CITY OF FORT PIERCE
TECHNICAL REVIEW COMMITTEE

AGENDA

Regular Meeting of the Fort Pierce Technical Review Committee to be held Thursday, October 17, 2024 at 10:00 a.m. in the William D. Dannahower, 2nd Floor Conference Room, 100 North U.S. Highway 1.

3. **NEW BUSINESS**

a. Future Land Use Map Amendment (FLUMA) – Pulte Single-Family Housing
2721 S. Jenkins Road

b. Final Planned Development - Millcreek - 2407-124-0001-000-3

c. Final Planned Development - Sunrise Lakes - 3804 Sunrise Boulevard

d. Major Site Plan - Weatherbee Road Townhomes - 3043-502-0015-000-5

e. Final Plat - Macy Reid - 715 and 625 Tumblin Kling Road and 4209 Garrison Lane

f. Minor Replat – Woodspring Suites – 2480 S. Jenkins Road

Technical Review Committee **3. a.**

Meeting Date: 10/17/2024

REQUESTED ACTION

Future Land Use Map Amendment (FLUMA) – Pulte Single-Family Housing
2721 S. Jenkins Road

SUMMARY

Project #: PZFLU2024-00002

The subject property is located at the southwest corner of South Jenkins Road and Okeechobee Road. The site is comprised of approximately 49.917 acres and is identified by the parcel numbers 232443100010002 and 232441300000009. The applicant is proposing to amend the Future Land Use Map from GC, General Commercial to RM, Medium Density Residential to permit the development of single family housing within close proximity to goods, services and the State's intermodal transportation network. The applicant intends to rezone the property in the future to PD, Planned Development with an associated site plan.

If you have access to the City of Fort Pierce Tyler EPL system, please add comments to the appropriate project. If not, please send comments to: planning@cityoffortpierce.com

LOCATION

2721 S. Jenkins Road

RESPONSIBLE STAFF

Vennis Gilmore, Assistant Planning Director

RECOMMENDATION

TBD

Attachments

TRC Packet

Form Review

Form Started By: Vennis Gilmore Started On: 10/03/2024 02:37 PM

Final Approval Date: 10/04/2024

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

Property Identification

Site Address: 2721 S JENKINS RD
Sec/Town/Range: 24/35S/39E
Parcel ID: 2324-413-0000-000-9
Jurisdiction: Fort Pierce

Use Type: 1000
Account #: 14293
Map ID: 23/24S
Zoning: General Co

Ownership

Cornerstone Fort Pierce Dev

c/o ECHO Real Estate Services Company
560 Epsilon Dr
Pittsburgh, PA 15238



Legal Description

24 35 39 THAT PART OF S 3/4 OF SE 1/4 LYG ELY OF ELY RD R/W LI OF I-95 R/W-LESS W 200 FT OF N 296 FT OF E 860.50 FT AND LESS E 40 FT AND LESS THAT PART MPDAF: FROM SE COR OF SEC RUN N 00 00 08 E ALG E SEC LI 357.69 FT,TH N 89 59 52 W 60 FT TO POB AND CURVE CONC SW,R OF 38 FT,TH WLY ALG ARC 19.90 FT,TH N 89 59 52 W 161.61 FT TO CURVE CONC SE,R OF 58 FT,TH SWLY ALG ARC 91.11 FT,TH N 00 00 08 E 89.67 FT,TH N 89 59 52 W 28.66 FT,TH N 00 00 08 E 29.98 FT,TH N 89 59 52 W 165.18 FT,TH N 00 00 08 E 19 FT,TH N 00 04 56 W 26 FT,TH N 00 00 08 E 19 FT,TH N 89 59 52 W 49.34 FT,TH N 00 00 08 E 19 FT,TH N 16 29 09 W 27.12 FT,TH N 00 00 08 E 19 FT,TH N 89 59 52 W 144.34 FT,TH N 00 00 08 E 15.15 FT,TH N 89 59 52 W 264.77 FT,TH S 00 03 41 W 7.67 FT,TH N 89 59 52 W 187.24 FT TO CURVE CONC W,R OF 298 FT,TH NLY ALG ARC 44.08 FT,TH N 00 00 08 E 383.90 FT,TH S 89 59 52 E 340.07 FT,TH S 00 00 08 W 8.79 FT,TH S 89 59 52 E 45.75 FT,TH S 00 00 08 W 12.20 FT,TH S 89 59 52 E 351.62 FT,TH S 00 00 08 W 19 FT,TH S 89 59 52 E 106.57 FT,TH S 00 00 08 W 491.62 FT TO CURVE CONC NE,R OF 38 FT,TH SELY ALG ARC 59.69 FT,TH S 89 59 52 E 109.98 FT,TH N 74 48 27 E 72.12 FT TO CURVE CONC NW,R OF 38 FT,TH NELY ALG ARC 26.17 FT,TH S 00 00 08 W 94.03 FT TO POB- (42.053 AC) (OR 2736-1681)

Current Values

Just/Market Value:	$3,606,400
Assessed Value:	$3,324,769
Exemptions:	$0
Taxable Value:	$3,324,769

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):	42.05
Land Size (SF):	1,831,829

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Jan 5, 2007	2736 / 1681	XX02	SPWD	FP Land Ltd	$25,000,000
Mar 30, 2006	2528 / 2870	XX01	SPWD	NSLWCD	$1,700,000
Oct 1, 1987	0561 / 0810	XX01	CV		$355,000
Oct 1, 1987	0561 / 0810	XX00	CV		$355,000
Mar 1, 1979	0304 / 2145	XX00	CV		$150,000
Aug 1, 1976	0255 / 2359	XX00	CV		$135,000

Special Features and Yard Items

Type	Qty	Units	Year Blt

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$3,606,400
Just/Market:	$3,606,400
Ag Credit:	$0
Save Our Homes or 10% Cap:	$281,631
Assessed:	$3,324,769
Exemption(s):	$0
Taxable:	$3,324,769

Current Year Exemption Value Breakdown

Tax Year	Grant Year	Code	Description	Amount

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2010	0041	116	Fort Pierce Stormwater Charge	$8,004.00
2013	0054	42.05301	North St. Lucie Water Management District	$1,009.27

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
2023	$3,606,400	$3,324,769	$0	$3,324,769
2022	$3,606,400	$3,022,518	$0	$3,022,518
2021	$2,747,744	$2,747,744	$0	$2,747,744
2020	$2,747,744	$2,747,744	$0	$2,747,744

Permits

Number	Issue Date	Description	Amount	Fee
RF20052017	May 27, 2005	Roof	$5,970	$60

BP18-0949	Apr 19, 2018	Demolition	$69,000	$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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Michelle Franklin, CFA -- Saint Lucie County Property Appraiser -- All rights reserved.

Property Identification

Site Address: S JENKINS RD
Sec/Town/Range: 24/35S/39E
Parcel ID: 2324-431-0001-000-2
Jurisdiction: Fort Pierce

Use Type: 1000
Account #: 138925
Map ID: 23/24S
Zoning: General Co



Ownership

Cornerstone Fort Pierce Dev

c/o ECHO Real Estate Services Company
560 Epsilon Dr
Pittsburgh, PA 15238

Legal Description

24 35 39 THAT PART OF SEC MPDAF: FROM SE COR OF SEC RUN N 00 00 08 E ALG E SEC LI 357.69 FT,TH N 89 59 52 W 60 FT TO POB AND CURVE CONC SW,R OF 38 FT,TH WLY ALG ARC 19.90 FT,TH N 89 59 52 W 161.61 FT TO CURVE CONC SE,R OF 58 FT,TH SWLY ALG ARC 91.11 FT,TH N 00 00 08 E 89.67 FT,TH N 89 59 52 W 28.66 FT,TH N 00 00 08 E 29.98 FT,TH N 89 59 52 W 165.18 FT,TH N 00 00 08 E 19 FT,TH N 00 04 56 W 26 FT,TH N 00 00 08 E 19 FT,TH N 89 59 52 W 49.34 FT,TH N 00 00 08 E 19 FT,TH N 16 29 09 W 27.12 FT,TH N 00 00 08 E 19 FT,TH N 89 59 52 W 144.34 FT,TH N 00 00 08 E 15.15 FT,TH N 89 59 52 W 264.77 FT,TH S 00 03 41 W 7.67 FT,TH N 89 59 52 W 187.24 FT TO CURVE CONC W,R OF 298 FT,TH NLY ALG ARC 44.08 FT,TH N 00 00 08 E 383.90 FT,TH S 89 59 52 E 340.07 FT,TH S 00 00 08 W 8.79 FT,TH S 89 59 52 E 45.75 FT,TH S 00 00 08 W 12.20 FT,TH S 89 59 52 E 351.62 FT,TH S 00 00 08 W 19 FT,TH S 89 59 52 E 106.57 FT,TH S 00 00 08 W 491.62 FT TO CURVE CONC NE,R OF 38 FT,TH SELY ALG ARC 59.69 FT,TH S 89 59 52 E 109.98 FT,TH N 74 48 27 E 72.12 FT TO CURVE CONC NW,R OF 38 FT,TH NELY ALG ARC 26.17 FT,TH S 00 00 08 W 94.03 FT TO POB (9.057 AC) (OR 2736-1681)

Current Values

Just/Market Value:	$828,500
Assessed Value:	$716,082
Exemptions:	$0
Taxable Value:	$716,082

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):	9.06
Land Size (SF):	394,536

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Jan 5, 2007	2736 / 1681	XX02	SPWD	FP Land Ltd	$25,000,000
Jun 17, 2005	2279 / 0933	XX01	WD	Fort Pierce Properties LLC,	$9,785,000
Nov 18, 2003	1849 / 1189	XX00	WD	Twenty Six Associates, LLC.	$2,400,000
Jun 16, 2003	1738 / 1793	XX00	TRUST	Brisben William O	$1,441,500
Jul 3, 2001	1410 / 2288	XX00	WD	Thomas Jr Roy P	$450,000
May 31, 1996	1027 / 2012	XX01	PRDEED	Thomas Myrtle L	$100

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:	$828,500
Just/Market:	$828,500
Ag Credit:	$0
Save Our Homes or 10% Cap:	$112,418
Assessed:	$716,082
Exemption(s):	$0
Taxable:	$716,082

Current Year Exemption Value Breakdown

Tax Year	Grant Year	Code	Description	Amount

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2010	0041	24.7	Fort Pierce Stormwater Charge	$1,704.30
2013	0054	9.0573	North St. Lucie Water Management District	$217.38

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
2023	$828,500	$716,082	$0	$716,082
2022	$828,500	$650,984	$0	$650,984
2021	$591,804	$591,804	$0	$591,804
2020	$591,804	$591,804	$0	$591,804

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 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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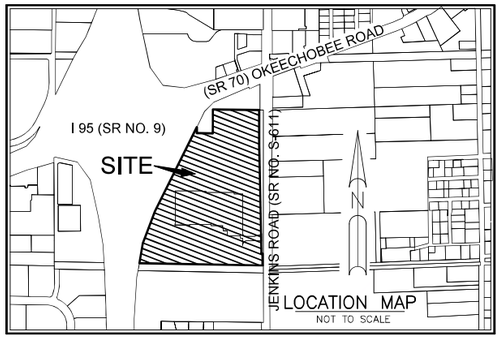


NORTH

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
INTENDED DISPLAY SCALE
1 INCH = 50 FEET

THE FOLLOWING IS A PARTIAL LIST OF NUMBERED EXCEPTIONS WHICH CORRESPOND TO THE NUMBERED EXCEPTIONS CONTAINED IN SCHEDULE B, PART II OF EXCEPTIONS OF THE FIDELITY NATIONAL TITLE INSURANCE COMPANY COMMITMENT FOR TITLE INSURANCE HAVING A FILE NUMBER: 522400441GM, WITH AN COMMITMENT DATE OF MAY 23, 2024 @ 5:00 P.M.

SCHEDULE B, PART II EXCEPTIONS

5. Resolution 96-011 recorded February 6, 1996, in Official Records Book 997, Page 2176.
(AFFECTS NOTHING TO PLOT)

6. Ordinance No K-251 recorded March 4, 2004, in Official Records Book 1912, Page 2979.
(AFFECTS, ANNEX INTO THE CITY OF FORT PIERCE)

7. Restrictive Covenants and Access Easement Agreement recorded May 28, 2009, in Official Records Book 3093, Page 2587.
(AFFECTS PLOTTED)

8. Developer's Agreement recorded July 1, 2010, in Official Records Book 3209, Page 1238.
(AFFECTS NOTHING TO PLOT)

9. Rights of tenants occupying all or part of the insured land under unrecorded leases or rental agreements.
(AFFECTS NOTHING TO PLOT)

LEGEND

N.S.L.R.W.C.D. – NORTH ST. LUCIE RIVER WATER CONTROL DISTRICT
O.R.B. – OFFICIAL RECORD BOOK
RW – RIGHT-OF-WAY
RCP – REINFORCED CONCRETE PIPE
PB – PLAT BOOK
PG – PAGE
– ANCHOR
CATV – CABLE TV VAULT
– CATCH BASIN
– CONCRETE POWER POLE
– CROSSWALK SIGNAL
– CURB INLET
– HOG OR BARBED WIRE FENCE
– DENOTES FOUND SURVEY ROD & CAP
– DENOTES NAIL & SURVEY DISK
– DRAINAGE MANHOLE
– ELECTRIC HAND HOLE
– ELECTRICAL WIRES OVERHEAD
F – FIBER OPTIC BOX
– FIRE HYDRANT
– MAST ARM / TRAFFIC SIGNAL
– LIGHT POLE
S – SANITARY MANHOLE
– SEWER VALVE
– TRAFFIC SIGN
– WATER VALVE
– WOOD POWER POLE (UNLESS NOTED)
– EXISTING ELEVATION
– DENOTES 1/4 SECTION CORNER
– DENOTES SECTION CORNER
– SURVEY MARKER/CONTROL POINT
PRM – DENOTES PERMANENT REFERENCE MONUMENT 5/8" IRON ROD WITH CAP STAMPED "C&W PRM LB 3591"
– DENOTES FOUND SURVEY MARKER
– SET 5/8" IR/CAP LB 3591

DESCRIPTION:

PARCEL 1:

THE SOUTH 574.36 FEET OF THE FOLLOWING-DESCRIBED PROPERTY:
THAT PART OF THE SOUTH 3/4 OF THE SE 1/4 OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA, LYING EASTERLY OF THE EASTERLY RIGHT-OF-WAY OF I-95, LESS THE NORTH 296 FEET OF THE EAST 860.50 FEET THEREOF, AND LESS THE EAST 40 FEET THEREOF AND LESS THE SOUTH 52 FEET THEREOF. LESS LANDS DESCRIBED IN ORDER OF TAKING RECORDED IN OFFICIAL RECORDS BOOK 3632 PAGE 1691

PARCEL 2:

THAT PART OF THE SOUTH 3/4 OF THE SE 1/4 OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA, LYING EASTERLY OF THE EASTERLY RIGHT-OF-WAY LINE OF I-95, LESS THE NORTH 296 FEET OF THE EAST 860.50 FEET THEREOF, AND LESS THE EAST 40 FEET THEREOF, AND LESS THE SOUTH 626.36 FEET THEREOF, LESS LANDS DESCRIBED IN ORDER OF TAKING RECORDED IN OFFICIAL RECORDS BOOK 3632 PAGE 1691

PARCEL 3:

THE EAST 660.5 FEET OF THE NORTH 296 FEET OF THE SOUTH 3/4 OF THE EAST 1 /2 OF THE SOUTHEAST 1/4 OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, LESS AND EXCEPTING THEREFROM THE EAST 40 FEET THEREOF AS RIGHT-OF-WAY FOR JENKINS ROAD, LESS LANDS DESCRIBED IN ORDER OF TAKING RECORDED IN OFFICIAL RECORDS BOOK 3632 PAGE 1691
ALL LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

CONTAINING: 49.917 ACRES, MORE OR LESS

SURVEY NOTES:

1. LAST DATE OF FIELD DATA ACQUISITION FOR THIS SURVEY IS JULY 12, 2024.
2. THIS SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
3. ALL MEASUREMENTS ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD FEET.
4. 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.
5. LANDS SHOWN HEREON WERE ABSTRACTED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, COMMITMENT FILE NUMBER: 522400441GM, EFFECTIVE DATE MAY 23, 2024 AT 5:00 P.M. AND ALL PLOTTABLE EXCEPTIONS ARE SHOWN HEREON.
6. THE DESCRIPTION OF THE LAND CONTAINED IN THIS SURVEY IS PER EXHIBIT "A" OF THE TITLE COMMITMENT REFERENCED ABOVE.
7. BEARINGS SHOWN HEREON ARE RELATIVE TO A RECORD BEARING OF SOUTH 00°00'09" WEST ALONG THE EAST LINE OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST AS DEPICTED ON STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION MAP, ITEM/SEGMENT NO. 428984-1 STATE PROJECT NO. 94030.2516 STATE ROAD NO. 70 (OKEECHOBEE RD.)
8. SUBJECT PROPERTY FALLS WITHIN ZONE "X", ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM (NFIP) FLOOD INSURANCE RATE MAP (FIRM); COMMUNITY PANEL NO. 12111C0167J, CITY OF FORT PIERCE, ST. LUCIE COUNTY, COMMUNITY NO. 120286 PANEL 0167, SUFFIX J; DATED FEBRUARY 16, 2012.
9. THERE ARE NOT GAPS, GORES OR HIATUSES, THE TRACTS ARE CONTIGUOUS ALONG THEIR BOUNDARIES.

CERTIFIED TO:

PULTE HOME COMPANY, LLC, A MICHIGAN LIMITED LIABILITY COMPANY
FIDELITY NATIONAL TITLE INSURANCE COMPANY

SURVEYOR'S CERTIFICATE:

I HEREBY CERTIFY THAT THE ATTACHED BOUNDARY SURVEY OF THE HEREON DESCRIBED PROPERTY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AS SURVEYED UNDER MY DIRECTION ON JULY 12, 2024. I FURTHER CERTIFY THAT THIS BOUNDARY SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH IN CHAPTER 5J-17.050, 5J-17.051, 5J-17.052, FLORIDA ADMINISTRATIVE CODE, ADOPTED BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, PURSUANT TO FLORIDA STATUTES 472.027, AS AMMENDED AND CHAPTERS 177.041 AND 177.061, FLORIDA STATUTES.
THE FIELDWORK WAS COMPLETED ON JULY 12, 2024.

RONNIE L. FURNISS
PROFESSIONAL SURVEYOR MAPPER #6272
STATE OF FLORIDA

CAULFIELD AND WHEELER, INC
SURVEYORS – ENGINEERS – PLANNERS
7900 GLADES ROAD, SUITE 100
CERTIFICATION OF AUTHORIZATION NO. LB 3591

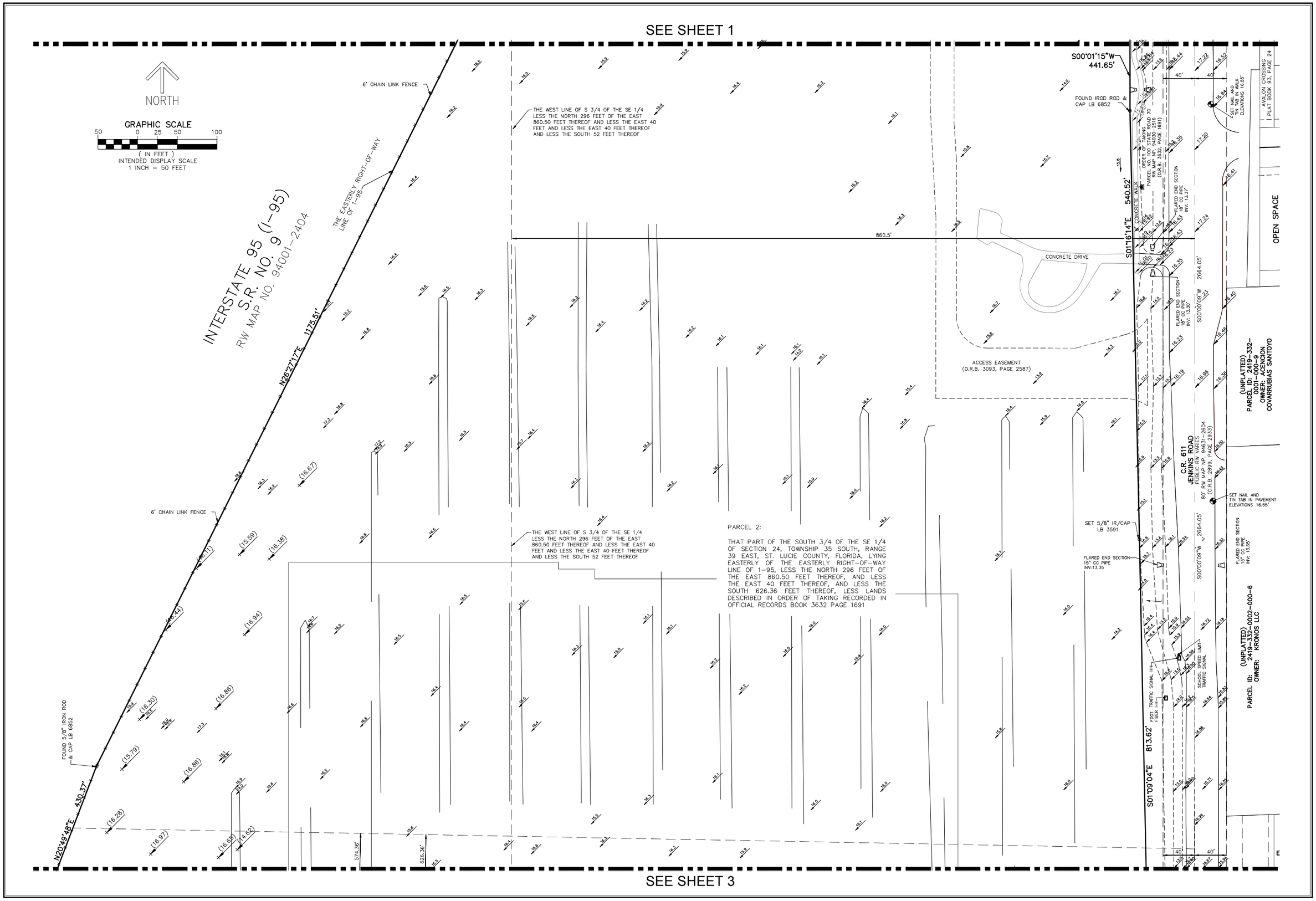
REVISIONS	DATE	BY
FILE NAME: 10958-ALTA-BNDY-TOPO.dwg		

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

ALTA/BOUNDARY & TOPOGRAPHIC SURVEY
PULTE GROUP
A PORTION OF THE SOUTH 3/4 OF THE SE 1/4 OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA

DATE 6/20/2024
DRAWN BY RLF
F.B./ PG. ELECT
SCALE AS SHOWN

JOB # 10108
SHT.NO. 1
OF 3 SHEETS



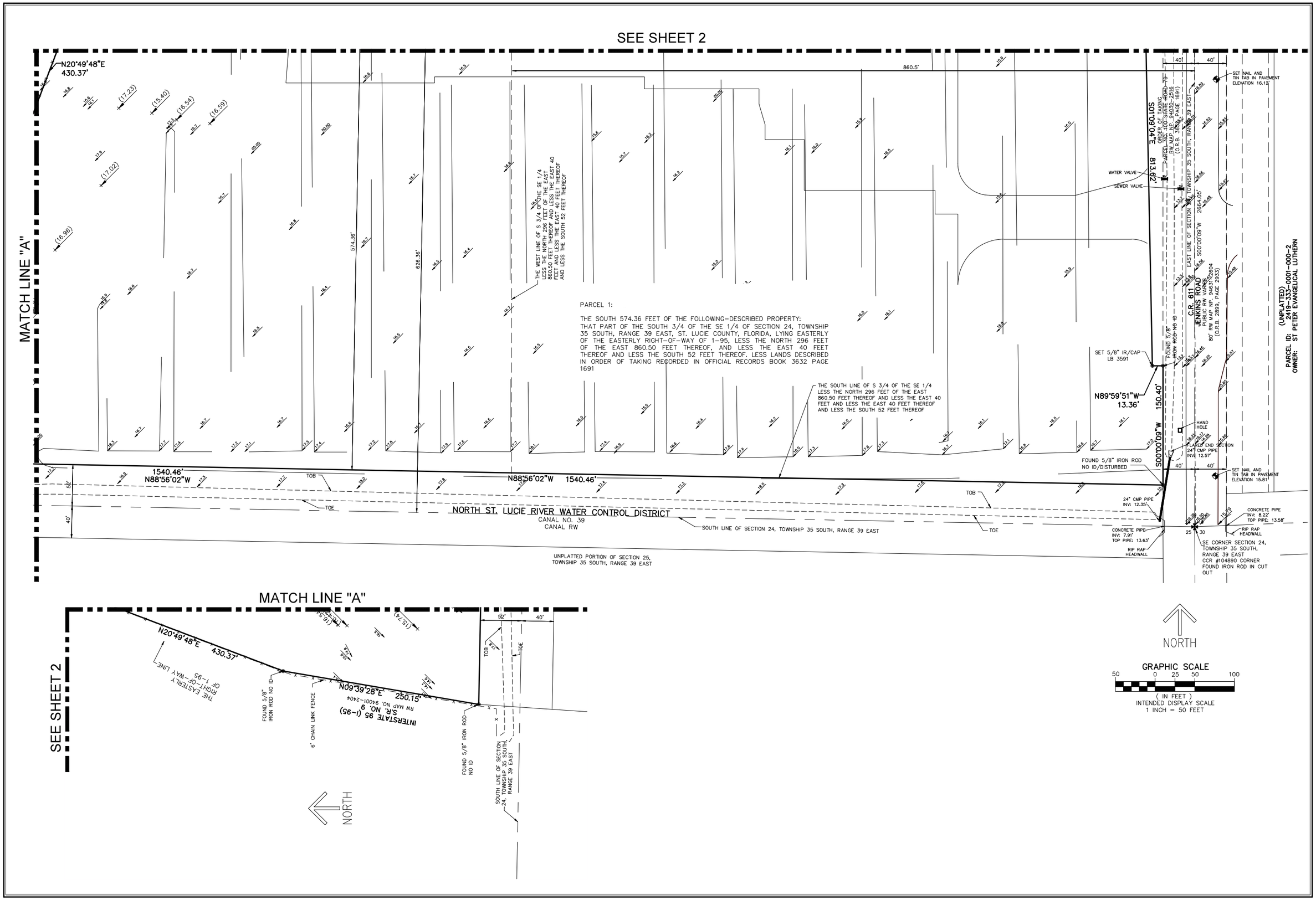
REVISIONS	DATE	BY
FILE NAME 10956-ALTA-BNDY-TOPO.dwg		

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

ALTA/BOUNDARY & TOPOGRAPHIC SURVEY
PULTE GROUP
A PORTION OF THE SOUTH 3/4 OF THE SE 1/4 OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA

DATE 6/20/2024
DRAWN BY RLF
F.B./ PG. ELECT
SCALE AS SHOWN

JOB # 10108
SHT.NO. 2
OF 3 SHEETS



REVISIONS	DATE	BY
FILE NAME 10956-ALTA-BNDY-TOPO.dwg		

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

ALTA/BOUNDARY & TOPOGRAPHIC SURVEY
PULTE GROUP
A PORTION OF THE SOUTH 3/4 OF THE SE 1/4 OF SECTION 24, TOWNSHIP 35 SOUTH, RANGE 39 EAST, ST. LUCIE COUNTY, FLORIDA

DATE	6/20/2024
DRAWN BY	RLF
F.B./ PG.	ELECT
SCALE AS SHOWN	

JOB # 10956
SHT.NO. 3
OF 3 SHEETS

EDWIN M. FRY, Jr., CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 2988687 OR BOOK 2736 PAGE 1681, Recorded 01/09/2007 at 01:11 PM
Doc Tax: $175000.00

This Instrument Prepared By:
Record and return to:
David M. Shaw, Esquire
HAILE, SHAW & PFAFFENBERGER, P.A.
660 U.S. Highway One, Third Floor
North Palm Beach, Florida 33408

Tax Folio Nos. 2324-413-0000-000/9
2324-414-0000-000/2
2324-413-0001-000/2

SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED, dated this 5th day of January, 2007, between FP LAND, LTD., a Florida limited partnership, with an address of 599 NW 82nd Avenue, Plantation, Florida 33324, hereinafter called the Grantor, which term shall include when used herein, wherever the context so requires or admits, its successors and assigns, and CORNERSTONE FORT PIERCE DEVELOPMENT, LLC, a Delaware limited liability company, with an address of c/o Cornerstone Real Estate Advisers, LLC, 180 Glastonbury Boulevard, Suite 401, Glastonbury, Connecticut 06033, and whose Taxpayer Identification Number is 56-2630592, hereinafter called the Grantee, which term shall include when used herein, wherever the context so requires or admits, its successors and assigns.

WITNESSETH:

That for the sum of TEN DOLLARS ($10.00) and other good and valuable consideration, Grantor does hereby grant, bargain, sell, alien, remise, release, convey and confirm unto the said Grantee all that certain piece of property and tract of land situate in the County of St. Lucie and State of Florida, described on Exhibit "A" attached hereto as a part hereof.

TOGETHER WITH all improvements thereon and rights, benefits, easements, appurtenances and hereditaments thereto appertaining.

SUBJECT HOWEVER to those matters designated on Exhibit "B" hereto, the provisions of which are not reimposed hereby.

TO HAVE AND TO HOLD IN FEE SIMPLE FOREVER.

Grantor does hereby specially warrant the title to the Property, subject only to those matters set forth herein, and will defend same against the lawful claims of all persons claiming by, through or under Grantor, but no other.

IN WITNESS WHEREOF, the Grantor has caused these presents to be executed the day and year aforesaid.

WITNESSES:

Name: Jill Calnan

Name: Joanne Shute

SELLER:

FP LAND, LTD., a Florida limited partnership

By: FP Land, LLC, a Florida limited liability company, its general partner

By: _____
Name: Kenneth H. Simigran
Title: Manager

STATE OF FLORIDA)
) SS:
COUNTY OF BROWARD)

The foregoing instrument was acknowledged before me this 3 day of January, 2006, by Kenneth H. Simigran, a Manager of FP Land, LLC, a Florida limited liability company, general partner of FP Land, Ltd., a Florida limited partnership, on behalf of the limited partnership, he is personally known to me or has produced _____ as identification.

JILL CALNAN
Comm# DD0608961
Expires 12/22/2010
Florida Notary Assn., Inc

[SEAL]

My Commission Expires: 12/22/2010

_____
Notary Public

Jill Calnan
Printed name of notary

EXHIBIT A

TO

SPECIAL WARRANTY DEED

Description of Land

Parcel 1:

The South 574.36 feet of the following-described property:

That part of the South 3/4 of the SE 1/4 of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida, lying easterly of the easterly right-of-way of I-95, LESS the North 296 feet of the East 860.50 feet thereof, and LESS the East 40 feet thereof and LESS the South 52 feet thereof.

Parcel 2:

That part of the South 3/4 of the SE 1/4 of Section 24, Township 35 South, Range 39 East, St. Lucie County, Florida, lying easterly of the easterly right-of-way line of I-95, LESS the North 296 feet of the East 860.50 feet thereof, and LESS the East 40 feet thereof, and LESS the South 626.36 feet thereof.

Parcel 3:

The East 660.5 feet of the North 296 feet of the South 3/4 of the East 1/2 of the Southeast 1/4 of Section 24, Township 35 South, Range 39 East, LESS AND EXCEPTING THEREFROM the East 40 feet thereof as right-of-way for Jenkins Road, all lying and being in St. Lucie County, Florida.

EXHIBIT B

TO

SPECIAL WARRANTY DEED

Permitted Exceptions

1. Taxes and assessments for the year 2007 and subsequent years, which are not yet due and payable.

2. Resolution No. 96-101 of the Board of County Commissioners of St. Lucie County, Florida, recorded in Official Records book 997, Page 2176.

3. Ordinances No. K-251 and No. K-261 of the City Commission of the City of Fort Pierce, recorded in Official Records Book 1948, Page 1790, respectively.

4. Right of way of Jenkins Road.

5. Matters as disclosed on that certain survey prepared by Manucy Land Surveyors, Inc., dated September 22, 2006, as Order No. 150-608, which discloses, among other matters, the following encroachments:

   a. by a 6-foot chain link fence onto adjoining property along the westerly property line of the subject property;

   b. by mail boxes, asphalt drives, a sign, a dirt drive, and wood poles at the northeasterly corner of the subject property;

   c. by a concrete drive and a dirt drive along the East property line; and

   d. by irrigation ditches onto adjoining property along the South property line.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	Vacant Office	GC	C-3
South	Proposed Residential Subdivision	RM	R-4
East	Residential Subdivision	RM/GC	E-3, R-2, PD
West	I-95	I-95	I-95

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	COM	C-3	150 DU & 1,739,508 sf	49.917	X
****Proposed**	RM	PD	749	49.917	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) Other: 0.125 gallons per day per square foot	
Demand Analysis	Maximum	
Current Zoning/FLU	Total gallons per day	256,438 gal.
**Proposed Zoning/FLU	Total gallons per day	194,646 gal.
**Change in Demand	Total gallons per day	61,762 gal. REDUCTION

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 212,951 gal.
**Proposed Zoning/FLU	Total gallons per day 194,676 gal.
**Change in Demand	Total gallons per day 18,274 gal. REDUCTION

C. Parks and Recreation (Residential Classifications Only):
(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	44,617	46,174	31.14 ac inc.
Urban District	5 acres per 1,000 people	44,617	46,174	7.78 ac. inc.
Community	2.5 acres per 1,000 people	44,617	46,174	3.89 ac. inc.
Neighborhood	1.36 acres per 1,000 people	44,617	46,174	2.12 ac. inc.

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		
City		
Distance		
Current Zoning/FLU Enrollment Demand	43	18
****Proposed Zoning/FLU Enrollment Demand**	212	91
****Change in Demand**	169 student increase	73 student increase

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	13 8-yds.
****Proposed Zoning/FLU**	5 8-yds.
***Change in Demand**	8 8 yds, REDUCTION

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	See attached Drainage analysis

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

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning/FLU	LUC 820 - 45,436	LUC 820 - 1,027/3,742
****Proposed Zoning/FLU**	LUC 210 - 5,340	LUC 210 - 388/546
***Change in Demand**	Trips 40,086 REDUCTION	Trips 639/3,196 REDUCTION
Impact to Capacity	LOS is maintained on the surrounding roadway network	

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**
None 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? _____
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: N/A

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

DISTRICT PLANNING GROUP

Historical Report

Cornerstone by Pulte

PID 2324-413-0000-000-9 & 2324-431-0001-000-2

There are no known historical resources present on the subject property.



Leslie Olson, AICP

Principal

O'ROURKE
ENGINEERING & PLANNING
ATMC Company

September 3, 2024

To: Aimee Carlson

From: Susan O'Rourke

Re: Cornerstone Site

O'Rourke Engineering & Planning (O'REP) is pleased to provide a land use plan amendment analysis of the 51.11 acre planned development to be located west of Jenkins Road and south of Okeechobee Road in Fort Pierce, St Lucie County, Florida. The project site plan and location are provided in **Attachment A**.

Existing Land Use Description

The existing land use is categorized as General Commercial. This land use allows for a maximum of either 15 dwelling units per acre or a 1.0 floor area ratio (FAR). With the site consisting of 51.11 acres, 1.0 FAR allows for 2,226,351 square feet of commercial space and a trip generation of 45,436 daily trips, 1,027 AM peak hour trips with 687 entering and 340 exiting and 3,742 PM peak hour trips with 1,766 entering and 1,976 exiting. The existing trip generation is shown in **Table 1a, 1b, and 1c**.

Proposed Land Use Description

The future land use is proposed to be classified as Residential Medium with a Planned Development zoning. The land use allows for a maximum of 12 dwelling units per acre. With the site consisting of 51.11 acres, the maximum proposed land use allows for 613 dwelling units and has a trip generation of 5,350 daily trips, 388 AM peak hour trips with 97 entering and 291 exiting and 546 PM peak hour trips with 344 entering and 202 exiting. The proposed trip generation is shown in **Table 2a, 2b, 2c**.

Conclusion

The proposed land use will result in a decrease in trips and therefore further analysis of the land use change is not required.

Prepared by: O'Rourke Engineering & Planning Certificate of Authorization: #26869 3725 SE Ocean Boulevard Suite 201 Stuart, Florida 34996 772-781-7918	Professional Engineer Susan E. O'Rourke, P.E. Date signed and sealed: 9/3/2024 License #: 42684

Table 1 - Trip Generation - Existing General Commercial

Table 1a: Daily

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips			Internalization Trips				Net External Trips			Pass-by Trips				Net New Trips		
					In	Out	In	Out	Total	In	Out	Total	%	In	Out	Total	In	Out	Total	%	In	Out	Total
Shopping Center (>150k)	820	2,226,351	Sft	T = 26.11(X) + 5863.73	50%	50%	31,997	31,997	63,994	-	-	-	0.0%	31,997	31,997	63,994	9,279	9,279	18,558	29.0%	22,718	22,718	45,436
TOTALS							**31,997**	**31,997**	**63,994**	**-**	**-**	**-**	**0.0%**	**31,997**	**31,997**	**63,994**	**9,279**	**9,279**	**18,558**	**29.0%**	**22,718**	**22,718**	**45,436**

Source: ITE 11th Edition Trip Generation Rates

Table 1b: AM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips			Internalization Trips				Net External Trips			Pass-by Trips				Net New Trips		
					In	Out	In	Out	Total	In	Out	Total	%	In	Out	Total	In	Out	Total	%	In	Out	Total
Shopping Center (>150k)	820	2,226,351	Sft	T = 0.59(X) + 133.55	62%	38%	897	550	1,447	-	-	-	0.0%	897	550	1,447	210	210	420	29.0%	687	340	1,027
TOTALS							**897**	**550**	**1,447**	**-**	**-**	**-**	**0.0%**	**897**	**550**	**1,447**	**210**	**210**	**420**	**29.0%**	**687**	**340**	**1,027**

Source: ITE 11th Edition Trip Generation Rates

Table 1c: PM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips			Internalization Trips				Net External Trips			Pass-by Trips				Net New Trips		
					In	Out	In	Out	Total	In	Out	Total	%	In	Out	Total	In	Out	Total	%	In	Out	Total
Shopping Center (>150k)	820	2,226,351	Sft	Ln(T) = 0.72Ln(X) + 3.02	48%	52%	2,530	2,740	5,270	-	-	-	0.0%	2,530	2,740	5,270	764	764	1,528	29.0%	1,766	1,976	3,742
TOTALS							**2,530**	**2,740**	**5,270**	**-**	**-**	**-**	**0.0%**	**2,530**	**2,740**	**5,270**	**764**	**764**	**1,528**	**29.0%**	**1,766**	**1,976**	**3,742**

Source: ITE 11th Edition Trip Generation Rates

Table 2 - Trip Generation - Proposed Residential Medium

Table 2a: Daily

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips			Internalization Trips				Net External Trips			Pass-by Trips				Net New Trips		
					In	Out	In	Out	Total	In	Out	Total	%	In	Out	Total	In	Out	Total	%	In	Out	Total
Single Family Detached	210	613	DU	Ln(T) = 0.92Ln(X) + 2.68	50%	50%	2,675	2,675	5,350	-	-	-	0.0%	2,675	2,675	5,350	-	-	-	0.0%	2,675	2,675	5,350
TOTALS							**2,675**	**2,675**	**5,350**	**-**	**-**	**-**	**0.0%**	**2,675**	**2,675**	**5,350**	**-**	**-**	**-**	**0.0%**	**2,675**	**2,675**	**5,350**

Source: ITE 11th Edition Trip Generation Rates

Table 2b: AM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips			Internalization Trips				Net External Trips			Pass-by Trips				Net New Trips		
					In	Out	In	Out	Total	In	Out	Total	%	In	Out	Total	In	Out	Total	%	In	Out	Total
Single Family Detached	210	613	DU	Ln(T) = 0.91Ln(X) + 0.12	25%	75%	97	291	388	-	-	-	0.0%	97	291	388	-	-	-	0.0%	97	291	388
TOTALS							**97**	**291**	**388**	**-**	**-**	**-**	**0.0%**	**97**	**291**	**388**	**-**	**-**	**-**	**0.0%**	**97**	**291**	**388**

Source: ITE 11th Edition Trip Generation Rates

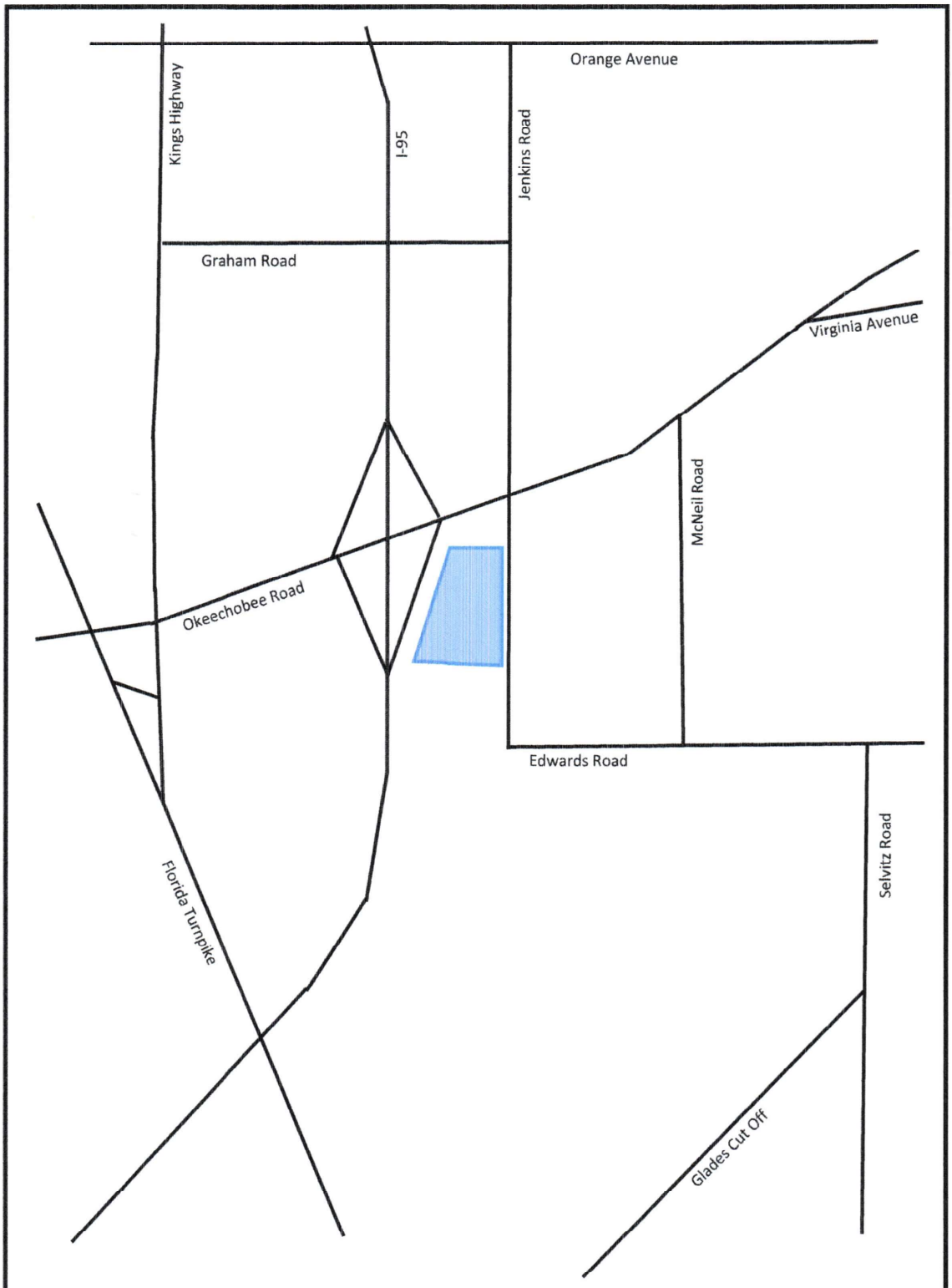
Table 2c: PM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips			Internalization Trips				Net External Trips			Pass-by Trips				Net New Trips		
					In	Out	In	Out	Total	In	Out	Total	%	In	Out	Total	In	Out	Total	%	In	Out	Total
Single Family Detached	210	613	DU	Ln(T) = 0.94Ln(X) + 0.27	63%	37%	344	202	546	-	-	-	0.0%	344	202	546	-	-	-	0.0%	344	202	546
TOTALS							**344**	**202**	**546**	**-**	**-**	**-**	**0.0%**	**344**	**202**	**546**	**-**	**-**	**-**	**0.0%**	**344**	**202**	**546**

Source: ITE 11th Edition Trip Generation Rates

ATTACHMENT A

Project Location



N

O'ROURKE ENGINEERING & PLANNING

A TMC Company

NTS

3725 S. East Ocean Blvd
Stuart, Fl, 34996 Suite 201

Job #:

Date:

Legend

= Project Location

Figure 1

Project Location

Cornerstone Site

KESHAVARZ & ASSOCIATES
CIVIL ENGINEERING | SURVEYING | CONSULTING

Drainage Statement:

Cornerstone – City of Fort Pierce

Date: September 6, 2024
K&A Project No. 24-1479

Location

The 49.9 acre project site is located on the west side of Jenkins Road south of Okeechobee Road (S.R. 70) and immediately east of Interstate 95 in the City of Fort Pierce (Saint Lucie County) Florida. The project site is located within the South Florida Water Management District (SFWMD) and the North Saint Lucie River Water Control District (NSLRWCD) and will discharge stormwater to the NSLWCD Canal No. 39 located along the south boundary of the property.

FEMA Flood Data

The project site is located within flood zone X based on the current FEMA Flood Insurance Rate Map (FIRM) panel number 12111 C0167J, effective February 16, 2012. Flood zone X is defined as areas of minimal flood hazards. There is not a base flood elevation (BFE) assigned to flood zone X.

Existing Conditions

The project site was previously used for agricultural purposes and contains irrigation/drainage ditches throughout the site. There are two 18" RCP culverts hydraulically connecting the project site the drainage ditch along the west side of Jenkins Road. The ditch along the west side of Jenkins Road runs south and connects to the NSLRWCD Canal No. 39 with a 24" CMP.

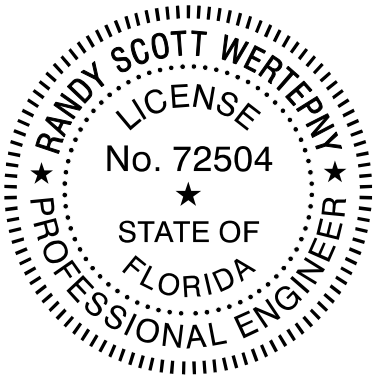
The existing ditches run in the north-south direction and connect to a larger ditch on the south boundary parallel to the NSLRWCD Canal No. 39. The Northeast corner of the property previously contained two residential homes that have been removed.

In 2008, an Environmental Resource Permit with SFWMD was obtained for the project site, SFWMD Permit No. 50-02924-P for the construction of a surface water management system for commercial development; however, this permit expired in 2013.

Proposed Improvements

The proposed project is for the development of a single-family residential community including building, driveways, roads, sidewalks and recreational amenities. The proposed stormwater management system will consist of catch basins and culverts that will direct stormwater runoff into proposed wet detention systems. The proposed detention systems will provide water quality treatment and stormwater attenuation prior to discharging into the NSLRWCD Canal No. 39 through a control structure regulating the volume of discharge. The proposed stormwater management system has been designed to meet the requirements of the SFWMD, NSLRWCD and the City of Fort Pierce.

The post development runoff from the site will be reduced to meet the SFWMD allowable discharge for the project site of 2" per acre per day or 4.19 cfs. Storm sewer mains will be designed to convey the runoff generated from a 5 year – 1 day storm event.



Keshavarz & Associates, Inc.
711 N. Dixie Highway, Suite 201
West Palm Beach, Florida 33401
Certificate of Authorization No. 4897

Randy Wertepny, P.E.
Florida License No. 72504
September 6, 2024

This item has been electronically signed and sealed by Randy Wertepny on the date indicated here using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

EW Consultants, Inc.
Natural Resource Management, Wetland, and Environmental Permitting Services

PULTE GROUP

CORNERSTONE

Environmental Assessment Report

Prepared For:

Pulte Group

Prepared By:

EW Consultants, Inc.

August 2024

1000 SE Monterey Commons Boulevard, Suite 208 • Stuart, FL 34996 772-287-8771 • Fax 772-287-2988
www.ewconsultants.com

INTRODUCTION

This Environmental Assessment Report documents and summarizes the natural resource characteristics of the Pulte Group Cornerstone property. The 49.9 +/- acre Cornerstone property is located in Section 24, Township 35 South, Range 39 East within the City of Ft. Pierce, St. Lucie County, Florida. The property is bounded to the north by undeveloped land and a residential home, to the west by I-95 and the State Road 70 interchange, to the south by the NSLRWCD Canal No. 39, and to the east by Jenkins Road.

The site is comprised predominantly of disturbed lands that were previously improved for agricultural use and are now dominated by non-native invasive Brazilian pepper with scattered native trees including laurel oaks, cabbage palms, and wax myrtle. Field observations conducted in June and July of 2024 confirmed the property does not contain any native upland habitat. There is also an area in the western portion of the site that contains wetland characteristics and may, upon review by the South Florida Water Management District, be considered a jurisdictional wetland. The property contains two man-made ditches on site that were constructed for the purpose of providing drainage and irrigation for the former agricultural practices on the property.

SOILS

A Custom Soil Resource Report for the subject property is provided in the Appendix. This report, prepared by the United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) provides descriptions of the soil types within the Cornerstone property along with acreage summaries, soil limitation information, and recommended soil treatments for various proposed land uses.

VEGETATION COMMUNITIES

The following is a summary of the land cover types found on the Cornerstone property site. Land cover classifications were mapped based on the Florida Land Use, Cover and Forms Classification System (FLUCFCS) developed by the Florida Department of Transportation. Field reconnaissance and aerial photograph interpretation were employed in the mapping effort of the land cover types on the subject property.

The vegetative community descriptions include general discussions of potential wildlife habitat provided by the various resources available in those communities. Detailed observations and occurrences of wildlife are discussed in subsequent sections. Application of categories described as wetlands and ditches provides an approximation of the wetland areas or ditch classifications that remain subject to verification by SFWMD and, under current circumstances, the U.S. Army Corps of Engineers (USACE) for Section 404 purposes.

The FLUCFCS classifications observed on the site are described below. A land cover map of the observed community types is included in the Appendix of this report. The communities observed on the property are described as follows:

191 – Undeveloped Land Within Urban Areas –

This land cover is located within the northern and western portions of the property. The vegetation assemblage within these areas is dominated by non-native invasive species, ruderal weeds, and non-native pasture grasses. Vegetation includes Brazilian pepper, Australian pine, guava, smut grass, cogon grass, guinea grass, Caesar weed, and castor bean. Scattered occurrences of native laurel oak, slash pine, cabbage palm, and wax myrtle are also present.

510 – Ditches –

The property contains two man-made ditches that were created in support of the former agricultural practices on the property. The northern of the two ditches is shallow and is vegetated predominantly with non-native invasive species including torpedo grass, limpo grass, Peruvian primrose willow, and Caesar weed. Scattered occurrences of native species including broomsedge, spadeleaf and pennywort are also present. The southern ditch, located near the southern property boundary is a deep, steep sided ditch that contains scattered occurrences of non-native invasive Peruvian primrose willow and native Carolina willow.

643 – Wet Prairie –

There is one area located near the western property boundary that meets the criteria to be considered a wet prairie wetland. Vegetative cover in this area includes native grape vine, Virginia chain fern, and broomsedge, and non-native invasive old-world climbing fern and Peruvian primrose willow.

740 – Disturbed Lands –

This is the predominant land cover type on the subject property, and was previously improved for agricultural use. The vegetation assemblage is currently dominated by non-native invasive Brazilian pepper with scattered occurrences of native laurel oak, cabbage palm, and wax myrtle.

WILDLIFE

Wildlife Observations –

During field reconnaissance conducted for the preparation of this environmental assessment, observations were made for wildlife presence and indicators of utilization. Field observations conducted in June and July 2024 include a variety of common avian species present within the property including mourning dove, American crow, boat-tail grackle, northern mockingbird, and cattle egret. Reptile species observed include Cuban anole and a black racer snake. Indicators of the occurrence of mammals (scat, tracks, or other physical indicators) included raccoon, armadillo, coyote, feral hog, and rodents.

Listed Species and Evaluation –

The survey methodologies used for determining the status of state and/or federally listed wildlife species occurrence on the site followed generally accepted protocols as specified in state and Federal guidance documents. The geographic range of the property and its associated habitats, vegetative cover types, and natural or disturbed status were the primary considerations in assessing potential occurrence of listed species.

Pedestrian and vehicular surveys were employed to assess relative habitat quality and wildlife utilization. In addition, the protected species evaluations and survey methodologies have been, and will continue to be, addressed on a species-specific basis in accordance with Florida Fish and Wildlife Conservation Commission (FFWCC) and U.S. Fish and Wildlife Service (USFWS) protocols and techniques relative to the species under consideration.

The state and/or federally listed wildlife species known or expected to occur on the subject site is summarized in the following table. Likelihood of occurrence has been indicated based on species-specific evaluations and best professional judgement and noted as either observed during site review or likelihood of occurrence as high, medium, or low.

Table 1. Known and Potentially Occurring Listed Faunal Species

Common Name	Scientific Name	Preferred Habitat	Sampling Method	Occurrence*	Listed Status
					State/Federal
American alligator	*Alligator mississippiensis*	Wetland and aquatic habitat	Pedestrian and vehicular transects	M	FT/SA
Audubon's crested caracara	*Caracara cheriway*	Dry prairie, open rangeland	Pedestrian and vehicular transects	L	FT
Bald eagle	*Haliaeetus leucocephalus*	Nest in tall trees (usually pine) near coasts, rivers, lakes and wetlands	Pedestrian and vehicular transects	L	No longer listed Nest trees protected

Common Name	Scientific Name	Preferred Habitat	Sampling Method	Occurrence*	Listed Status
Eastern indigo snake	*Drymarchon corais couperi*	A diversity of upland/low land habitat	Pedestrian and vehicular transects	L	FT
Florida bonneted bat	*Eumops floridanus*	A diversity of forested habitats	Acoustic and roost surveys	L	FE
Florida burrowing owl	*Athene cunicularia*	Sandhills, ruderal communities, dry prairies	Pedestrian and vehicular transects	L	ST
Florida pine snake	*Pituophis melanoleucus mugitus*	Well drained sandy soils, moderate to open pine canopy	Pedestrian and vehicular transects	L	ST
Florida sandhill crane	*Grus canadensis pratensis*	Breed in emergent palustrine wetlands; forage in pastures/prairies	Pedestrian and vehicular transects; aerial nest survey	L	ST
Florida scrub-jay	*Aphelocoma coerulescens*	Xeric oak scrub and scrubby flatwoods on sandy ridges and dunes	Pedestrian and vehicular transects	L	FT
Gopher tortoise	*Gopherus polyphemus*	Sandhills, xeric oak scrub, sand pine scrub, scrubby flatwoods; agricultural lands	Burrow survey 100% of suitable habitat	M	ST
Little blue heron	*Egretta caerulea*	Breeding: marshes, swamps, ponds, estuaries, rivers; nest in shrubs and small trees	Pedestrian and vehicular transects	M	ST
Red-cockaded woodpecker	*Picoides borealis*	Mature pine woodlands	Pedestrian and vehicular transects	L	FE
Reddish egret	*Egretta rufescens*	Breeding: marshes, swamps, ponds, estuaries, rivers; nest in shrubs and small trees	Pedestrian and vehicular transects	L	ST
Roseate spoonbill	*Ajaia ajaja*	Breeding: marshes, swamps, ponds, estuaries, rivers; nest in shrubs and small trees	Pedestrian and vehicular transects	M	ST
Southeast American kestrel	*Falco sparverius paulus*	Sandhill and open rangeland nest in cavities of dead trees and	Pedestrian and vehicular transects	L	ST

Common Name	Scientific Name	Preferred Habitat	Sampling Method	Occurrence*	Listed Status
Tricolored heron	*Egretta tricolor*	Breeding: marshes, swamps, ponds, nest in shrubs and small trees	Pedestrian and vehicular transects	M	ST
Wood stork	*Mycteria americana*	Estuarine or freshwater wetlands; nest in tops of trees in cypress or mangrove swamps	Pedestrian and vehicular transects	M	FT

O* = Observed; [1] Observed transient ; [2] Observed nesting and/or resident
Probability of Occurrence: H= High; M= Medium; L= Low;

FE = Federally-designated Endangered; FT = Federally-designated Threatened; FXN = Federally-designated Threatened Nonessential Experimental Population; FT(S/A) = Federally-designated Threatened species due to similarity of appearance; ST = State-designated Threatened; SSC = State Species of Special Concern

The American alligator is listed as Federally Threatened due to similarity of appearance with the American crocodile. Alligators are relatively common throughout the region in wetland and aquatic systems. Although none were observed during the field reconnaissance for this environmental assessment, there is a moderate potential for alligators to occur within the on-site ditches.

The subject site is within the consultation area of Audubon's crested caracara. The subject site; however, does not contain suitable nesting or foraging habitat and no crested caracara or caracara nests were observed during site reconnaissance conducted in June and July of 2024.

Bald eagles, while no longer listed, remain protected under the Bald and Golden Eagle Protection Act. The property does not contain any suitable nesting or foraging habitat for bald eagles and no bald eagles or bald eagle nests were observed on site.

A reptile species that was not observed but has potential to occur on the site is the federally threatened eastern indigo snake. The eastern indigo snake is a secretive species that ranges widely over a diversity of upland and wetland habitats, and is known to occur in the region. Standardized and specific construction awareness and notification procedures will be implemented for the protection of this species during site development.

The Florida bonneted bat is listed as endangered by the U.S. Fish and Wildlife Service (USFWS). This species preferred habitat for roosting and nesting includes a variety of forested habitats and man-made structures. The property is located outside of the designated consultation area for this species, thus its potential for occurrence is considered low.

The Florida burrowing owl is a small ground-dwelling owl often found in open fields with little to no tree canopy coverage, where it spends most of its time on the ground, perching on dirt mounts, fence posts, or short shrubs. The site does not contain suitable habitat for burrowing owls, thus there is a low potential for this species to occur. No burrowing owls or burrowing owl burrows were observed on the property.

The Florida pine snake inhabits areas that feature well-drained sandy soils with moderate to open canopy. According to the FFWCC publicly available database, the subject site is located within the distribution area for this species. The property does not contain any suitable habitat for this species, thus the potential for this species to occur is considered low and no Florida pine snakes were observed during field reconnaissance.

No Florida sandhill crane nests were observed on the site; however, this species is relatively common within the region. The preferred nesting habitat for sandhill cranes is freshwater herbaceous marsh wetland which does not occur on site and no sandhill cranes or sandhill crane nests were observed during field reconnaissance.

The Florida scrub-jay is a Federally threatened species that inhabits xeric oak and scrubby flatwoods habitats along sandy ridges and dunes. The subject property does not contain any suitable habitat for this species and no Florida scrub-jays were observed or heard during field reconnaissance.

In July 2024, a representative habitat survey was conducted by Jason Hahner (Licensed Gopher Tortoise Agent #GTA-14-00024H) in order to identify any occurrence of gopher tortoises, their burrows, or indicators of their presence. The habitat survey was conducted in accordance with Florida Fish and Wildlife Conservation Commission (FFWCC) *Gopher Tortoise Permitting Guidelines* (revised April 2023).

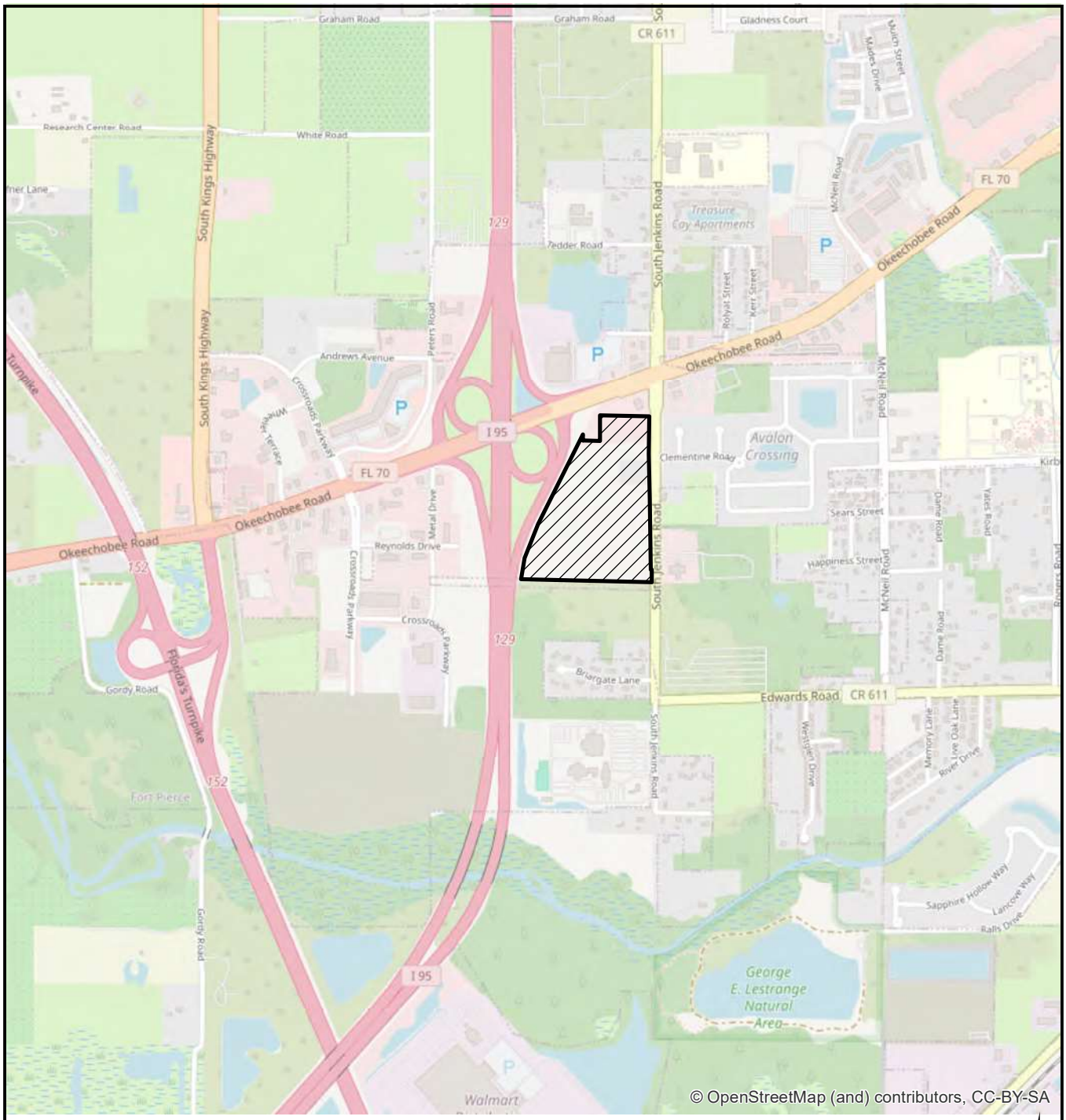
There were no gopher tortoises, potentially occupied gopher tortoise burrows, or other indicators of the presence of gopher tortoises observed on the property during field reconnaissance and the representative habitat survey conducted in July 2024. In accordance with FFWCC gopher tortoise permitting guidelines, prior to any land clearing or site work, a 100% habitat survey for this species must be completed. A gopher tortoise relocation permit will need to be obtained through FFWCC for any gopher tortoise burrows that cannot be avoided from impacts by a radius of at least 25 feet from a burrow's entrance.

The presence of surface water (ditches) and a wet prairie wetland indicates a moderate potential for occurrence of State-designated threatened wading bird species including the little blue heron, tricolored heron, and roseate spoonbill, and the Federally-designated threatened wood stork. The property does not contain suitable nesting habitat for any of these species and no such nesting activity was observed. Therefore, any occurrence of these wading bird species on the property would be for the purpose of transient foraging.

WETLANDS AND WATERBODIES

Preliminary field evaluation has identified an area within the property boundaries that may be considered state-jurisdictional wetlands. However, this opinion has not yet been verified by the South Florida Water Management District (SFWMD) for the proposed project. The review of the SFWMD online e-permitting database for publicly available permitting files revealed that a permit (permit 56-02924-P) authorizing construction and operation of a surface water management system on the subject property was previously issued by SFWMD on August 16, 2013. The previously issued permit includes a statement that no wetlands were present on the property at the time of permit issuance. A site review with SFWMD staff to verify whether wetlands are present, and the extent of any wetlands identified will be required upon submittal of a new Environmental Resource Permit (ERP) application.

APPENDIX



LEGEND

▨ - SITE (49.9+/- AC)

CORNERSTONE
LOCATION MAP

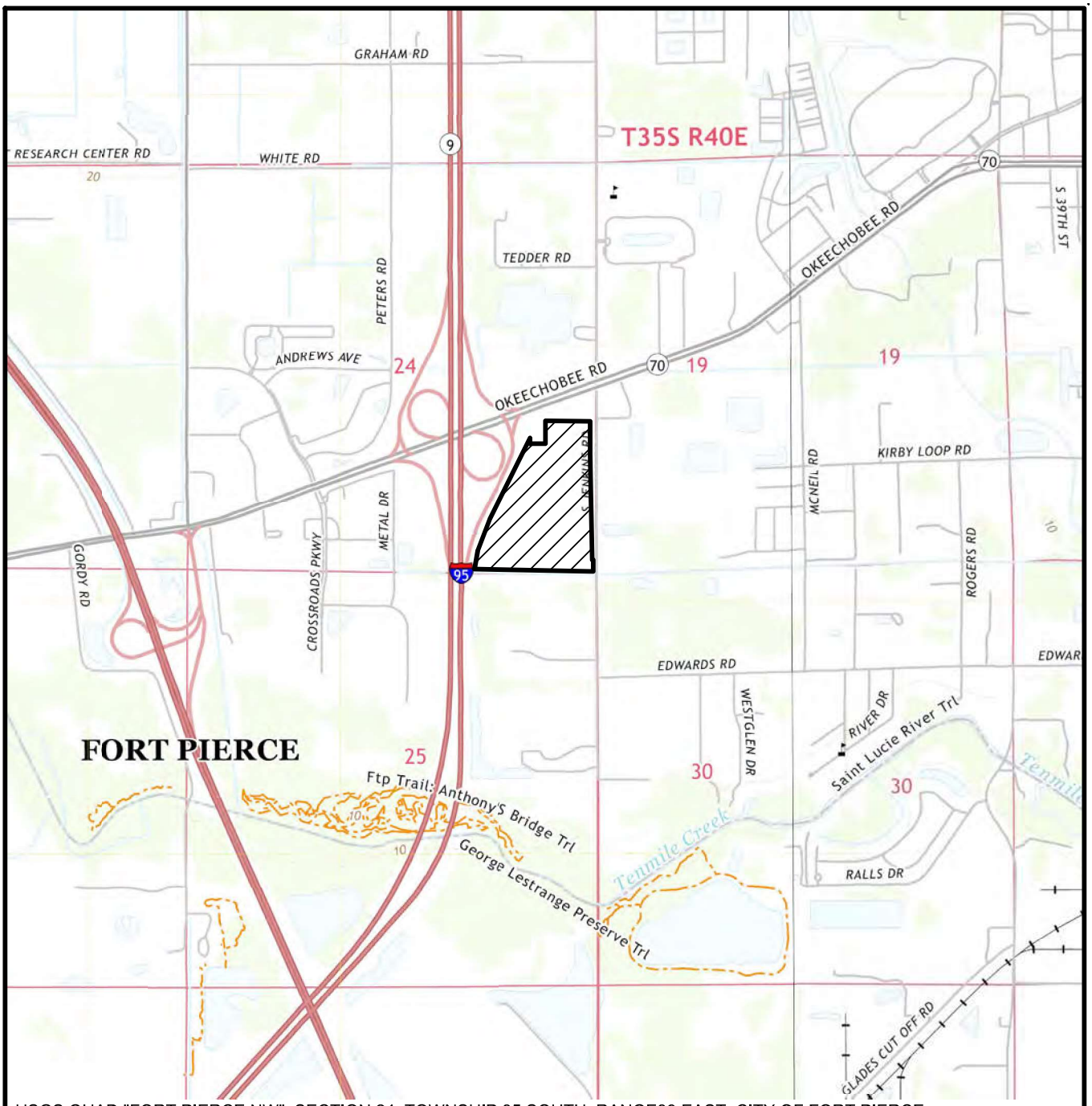
EW CONSULTANTS, INC.

1000 SE Monterey Commons Blvd., Suite 208
Stuart, FL 34996
772-287-8771 Fax 772-287-2988
www.ewconsultants.com

AUG 2024

FIGURE

1



USGS QUAD "FORT PIERCE NW", SECTION 24, TOWNSHIP 35 SOUTH, RANGE39 EAST, CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA, LATITUDE 27d°04'47" LONGITUDE -80°23'06"

LEGEND

- SITE (49.9± AC)

0 2000

SCALE IN FEET

CORNERSTONE

QUAD

EW CONSULTANTS, INC.

1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 FAX 772-287-2988
WWW.EWCONSULTANTS.COM

AUG 2024

FIGURE

2

Cornerstone.dwg QUAD



FDOT AERIALS DATED 2024

0 600
SCALE IN FEET

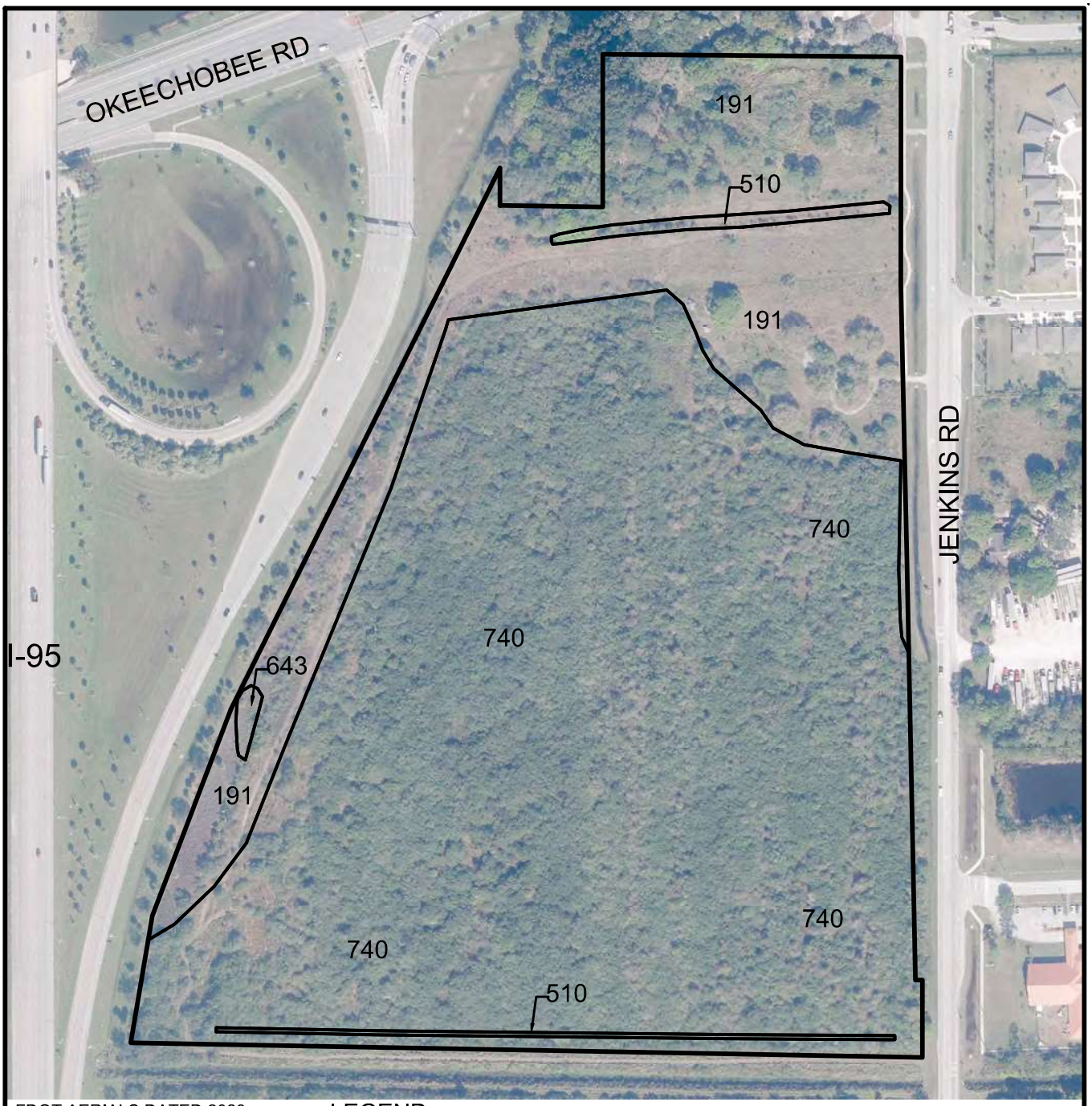
CORNERSTONE
AERIAL

EW CONSULTANTS, INC.
1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 FAX 772-287-2988
WWW.EWCONSULTANTS.COM

AUG 2024

FIGURE
3

Cornerstone.dwg AERIAL



FDOT AERIALS DATED 2023

LEGEND

191 - UNDEVELOPED LAND WITHIN URBAN AREAS (12.4± AC)
510 - DITCH (0.6± AC)
643 - WET PRAIRIE (0.1± AC)
740 - DISTURBED LANDS (36.8± AC)
TOTAL SITE (49.9± AC)

0 300
SCALE IN FEET

CORNERSTONE

FLUCFCS

EW CONSULTANTS, INC.
1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 FAX 772-287-2988
WWW.EWCONSULTANTS.COM

AUG 2024

FIGURE
4

Cornerstone.dwg FLUCFCS

Soil Map—St. Lucie County, Florida
(CORNERSTONE)



Map Scale: 1:3,630 if printed on A portrait (8.5" x 11") sheet.

N

Meters
0 50 100 200 300

Feet
0 150 300 600 900

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 17, Sep 6, 2023

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
2	Ankona and Farmton sands	0.9	1.8%
25	Nettles and Oldsmar sands	49.0	98.2%
Totals for Area of Interest		**49.9**	**100.0%**

Technical Review Committee **3. b.**

Meeting Date: 10/17/2024

REQUESTED ACTION

Final Planned Development - Millcreek - 2407-124-0001-000-3

SUMMARY

MILLCREEK PLANNED DEVELOPMENT: This is a Final Planned Development Application. The proposed site plan indicates a total of 439 dwelling units, distributed in 309 townhomes, and 130 detached single-family homes. The proposed density is 7.1 du/ac, The main access is located on Orange Avenue to the south. The project's first connection to the Major Road Network is on Orange Avenue between Jenkins Road and Hartman Road, at the existing intersection of Orange Avenue and Bent Creek Drive. There is an existing eastbound left turn at the proposed driveway that will remain and improved if required by FDOT.

LOCATION

The subject parcel number is 2407-124-0001-000-3, located north of Orange Avenue and west of N 41st Street.

RESPONSIBLE STAFF

Kev Freeman - kfreeman@cityoffortpierce.com

RECOMMENDATION

TBD

Attachments

Cover Letter
Location Map
Site Plan
Landscape Plan
Landscape Plan-2
Tree Survey
Construction - Grading
Preliminary Engineering
Survey
Stormwater Report
Stormwater Maintenance
Environmental Assessment
Lighting Plan
Lighting Spec

Legal Description
Warranty Deed
Concurrency Review
Phasing Plan
Design Review Application
Existing Area Architectural
Architectural Rendering 1
Architectural Rendering 2
Architectural Rendering 3
Architectural Rendering 4
Development Agreement

Form Review

Form Started By: Kev Freeman
Started On: 09/24/2024 01:54 PM
Final Approval Date: 09/24/2024

COVER LETTER

MILLCREEK
Planned Development Amendment
July 2024

To:
The Fort Pierce Planning Department

Prepared by:

Redtail DG
100 S. 2nd Street

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
772.742.1555
www.redtaildg.com
todm@redtaildg.com

Dear Planning Department,

We are excited to be able to present to you a proposal for the major site plan of the development located on Orange Avenue called Millcreek.

PROPERTY

Following the Redtail Design Group's application, the subject property (Image 1) was annexed to the city and its future land use was established as Residential Medium (Image 2) and the zoning designation was established as a Planned Development (Image 3) in 2023. The subject parcel has 62.51 acres and its parcel number is 2407-124-0001-000-3 (image 1).

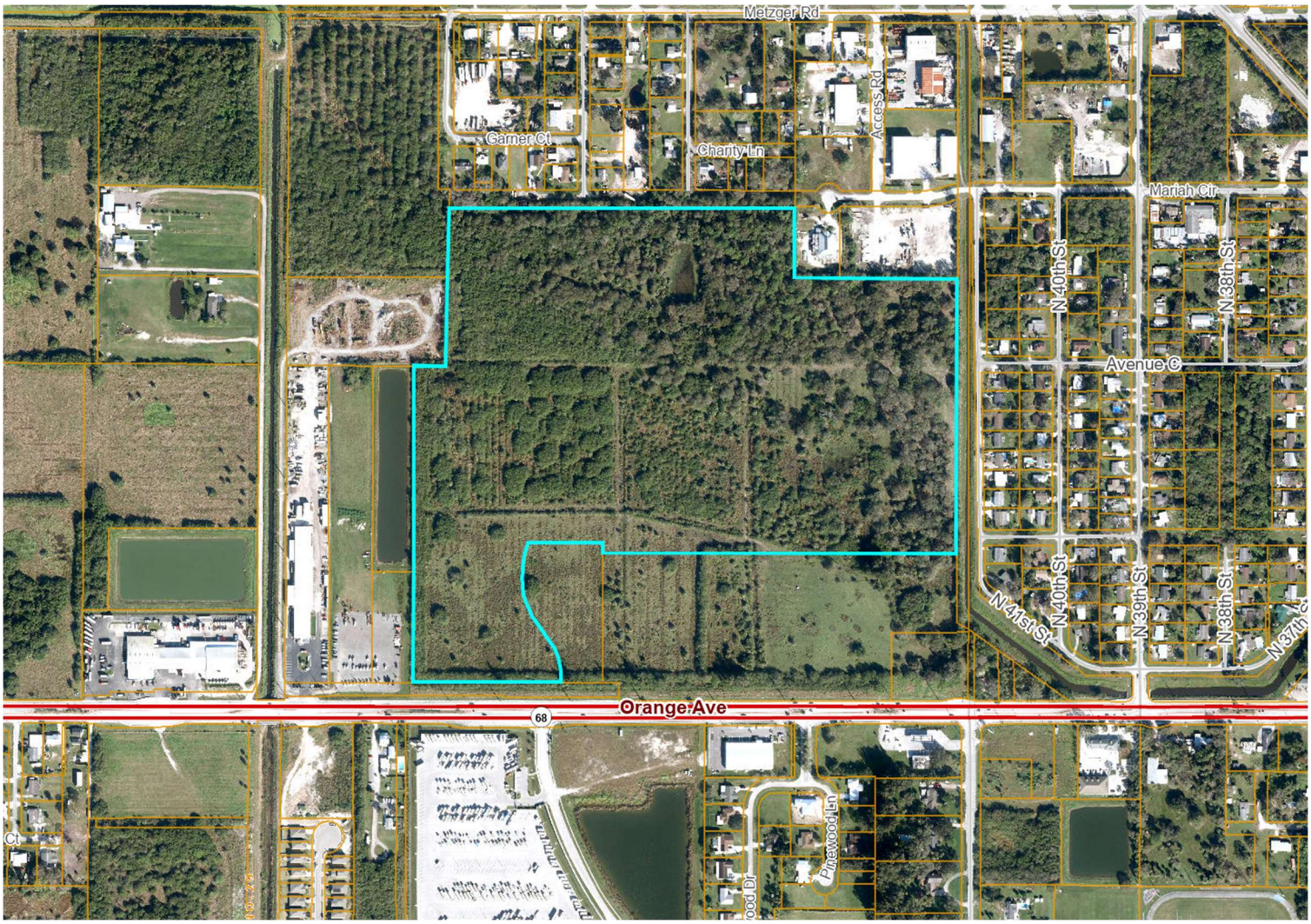


Image 1 – Subject property

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
772.742.1555
www.redtaildg.com
todm@redtaildg.com

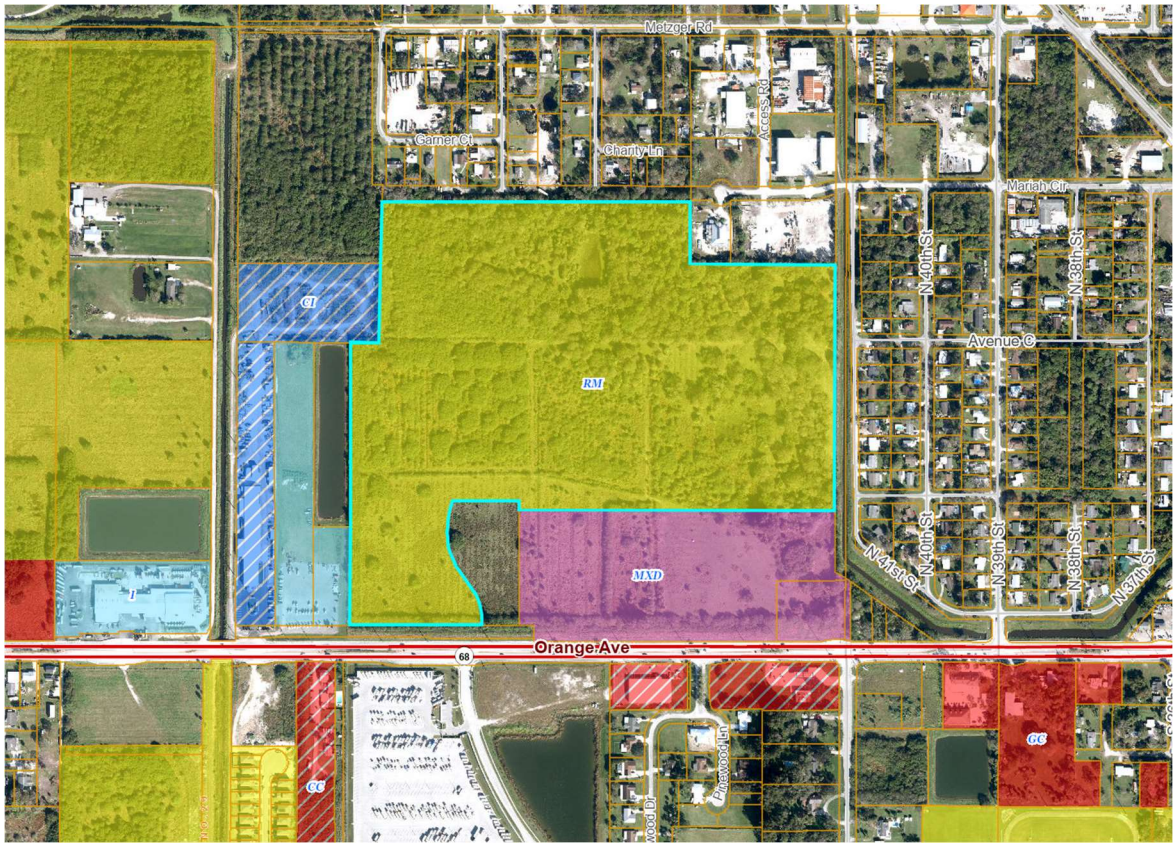


Image 2 – Future Land Use Map

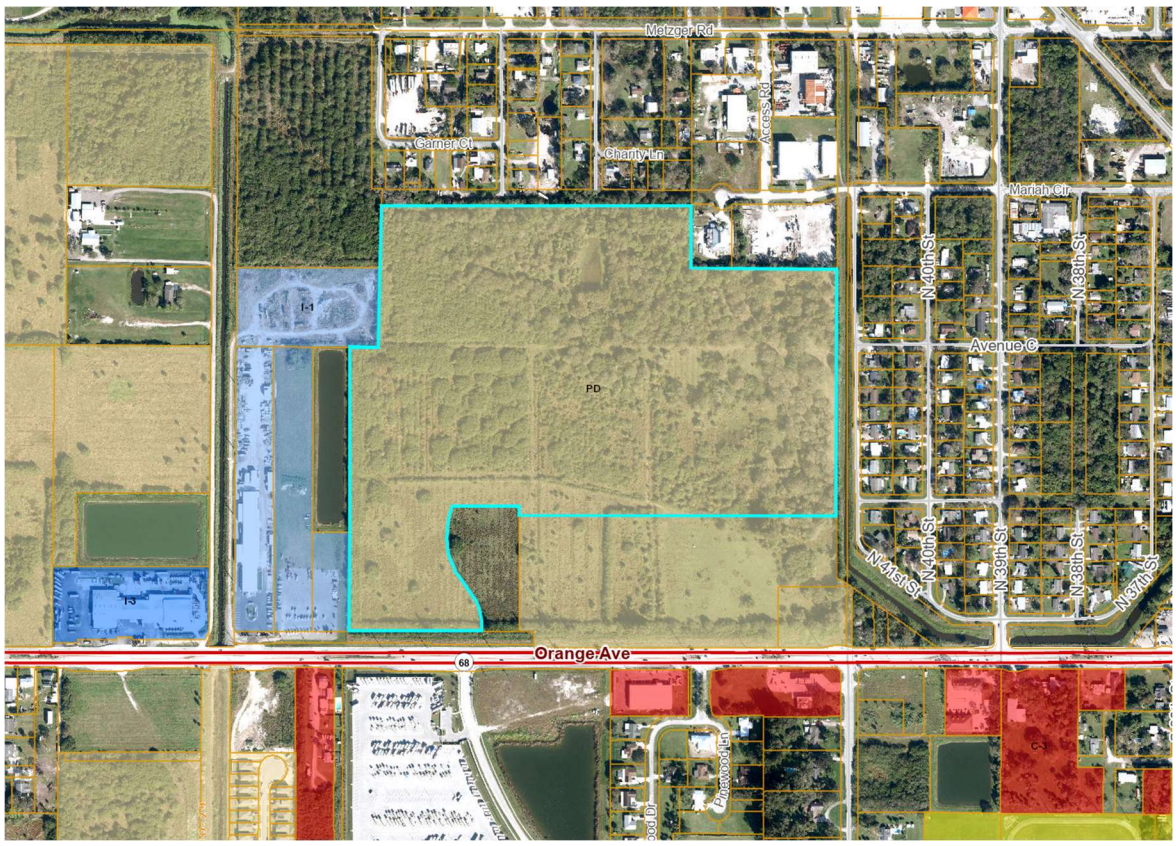


Image 3 – Zoning Map

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
772.742.1555
www.redtaildg.com
todm@redtaildg.com

The property was historically used as a citrus land, a practice that was abandoned a long time ago. As the city is growing, this location is seeing a rapid development because it is a very attractive area for residential developments such as Bent Creek on the south, West Orange on the west and Celebration Pointe on the southwest.

HOME BUILDER

We are proud to present the home builder that will develop the subject site. They are Dream Finders Homes, a national home builder that was founded in 2008, and has built homes across 9 states in 190 unique communities. In total, they have built over 15,000 homes in 15 years. They are the Official Home Builder of the NFL Jacksonville Jaguars and Florida Gators.

In 2021, the company went public and is listed on NASDAQ as DHF. In the same year, they acquired Century Homes Florida LLC and McGuyer Homebuilders Inc.

In 2022, they were ranked #17 in the Builder 100, and became the Official Home Builder of the PGA TOUR. Their capital Allocation Framework can be seen on the image 4.

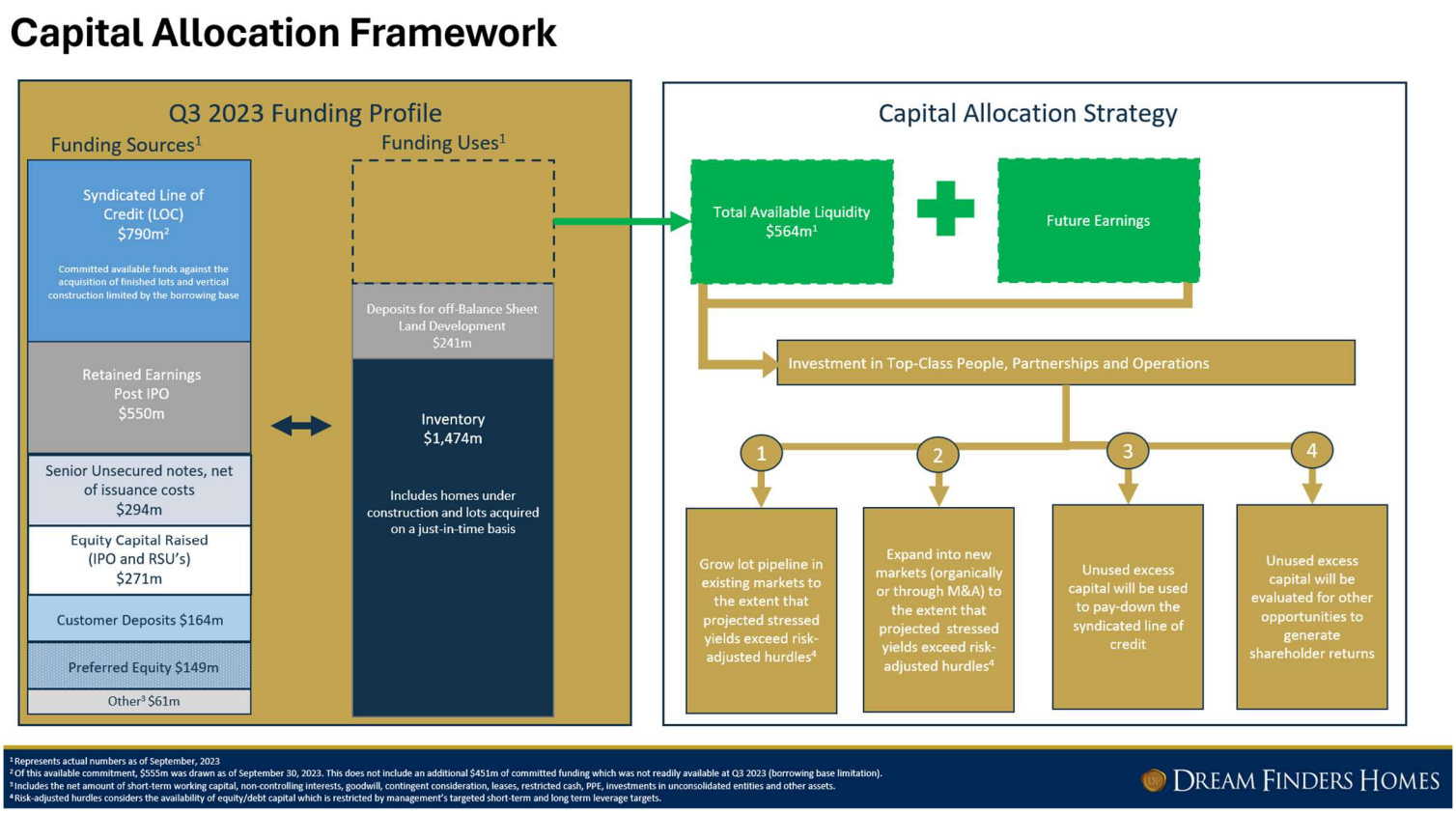


Image 4 – Dream Finders Homes - Capital Allocation Framework

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
772.742.1555
www.redtaildg.com
todm@redtaildg.com

SITE PLAN

The proposed site plan (Image 5) shows the residential development that will have a total of 439 dwelling units, distributed in 309 townhomes and 130 detached single-family homes. The density is 7.1 du/ac which is well bellow the allowed 12 du/ac per the Planned Development zoning requirements.

The main access is located on Orange Avenue on the south. The project's first connection to the Major Road Network is on Orange Avenue between Jenkins Road and Hartman Road, at the existing intersection of Orange Avenue and Bent Creek Drive. There is an existing eastbound left turn at the proposed driveway that will remain and improved if required by FDOT. An additional westbound right turn lane is not warranted at this time. Going north, there will be an access to the neighboring parcel to the east, after which the residents will approach the clubhouse with amenities, and will be able to easily access the residential units. We proposed two grids of roads that are different in character to give different character to the areas, and used curved roads for the single-family units which represents the rural area roads that have more freedom in design, and used orthogonal grid for the townhomes which symbolizes the grids of the American towns. It is a perfect blend. All lots were carefully designed to meet the requirements of the City Code.

The site has a dog park and a pocket park, and 12.8% of the stormwater, which was divided into 5 lakes making a unique character of the development. There is an emergency road planned on the north that aligns with the N 43rd street. On the southeast, we left a possibility of connection to the future development that would connect this development to the signalized intersection of Orange Avenue and Hartman Road.

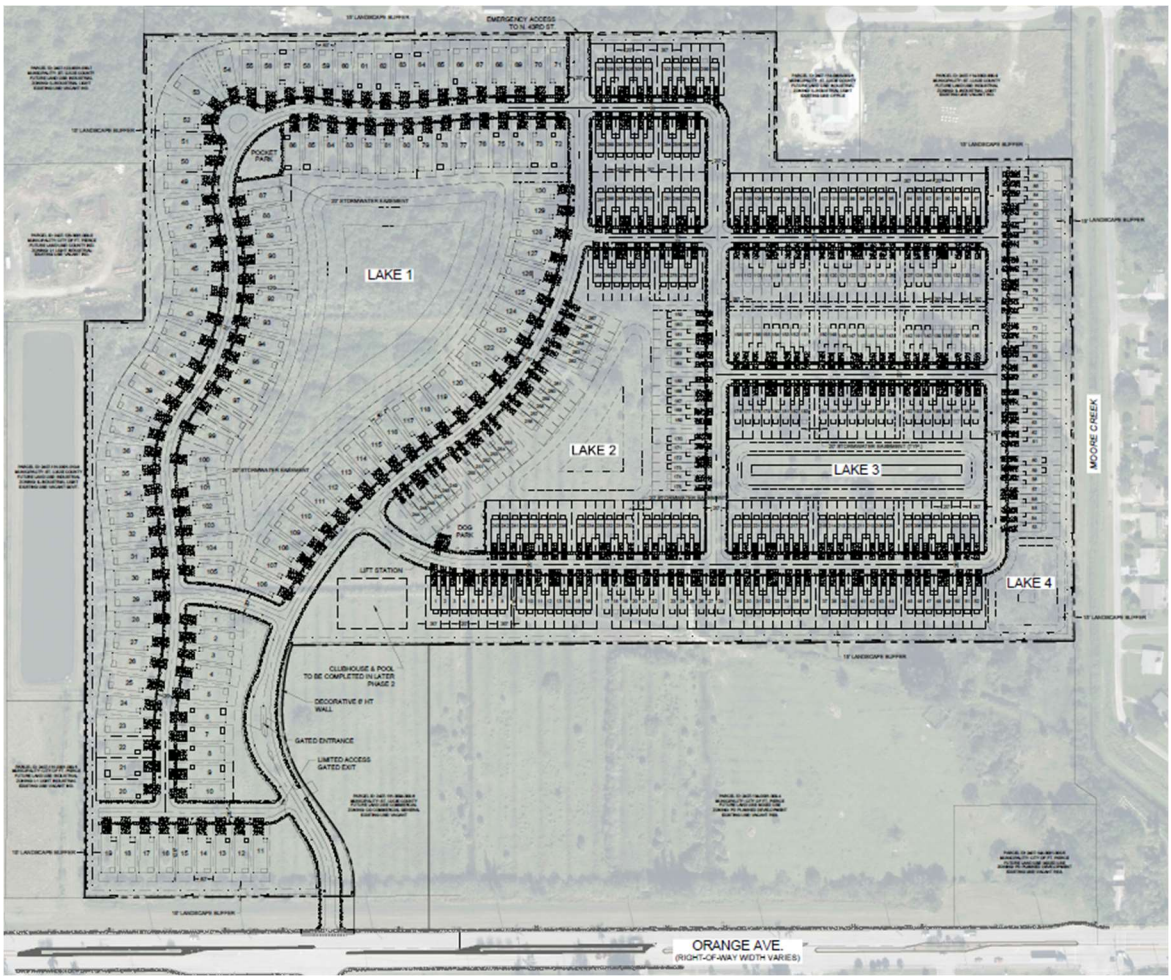


Image 5 – Proposed Site Plan

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
772.742.1555
www.redtaildg.com
todm@redtaildg.com

HOME PRODUCTS

The following are the premium home products that will be used throughout the development.

AVONDALE

1,844 sq. ft. | 3 Bed | 2 Bath | 2-Car Garage



Image 6 – Avondale Single family home product

STOCKTON

2,036 sq. ft. | 4 Bed | 2.5 Bath | 2-Car Garage



Image 7 – Stockton Single family home product

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todm@redtaildg.com

VILANO

2,500 sq. ft. | 4 Bed | 3 Bath | 2-Car Garage



Image 8 – Vilano Single family home product

Warbler

1,445 sq. ft. | 3 Bed | 2.5 Bath | 1-Car Garage



Image 9 – Warbler Townhome home product

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todm@redtaildg.com

The home products have several options each, which adds to the design diversity of the proposed development. We would like to note that the submitted architectural styles are currently available, and in the case of them being changed by the time the development starts, the equivalent architectural styles will be used. Similarly, the developer is working on the architecture of the proposed clubhouse and these plans will be submitted shortly.

CONCLUSION

The development of this size and quality is what is demanded on the market, and we believe that it will be an example to follow. To conclude this cover letter, here is a summary of the proposed development:

- 439 dwelling units on 62.51 acres (7.1 du/ac)
- National home builder 'Dream Finders Homes'
- Premium home products 309 townhomes and 130 single family units
- Access points
    - Main access from Orange Avenue
    - Emergency access on north aligned with N 43rd
    - Open possibility of connection to Orange Avenue and Hartman Road intersection
- Clubhouse with amenities
- Dog park
- Pocket park
- 5 lakes that total to 7.57 acres and constitute 12.1 percent of the site.

Based on the above and attached information, the applicant respectfully request approval of the proposed application.

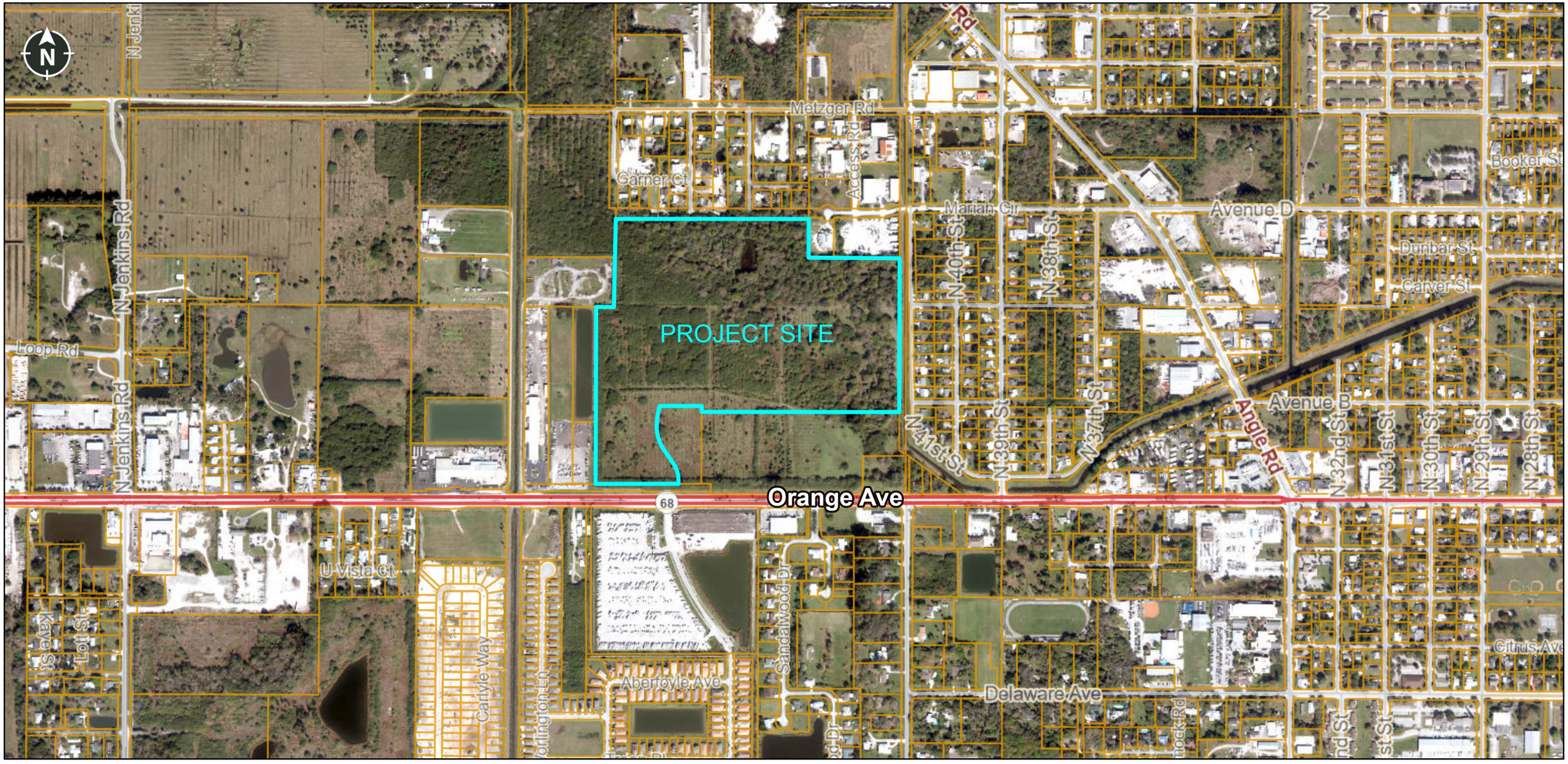
If you have any questions, please do not hesitate to contact us.

We are looking forward to working with you on this project,
Sincerely,

Tod Mowery, AICP
Redtail DG

C:
FM Millcreek Holding LLC
Dreamfinders Homes

Millcreek - Location Map



7/19/2024

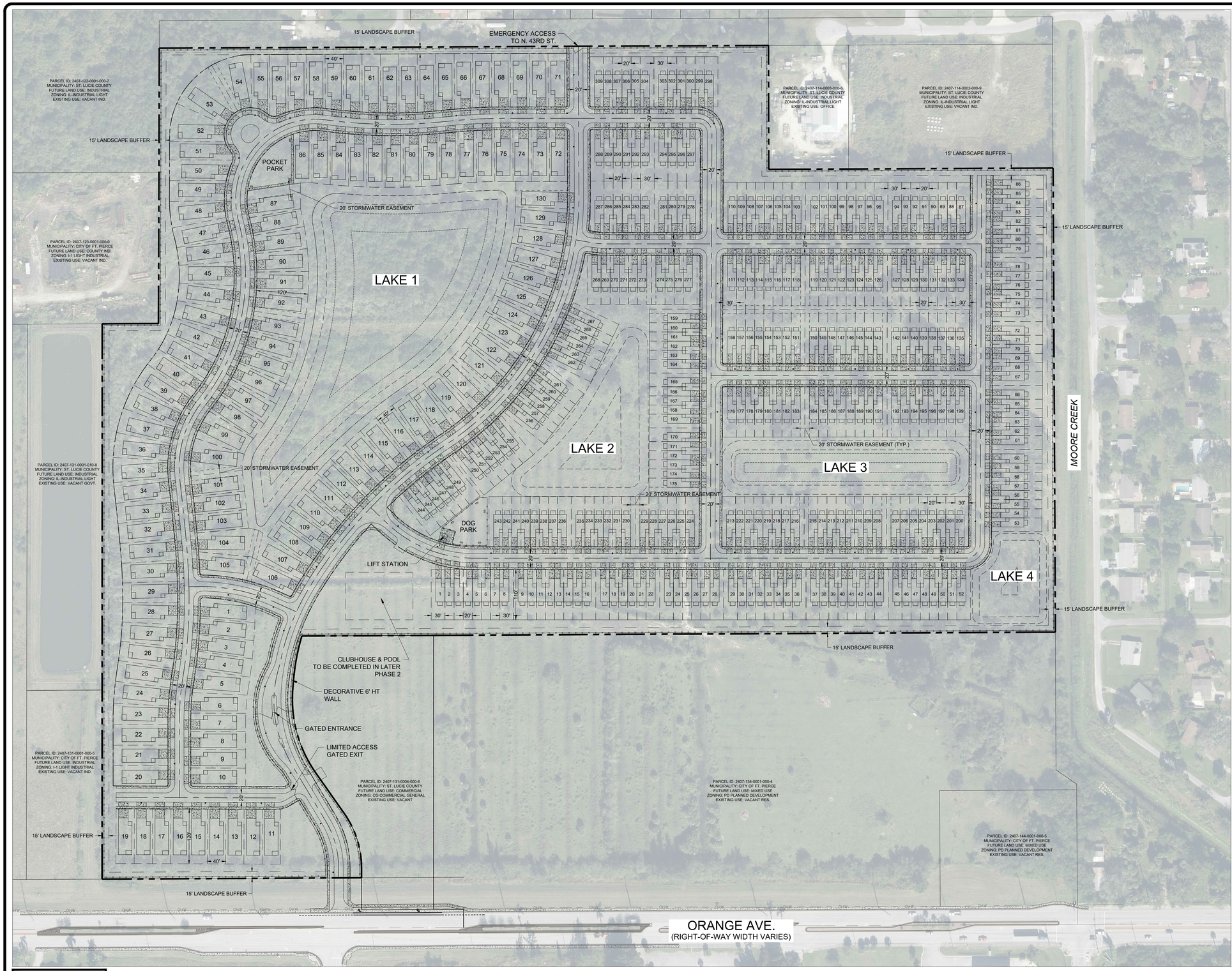
1:9,028

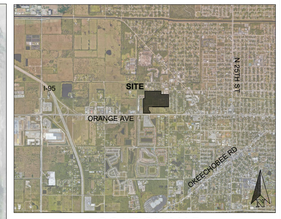
0 500 1,000 2,000 ft

0 155 310 620 m

REDTAIL DG
100 S. 2nd Street
Fort Pierce, FL 34950

RedtailDG





LOCATION MAP
NTS

LEGEND

- OVERALL PROPERTY LINE
- PROPOSED BUILDING
- PROPOSED CURB AND GUTTER
- PROPOSED LOT LINES
- PROPOSED STORMWATER EASEMENT
- PROPOSED WALL
- LANDSCAPE BUFFER
- ROADWAY CENTERLINE
- PROPOSED CONCRETE SIDEWALK

SITE DATA

ZONING	PLANNED DEVELOPMENT ZONE (PD)
FUTURE LAND USE	PLANNED DEVELOPMENT ZONE (PD)
PCN	2407-124-0001-000-3
EXISTING USE	VACANT
PROPOSED USE	PLANNED DEVELOPMENT ZONE (PD)

SITE AREAS

TOTAL SITE AREA	2,722,935.6 SF	62.51 AC	100.00%
IMPERVIOUS TOTAL	1,457,199 SF	33.45 AC	53.51%
BUILDING COVERAGE	613,854 SF	14.09 AC	42.12%
DRIVWAYS	188,319 SF	04.32 AC	12.91%
PAVEMENT	208,773 SF	04.80 AC	14.35%
SIDEWALKS & CURB	97,957 SF	02.24 AC	06.70%
STORMWATER POND	348,296 SF	08.00 AC	23.92%
PERVIOUS TOTAL	1,265,736.6 SF	29.06 AC	46.49%
OPEN SPACE	1,265,736.6 SF	29.06 AC	100.00%

BUILDING DATA

TOTAL UNITS:	439	100%	
TOWNHOMES:	309	70%	
SINGLE FAMILY HOMES:	130	30%	
TOTAL BUILDING COVERAGE:	613,854 SF	14.09 AC	22.54%
TOTAL DENSITY:	7.02 Du/ AC		
TYP. SINGLE FAMILY HOME FAR:	0.48		
TYP. TOWNHOME FAR:	0.46		
LOT COVERAGE	50% MAX		

	PERMITTED	PROVIDED
OPEN SPACE	MIN. 12.502 AC (20%)	29.06 AC (46.49%)
BUILDING HEIGHT	PERMITTED 45'	PROVIDED 45'
BUILDING SETBACKS	REQUIRED	PROVIDED
FRONT	20'	20'
REAR	10'/2' (4)	10'
SIDE	5'	5'

PER ORD. NO. 23-011

OWNER
FM MILLCREEK HOLDING LLC
1698 W HIBISCUS BLVD.,
UNIT STE. A
MELBOURNE, FL 32901-2639

PLANNER
REDTAIL DESIGN GROUP
TOD MOWERY, AICP
100 S. 2ND STREET, UNIT 209
FORT PIERCE, FLORIDA 34950
772.742.1555

ENGINEER
THOMAS ENGINEERING GROUP
BRANDON M. ULMER, PE
840 SE OSCEOLA ST.
STUART, FLORIDA 34994
772.888.3138

SURVEYOR
EDC, INC.
MICHAEL T. OWEN, PSM
10250 VILLAGE PKWY., UNIT 201
PORT ST. LUCIE, FLORIDA 34987
772.462.2455

LANDSCAPER
LANDSCAPE DESIGN ASSOCIATES
SABINE MARCKS, RLA
2510 NW 182ND AVE.
HIGH SPRINGS, FL 32643
352.210.5765

GRAPHIC SCALE
0 100 200
1" = 100'

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THIS CONCEPTUAL PLAN IS INTENDED FOR DESIGN PURPOSES ONLY AND MAY OR MAY NOT COMPLY WITH ALL COUNTY LAND DEVELOPMENT REGULATIONS.THIS INSTRUMENT MAY NOT BE UTILIZED FOR ANY OTHER PURPOSE OR BY OTHERS THAN INTENDED WITHOUT EXPRESS WRITTEN CONSENT FROM REDTAIL DG.

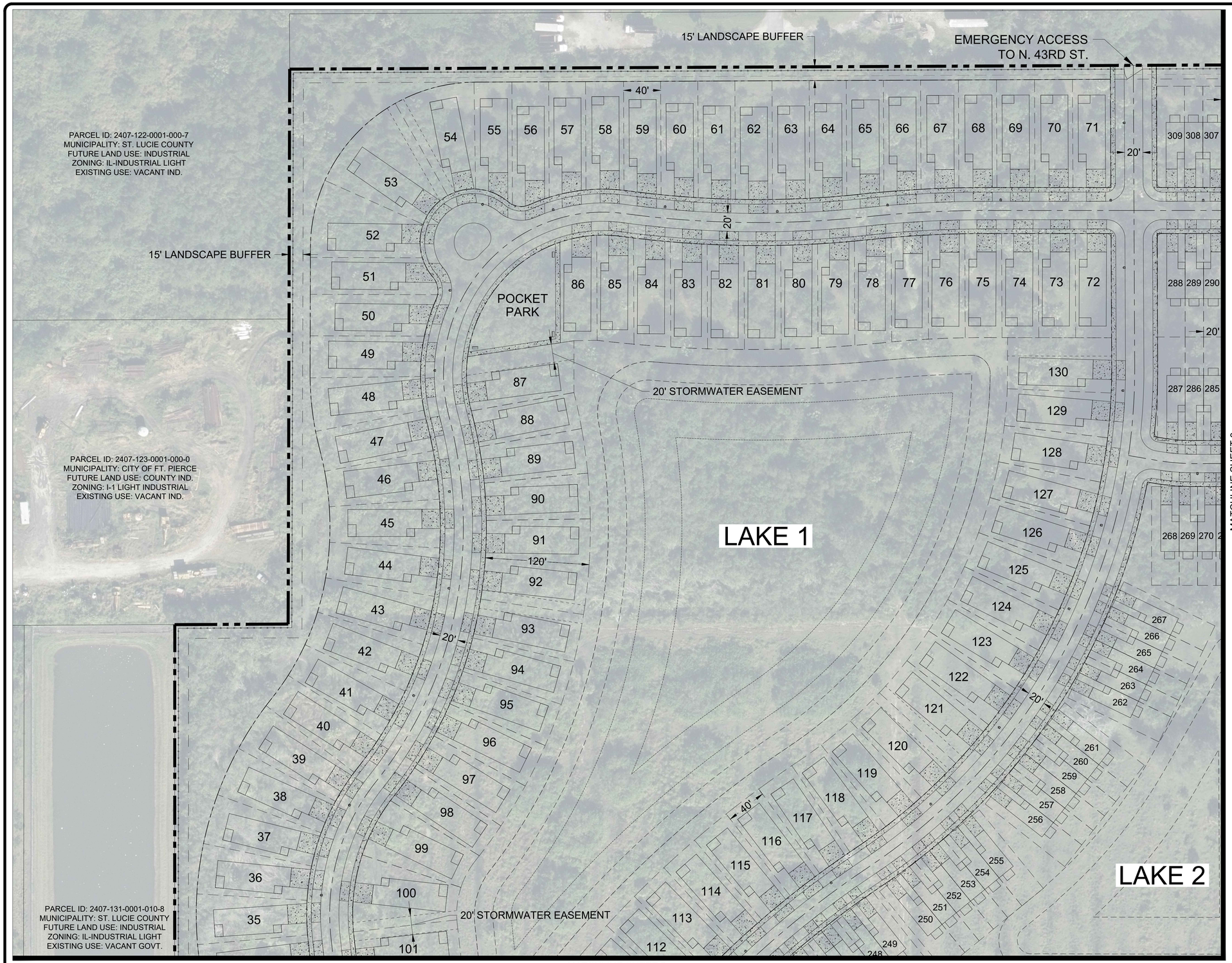
REDTAIL DESIGN GROUP LLC
p. 772.742.1555
hodie@redtaildg.com

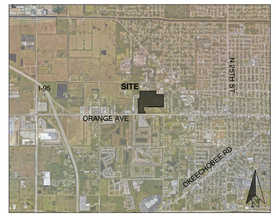
DESIGNED BY	TM
DRAWN BY	AH
FILENAME	RDTL-SIT-FLDWG
	SIT
	LAYOUT
SCALE	1" = 100'
DATE	7/19/2024

REVISION COMMENTS

DATE

MILLCREEK
ORANGE AVE.
OVERALL CONCEPTUAL SITE PLAN
CITY OF FT. PIERCE FLORIDA





LOCATION MAP
NTS

LEGEND

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BUILDING SETBACKS	REQUIRED	PROVIDED
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REAR	10'/2' (4)	10'
SIDE	5'	5'

PER ORD. NO. 23-011

OWNER
FM MILLCREEK HOLDING LLC
1698 W HIBISCUS BLVD,
UNIT STE A
MELBOURNE, FL 32901-2639

SURVEYOR
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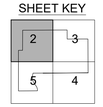
SHEET KEY



GRAPHIC SCALE

0 50 100

1" = 50'

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holden@redtaildg.com

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AH	DRAWN BY
RDTL-SIT-FL1.DWG	FILENAME
SIT-2	LAYOUT
1" = 50'	SCALE
7/19/2024	DATE

REVISION COMMENTS

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MILLCREEK
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CONCEPTUAL SITE PLAN
CITY OF FT. PIERCE
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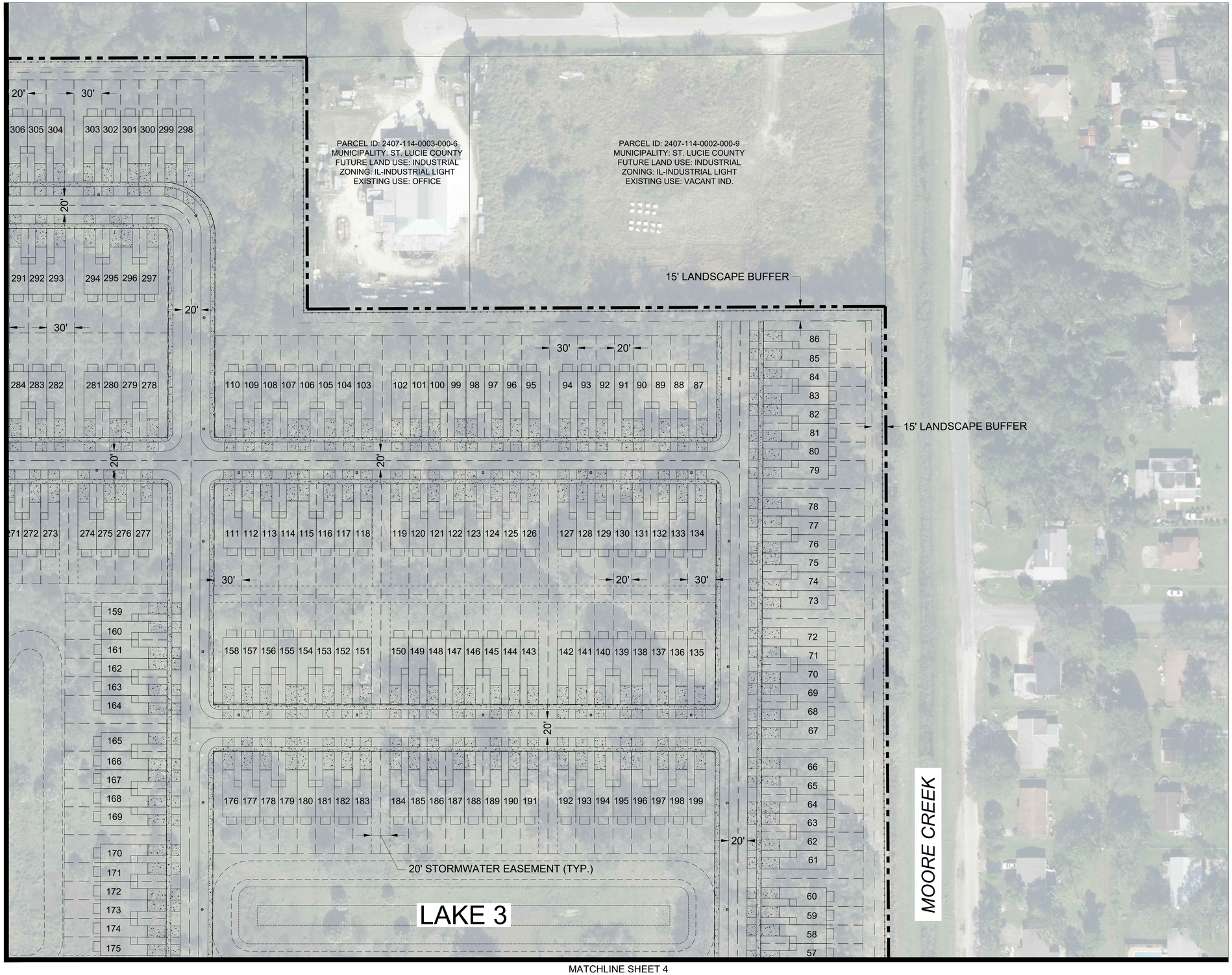

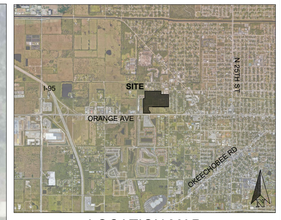

LOCATION MAP
NTS

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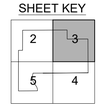

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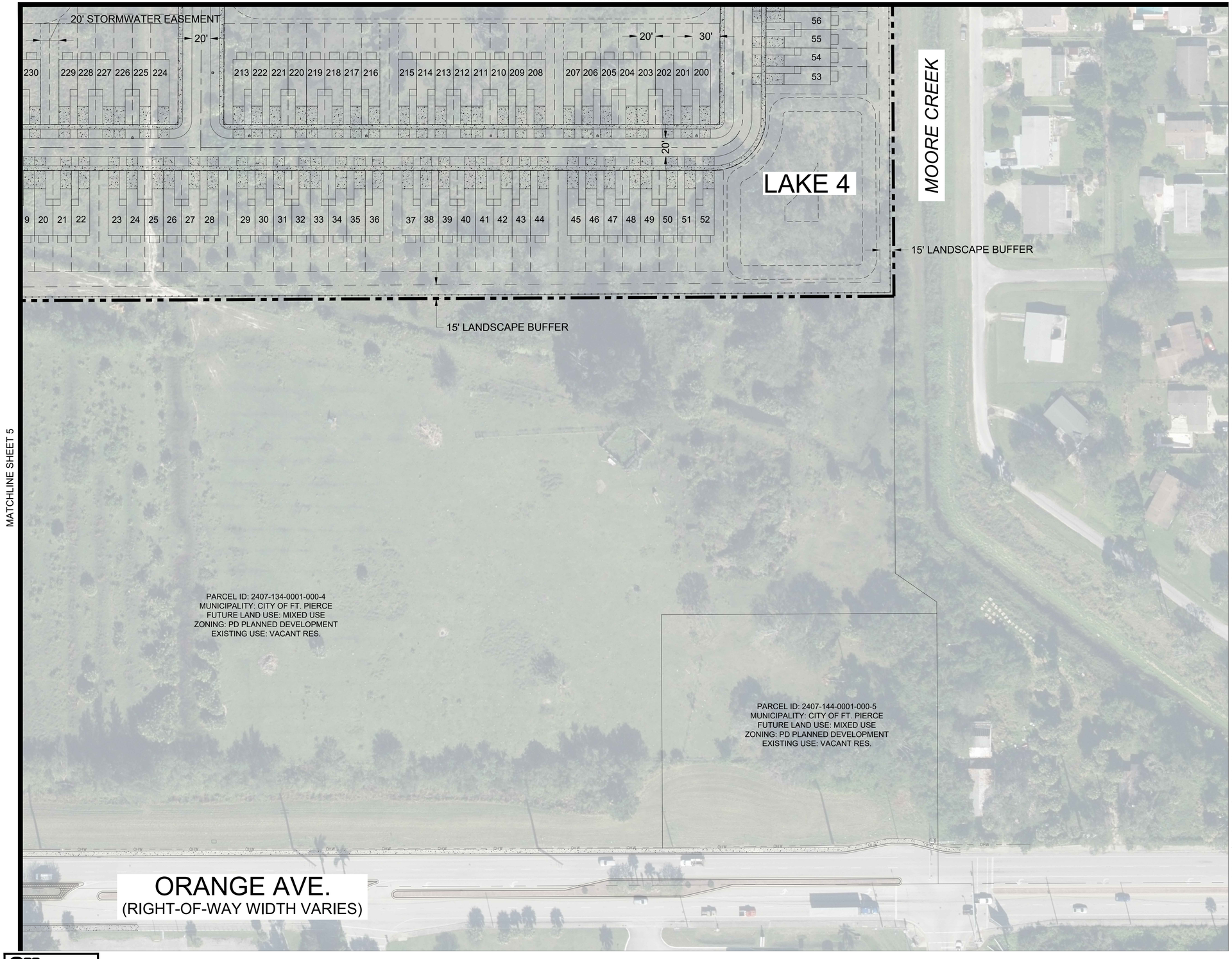
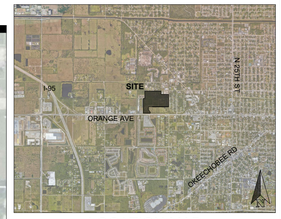
MATCHLINE SHEET 3



MATCHLINE SHEET 5



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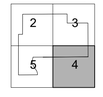

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SIT-4 LAYOUT
1" = 50' SCALE
7/19/2024 DATE

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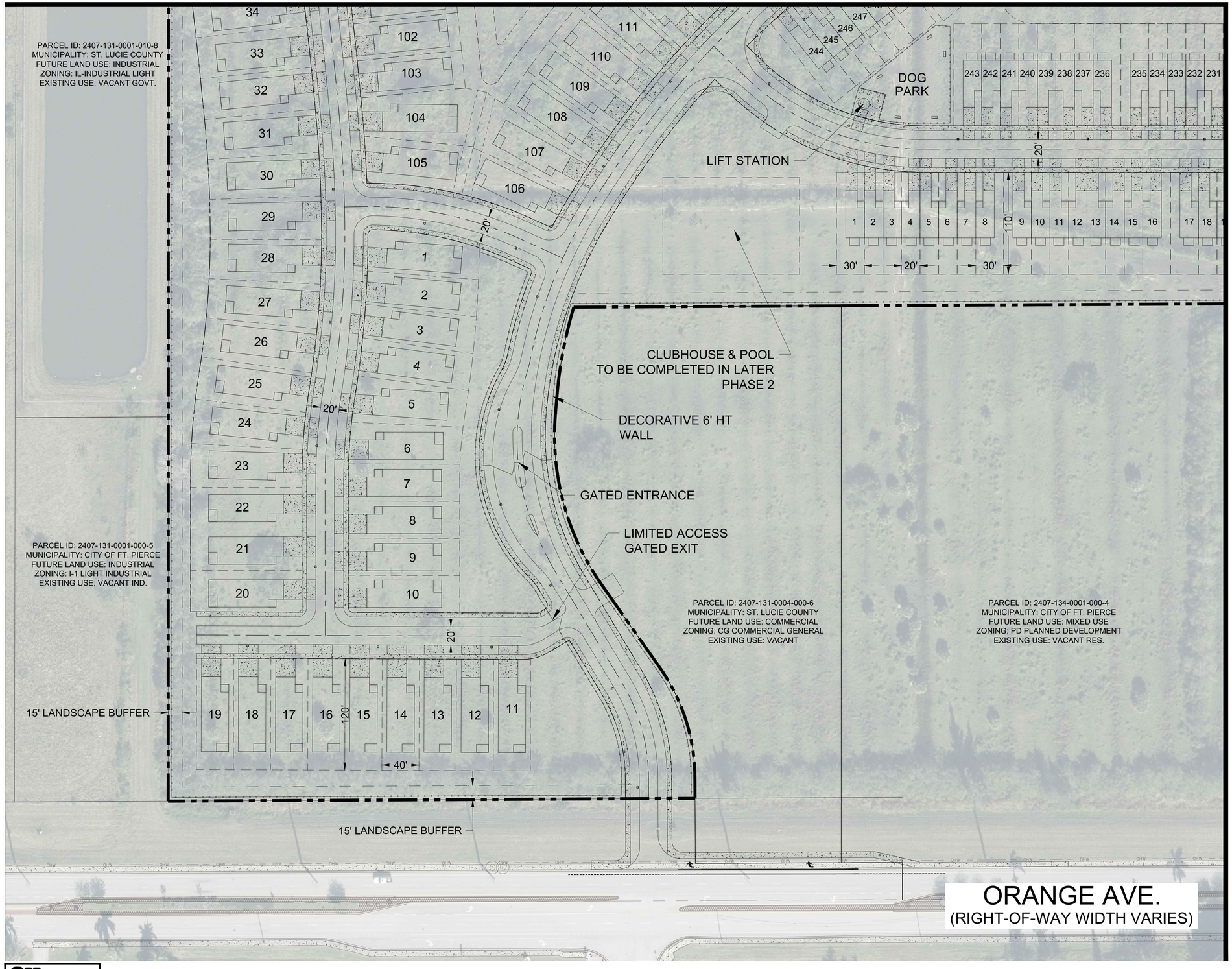
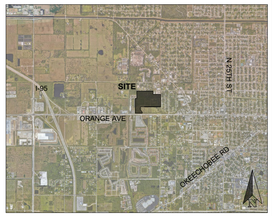
MATCHLINE SHEET 2





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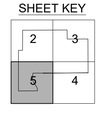

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MILLCREEK
ORANGE AVE.
CONCEPTUAL SITE PLAN
CITY OF FT. PIERCE FLORIDA

NOTES:
1. ALL SIGNS SHALL COMPLY WITH U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION'S "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES", LOCAL CODES AND AS SPECIFIED. MOUNT SIGNS TO POST IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

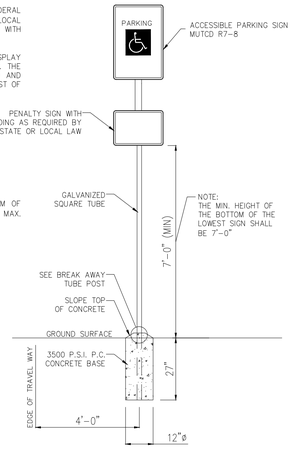
2. THE TOP PORTION OF THE PARKING BY DISABLED PERMIT ONLY SIGN SHALL DISPLAY WHITE REFLECTIVE LEGEND AND BORDER WITH A BLUE REFLECTIVE BACKGROUND. THE BOTTOM PORTION OF THE SIGN SHALL DISPLAY AN OPAQUE BLACK LEGEND AND BORDER WITH A REFLECTIVE WHITE BACKGROUND. SIGN FABRICATION SHALL CONSIST OF ONE PANEL.

3. GALVANIZED SQUARE TUBE

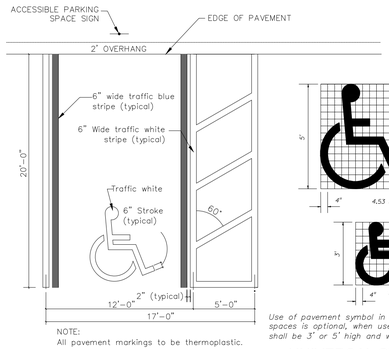
   POST TUBES – 2"x2"x3/16" 14ga
   POST TUBE SHALL MEET ASTM A1011 GRADE 50.
   POST TUBE GALVANIZED AS PER ASTM A653 GRADE 90.

   ANCHOR TUBE – 2-1/4"x2-1/4"x3/16" 14ga
   HEAVY DUTY ANCHOR TUBE SHALL MEET ASTM A500 GRADE B.
   STRUCTURAL TUBE AND STEEL SHALL BE HOT DIP GALVANIZED PER ASTM A123.

   THE UPPER SIGN POST SHALL TELESCOPE INSIDE THE ANCHOR TUBE A MINIMUM OF 12". THE ANCHOR TUBE SHALL BE A MINIMUM 27" DEEP WITH 3" MIN. 4" MAX. EXPOSED ABOVE FINISH GRADE.



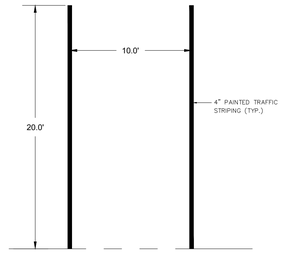
ACCESSIBLE SIGN MOUNTING AND BASE
N.T.S



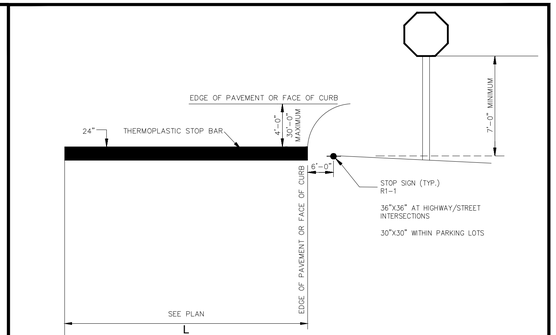
ACCESSIBLE PARKING STALL
N.T.S

Use of pavement symbol in accessible parking spaces is optional, when used the symbol shall be 3' or 5' high and white in color.

UNIVERSAL SYMBOL OF ACCESSIBILITY
N.T.S



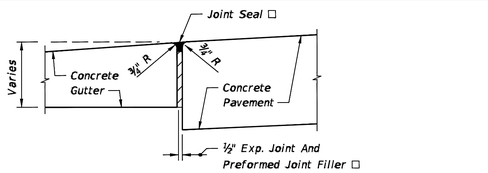
TYPICAL PARKING DETAIL
N.T.S



NOTES:
1. INSTALLATION OF STOP SIGNS SHALL BE IN ACCORDANCE WITH THE SECTION 28.04 OF THE MUTCD. MULTI-WAY STOP SIGNS SHALL BE PLACED ONLY IF APPLICABLE IN ACCORDANCE WITH SECTION 28.07 OF THE MUTCD. STOP SIGNS ARE USED TO INDICATE THAT TRAFFIC IS ALWAYS REQUIRED TO STOP AND SHOULD NEVER BE USED TO SLOW OR CALM TRAFFIC FLOW. STOP SIGNS SHALL BE OCTAGONAL AND AT LEAST 30 INCHES HIGH BY 30 INCHES WIDE WITH WHITE DIAMOND GRADE SHEETING BACKGROUND AND CLEAR RED ELECTROCUT OVERLAY OR SILKSCREENED WITH CLEAR ULTRAVIOLET RESISTANT OVERLAY.

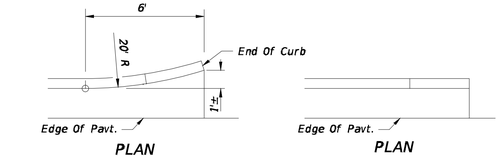
2. A STOP BAR OR LINE IS REQUIRED AT EACH LOCATION WHERE A STOP SIGN EXISTS. THE STOP BAR SHALL CONSIST OF A SOLID 24-INCH WIDE WHITE THERMOPLASTIC LINE THAT EXTENDS ACROSS THE APPROACH LANES TO INDICATE THE POINT AT WHICH THE STOP IS INTENDED OR REQUIRED TO BE MADE.

TYPICAL STOP BAR AND SIGN LOCATION DETAIL
N.T.S



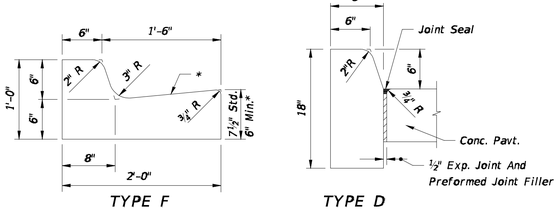
☐ *Applies to both high and low sides of pavement, low side shown.*

EXPANSION JOINT BETWEEN GUTTER AND CONCRETE PAVEMENT



CURB AND GUTTER TYPE F

CURB AND GUTTER ENDINGS



Note: For use adjacent to concrete or flexible pavement, concrete shown. Expansion joint, preformed joint filler and joint seal are required between curbs and concrete pavement only.

CONCRETE CURB

* *When used on high side of roadways, the cross slope of the gutter shall match the cross slope of the adjacent pavement. The thickness of the lip shall be 6", unless otherwise shown on plans.*

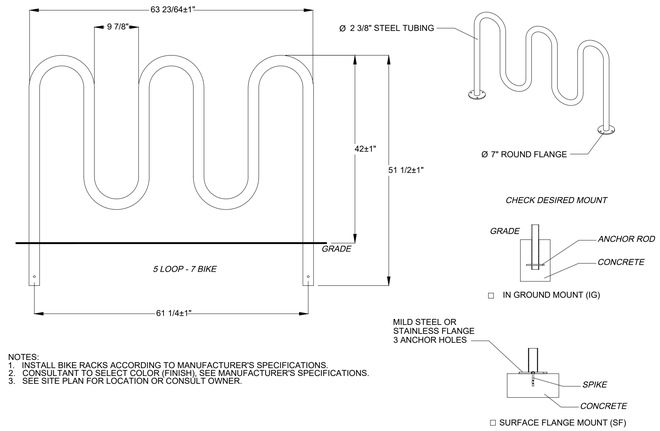
◪ *Rotate entire section so that gutter cross slope matches slope of adjacent circulating roadway pavement.*

For use adjacent to concrete or flexible pavement. For details depicting usage adjacent to flexible pavement, see Sheet 2. Expansion joint, preformed joint filler and joint seal are required between curb & gutter and concrete pavement only.

CONCRETE CURB AND GUTTER DETAILS
N.T.S



WHITE LEGEND RED BACKGROUND
R1-1
30" X 30"
STOP SIGN
N.T.S



NOTES:
1. INSTALL BIKE RACKS ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. CONSULTANT TO SELECT COLOR (FINISH). SEE MANUFACTURER'S SPECIFICATIONS.
3. SEE SITE PLAN FOR LOCATION OR CONSULT OWNER.

BICYCLE RACK DETAILS
N.T.S

REDTAIL DG
p. 772.742.1555
hollie@redtaildg.com

TM DESIGNED BY
AH DRAWN BY
RDTL-SIT-01.DWG FILENAME
DET LAYOUT
SCALE
7/19/2024 DATE

REVISION COMMENTS
DATE

MILLCREEK
ORANGE AVE.
DETAILS
CITY OF FT. PIERCE
FLORIDA

6 OF 6

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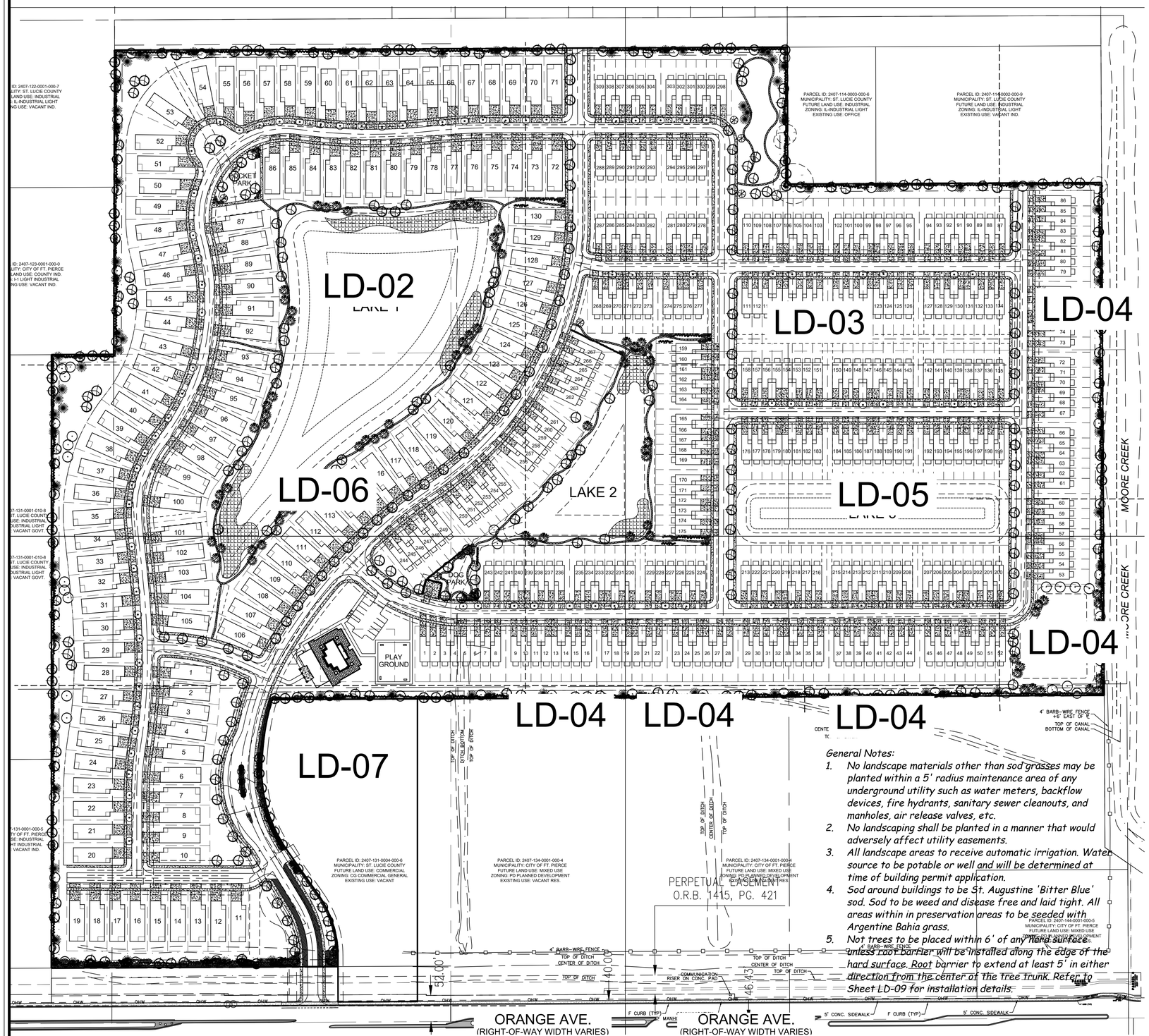

Landscape Legend:

Symb	Qty	Tag	WU	Name (N) Native (F) Flowering Tree (E) Evergreen
	Trees:			
	69	AR		Red Maple (N)(F) Acer rubrum, FG, 12' Ht, 5' Spr., 2.5" DBH
	80	IC		Dahoon Holly (N)(E) Ilex cassine, FG, 12' ht, 5' Spr., 2.5" DBH
	87	PE		Slash Pine (N)(E) Pinus eliottii 'densa', FG, 12' ht, 5' Spr., 2.5" DBH
	313	QV		Live Oak (N)(E) Quercus virginiana, FG, 12' Ht, 5' Spr., 2.5" DBH
	123	SP		Cabbage Palm (N) (3:1) relocated from site
	13	TA		Yellow Tabebuia (F) Tabebuia argentea, FG, 12' Ht, 5' Spr., 2.5" DBH
	76	TD		Bald Cypress (N) Taxodium distichum, FG, 12' ht, 5' Spr., 2.5" DBH
	Accents:			
	20	CRI		Crinum Lily Crinum asiaticum 'Queen Emma, 7 gal, 36" oc
	6	HIS		Hibiscus Standard, 'Tequila' Hibiscus rosa-sinensis, 7 gal, STD, 36" ht
	Shrubs:			
	1345	FOR		Florida Privet (N) Foresteria segregata, 3 gal, 24" ht, 36" o.c.
	848	HAM		Dwarf Firebush (N)(F) Hamelis patens 'Calusa', 3 gal, 18" ht, 36" o.c.
	265	MUH		Muhly Grass Muhlenbergia capillaris, 3 gal, 36" oc
	668	MYR		Wax Myrtle (N) (E) Myrica cerifera, 3 gal, 24"x18", 36" o.c.
	643	SER		Saw Palmetto (N) Serenoa repens, 3 gal, 48" oc
	76	TRI		Fakahatchee Grass (N) Tripsacum dactyloides, 3 gal, 36" oc
	30	VIB		Dwarf Walters Viburnum (N) Viburnum obovatum 'Mrs Schiller', 3 gal, 24" ht, 24" o.c.
	221	ZAM		Coontie (N)(E) Zamia pumila, 3 gal, 36" oc
	Groundcover:			
	5138 sf	ARA		Perennial Peanut Arachis glabrata 'Ecoturf', sod form
	70	LAN		Pineland Lantana (N) Lantana depressa, 1 gal, 6"x12", 36" o.c.
	96	LIR		Liriope Liriope muscari 'Emerald Godess', 1 gal, 12" oc
	242	PEN		Pentas Pentas lanceolata 'New Look Red', 1 gal, 6" ht, 12" oc.

General Notes:

1. *No landscape materials other than sod grasses may be planted within a 5' radius maintenance area of any underground utility such as water meters, backflow devices, fire hydrants, sanitary sewer cleanouts, and manholes, air release valves, etc.*
2. *No landscaping shall be planted in a manner that would adversely affect utility easements.*
3. *All landscape areas to receive automatic irrigation. Water source to be potable or well and will be determined at time of building permit application.*
4. *Sod around buildings to be St. Augustine 'Bitter Blue' sod. Sod to be weed and disease free and laid tight. All areas within in preservation areas to be seeded with Argentine Bahia grass.*
5. *Not trees to be placed within 6' of any hard surface unless root barrier will be installed along the edge of the hard surface. Root barrier to extend at least 5' in either direction from the center of the tree trunk. Refer to Sheet LD-09 for installation details.*

Landscape Data:

Exterior Landscape:

Buffer against other Property Lines:

North:	2,266- 50' driveway =2,176 x10' = 21,760 sf/300	73 trees
East:	1,016'x10' = 10,160 sf/300	34 trees
West:	1,942'x10 = 19,420 sf/200	65 trees

Buffer against R/W line:

South: 2,218'-100' driveway = 2,118 x10 = 21,180 sf/300		71 trees

Interior Landscape

Total VUA area:	204,339 sf		
Landscape Area required:	1 sf/15 sf VUA	13,623 sf	
Total Interior trees required:	1 tree/100 sf		136 trees
Landscape area provided:		36,737 sf	
Total trees required:			378 Trees
Total trees provided:			638 Trees

Tree Mitigation

Native trees, 14" or greater, on site:		
Total:	10,099 inches	
Native trees, 14" or greater removed:	10,024 inches	
Native trees preserved:	75 inches	
Mitigation required:	19,898 inches	
Mitigation provided:		
Extra Trees planted: 247 trees @ 2.5"	618 inches	
and payment of $5,784,150 into mitigation fund		
Palm Tree Mitigation		
Palm Trees on site:	172 trees	
Palm trees relocated on site:	172 trees	

N W E S

Graphic Scale
100 50 0 100
Scale: 1" = 100'

Landscape Design Associates
25110 NW 182nd Ave
High Springs, FL 32643
352-210-5765 ph. www.landscapeda.com

Revisions	
Date	Comments

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Checked by: SM
CADD No.: 24-044 lp.dwg
Date: 7.17.24

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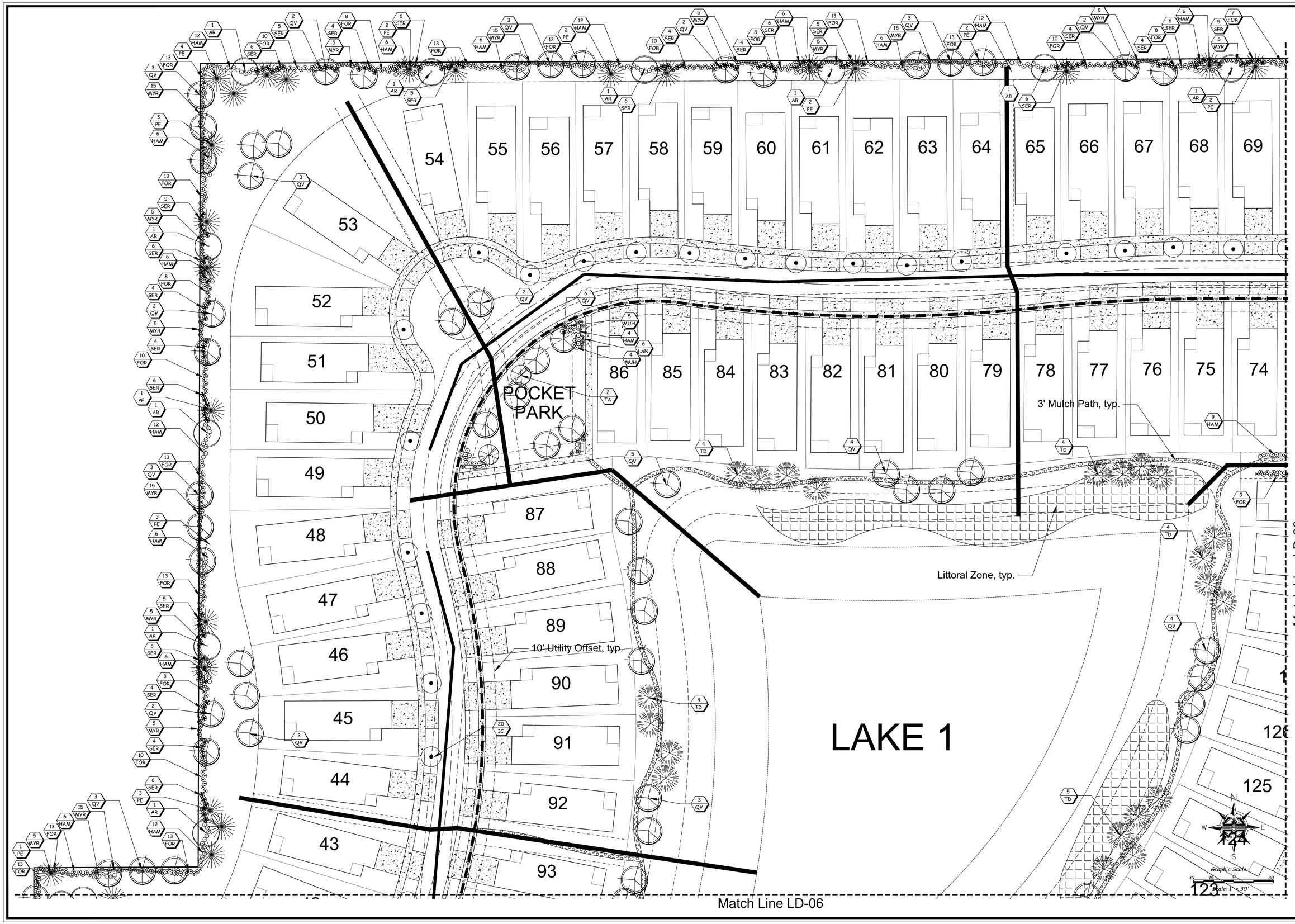
Millcreek
City of Fort Pierce
Overall Landscape Plan

REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

LD-01



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Millcreek
City of Fort Pierce
Landscape Plan

LD-02

3' Mulch Path

Ex. Tree, to remain, typ.

Match Line LD-02

Match Line LD-04

Match Line LD-05

Graphic Scale

Scale: 1" = 30'

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Revisions
Date | Comments

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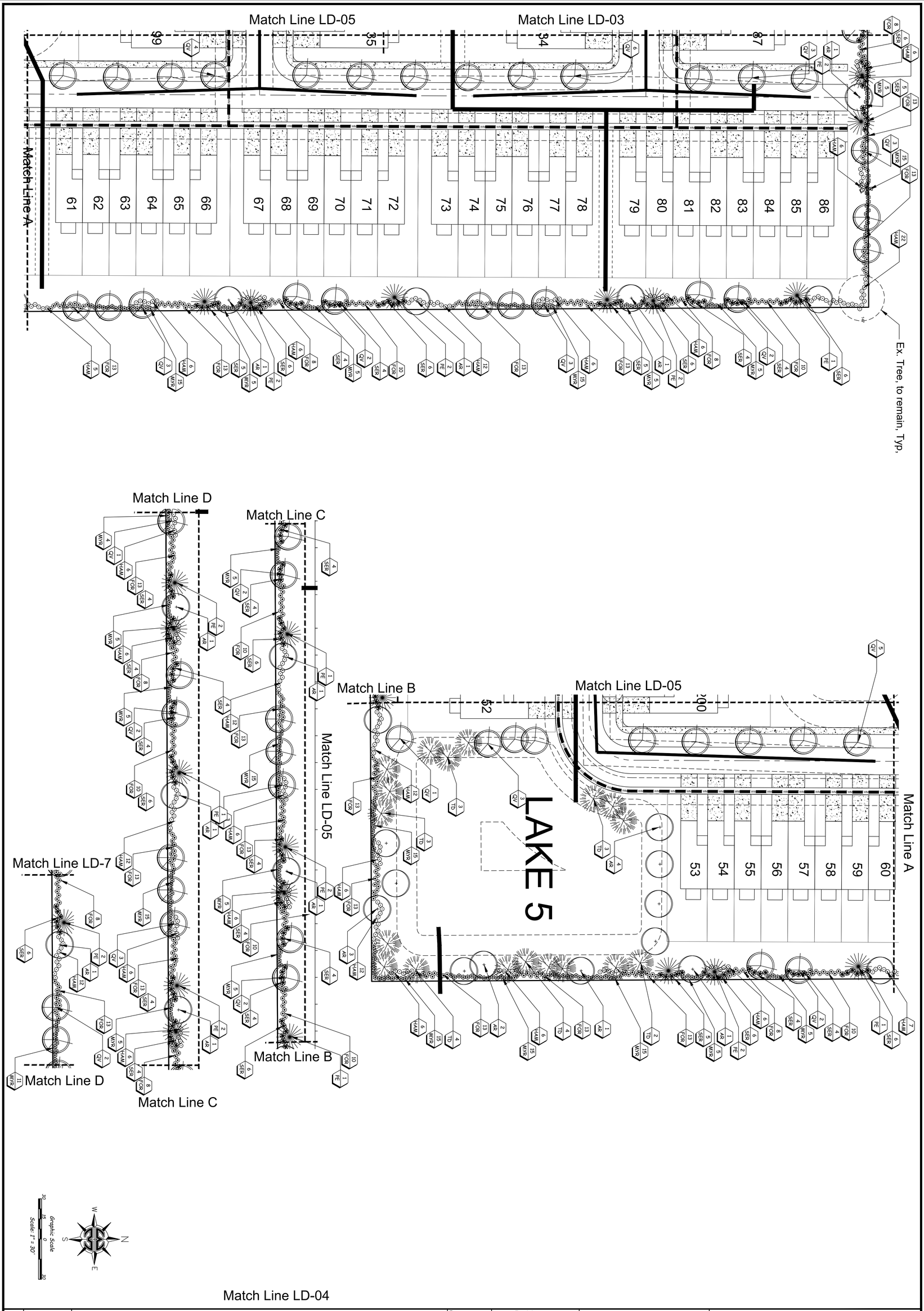
Millcreek
City of Fort Pierce
Landscape Plan

LA0001733

LD-03



LD-04

Millcreek

City of Fort Pierce

Landscape Plan

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Date	Comments

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Match Line LD-03

LAKE 2

LAKE 3

3' Mulch Path, typ.

Littoral Zone, typ.

Match Line LD-06

Match Line LD-04

Match Line LD-04

Graphic Scale

1" = 30'

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Millcreek
City of Fort Pierce
Landscape Plan

Revisions	
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REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

LD-05

Match Line LD-02

Match Line LD-05

Match Line LD-07

Graphic Scale
30 15 0 30
Scale: 1" = 30'

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Millcreek
City of Fort Pierce
Landscape Plan

REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

LD-06

Match Line LD-06

Match Line LD-04

PARCEL ID: 2407-131-0004-000-6
MUNICIPALITY: ST. LUCIE COUNTY
FUTURE LAND USE: COMMERCIAL
ZONING: CG COMMERCIAL GENERAL
EXISTING USE: VACANT

PARCEL ID: 24
MUNICIPALITY: C
FUTURE LAND
ZONING: PD PLAN
EXISTING US

TOP OF DITCH
DITCH BOTTOM
TOP OF DITCH

52.00'

Graphic Scale
30 15 0 30
Scale: 1" = 30'

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Revisions
Date | Comments

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Millcreek
City of Fort Pierce
Landscape Plan

REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

LD-06

PLANTING NOTES:

FERTILIZER

FERTILIZERS SHALL BE SLOW RELEASE, UNIFROM IN COMPOSITION, DRY AND FREE FLOWING. THE FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED BAGS, EACH BEARING THE MANUFACTURERS STATEMENT OF ANALYSIS,AND SHALL MEET THE FOLLOWING REQUIREMENTS: SIX (6) PERCENT NITROGEN,SIX (6) PERCENT PHOSPHOROUS,AND SIX (6) PERCENT POTASSIUM. FERTILIZER SHALL BE APPLIED TO ALL SHRUBS (1/3 LB PER 3 GAL POT, 1/4 LB PER 1 GAL POT) AND GROUNDCOVER. THE SOD STARTER FERTILIZER MIXTURE SHALL BE A 5-10-10 ANALYSIS. A 14-14-14 FERTILIZER ANALYSIS IS REQUIRED ON ALL TREES AND SHRUBS OVER 5' IN HEIGHT (1/2 LB PER 5' OF SPREAD). AGRIFORM TABLETS WITH TWENTY (20) PERCENT NITROGEN, TEN (10) PERCENT PHOSPHOROUS,FIVE (5) PERCENT POTASSIUM IN 21 GRAM SIZES SHALL BE APPLIED ALONG WITH THE FERTILIZER PROCESS (1 WITH 1 GAL PLANTS. 2 WITH 3 GAL PLANTS AND 2 TABLETS PER 1" OF TREE TRUNK CALIPER). MAGNESIUM SULFATE SHALL BE APPLIED TO ALL PALMS AT INSTALLATION AT A RATE OF 1/2 LB PER INCH OF TRUNK CALIPER. MANGANESE SHALL BE APPLIED AT THE SAME RATE.

MULCH

MULCH MATERIAL SHALL BE COLORED 'A' GRADE CERTIFIED RE-CYCLED MULCH AND MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT. MULCH SHALL BE APPLIED TO A MINIMUM OF 3" DEPTH IN PLANTING BEDS. MULCH SHALL NOT BE PLACED WITHIN 6" OF TREE OR PALM TRUNKS.

SOD

THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS,ABSOLUTELY TRUE TO VARIETAL TYPE,AND FREE FROM WEEDS,FUNGUS,INSECTS AND DISEASE OF ANY KIND.

SUBSTITUTIONS

NO SUBSTITUTION OF PLANT MATERIAL TYPES OR SIZES WILL BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT OF RECORD. CONTAINER GROWN MATERIAL WILL NOT BE ACCEPTED AS A SUBSTITUTE FOR B & B MATERIAL UNLESS PREVIOUSLY APPROVED. INTENDED SUBSTITUTIONS SHALL BE SPELLED OUT IN BID.

MEASUREMENTS

SHADE TREES: HEIGHT SHALL BE MEASURED FROM GROUND TO THE AVERAGE BRANCH HEIGHT OF CANOPY. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.

SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE POINT WHERE MATURE PLANT GROWTH STOPS. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENT AREA NOT TO INCLUDE ANY TERMINAL GROWTH.

PALMS: CLEAR TRUNK SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE POINT WHERE THE MATURE AGED TRUNK JOINS THE IMMATURE OR GREEN PORTION OF THE TRUNK OR HEAD.

GREY WOOD (G.W.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO TOP OF THE HARDENED TRUNK.

OVERALL HEIGHT (O.A.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE AVERAGE FROND HEIGHT.

PALMS WITH MARRED OR BURNED TRUNKS WILL NOT BE ACCEPTED.

PLANTING SOIL AND BACKFILL

TOPSOIL SHALL CONSIST OF A STABILIZED MIXTURE OF GROUND YARD TRIMMINGS AND POSSIBLY BIOSOLIDS PROCESSED ACCORDING TO STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GUIDELINES FOR THE PROCESSING AND DISTRIBUTION OF SEWAGE SLUDGE COMPOST. RECYCLED TOPSOIL SHALL ONLY BE OBTAINED FROM A STATE PERMITTED RECYCLING FACILITY WHICH IS ALSO D.O.T. CERTIFIED AND STORES PRODUCT ON A PAD WITH A CURRENT NEMATODE CERTIFICATION FROM FLORIDA DEPARTMENT OF AGRICULTURE. RECYCLED TOPSOIL SHALL HAVE THE FOLLOWING CHARACTERISTICS:

- WEED FREE
- MOISTURE CONTENT 50% BY WEIGHT MAXIMUM
- WATER HOLDING CAPACITY 200% BY WEIGHT MINIMUM
- CARBON TO NITROGEN RATIO LESS THAN 25 TO 1
- ORGANIC MATTER CONTENT 40% BY DRY WEIGHT MINIMUM
- SOLUBLE SALTS LESS THAN 3 MMHOS/CM
- PH RANGE 7.0 - 7.9
- MINIMUM NUTRIENT LEVELS AS FOLLOWS:

MACRO NUTRIENTS: NITROGEN (N) - 1% MINIMUM, WATER INSOLUBLE NITROGEN 90% MINIMUM, PHOSPHORUS (P) - 0.5% MINIMUM, POTASSIUM (K) - 0.2% MINIMUM AND OTHER MACRO AND MICRO NUTRIENTS. THE RECYCLED TOPSOIL SHALL CONTAIN LEVELS OF THOSE MICRO NUTRIENTS NECESSARY FOR PLANT GROWTH. THESE INCLUDE CALCIUM, MAGNESIUM, SULFUR, BORON, COPPER, IRON, MANGANESE AND MOLYBDENUM. TOPSOIL NOT MEETING THESE REQUIREMENTS WILL NOT BE ACCEPTED.

BACKFILL:

ALL NEW AND TRANSPLANTED PLANT MATERIAL (INCLUDING NEW SOD) SHALL BE PLANTED ONLY AFTER PREPARATION OF EXISTING SOIL AS FOLLOWS: SPREAD A LAYER OF 3" DEPTH OF RECYCLED TOPSOIL (AS DEFINED ABOVE) OVER THE ENTIRE PLANTING AREA. THE TOPSOIL SHALL THEN BE UNIFORMLY DISKED, TILLED OR AERIFIED INTO THE EXISTING SOIL TO A DEPTH OF 12" UNDERNEATH SHRUBS AND GROUNDCOVERS, 6" UNDERNEATH SOD AND TO A DEPTH OF 36" FOR THE TREE PITS, WITH THE FOLLOWING EXCEPTION: NO ROTOTILLING OR DISKING SHALL OCCUR CLOSER TO THE TRUNKS OF ESTABLISHED PLANTS THAN ONE HALF (1/2) THE DISTANCE OF THE CANOPY FURTHER OUT FROM THE DRIP LINE OF THE EXISTING PLANT CANOPY. ALL PLANTS, INCLUDING HEDGES AND GROUND COVER SHALL BE PLANTED IN INDIVIDUALLY DUG HOLES AND THE MATERIAL DUG FROM THE HOLES SHALL THEN BE FURTHER MIXED WITH THE PREPARED SITE SOIL PRIOR TO BACKFILLING OF THE PLANTING HOLES AROUND THE ROOT BALLS. NO ADDITIONAL BACKFILL SOIL SHALL BE USED.

AN EXCEPTION ARE PLANTING PITS FOR CABBAGE PALMS, WHICH SHALL BE BACKFILLED WITH CLEAN NATIVE SAND ONLY.

REMOVE EXCESS MATERIAL TO PROVIDE PROPER FINISHED GRADE.

PLANT MATERIALS

TREES, PALMS, SHRUBS,GROUND COVERS:

PLANT SPECIES AND SIZES SHALL CONFORM TO THOSE INDICATED IN THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED 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 NORMAL FOR THE VARIETY AND FLORIDA GRADE NUMBER 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY.

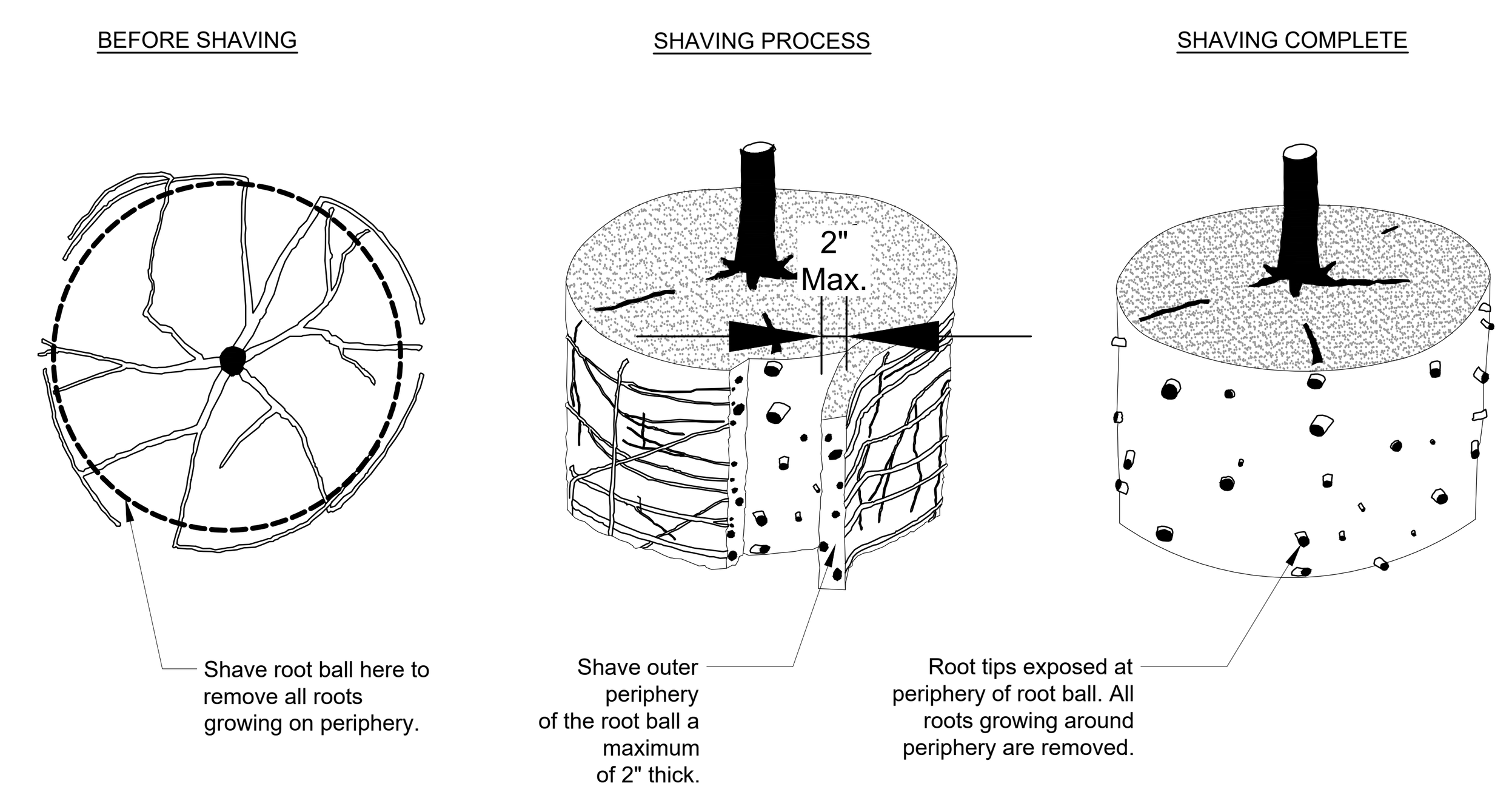
SPECIMEN MEANS AN EXCEPTIONALLY HEAVY, SYMMETRICAL. TIGHTLY KNIT PLANT, SO TRAINED OR FAVORED IN ITS DEVELOPMENT THAT FIRST APPEARANCE IS UNQUESTIONABLE AND IT IS OUTSTANDINGLY SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY.

ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL BRANCHED AND FREE OF DISEASE AND INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT, WHERE REQUIREMENTS ARE OMITTED FROM THE PLANT LIST. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

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 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.

GENERAL NOTES:

1. THE CONTRACTOR SHALL PERSONALLY ACQUAINT HIM/HER SELF WITH THE EXISTING SITE CONDITIONS AND THE EXTENT AND SCOPE OF WORK REQUIRED.
2. THE PLANT LIST INDICATES THE NAMES, SIZES AND SPACING OF SPECIFIC PLANT MATERIALS. QUANTITIES HAVE BEEN PROVIDED TO THE CONTRACTOR AS A CONVENIENCE, THE CONTRACTOR IS RESPONSIBLE FOR HIS/HER OWN QUANTITY COUNT. IN CASE OF DISCREPANCIES BETWEEN THE DRAWINGS AND PLANT LIST, THE QUANTITIES ON THE PLANT LIST SHALL PREVAIL.
3. NO SUBSTITUTES ON VARIETIES LISTED WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT.
4. PLANTS SHALL BE WATERED AS NECESSARY OR WITHIN 24 HOURS AFTER NOTIFICATION BY THE LANDSCAPE ARCHITECT.
5. 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 OF RECORD.
6. ALL PLASTIC FABRIC SHALL BE REMOVED FROM PLANT MATERIAL AT TIME OF INSTALLATION.
7. ALL TREES MUST BE STAKED AS SHOWN ON THE LANDSCAPE DETAIL SHEET WITHIN 24 HRS OF PLANTING. STAKES TO REMAIN FOR A MINIMUM OF 12 MONTH BUT NO LONGER THAN 18 MONTH. CONTRACTOR RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF THE STAKES.
8. ALL TREES MUST BE PRUNED AS PER LANDSCAPE ARCHITECT DIRECTION.
9. ALL SOD EDGES SHALL BE TRIMMED AS PER THE LANDSCAPE ARCHITECTS DIRECTION.
10. ALL SHRUBS, TREES, GROUNDCOVERS, AND SOD AREAS SHALL HAVE IMPROVED SOIL AS PER PLANTING SOIL NOTES. WILDFLOWER AREAS SHALL BE NATIVE TOPSOIL ONLY.
11. DO NOT ALLOW AIR POCKETS TO FROM WHEN BACKFILLING.
12. SOAK PLANTS IMMEDIATELY WITH WATER FOLLOWING PLANTING.
13. MAINTAIN THE ORIGINAL GRADE OF THE TREE BASE.
14. DO NOT BREAK ROOTBALL. SHAVE ROOTBALL OF TREES PER DETAIL BELOW.
15. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE ON LOCALITY OF THE PROJECT.
16. THE LANDSCAPE CONTRACTOR SHALL WATER, MULCH, WEED, PRUNE,, AND OTHERWISE MAINTAIN ALL PLANTS, INCLUDING SOD, UNTIL COMPLETION OF THE CONTRACT OR ACCEPTANCE BY THE LANDSCAPE ARCHITECT. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE, PLANTING SAUCERS RESTORED, AND DEFECTIVE WORK CORRECTED.
17. THE LANDSCAPE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR DEBRIS CAUSED BY THE 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.
18. 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 REPRESENTATIVE SHALL BE PROMPTLY CORRECTED BY THE LANDSCAPE CONTRACTOR.
19. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE IN WRITING FROM THE LANDSCAPE ARCHITECT. AT THE TIME OF FINAL ACCEPTANCE THE ONE (1) YEAR PERIOD SHALL COMMENCE. ANY MATERIALS WHICH HAVE DIED DURING THIS PERIOD SHALL BE PROMPTLY REPLACED WITH SPECIMENS THAT MEET THE MINIMUM REQUIREMENTS CALLED FOR IN THE DRAWINGS. THE LANDSCAPE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE DEATH OR DAMAGE RESULTING FROM LIGHTNING, VANDALISM, AUTOMOBILES OR FROM NEGLIGENCE BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND OTHERWISE MAINTAINING PLANTS DURING THE GUARANTEE PERIOD UNLESS A WRITTEN AGREEMENT WITH THE LANDSCAPE ARCHITECT PROVIDES FOR A DIFFERENT ARRANGEMENT.
20. 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 COST FOR THE REMOVAL OF UNSUITABLE OR EXCESS BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACTORS BID TO PERFORM THE WORK PRESENTED IN THIS PLAN SET.
21. NO LANDSCAPING ADDED UNDER THIS PROJECT SHALL BE LOCATED SUCH THAT SAID LANDSCAPING OBSCURES MOTORIST'S VISIBILITY OF ANY EXISTING SIGN(S).
22. 100% OF REQUIRED SHRUBS ARE DROUGHT TOLERANT.



Notes:
1- Shaving to be conducted using a sharp blade or hand saw eliminating no more than needed to remove all roots on the periphery of root ball.

2- Shaving can be performed just prior to planting or after placing in the hole.

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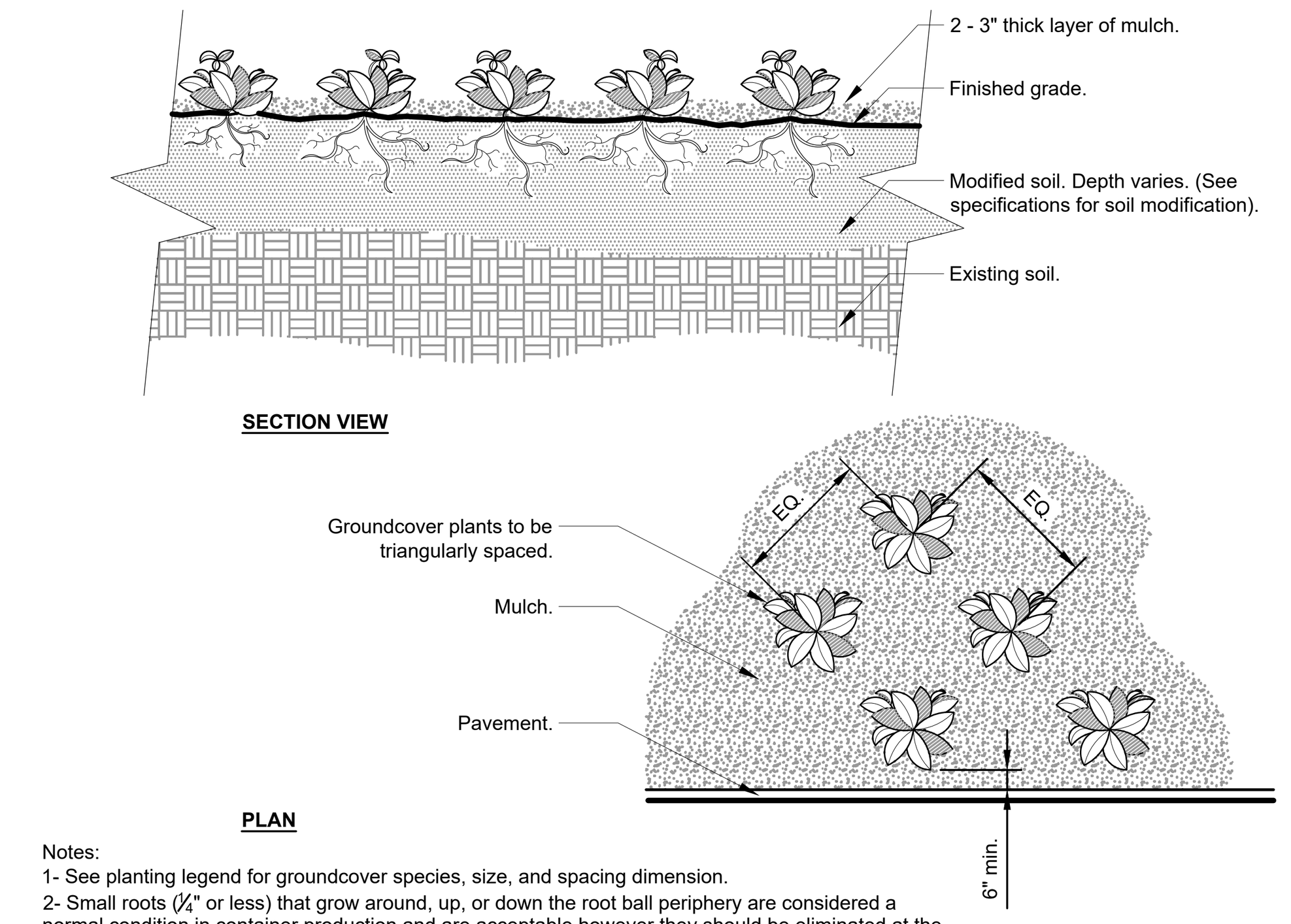
ROOT BALL SHAVING CONTAINER DETAIL



Notes:
1- See planting legend for groundcover species, size, and spacing dimension.
2- Small roots (¼" or less) that grow around, up, or down the root ball periphery are considered a normal condition in container production and are acceptable however they should be eliminated at the time of planting. Roots on the periperhy can be removed at the time of planting. (See root ball shaving container detail).
3- Settle soil around root ball of each groundcover prior to mulching.

GROUNDCOVER

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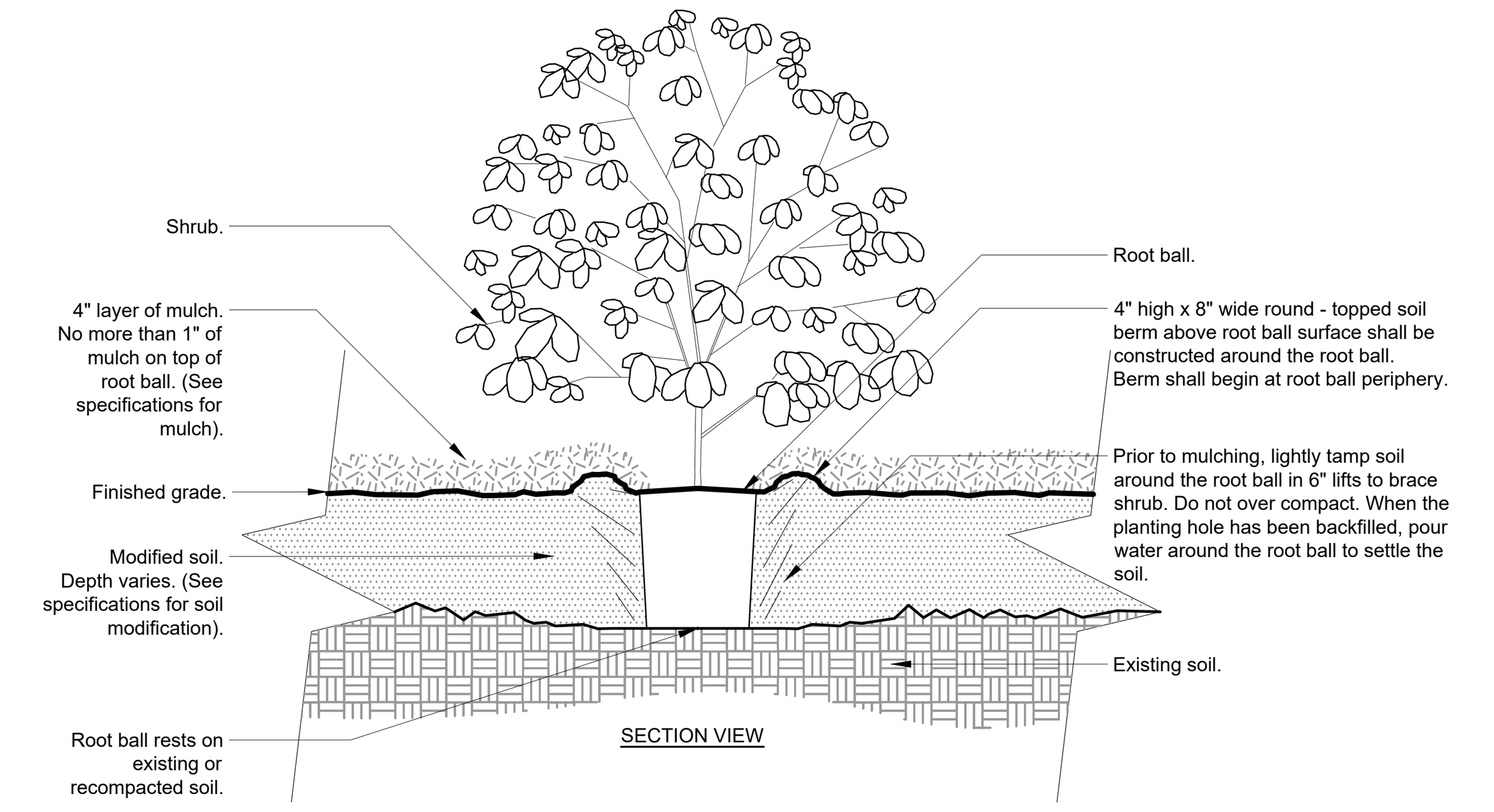

Notes:
1- Shrubs shall be of quality prescribed in the root observations detail and specifications.

2- See specifications for further requirements related to this detail.

SHRUB - MODIFIED SOIL

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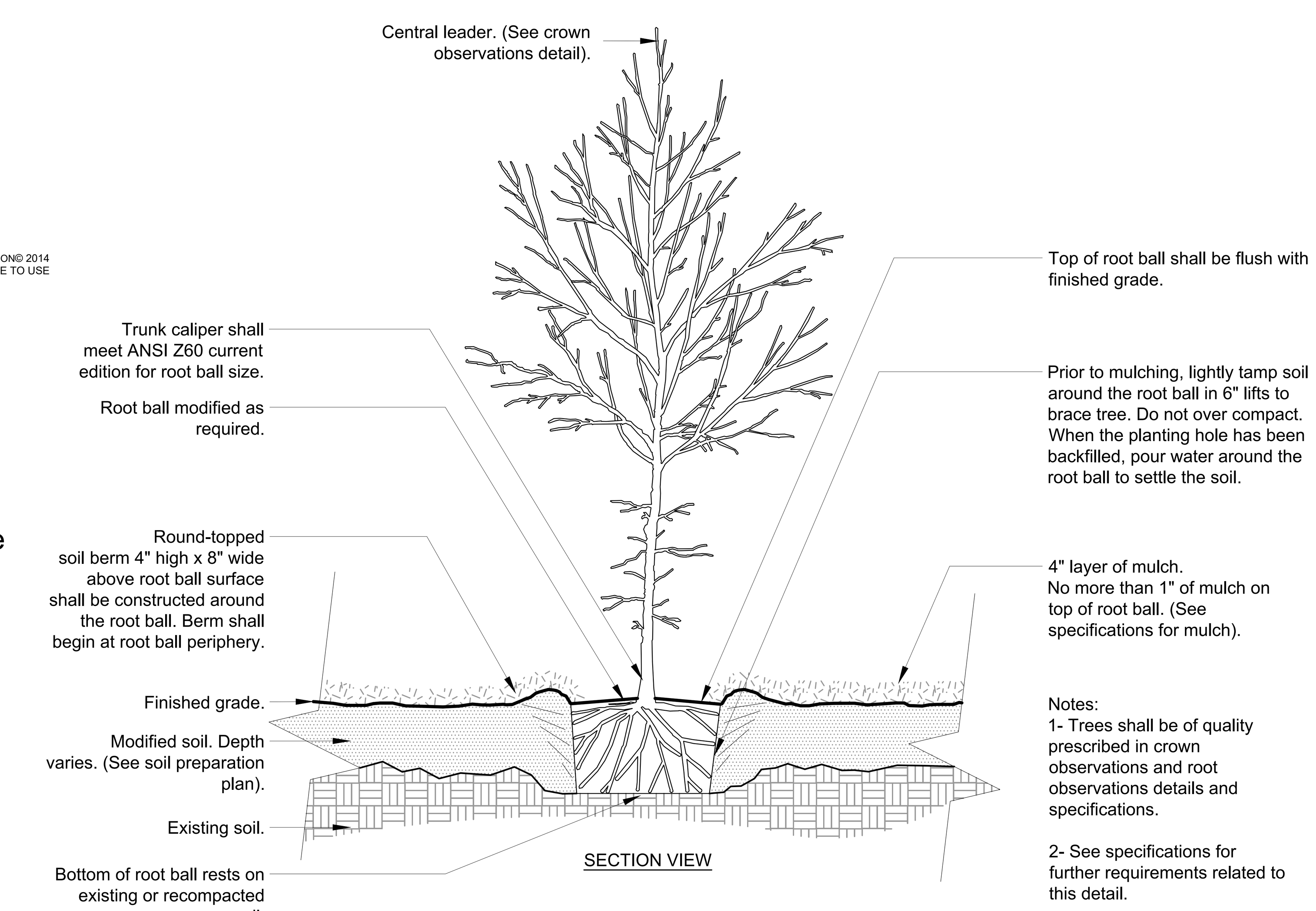

Notes:
1- Trees shall be of quality prescribed in crown observations and root observations details and specifications.

2- See specifications for further requirements related to this detail.

TREE w/ BERM (EXISTING SOIL MODIFIED)

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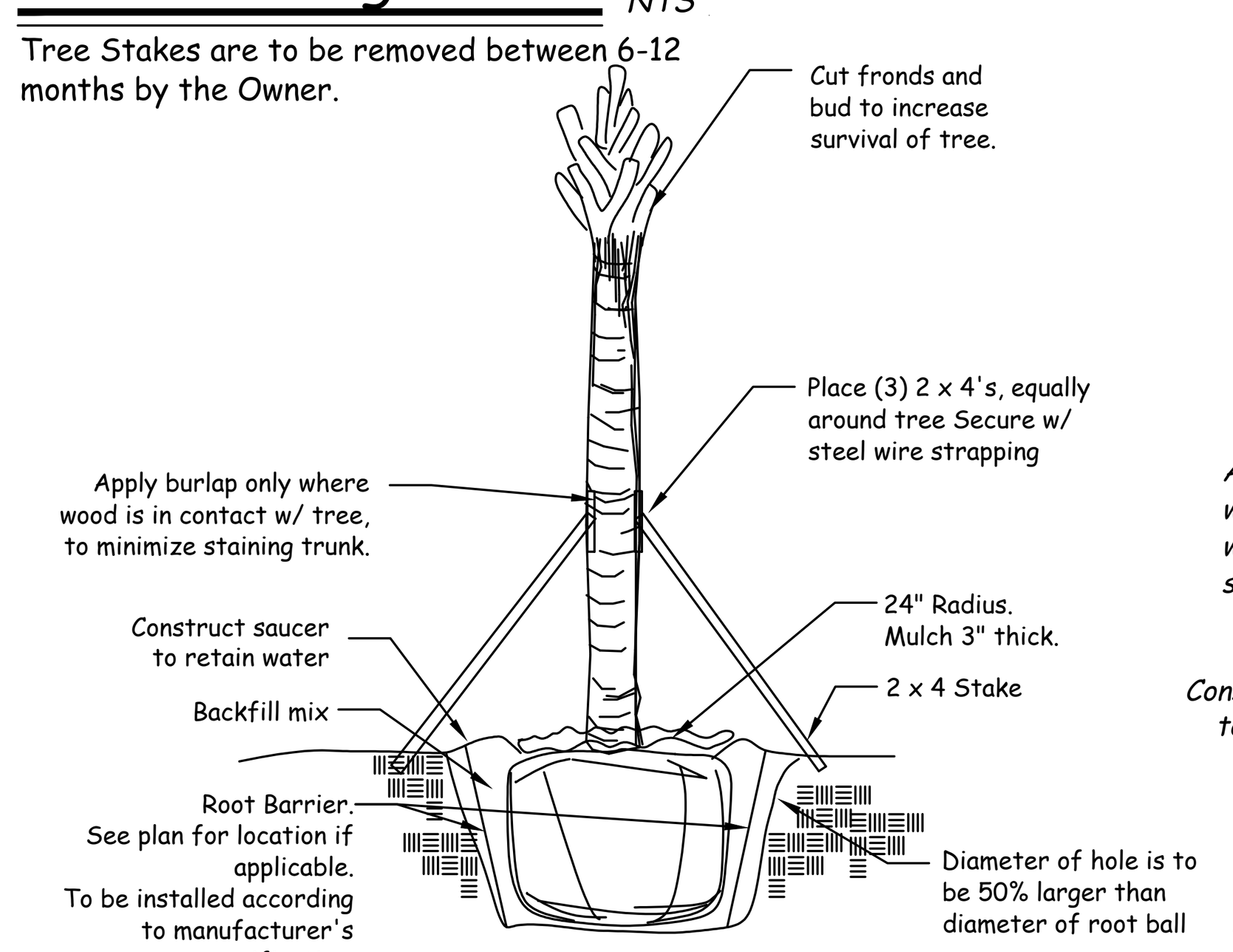
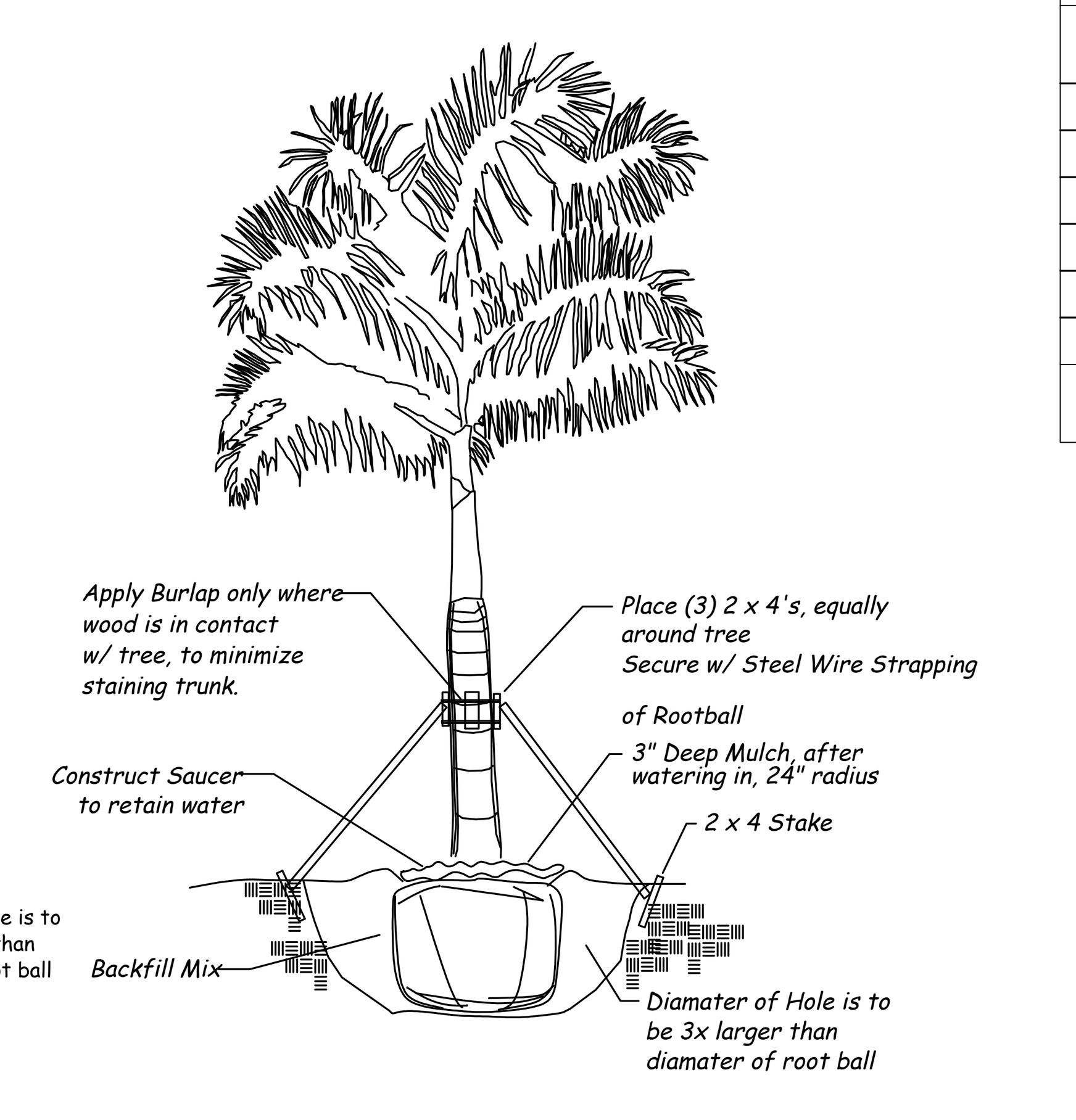
Watering Schedule			
Item	**Water**	**Month**	**No. of Applications**
Palms	20 gal	1	12
Large Trees	30 gal	2	12
Small Trees	20 gal	3	8
Large Shrubs	10 gal	4	8
Small Shrubs	5 gal	5	5
Groundcover	5 gal		
Total Applications			**45**

Palm Planting Detail

NTS

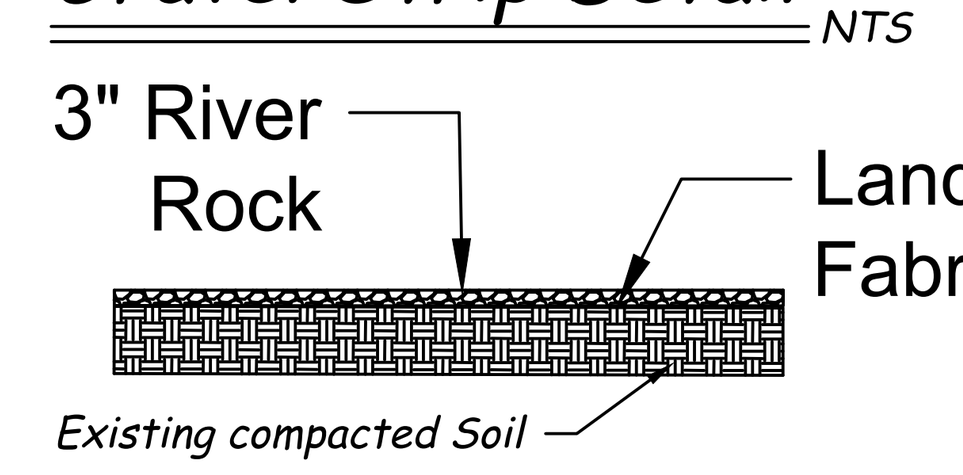
Tree Stakes are to be removed between 6-12 months by the Owner.





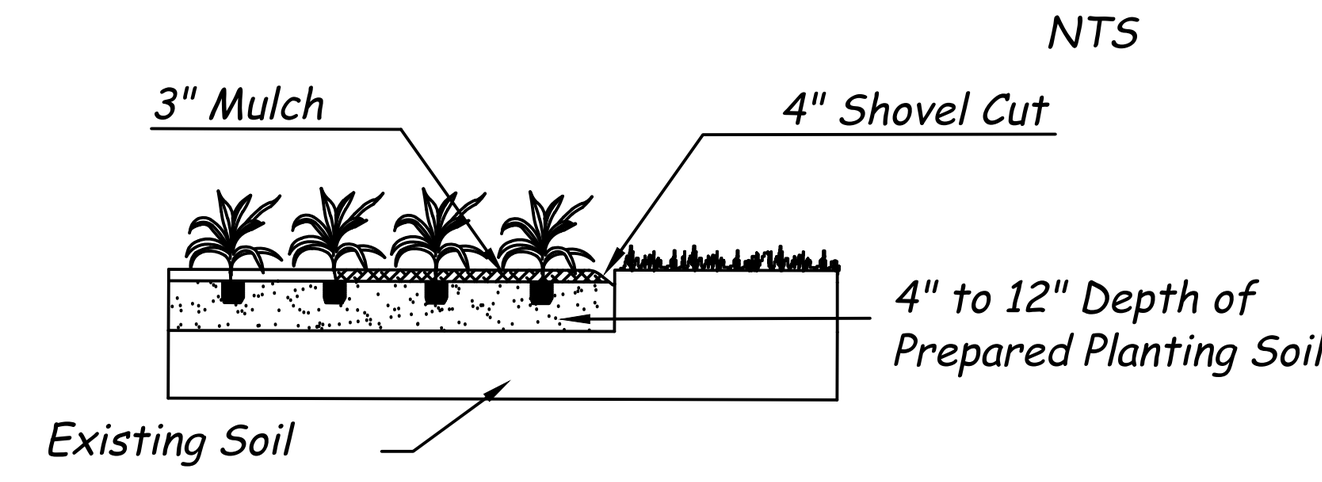
Gravel Strip Detail

NTS



Planting Edge at Sod Detail

NTS



ABBREVIATIONS:

C.T.- CLEAR TRUNK
Ht.- HEIGHT
O.C.- ON CENTER
Spr.- SPREAD

Landscape Design Associates
25110 NW 182nd Ave
High Springs, FL 32643
352-210-5765 ph, www.landscapeda.com

Scale: NTS
Drawn by: SM
Checked by: SM
CADD No.: 24-044 lp.dwg
Date: 7.17.24

Revisions	
Date	Comments

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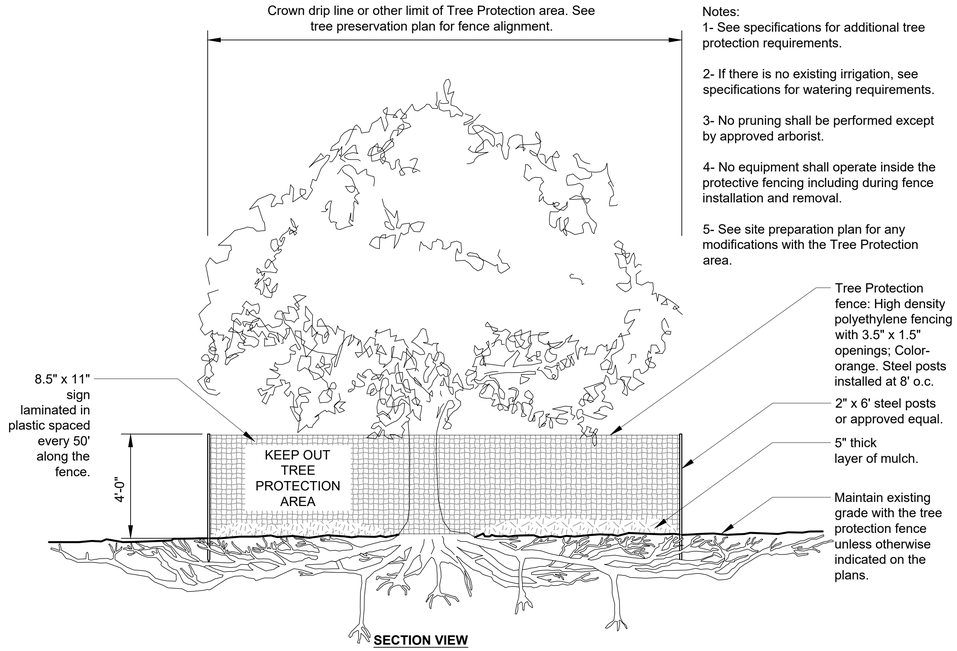
Millcreek
City of Fort Pierce
Landscape Notes & Details

REGISTERED LANDSCAPE ARCHITECT SABINE LANG-MARCKS LA0001733 STATE OF FLORIDA

LD-08



Notes:
1- See specifications for additional tree protection requirements.

2- If there is no existing irrigation, see specifications for watering requirements.

3- No pruning shall be performed except by approved arborist.

4- No equipment shall operate inside the protective fencing including during fence installation and removal.

5- See site preparation plan for any modifications with the Tree Protection area.

S-X TREE PROTECTION

1/4" = 1'-0"

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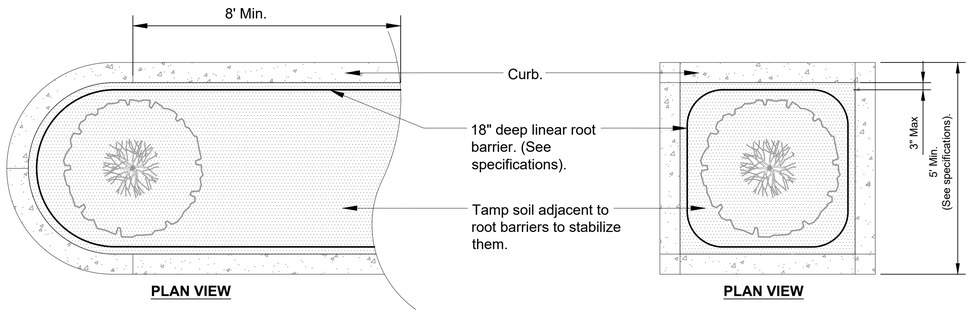
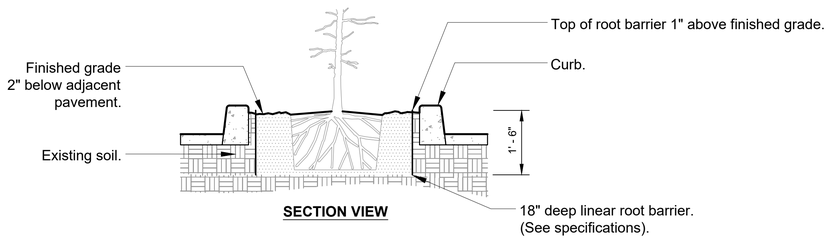
L_tree protection_safety netting





Notes:
1- Root barriers shall be installed per manufacturer's specifications and recommendations.

2- Root barriers shall be installed when root ball is located within 6' of pavement.

ROOT BARRIERS - PARKING LOT ISLANDS

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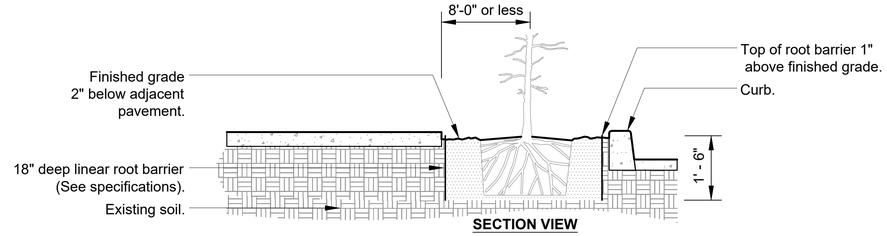

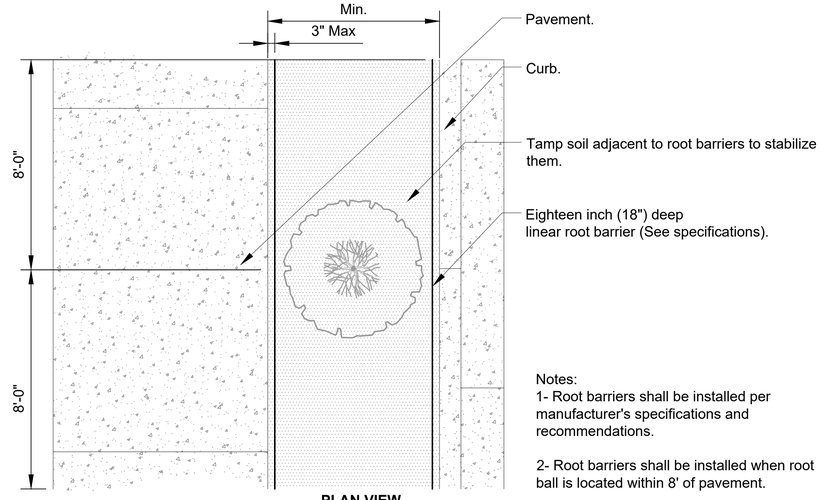

Notes:
1- Root barriers shall be installed per manufacturer's specifications and recommendations.

2- Root barriers shall be installed when root ball is located within 8' of pavement.

S-X ROOT BARRIERS

3/8" = 1'-0"

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L_site preparation_rootbarriers

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Millcreek
City of Fort Pierce

Landscape Notes & Details

REGISTERED LANDSCAPE ARCHITECT LA0001733 STATE OF FLORIDA

LD-09

Littoral Planting Specifications

Part 1: General Notes

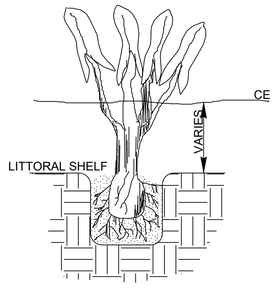
1. *The contractor shall confirm water elevation is stable at the control elevation level (C.E.) prior to installing any littoral plant material.*
2. *The contractor shall verify littoral shelf elevations and stabilization and confirm proper grade relationship for littoral plant materials specified prior to installation.*
3. *Littoral planting zone shall be staked by the contractor for approval by the owner or the owner's representative prior to installation.*
4. *The contractor shall be responsible for any damage to existing plant material along the shoreline and for coordinating with other contractors on the job site.*
5. *All littoral plant material shall comply with applicable State and local rules and regulations.*
6. *Lake shoreline bank above the C.E shall be sodded where applicable prior to littoral planting installation. All sodded areas shall be installed a minimum of 1' clear of the C.E..*
7. *The Contractor shall be responsible for inspecting and accepting contract documents and/or indicating necessary changes to contract documents at time of bid. Changes or necessary field adjustments must be approved by County and Landscape Architect.*

Part 2: Materials

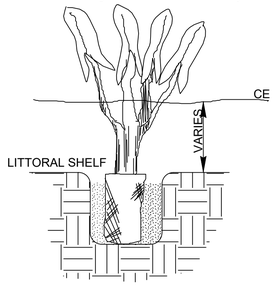
1. *All littoral plants indicated are naturally occurring species indigenous to the area. Naturalistic plantings as shown on contract documents shall be adhered to by the contractor.*
2. *All container grown materials shall be healthy, vigorous, well-rooted plants and established in the container so that the root mass will retain its shape and hold together when removed from the container. The plants shall have tops which are of good quality and are in a healthy growing condition.*
3. *All container grown or bare root littoral plant materials shall be grown or field collected by a certified nursery grower. Field grown plants area recommended wherever possible.*
4. *Field collected plants should be cleaned and void of all native soil. Soil removal eliminates transport and establishment of plant/animal pests.*
5. *All littoral plant materials should exhibit healthy white roots with active growing bud sites and shall have adequate root mass to support plant growth.*
6. *Root bound littoral plants will not be accepted.*
7. *Littoral plants shall not be handled by stems or foliage.*

Part 3: Execution

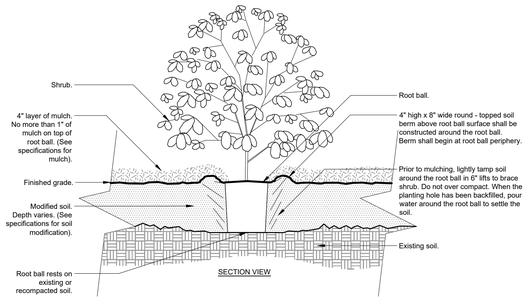
1. *Depth for littoral planting are to be established from the Lake systems C.E..*
2. *After transport, bare rooted littoral plant materials shall be protected to prevent dehydration and shall be installed within 48 hours after collection. (Plants shall be staged in water until installed).*
3. *Nuisance and invader species such as Typha (Cattails) and Water-Primrose shall be hand removed on a regular monthly basis for a period of one year Preventative spraying where applicable by an aquatic-approved herbicide for invasive plant materials should coincide with pre-planting practices.*
4. *Littoral planting establishment shall be performed on stabilized slopes conforming to grades set from the CE.. P*
5. *Planting shall not occur until the construction of all structures within the water management tract and drainage easements associated therewith, and the final grading of the water management tract and the adjacent area draining directly into the water management tract is complete and proper water quality is achieved.*
6. *Planted littoral areas shall be protected from disturbance and sediments occurring from construction on adjacent sites.*



BARE ROOT AQUATIC



CONTAINER GROWN AQUATIC



Notes:
1- Shrubs shall be of quality prescribed in the root observations detail and specifications.

2- See specifications for further requirements related to this detail.

SHRUB - MODIFIED SOIL

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Littoral Mainte nance Plan

Part 1: General Notes

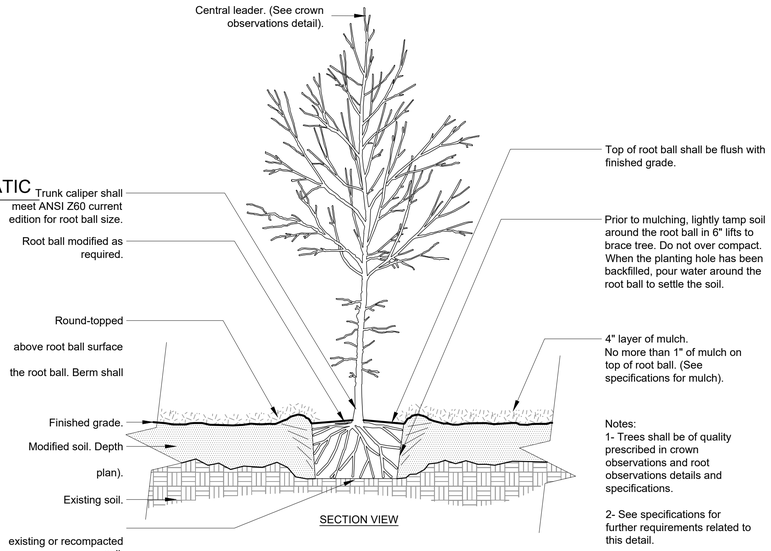
1. Precautions will be taken to control and reduce construction oriented pollution from adjacent activities to the littoral areas.
2. Equipment wash down areas, refueling and equipment repair shall occur away from areas of drainage collection or possible connection/influence of the littoral area.
3. Land treatment chemicals and soil sterilants will not be used in or around areas where littoral areas are located.
4. All construction debris piles associated with adjacent construction will be located away from littoral areas.
5. Maintenance contractor shall be fully qualified and have full working knowledge of littoral zone maintenance requirements.
6. Contractor shall be fully insured and possess a current occupational license in St. Lucie County, Florida.
7. St. Lucie County shall be notified of installation commencement and schedule prior to planting.
8. Source of plant material shall be reported to county if available.

Part 2: Plant Maintenance

1. Periodic littoral zone examinations will occur after planting is completed. The examination shall entail growth evaluation, damage or death rate appraisal, pest infestation and the presence of exotic vegetation intrusion.
2. Fertilization of the littoral area will result primarily from the run-off and the overall water quality composition. Therefore, supplemental fertilization shall not be applied after installation.
3. Non-surviving plants shall be removed and replaced when identified.
4. Once established, the littoral zone shall receive minimal pruning and be allowed to maintain itself as naturally as possible.
5. Appropriate pesticides shall be applied at the time any pest infestations are observed.
6. All exotic vegetation observed during the the inspections shall be removed by non-mechanical methods as timely as possible.
7. The maintenance contractor shall be responsible for the removal of all trash generated by his activity or accumulations in the littoral zone.
8. The maintenance contractor shall be responsible for registering all products used on the littoral zone with EPA and other appropriate agencies.
9. The maintenance contractor shall be responsible for the following services:
   *Algae and undesirable aquatic plant control
   *Border grass and brush control along the waters edge
   *Annual water chemistry analysis
   *Visit pre-notification *Biological Control agent introduction (if required)
   *Management reporting

Part 3: Execution

1. The littoral zone shall be inspected and monitored for one year after planting. During this one year maintenance and monitoring period, maintenance and monitoring shall occur 90, 180 and 360 days after planting. The maintenance and monitoring program shall consist of the following:
   A: Inspection, monitoring, exotic removal and replanting during each monitoring period.
   B: Complete removal of exotic and invasive plant species such as Cattails, Primrose Willows and Water Hyacinth from the planted littoral zone until the required plant species attain complete coverage of the planted littoral zone.
   C: The submittal of a monitoring report to St. Lucie County representing a time Zero monitoring, to be completed within 30 days of initial planting, ninety (90) day, one hundred eighty (180) day and three hundred sixty (360) day reports, each report submitted to SLC within 30 days of completion of the monitoring report.
   D: Each monitoring report shall assess the species, numbers, location of planted littoral shelves and multiple photographs (panoramas are preferred) of site clearly depicting the entire littoral zone planting. Photographs must be taken at approximately the same location(s) each time.
2. After the first year, the land owner or entity having maintenance responsibility for the planted littoral zone shall maintain the littoral zone in the following manner:
   A minimum of eighty percent (80%) survivorship and a minimum of seventy percent (70%) coverage of the planted littoral zone is required. Exotic and invasive plants species such as Cattails, Primrose Willows and Water Hyacinth, shall be restricted to less than ten percent (10%) of the required littoral zone.



Notes:
1- Trees shall be of quality prescribed in crown observations and root observations details and specifications.

2- See specifications for further requirements related to this detail.

TREE w/ BERM (EXISTING SOIL MODIFIED)

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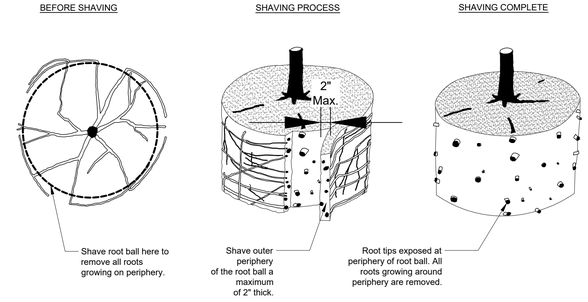
GENERAL NOTES:

1. THE CONTRACTOR SHALL PERSONALLY ACQUAINT HIM/HER SELF WITH THE EXISTING SITE CONDITIONS AND THE EXTENT AND SCOPE OF WORK REQUIRED.
2. THE PLANT LIST INDICATES THE NAMES, SIZES AND SPACING OF SPECIFIC PLANT MATERIALS. QUANTITIES HAVE BEEN PROVIDED TO THE CONTRACTOR AS A CONVENIENCE, THE CONTRACTOR IS RESPONSIBLE FOR HIS/HER OWN QUANTITY COUNT. IN CASE OF DISCREPANCIES BETWEEN THE DRAWINGS AND PLANT LIST, THE QUANTITIES ON THE PLANT LIST SHALL PREVAIL.
3. NO SUBSTITUTES ON VARIETIES LISTED WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT.
4. PLANTS SHALL BE WATERED AS NECESSARY OR WITHIN 24 HOURS AFTER NOTIFICATION BY THE LANDSCAPE ARCHITECT.
5. 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 OF RECORD.
6. ALL PLASTIC FABRIC SHALL BE REMOVED FROM PLANT MATERIAL AT TIME OF INSTALLATION.
7. ALL TREES MUST BE STAKED AS SHOWN ON THE LANDSCAPE DETAIL SHEET WITHIN 24 HRS OF PLANTING. STAKES TO REMAIN FOR A MINIMUM OF 12 MONTH BUT NO LONGER THAN 18 MONTH. CONTRACTOR RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF THE STAKES.
8. ALL TREES MUST BE PRUNED AS PER LANDSCAPE ARCHITECT DIRECTION.
9. ALL SOD EDGES SHALL BE TRIMMED AS PER THE LANDSCAPE ARCHITECTS DIRECTION.
10. ALL SHRUBS, TREES, GROUNDCOVERS, AND SOD AREAS SHALL HAVE IMPROVED SOIL AS PER PLANTING SOIL NOTES. WILDFLOWER AREAS SHALL BE NATIVE TOPSOIL ONLY.
11. DO NOT ALLOW AIR POCKETS TO FROM WHEN BACKFILLING.
12. SOAK PLANTS IMMEDIATELY WITH WATER FOLLOWING PLANTING.
13. MAINTAIN THE ORIGINAL GRADE OF THE TREE BASE.
14. DO NOT BREAK ROOTBALL. SHAVE ROOTBALL OF TREES PER DETAIL BELOW.
15. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE ON LOCALITY OF THE PROJECT.
16. THE LANDSCAPE CONTRACTOR SHALL WATER, MULCH, WEED, PRUNE,, AND OTHERWISE MAINTAIN ALL PLANTS, INCLUDING SOD, UNTIL COMPLETION OF THE CONTRACT OR ACCEPTANCE BY THE LANDSCAPE ARCHITECT. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE, PLANTING SAUCERS RESTORED, AND DEFECTIVE WORK CORRECTED.
17. THE LANDSCAPE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR DEBRIS CAUSED BY THE 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.
18. 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 REPRESENTATIVE SHALL BE PROMPTLY CORRECTED BY THE LANDSCAPE CONTRACTOR.
19. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE IN WRITING FROM THE LANDSCAPE ARCHITECT. AT THE TIME OF FINAL ACCEPTANCE THE ONE (1) YEAR PERIOD SHALL COMMENCE. ANY MATERIALS WHICH HAVE DIED DURING THIS PERIOD SHALL BE PROMPTLY REPLACED WITH SPECIMENS THAT MEET THE MINIMUM REQUIREMENTS CALLED FOR IN THE DRAWINGS. THE LANDSCAPE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE DEATH OR DAMAGE RESULTING FROM LIGHTNING, VANDALISM, AUTOMOBILES OR FROM NEGLIGENCE BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND OTHERWISE MAINTAINING PLANTS DURING THE GUARANTEE PERIOD UNLESS A WRITTEN AGREEMENT WITH THE LANDSCAPE ARCHITECT PROVIDES FOR A DIFFERENT ARRANGEMENT.
20. 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 COST FOR THE REMOVAL OF UNSUITABLE OR EXCESS BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACTORS BID TO PERFORM THE WORK PRESENTED IN THIS PLAN SET.
21. NO LANDSCAPING ADDED UNDER THIS PROJECT SHALL BE LOCATED SUCH THAT SAID LANDSCAPING OBSCURES MOTORIST'S VISIBILITY OF ANY EXISTING SIGN(S).
22. 100% OF REQUIRED SHRUBS ARE DROUGHT TOLERANT.



Notes:
1- Shaving to be conducted using a sharp blade or hand saw eliminating no more than needed to remove all roots on the periphery of root ball.

2- Shaving can be performed just prior to planting or after placing in the hole.

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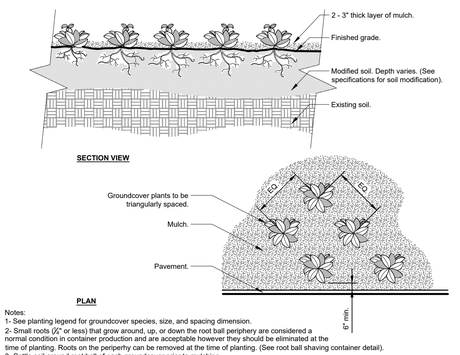
ROOT BALL SHAVING CONTAINER DETAIL

Watering Schedule			
Item	**Water**	**Month**	**No. of Applications**
Palms	20 gal	1	12
Large Trees	30 gal	2	12
Small Trees	20 gal	3	8
Large Shrubs	10 gal	4	8
Small Shrubs	5 gal	5	5
Groundcover	5 gal		
Total Applications			**45**



Notes:
1- See planting legend for groundcover species, size, and spacing dimension.
2- Small roots (¼" or less) that grow around, up, or down the root ball periphery are considered a normal condition in container production and are acceptable however they should be eliminated at the time of planting. Roots on the periperhy can be removed at the time of planting. (See root ball shaving container detail).
3- Settle soil around root ball of each groundcover prior to mulching.

GROUNDCOVER

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Revisions	
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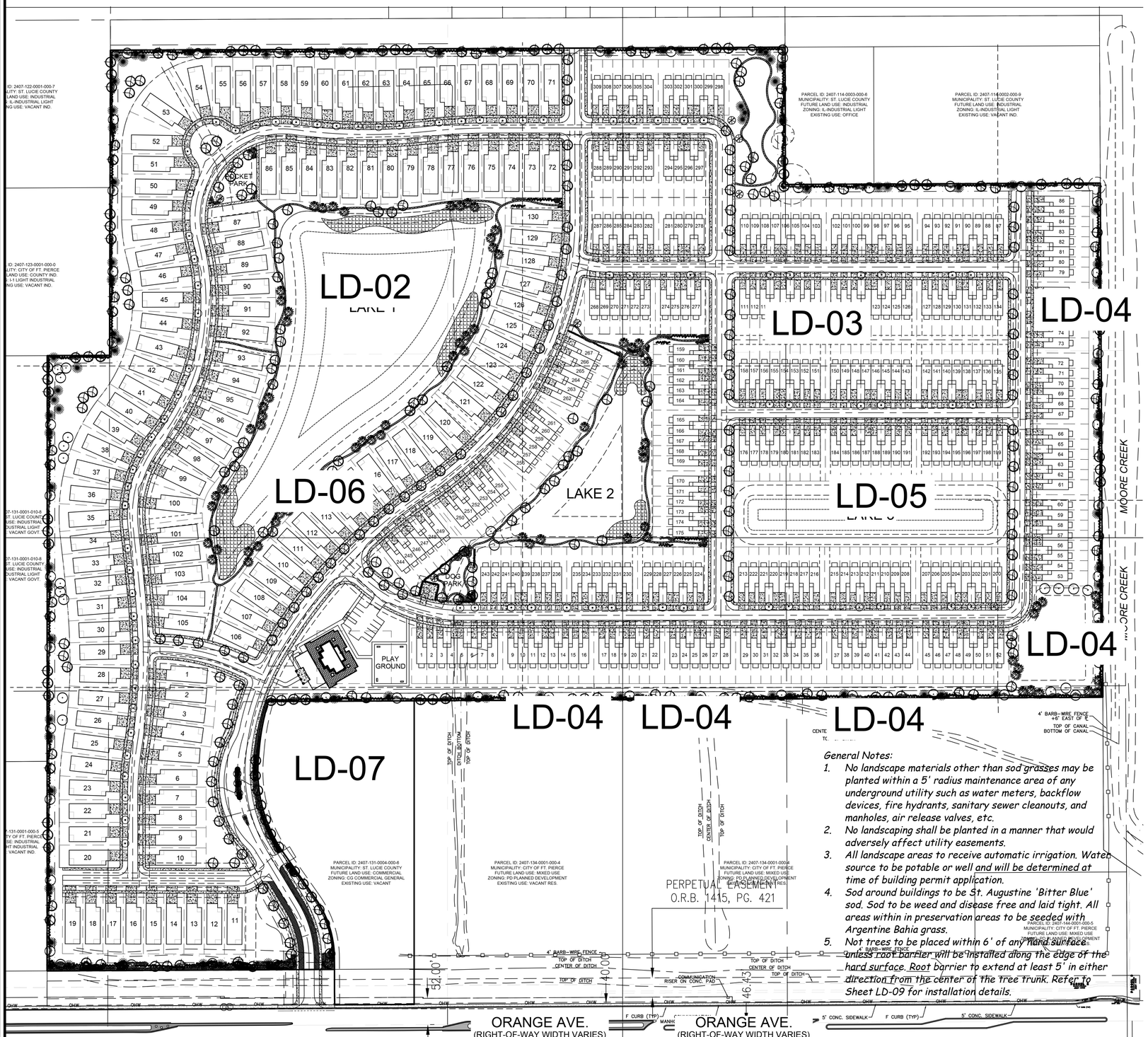
Millcreek
City of Fort Pierce

Littoral Planting Notes & Details

REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

LD-10



Landscape Legend:

Symb	Qty	Tag	WU	Name (N) Native (F) Flowering Tree (E) Evergreen
	Trees:			
	69	AR		Red Maple (N)(F) Acer rubrum, FG, 12' Ht, 5' Spr., 2.5" DBH
	80	IC		Dahoon Holly (N)(E) Ilex cassine, FG, 12' ht, 5' Spr., 2.5" DBH
	87	PE		Slash Pine (N)(E) Pinus eliottii 'densa', FG, 12' ht, 5' Spr., 2.5" DBH
	313	QV		Live Oak (N)(E) Quercus virginiana, FG, 12' Ht, 5' Spr., 2.5" DBH
	123	SP		Cabbage Palm (N) (3:1) relocated from site
	13	TA		Yellow Tabebuia (F) Tabebuia argentea, FG, 12' Ht, 5' Spr., 2.5" DBH
	76	TD		Bald Cypress (N) Taxodium distichum, FG, 12' ht, 5' Spr., 2.5" DBH
	Accents:			
	20	CRI		Crinum Lily Crinum asiaticum 'Queen Emma, 7 gal, 36" oc
	6	HIS		Hibiscus Standard, 'Tequila' Hibiscus rosa-sinensis, 7 gal, STD, 36" ht
	Shrubs:			
	1345	FOR		Florida Privet (N) Foresteria segregata, 3 gal, 24" ht, 36" o.c.
	848	HAM		Dwarf Firebush (N)(F) Hamelis patens 'Calusa', 3 gal, 18" ht, 36" o.c.
	265	MUH		Muhly Grass Muhlenbergia capillaris, 3 gal, 36" oc
	668	MYR		Wax Myrtle (N) (E) Myrica cerifera, 3 gal, 24"x18", 36" o.c.
	643	SER		Saw Palmetto (N) Serenoa repens, 3 gal, 48" oc
	76	TRI		Fakahatchee Grass (N) Tripsacum dactyloides, 3 gal, 36" oc
	30	VIB		Dwarf Walters Viburnum (N) Viburnum obovatum 'Mrs Schiller', 3 gal, 24" ht, 24" o.c.
	221	ZAM		Coontie (N)(E) Zamia pumila, 3 gal, 36" oc
	Groundcover:			
	5138 sf	ARA		Perennial Peanut Arachis glabrata 'Ecoturf', sod form
	70	LAN		Pineland Lantana (N) Lantana depressa, 1 gal, 6"x12", 36" o.c.
	96	LIR		Liriope Liriope muscari 'Emerald Godess', 1 gal, 12" oc
	242	PEN		Pentas Pentas lanceolata 'New Look Red', 1 gal, 6" ht, 12" oc.

Landscape Data:

Exterior Landscape:

Buffer against other Property Lines:

North:	2,266- 50' driveway =2,176 x10' = 21,760 sf/300		73 trees
East:	1,016'x10' = 10,160 sf/300		34 trees
West:	1,942'x10 = 19,420 sf/200		65 trees

Buffer against R/W line:

South: 2,218'-100' driveway = 2,118 x10 = 21,180 sf/300		71 trees

Interior Landscape

Total VUA area:	204,339 sf		
Landscape Area required:	1 sf/15 sf VUA	13,623 sf	
Total Interior trees required:	1 tree/100 sf		136 trees
Landscape area provided:		36,737 sf	

Total trees required:	378 Trees
Total trees provided:	638 Trees

General Notes:

1. *No landscape materials other than sod grasses may be planted within a 5' radius maintenance area of any underground utility such as water meters, backflow devices, fire hydrants, sanitary sewer cleanouts, and manholes, air release valves, etc.*
2. *No landscaping shall be planted in a manner that would adversely affect utility easements.*
3. *All landscape areas to receive automatic irrigation. Water source to be potable or well and will be determined at time of building permit application.*
4. *Sod around buildings to be St. Augustine 'Bitter Blue' sod. Sod to be weed and disease free and laid tight. All areas within in preservation areas to be seeded with Argentine Bahia grass.*
5. *Not trees to be placed within 6' of any hard surface unless root barrier will be installed along the edge of the hard surface. Root barrier to extend at least 5' in either direction from the center of the tree trunk. Refer to Sheet LD-09 for installation details.*

N W E S

Graphic Scale
100 50 0 100
Scale: 1" = 100'

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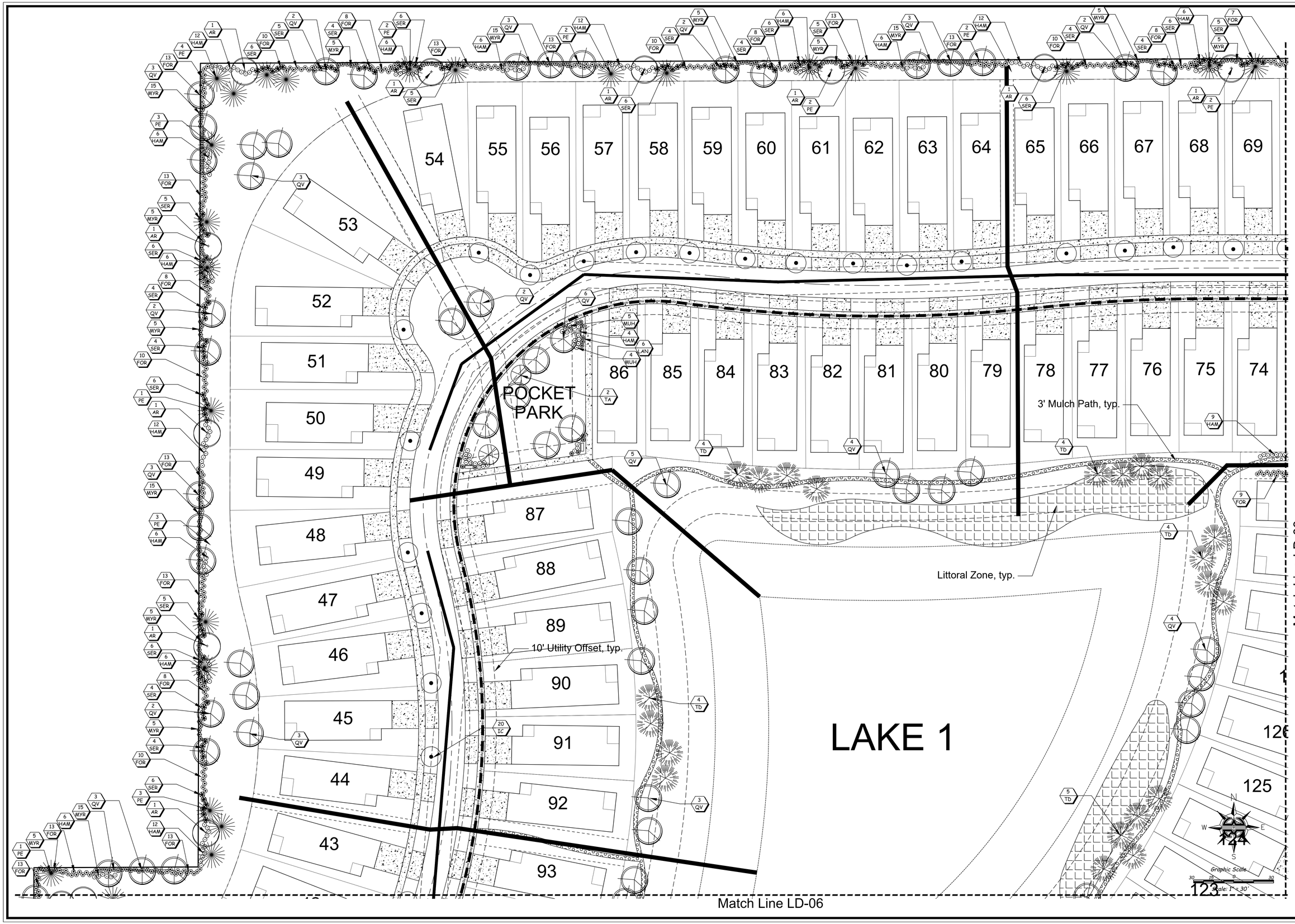
Millcreek
City of Fort Pierce
Overall Landscape Plan

LICENSED LANDSCAPE ARCHITECT LA0001733 STATE OF FLORIDA

LD-01



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Millcreek
City of Fort Pierce
Landscape Plan

LD-02

3' Mulch Path

Ex. Tree, to remain, typ.

Match Line LD-02

Match Line LD-04

Match Line LD-05

Graphic Scale

Scale: 1" = 30'

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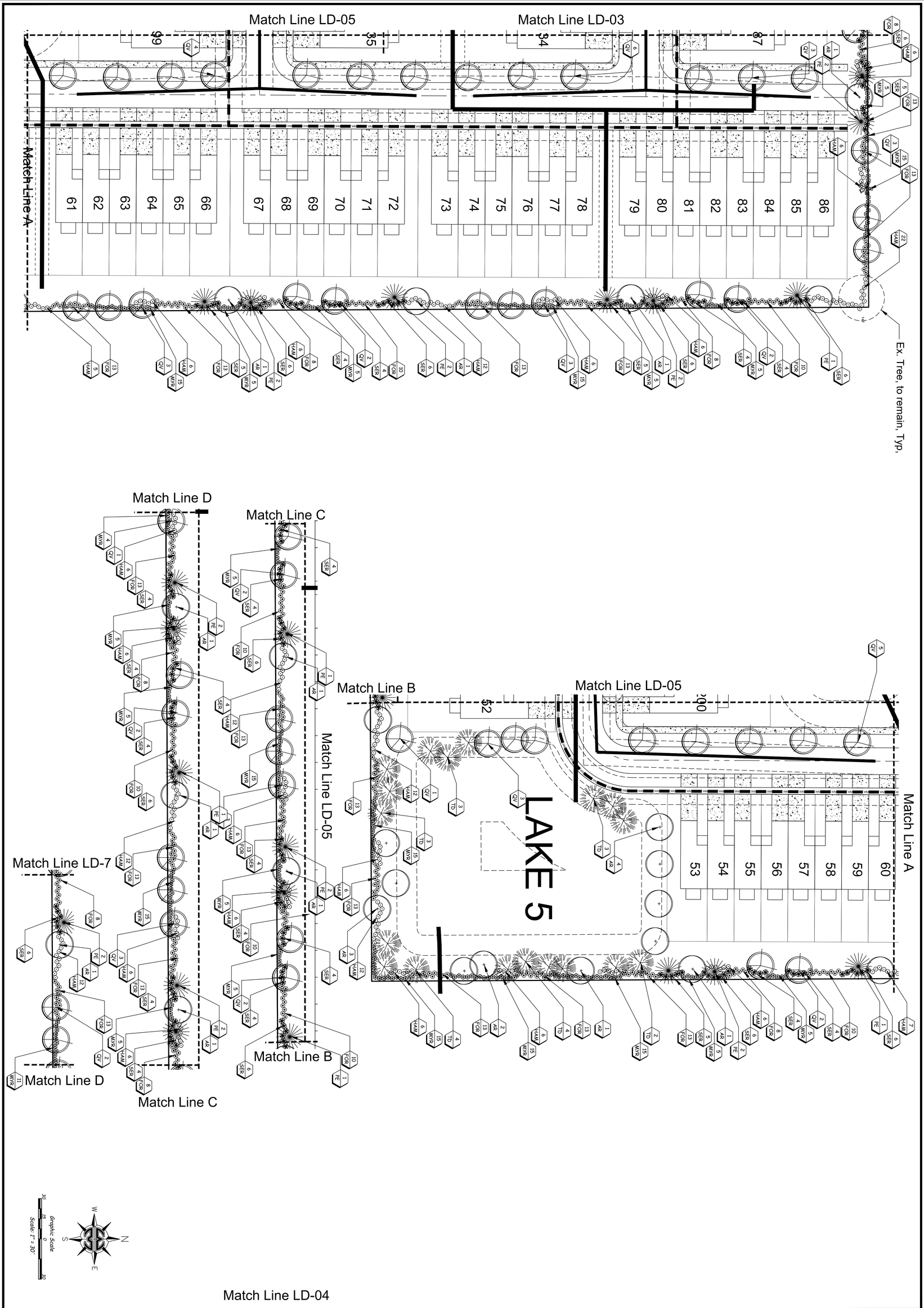
LA0001733

LD-03



LD-04

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Landscape Plan

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Match Line LD-03

LAKE 2

LAKE 3

3' Mulch Path, typ.

Littoral Zone, typ.

Match Line LD-06

Match Line LD-04

Match Line LD-04

Graphic Scale

1" = 30'

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REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

LD-05

Match Line LD-02

Match Line LD-05

Match Line LD-07

Graphic Scale
30 15 0 30
Scale: 1" = 30'

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City of Fort Pierce
Landscape Plan

REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

LD-06

Match Line LD-06

Match Line LD-04

PARCEL ID: 2407-131-0004-000-6
MUNICIPALITY: ST. LUCIE COUNTY
FUTURE LAND USE: COMMERCIAL
ZONING: CG COMMERCIAL GENERAL
EXISTING USE: VACANT

PARCEL ID: 24
MUNICIPALITY: C
FUTURE LAND
ZONING: PD PLAN
EXISTING US

TOP OF DITCH
DITCH BOTTOM
TOP OF DITCH

52.00'

Graphic Scale
30 15 0 30
Scale: 1" = 30'

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REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

LD-06

PLANTING NOTES:

FERTILIZER

FERTILIZERS SHALL BE SLOW RELEASE, UNIFROM IN COMPOSITION, DRY AND FREE FLOWING. THE FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED BAGS, EACH BEARING THE MANUFACTURERS STATEMENT OF ANALYSIS,AND SHALL MEET THE FOLLOWING REQUIREMENTS: SIX (6) PERCENT NITROGEN,SIX (6) PERCENT PHOSPHOROUS,AND SIX (6) PERCENT POTASSIUM. FERTILIZER SHALL BE APPLIED TO ALL SHRUBS (1/3 LB PER 3 GAL POT, 1/4 LB PER 1 GAL POT) AND GROUNDCOVER. THE SOD STARTER FERTILIZER MIXTURE SHALL BE A 5-10-10 ANALYSIS. A 14-14-14 FERTILIZER ANALYSIS IS REQUIRED ON ALL TREES AND SHRUBS OVER 5' IN HEIGHT (1/2 LB PER 5' OF SPREAD). AGRIFORM TABLETS WITH TWENTY (20) PERCENT NITROGEN, TEN (10) PERCENT PHOSPHOROUS,FIVE (5) PERCENT POTASSIUM IN 21 GRAM SIZES SHALL BE APPLIED ALONG WITH THE FERTILIZER PROCESS (1 WITH 1 GAL PLANTS. 2 WITH 3 GAL PLANTS AND 2 TABLETS PER 1" OF TREE TRUNK CALIPER). MAGNESIUM SULFATE SHALL BE APPLIED TO ALL PALMS AT INSTALLATION AT A RATE OF 1/2 LB PER INCH OF TRUNK CALIPER. MANGANESE SHALL BE APPLIED AT THE SAME RATE.

MULCH

MULCH MATERIAL SHALL BE COLORED 'A' GRADE CERTIFIED RE-CYCLED MULCH AND MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT. MULCH SHALL BE APPLIED TO A MINIMUM OF 3" DEPTH IN PLANTING BEDS. MULCH SHALL NOT BE PLACED WITHIN 6" OF TREE OR PALM TRUNKS.

SOD

THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS,ABSOLUTELY TRUE TO VARIETAL TYPE,AND FREE FROM WEEDS,FUNGUS,INSECTS AND DISEASE OF ANY KIND.

SUBSTITUTIONS

NO SUBSTITUTION OF PLANT MATERIAL TYPES OR SIZES WILL BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT OF RECORD. CONTAINER GROWN MATERIAL WILL NOT BE ACCEPTED AS A SUBSTITUTE FOR B & B MATERIAL UNLESS PREVIOUSLY APPROVED. INTENDED SUBSTITUTIONS SHALL BE SPELLED OUT IN BID.

MEASUREMENTS

SHADE TREES: HEIGHT SHALL BE MEASURED FROM GROUND TO THE AVERAGE BRANCH HEIGHT OF CANOPY. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.

SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE POINT WHERE MATURE PLANT GROWTH STOPS. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENT AREA NOT TO INCLUDE ANY TERMINAL GROWTH.

PALMS: CLEAR TRUNK SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE POINT WHERE THE MATURE AGED TRUNK JOINS THE IMMATURE OR GREEN PORTION OF THE TRUNK OR HEAD.

GREY WOOD (G.W.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO TOP OF THE HARDENED TRUNK.

OVERALL HEIGHT (O.A.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE AVERAGE FROND HEIGHT.

PALMS WITH MARRED OR BURNED TRUNKS WILL NOT BE ACCEPTED.

PLANTING SOIL AND BACKFILL

TOPSOIL SHALL CONSIST OF A STABILIZED MIXTURE OF GROUND YARD TRIMMINGS AND POSSIBLY BIOSOLIDS PROCESSED ACCORDING TO STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GUIDELINES FOR THE PROCESSING AND DISTRIBUTION OF SEWAGE SLUDGE COMPOST. RECYCLED TOPSOIL SHALL ONLY BE OBTAINED FROM A STATE PERMITTED RECYCLING FACILITY WHICH IS ALSO D.O.T. CERTIFIED AND STORES PRODUCT ON A PAD WITH A CURRENT NEMATODE CERTIFICATION FROM FLORIDA DEPARTMENT OF AGRICULTURE. RECYCLED TOPSOIL SHALL HAVE THE FOLLOWING CHARACTERISTICS:

- WEED FREE
- MOISTURE CONTENT 50% BY WEIGHT MAXIMUM
- WATER HOLDING CAPACITY 200% BY WEIGHT MINIMUM
- CARBON TO NITROGEN RATIO LESS THAN 25 TO 1
- ORGANIC MATTER CONTENT 40% BY DRY WEIGHT MINIMUM
- SOLUBLE SALTS LESS THAN 3 MMHOS/CM
- PH RANGE 7.0 - 7.9
- MINIMUM NUTRIENT LEVELS AS FOLLOWS:

MACRO NUTRIENTS: NITROGEN (N) - 1% MINIMUM, WATER INSOLUBLE NITROGEN 90% MINIMUM, PHOSPHORUS (P) - 0.5% MINIMUM, POTASSIUM (K) - 0.2% MINIMUM AND OTHER MACRO AND MICRO NUTRIENTS. THE RECYCLED TOPSOIL SHALL CONTAIN LEVELS OF THOSE MICRO NUTRIENTS NECESSARY FOR PLANT GROWTH. THESE INCLUDE CALCIUM, MAGNESIUM, SULFUR, BORON, COPPER, IRON, MANGANESE AND MOLYBDENUM. TOPSOIL NOT MEETING THESE REQUIREMENTS WILL NOT BE ACCEPTED.

BACKFILL:

ALL NEW AND TRANSPLANTED PLANT MATERIAL (INCLUDING NEW SOD) SHALL BE PLANTED ONLY AFTER PREPARATION OF EXISTING SOIL AS FOLLOWS: SPREAD A LAYER OF 3" DEPTH OF RECYCLED TOPSOIL (AS DEFINED ABOVE) OVER THE ENTIRE PLANTING AREA. THE TOPSOIL SHALL THEN BE UNIFORMLY DISKED, TILLED OR AERIFIED INTO THE EXISTING SOIL TO A DEPTH OF 12" UNDERNEATH SHRUBS AND GROUNDCOVERS, 6" UNDERNEATH SOD AND TO A DEPTH OF 36" FOR THE TREE PITS, WITH THE FOLLOWING EXCEPTION: NO ROTOTILLING OR DISKING SHALL OCCUR CLOSER TO THE TRUNKS OF ESTABLISHED PLANTS THAN ONE HALF (1/2) THE DISTANCE OF THE CANOPY FURTHER OUT FROM THE DRIP LINE OF THE EXISTING PLANT CANOPY. ALL PLANTS, INCLUDING HEDGES AND GROUND COVER SHALL BE PLANTED IN INDIVIDUALLY DUG HOLES AND THE MATERIAL DUG FROM THE HOLES SHALL THEN BE FURTHER MIXED WITH THE PREPARED SITE SOIL PRIOR TO BACKFILLING OF THE PLANTING HOLES AROUND THE ROOT BALLS. NO ADDITIONAL BACKFILL SOIL SHALL BE USED.

AN EXCEPTION ARE PLANTING PITS FOR CABBAGE PALMS, WHICH SHALL BE BACKFILLED WITH CLEAN NATIVE SAND ONLY.

REMOVE EXCESS MATERIAL TO PROVIDE PROPER FINISHED GRADE.

PLANT MATERIALS

TREES, PALMS, SHRUBS,GROUND COVERS:

PLANT SPECIES AND SIZES SHALL CONFORM TO THOSE INDICATED IN THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED 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 NORMAL FOR THE VARIETY AND FLORIDA GRADE NUMBER 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY.

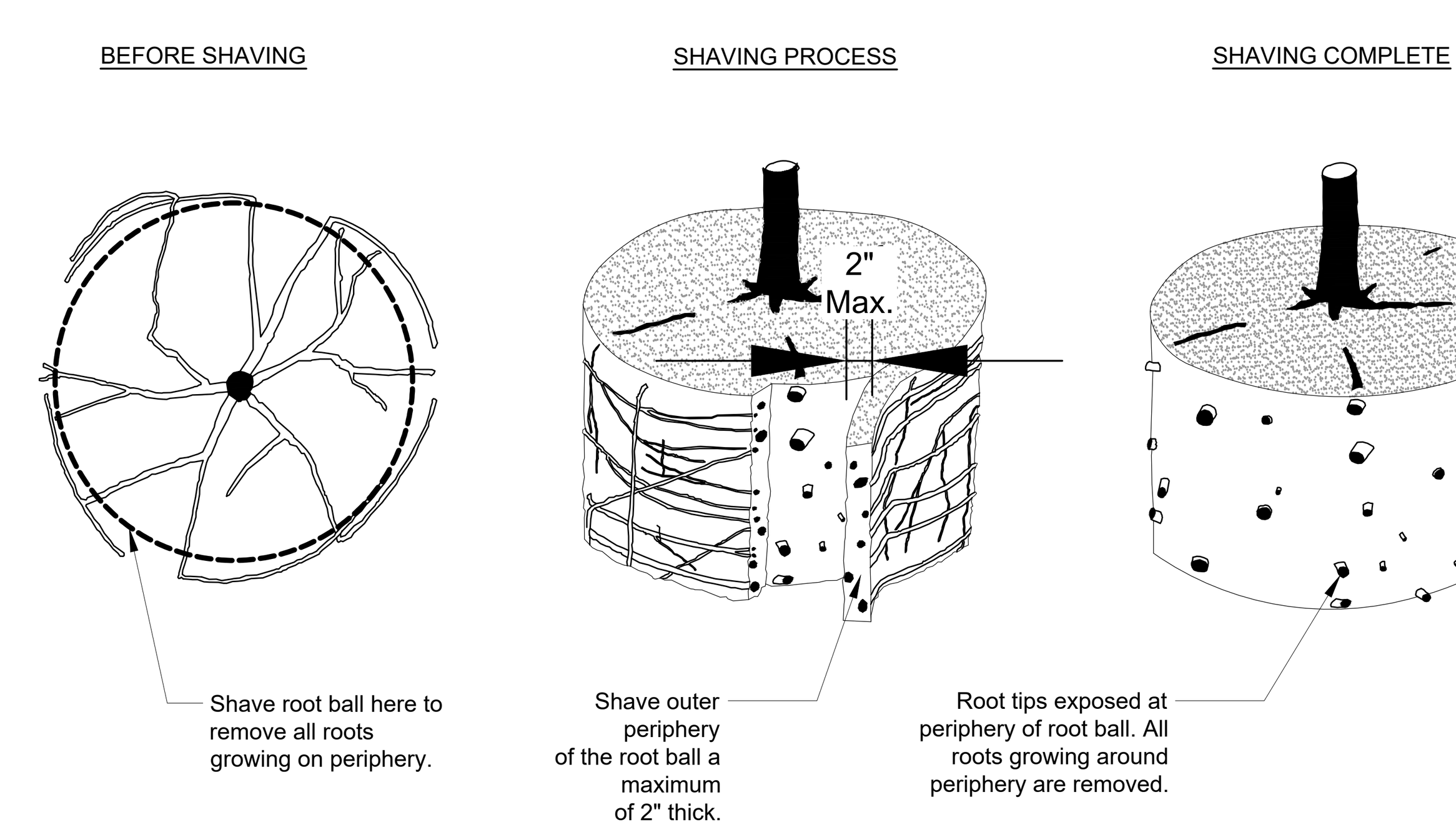
SPECIMEN MEANS AN EXCEPTIONALLY HEAVY, SYMMETRICAL. TIGHTLY KNIT PLANT, SO TRAINED OR FAVORED IN ITS DEVELOPMENT THAT FIRST APPEARANCE IS UNQUESTIONABLE AND IT IS OUTSTANDINGLY SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY.

ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL BRANCHED AND FREE OF DISEASE AND INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT, WHERE REQUIREMENTS ARE OMITTED FROM THE PLANT LIST. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

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 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.

GENERAL NOTES:

1. THE CONTRACTOR SHALL PERSONALLY ACQUAINT HIM/HER SELF WITH THE EXISTING SITE CONDITIONS AND THE EXTENT AND SCOPE OF WORK REQUIRED.
2. THE PLANT LIST INDICATES THE NAMES, SIZES AND SPACING OF SPECIFIC PLANT MATERIALS. QUANTITIES HAVE BEEN PROVIDED TO THE CONTRACTOR AS A CONVENIENCE, THE CONTRACTOR IS RESPONSIBLE FOR HIS/HER OWN QUANTITY COUNT. IN CASE OF DISCREPANCIES BETWEEN THE DRAWINGS AND PLANT LIST, THE QUANTITIES ON THE PLANT LIST SHALL PREVAIL.
3. NO SUBSTITUTES ON VARIETIES LISTED WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT.
4. PLANTS SHALL BE WATERED AS NECESSARY OR WITHIN 24 HOURS AFTER NOTIFICATION BY THE LANDSCAPE ARCHITECT.
5. 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 OF RECORD.
6. ALL PLASTIC FABRIC SHALL BE REMOVED FROM PLANT MATERIAL AT TIME OF INSTALLATION.
7. ALL TREES MUST BE STAKED AS SHOWN ON THE LANDSCAPE DETAIL SHEET WITHIN 24 HRS OF PLANTING. STAKES TO REMAIN FOR A MINIMUM OF 12 MONTH BUT NO LONGER THAN 18 MONTH. CONTRACTOR RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF THE STAKES.
8. ALL TREES MUST BE PRUNED AS PER LANDSCAPE ARCHITECT DIRECTION.
9. ALL SOD EDGES SHALL BE TRIMMED AS PER THE LANDSCAPE ARCHITECTS DIRECTION.
10. ALL SHRUBS, TREES, GROUNDCOVERS, AND SOD AREAS SHALL HAVE IMPROVED SOIL AS PER PLANTING SOIL NOTES. WILDFLOWER AREAS SHALL BE NATIVE TOPSOIL ONLY.
11. DO NOT ALLOW AIR POCKETS TO FROM WHEN BACKFILLING.
12. SOAK PLANTS IMMEDIATELY WITH WATER FOLLOWING PLANTING.
13. MAINTAIN THE ORIGINAL GRADE OF THE TREE BASE.
14. DO NOT BREAK ROOTBALL. SHAVE ROOTBALL OF TREES PER DETAIL BELOW.
15. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE ON LOCALITY OF THE PROJECT.
16. THE LANDSCAPE CONTRACTOR SHALL WATER, MULCH, WEED, PRUNE,, AND OTHERWISE MAINTAIN ALL PLANTS, INCLUDING SOD, UNTIL COMPLETION OF THE CONTRACT OR ACCEPTANCE BY THE LANDSCAPE ARCHITECT. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE, PLANTING SAUCERS RESTORED, AND DEFECTIVE WORK CORRECTED.
17. THE LANDSCAPE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR DEBRIS CAUSED BY THE 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.
18. 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 REPRESENTATIVE SHALL BE PROMPTLY CORRECTED BY THE LANDSCAPE CONTRACTOR.
19. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE IN WRITING FROM THE LANDSCAPE ARCHITECT. AT THE TIME OF FINAL ACCEPTANCE THE ONE (1) YEAR PERIOD SHALL COMMENCE. ANY MATERIALS WHICH HAVE DIED DURING THIS PERIOD SHALL BE PROMPTLY REPLACED WITH SPECIMENS THAT MEET THE MINIMUM REQUIREMENTS CALLED FOR IN THE DRAWINGS. THE LANDSCAPE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE DEATH OR DAMAGE RESULTING FROM LIGHTNING, VANDALISM, AUTOMOBILES OR FROM NEGLIGENCE BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND OTHERWISE MAINTAINING PLANTS DURING THE GUARANTEE PERIOD UNLESS A WRITTEN AGREEMENT WITH THE LANDSCAPE ARCHITECT PROVIDES FOR A DIFFERENT ARRANGEMENT.
20. 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 COST FOR THE REMOVAL OF UNSUITABLE OR EXCESS BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACTORS BID TO PERFORM THE WORK PRESENTED IN THIS PLAN SET.
21. NO LANDSCAPING ADDED UNDER THIS PROJECT SHALL BE LOCATED SUCH THAT SAID LANDSCAPING OBSCURES MOTORIST'S VISIBILITY OF ANY EXISTING SIGN(S).
22. 100% OF REQUIRED SHRUBS ARE DROUGHT TOLERANT.



Notes:
1- Shaving to be conducted using a sharp blade or hand saw eliminating no more than needed to remove all roots on the periphery of root ball.

2- Shaving can be performed just prior to planting or after placing in the hole.

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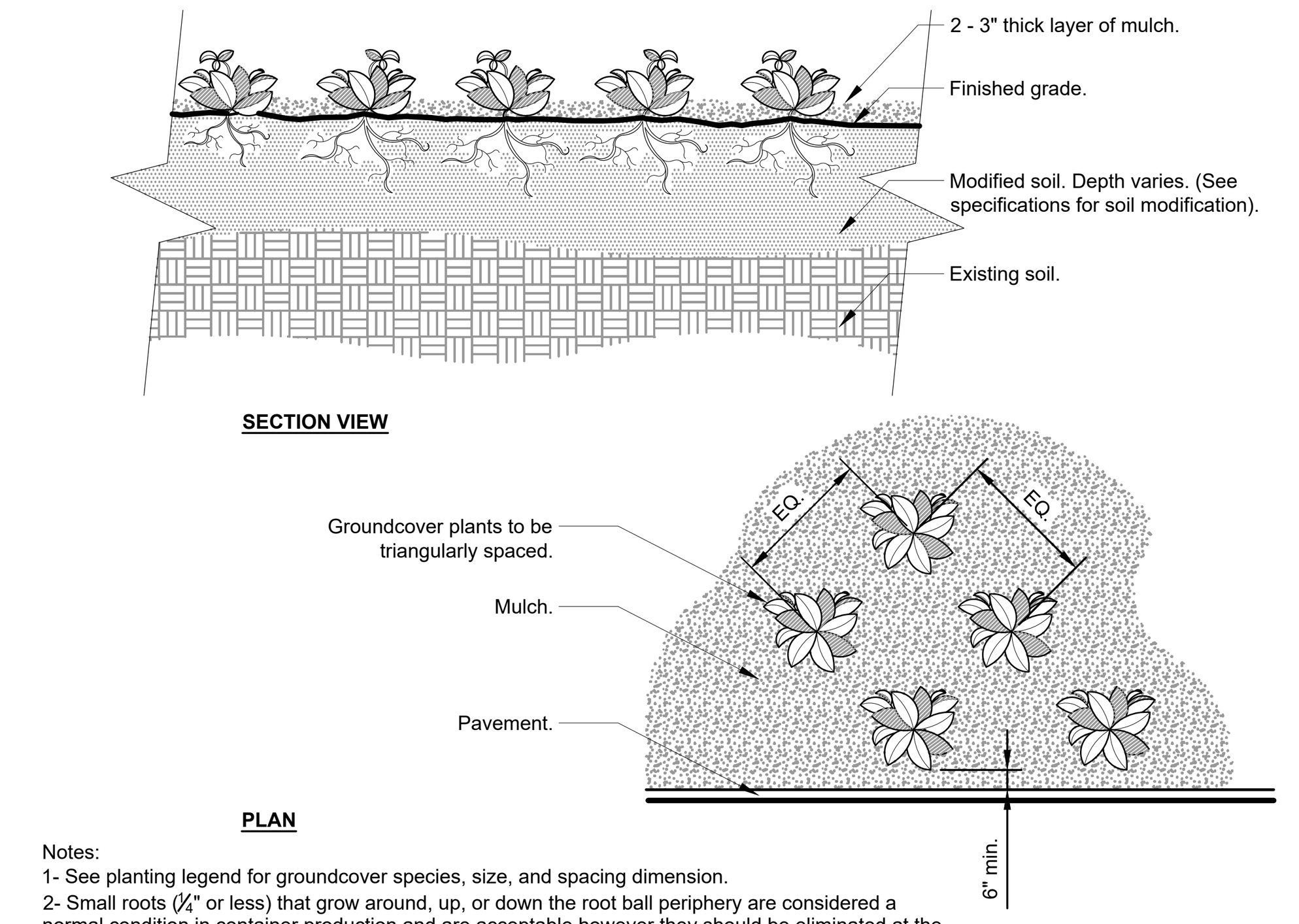
ROOT BALL SHAVING CONTAINER DETAIL



Notes:
1- See planting legend for groundcover species, size, and spacing dimension.
2- Small roots (¼" or less) that grow around, up, or down the root ball periphery are considered a normal condition in container production and are acceptable however they should be eliminated at the time of planting. Roots on the periperhy can be removed at the time of planting. (See root ball shaving container detail).
3- Settle soil around root ball of each groundcover prior to mulching.

GROUNDCOVER

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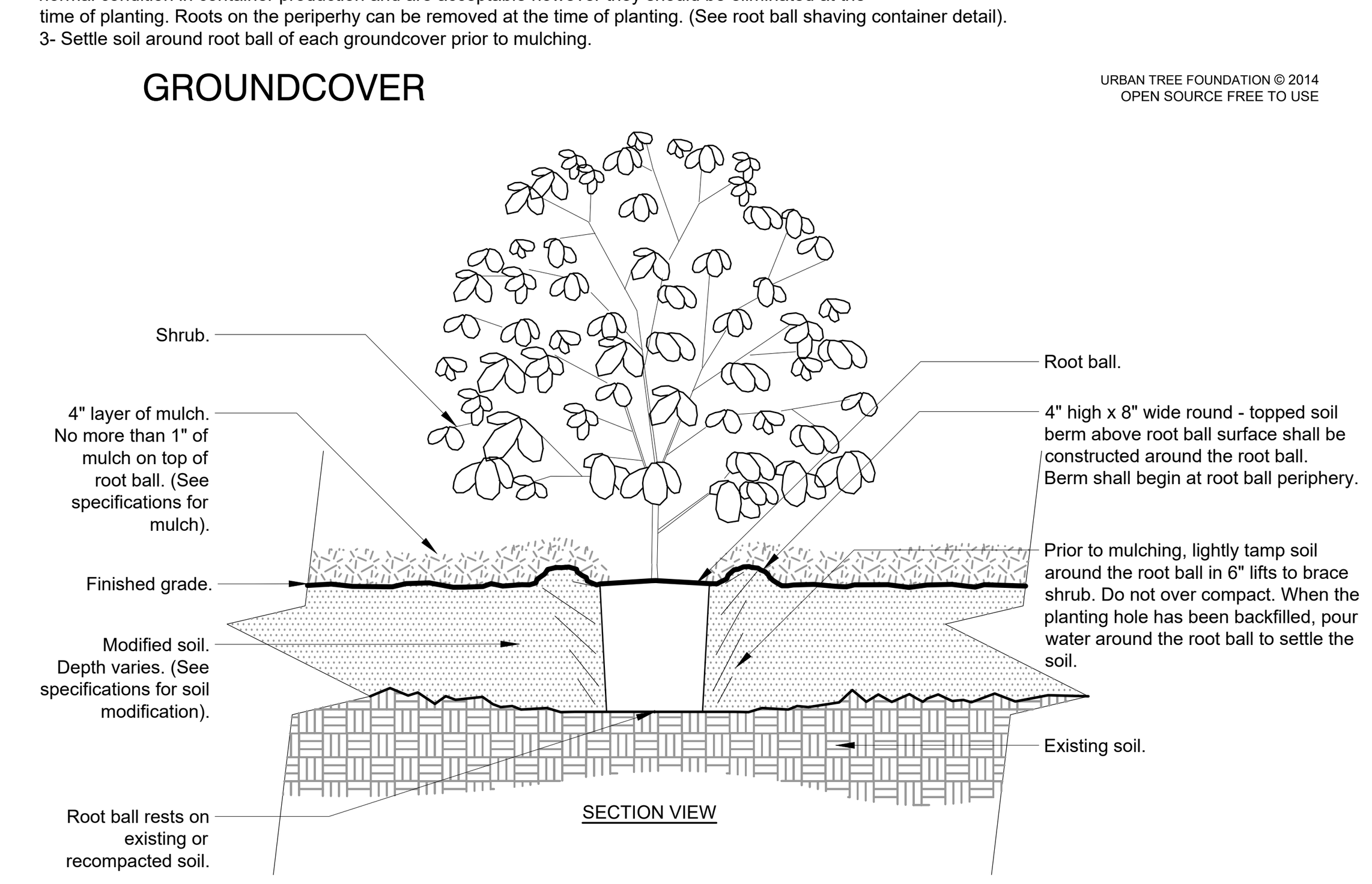

Notes:
1- Shrubs shall be of quality prescribed in the root observations detail and specifications.

2- See specifications for further requirements related to this detail.

SHRUB - MODIFIED SOIL

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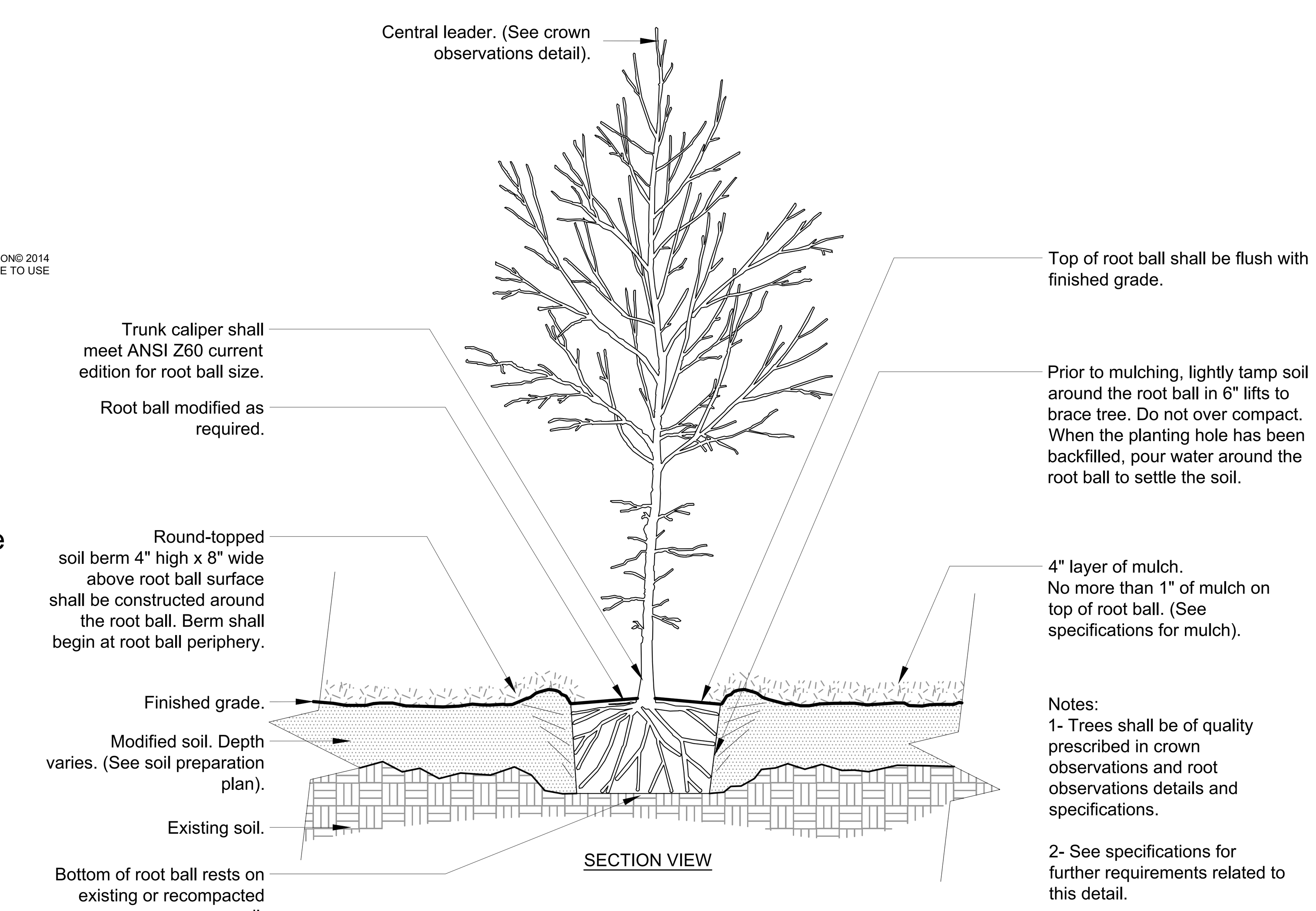

Notes:
1- Trees shall be of quality prescribed in crown observations and root observations details and specifications.

2- See specifications for further requirements related to this detail.

TREE w/ BERM (EXISTING SOIL MODIFIED)

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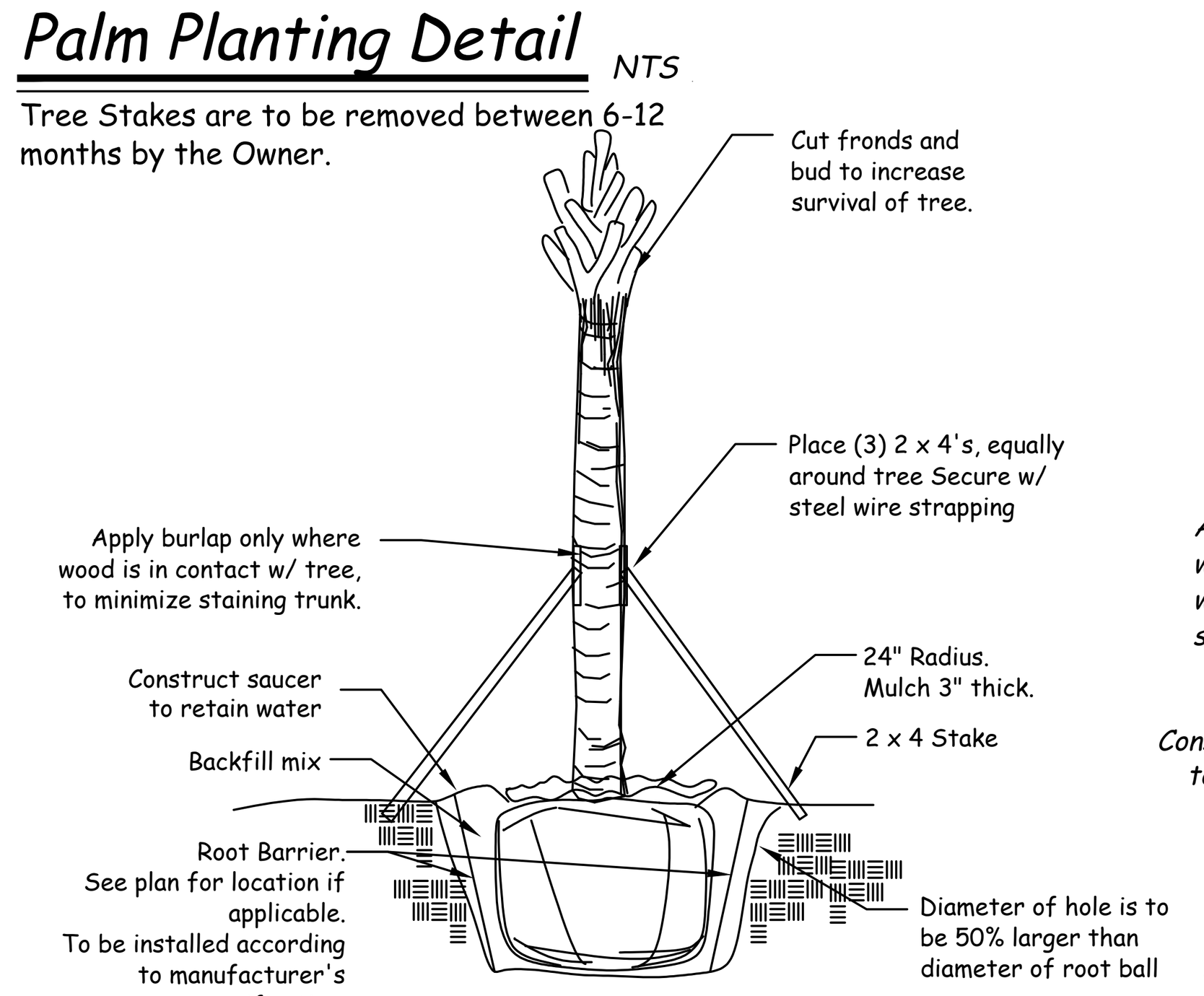
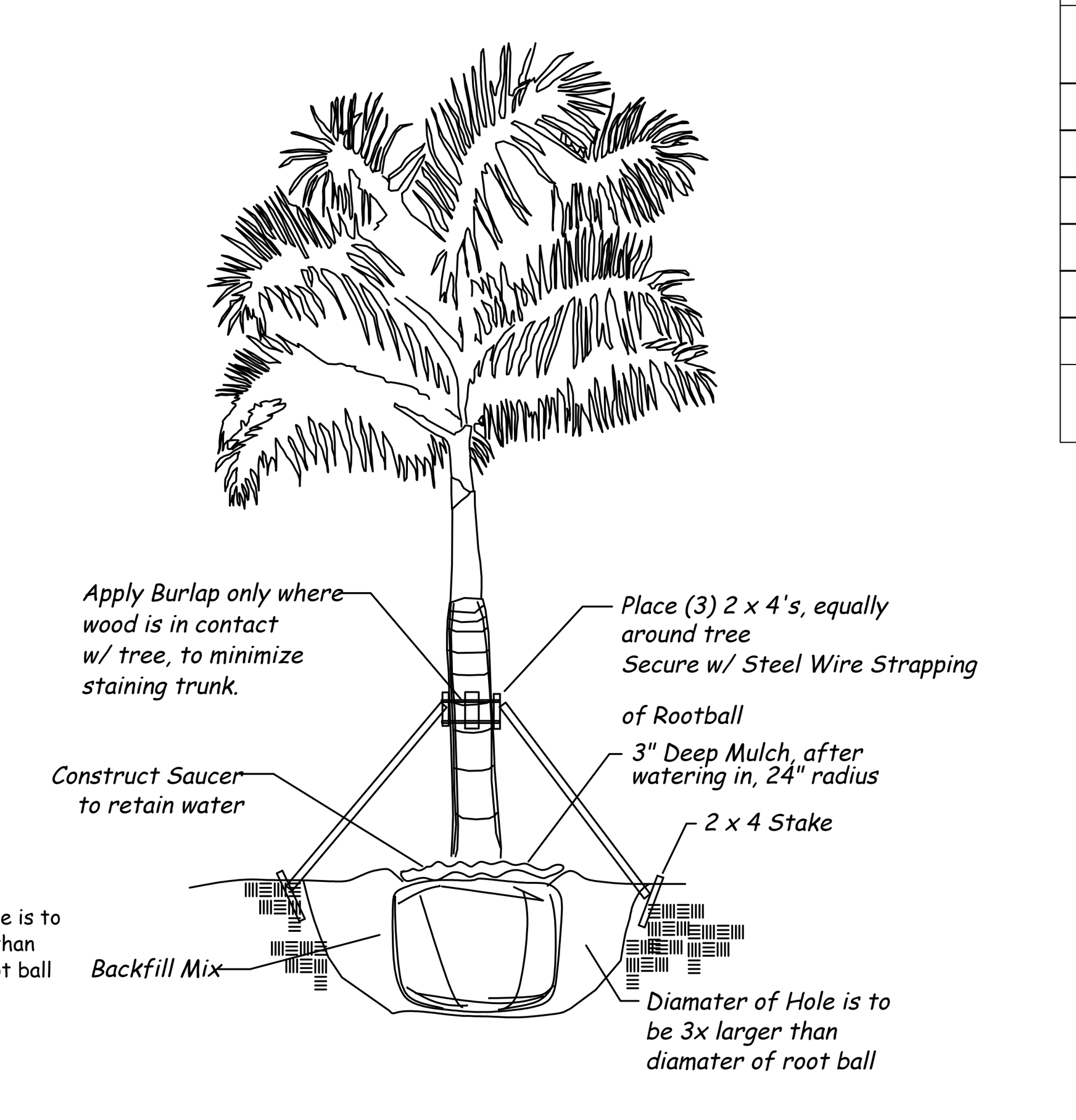
Watering Schedule			
Item	**Water**	**Month**	**No. of Applications**
Palms	20 gal	1	12
Large Trees	30 gal	2	12
Small Trees	20 gal	3	8
Large Shrubs	10 gal	4	8
Small Shrubs	5 gal	5	5
Groundcover	5 gal		
Total Applications			**45**

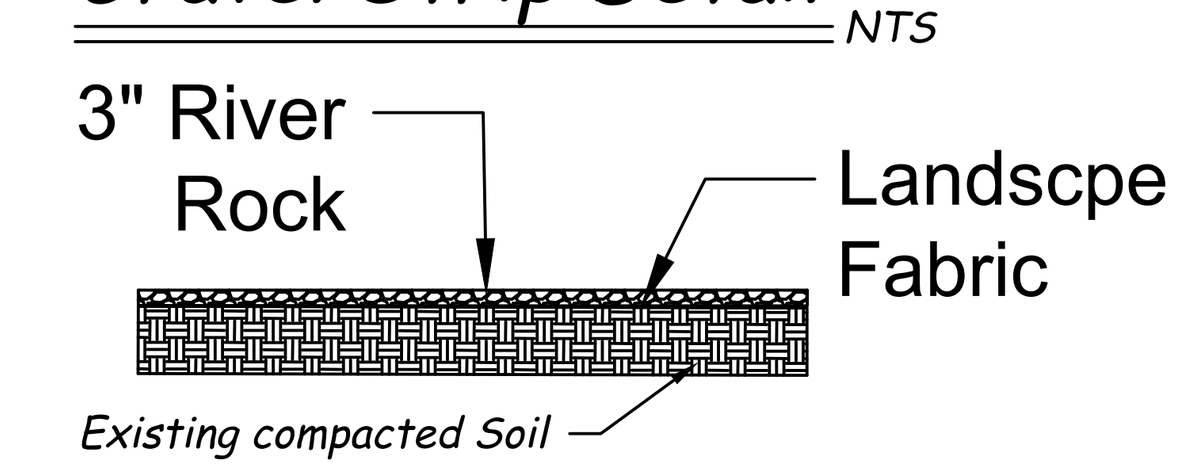
Palm Planting Detail NTS

Tree Stakes are to be removed between 6-12 months by the Owner.



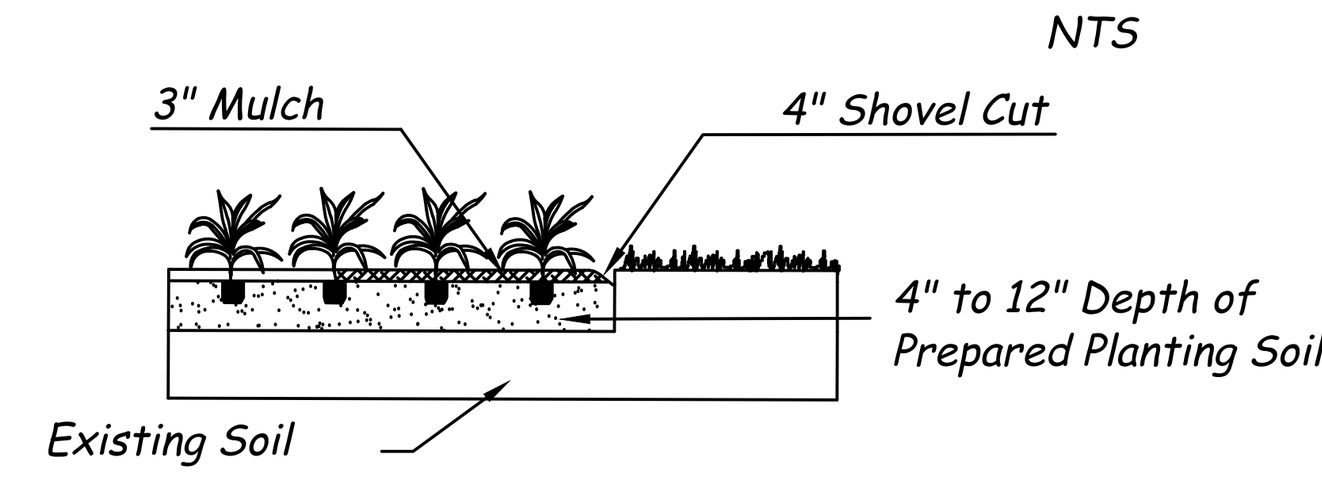


Gravel Strip Detail NTS



Planting Edge at Sod Detail

NTS



ABBREVIATIONS:
C.T.- CLEAR TRUNK
Ht.- HEIGHT
O.C.- ON CENTER
Spr.- SPREAD

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High Springs, FL 32643
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Date	Comments

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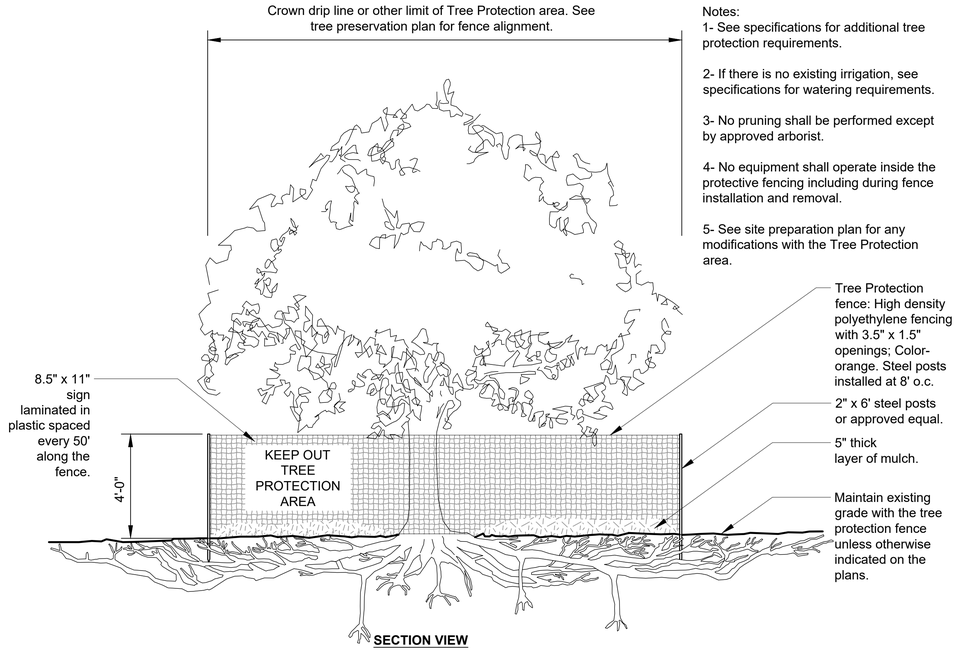
Millcreek
City of Fort Pierce
Landscape Notes & Details

REGISTERED LANDSCAPE ARCHITECT SABINE LANG-MARCKS LA0001733 STATE OF FLORIDA



Notes:
1- See specifications for additional tree protection requirements.

2- If there is no existing irrigation, see specifications for watering requirements.

3- No pruning shall be performed except by approved arborist.

4- No equipment shall operate inside the protective fencing including during fence installation and removal.

5- See site preparation plan for any modifications with the Tree Protection area.

S-X TREE PROTECTION

1/4" = 1'-0"

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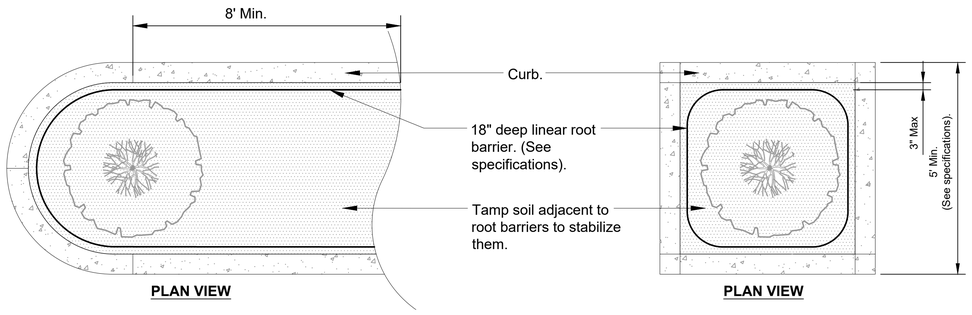
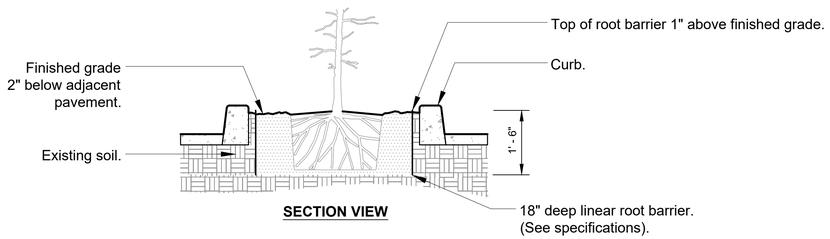
L_tree protection_safety netting





Notes:
1- Root barriers shall be installed per manufacturer's specifications and recommendations.

2- Root barriers shall be installed when root ball is located within 6' of pavement.

ROOT BARRIERS - PARKING LOT ISLANDS

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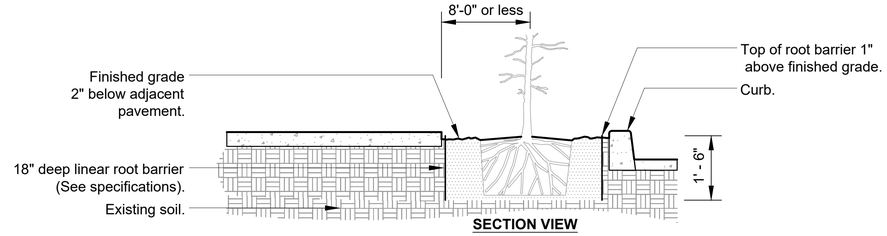

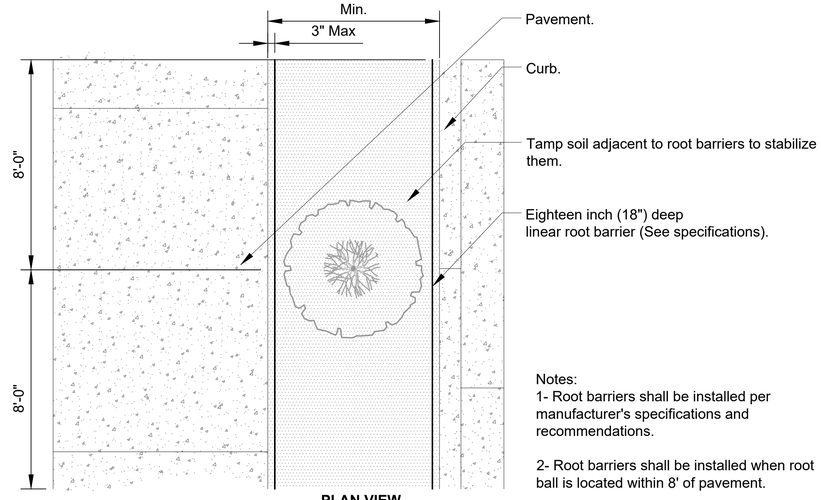

Notes:
1- Root barriers shall be installed per manufacturer's specifications and recommendations.

2- Root barriers shall be installed when root ball is located within 8' of pavement.

S-X ROOT BARRIERS

3/8" = 1'-0"

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L_site preparation_rootbarriers

Landscape Design Associates
25110 NW 182nd Ave
High Springs, FL 32643
352-210-5765 ph. www.landscapeda.com

Scale: NTS
Drawn by: SM
Checked by: SM
CADD No.: 24-044 lp.dwg
Date: 7.17.24

Revisions
Date | Comments

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Millcreek
City of Fort Pierce

Landscape Notes & Details

REGISTERED LANDSCAPE ARCHITECT LA0001733 STATE OF FLORIDA

LD-09

Littoral Planting Specifications

Part 1: General Notes

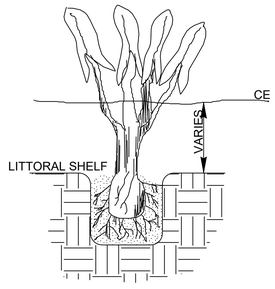
1. *The contractor shall confirm water elevation is stable at the control elevation level (C.E.) prior to installing any littoral plant material.*
2. *The contractor shall verify littoral shelf elevations and stabilization and confirm proper grade relationship for littoral plant materials specified prior to installation.*
3. *Littoral planting zone shall be staked by the contractor for approval by the owner or the owner's representative prior to installation.*
4. *The contractor shall be responsible for any damage to existing plant material along the shoreline and for coordinating with other contractors on the job site.*
5. *All littoral plant material shall comply with applicable State and local rules and regulations.*
6. *Lake shoreline bank above the C.E shall be sodded where applicable prior to littoral planting installation. All sodded areas shall be installed a minimum of 1' clear of the C.E..*
7. *The Contractor shall be responsible for inspecting and accepting contract documents and/or indicating necessary changes to contract documents at time of bid. Changes or necessary field adjustments must be approved by County and Landscape Architect.*

Part 2: Materials

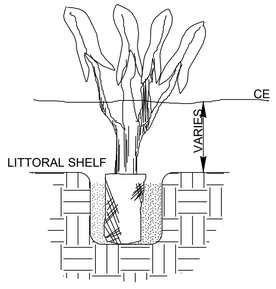
1. *All littoral plants indicated are naturally occurring species indigenous to the area. Naturalistic plantings as shown on contract documents shall be adhered to by the contractor.*
2. *All container grown materials shall be healthy, vigorous, well-rooted plants and established in the container so that the root mass will retain its shape and hold together when removed from the container. The plants shall have tops which are of good quality and are in a healthy growing condition.*
3. *All container grown or bare root littoral plant materials shall be grown or field collected by a certified nursery grower. Field grown plants area recommended wherever possible.*
4. *Field collected plants should be cleaned and void of all native soil. Soil removal eliminates transport and establishment of plant/animal pests.*
5. *All littoral plant materials should exhibit healthy white roots with active growing bud sites and shall have adequate root mass to support plant growth.*
6. *Root bound littoral plants will not be accepted.*
7. *Littoral plants shall not be handled by stems or foliage.*

Part 3: Execution

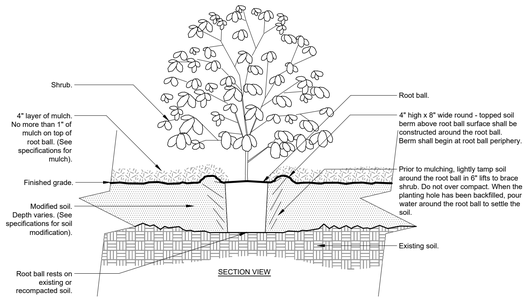
1. *Depth for littoral planting are to be established from the Lake systems C.E..*
2. *After transport, bare rooted littoral plant materials shall be protected to prevent dehydration and shall be installed within 48 hours after collection. (Plants shall be staged in water until installed).*
3. *Nuisance and invader species such as Typha (Cattails) and Water-Primrose shall be hand removed on a regular monthly basis for a period of one year Preventative spraying where applicable by an aquatic-approved herbicide for invasive plant materials should coincide with pre-planting practices.*
4. *Littoral planting establishment shall be performed on stabilized slopes conforming to grades set from the CE.. P*
5. *Planting shall not occur until the construction of all structures within the water management tract and drainage easements associated therewith, and the final grading of the water management tract and the adjacent area draining directly into the water management tract is complete and proper water quality is achieved.*
6. *Planted littoral areas shall be protected from disturbance and sediments occurring from construction on adjacent sites.*



BARE ROOT AQUATIC



CONTAINER GROWN AQUATIC



Notes:
1- Shrubs shall be of quality prescribed in the root observations detail and specifications.

2- See specifications for further requirements related to this detail.

SHRUB - MODIFIED SOIL

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Littoral Mainte nance Plan

Part 1: General Notes

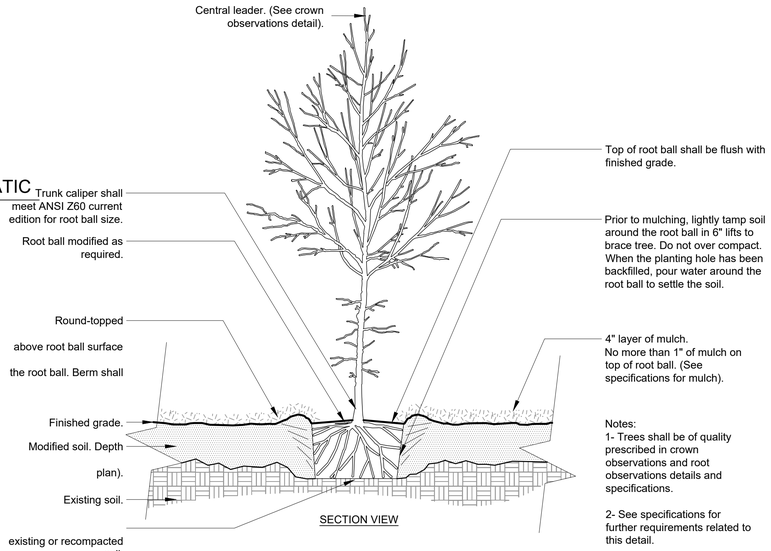
1. Precautions will be taken to control and reduce construction oriented pollution from adjacent activities to the littoral areas.
2. Equipment wash down areas, refueling and equipment repair shall occur away from areas of drainage collection or possible connection/influence of the littoral area.
3. Land treatment chemicals and soil sterilants will not be used in or around areas where littoral areas are located.
4. All construction debris piles associated with adjacent construction will be located away from littoral areas.
5. Maintenance contractor shall be fully qualified and have full working knowledge of littoral zone maintenance requirements.
6. Contractor shall be fully insured and possess a current occupational license in St. Lucie County, Florida.
7. St. Lucie County shall be notified of installation commencement and schedule prior to planting.
8. Source of plant material shall be reported to county if available.

Part 2: Plant Maintenance

1. Periodic littoral zone examinations will occur after planting is completed. The examination shall entail growth evaluation, damage or death rate appraisal, pest infestation and the presence of exotic vegetation intrusion.
2. Fertilization of the littoral area will result primarily from the run-off and the overall water quality composition. Therefore, supplemental fertilization shall not be applied after installation.
3. Non-surviving plants shall be removed and replaced when identified.
4. Once established, the littoral zone shall receive minimal pruning and be allowed to maintain itself as naturally as possible.
5. Appropriate pesticides shall be applied at the time any pest infestations are observed.
6. All exotic vegetation observed during the the inspections shall be removed by non-mechanical methods as timely as possible.
7. The maintenance contractor shall be responsible for the removal of all trash generated by his activity or accumulations in the littoral zone.
8. The maintenance contractor shall be responsible for registering all products used on the littoral zone with EPA and other appropriate agencies.
9. The maintenance contractor shall be responsible for the following services:
   *Algae and undesirable aquatic plant control
   *Border grass and brush control along the waters edge
   *Annual water chemistry analysis
   *Visit pre-notification *Biological Control agent introduction (if required)
   *Management reporting

Part 3: Execution

1. The littoral zone shall be inspected and monitored for one year after planting. During this one year maintenance and monitoring period, maintenance and monitoring shall occur 90, 180 and 360 days after planting. The maintenance and monitoring program shall consist of the following:
   A: Inspection, monitoring, exotic removal and replanting during each monitoring period.
   B: Complete removal of exotic and invasive plant species such as Cattails, Primrose Willows and Water Hyacinth from the planted littoral zone until the required plant species attain complete coverage of the planted littoral zone.
   C: The submittal of a monitoring report to St. Lucie County representing a time Zero monitoring, to be completed within 30 days of initial planting, ninety (90) day, one hundred eighty (180) day and three hundred sixty (360) day reports, each report submitted to SLC within 30 days of completion of the monitoring report.
   D: Each monitoring report shall assess the species, numbers, location of planted littoral shelves and multiple photographs (panoramas are preferred) of site clearly depicting the entire littoral zone planting. Photographs must be taken at approximately the same location(s) each time.
2. After the first year, the land owner or entity having maintenance responsibility for the planted littoral zone shall maintain the littoral zone in the following manner:
   A minimum of eighty percent (80%) survivorship and a minimum of seventy percent (70%) coverage of the planted littoral zone is required. Exotic and invasive plants species such as Cattails, Primrose Willows and Water Hyacinth, shall be restricted to less than ten percent (10%) of the required littoral zone.



Notes:
1- Trees shall be of quality prescribed in crown observations and root observations details and specifications.

2- See specifications for further requirements related to this detail.

TREE w/ BERM (EXISTING SOIL MODIFIED)

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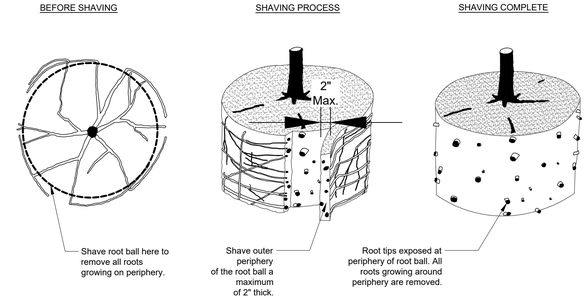
GENERAL NOTES:

1. THE CONTRACTOR SHALL PERSONALLY ACQUAINT HIM/HER SELF WITH THE EXISTING SITE CONDITIONS AND THE EXTENT AND SCOPE OF WORK REQUIRED.
2. THE PLANT LIST INDICATES THE NAMES, SIZES AND SPACING OF SPECIFIC PLANT MATERIALS. QUANTITIES HAVE BEEN PROVIDED TO THE CONTRACTOR AS A CONVENIENCE, THE CONTRACTOR IS RESPONSIBLE FOR HIS/HER OWN QUANTITY COUNT. IN CASE OF DISCREPANCIES BETWEEN THE DRAWINGS AND PLANT LIST, THE QUANTITIES ON THE PLANT LIST SHALL PREVAIL.
3. NO SUBSTITUTES ON VARIETIES LISTED WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT.
4. PLANTS SHALL BE WATERED AS NECESSARY OR WITHIN 24 HOURS AFTER NOTIFICATION BY THE LANDSCAPE ARCHITECT.
5. 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 OF RECORD.
6. ALL PLASTIC FABRIC SHALL BE REMOVED FROM PLANT MATERIAL AT TIME OF INSTALLATION.
7. ALL TREES MUST BE STAKED AS SHOWN ON THE LANDSCAPE DETAIL SHEET WITHIN 24 HRS OF PLANTING. STAKES TO REMAIN FOR A MINIMUM OF 12 MONTH BUT NO LONGER THAN 18 MONTH. CONTRACTOR RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF THE STAKES.
8. ALL TREES MUST BE PRUNED AS PER LANDSCAPE ARCHITECT DIRECTION.
9. ALL SOD EDGES SHALL BE TRIMMED AS PER THE LANDSCAPE ARCHITECTS DIRECTION.
10. ALL SHRUBS, TREES, GROUNDCOVERS, AND SOD AREAS SHALL HAVE IMPROVED SOIL AS PER PLANTING SOIL NOTES. WILDFLOWER AREAS SHALL BE NATIVE TOPSOIL ONLY.
11. DO NOT ALLOW AIR POCKETS TO FROM WHEN BACKFILLING.
12. SOAK PLANTS IMMEDIATELY WITH WATER FOLLOWING PLANTING.
13. MAINTAIN THE ORIGINAL GRADE OF THE TREE BASE.
14. DO NOT BREAK ROOTBALL. SHAVE ROOTBALL OF TREES PER DETAIL BELOW.
15. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE ON LOCALITY OF THE PROJECT.
16. THE LANDSCAPE CONTRACTOR SHALL WATER, MULCH, WEED, PRUNE,, AND OTHERWISE MAINTAIN ALL PLANTS, INCLUDING SOD, UNTIL COMPLETION OF THE CONTRACT OR ACCEPTANCE BY THE LANDSCAPE ARCHITECT. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE, PLANTING SAUCERS RESTORED, AND DEFECTIVE WORK CORRECTED.
17. THE LANDSCAPE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR DEBRIS CAUSED BY THE 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.
18. 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 REPRESENTATIVE SHALL BE PROMPTLY CORRECTED BY THE LANDSCAPE CONTRACTOR.
19. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE IN WRITING FROM THE LANDSCAPE ARCHITECT. AT THE TIME OF FINAL ACCEPTANCE THE ONE (1) YEAR PERIOD SHALL COMMENCE. ANY MATERIALS WHICH HAVE DIED DURING THIS PERIOD SHALL BE PROMPTLY REPLACED WITH SPECIMENS THAT MEET THE MINIMUM REQUIREMENTS CALLED FOR IN THE DRAWINGS. THE LANDSCAPE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE DEATH OR DAMAGE RESULTING FROM LIGHTNING, VANDALISM, AUTOMOBILES OR FROM NEGLIGENCE BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND OTHERWISE MAINTAINING PLANTS DURING THE GUARANTEE PERIOD UNLESS A WRITTEN AGREEMENT WITH THE LANDSCAPE ARCHITECT PROVIDES FOR A DIFFERENT ARRANGEMENT.
20. 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 COST FOR THE REMOVAL OF UNSUITABLE OR EXCESS BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACTORS BID TO PERFORM THE WORK PRESENTED IN THIS PLAN SET.
21. NO LANDSCAPING ADDED UNDER THIS PROJECT SHALL BE LOCATED SUCH THAT SAID LANDSCAPING OBSCURES MOTORIST'S VISIBILITY OF ANY EXISTING SIGN(S).
22. 100% OF REQUIRED SHRUBS ARE DROUGHT TOLERANT.



Notes:
1- Shaving to be conducted using a sharp blade or hand saw eliminating no more than needed to remove all roots on the periphery of root ball.

2- Shaving can be performed just prior to planting or after placing in the hole.

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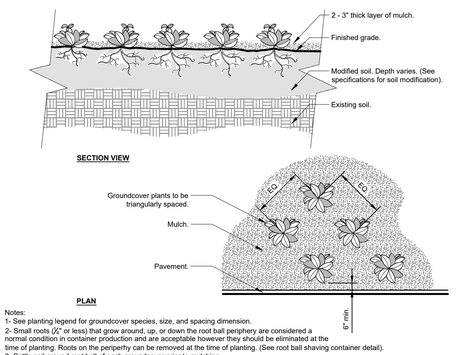
ROOT BALL SHAVING CONTAINER DETAIL

Watering Schedule			
Item	**Water**	**Month**	**No. of Applications**
Palms	20 gal	1	12
Large Trees	30 gal	2	12
Small Trees	20 gal	3	8
Large Shrubs	10 gal	4	8
Small Shrubs	5 gal	5	5
Groundcover	5 gal		
Total Applications			**45**



Notes:
1- See planting legend for groundcover species, size, and spacing dimension.
2- Small roots (¼" or less) that grow around, up, or down the root ball periphery are considered a normal condition in container production and are acceptable however they should be eliminated at the time of planting. Roots on the periperhy can be removed at the time of planting. (See root ball shaving container detail).
3- Settle soil around root ball of each groundcover prior to mulching.

GROUNDCOVER

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Landscape Design Associates
25110 NW 182nd Ave
High Springs, FL 32643
352-210-5765 ph. www.landscapeda.com

Revisions	
Date	Comments

Scale: NTS
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CADD No.: 24-044 lp.dwg
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Millcreek
City of Fort Pierce

Littoral Planting Notes & Details

REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

LD-10



ENGINEERS & SURVEYORS
ENVIRONMENTAL

10250 VILLAGE PARKWAY
SUITE 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

INITIALS DESIGNED BY
INITIALS DRAWN BY
21539 millcreek tree location map.dwg FILENAME
RH 24X36 LAYOUT
AS SHOWN SCALE
MONTH-YEAR DATE

DATE # REVISION COMMENTS

21-539 Millcreek 62ac.

Tree Location Map

SAINT LUCIE COUNTY FLORIDA

MONTH-YEAR

10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
772-462-2455

21-539

1 OF 1

Latitude	Longitude	Tree Number	Tree Name	DBH	Health Rating	Tree Condition	Notes
27.44929342	-80.36641678	1	Live Oak (Quercus virginiana)	17	10	Healthy	
27.4492549	-80.366505	2	Live Oak (Quercus virginiana)	15	10	Healthy	
27.44931247	-80.36646373	3	Live Oak (Quercus virginiana)	25.3	10	Healthy	
27.44938814	-80.366436	4	Live Oak (Quercus virginiana)	13.7	10	Healthy	
27.44940652	-80.36634911	5	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.44940057	-80.36640611	6	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4494693	-80.36638398	7	Live Oak (Quercus virginiana)	20.2	10	Healthy	
27.44951504	-80.3664436	8	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.44961214	-80.36648445	9	Laurel Oak (Quercus hemisphaerica)	17.7	10	Healthy	
27.44970056	-80.36648093	10	Laurel Oak (Quercus hemisphaerica)	15.6	10	Healthy	
27.44975063	-80.36645048	11	Laurel Oak (Quercus hemisphaerica)	24.3	10	Healthy	
27.44979082	-80.36644411	12	Laurel Oak (Quercus hemisphaerica)	14	10	Healthy	
27.44979866	-80.36641092	13	Laurel Oak (Quercus hemisphaerica)	13.2	10	Healthy	
27.44980788	-80.36640108	14	Laurel Oak (Quercus hemisphaerica)	12	9	Fungi	
27.44981923	-80.36652698	15	Live Oak (Quercus virginiana)	24.4	10	Healthy	
27.44988137	-80.36650508	16	Live Oak (Quercus virginiana)	19.8	10	Healthy	
27.44989235	-80.36646989	17	Laurel Oak (Quercus hemisphaerica)	55.9	8	Insects	
27.44992362	-80.36646981	18	Laurel Oak (Quercus hemisphaerica)	12	10	Healthy	
27.44995446	-80.36655406	19	Laurel Oak (Quercus hemisphaerica)	17	10	Healthy	
27.4499619	-80.36653418	20	Laurel Oak (Quercus hemisphaerica)	12.2	10	Healthy	
27.4499177	-80.36664694	21	Laurel Oak (Quercus hemisphaerica)	18.8	10	Healthy	
27.44986414	-80.36666731	22	Laurel Oak (Quercus hemisphaerica)	17.5	10	Healthy	
27.4498384	-80.36662198	23	Laurel Oak (Quercus hemisphaerica)	21.5	10	Healthy	
27.44980844	-80.36661707	24	Laurel Oak (Quercus hemisphaerica)	12.8	10	Healthy	
27.44974814	-80.36664741	25	Laurel Oak (Quercus hemisphaerica)	43	9	Healthy	Ants
27.44967916	-80.3666138	26	Live Oak (Quercus virginiana)	14.5	10	Healthy	
27.44953753	-80.3666177	27	Laurel Oak (Quercus hemisphaerica)	15	10	Healthy	
27.44951227	-80.36653941	28	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.44950327	-80.36656104	29	Live Oak (Quercus virginiana)	21.1	10	Healthy	
27.44947598	-80.3666129	30	Live Oak (Quercus virginiana)	19	10	Healthy	
27.44943002	-80.36654731	31	Live Oak (Quercus virginiana)	16	10	Healthy	
27.44944999	-80.36662926	32	Laurel Oak (Quercus hemisphaerica)	21	10	Healthy	
27.44944687	-80.36664453	33	Laurel Oak (Quercus hemisphaerica)	17.4	10	Healthy	
27.4494887	-80.36674247	34	Live Oak (Quercus virginiana)	23.3	10	Healthy	
27.4495203	-80.36681229	35	Laurel Oak (Quercus hemisphaerica)	16	10	Healthy	
27.44950809	-80.36670843	36	Live Oak (Quercus virginiana)	22	10	Healthy	
27.44947505	-80.36686988	37	Laurel Oak (Quercus hemisphaerica)	32.8	10	Healthy	
27.44962936	-80.36672995	38	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.44982062	-80.36700377	39	Laurel Oak (Quercus hemisphaerica)	51	10	Healthy	
27.44990965	-80.36696475	40	Laurel Oak (Quercus hemisphaerica)	13.5	10	Healthy	
27.45004037	-80.36660624	41	Laurel Oak (Quercus hemisphaerica)	13	10	Healthy	
27.45009249	-80.36655359	42	Laurel Oak (Quercus hemisphaerica)	14	10	Healthy	
27.4500585	-80.36658843	43	Laurel Oak (Quercus hemisphaerica)	34.6	10	Healthy	
27.45011722	-80.36669031	44	Laurel Oak (Quercus hemisphaerica)	13.3	10	Healthy	
27.45010633	-80.36673242	45	Laurel Oak (Quercus hemisphaerica)	20.7	10	Healthy	
27.45010506	-80.36675615	46	Laurel Oak (Quercus hemisphaerica)	15	10	Healthy	
27.45015461	-80.36680873	47	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45016596	-80.36669263	48	Laurel Oak (Quercus hemisphaerica)	12.2	10	Healthy	
27.45010512	-80.36647316	49	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45015093	-80.36641885	50	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45019456	-80.36651979	51	Laurel Oak (Quercus hemisphaerica)	23	10	Healthy	
27.45026442	-80.36648649	52	Live Oak (Quercus virginiana)	17	10	Healthy	
27.45018722	-80.36659582	53	Laurel Oak (Quercus hemisphaerica)	17	10	Healthy	
27.45016807	-80.36662736	54	Laurel Oak (Quercus hemisphaerica)	25.7	10	Healthy	
27.45020156	-80.36672464	55	Laurel Oak (Quercus hemisphaerica)	16.7	10	Healthy	
27.45018961	-80.36675365	56	Laurel Oak (Quercus hemisphaerica)	12.5	10	Healthy	
27.45014826	-80.36672596	57	Laurel Oak (Quercus hemisphaerica)	32	10	Healthy	
27.450167	-80.36674038	58	Laurel Oak (Quercus hemisphaerica)	20.3	10	Healthy	
27.45020127	-80.3668936	59	Laurel Oak (Quercus hemisphaerica)	16.4	10	Healthy	
27.45016254	-80.36698379	60	Laurel Oak (Quercus hemisphaerica)	36.5	10	Healthy	
27.45019539	-80.36695259	61	Laurel Oak (Quercus hemisphaerica)	22.4	10	Healthy	
27.45026751	-80.36696031	62	Laurel Oak (Quercus hemisphaerica)	23.5	10	Healthy	
27.45031019	-80.36690628	63	Laurel Oak (Quercus hemisphaerica)	23.9	10	Healthy	
27.45034951	-80.36669722	64	Laurel Oak (Quercus hemisphaerica)	14.7	10	Healthy	
27.45036783	-80.36666142	65	Laurel Oak (Quercus hemisphaerica)	27.5	10	Healthy	
27.4503793	-80.3666659	66	Laurel Oak (Quercus hemisphaerica)	26.9	10	Healthy	
27.45029532	-80.36653524	67	Laurel Oak (Quercus hemisphaerica)	13.5	10	Healthy	
27.45029553	-80.36651708	68	Live Oak (Quercus virginiana)	16	10	Healthy	
27.45040224	-80.36651501	69	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	Lean (almost parallel to ground)
27.45035677	-80.3665718	70	Laurel Oak (Quercus hemisphaerica)	17.3	10	Healthy	
27.45039806	-80.36657937	71	Laurel Oak (Quercus hemisphaerica)	13.3	10	Healthy	
27.45046186	-80.36646288	72	Laurel Oak (Quercus hemisphaerica)	20.7	10	Healthy	
27.45048655	-80.36647148	73	Laurel Oak (Quercus hemisphaerica)	29.6	10	Healthy	
27.45050109	-80.36650073	74	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45051835	-80.36655656	76	Laurel Oak (Quercus hemisphaerica)	18.2	10	Healthy	
27.45052612	-80.36658011	75	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45051332	-80.36658984	77	Laurel Oak (Quercus hemisphaerica)	29.3	10	Healthy	
27.45042429	-80.3666907	78	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45042265	-80.36681549	79	Laurel Oak (Quercus hemisphaerica)	20.1	10	Healthy	
27.45041544	-80.36683291	80	Laurel Oak (Quercus hemisphaerica)	14	9	Healthy,Insects,Fungi	
27.45042444	-80.366865	81	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	

27.45042349	-80.36700534	82	Laurel Oak (Quercus hemisphaerica)	35.5	10	Healthy	Bees
27.45050682	-80.36701123	83	Laurel Oak (Quercus hemisphaerica)	29.5	10	Healthy	
27.45051862	-80.36689082	84	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4505476	-80.36687165	85	Laurel Oak (Quercus hemisphaerica)	15.1	10	Healthy	
27.45051716	-80.36683078	86	Laurel Oak (Quercus hemisphaerica)	26.6	10	Healthy	
27.45054854	-80.36683059	87	Laurel Oak (Quercus hemisphaerica)	19.8	10	Healthy	
27.45059179	-80.36688864	88	Laurel Oak (Quercus hemisphaerica)	21.2	10	Healthy	
27.4505646	-80.3667424	89	Laurel Oak (Quercus hemisphaerica)	25.1	10	Healthy	
27.4506496	-80.36662703	90	Laurel Oak (Quercus hemisphaerica)	29.5	10	Healthy	
27.45068697	-80.36666358	91	Laurel Oak (Quercus hemisphaerica)	18	10	Healthy	
27.45064675	-80.36668258	92	Laurel Oak (Quercus hemisphaerica)	21.6	10	Healthy	
27.4507165	-80.36671209	93	Laurel Oak (Quercus hemisphaerica)	15.7	10	Healthy	
27.45062907	-80.366733	94	Laurel Oak (Quercus hemisphaerica)	26.8	10	Healthy	
27.45058663	-80.36706936	95	Laurel Oak (Quercus hemisphaerica)	20.5	10	Healthy	
27.45064116	-80.36708312	96	Laurel Oak (Quercus hemisphaerica)	51.6	10	Healthy	
27.45052819	-80.36711187	97	Live Oak (Quercus virginiana)	32.5	10	Healthy	
27.45050261	-80.36715176	98	Live Oak (Quercus virginiana)	13.5	10	Healthy	
27.4505315	-80.36732145	99	Live Oak (Quercus virginiana)	51.6	10	Healthy	
27.45050046	-80.36742476	100	Live Oak (Quercus virginiana)	32	10	Healthy	
27.45071505	-80.36710918	101	Laurel Oak (Quercus hemisphaerica)	13.1	10	Healthy	
27.45072831	-80.36707496	102	Laurel Oak (Quercus hemisphaerica)	23.3	10	Healthy	
27.45073587	-80.36700055	103	Laurel Oak (Quercus hemisphaerica)	16.5	10	Healthy	
27.45079585	-80.36695359	104	Laurel Oak (Quercus hemisphaerica)	23.6	10	Healthy	
27.45086381	-80.36677632	105	Laurel Oak (Quercus hemisphaerica)	29	10	Healthy	
27.45087885	-80.3666613	106	Laurel Oak (Quercus hemisphaerica)	35.9	10	Healthy	
27.45088398	-80.36656986	107	Laurel Oak (Quercus hemisphaerica)	28.7	10	Healthy	
27.45083157	-80.36656951	109	Live Oak (Quercus virginiana)	18.4	10	Healthy	
27.45084984	-80.36658277	108	Live Oak (Quercus virginiana)	20.5	10	Healthy	
27.45115456	-80.36690241	110	Live Oak (Quercus virginiana)	56.2	10	Healthy	
27.4512723	-80.36682111	111	Live Oak (Quercus virginiana)	20	10	Healthy	
27.45127261	-80.36681414	112	Live Oak (Quercus virginiana)	26.2	10	Healthy	
27.45080499	-80.36706942	113	Laurel Oak (Quercus hemisphaerica)	34.7	6	Fungi	Kanker
27.45082156	-80.36708582	114	Laurel Oak (Quercus hemisphaerica)	37.7	10	Healthy	
27.45082138	-80.36714114	115	Laurel Oak (Quercus hemisphaerica)	15.8	10	Healthy	
27.45082045	-80.36713382	116	Laurel Oak (Quercus hemisphaerica)	18.8	10	Healthy	
27.45080076	-80.36712227	117	Laurel Oak (Quercus hemisphaerica)	14.7	10	Healthy	
27.4507345	-80.36714297	118	Laurel Oak (Quercus hemisphaerica)	26.2	10	Healthy	
27.45090444	-80.36711636	119	Laurel Oak (Quercus hemisphaerica)	22.4	10	Healthy	
27.45095188	-80.3671065	120	Laurel Oak (Quercus hemisphaerica)	33.3	10	Healthy	
27.45100699	-80.36720434	121	Laurel Oak (Quercus hemisphaerica)	79.7	10	Healthy	
27.45103469	-80.36723068	122	Laurel Oak (Quercus hemisphaerica)	90.2	10	Healthy	
27.45121876	-80.36722384	123	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45121459	-80.36714774	124	Live Oak (Quercus virginiana)	50.5	10	Healthy	
27.45134509	-80.36694541	125	Laurel Oak (Quercus hemisphaerica)	36.8	10	Healthy	
27.45145055	-80.36678844	126	Live Oak (Quercus virginiana)	23	10	Healthy	
27.45142934	-80.36676727	127	Live Oak (Quercus virginiana)	30	10	Healthy	
27.45136293	-80.36671457	128	Laurel Oak (Quercus hemisphaerica)	26	10	Healthy	
27.4514388	-80.3666958	129	Live Oak (Quercus virginiana)	33.6	10	Healthy	
27.45141463	-80.36659425	130	Laurel Oak (Quercus hemisphaerica)	50	10	Healthy	
27.45112295	-80.36636118	131	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45128543	-80.36640939	132	Live Oak (Quercus virginiana)	25.2	10	Healthy	
27.45136547	-80.36641626	133	Laurel Oak (Quercus hemisphaerica)	30.8	10	Healthy	
27.45139451	-80.36635144	134	Laurel Oak (Quercus hemisphaerica)	45	7		Rot
27.45151125	-80.36645915	135	Slash Pine (Pinus elliottii var. densa)	17.8	10	Healthy	
27.45152191	-80.36644939	136	Live Oak (Quercus virginiana)	15.9	10	Healthy	
27.45152633	-80.36647769	137	Live Oak (Quercus virginiana)	12.9	10	Healthy	
27.45154482	-80.36645161	138	Slash Pine (Pinus elliottii var. densa)	16.7	10	Healthy	
27.45156032	-80.36642488	139	Live Oak (Quercus virginiana)	13.6	10	Healthy	
27.45159788	-80.36650161	140	Slash Pine (Pinus elliottii var. densa)	12.6	10	Healthy	
27.45160733	-80.3664688	141	Slash Pine (Pinus elliottii var. densa)	19.7	10	Healthy	
27.45166118	-80.36631424	142	Slash Pine (Pinus elliottii var. densa)	13.3	10	Healthy	
27.45177311	-80.36643774	143	Laurel Oak (Quercus hemisphaerica)	23	10	Healthy	
27.45171622	-80.36630083	144	Laurel Oak (Quercus hemisphaerica)	12.2	10	Healthy	
27.45177701	-80.36644348	145	Laurel Oak (Quercus hemisphaerica)	20.4	10	Healthy	
27.45188343	-80.3663139	146	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45204885	-80.36634207	147	Laurel Oak (Quercus hemisphaerica)	16.7	10	Healthy	
27.45208158	-80.36635716	148	Laurel Oak (Quercus hemisphaerica)	28.8	10	Healthy	
27.45208535	-80.36646615	149	Laurel Oak (Quercus hemisphaerica)	20	10	Healthy	
27.45207414	-80.36659688	151	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45206343	-80.36660291	150	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45209335	-80.36662319	152	Laurel Oak (Quercus hemisphaerica)	17.8	10	Healthy	
27.45201414	-80.36664237	153	Live Oak (Quercus virginiana)	22	10	Healthy	
27.451978	-80.36663693	154	Live Oak (Quercus virginiana)	32.5	10	Healthy	
27.45196955	-80.36667916	155	Live Oak (Quercus virginiana)	14.5	10	Healthy	
27.45197334	-80.36670149	156	Laurel Oak (Quercus hemisphaerica)	25.5	10	Healthy	
27.45201213	-80.36670687	157	Laurel Oak (Quercus hemisphaerica)	12.3	10	Healthy	
27.45200741	-80.36675082	158	Laurel Oak (Quercus hemisphaerica)	24.5	10	Healthy	
27.45203411	-80.36685916	159	Laurel Oak (Quercus hemisphaerica)	16	10	Healthy	
27.45200945	-80.3668459	160	Laurel Oak (Quercus hemisphaerica)	14.2	10	Healthy	
27.45200295	-80.36682478	161	Laurel Oak (Quercus hemisphaerica)	16.7	10	Healthy	
27.45207473	-80.36690097	162	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45210587	-80.3669802	163	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	

27.45208	-80.3669296	164	Laurel Oak (Quercus hemisphaerica)	12.8	10	Healthy	
27.45195874	-80.36700846	165	Laurel Oak (Quercus hemisphaerica)	17.4	10	Healthy	
27.4517958	-80.36670081	166	Live Oak (Quercus virginiana)	34.3	10	Healthy	
27.45176075	-80.36666312	167	Live Oak (Quercus virginiana)	14	10	Healthy	
27.45177348	-80.36666597	168	Live Oak (Quercus virginiana)	12.3	10	Healthy	
27.45163938	-80.36665225	169	Live Oak (Quercus virginiana)	38.6	10	Healthy	
27.45160401	-80.36688423	170	Laurel Oak (Quercus hemisphaerica)	34	10	Healthy	
27.45167355	-80.36689532	171	Laurel Oak (Quercus hemisphaerica)	84	10	Healthy	
27.45172931	-80.36696367	172	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45172842	-80.36699284	173	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45172276	-80.36701664	174	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45172485	-80.36704581	175	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45170134	-80.36709946	176	Laurel Oak (Quercus hemisphaerica)	16.3	10	Healthy	
27.45176442	-80.36718898	177	Laurel Oak (Quercus hemisphaerica)	19.8	10	Healthy	
27.45181139	-80.36723633	178	Laurel Oak (Quercus hemisphaerica)	19.9	10	Healthy	
27.45203402	-80.36704878	179	Laurel Oak (Quercus hemisphaerica)	41.2	10	Healthy	
27.45207456	-80.36707954	180	Laurel Oak (Quercus hemisphaerica)	12.5	10	Healthy	
27.45198974	-80.36715857	181	Live Oak (Quercus virginiana)	14.6	10	Healthy	
27.45208267	-80.36722165	182	Laurel Oak (Quercus hemisphaerica)	13.9	10	Healthy	
27.45203415	-80.36720467	183	Laurel Oak (Quercus hemisphaerica)	21.2	10	Healthy	
27.45195921	-80.36719747	184	Laurel Oak (Quercus hemisphaerica)	21.8	10	Healthy	
27.45195514	-80.36726182	185	Laurel Oak (Quercus hemisphaerica)	13.7	10	Healthy	
27.45199319	-80.367329	186	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45186798	-80.36726186	187	Laurel Oak (Quercus hemisphaerica)	30.5	10	Healthy	
27.45163606	-80.36727823	188	Laurel Oak (Quercus hemisphaerica)	21.7	10	Healthy	
27.45157422	-80.36722014	189	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4515779	-80.36699184	190	Live Oak (Quercus virginiana)	23.7	10	Healthy	
27.45157851	-80.36703326	191	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4512847	-80.36721017	192	Live Oak (Quercus virginiana)	15.6	10	Healthy	
27.45130273	-80.36714004	193	Live Oak (Quercus virginiana)	19.4	10	Healthy	
27.45090008	-80.36788852	194	Laurel Oak (Quercus hemisphaerica)	16.4	10	Healthy	
27.45089885	-80.36785945	195	Laurel Oak (Quercus hemisphaerica)	16	10	Healthy	
27.45089561	-80.36785046	196	Laurel Oak (Quercus hemisphaerica)	33.5	10	Healthy	
27.45090292	-80.3678902	197	Laurel Oak (Quercus hemisphaerica)	48.6	10	Healthy	
27.45049317	-80.36815253	198	Laurel Oak (Quercus hemisphaerica)	38.2	10	Healthy	
27.450481	-80.3682234	199	Laurel Oak (Quercus hemisphaerica)	26.2	10	Healthy	
27.45043476	-80.36811427	200	Laurel Oak (Quercus hemisphaerica)	25.1	10	Healthy	
27.45056559	-80.36838627	201	Live Oak (Quercus virginiana)	20.6	10	Healthy	
27.45059231	-80.36844725	202	Laurel Oak (Quercus hemisphaerica)	19.3	10	Healthy	
27.45055116	-80.36849231	203	Live Oak (Quercus virginiana)	24.4	10	Healthy	
27.45064861	-80.36853041	204	Laurel Oak (Quercus hemisphaerica)	28.8	10	Healthy	
27.45064771	-80.3684548	205	Laurel Oak (Quercus hemisphaerica)	26	10	Healthy	
27.45063866	-80.36844174	206	Laurel Oak (Quercus hemisphaerica)	16.7	10	Healthy	
27.44929418	-80.36714076	207	Laurel Oak (Quercus hemisphaerica)	17.9	10	Healthy	
27.44925954	-80.3671997	208	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.44946357	-80.36717213	209	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.44946043	-80.36723457	210	Live Oak (Quercus virginiana)	20.2	10	Healthy	
27.44948797	-80.36722663	211	Live Oak (Quercus virginiana)	21	10	Healthy	
27.4496157	-80.36728809	212	Laurel Oak (Quercus hemisphaerica)	55.1	10	Healthy	
27.44975477	-80.36724484	213	Live Oak (Quercus virginiana)	21.5	10	Healthy	
27.4498061	-80.36732674	214	Laurel Oak (Quercus hemisphaerica)	22.3	10	Healthy	
27.45000371	-80.36720311	215	Laurel Oak (Quercus hemisphaerica)	14.6	10	Healthy	
27.45071096	-80.36766019	216	Live Oak (Quercus virginiana)	30.5	10	Healthy	
27.45063453	-80.36778813	217	Live Oak (Quercus virginiana)	14.3	10	Healthy	
27.45063709	-80.36781359	218	Live Oak (Quercus virginiana)	23.9	10	Healthy	
27.45069428	-80.36781322	219	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4507346	-80.36781507	220	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45084834	-80.36783572	221	Laurel Oak (Quercus hemisphaerica)	35.2	10	Healthy	
27.45063463	-80.36796831	222	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45065408	-80.36793767	223	Laurel Oak (Quercus hemisphaerica)	49	10	Healthy	
27.45085072	-80.36854818	224	Laurel Oak (Quercus hemisphaerica)	22.2	10	Healthy	
27.4511301	-80.36873326	225	Laurel Oak (Quercus hemisphaerica)	19.9	10	Healthy	
27.45107357	-80.36858439	226	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45105512	-80.3685626	227	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4508769	-80.36873996	228	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45091647	-80.36871515	229	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45083738	-80.36883879	230	Laurel Oak (Quercus hemisphaerica)	17.9	10	Healthy	
27.45085761	-80.36885344	231	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45080912	-80.3689161	232	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45078111	-80.36895482	233	Laurel Oak (Quercus hemisphaerica)	14.8	10	Healthy	
27.45068725	-80.3689992	234	Laurel Oak (Quercus hemisphaerica)	16.5	10	Healthy	
27.45084156	-80.36901253	235	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4508434	-80.36907805	236	Laurel Oak (Quercus hemisphaerica)	33	10	Healthy	
27.45103781	-80.36911336	237	Laurel Oak (Quercus hemisphaerica)	33	10	Healthy	
27.45098852	-80.36915717	238	Live Oak (Quercus virginiana)	17.2	10	Healthy	
27.45099125	-80.36923259	239	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4508081	-80.36933144	240	Laurel Oak (Quercus hemisphaerica)	23.2	10	Healthy	
27.45078847	-80.36934945	241	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45074387	-80.36946459	242	Laurel Oak (Quercus hemisphaerica)	16.5	10	Healthy	
27.45080078	-80.36950088	243	Laurel Oak (Quercus hemisphaerica)	12	10	Healthy	
27.45082896	-80.3695806	244	Laurel Oak (Quercus hemisphaerica)	12.7	10	Healthy	
27.45076682	-80.3698162	245	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	

27.45090365	-80.36996719	246	Laurel Oak (Quercus hemisphaerica)	15.5	10	Healthy	
27.45093799	-80.36994746	247	Laurel Oak (Quercus hemisphaerica)	13.4	10	Healthy	
27.45095634	-80.36998283	248	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45101349	-80.36981672	249	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45102655	-80.36963736	250	Laurel Oak (Quercus hemisphaerica)	12.4	10	Healthy	
27.45107976	-80.36963873	251	Slash Pine (Pinus elliottii var. densa)	21.8	10	Healthy	
27.45111205	-80.36980678	252	Laurel Oak (Quercus hemisphaerica)	15.9	10	Healthy	
27.45006311	-80.36988305	253	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45117492	-80.367478	254	Laurel Oak (Quercus hemisphaerica)	31	10	Healthy	
27.45139979	-80.36743725	255	Laurel Oak (Quercus hemisphaerica)	33.5	10	Healthy	
27.4514243	-80.36725034	256	Live Oak (Quercus virginiana)	45	10	Healthy	
27.45150161	-80.36731968	257	Live Oak (Quercus virginiana)	15	10	Healthy	
27.45152387	-80.36732866	258	Live Oak (Quercus virginiana)	14.4	10	Healthy	
27.45160235	-80.36729336	259	Laurel Oak (Quercus hemisphaerica)	47.6	10	Healthy	
27.45175853	-80.36732858	260	Live Oak (Quercus virginiana)	43.9	10	Healthy	
27.4518085	-80.36734773	261	Laurel Oak (Quercus hemisphaerica)	26	10	Healthy	
27.45179856	-80.36731372	262	Slash Pine (Pinus elliottii var. densa)	12	10	Healthy	
27.45185423	-80.3673905	263	Laurel Oak (Quercus hemisphaerica)	18.9	10	Healthy	
27.45186031	-80.36743852	264	Laurel Oak (Quercus hemisphaerica)	14.3	10	Healthy	
27.45186944	-80.36749776	265	Laurel Oak (Quercus hemisphaerica)	58	10	Healthy	
27.45166354	-80.3674246	266	Live Oak (Quercus virginiana)	19.8	10	Healthy	
27.45155803	-80.3675877	267	Live Oak (Quercus virginiana)	47.3	10	Healthy	
27.45165166	-80.36758728	268	Laurel Oak (Quercus hemisphaerica)	32.8	10	Healthy	
27.45160683	-80.3676535	269	Live Oak (Quercus virginiana)	22.4	10	Healthy	
27.45154038	-80.36765903	270	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45143961	-80.36778774	271	Laurel Oak (Quercus hemisphaerica)	20.3	10	Healthy	
27.45130046	-80.36757064	272	Laurel Oak (Quercus hemisphaerica)	27.8	10	Healthy	
27.45123475	-80.3676303	273	Laurel Oak (Quercus hemisphaerica)	55	10	Healthy	
27.45124814	-80.36778649	274	Laurel Oak (Quercus hemisphaerica)	43.6	10	Healthy	
27.45119973	-80.36781313	275	Laurel Oak (Quercus hemisphaerica)	30	10	Healthy	
27.45118304	-80.36786427	276	Laurel Oak (Quercus hemisphaerica)	24.3	10	Healthy	
27.45124745	-80.36792207	277	Live Oak (Quercus virginiana)	45.5	10	Healthy	
27.45137347	-80.36795642	278	Slash Pine (Pinus elliottii var. densa)	14.6	10	Healthy	
27.4513849	-80.36789193	279	Laurel Oak (Quercus hemisphaerica)	61.1	10	Healthy	
27.45153252	-80.36780194	280	Slash Pine (Pinus elliottii var. densa)	12.8	10	Healthy	
27.45154043	-80.36787801	281	Slash Pine (Pinus elliottii var. densa)	16.2	10	Healthy	
27.45174041	-80.36775451	282	Laurel Oak (Quercus hemisphaerica)	28	10	Healthy	
27.45180937	-80.36762832	283	Laurel Oak (Quercus hemisphaerica)	26.9	10	Healthy	
27.4518408	-80.36764425	284	Laurel Oak (Quercus hemisphaerica)	15.8	10	Healthy	
27.45189775	-80.36769057	285	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45184427	-80.36767194	286	Laurel Oak (Quercus hemisphaerica)	12.2	10	Healthy	
27.45183497	-80.3677446	287	Laurel Oak (Quercus hemisphaerica)	38.7	10	Healthy	
27.45189934	-80.36775935	288	Laurel Oak (Quercus hemisphaerica)	13.6	10	Healthy	
27.4519458	-80.36770941	289	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45200273	-80.36769154	290	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45201575	-80.36767777	291	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45207057	-80.36757253	292	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45203546	-80.36759768	293	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45200987	-80.36757119	294	Slash Pine (Pinus elliottii var. densa)	13.4	10	Healthy	
27.45207515	-80.36769012	295	Laurel Oak (Quercus hemisphaerica)	42.8	10	Healthy	
27.45207806	-80.36772661	296	Laurel Oak (Quercus hemisphaerica)	24.8	10	Healthy	
27.4521009	-80.36768502	297	Laurel Oak (Quercus hemisphaerica)	23.2	10	Healthy	
27.45207349	-80.3677256	298	Laurel Oak (Quercus hemisphaerica)	13.9	10	Healthy	
27.45209113	-80.36777764	299	Live Oak (Quercus virginiana)	18.8	10	Healthy	
27.45203695	-80.36777638	300	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45201166	-80.36775459	301	Laurel Oak (Quercus hemisphaerica)	12.8	10	Healthy	
27.45200987	-80.36778711	302	Laurel Oak (Quercus hemisphaerica)	12.1	10	Healthy	
27.45198935	-80.36779515	303	Laurel Oak (Quercus hemisphaerica)	15.2	10	Healthy	
27.45198259	-80.36778295	304	Laurel Oak (Quercus hemisphaerica)	13.8	10	Healthy	
27.45192419	-80.36783417	305	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45192082	-80.36783679	306	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45192322	-80.36784338	307	Slash Pine (Pinus elliottii var. densa)	13	10	Healthy	
27.45197835	-80.36794072	308	Slash Pine (Pinus elliottii var. densa)	15	10	Healthy	
27.45196673	-80.36798995	309	Laurel Oak (Quercus hemisphaerica)	33.4	10	Healthy	
27.45196017	-80.36794905	310	Slash Pine (Pinus elliottii var. densa)	12.4	10	Healthy	
27.45186338	-80.36796034	311	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45177543	-80.36796112	312	Laurel Oak (Quercus hemisphaerica)	14.9	10	Healthy	
27.45156487	-80.36796187	313	Laurel Oak (Quercus hemisphaerica)	18.4	10	Healthy	
27.45111264	-80.36832015	314	Live Oak (Quercus virginiana)	28.5	10	Healthy	
27.45113477	-80.36839013	315	Laurel Oak (Quercus hemisphaerica)	19.4	10	Healthy	
27.45116342	-80.36820889	316	Live Oak (Quercus virginiana)	24.9	10	Healthy	
27.45123416	-80.36822199	317	Laurel Oak (Quercus hemisphaerica)	15	10	Healthy	
27.45129909	-80.36813043	318	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45132612	-80.36831378	319	Live Oak (Quercus virginiana)	52.7	10	Healthy	
27.45137188	-80.36829708	320	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45150555	-80.36806143	321	Live Oak (Quercus virginiana)	15.7	10	Healthy	
27.45151149	-80.3681868	322	Slash Pine (Pinus elliottii var. densa)	19.4	10	Healthy	
27.45160524	-80.36819483	323	Slash Pine (Pinus elliottii var. densa)	13.6	10	Healthy	
27.45157222	-80.36815524	324	Laurel Oak (Quercus hemisphaerica)	19.6	10	Healthy	
27.45165433	-80.36798257	325	Slash Pine (Pinus elliottii var. densa)	18	10	Healthy	
27.45168954	-80.36801486	326	Slash Pine (Pinus elliottii var. densa)	14.5	10	Healthy	
27.45171615	-80.36800456	327	Slash Pine (Pinus elliottii var. densa)	14.3	10	Healthy	

27.45173248	-80.36812338	328	Slash Pine (Pinus elliottii var. densa)	16.4	10	Healthy	
27.45181464	-80.36821778	329	Slash Pine (Pinus elliottii var. densa)	15.4	10	Healthy	
27.45186967	-80.36822971	330	Slash Pine (Pinus elliottii var. densa)	17.5	10	Healthy	
27.45193569	-80.36815676	331	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45191968	-80.36821144	332	Laurel Oak (Quercus hemisphaerica)	18.2	10	Healthy	
27.45197774	-80.36823906	333	Laurel Oak (Quercus hemisphaerica)	13.8	10	Healthy	
27.45199541	-80.36818956	334	Laurel Oak (Quercus hemisphaerica)	16.1	10	Healthy	
27.45201476	-80.36818381	335	Laurel Oak (Quercus hemisphaerica)	12.7	10	Healthy	
27.4520642	-80.36816047	336	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45206462	-80.36822364	337	Laurel Oak (Quercus hemisphaerica)	39.5	10	Healthy	
27.45210186	-80.36821402	338	Laurel Oak (Quercus hemisphaerica)	12.7	10	Healthy	
27.45196636	-80.36830249	339	Slash Pine (Pinus elliottii var. densa)	18.8	10	Healthy	
27.45200438	-80.36839971	340	Laurel Oak (Quercus hemisphaerica)	12.5	10	Healthy	
27.45196862	-80.36842208	341	Slash Pine (Pinus elliottii var. densa)	13	10	Healthy	
27.45184011	-80.36838221	342	Slash Pine (Pinus elliottii var. densa)	19.7	10	Healthy	
27.45180412	-80.36835993	343	Slash Pine (Pinus elliottii var. densa)	15.5	10	Healthy	
27.45180491	-80.3683603	344	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45180259	-80.36842267	345	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4518263	-80.3684305	346	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45182362	-80.36841441	347	Slash Pine (Pinus elliottii var. densa)	13.3	10	Healthy	
27.45187063	-80.36839463	348	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45189563	-80.36837619	349	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45187406	-80.36850977	350	Slash Pine (Pinus elliottii var. densa)	17.2	10	Healthy	
27.45194803	-80.36853609	351	Slash Pine (Pinus elliottii var. densa)	19.5	10	Healthy	
27.45196287	-80.36853578	352	Slash Pine (Pinus elliottii var. densa)	15.7	10	Healthy	
27.45205815	-80.36861275	353	Slash Pine (Pinus elliottii var. densa)	19.2	10	Healthy	
27.4520319	-80.36848816	354	Slash Pine (Pinus elliottii var. densa)	14.3	10	Healthy	
27.45206275	-80.36851783	355	Slash Pine (Pinus elliottii var. densa)	14.1	10	Healthy	
27.45211802	-80.36858471	356	Slash Pine (Pinus elliottii var. densa)	14.8	10	Healthy	
27.45210785	-80.36851579	357	Laurel Oak (Quercus hemisphaerica)	18.6	10	Healthy	
27.45212031	-80.36847777	358	Slash Pine (Pinus elliottii var. densa)	15.4	10	Healthy	
27.45222968	-80.36852221	359	Live Oak (Quercus virginiana)	15.4	10	Healthy	
27.45221609	-80.36846813	360	Live Oak (Quercus virginiana)	22.8	10	Healthy	
27.45227824	-80.3684999	361	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45229252	-80.36854483	362	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45231547	-80.3686141	363	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45233936	-80.36859494	364	Slash Pine (Pinus elliottii var. densa)	14.8	10	Healthy	
27.45233209	-80.36855657	365	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45231229	-80.36860081	366	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45228094	-80.36862694	367	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45222647	-80.36859848	368	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45217554	-80.36850511	369	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45215801	-80.36855347	370	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45149267	-80.3684088	371	Slash Pine (Pinus elliottii var. densa)	18.5	10	Healthy	
27.45151837	-80.36838978	372	Slash Pine (Pinus elliottii var. densa)	14.4	10	Healthy	
27.45153776	-80.36840887	373	Slash Pine (Pinus elliottii var. densa)	19.2	10	Healthy	
27.45164989	-80.36836983	374	Laurel Oak (Quercus hemisphaerica)	20.2	10	Healthy	
27.45168944	-80.36845174	375	Slash Pine (Pinus elliottii var. densa)	19.5	10	Healthy	
27.45168175	-80.36834439	376	Slash Pine (Pinus elliottii var. densa)	16.4	10	Healthy	
27.45163559	-80.36826602	377	Slash Pine (Pinus elliottii var. densa)	14.6	10	Healthy	
27.45171366	-80.36848396	378	Laurel Oak (Quercus hemisphaerica)	20.1	10	Healthy	
27.4516969	-80.36847097	379	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45171822	-80.36851054	380	Slash Pine (Pinus elliottii var. densa)	17.4	10	Healthy	
27.45166106	-80.36851949	381	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45162454	-80.36851414	382	Slash Pine (Pinus elliottii var. densa)	18	10	Healthy	
27.4515017	-80.36848146	383	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45141954	-80.36845917	384	Laurel Oak (Quercus hemisphaerica)	57.1	10	Healthy	
27.45141683	-80.36848436	385	Laurel Oak (Quercus hemisphaerica)	16.7	10	Healthy	
27.45137383	-80.36852228	386	Live Oak (Quercus virginiana)	19.8	10	Healthy	
27.45139634	-80.3684627	387	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	Heavy lean
27.45134528	-80.36841521	388	Laurel Oak (Quercus hemisphaerica)	41.1	10	Healthy	
27.45131159	-80.3685331	390	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45131962	-80.36854282	389	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45128939	-80.36859941	391	Live Oak (Quercus virginiana)	23.9	4		Cat face
27.45142653	-80.36861715	392	Slash Pine (Pinus elliottii var. densa)	18.4	10	Healthy	
27.45156526	-80.36854033	393	Slash Pine (Pinus elliottii var. densa)	20.4	10	Healthy	
27.45162327	-80.36853965	394	Laurel Oak (Quercus hemisphaerica)	30.4	10	Healthy	
27.45166499	-80.36857044	395	Laurel Oak (Quercus hemisphaerica)	24.1	10	Healthy	
27.45154362	-80.36865924	396	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45153389	-80.36868988	397	Live Oak (Quercus virginiana)	25.8	10	Healthy	
27.45157308	-80.36870848	398	Live Oak (Quercus virginiana)	47.2	10	Healthy	
27.45165991	-80.36873687	399	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45166076	-80.36872292	400	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45169585	-80.36877035	401	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45169628	-80.36876611	402	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45171944	-80.36879071	403	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45176472	-80.36866318	404	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45180924	-80.36863813	405	Slash Pine (Pinus elliottii var. densa)	20.2	10	Healthy	
27.45182359	-80.36865643	406	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45185551	-80.36856677	407	Live Oak (Quercus virginiana)	18.2	10	Healthy	
27.45194727	-80.36872956	408	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45192784	-80.36874792	409	Laurel Oak (Quercus hemisphaerica)	13.7	10	Healthy	

27.45204655	-80.36869371	410	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45197123	-80.36867744	411	Slash Pine (Pinus elliottii var. densa)	19.5	10	Healthy	
27.45202423	-80.36875481	412	Slash Pine (Pinus elliottii var. densa)	22.3	10	Healthy	
27.45196382	-80.3687471	413	Laurel Oak (Quercus hemisphaerica)	18.7	10	Healthy	
27.45187654	-80.36866045	414	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45187831	-80.36867484	415	Laurel Oak (Quercus hemisphaerica)	37.4	10	Healthy	
27.45192037	-80.36881827	416	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45183101	-80.36887858	417	Slash Pine (Pinus elliottii var. densa)	14.3	10	Healthy	
27.45180298	-80.3689184	418	Laurel Oak (Quercus hemisphaerica)	52	10	Healthy	
27.45171977	-80.36886608	419	Live Oak (Quercus virginiana)	18.6	10	Healthy	
27.45172021	-80.36891329	420	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45167877	-80.36891866	421	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45166092	-80.36888531	422	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4516424	-80.36886524	423	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45163291	-80.36887944	424	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45157308	-80.36889413	425	Laurel Oak (Quercus hemisphaerica)	28.2	10	Healthy	
27.45158534	-80.36882405	426	Live Oak (Quercus virginiana)	13.3	10	Healthy	
27.4515609	-80.36891273	427	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45153681	-80.36890425	428	Live Oak (Quercus virginiana)	18.2	10	Healthy	
27.45154024	-80.36893556	429	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45153885	-80.36899188	430	Slash Pine (Pinus elliottii var. densa)	23.7	10	Healthy	
27.45148885	-80.368903	431	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45142538	-80.36896306	432	Laurel Oak (Quercus hemisphaerica)	27.4	10	Healthy	
27.45138269	-80.36894985	433	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4512934	-80.36893683	434	Laurel Oak (Quercus hemisphaerica)	29.4	10	Healthy	
27.45124029	-80.36905678	435	Laurel Oak (Quercus hemisphaerica)	31.4	10	Healthy	
27.45126971	-80.36907628	436	Slash Pine (Pinus elliottii var. densa)	18.8	10	Healthy	
27.4513494	-80.3690457	437	Laurel Oak (Quercus hemisphaerica)	25.6	10	Healthy	
27.45138082	-80.36911585	438	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45137853	-80.36910139	439	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45135956	-80.36914583	440	Slash Pine (Pinus elliottii var. densa)	21.5	10	Healthy	
27.45152561	-80.36899232	441	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45153407	-80.36898191	442	Slash Pine (Pinus elliottii var. densa)	28.9	10	Healthy	
27.45141878	-80.36910596	443	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45128083	-80.36924841	444	Laurel Oak (Quercus hemisphaerica)	49	10	Healthy	
27.45141156	-80.3692793	445	Live Oak (Quercus virginiana)	27.4	10	Healthy	
27.45149784	-80.36943954	446	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45146067	-80.36917018	447	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45146385	-80.36918786	448	Slash Pine (Pinus elliottii var. densa)	19.5	10	Healthy	
27.45150631	-80.36912487	449	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45158725	-80.36922873	450	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45159755	-80.36917695	451	Laurel Oak (Quercus hemisphaerica)	16.5	10	Healthy	
27.45162966	-80.36919599	452	Live Oak (Quercus virginiana)	13.5	10	Healthy	
27.45165527	-80.36910003	453	Laurel Oak (Quercus hemisphaerica)	56.3	10	Healthy	
27.45174293	-80.36912566	454	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45177087	-80.36911242	455	Slash Pine (Pinus elliottii var. densa)	22.2	10	Healthy	
27.45179782	-80.36915329	456	Laurel Oak (Quercus hemisphaerica)	49.1	10	Healthy	
27.45184813	-80.36895391	457	Slash Pine (Pinus elliottii var. densa)	15.4	10	Healthy	
27.45194677	-80.36893749	458	Laurel Oak (Quercus hemisphaerica)	13.1	10	Healthy	
27.45194439	-80.36887474	459	Live Oak (Quercus virginiana)	25.9	10	Healthy	
27.45200807	-80.36893723	460	Laurel Oak (Quercus hemisphaerica)	28	7		Cat face
27.45201964	-80.36896618	461	Laurel Oak (Quercus hemisphaerica)	39.8	10	Healthy	
27.45199344	-80.36879151	462	Laurel Oak (Quercus hemisphaerica)	15.7	10	Healthy	
27.45207109	-80.36883906	463	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45210657	-80.36888779	464	Laurel Oak (Quercus hemisphaerica)	23.5	10	Healthy	
27.45215824	-80.36897466	465	Laurel Oak (Quercus hemisphaerica)	29.2	10	Healthy	
27.45215727	-80.36899137	466	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45221995	-80.36901507	467	Laurel Oak (Quercus hemisphaerica)	16.1	10	Healthy	
27.45214677	-80.36902655	468	Laurel Oak (Quercus hemisphaerica)	27.8	10	Healthy	
27.45214856	-80.36910743	469	Laurel Oak (Quercus hemisphaerica)	28.5	10	Healthy	
27.45218721	-80.36910969	470	Laurel Oak (Quercus hemisphaerica)	24.1	7	Healthy	Hollow area
27.45221042	-80.369305	471	Laurel Oak (Quercus hemisphaerica)	33.5	10	Healthy	
27.45228491	-80.36890214	472	Slash Pine (Pinus elliottii var. densa)	18.7	10	Healthy	
27.45217126	-80.36874522	473	Slash Pine (Pinus elliottii var. densa)	19.6	10	Healthy	
27.45210801	-80.36872882	474	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45208358	-80.36870506	475	Slash Pine (Pinus elliottii var. densa)	16.5	10	Healthy	
27.45210607	-80.36858747	476	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45210414	-80.3686263	477	Slash Pine (Pinus elliottii var. densa)	22	10	Healthy	
27.45220668	-80.36863292	478	Slash Pine (Pinus elliottii var. densa)	14	10	Healthy	
27.4522141	-80.3685771	479	Laurel Oak (Quercus hemisphaerica)	16	10	Healthy	
27.45222092	-80.36860496	480	Slash Pine (Pinus elliottii var. densa)	18.7	10	Healthy	
27.45220177	-80.36864163	481	Laurel Oak (Quercus hemisphaerica)	30.2	10	Healthy	
27.45223429	-80.36861199	482	Slash Pine (Pinus elliottii var. densa)	14.3	10	Healthy	
27.4522536	-80.36865515	483	Slash Pine (Pinus elliottii var. densa)	14.2	10	Healthy	
27.45224087	-80.36871738	484	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45224203	-80.36872794	485	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4522356	-80.3687387	486	Live Oak (Quercus virginiana)	17.3	10	Healthy	
27.45230264	-80.36879528	487	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45231829	-80.36891488	488	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45240327	-80.36883876	489	Slash Pine (Pinus elliottii var. densa)	15.9	10	Healthy	
27.4523759	-80.36885452	490	Laurel Oak (Quercus hemisphaerica)	23.6	10	Healthy	
27.45236594	-80.36884798	491	Slash Pine (Pinus elliottii var. densa)	14.8	10	Healthy	

27.45238066	-80.36882405	492	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45236526	-80.36872155	493	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45234866	-80.36868908	494	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45237937	-80.36870619	495	Slash Pine (Pinus elliottii var. densa)	16.9	10	Healthy	
27.45242496	-80.36835187	496	Slash Pine (Pinus elliottii var. densa)	12.7	10	Healthy	
27.45242624	-80.36839366	497	Laurel Oak (Quercus hemisphaerica)	14.8	10	Healthy	
27.45234441	-80.36830318	498	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45233783	-80.36826129	499	Laurel Oak (Quercus hemisphaerica)	19.5	10	Healthy	
27.45230301	-80.36829188	500	Slash Pine (Pinus elliottii var. densa)	15.9	10	Healthy	
27.4521977	-80.36835811	501	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45222917	-80.36833647	502	Slash Pine (Pinus elliottii var. densa)	15.4	10	Healthy	
27.45242517	-80.36840931	503	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45241879	-80.36842144	504	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45241373	-80.36849695	505	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45239702	-80.36854509	506	Laurel Oak (Quercus hemisphaerica)	26	10	Healthy	
27.45249869	-80.36851964	507	Laurel Oak (Quercus hemisphaerica)	18.3	10	Healthy	
27.45260455	-80.36833677	508	Laurel Oak (Quercus hemisphaerica)	19.6	10	Healthy	
27.45259928	-80.36832316	509	Slash Pine (Pinus elliottii var. densa)	16.1	10	Healthy	
27.45256825	-80.3684273	510	Slash Pine (Pinus elliottii var. densa)	12.4	10	Healthy	
27.4526039	-80.36844847	511	Laurel Oak (Quercus hemisphaerica)	12.7	10	Healthy	
27.45268819	-80.3684201	512	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4527216	-80.36843988	513	Slash Pine (Pinus elliottii var. densa)	14.4	10	Healthy	
27.4527263	-80.36837374	514	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45276501	-80.3684133	515	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45276952	-80.36839347	516	Slash Pine (Pinus elliottii var. densa)	14.6	10	Healthy	
27.45280411	-80.36830733	517	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45281412	-80.36838329	518	Slash Pine (Pinus elliottii var. densa)	14.5	10	Healthy	
27.45277382	-80.36861413	519	Slash Pine (Pinus elliottii var. densa)	12.2	10	Healthy	
27.45257309	-80.36849735	520	Laurel Oak (Quercus hemisphaerica)	13.4	10	Healthy	
27.45256407	-80.36853576	521	Slash Pine (Pinus elliottii var. densa)	14.3	10	Healthy	
27.45258935	-80.36857902	522	Slash Pine (Pinus elliottii var. densa)	14	10	Healthy	
27.45257236	-80.36857515	523	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45255439	-80.36861082	524	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45259183	-80.36864977	525	Slash Pine (Pinus elliottii var. densa)	12.2	10	Healthy	
27.45246019	-80.36869292	526	Laurel Oak (Quercus hemisphaerica)	31.2	10	Healthy	
27.45246666	-80.3686691	527	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45246497	-80.36866306	528	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45244893	-80.36868686	529	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45242131	-80.36870467	530	Slash Pine (Pinus elliottii var. densa)	12.9	10	Healthy	
27.45249059	-80.36873209	531	Slash Pine (Pinus elliottii var. densa)	16.3	10	Healthy	
27.45256967	-80.36881931	532	Slash Pine (Pinus elliottii var. densa)	13.7	10	Healthy	
27.45257812	-80.36876011	533	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45257584	-80.36874592	534	Slash Pine (Pinus elliottii var. densa)	13	10	Healthy	
27.45258203	-80.36871847	535	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45260912	-80.36874944	536	Slash Pine (Pinus elliottii var. densa)	12.8	10	Healthy	
27.45269575	-80.36870685	537	Slash Pine (Pinus elliottii var. densa)	13.9	10	Healthy	
27.45280637	-80.36882929	538	Slash Pine (Pinus elliottii var. densa)	15.4	10	Healthy	
27.45270953	-80.36882962	539	Slash Pine (Pinus elliottii var. densa)	17.2	10	Healthy	
27.45259923	-80.36885085	540	Slash Pine (Pinus elliottii var. densa)	12.8	10	Healthy	
27.4525502	-80.36890145	541	Laurel Oak (Quercus hemisphaerica)	32.8	10	Healthy	
27.4525633	-80.36889801	542	Laurel Oak (Quercus hemisphaerica)	27.5	10	Healthy	
27.45258356	-80.36895859	543	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4525357	-80.36891541	544	Laurel Oak (Quercus hemisphaerica)	14.1	10	Healthy	
27.45243461	-80.36888778	545	Slash Pine (Pinus elliottii var. densa)	13.3	10	Healthy	
27.45243882	-80.36891492	546	Slash Pine (Pinus elliottii var. densa)	12.5	10	Healthy	
27.45232581	-80.36893651	547	Slash Pine (Pinus elliottii var. densa)	16.8	10	Healthy	
27.45237035	-80.36901716	548	Slash Pine (Pinus elliottii var. densa)	15.1	10	Healthy	
27.45238629	-80.36903062	549	Slash Pine (Pinus elliottii var. densa)	18.2	10	Healthy	
27.45242251	-80.36897093	550	Laurel Oak (Quercus hemisphaerica)	15.3	10	Healthy	
27.45244685	-80.36908663	551	Slash Pine (Pinus elliottii var. densa)	22	10	Healthy	
27.45255089	-80.36909298	552	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45257074	-80.36906399	553	Slash Pine (Pinus elliottii var. densa)	14.3	10	Healthy	
27.4525971	-80.36899071	554	Slash Pine (Pinus elliottii var. densa)	13.3	10	Healthy	
27.4525521	-80.36899167	555	Slash Pine (Pinus elliottii var. densa)	14.7	10	Healthy	
27.45255585	-80.36901437	556	Laurel Oak (Quercus hemisphaerica)	20.3	10	Healthy	
27.45266007	-80.36904024	557	Slash Pine (Pinus elliottii var. densa)	16.8	10	Healthy	
27.45267353	-80.36897015	558	Laurel Oak (Quercus hemisphaerica)	33.9	10	Healthy	
27.45267669	-80.36893763	559	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4527921	-80.36896919	560	Laurel Oak (Quercus hemisphaerica)	14.6	10	Healthy	
27.45276149	-80.36903992	561	Slash Pine (Pinus elliottii var. densa)	18.5	10	Healthy	
27.45264221	-80.36911359	562	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45263641	-80.36919883	563	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45272312	-80.36927325	564	Slash Pine (Pinus elliottii var. densa)	17	10	Healthy	
27.4527056	-80.36924291	565	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45265101	-80.36927028	566	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45257834	-80.3692908	567	Slash Pine (Pinus elliottii var. densa)	16.5	10	Healthy	
27.4525821	-80.36929925	568	Slash Pine (Pinus elliottii var. densa)	14.1	10	Healthy	
27.45255583	-80.36923871	569	Slash Pine (Pinus elliottii var. densa)	12.3	10	Healthy	
27.452567	-80.36921999	570	Slash Pine (Pinus elliottii var. densa)	14.7	10	Healthy	
27.45253417	-80.36922792	571	Slash Pine (Pinus elliottii var. densa)	14.1	10	Healthy	
27.45246778	-80.36925374	572	Laurel Oak (Quercus hemisphaerica)	16.5	10	Healthy	
27.45248504	-80.36920941	573	Slash Pine (Pinus elliottii var. densa)	16.9	10	Healthy	

27.45231358	-80.36936373	574	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45229407	-80.3693491	575	Laurel Oak (Quercus hemisphaerica)	13	10	Healthy	
27.45249419	-80.3694093	576	Laurel Oak (Quercus hemisphaerica)	18.7	10	Healthy	
27.45264653	-80.36947601	577	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45262484	-80.36949254	578	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45262893	-80.36948971	579	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45255913	-80.3695368	580	Laurel Oak (Quercus hemisphaerica)	24.7	10	Healthy	
27.4525525	-80.36950295	581	Slash Pine (Pinus elliottii var. densa)	14.8	10	Healthy	
27.45258573	-80.36955119	582	Laurel Oak (Quercus hemisphaerica)	24.9	10	Healthy	
27.45266083	-80.36964222	583	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45278016	-80.36961503	584	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45202077	-80.36925338	585	Laurel Oak (Quercus hemisphaerica)	13.1	10	Healthy	
27.4517738	-80.36942038	586	Laurel Oak (Quercus hemisphaerica)	46.5	10	Healthy	
27.45172807	-80.36949678	587	Laurel Oak (Quercus hemisphaerica)	23.7	10	Healthy	
27.45179284	-80.3695352	588	Laurel Oak (Quercus hemisphaerica)	32.2	10	Healthy	
27.45176186	-80.36953559	589	Laurel Oak (Quercus hemisphaerica)	43.3	10	Healthy	
27.4517536	-80.36963459	590	Live Oak (Quercus virginiana)	36.1	10	Healthy	
27.451764	-80.36968469	591	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45176989	-80.36971296	592	Live Oak (Quercus virginiana)	35.1	10	Healthy	
27.45171573	-80.36965788	593	Laurel Oak (Quercus hemisphaerica)	13.3	10	Healthy	
27.45169955	-80.36965703	594	Laurel Oak (Quercus hemisphaerica)	19.8	10	Healthy	
27.45160511	-80.3697057	595	Laurel Oak (Quercus hemisphaerica)	15	10	Healthy	
27.45159853	-80.36968641	596	Laurel Oak (Quercus hemisphaerica)	25.8	10	Healthy	
27.45157235	-80.36969968	597	Laurel Oak (Quercus hemisphaerica)	13.5	10	Healthy	
27.45146205	-80.3695931	598	Laurel Oak (Quercus hemisphaerica)	94.2	10	Healthy	
27.4513745	-80.36981917	599	Live Oak (Quercus virginiana)	30.9	10	Healthy	
27.45135132	-80.36986631	600	Live Oak (Quercus virginiana)	21.1	10	Healthy	
27.45128596	-80.36992563	601	Laurel Oak (Quercus hemisphaerica)	18.8	10	Healthy	
27.45130525	-80.3700978	602	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45132662	-80.37009108	603	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45144726	-80.37007671	604	Laurel Oak (Quercus hemisphaerica)	45.2	10	Healthy	
27.45121584	-80.36864784	605	Laurel Oak (Quercus hemisphaerica)	12.6	10	Healthy	
27.45122887	-80.36857869	606	Laurel Oak (Quercus hemisphaerica)	13.9	10	Healthy	
27.45121646	-80.36940254	607	Laurel Oak (Quercus hemisphaerica)	20.9	10	Healthy	
27.4511894	-80.36982024	608	Laurel Oak (Quercus hemisphaerica)	25.7	10	Healthy	
27.45177643	-80.37027117	609	Laurel Oak (Quercus hemisphaerica)	19.3	10	Healthy	
27.45179175	-80.37036407	610	Laurel Oak (Quercus hemisphaerica)	14.4	10	Healthy	
27.45182165	-80.37047654	611	Laurel Oak (Quercus hemisphaerica)	24.1	10	Healthy	
27.45191874	-80.37037788	612	Laurel Oak (Quercus hemisphaerica)	12.2	10	Healthy	
27.45194519	-80.3704991	613	Laurel Oak (Quercus hemisphaerica)	20.8	10	Healthy	
27.4519313	-80.3706102	614	Laurel Oak (Quercus hemisphaerica)	12.9	10	Healthy	
27.45182805	-80.37091963	615	Laurel Oak (Quercus hemisphaerica)	12.3	10	Healthy	
27.45196478	-80.37098646	616	Laurel Oak (Quercus hemisphaerica)	21.8	10	Healthy	
27.45200854	-80.37105131	617	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45205894	-80.37098867	618	Laurel Oak (Quercus hemisphaerica)	13.8	10	Healthy	
27.4519669	-80.37121384	619	Laurel Oak (Quercus hemisphaerica)	13	10	Healthy	
27.45206115	-80.37128963	620	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45219117	-80.37122101	621	Laurel Oak (Quercus hemisphaerica)	14.8	10	Healthy	
27.45219349	-80.37131155	623	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45219196	-80.37128773	622	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45220297	-80.37112671	624	Laurel Oak (Quercus hemisphaerica)	13.3	10	Healthy	
27.45227375	-80.37108897	625	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45232329	-80.3710935	626	Laurel Oak (Quercus hemisphaerica)	15.7	10	Healthy	
27.45219254	-80.37095925	627	Live Oak (Quercus virginiana)	25.3	10	Healthy	
27.45223211	-80.37088513	628	Laurel Oak (Quercus hemisphaerica)	17.9	10	Healthy	
27.45225719	-80.37070262	629	Laurel Oak (Quercus hemisphaerica)	27	10	Healthy	
27.45231987	-80.37063783	630	Laurel Oak (Quercus hemisphaerica)	13.8	10	Healthy	
27.45244803	-80.37071608	631	Laurel Oak (Quercus hemisphaerica)	12.3	10	Healthy	
27.45253098	-80.37072317	632	Laurel Oak (Quercus hemisphaerica)	24.6	10	Healthy	
27.45254749	-80.37068073	633	Laurel Oak (Quercus hemisphaerica)	14.2	10	Healthy	
27.45254552	-80.37063624	634	Laurel Oak (Quercus hemisphaerica)	15.3	10	Healthy	
27.45260904	-80.37065546	635	Laurel Oak (Quercus hemisphaerica)	14	10	Healthy	
27.45266433	-80.37068714	636	Laurel Oak (Quercus hemisphaerica)	14.6	10	Healthy	
27.45278327	-80.37087486	637	Laurel Oak (Quercus hemisphaerica)	13	10	Healthy	
27.45275315	-80.37033954	638	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45276261	-80.370279	639	Slash Pine (Pinus elliottii var. densa)	16	10	Healthy	
27.45271868	-80.37035933	640	Slash Pine (Pinus elliottii var. densa)	14.5	10	Healthy	
27.45273411	-80.37033226	641	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45270816	-80.37032548	642	Slash Pine (Pinus elliottii var. densa)	19.2	10	Healthy	
27.45269477	-80.37031274	643	Slash Pine (Pinus elliottii var. densa)	16.5	10	Healthy	
27.45260373	-80.37044752	644	Slash Pine (Pinus elliottii var. densa)	24.7	10	Healthy	
27.45255087	-80.37032139	645	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45270846	-80.37020914	646	Laurel Oak (Quercus hemisphaerica)	20.6	10	Healthy	
27.45267811	-80.37015852	647	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4526865	-80.37020411	648	Laurel Oak (Quercus hemisphaerica)	13.6	10	Healthy	
27.45265146	-80.37021559	649	Laurel Oak (Quercus hemisphaerica)	13.1	10	Healthy	
27.45255258	-80.37023133	650	Laurel Oak (Quercus hemisphaerica)	14.2	10	Healthy	
27.45245654	-80.37024208	651	Laurel Oak (Quercus hemisphaerica)	17.2	10	Healthy	
27.45227604	-80.37018677	652	Laurel Oak (Quercus hemisphaerica)	22.8	10	Healthy	
27.45232918	-80.37019041	653	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4525462	-80.37006632	654	Laurel Oak (Quercus hemisphaerica)	25.2	10	Healthy	
27.45262295	-80.36986285	655	Laurel Oak (Quercus hemisphaerica)	33.6	10	Healthy	

27.45259835	-80.36979937	656	Laurel Oak (Quercus hemisphaerica)	15.2	10	Healthy	
27.45259705	-80.36983013	657	Laurel Oak (Quercus hemisphaerica)	12.5	10	Healthy	
27.45255111	-80.36974495	658	Live Oak (Quercus virginiana)	39.3	10	Healthy	
27.45221612	-80.36980182	659	Laurel Oak (Quercus hemisphaerica)	17.7	10	Healthy	
27.4521536	-80.36995424	660	Laurel Oak (Quercus hemisphaerica)	20.9	10	Healthy	
27.4522721	-80.37002946	661	Laurel Oak (Quercus hemisphaerica)	27.5	10	Healthy	
27.4524072	-80.37006706	662	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45238404	-80.36991592	663	Laurel Oak (Quercus hemisphaerica)	14	10	Healthy	
27.45235542	-80.36997111	664	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.4523305	-80.36996775	665	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45233015	-80.36995347	666	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45222917	-80.36998438	667	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45202299	-80.36993786	668	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45222276	-80.37048458	669	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	
27.45234006	-80.37057274	670	Cabbage Palm (Sabal Palmetto)	0	10	Healthy	

Total DBH	11128
Palms	172
Laurel Oak	300
Live Oak	85
Slash Pine	113



1. Tree 14 - rot.



2. Tree 69 – extreme lean.



3. Tree 82 – Beehive.



4. Tree 12 – Rot.



5. Tree 25 – included bark w/ants.



6. Tree 113 - Canker.



7. Tree 134 – hollowing and rot.



8. Tree 460 - Hollowing.



9. Tree 113 – extreme canker.



10. Tree 387 – extreme lean.



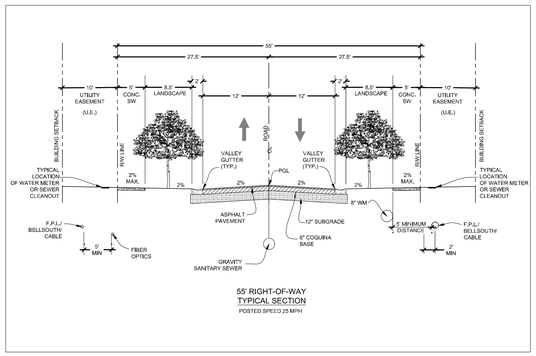
11. Tree 391 – extreme hollowing.



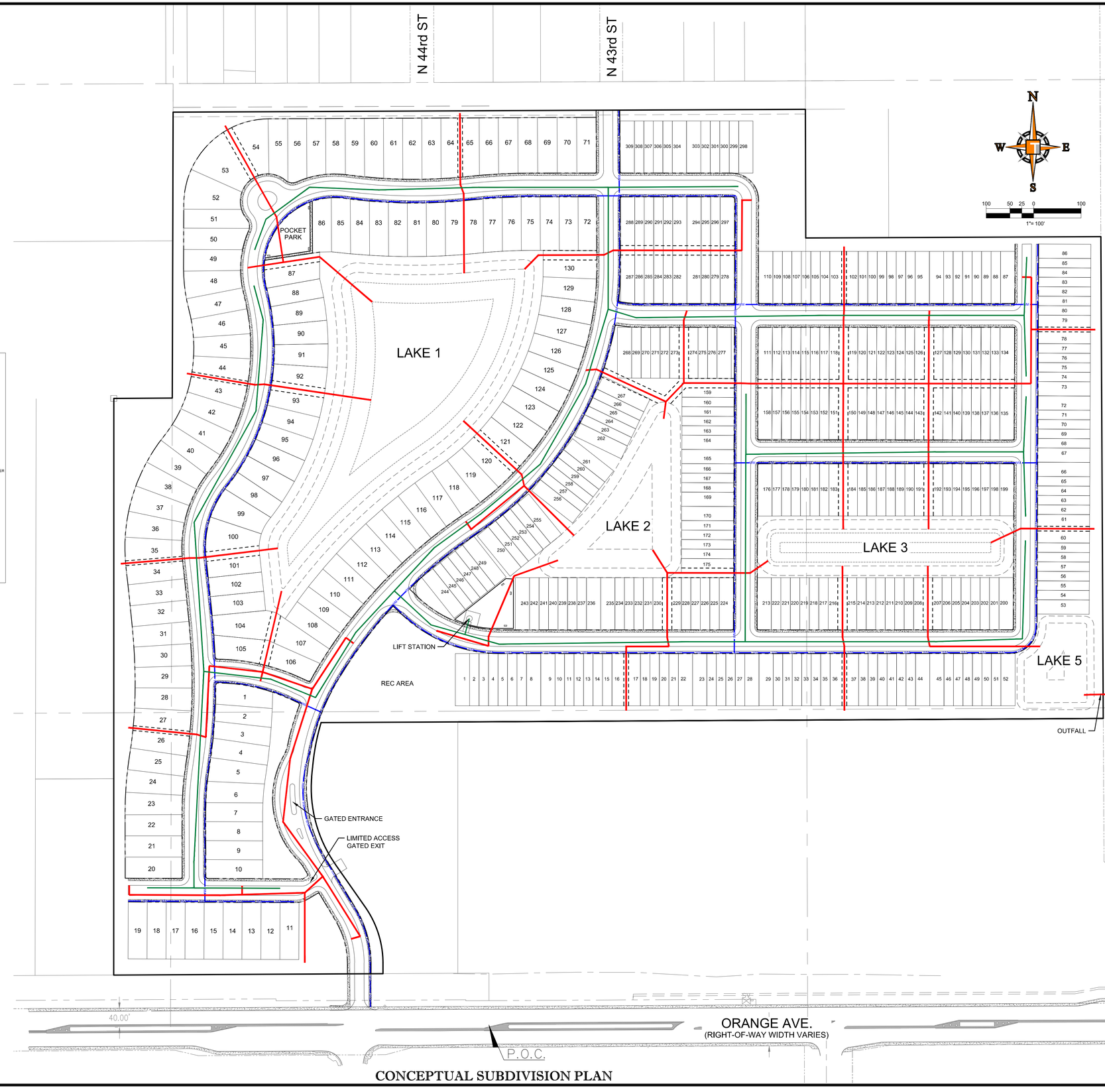
12. Tree 470 – hollowing, potential nest.

LEGEND

UNDERGROUND WATER LINE	W
STORM SEWER	
SANITARY SEWER MAIN	S
HYDRANT	
SANITARY MANHOLE	S
STORM MANHOLE	
CATCH BASIN	



55' RIGHT-OF-WAY
TYPICAL SECTION
POSTED SPEED 25 MPH



CONCEPTUAL SUBDIVISION PLAN

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
6300 NW 31st AVE
FT. LAUDERDALE, FL 33309
P: 954-202-7000
1502 W. FLETCHER AVE
SUITE 101
TAMPA, FL 33612
P: 813-379-4100

THE INFORMATION, DESIGN, AND CONTENT OF THIS PLAN ARE PROPRIETARY AND SHALL NOT BE COPIED OR USED FOR ANY PURPOSE WITHOUT PRIOR WRITTEN AUTHORIZATION FROM THOMAS ENGINEERING GROUP, LLC. ONLY APPROVED, SIGNED AND SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION.

REVISIONS:

REV:	DATE:	COMMENT:	BY:

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

Brandon Ulmer, P.E. State of Florida, Professional Engineer, License No. 58345
This item has been electronically signed and sealed by Brandon Ulmer, P.E. on 7/22/24 using a SHA-1 authentication code.
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PROJECT No.: FJ230027
DRAWN BY: MJL
CHECKED BY: BMU
CAD I.D.: FJ240001-SITE-PLAN

PROJECT:

PRELIMINARY ENGINEERING PLANS

FOR

OAK RIDGE RANCHES POD 6

SAINT LUCIE COUNTY
FLORIDA

THOMAS ENGINEERING GROUP
840 SE Osceola St.
Stuart, FL 34994
PH: (772) 888-3138
www.ThomasEngineeringGroup.com

BRANDON ULMER
No. 68345
PROFESSIONAL ENGINEER
DATE: Jul 22, 2024
FLORIDA LICENSE No. 68345
FLORIDA BUSINESS CERTIFICATE OF AUTH. No. 27528

SHEET TITLE:
CONCEPTUAL ENGINEERING PLAN

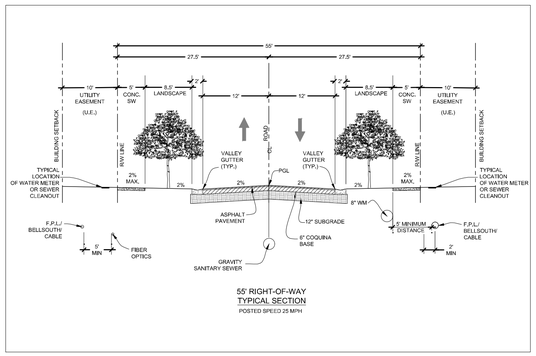
SHEET NUMBER:
CE-01

ELEVATIONS BASED ON NAVD '88

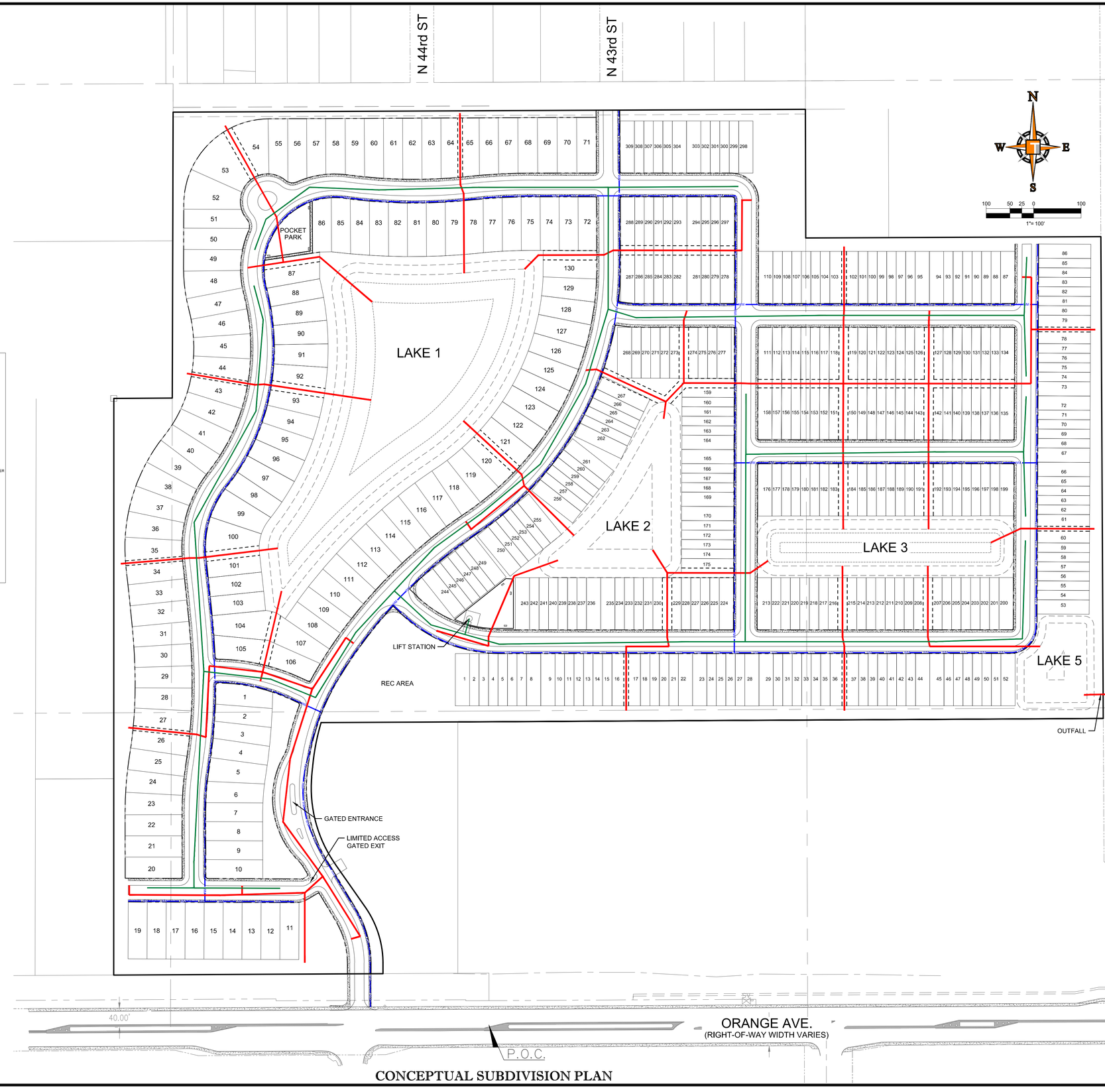
Printed on Monday, July 22, 2024, 8:12 PM by Michael Lapekoffer

LEGEND

UNDERGROUND WATER LINE	W
STORM SEWER	
SANITARY SEWER MAIN	S
HYDRANT	
SANITARY MANHOLE	S
STORM MANHOLE	
CATCH BASIN	



55' RIGHT-OF-WAY
TYPICAL SECTION
POSTED SPEED 25 MPH



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Brandon Ulmer, P.E. State of Florida, Professional Engineer, License No. 58345
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PROJECT No.: FJ230027
DRAWN BY: MJL
CHECKED BY: BMU
CAD I.D.: FJ240001-SITE-PLAN

PROJECT:

PRELIMINARY ENGINEERING PLANS

FOR

OAK RIDGE RANCHES POD 6

SAINT LUCIE COUNTY
FLORIDA

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BRANDON ULMER
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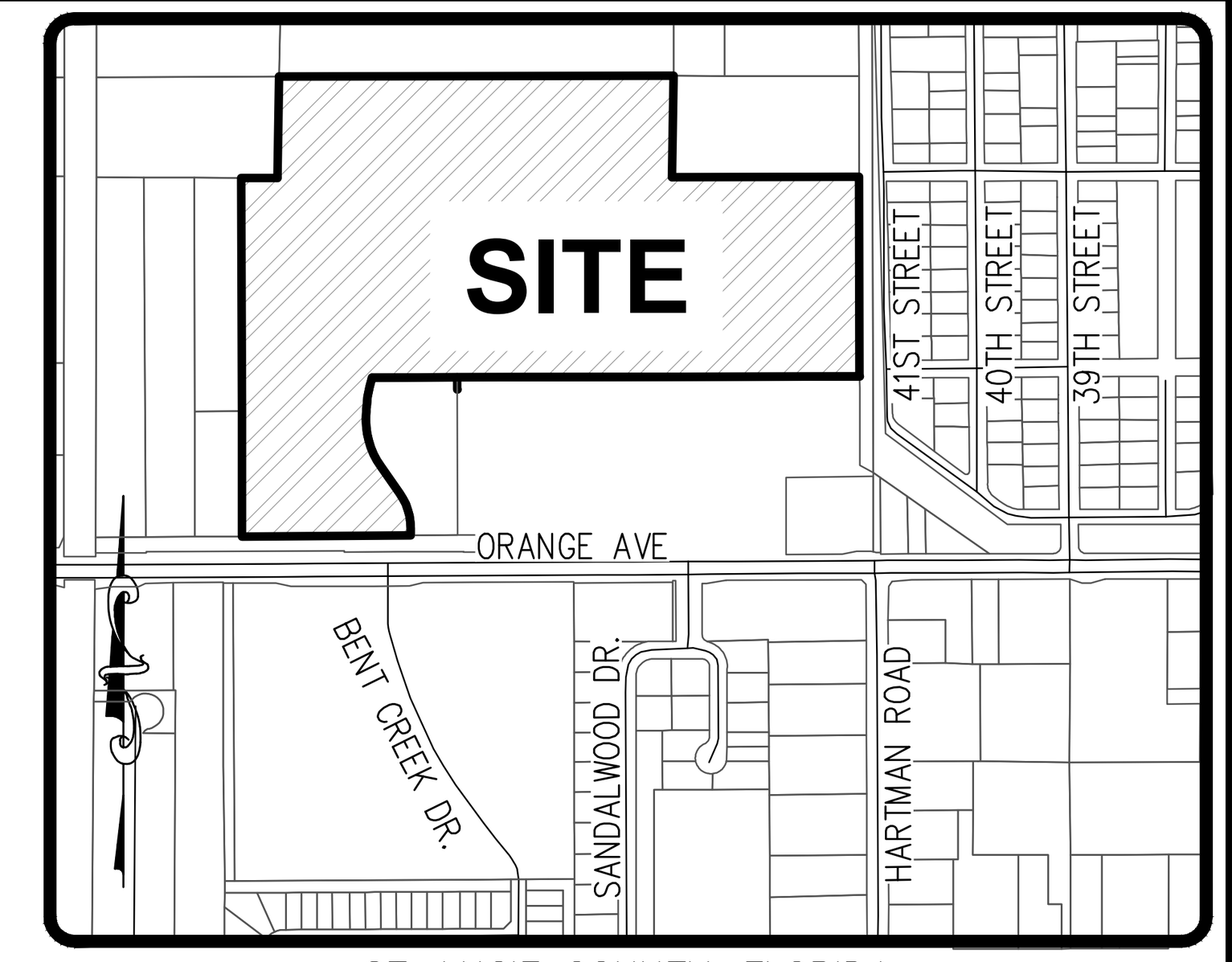
ELEVATIONS BASED ON NAVD '88

Printed on Monday, July 22, 2024, 8:12 PM by Michael Lapekoffer

ALTA NSPS LAND/TITLE SURVEY
FOR FM MILLCREEK HOLDING, LLC



ST. LUCIE COUNTY, FLORIDA
VICINITY MAP
NO SCALE

LEGAL DESCRIPTION:

PARCEL A:

A PARCEL OF LAND LYING IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE S 1/2 OF THE SE 1/4 OF THE NE 1/4 OF THE NE 1/4; AND THE SW 1/4 OF THE NE 1/4 OF THE NE 1/4; AND SE 1/4 OF THE NW 1/4 OF THE NE 1/4; LESS THE NORTH 50 FEET THEREOF; AND SE 1/4 OF THE NE 1/4, LESS THE NORTH 254.5 FEET SOUTH 294.5 FEET OF THE EAST 300 FEET OF THE SE 1/4 OF THE SE 1/4 OF THE NE 1/4; AND THE EAST 791.25 FEET OF THE SW 1/4 OF THE NE 1/4; LESS RIGHTS OF WAY FOR PUBLIC ROADS AND DRAINAGE CANALS AS TO ALL OF SAID PARCELS; ALL IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. LESS AND EXCEPT THE SOUTH 600.00 FEET THEREOF.

PARCEL B:

A PARCEL OF LAND LYING IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE WEST 725.27 FEET OF THE SOUTH 600.00 FEET OF THE FOLLOWING DESCRIBED PROPERTY:

THE EAST 791.25 FEET OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 7, LESS RIGHT-OF- WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

LESS AND EXCEPT THE FOLLOWING PARCEL:

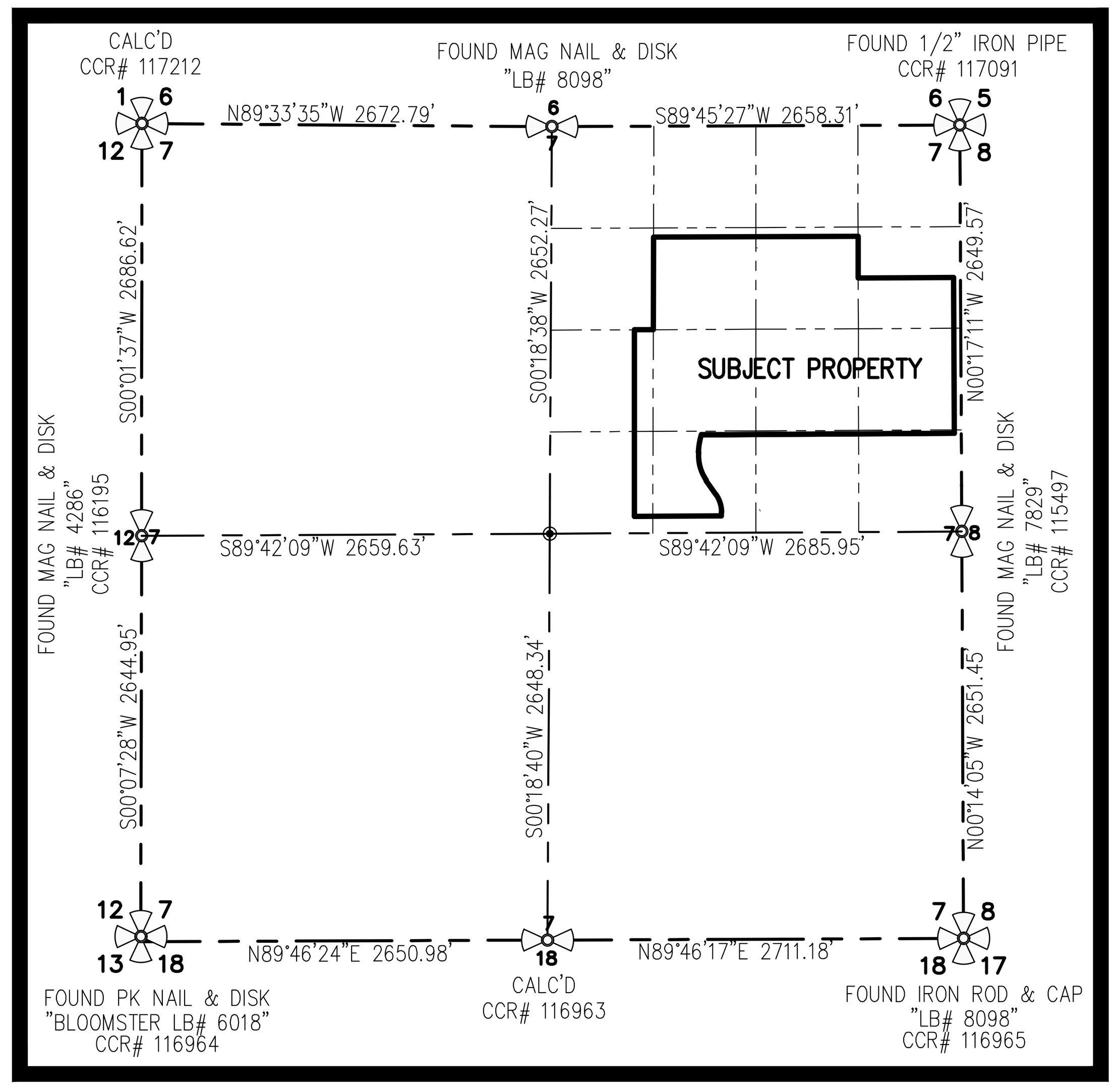
A PORTION OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7; THENCE NORTH 00°00'56" EAST ALONG THE EAST LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 40.00 FEET; THENCE SOUTH 89°42'09" WEST ALONG A LINE 40 FEET NORTH FROM AND PARALLEL WITH, AS MEASURED AT RIGHT ANGLES TO THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 65.98 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 89°42'09" WEST ALONG SAID PARALLEL LINE FOR 157.17 FEET; THENCE NORTH 00°17'51" WEST, FOR 92.93 FEET TO A POINT OF CURVATURE WITH A CURVE CONCAVE TO THE SOUTHWEST, SAID CURVE HAVING A RADIUS OF 206.46 FEET AND A CENTRAL ANGLE OF 34°44'37"; THENCE NORTHWESTERLY ALONG SAID CURVE FOR 125.20 FEET TO A POINT OF TANGENCY; THENCE NORTH 35°02'28N WEST, FOR 109.91 FEET TO A POINT OF CURVATURE WITH A CURVE CONCAVE TO THE EAST, SAID CURVE HAVING A RADIUS OF 280.00 FEET AND A CENTRAL ANGLE OF 39°48'56"; THENCE NORTHERLY ALONG SAID CURVE FOR 194.58 FEET TO A POINT OF TANGENCY, THENCE NORTH 04°46'28" EAST, FOR 18.58 FEET TO A POINT OF CURVATURE WITH A CURVE CONCAVE TO THE EAST, SAID CURVE HAVING A RADIUS OF 477.11 AND A CENTRAL ANGLE OF 11°47'43" THENCE NORTHERLY ALONG SAID CURVE FOR 98.22 FEET; THENCE NORTH 89°42'09" EAST ALONG A LINE 640 FEET NORTH FROM AND PARALLEL WITH, AS MEASURED AT RIGHT ANGLES TO THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 288.42 FEET; THENCE SOUTH 00°00'56" WEST ALONG THE EAST LINE OF THE WEST 725.27 FEET OF THE EAST 791.25 FEET OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 600.01 FEET TO THE POINT OF BEGINNING.

AND FURTHER EXCEPTING ANY PART LYING WITHIN THAT CERTAIN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 3210, PAGE 468, OF THE PUBLIC RECORDS OF SAID COUNTY.

SUBJECT TO EXISTING EASEMENTS, RIGHTS-OF-WAY, COVENANTS, RESERVATIONS AND RESTRICTIONS OF RECORD, IF ANY.

SAID LANDS LYING AND SITUATE IN ST LUCIE COUNTY, FLORIDA.



SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST

(1"=1000')

SURVEYORS NOTES AND REPORT:

1. THIS BOUNDARY SURVEY WAS PERFORMED FOR THE PURPOSE OF MAPPING EXISTING FEATURES AND CONDITIONS, AS SHOWN AND DEPICTED HEREON. I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS IS A TRUE AND ACCURATE DEPICTION OF A FIELD SURVEY PERFORMED UNDER MY DIRECTION AND COMPLETED ON APRIL 3, 2024. I FURTHER CERTIFY THAT SAID DRAWING IS IN COMPLIANCE WITH THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
2. THIS SURVEY MAP AND REPRODUCTIONS THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER OR ORIGINAL ELECTRONIC SIGNATURE. 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.
3. THE LAST DATE OF FIELD WORK (AND DATA ACQUISITION) WAS FEBRUARY 20, 2024.
4. LEGAL DESCRIPTION(S) HEREON SHOWN IS IN REFERENCE TO THE TITLE COMMITMENT PREPARED BY FIRST AMERICAN TITLE INSURANCE COMPANY DATED JANUARY 31, 2024 UNDER COMMITMENT NUMBER 5405290. ALL APPLICABLE B-II EXCEPTIONS FROM THAT TITLE COMMITMENT ARE SHOWN ON THE SURVEY.
5. PARCEL(S) CONTAIN A TOTAL OF 61.76 ACRES, MORE OR LESS.
6. THIS BOUNDARY SURVEY HAS BEEN REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM-EAST ZONE, NAD 83 (2011 ADJUSTMENT).
7. UNDERGROUND UTILITIES, UTILITY SERVICES, FOUNDATIONS, AND IMPROVEMENTS WERE NOT LOCATED AS A PART OF THIS SURVEY, UNLESS FEATURES WERE VISIBLE AT THE SURFACE LEVEL.
8. REVISIONS SHOWN HEREON DO NOT REPRESENT A "FIELD SURVEY UPDATE" UNLESS OTHERWISE NOTED.
9. BEARINGS SHOWN HEREON ARE BASED UPON GRID NORTH AND REFERENCE TO THE SOUTH LINE OF THE NORTHEAST QUARTER OF SECTION 7, LABELED HEREON AS (BEARING BASIS) AND ALL OTHER BEARINGS ARE RELATIVE THERETO. DISTANCES ARE IN U.S. SURVEY FEET AND DECIMAL PARTS THEREOF.
10. THIS SITE WAS SURVEYED UTILIZING TRIMBLE/SPECTRA HARDWARE TOGETHER WITH SPECTRA SURVEY PRO REALTIME PROCESSING AND WAS BASED ON TRIMBLE'S "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.
11. 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.
12. 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.
13. 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.
14. THE PROPERTY WHICH IS THE SUBJECT OF THIS SURVEY APPEARS TO BE SITUATE IN ZONE X AND ZONE A AT THIS TIME PURSUANT TO F.E.M.A. FIRM NUMBER 12111C0178J, HAVING AN EFFECTIVE DATE OF FEBRUARY 16, 2012. FOR APPROXIMATE DELINEATION OF THE FLOOD ZONE LIMITS, REFER TO AFOREMENTIONED FIRM PANELS.
15. ALL ABOVE GROUND UTILITIES AND DRAINAGE STRUCTURES ALONG THE NORTH RIGHT-OF-WAY OF ORANGE AVENUE HAVE BEEN LOCATED. NO UNDERGROUND UTILITY MARKINGS WERE OBSERVED IN THE PROCESS OF PERFORMING THE FIELD WORK.
16. NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WERE OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

SYMBOL & ABBREVIATION LEGEND:

Symbol	Description
(A)	AIR RELEASE VALVE
AL	ARC LENGTH
ASPH	ASPHALT
BFP	BACK FLOW PREVENTER
	BENCHMARK (BM) OR GROUND CONTROL POINT (GCP)
CATV	CABLE RISER
(C)	CALCULATED
	CATCH BASIN
℄	CENTERLINE
CCR	CERTIFIED CORNER RECORD
CLF	CHAIN LINK FENCE
CHD.	CHORD
CO	CLEAN OUT
COMM RISER	COMMUNICATION RISER
CONC	CONCRETE
	CONCRETE LIGHT POST
CM	CONCRETE MONUMENT
CPP	CONCRETE POWER POLE (CPP)
	CONCRETE POWER POLE W/STREET LIGHT
	CONCRETE SIGNAL LIGHT POLE
CMP	CORRUGATED METAL PIPE
	CURB INLET
	DECORATIVE LIGHT POST
(D)	DEED
D.B.	DEED BOOK
Δ	DELTA/CENTRAL ANGLE
(D)	DRAINAGE MANHOLE
DIP	DUCTILE IRON PIPE
EP	EDGE OF PAVEMENT
EOW	EDGE OF WATER
EB	ELECTRIC BOX
EHH	ELECTRIC HAND HOLE (EHH)
EM	ELECTRIC METER
ELEC. PANEL	ELECTRICAL PANEL
EL./ELEV.	ELEVATION
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
F.O.	FIBER OPTIC
FOHH	FIBER OPTIC HAND HOLE
FO	FIBER OPTIC MARKER
FIBER RISER	FIBER OPTIC RISER
(M)	FIELD MEASURED
F.F.E.	FINISHED FLOOR ELEVATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FPL	FLORIDA POWER AND LIGHT
FT	FOOT
FM	FORCE MAIN
FND	FOUND
(F)	FPL MANHOLE
SQ FT.	SQUARE FEET
GAS	GAS VALVE
GIS	GEOGRAPHIC INFORMATION SYSTEMS
GND	GROUND
	GUY WIRE ANCHOR
	HANDICAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HWF	HOG WIRE FENCE
HYD	HYDRANT
INV	INVERT
IP	IRON PIPE
IR	IRON ROD
IR/C	IRON ROD AND CAP
	IRRIGATION CONTROL VALVE
L	LENGTH
	LIGHT POST
MAG/D	MAG NAIL MAG BRAND NAIL
(M)	MAILBOX
MHWL	MEAN HIGH WATER LINE
	METAL LIGHT POST
	METAL POWER POLE
MON	MONUMENT
N/D	NON DESCRIPT NAIL AND DISK
N.R.	NON-RADIAL
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
No.	NUMBER
O.R.B.	OFFICIAL RECORDS BOOK
OHW	OVER HEAD WIRES
PG	PAGE
PCN	PARCEL CONTROL NUMBER
PK NAIL	PARKER-KALON NAIL
PK/D	PARKER-KALON NAIL & DISK
PCP	PERMANENT CONTROL POINT
PRM	PERMANENT REFERENCE MONUMENT
P.B.	PLAT BOOK
(P)	PLAT DATA
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCEMENT
P.C.C.	POINT OF COMPOUND CURVE
P.C.	POINT OF CURVATURE
P.T.	POINT OF TANGENCY
P.O.T.	POINT OF TERMINUS
PVC	POLYVINYL CHLORIDE
PLS	PROFESSIONAL LAND SURVEYOR
R	RADIUS
RGE	RANGE
RTK	REAL TIME KINEMATIC
RWV	RECLAIMED WATER VALVE
RLS	REGISTERED LAND SURVEYOR
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT-OF-WAY
R/C	ROD AND CAP
(S)	SANITARY MANHOLE
SV	SANITARY VALVE
SEC	SECTION
	PROPERTY CORNER
	RIGHT-OF-WAY CONTROL
	SIGN
STA	STATION
	STREET SIGN
TELE RISER	TELEPHONE RISER BOX
TOE	TOE OF SLOPE
TOB	TOP OF BANK/BERM
T.O.N.	TOP OF NUT
X 0.0	TOPOGRAPHIC DATA (SOFT SURFACE)
X 0.00	TOPOGRAPHIC DATA (HARD SURFACE)
TWP	TOWNSHIP
(T)	TRAFFIC HAND HOLE
TSCB	TRAFFIC SIGNAL CONTROL BOX
TYP	TYPICAL
U.E.	UTILITY EASEMENT
SS	UNDERGROUND SANITARY
DRN	UNDERGROUND STORM
UNK	UNKNOWN
UNK HH	UNKNOWN HAND HOLE
RISER BOX	UNKNOWN RISER BOX
(U)	UNKNOWN TYPE MANHOLE
VCP	VITRIFIED CLAY PIPE
W	WATER SERVICE METER (WM)
WV	WATER VALVE (WV)
(W)	WELL
WF	WOOD FENCE
	WOOD POLE STREET LIGHT
	WOOD POWER POLE

SCHEDULE B-II ITEMS
TITLE COMMITMENT PREPARED BY
FIRST AMERICAN TITLE INSURANCE COMPANY
COMMITMENT # 5405290
COMMITMENT DATE: JANUARY 31, 2024, AT 8:00 AM

1. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY, CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS COMMITMENT.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
2. ANY RIGHTS, INTERESTS, OR CLAIMS OF PARTIES IN POSSESSION OF THE LAND NOT SHOWN BY THE PUBLIC RECORDS.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
3. ANY ENCROACHMENT, ENCUMBRANCE, VIOLATION, VARIATION OR ADVERSE CIRCUMSTANCE AFFECTING THE TITLE THAT WOULD BE DISCLOSED BY AN ACCURATE AND COMPLETE LAND SURVEY OF THE LAND.
   AFFECTS SUBJECT PROPERTY; SHOWN ON SURVEY.
4. ANY LIEN, FOR SERVICES, LABOR, OR MATERIALS IN CONNECTION WITH IMPROVEMENTS, REPAIRS OR RENOVATIONS PROVIDED BEFORE, ON, OR AFTER DATE OF POLICY, NOT SHOWN BY THE PUBLIC RECORDS.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
5. ANY DISPUTE AS TO THE BOUNDARIES CAUSED BY A CHANGE IN THE LOCATION OF ANY WATER BODY WITHIN OR ADJACENT TO THE LAND PRIOR TO DATE OF POLICY, AND ANY ADVERSE CLAIM TO ALL OR PART OF THE LAND THAT IS, AT DATE OF POLICY, OR WAS PREVIOUSLY UNDER WATER.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
6. TAXES OR SPECIAL ASSESSMENTS NOT SHOWN AS LIENS IN THE PUBLIC RECORDS OR IN THE RECORDS OF THE LOCAL TAX COLLECTING AUTHORITY, AT DATE OF POLICY.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
7. ANY MINERALS OR MINERAL RIGHTS LEASED, GRANTED OR RETAINED BY CURRENT OR PRIOR OWNERS.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
8. TAXES AND ASSESSMENTS FOR THE YEAR 2024 AND SUBSEQUENT YEARS, WHICH ARE NOT YET DUE AND PAYABLE, AND TAXES AND ASSESSMENTS LEVIED AND/OR ASSESSED SUBSEQUENT TO THE DATE HEREOF.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
9. INTENTIONALLY DELETED. (UNRECORDED CATTLE LEASE WAS TERMINATED).
10. INTENTIONALLY DELETED. (DUPLICATIVE DUE TO STANDARD RIGHTS OF PARTIES IN POSSESSION EXCEPTION)
11. INTENTIONALLY DELETED. (UNRECORDED EASEMENT TO MILLCREEK ORANGE AVENUE I IS NOT ON THE CAPTION)
12. INTENTIONALLY DELETED. (SEE EXCEPTION #13 BELOW)
13. EASEMENT GRANTED TO FLORIDA POWER & LIGHT COMPANY AS SET FORTH IN INSTRUMENT RECORDED IN DEED BOOK 74, PAGE 238, AND BOOK 190, PAGE 1094, AND BOOK 190, PAGE 1092, AS AFFECTED BY SUBORDINATION OF UTILITY INTERESTS IN BOOK 1445, PAGE 770; DEED BOOK 73, PAGE 419.
   DEED BOOK 74, PAGE 238 AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
   BOOK 190, PAGE 1094 AND BOOK 190, PAGE 1092 AFFECTS SUBJECT PROPERTY; SHOWN ON SURVEY.
   BOOK 1445, PAGE 770 & DEED BOOK 73, PAGE 419 AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
14. INTENTIONALLY DELETED. (ADDED TO EXCEPTION #13)
15. RESERVATION IN DEED AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 629, PAGE 913.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
16. EASEMENT AND RIGHT OF WAY AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 1415, PAGE 421, AS AFFECTED BY AGREED STIPULATED FINAL JUDGMENT IN BOOK 1669, PAGE 2211.
   DOES NOT AFFECT SUBJECT PROPERTY. SHOWN ON SURVEY.
17. EASEMENT GRANTED TO BELLSOUTH TELECOMMUNICATIONS, INC. AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 2621, PAGE 2055.
   AFFECTS SUBJECT PROPERTY; SHOWN ON SURVEY.
18. RESOLUTION NO. 08-148 AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 2987, PAGE 1551, AS AFFECTED BY BOOK 3026, PAGE 1790.
   AFFECTS SUBJECT PROPERTY; RESOLUTION NO 08-148 IS NOT A SURVEY MATTER; RESOLUTION NO 08-278 IN BOOK 3026, PAGE 1790 INCLUDES A PORTION OF LAND BEING SOLD TO ST. LUCIE COUNTY AND AN EASEMENT TO ST. LUCIE COUNTY FOR INGRESS EGRESS WHICH IS SHOWN ON THE SURVEY.
19. FORCE MAIN EASEMENT AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 2968, PAGE 2619.
   AFFECTS SUBJECT PROPERTY; SHOWN ON SURVEY.
20. EASEMENT(S) SET FORTH IN SPECIAL WARRANTY DEED RECORDED IN BOOK 2511, PAGE 150.
   AFFECTS SUBJECT PROPERTY; SHOWN ON SURVEY.
21. ORDINANCE NO. 23-005 EXTENDING THE TERRITORIAL LIMITS OF THE CITY OF FORT PIERCE, FLORIDA AS SET FORTH IN INSTRUMENT RECORDED IN BOOK 4949, PAGE 259.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.

CERTIFIED TO:

- FIRST AMERICAN TITLE INSURANCE COMPANY
- FM MILLCREEK HOLDING, LLC

ALTA CERTIFICATION:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 3, 4, 8, 11, 13, 14, 15, 16, 19 & 20 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON FEBRUARY 20, 2024.

MICHAEL T. OWEN PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REGISTRATION #5556

SIGNATURE DATE:

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
ABB	MTO	SV	21-539 ALTA Survey Rev 4.dwg	AS SHOWN	May 16, 2024

DATE	REVISION COMMENTS
05/16/24	MADE A CORRECTION TO THE PLACEMENT OF THE BS EASEMENT (B-II #17)

ALTA NSPS LAND/TITLE SURVEY
FOR: FM MILLCREEK HOLDING, LLC
RECORD INFORMATION
SEC. 7, TWP. 35 SOUTH, RGE. 40 EAST
ST. LUCIE COUNTY, FLORIDA

10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
772-462-2455

21-539

Z:\EDC-2021\21-539 - Suchman - Millcreek 62-acres\SURVEY\Dwg - PDF\Survey\21-539 ALTA Survey Rev 4.dwg, 5/16/2024 10:03 AM
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ALTA NSPS LAND/TITLE SURVEY

FOR FM MILLCREEK HOLDING, LLC

GRAPHIC SCALE
150 0 75 150 300 600
(IN FEET)
1 inch = 150 ft.

NORTH

METZGER ROAD
(VARYING WIDTH RIGHT-OF-WAY)

N LINE OF SECTION 7 N89°45'27"E 2658.31'

NORTH 1/4 CORNER SECTION 7
FOUND MAG NAIL & DISK
"LB# 8098"

NORTHEAST CORNER
SECTION 7
FOUND 1/2" IRON PIPE
CCR# 117091

ABELARDO PEREZ
4417 N 44TH ST
PARCEL ID:
2407-121-0026-000-5

HOWARD LORR
PARCEL ID: 2407-121-0028-000-9

DANA STEPHENS
4465 PARKER CT
PARCEL ID:
2407-121-0030-000-6

GALLEGO'S TRUCKING INC
4465 PARKER CT
PARCEL ID:
2407-121-0030-000-6

4403 PARKER CT
PARCEL ID:
2407-121-0031-000-3

SHIRLEY REESE
405 N 44TH ST
PARCEL ID:
2407-121-0033-000-7

N 44TH STREET

JOSE MACIAS
406 N 44TH ST
PARCEL ID:
2407-121-0007-000-6

JOSE MACIAS
PARCEL ID: 2407-121-0008-000-9

MANUEL NIETO-ALMANZA
4203 CHARITY LN
PARCEL ID: 2407-112-0009-000-2

N 43RD STREET

PANFILO AQUINO
4215 CHARITY LN
PARCEL ID:
2407-112-0014-000-0

CHARLES RANDOLPH
4205 CHARITY LN
PARCEL ID: 2407-112-0016-000-4

ODESSA RANDOLPH
PARCEL ID: 2407-112-0017-000-1

JUAN MACIAS
4203 CHARITY LN
PARCEL ID:
2407-112-0018-000-8

DAVIS HOLDING COMPANY LLC
4205 METZGER RD
PARCEL ID: 2407-111-0002-000-0

N LINE OF THE SE 1/4, OF THE NW 1/4, OF THE NE 1/4 OF SEC 6
NO RECORD INFORMATION AVAILABLE

N LINE OF THE SW 1/4, OF THE NE 1/4, OF THE NE 1/4 OF SEC 6

S89°44'37"W 1332.92'

50.00'

00.00'

10.00' INGRESS EGRESS EASEMENT
O.R.B. 3210, PG. 468

LESS AND EXCEPT
O.R.B. 3210, PG. 468

FOUND 5/8" IRON ROD
& CAP "LB# 8098"

FOUND 5/8" IRON ROD
& CAP "LB# 8098"

EAST LINE SECTION 7

RIVERSTONE METZGER LLC
PARCEL ID: 2407-122-0001-000-7

ISLAND STYLE HOMES INC
4275 MARIAH CIR
PARCEL ID: 2407-114-0001-000-6

KG CONCRETE & DEVELOPMENT LLC
4105 MARIAH CIR
PARCEL ID: 2407-114-0002-000-9

FOUND 5/8" IRON ROD
& CAP "LB# 8098"

N00°08'13"W 271.28'

S89°44'18"W 622.17'

N00°18'35"E 2652.27'

S00°09'41"W 602.89'

SE 1/4 OF THE NW 1/4
OF THE NE 1/4 LESS THE
NORTH 50.00'

SW 1/4 OF THE NE 1/4
OF THE NE 1/4

S 1/2 OF THE SE 1/4 OF
THE NE 1/4 OF THE NE 1/4
LESS THE CANAL R/W

DAVID WEBB
PARCEL ID: 2407-123-0001-000-0

FOUND 5/8" IRON ROD
& CAP "LB# 8098"

FOUND 3"X3"
CONCRETE MONUMENT
(S 0.13', W 0.13')

PARCEL A

N LINE OF THE SW 1/4 OF THE NE 1/4 OF SECTION 7

S LINE OF THE NE 1/4 OF THE NE 1/4 OF SECTION 7
N LINE OF THE SE 1/4 OF THE NE 1/4 OF SECTION 7

S89°43'48"W 123.23'

PARCEL ID:
2407-124-0001-000-3
TOTAL AREA=61.760 ACRES
MORE OR LESS

E 791.25' OF THE SW 1/4 OF THE NE 1/4
LESS RIGHT-OF-WAY FOR PUBLIC
ROADS & LESS THE S 600'

N00°17'11"W 1015.99'

N.S.L.R.W.C.D. CANAL NO. 29
(108.00' RIGHT-OF-WAY)

S00°00'44"W 1215.78'

FLORIDA DEPARTMENT OF TRANSPORTATION
PARCEL ID: 2407-131-0001-010-8

E LINE OF THE SW 1/4 OF THE NE 1/4 OF SECTION 7

N.S.L.R.W.C.D. CANAL NO. 3
(CANAL RIGHT-OF-WAY WIDTH VARIES)

SE 1/4 OF THE NE 1/4
LESS ROAD & CANAL
RIGHT-OF-WAY

N LINE OF THE SE 1/4 OF
THE SE 1/4 OF THE NE 1/4

FOUND 4"X4"
CONCRETE MONUMENT
"LB# 6610"
(S 0.27', E 0.59')

FOUND 5/8" IRON
ROD & CAP "LB# 8098"

17 BELLSOUTH TELECOMMUNICATIONS
EASEMENT P.B. 2621, PG. 2055

19 FORCE MAIN EASEMENT
P.B. 2968, PG. 2619

20 FORCE MAIN EASEMENT
P.B. 2511, PG. 150

FOUND 4"X4"
CONCRETE MONUMENT
(N 0.09', W 0.25')

N89°42'09"E 1649.00'

N89°42'09"E 1360.62'

N89°42'09"E(C)(D)
288.38'(C) 288.42'(D)

LESS & EXCEPT
MILLCREEK ORANGE AVENUE LLC
PARCEL ID:
2407-131-0004-000-6

N04°46'28"E(C)(D)
18.58'
L=194.58'
R=280.00'
Δ=39°48'56"

PARCEL B

FOUND 5/8" IRON
ROD & CAP "LB# 8098"

19 FORCE MAIN EASEMENT
O.R.B. 2968, P.G. 2619

WEST 725.27'
EAST 791.25'

N35°02'28"W(C)(D)
109.91'
L=125.20'
R=206.46'
Δ=34°44'37"
N00°17'51"W(C)(D)
22.87'

20 ACCESS, UTILITY &
DRAINAGE EASEMENT
O.R.B. 2511, P.G. 150

20 70' DRAINAGE EASEMENT
O.R.B. 2511, P.G. 150

FOUND 5/8" IRON ROD
& CAP "LB#8098"

PERMANENT DRAINAGE EASEMENT
TO ST. LUCIE COUNTY

BOTTOM OF
DITCH

ORANGE AVENUE
DEVELOPMENT LLC
PARCEL ID:
2407-134-0001-000-4

CENTER OF DITCH

TOP OF DITCH

ORANGE AVENUE
DEVELOPMENT LLC
PARCEL ID: 2407-144-0001-000-5

FLOOD ZONE "X"

FLOOD ZONE "X"

4' BARB-WIRE FENCE
+6' EAST OF

BOTTOM OF CANAL

4' BARBED WIRE FENCE

37.40' CANAL EASEMENT
O.R.B. 2883, PG. 2575

WEST LINE OF THE NE 1/4 OF SECTION 7

JOHN H STAMM JR
4850 ORANGE AVE
PARCEL ID: 2407-131-0003-000-9

JOHN H STAMM JR
PARCEL ID: 2407-131-0002-000-2

JOHN H STAMM JR
PARCEL ID: 2407-131-0001-000-5

SOUTH 600.00'

LESS THE SOUTH 600.00'

W LINE OF THE SE 1/4 OF THE NE 1/4

16 20 PERPETUAL FDOT EASEMENT
O.R.B. 1415, PG. 421

13 20 5.00' FPL EASEMENT
O.R.B. 190, PG. 1092

20.00' FPUA EASEMENT
O.R.B. 4312, PG. 974

EAST 300'

LESS AND
EXCEPT
GATE

SOUTH 294.50'

NORTH 294.50'

SIGNAL
MAST ARM

640.00'

13 5.00' FPL EASEMENT
O.R.B. 190, PG. 1094

SOUTHEAST CORNER
NE 1/4, SECTION 7
FOUND MAG NAIL & DISK
"LB# 7829"
CCR# 115497

SOUTHWEST CORNER
NE 1/4, SECTION 7
FOUND MAG NAIL & DISK
"LB# 8098"

ST. LUCIE COUNTY
PARCEL ID: 2407-131-0005-000-3
RIGHT-OF-WAY LINE

N89°42'04"E 567.73'

N00°17'44"W(C)(D)
70.06'
110.00'

S89°42'09"W(C)(D)
65.98'

S89°42'09"W 2685.95'

S LINE OF THE NE 1/4 OF SECTION 7

40.00'

CURB INLET

GAS RISER

S89°42'09"W(C)(D)
65.98'

P.O.B.
LESS & EXCEPT
FOR PARCEL B

26'± WIDE ASPHALT
TRAVEL LANES

N00°17'44"W(C)(D)
40.00'
N00°00'56"E(D)

CENTER OF DITCH

ORANGE AVENUE
STATE ROAD NO. 68 (VARYING WIDTH RIGHT-OF-WAY)
F.D.O.T. R/W MAP SECTION 94070-2505)

CURB INLET 46.43'

LESS & EXCEPT FOR PARCEL B
SE CORNER OF THE SW 1/4
OF THE NE 1/4 OF SEC 7

COMMUNICATION RISER
ON CONC. PAD

F CURB (TYP)

CURB INLET

5' WIDE SIDEWALK

54.69'

DRIVE

ROAD

7 8

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

ABB	DRAWN BY
MTO	CHECKED BY
SV	FIELD CREW
21-539 ALTA Survey Rev 4.dwg	FILENAME
AS SHOWN	SCALE
May 16, 2024	DATE

05/16/24	MADE A CORRECTION TO THE PLACEMENT OF THE BS EASEMENT (BS # 17)
DATE	REVISION COMMENTS

ALTA NSPS LAND/TITLE SURVEY

FOR: FM MILLCREEK HOLDING, LLC

RECORD INFORMATION
SEC. 7, TWP. 35 SOUTH, RGE. 40 EAST
ST. LUCIE COUNTY, FLORIDA

10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
772-462-2455

21-539

1 OF 2

Z:\EDC-2021\21-539 - Suchman - Millcreek 62-acres\SURVEY\Dwg - PDP\Survey\21-539 ALTA Survey Rev 4.dwg, 5/16/2024 10:03 AM
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Thomas Engineering Group
840 SE Osceola Street
Stuart, FL 34994
P: (772) 888-3138
www.ThomasEngineeringGroup.com

SURFACE WATER MANAGEMENT REPORT

Conceptual Overall Report

Mill Creek

St Lucie County, Florida

PREPARED BY

THOMAS ENGINEERING GROUP

8-2024

All elevations for this project were based on NAVD

Brandon Ulmer, PE

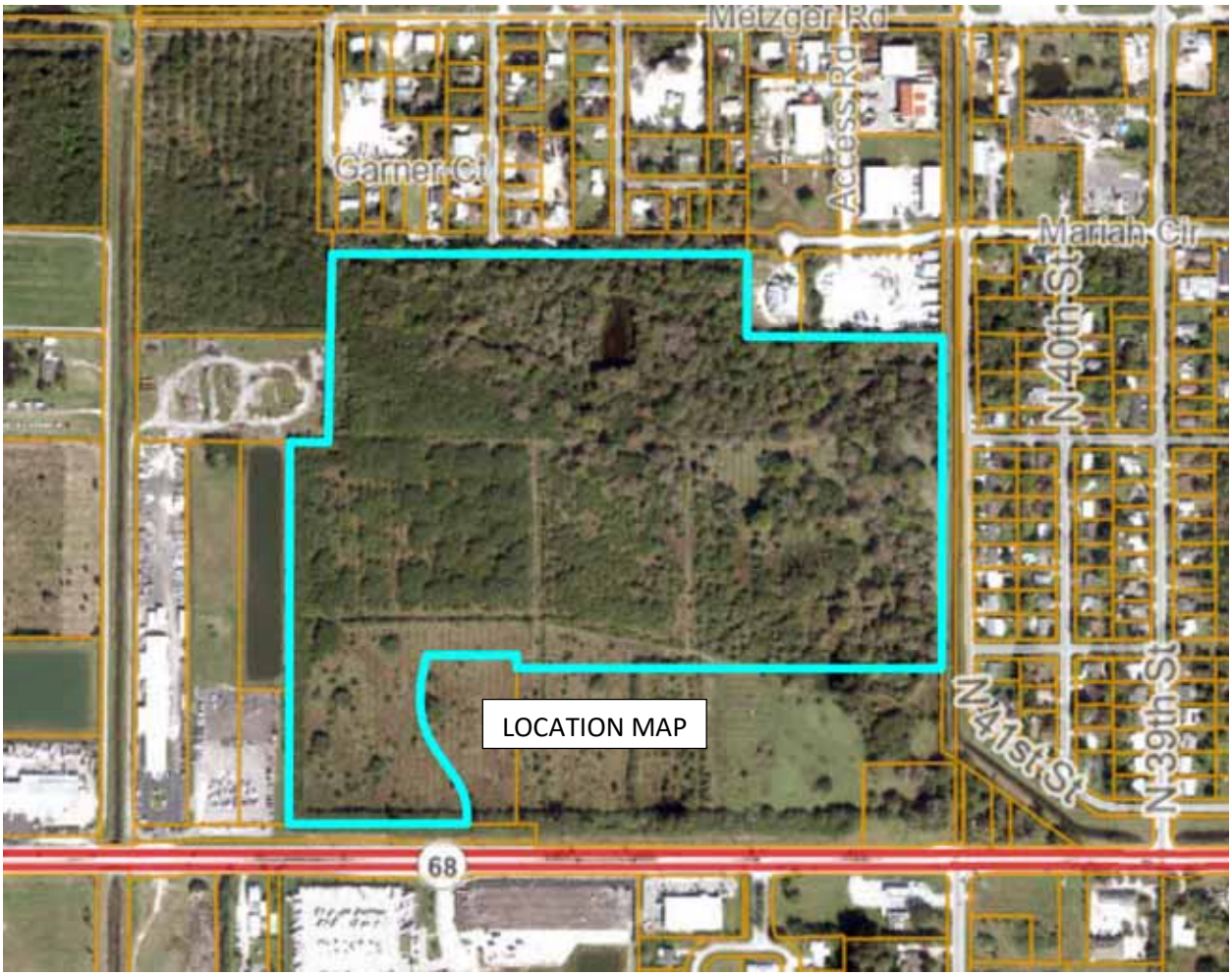
FL PE # 68345

CA #27528

Thomas Engineering Group
840 SE Osceola Street
Stuart, FL 34994
P: (772) 888-3138
www.ThomasEngineeringGroup.com

Introduction:

The proposed site is in City of Fort Pierce within St Lucie County. The site is located on the north side of orange avenue approximately 1.2miles east of I-95. The site is vacant and consists of one parcel 2407-124-0001-000-3 totaling approximately 61.76 acres as seen below.



Background:

The existing site is currently undeveloped and appears to have been used for agricultural use in the past. The site is currently drains to the NSLWCD canal #3 along the east side of the project through a series of onsite ditches.
The site is in flood zone X per FEMA 12111C0178J

THOMAS ENGINEERING GROUP

Thomas Engineering Group
840 SE Osceola Street
Stuart, FL 34994
P: (772) 888-3138
www.ThomasEngineeringGroup.com

Proposed Design:

The proposed project will require the design, permitting and construction of a stormwater management system for the development. The system will generally consist of Interconnected lakes that will discharge through control structures to the existing outfall canal along east property line. The project will be one drainage basin. Summary of the project is shown below:

Proposed Project Summary is in chart below:

BASIN SUMMARY

BASIN	BUILDING AREA (acres)	WATER SURFACE AREA (acres)	IMPERVIOUS AREA (acres)	PERVIOUS AREA (acres)	TOTAL AREA (area)
BASIN 1					
BASIN 3					
TOTAL	15.94	6.80	17.35	21.67	61.76
% BASIN	26%	11%	28%	35%	100%
TOTAL	15.94	6.80	17.35	21.67	61.76

Minimum road elevation = 16.00'NAVD
Minimum Finish Floor elevation = 17.50'NAVD
Minimum Berm Elevation = 15.50'NAVD
Water table used for Design = 12.00'NAVD

Allowable Discharge:

The allowable discharge rate for this project will be limited to 2" per 24hr period see below for Peak allowable

ALLOWABLE PEAK DISCHARGE RATE FOR 10-YR, 72-HR STORM

BASIN	BASIN AREA (acres)	ALLOWABLE PEAK DISCHARGE RATE (cfs)	Proposed
BASIN 3	61.76	5.19	
TOTAL	61.76	5.19	5.16

Proposed Water Quality:

THOMAS
ENGINEERING GROUP

Thomas Engineering Group
840 SE Osceola Street
Stuart, FL 34994
P: (772) 888-3138
www.ThomasEngineeringGroup.com

Water quality for the overall site has been developed and is included on page 24, total water quality has been determined based on the attached calculations to be the 1" over the site Plus the 50% impaired basin criteria. Total Water quality is 1.5" over the drainage basin area of 61.76 acres for a total water quality of 7.72 ac-ft, elevations for water quality is listed in the attached water quality calculations.

We are anticipating the project to be building in three phases, with the majority of the stormwater infrastructure to support the project being installed in Phase I.

Nutrient loading has been included as part of the current requirements; we are showing an overall reduction in nutrient loading. The nutrient loading has been provided for in the onsite lake system.

Prepared by:

Brandon Ulmer, PE

FL PE #68345

LAND USE AND STAGE STORAGE CALCULATIONS

Project Name:
Basin / Node Name: CONCEPTUAL LANDUSE

10 year 3 day 9" 16.00
100 year 3 day 12"
5 year - 1 day 5"

SUMMARY

Total Area =	**61.76**	**AC**	61.76		**Discharge 2" over the site for 24hrs max**		Soil storage	Over Pervious area
DCIA =	**0**	**%**			2690093.83	**SF**		
Time of Concentration =	**15.00**	**MINUTES**			448348.97	CF		
Control Elevation =	**12**	**FEET NAVD**		Allowable	**5.19**	**CFS**	8.18	2.87

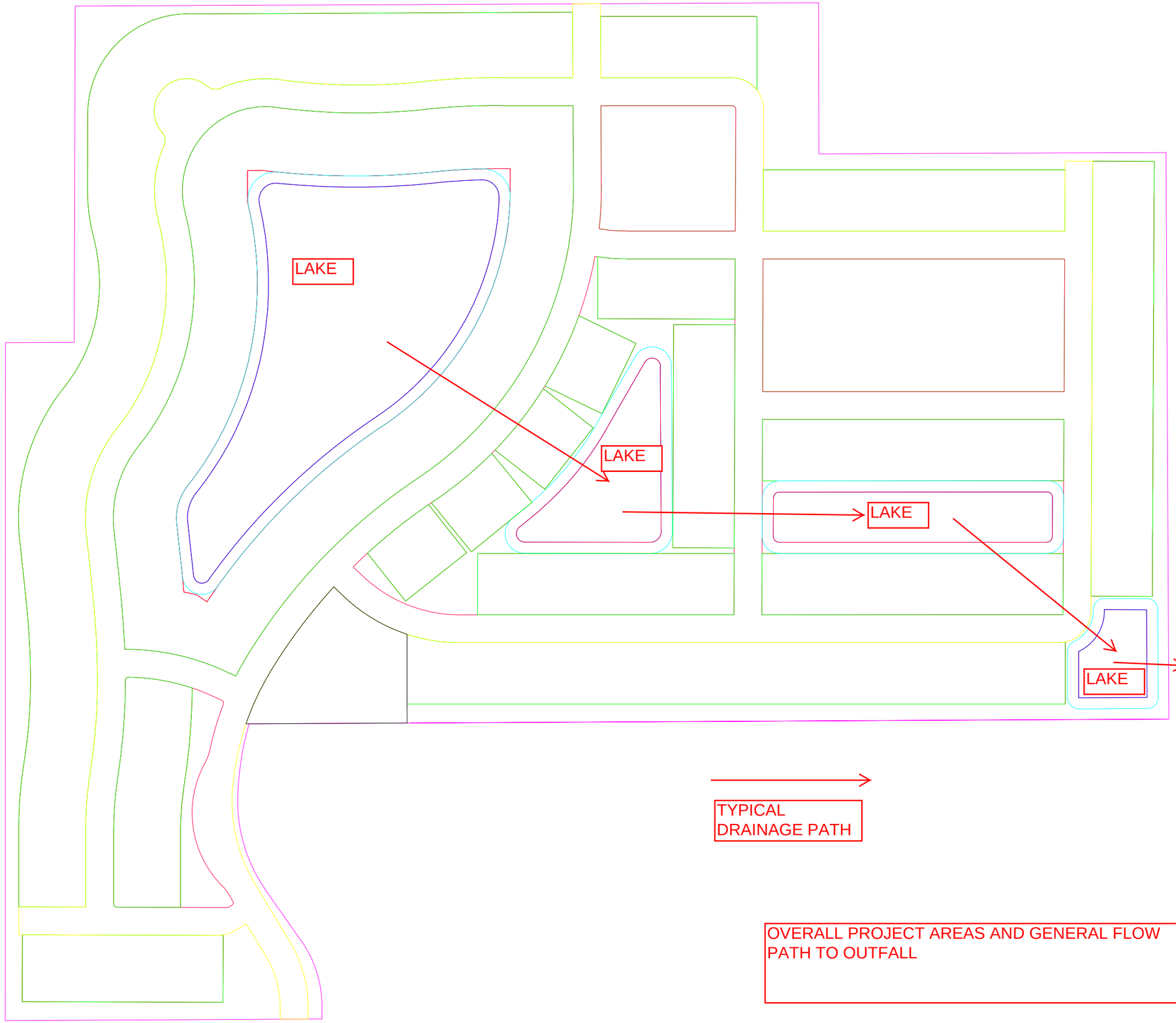
LAND USE BREAKDOWN & CURVE NUMBER CALCULATION

	R/W(Road)			Rec Area	Park Site	residential TH	Buffer	Residential	Open Space	Lake	Lake Slope		Total Area	Curve Number	CN*Area%
Total Areas (Ac.)	11.14	0.00	0.00	1.06	0.48	18.18	3.68	15.57	2.53	6.80	2.32		61.76	--	--
Bldg. Area (Ac.)			0.00	0.11		8.36	0.00	7.47	0.00	0.00	0.00	0.00	15.94	--	--
Water Surface Area (Ac.)			0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.80	0.00	0.00	6.80	--	--
Impervious Area (Ac.)	8.91	0.00		0.42	0.10	4.36	0.00	3.43	0.13	0.00	0.00	0.00	17.35	--	--
Developed Perv. Area - Good Cond. (Ac.)	2.23		0.00	0.53	0.38	5.45	0.00	4.67	2.40	0.00	2.32	0.00	17.99	--	--
				0.00	0.00	0.00	3.68	0.00	0.00	0.00	0.00	0.00	3.68	--	--
Bldg. Area%	0%	0%	0%	10%	0%	46%	0%	48%	0%	0%	0%	#DIV/0!	26%	98	25.3
Water Area %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	#DIV/0!	11%	100	11.0
Impervious Area %	80%	100%	0%	40%	20%	24%	0%	22%	5%	0%	0%	#DIV/0!	28%	98	27.5
Developed Perv. Area - Good Cond. %	20%	0%	100%	50%	80%	30%	0%	30%	95%	0%	100%	#DIV/0!	29%	75	21.8
	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	#DIV/0!	6%	77	4.6
														Composite CN =	**90.2**

STAGE STORAGE CALULATION

Computation Type Stage-Storage
Starting Stage = 12.00
Ending Stage = 17.00
Stage Increment = 0.50

Name	**R/W(Road)**	**0.00**	**0.00**	**Rec Area**	**Park Site**	**residential TH**	**Buffer**	**Residential**	**Open Space**	**Lake**	**Lake Slope**	**0.00**		
Area	11.14	0.00	0.00	0.96	0.48	9.82	3.68	8.10	2.53	6.80	2.32	0.00		
Start Elev	16.00			16.00	16.00	17.00	16.00	17.00	15.00	12.00	12.00			
End Elev	17.00			18.00	18.00	19.00	17.00	19.00	16.00		16.00			
Stage	Linear	Vert	Vert	Linear	Linear	Linear	Linear	Linear	Linear	Vert	Linear	Vert	Total	
Feet	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	
NAVD	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	
12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00
12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.40	0.07	0.00	3.47	12.50
13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.80	0.29	0.00	7.09	13.00
13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.20	0.65	0.00	10.85	13.50
14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.60	1.16	0.00	14.76	14.00
14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.00	1.81	0.00	18.81	14.50
15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.40	2.61	0.00	23.01	15.00
15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	23.80	3.55	0.00	27.67	15.50
16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	27.20	4.64	0.00	33.10	16.00
16.50	1.39	0.00	0.00	0.06	0.03	0.00	0.46	0.00	2.53	30.60	5.80	0.00	40.87	16.50
17.00	5.57	0.00	0.00	0.24	0.12	0.00	1.84	0.00	3.80	34.00	6.96	0.00	52.52	17.00



1 Entities: AREA-BNDY
2,690,282.73 SF
61.760 Acres
10,690.47 Linear Feet

15 Entities: AREA-LOTS-TH
791,800.14 SF
18.177 Acres
16,470.03 Linear Feet

5 Entities: AREA-LOTS
678,309.09 SF
15.572 Acres
10,039.78 Linear Feet

7 Entities: AREA-ROW
485,281.79 SF
11.141 Acres
7,737.26 Linear Feet

8 Entities: AREA-LME
101,007.73 SF
2.319 Acres
5,301.71 Linear Feet

4 Entities: AREA-LAKES
296,212.52 SF
6.800 Acres
4,799.06 Linear Feet

OVERALL PROJECT AREAS AND GENERAL FLOW PATH TO OUTFALL

WATER QUALITY CALCULATIONS
Mill Creek
VERSION 1 **8/22/2024**

WATER QUALITY CALCULATIONS

BASIN 3 AREA =	61.76	AC	
WATER SURFACE (LAKE) AREA =	6.80	AC	
BUILDING (ROOF) AREA =	15.94	AC	
TOTAL PERVIOUS AREA =	21.67	AC	
SITE AREA FOR WATER QUALITY (SFWMD) =	39.01	AC	BASIN AREA - (LAKE + ROOF)
IMPERVIOUS AREA FOR WQ (SFWMD) =	17.35	AC	BASIN AREA - (LAKE + ROOF) - PERVIOUS
% IMPERVIOUS FOR WQ CALC (SFWMD) =	44%		IMPERVIOUS AREA FOR WQ / BASIN AREA

TREATMENT VOLUME

1" OVER ENTIRE SITE =	5.15	AC-FT	
2.5" X % IMPERVIOUS =	1.11	IN	2.5" x % IMPERVIOUS FOR WQ CALCS
VOLUME TO BE TREATED =	5.09	AC-FT	(2.5" x % IMPERVIOUS FOR WQ CALCS) X (TOTAL SITE - LAKES)
STANDARD REQUIRED WET DETENTION VOL =	5.15	AC-FT	
ADDITIONAL 50% WET DET. VOL. =	2.57	AC-FT	
REQUIRED WET DET. VOL. =	**7.72**	AC-FT	(extra 50% Det. Vol. required b/c project discharges to an imparired water body)

STAGE STORAGE IN BASIN 1 LAKES:

FT NAVD	AC-FT
12.00	0.00
12.50	3.47
13.00	7.09
13.50	10.85
14.00	14.76

INTERPOLATION:

ELEV. #1 =	13.00	FT NAVD
ELEV. #2 =	13.50	FT NAVD
STORAGE #1 =	7.09	AC-FT
STORAGE #2 =	10.85	AC-FT
TARGET STORAGE =	7.72	AC-FT
MIN. REQUIRED WQ ELEV =	**13.08**	**FT NAVD**
CONTROL ELEV =	**12.00**	**FT NAVD**

Nutrient Loading Analysis

(Estimated based on Dr. Harper's methodology (Pre-Post loading Criteria) from "Evaluation of Current Stormwater Design Criteria within the State of Florida" - June 2007)

Annual Runoff Volume (ac-ft/yr) = Area (ac) x Rainfall (inches/year) x 1/12 inches x Runoff Coefficient

Nutrient Loading (kg/yr) = Runoff Volume (ac-ft/yr) x 43560 ft^2/ac. x 7.48 gal/ft^3 x 3.785 liter/gal x Mean Concentration (mg/l)/ 10^6

Annual Rainfall value used is from Appendix A.3

Event Mean Concentrations have been used from Table 4-17

Mean Runoff Coefficients have been used from Table 4-24 - Cluster 2, Hydrologic Soil Group D

Pre-Development Conditions

Landuse	Area (AC)	Runoff C	Rainfall (INCHES/YR)	Annual Runoff (AC-FT/YR)	Nitrogen Concentration (mg/l)	Nitrogen (KG/YR)	Phosphorus Concentration (mg/l)	Phosphorus (KG/YR)
Pasture	61.67	0.128	54.5	35.85	3.47	153.42	0.616	27.24
Totals =	**61.67**			**35.85**		**153.42**		**27.24**

Post-Development Conditions

Landuse	Area (AC)	Runoff C	Rainfall (INCHES/YR)	Annual Runoff (AC-FT/YR)	Nitrogen Concentration (mg/l)	Nitrogen (KG/YR)	Phosphorus Concentration (mg/l)	Phosphorus (KG/YR)
Residential	54.87	0.262	54.5	65.29	2.07	166.68	0.327	26.33
Lake	6.80				0.00		0	
Totals =	**61.67**			**65.29**		**166.68**		**26.33**

		(N)	(P)
Required Removal Efficiency (%)			
= (1- Pre-Loading/Post-Loading) x100	**Required Removal for N and P =**	**7.95%**	**-3.44%**

See separate nutrient loading calculations for the required removal of Nitrogen

Summary Treatment Report Version: 5.3.2

Project: Lake providing 6.8 ac-ft of storage

Analysis Type: Specified Removal Efficiency

Date:8/27/2024

BMP Types:

Catchment 1 - (site) Wet Detention

Catchment 2 - (Catchment 0) None

Based on % removal values to the nearest percent

Routing Summary
Catchment 1 Routed to Outlet
Catchment 2 Routed to Outlet

Total nitrogen target removal met? **Yes**
Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	kg/yr	
Total N post load	613.58 kg/yr	
Target N load reduction	10 %	
Target N discharge load	552.23 kg/yr	
Percent N load reduction	18 %	
Provided N discharge load	502.85 kg/yr	1108.79 lb/yr
Provided N load removed	110.73 kg/yr	244.17 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	kg/yr	
Total P post load	96.929 kg/yr	
Target P load reduction	%	
Target P discharge load	96.929 kg/yr	
Percent P load reduction	31 %	
Provided P discharge load	67.184 kg/yr	148.14 lb/yr
Provided P load removed	29.745 kg/yr	65.587 lb/yr

nutrient removal for 1' of storage in the lake system, the system only needs to provide for an additional 7.95% as shown on page 7 of this report.

Project Name: Mill Creek
Reviewer: BMU
Project Number:
  Period Begin: Jun 01, 2024;0000 hr End: Jun 04, 2024;0000 hr Duration: 72 hr
  Time Step: 0.016 hr, Iterations: 10

Basin 1: onsite

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 24 hr
  Design Frequency: 5 year
  1 Day Rainfall: 5 inches
  Area: 61.76 acres
  Ground Storage: 2.87 inches
  Time of Concentration: 0.25 hours
  Initial Stage: 12 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
12.00	0.00
12.50	3.47
13.00	7.09
14.00	14.76
15.00	23.01
16.00	33.10
17.00	52.52

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	12.00
360.00	12.00

Structure: 1

  From Basin: onsite
  To Basin: Offsite1
  Structure Type: Gravity
    Weir: None
    Bleeder: Inv-Tri, Invert Elev = 12 ft NGVD, Height = 1.06 ft
      Width = 1.25 ft
      Default Coefs: Weir Coef = 2.5, Orifice Coef = 0.6
    Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	12.00	12.00
2.00	0.10	0.00	0.00	0.00	12.00	12.00
4.00	0.23	0.00	0.00	0.00	12.00	12.00
6.00	0.42	0.00	0.00	0.00	12.00	12.00
8.00	0.68	0.47	0.00	0.00	12.00	12.00
10.00	1.07	3.33	0.00	0.00	12.04	12.00
12.00	3.28	121.52	0.42	0.01	12.61	12.00
14.00	4.09	11.86	2.45	0.32	13.30	12.00
16.00	4.40	7.61	2.70	0.75	13.42	12.00
18.00	4.58	4.62	2.78	1.20	13.47	12.00
20.00	4.76	4.67	2.86	1.67	13.51	12.00
22.00	4.88	3.14	2.87	2.14	13.52	12.00
24.00	5.00	3.15	2.88	2.62	13.53	12.00
26.00	5.00	0.00	2.79	3.09	13.47	12.00
28.00	5.00	0.00	2.68	3.54	13.42	12.00
30.00	5.00	0.00	2.57	3.97	13.36	12.00
32.00	5.00	0.00	2.46	4.39	13.30	12.00
34.00	5.00	0.00	2.35	4.79	13.25	12.00
36.00	5.00	0.00	2.24	5.17	13.20	12.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
38.00	5.00	0.00	2.13	5.53	13.16	12.00
40.00	5.00	0.00	2.02	5.87	13.11	12.00
42.00	5.00	0.00	1.91	6.19	13.07	12.00
44.00	5.00	0.00	1.60	6.48	13.03	12.00
46.00	5.00	0.00	1.47	6.73	13.00	12.00
48.00	5.00	0.00	1.36	6.96	12.97	12.00
50.00	5.00	0.00	1.25	7.18	12.94	12.00
52.00	5.00	0.00	1.16	7.38	12.91	12.00
54.00	5.00	0.00	1.08	7.56	12.88	12.00
56.00	5.00	0.00	1.01	7.74	12.86	12.00
58.00	5.00	0.00	0.95	7.90	12.84	12.00
60.00	5.00	0.00	0.89	8.05	12.82	12.00
62.00	5.00	0.00	0.84	8.19	12.80	12.00
64.00	5.00	0.00	0.79	8.33	12.78	12.00
66.00	5.00	0.00	0.75	8.45	12.76	12.00
68.00	5.00	0.00	0.71	8.57	12.74	12.00
70.00	5.00	0.00	0.67	8.69	12.73	12.00
72.00	5.00	0.00	0.64	8.80	12.71	12.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	2.88	24.02	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
onsite	13.53	24.02	12.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
onsite	13.81	0.00	8.79	0.00	5.02	0.00

Project Name: Mill Creek
Reviewer: BMU
Project Number:
  Period Begin: Jun 01, 2024;0000 hr End: Jun 04, 2024;0000 hr Duration: 72 hr
  Time Step: 0.016 hr, Iterations: 10

Basin 1: onsite

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 10 year
  3 Day Rainfall: 9 inches
  Area: 61.76 acres
  Ground Storage: 2.87 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 12 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
12.00	0.00
12.50	3.47
13.00	7.09
14.00	14.76
15.00	23.01
16.00	33.10
17.00	52.52

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	12.00
360.00	12.00

Structure: 1

  From Basin: onsite
  To Basin: Offsite1
  Structure Type: Gravity
    Weir: None
    Bleeder: Inv-Tri, Invert Elev = 12 ft NGVD, Height = 1.06 ft
      Width = 1.25 ft
      Default Coefs: Weir Coef = 2.5, Orifice Coef = 0.6
    Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	12.00	12.00
2.00	0.08	0.00	0.00	0.00	12.00	12.00
4.00	0.16	0.00	0.00	0.00	12.00	12.00
6.00	0.24	0.00	0.00	0.00	12.00	12.00
8.00	0.32	0.00	0.00	0.00	12.00	12.00
10.00	0.40	0.00	0.00	0.00	12.00	12.00
12.00	0.48	0.00	0.00	0.00	12.00	12.00
14.00	0.56	0.00	0.00	0.00	12.00	12.00
16.00	0.64	0.09	0.00	0.00	12.00	12.00
18.00	0.73	0.21	0.00	0.00	12.00	12.00
20.00	0.81	0.33	0.00	0.00	12.01	12.00
22.00	0.89	0.44	0.00	0.00	12.02	12.00
24.00	0.97	0.54	0.00	0.00	12.03	12.00
26.00	1.08	0.97	0.00	0.00	12.05	12.00
28.00	1.20	1.15	0.00	0.00	12.08	12.00
30.00	1.32	1.31	0.01	0.00	12.11	12.00
32.00	1.44	1.46	0.01	0.00	12.14	12.00
34.00	1.55	1.59	0.02	0.00	12.17	12.00
36.00	1.67	1.72	0.03	0.01	12.21	12.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
38.00	1.79	1.83	0.05	0.02	12.26	12.00
40.00	1.91	1.93	0.07	0.03	12.30	12.00
42.00	2.02	2.02	0.10	0.04	12.34	12.00
44.00	2.14	2.11	0.14	0.06	12.39	12.00
46.00	2.26	2.19	0.19	0.09	12.44	12.00
48.00	2.38	2.26	0.24	0.12	12.49	12.00
50.00	2.51	2.63	0.31	0.17	12.54	12.00
52.00	2.68	3.61	0.41	0.23	12.60	12.00
54.00	2.93	5.93	0.60	0.31	12.70	12.00
56.00	3.28	8.64	0.97	0.43	12.85	12.00
58.00	3.79	13.21	1.70	0.65	13.06	12.00
60.00	6.72	163.42	3.44	1.04	13.87	12.00
62.00	7.79	23.07	4.91	1.78	15.08	12.00
64.00	8.21	11.69	5.07	2.61	15.24	12.00
66.00	8.44	6.97	5.12	3.45	15.29	12.00
68.00	8.68	6.91	5.15	4.30	15.32	12.00
70.00	8.84	4.66	5.15	5.15	15.32	12.00
72.00	9.00	4.63	5.14	6.00	15.31	12.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	5.16	68.72	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
onsite	15.32	68.72	12.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
onsite	32.15	0.00	6.00	0.00	26.15	0.00

Project Name: Mill Creek
Reviewer: BMU
Project Number:
  Period Begin: Jun 01, 2024;0000 hr End: Jun 04, 2024;0000 hr Duration: 72 hr
  Time Step: 0.016 hr, Iterations: 10

Basin 1: onsite

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 100 year
  3 Day Rainfall: 12 inches
  Area: 61.76 acres
  Ground Storage: 2.87 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 12 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
12.00	0.00
12.50	3.47
13.00	7.09
14.00	14.76
15.00	23.01
16.00	33.10
17.00	52.52

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	12.00
360.00	12.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
onsite	16.70	72.00	12.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
onsite	46.72	0.00	0.00	0.00	46.72	0.00

Thomas Engineering Group
840 SE Osceola Street
Stuart, FL 34994
P: (772) 888-3138
www.ThomasEngineeringGroup.com

SURFACE WATER MANAGEMENT REPORT

Conceptual Overall Report

Mill Creek

St Lucie County, Florida

PREPARED BY

THOMAS ENGINEERING GROUP

8-2024

All elevations for this project were based on NAVD

Brandon Ulmer, PE

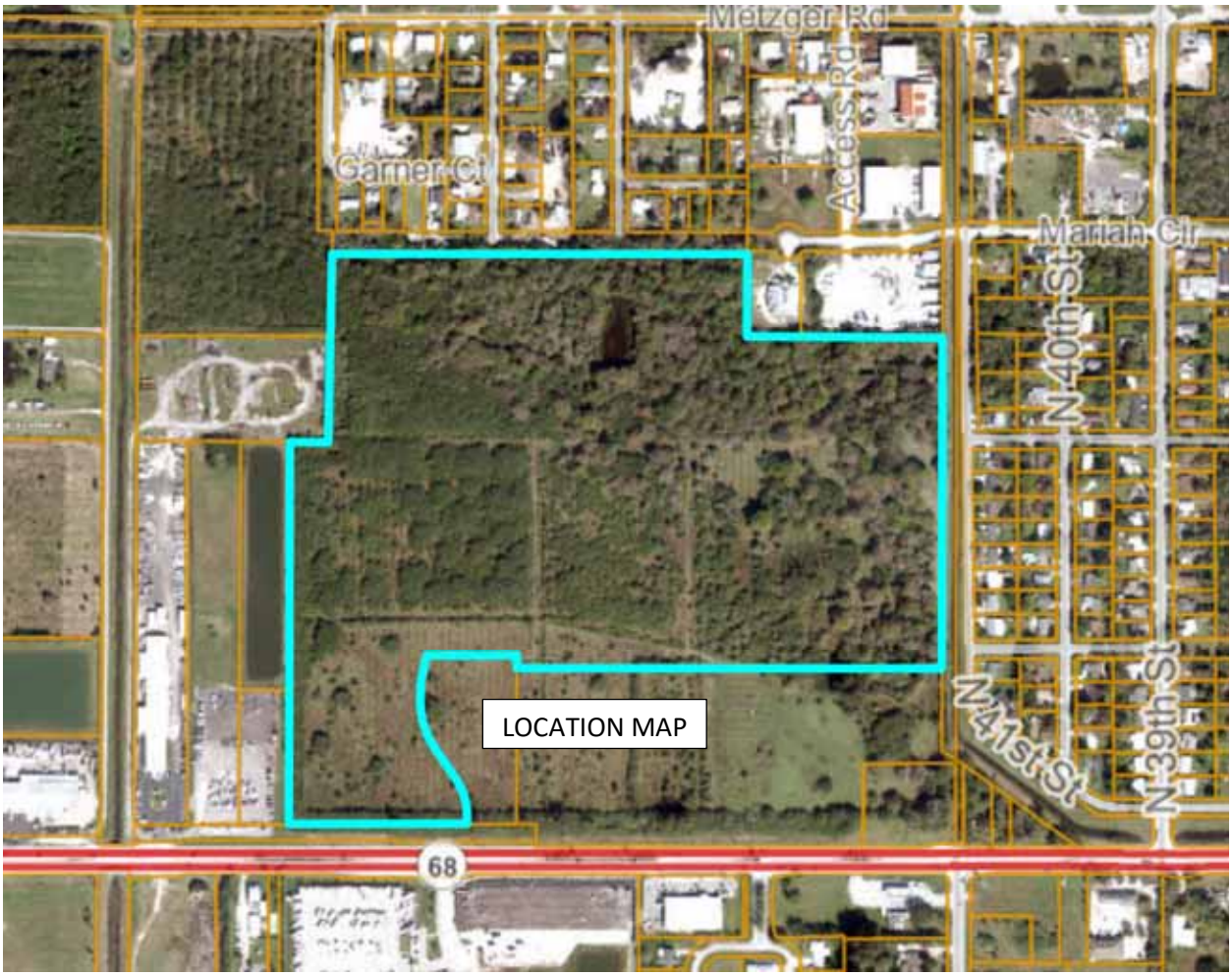
FL PE # 68345

CA #27528

Thomas Engineering Group
840 SE Osceola Street
Stuart, FL 34994
P: (772) 888-3138
www.ThomasEngineeringGroup.com

Introduction:

The proposed site is in City of Fort Pierce within St Lucie County. The site is located on the north side of orange avenue approximately 1.2miles east of I-95. The site is vacant and consists of one parcel 2407-124-0001-000-3 totaling approximately 61.76 acres as seen below.



Background:

The existing site is currently undeveloped and appears to have been used for agricultural use in the past. The site is currently drains to the NSLWCD canal #3 along the east side of the project through a series of onsite ditches.
The site is in flood zone X per FEMA 12111C0178J

THOMAS ENGINEERING GROUP

Thomas Engineering Group
840 SE Osceola Street
Stuart, FL 34994
P: (772) 888-3138
www.ThomasEngineeringGroup.com

Proposed Design:

The proposed project will require the design, permitting and construction of a stormwater management system for the development. The system will generally consist of Interconnected lakes that will discharge through control structures to the existing outfall canal along east property line. The project will be one drainage basin. Summary of the project is shown below:

Proposed Project Summary is in chart below:

BASIN SUMMARY

BASIN	BUILDING AREA (acres)	WATER SURFACE AREA (acres)	IMPERVIOUS AREA (acres)	PERVIOUS AREA (acres)	TOTAL AREA (area)
BASIN 1					
BASIN 3					
TOTAL	15.94	6.80	17.35	21.67	61.76
% BASIN	26%	11%	28%	35%	100%
TOTAL	15.94	6.80	17.35	21.67	61.76

Minimum road elevation = 16.00'NAVD
Minimum Finish Floor elevation = 17.50'NAVD
Minimum Berm Elevation = 15.50'NAVD
Water table used for Design = 12.00'NAVD

Allowable Discharge:

The allowable discharge rate for this project will be limited to 2" per 24hr period see below for Peak allowable

ALLOWABLE PEAK DISCHARGE RATE FOR 10-YR, 72-HR STORM

BASIN	BASIN AREA (acres)	ALLOWABLE PEAK DISCHARGE RATE (cfs)	Proposed
BASIN 3	61.76	5.19	
TOTAL	61.76	5.19	5.16

Proposed Water Quality:

THOMAS
ENGINEERING GROUP

Thomas Engineering Group
840 SE Osceola Street
Stuart, FL 34994
P: (772) 888-3138
www.ThomasEngineeringGroup.com

Water quality for the overall site has been developed and is included on page 24, total water quality has been determined based on the attached calculations to be the 1" over the site Plus the 50% impaired basin criteria. Total Water quality is 1.5" over the drainage basin area of 61.76 acres for a total water quality of 7.72 ac-ft, elevations for water quality is listed in the attached water quality calculations.

We are anticipating the project to be building in three phases, with the majority of the stormwater infrastructure to support the project being installed in Phase I.

Nutrient loading has been included as part of the current requirements; we are showing an overall reduction in nutrient loading. The nutrient loading has been provided for in the onsite lake system.

Prepared by:

Brandon Ulmer, PE

FL PE #68345

LAND USE AND STAGE STORAGE CALCULATIONS

Project Name:
Basin / Node Name: CONCEPTUAL LANDUSE

10 year 3 day 9" 16.00
100 year 3 day 12"
5 year - 1 day 5"

SUMMARY

Total Area =	**61.76**	**AC**	61.76		**Discharge 2" over the site for 24hrs max**		Soil storage	Over Pervious area
DCIA =	**0**	**%**			2690093.83	**SF**		
Time of Concentration =	**15.00**	**MINUTES**			448348.97	CF		
Control Elevation =	**12**	**FEET NAVD**		Allowable	**5.19**	**CFS**	8.18	2.87

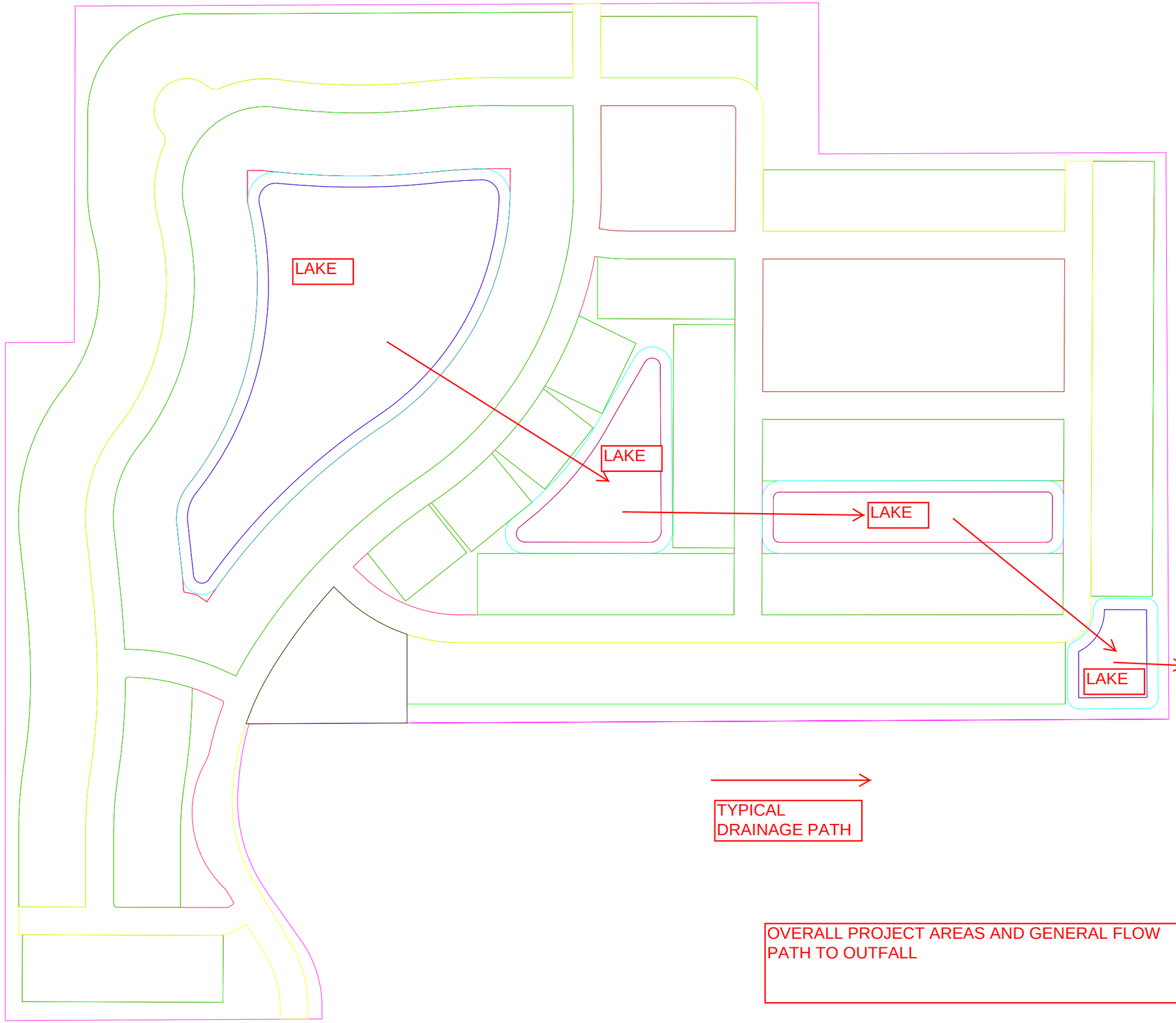
LAND USE BREAKDOWN & CURVE NUMBER CALCULATION

	R/W(Road)			Rec Area	Park Site	residential TH	Buffer	Residential	Open Space	Lake	Lake Slope		Total Area	Curve Number	CN*Area%
Total Areas (Ac.)	11.14	0.00	0.00	1.06	0.48	18.18	3.68	15.57	2.53	6.80	2.32		61.76	--	--
Bldg. Area (Ac.)			0.00	0.11		8.36	0.00	7.47	0.00	0.00	0.00	0.00	15.94	--	--
Water Surface Area (Ac.)			0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.80	0.00	0.00	6.80	--	--
Impervious Area (Ac.)	8.91	0.00		0.42	0.10	4.36	0.00	3.43	0.13	0.00	0.00	0.00	17.35	--	--
Developed Perv. Area - Good Cond. (Ac.)	2.23		0.00	0.53	0.38	5.45	0.00	4.67	2.40	0.00	2.32	0.00	17.99	--	--
				0.00	0.00	0.00	3.68	0.00	0.00	0.00	0.00	0.00	3.68	--	--
Bldg. Area%	0%	0%	0%	10%	0%	46%	0%	48%	0%	0%	0%	#DIV/0!	26%	98	25.3
Water Area %	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	0%	#DIV/0!	11%	100	11.0
Impervious Area %	80%	100%	0%	40%	20%	24%	0%	22%	5%	0%	0%	#DIV/0!	28%	98	27.5
Developed Perv. Area - Good Cond. %	20%	0%	100%	50%	80%	30%	0%	30%	95%	0%	100%	#DIV/0!	29%	75	21.8
	0%	0%	0%	0%	0%	0%	100%	0%	0%	0%	0%	#DIV/0!	6%	77	4.6
														Composite CN =	**90.2**

STAGE STORAGE CALULATION

Computation Type Stage-Storage
Starting Stage = 12.00
Ending Stage = 17.00
Stage Increment = 0.50

Name	**R/W(Road)**	**0.00**	**0.00**	**Rec Area**	**Park Site**	**residential TH**	**Buffer**	**Residential**	**Open Space**	**Lake**	**Lake Slope**	**0.00**		
Area	11.14	0.00	0.00	0.96	0.48	9.82	3.68	8.10	2.53	6.80	2.32	0.00		
Start Elev	16.00			16.00	16.00	17.00	16.00	17.00	15.00	12.00	12.00			
End Elev	17.00			18.00	18.00	19.00	17.00	19.00	16.00		16.00			
Stage	Linear	Vert	Vert	Linear	Linear	Linear	Linear	Linear	Linear	Vert	Linear	Vert	Total	
Feet	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	Storage	
NAVD	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	Ac-ft	
12.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.00
12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.40	0.07	0.00	3.47	12.50
13.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.80	0.29	0.00	7.09	13.00
13.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.20	0.65	0.00	10.85	13.50
14.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.60	1.16	0.00	14.76	14.00
14.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.00	1.81	0.00	18.81	14.50
15.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.40	2.61	0.00	23.01	15.00
15.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.32	23.80	3.55	0.00	27.67	15.50
16.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	27.20	4.64	0.00	33.10	16.00
16.50	1.39	0.00	0.00	0.06	0.03	0.00	0.46	0.00	2.53	30.60	5.80	0.00	40.87	16.50
17.00	5.57	0.00	0.00	0.24	0.12	0.00	1.84	0.00	3.80	34.00	6.96	0.00	52.52	17.00



1 Entities: AREA-BNDY
2,690,282.73 SF
61.760 Acres
10,690.47 Linear Feet

15 Entities: AREA-LOTS-TH
791,800.14 SF
18.177 Acres
16,470.03 Linear Feet

5 Entities: AREA-LOTS
678,309.09 SF
15.572 Acres
10,039.78 Linear Feet

7 Entities: AREA-ROW
485,281.79 SF
11.141 Acres
7,737.26 Linear Feet

8 Entities: AREA-LME
101,007.73 SF
2.319 Acres
5,301.71 Linear Feet

4 Entities: AREA-LAKES
296,212.52 SF
6.800 Acres
4,799.06 Linear Feet

OVERALL PROJECT AREAS AND GENERAL FLOW PATH TO OUTFALL

WATER QUALITY CALCULATIONS
Mill Creek
VERSION 1 **8/22/2024**

WATER QUALITY CALCULATIONS

BASIN 3 AREA =	61.76	AC	
WATER SURFACE (LAKE) AREA =	6.80	AC	
BUILDING (ROOF) AREA =	15.94	AC	
TOTAL PERVIOUS AREA =	21.67	AC	
SITE AREA FOR WATER QUALITY (SFWMD) =	39.01	AC	BASIN AREA - (LAKE + ROOF)
IMPERVIOUS AREA FOR WQ (SFWMD) =	17.35	AC	BASIN AREA - (LAKE + ROOF) - PERVIOUS
% IMPERVIOUS FOR WQ CALC (SFWMD) =	44%		IMPERVIOUS AREA FOR WQ / BASIN AREA

TREATMENT VOLUME

1" OVER ENTIRE SITE =	5.15	AC-FT	
2.5" X % IMPERVIOUS =	1.11	IN	2.5" x % IMPERVIOUS FOR WQ CALCS
VOLUME TO BE TREATED =	5.09	AC-FT	(2.5" x % IMPERVIOUS FOR WQ CALCS) X (TOTAL SITE - LAKES)
STANDARD REQUIRED WET DETENTION VOL =	5.15	AC-FT	
ADDITIONAL 50% WET DET. VOL. =	2.57	AC-FT	
REQUIRED WET DET. VOL. =	**7.72**	AC-FT	(extra 50% Det. Vol. required b/c project discharges to an imparired water body)

STAGE STORAGE IN BASIN 1 LAKES:

FT NAVD	AC-FT
12.00	0.00
12.50	3.47
13.00	7.09
13.50	10.85
14.00	14.76

INTERPOLATION:

ELEV. #1 =	13.00	FT NAVD
ELEV. #2 =	13.50	FT NAVD
STORAGE #1 =	7.09	AC-FT
STORAGE #2 =	10.85	AC-FT
TARGET STORAGE =	7.72	AC-FT
MIN. REQUIRED WQ ELEV =	**13.08**	**FT NAVD**
CONTROL ELEV =	**12.00**	**FT NAVD**

Nutrient Loading Analysis

(Estimated based on Dr. Harper's methodology (Pre-Post loading Criteria) from "Evaluation of Current Stormwater Design Criteria within the State of Florida" - June 2007)

Annual Runoff Volume (ac-ft/yr) = Area (ac) x Rainfall (inches/year) x 1/12 inches x Runoff Coefficient

Nutrient Loading (kg/yr) = Runoff Volume (ac-ft/yr) x 43560 ft^2/ac. x 7.48 gal/ft^3 x 3.785 liter/gal x Mean Concentration (mg/l)/ 10^6

Annual Rainfall value used is from Appendix A.3

Event Mean Concentrations have been used from Table 4-17

Mean Runoff Coefficients have been used from Table 4-24 - Cluster 2, Hydrologic Soil Group D

Pre-Development Conditions

Landuse	Area (AC)	Runoff C	Rainfall (INCHES/YR)	Annual Runoff (AC-FT/YR)	Nitrogen Concentration (mg/l)	Nitrogen (KG/YR)	Phosphorus Concentration (mg/l)	Phosphorus (KG/YR)
Pasture	61.67	0.128	54.5	35.85	3.47	153.42	0.616	27.24
Totals =	**61.67**			**35.85**		**153.42**		**27.24**

Post-Development Conditions

Landuse	Area (AC)	Runoff C	Rainfall (INCHES/YR)	Annual Runoff (AC-FT/YR)	Nitrogen Concentration (mg/l)	Nitrogen (KG/YR)	Phosphorus Concentration (mg/l)	Phosphorus (KG/YR)
Residential	54.87	0.262	54.5	65.29	2.07	166.68	0.327	26.33
Lake	6.80				0.00		0	
Totals =	**61.67**			**65.29**		**166.68**		**26.33**

		(N)	(P)
Required Removal Efficiency (%)			
= (1- Pre-Loading/Post-Loading) x100	**Required Removal for N and P =**	**7.95%**	**-3.44%**

See separate nutrient loading calculations for the required removal of Nitrogen

Summary Treatment Report Version: 5.3.2

Project: Lake providing 6.8 ac-ft of storage

Analysis Type: Specified Removal Efficiency

Date:8/27/2024

BMP Types:

Catchment 1 - (site) Wet Detention

Catchment 2 - (Catchment 0) None

Based on % removal values to the nearest percent

Routing Summary
Catchment 1 Routed to Outlet
Catchment 2 Routed to Outlet

Total nitrogen target removal met? **Yes**
Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge

Total N pre load	kg/yr	
Total N post load	613.58 kg/yr	
Target N load reduction	10 %	
Target N discharge load	552.23 kg/yr	
Percent N load reduction	18 %	
Provided N discharge load	502.85 kg/yr	1108.79 lb/yr
Provided N load removed	110.73 kg/yr	244.17 lb/yr

Phosphorus

Surface Water Discharge

Total P pre load	kg/yr	
Total P post load	96.929 kg/yr	
Target P load reduction	%	
Target P discharge load	96.929 kg/yr	
Percent P load reduction	31 %	
Provided P discharge load	67.184 kg/yr	148.14 lb/yr
Provided P load removed	29.745 kg/yr	65.587 lb/yr

nutrient removal for 1' of storage in the lake system, the system only needs to provide for an additional 7.95% as shown on page 7 of this report.

Project Name: Mill Creek
Reviewer: BMU
Project Number:
  Period Begin: Jun 01, 2024;0000 hr End: Jun 04, 2024;0000 hr Duration: 72 hr
  Time Step: 0.016 hr, Iterations: 10

Basin 1: onsite

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 24 hr
  Design Frequency: 5 year
  1 Day Rainfall: 5 inches
  Area: 61.76 acres
  Ground Storage: 2.87 inches
  Time of Concentration: 0.25 hours
  Initial Stage: 12 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
12.00	0.00
12.50	3.47
13.00	7.09
14.00	14.76
15.00	23.01
16.00	33.10
17.00	52.52

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	12.00
360.00	12.00

Structure: 1

  From Basin: onsite
  To Basin: Offsite1
  Structure Type: Gravity
    Weir: None
    Bleeder: Inv-Tri, Invert Elev = 12 ft NGVD, Height = 1.06 ft
      Width = 1.25 ft
      Default Coefs: Weir Coef = 2.5, Orifice Coef = 0.6
    Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	12.00	12.00
2.00	0.10	0.00	0.00	0.00	12.00	12.00
4.00	0.23	0.00	0.00	0.00	12.00	12.00
6.00	0.42	0.00	0.00	0.00	12.00	12.00
8.00	0.68	0.47	0.00	0.00	12.00	12.00
10.00	1.07	3.33	0.00	0.00	12.04	12.00
12.00	3.28	121.52	0.42	0.01	12.61	12.00
14.00	4.09	11.86	2.45	0.32	13.30	12.00
16.00	4.40	7.61	2.70	0.75	13.42	12.00
18.00	4.58	4.62	2.78	1.20	13.47	12.00
20.00	4.76	4.67	2.86	1.67	13.51	12.00
22.00	4.88	3.14	2.87	2.14	13.52	12.00
24.00	5.00	3.15	2.88	2.62	13.53	12.00
26.00	5.00	0.00	2.79	3.09	13.47	12.00
28.00	5.00	0.00	2.68	3.54	13.42	12.00
30.00	5.00	0.00	2.57	3.97	13.36	12.00
32.00	5.00	0.00	2.46	4.39	13.30	12.00
34.00	5.00	0.00	2.35	4.79	13.25	12.00
36.00	5.00	0.00	2.24	5.17	13.20	12.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
38.00	5.00	0.00	2.13	5.53	13.16	12.00
40.00	5.00	0.00	2.02	5.87	13.11	12.00
42.00	5.00	0.00	1.91	6.19	13.07	12.00
44.00	5.00	0.00	1.60	6.48	13.03	12.00
46.00	5.00	0.00	1.47	6.73	13.00	12.00
48.00	5.00	0.00	1.36	6.96	12.97	12.00
50.00	5.00	0.00	1.25	7.18	12.94	12.00
52.00	5.00	0.00	1.16	7.38	12.91	12.00
54.00	5.00	0.00	1.08	7.56	12.88	12.00
56.00	5.00	0.00	1.01	7.74	12.86	12.00
58.00	5.00	0.00	0.95	7.90	12.84	12.00
60.00	5.00	0.00	0.89	8.05	12.82	12.00
62.00	5.00	0.00	0.84	8.19	12.80	12.00
64.00	5.00	0.00	0.79	8.33	12.78	12.00
66.00	5.00	0.00	0.75	8.45	12.76	12.00
68.00	5.00	0.00	0.71	8.57	12.74	12.00
70.00	5.00	0.00	0.67	8.69	12.73	12.00
72.00	5.00	0.00	0.64	8.80	12.71	12.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	2.88	24.02	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
onsite	13.53	24.02	12.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
onsite	13.81	0.00	8.79	0.00	5.02	0.00

Project Name: Mill Creek
Reviewer: BMU
Project Number:
  Period Begin: Jun 01, 2024;0000 hr End: Jun 04, 2024;0000 hr Duration: 72 hr
  Time Step: 0.016 hr, Iterations: 10

Basin 1: onsite

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 10 year
  3 Day Rainfall: 9 inches
  Area: 61.76 acres
  Ground Storage: 2.87 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 12 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
12.00	0.00
12.50	3.47
13.00	7.09
14.00	14.76
15.00	23.01
16.00	33.10
17.00	52.52

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	12.00
360.00	12.00

Structure: 1

  From Basin: onsite
  To Basin: Offsite1
  Structure Type: Gravity
    Weir: None
    Bleeder: Inv-Tri, Invert Elev = 12 ft NGVD, Height = 1.06 ft
      Width = 1.25 ft
      Default Coefs: Weir Coef = 2.5, Orifice Coef = 0.6
    Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	12.00	12.00
2.00	0.08	0.00	0.00	0.00	12.00	12.00
4.00	0.16	0.00	0.00	0.00	12.00	12.00
6.00	0.24	0.00	0.00	0.00	12.00	12.00
8.00	0.32	0.00	0.00	0.00	12.00	12.00
10.00	0.40	0.00	0.00	0.00	12.00	12.00
12.00	0.48	0.00	0.00	0.00	12.00	12.00
14.00	0.56	0.00	0.00	0.00	12.00	12.00
16.00	0.64	0.09	0.00	0.00	12.00	12.00
18.00	0.73	0.21	0.00	0.00	12.00	12.00
20.00	0.81	0.33	0.00	0.00	12.01	12.00
22.00	0.89	0.44	0.00	0.00	12.02	12.00
24.00	0.97	0.54	0.00	0.00	12.03	12.00
26.00	1.08	0.97	0.00	0.00	12.05	12.00
28.00	1.20	1.15	0.00	0.00	12.08	12.00
30.00	1.32	1.31	0.01	0.00	12.11	12.00
32.00	1.44	1.46	0.01	0.00	12.14	12.00
34.00	1.55	1.59	0.02	0.00	12.17	12.00
36.00	1.67	1.72	0.03	0.01	12.21	12.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
38.00	1.79	1.83	0.05	0.02	12.26	12.00
40.00	1.91	1.93	0.07	0.03	12.30	12.00
42.00	2.02	2.02	0.10	0.04	12.34	12.00
44.00	2.14	2.11	0.14	0.06	12.39	12.00
46.00	2.26	2.19	0.19	0.09	12.44	12.00
48.00	2.38	2.26	0.24	0.12	12.49	12.00
50.00	2.51	2.63	0.31	0.17	12.54	12.00
52.00	2.68	3.61	0.41	0.23	12.60	12.00
54.00	2.93	5.93	0.60	0.31	12.70	12.00
56.00	3.28	8.64	0.97	0.43	12.85	12.00
58.00	3.79	13.21	1.70	0.65	13.06	12.00
60.00	6.72	163.42	3.44	1.04	13.87	12.00
62.00	7.79	23.07	4.91	1.78	15.08	12.00
64.00	8.21	11.69	5.07	2.61	15.24	12.00
66.00	8.44	6.97	5.12	3.45	15.29	12.00
68.00	8.68	6.91	5.15	4.30	15.32	12.00
70.00	8.84	4.66	5.15	5.15	15.32	12.00
72.00	9.00	4.63	5.14	6.00	15.31	12.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	5.16	68.72	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
onsite	15.32	68.72	12.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
onsite	32.15	0.00	6.00	0.00	26.15	0.00

Project Name: Mill Creek
Reviewer: BMU
Project Number:
  Period Begin: Jun 01, 2024;0000 hr End: Jun 04, 2024;0000 hr Duration: 72 hr
  Time Step: 0.016 hr, Iterations: 10

Basin 1: onsite

  Method: Santa Barbara Unit Hydrograph
  Rainfall Distribution: SFWMD - 3day
  Design Frequency: 100 year
  3 Day Rainfall: 12 inches
  Area: 61.76 acres
  Ground Storage: 2.87 inches
  Time of Concentration: 0.5 hours
  Initial Stage: 12 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
12.00	0.00
12.50	3.47
13.00	7.09
14.00	14.76
15.00	23.01
16.00	33.10
17.00	52.52

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	12.00
360.00	12.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
onsite	16.70	72.00	12.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
onsite	46.72	0.00	0.00	0.00	46.72	0.00

EW Consultants, Inc.
Natural Resource Management, Wetland, and Environmental Permitting Services

ENVIRONMENTAL ASSESSMENT

MILLCREEK

FORT PIERCE, FLORIDA

Prepared for:

DreamFinders Homes

Prepared by:

EW Consultants, Inc.

July 2024

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1000 SE Monterey Commons, Suite 208 • Stuart, FL 34996 • 772-287-8771 • Fax 772-287-2988

www.ewconsultants.com

I. INTRODUCTION -

This Environmental Assessment details and summarizes the various natural and man-made conditions related to the Millcreek project located within the City of Fort Pierce, St. Lucie County, Florida. The subject site, as shown on Figures 1 and 2 in Appendix A, is 63+/- acres, and is located in Section 7, Township 35 South, and Range 40 East.

The site is located west of and adjacent to North 41st Street, south of and adjacent to residential homes, east of and adjacent to Stamm Manufacturing and undeveloped land, and north of and adjacent to Orange Avenue and vacant remnant agricultural land. Figure 3, 2023 Aerial Photograph, in Appendix A is an aerial view of the subject property and immediate surroundings.

II. GENERAL PROPERTY DESCRIPTION –

Based on July, 2024, site visits conducted by staff from EW Consultants, Inc., the project area consists of various types of active cattle pasture, dense stands of the exotic Brazilian pepper tree, wet prairie wetlands, and native upland hardwood forest.

The woodland pasture contains partially cleared lands but still possesses native canopy trees; mainly laurel oak, live oak, and slash pines, with exotic vegetation mixed in, as well. The area of native upland hardwood forest is located in the northeastern portion of the site. Two freshwater wetlands occur on-site; one in the southeastern portion of the unimproved pasture and one in the north-central portion of the project site.

There is a network of unmaintained ditches and furrows throughout the subject property which are the result of the historic citrus grove operation. The entire site is currently used for cattle grazing, including the upland hardwood forest area, thereby negatively impacting native groundcover and understory plants. There is also at least one free-flowing artesian well located within the site boundaries which keep the ditches full of groundwater thus providing the cattle with drinking water and relief from the heat. The unimproved pasture is similar to the improved pasture areas but has more nuisance vegetation dominating the landscape, including Brazilian pepper and Chinese tallow.

Both wetlands on-site are in very poor ecological, essential being remnant features of the historic agricultural operations. They consist of mostly invasive and nuisance plant species.

III. SOIL TYPES –

A Soils Report produced by the United States Department of Agriculture/Natural Resources Conservation Service is provided in Appendix B of this report. Soil types are typical for this region of St. Lucie County. The soil types found on the project site are as follows; (11) Chobee loamy sand, frequently ponded, 0 to 1 percent slopes, (16) Hilolo loamy sand, 0 to 2 percent slopes, (25) Nettles and Oldsmar sands, (31) Pepper and EauGallie sands, (48) Wabasso sand, 0 to 2 percent slopes, (55) Winder loamy sand.

IV. EXISTING LAND COVER TYPES –

The following is a summary of the vegetation cover types found on the Millcreek project site. Land cover and vegetative community classifications were mapped based on the Florida Land Use, Cover and Forms Classification System (FLUCCSS, FDOT). These categories have been mapped based on the recent field reconnaissance, the non-binding wetland determination, hand-held GPS points, and aerial photograph interpretation.

Figure 4 in Appendix A provides a recent aerial view with nomenclature for the various types of land covers which currently exist on-site. The land cover types found on the project include:

Native Upland Habitat – 420 Upland Hardwood Forest – 7.4± Acres

This native upland habitat is located in the northeastern portion of the subject property and possesses a crown canopy with at least a 66 percent dominance by hardwood tree species. This area consists of mature laurel oaks and live oaks with sparse slash pines in the canopy stratum, while also containing a mixture of other native trees such as red bay, dahoon holly, and cabbage palms. It is in moderate to good ecological condition, with no apparent land management activities such as burning or roller-chopping observed. Desirable understory and groundcover plants include wiregrass, saw palmetto, beautyberry, wild coffee, bluestem grasses, gallberry, wax myrtle, and various broomsedge grasses. While there is a minimal amount of exotic vegetation coverage within the native upland habitat area, species such as Brazilian pepper, yellow poinciana, Caesarweed, Java plum and Chinese tallow are scattered throughout.

Non-Native Upland Areas — 211, 212, 213, 422 – 54± Acres

Non-native upland areas cover the majority of the project site. There is a network of remnant agricultural ditches found within all of these areas as well as furrows from the historic citrus operation. The ditches contain torpedo grass (an invasive species), smartweed, pickerelweed, water lettuce, pennywort, and various sedges. Brazilian Pepper (category 422) is a monoculture of the invasive Brazilian pepper tree.

Woodland Pasture (category 213) include forested lands that are used as pastures with evidence of cattle activity. There are scattered native and non-native trees within the woodland pastures such as live oak, slash pine, laurel oak, yellow poinciana, laurel oak, Chinese tallow, Java plum, Brazilian pepper, and cabbage palm. Understory plants are generally sparse and scattered throughout due to a higher concentration of cattle activity within these areas, as well as the shading of the forest floor by the dense canopy cover. Such vegetation includes smutgrass, Bahia grass, beautyberry, Caesarweed, Surinam cherry, sword fern, tropical soda apple, Guinea grass, pink periwinkle, and pokeweed.

Unimproved Pasture (category 212) includes cleared land with major stands of trees and brush where grasses have been allowed to establish. This land cover is found in the central and western portions of the site. The vegetation within this area includes; Brazilian pepper, smutgrass, torpedo grass, various sedges, Chinese tallow, Bahia grass, tropical soda apple, Guinea grass, basket grass, and sparse native oaks and cabbage palms.

Improved Pasture (category 211) is mainly comprised of land which has been cleared, tilled, reseeded with specific grass types for both cattle feed and soil stabilization. This area is found in the southwestern portion of the site and includes, smutgrass, torpedo grass, Bahia grass, basket grass, Bermuda grass, various sedges, centipede grass, tropical soda apple, Guinea grass, Brazilian pepper, and sparse cabbage palms.

Freshwater Wetlands – 643 Wet Prairie – 1.6± Acres

The freshwater wetlands on-site are considered low-quality being remnants of the historic agricultural operation. In addition, current impacts from cattle grazing further degrade these wetlands. The approximate acreage for the wetlands can be seen on Figure 4 in Appendix A, and represent the 2022 non-binding wetland determination issued by the South Florida Water Management District (SFWMD) as shown in Exhibit 1.

The wetlands are comprised primarily of smartweed, flatsedge, pennywort, soft rush, Mexican primrose willow, camphorweed, Brazilian pepper and Chinese tallow.

V. LISTED SPECIES DISCUSSION –

Because of the various native and man-made resources found on the subject property, the site provides potential foraging and nesting habitat for a variety of state and federally listed wildlife species, albeit minimal. In particular, the on-site water resources could provide foraging opportunities for various listed avian species, including a myriad wading birds such as wood stork, roseate spoonbill, sandhill crane and various ibis and herons. No listed wading bird species were observed during the 2024 site visits. No nesting of wading bird species is expected due to the lack of suitable nesting habitat on-site. Non-listed wading birds observed included the cattle egret and white egret.

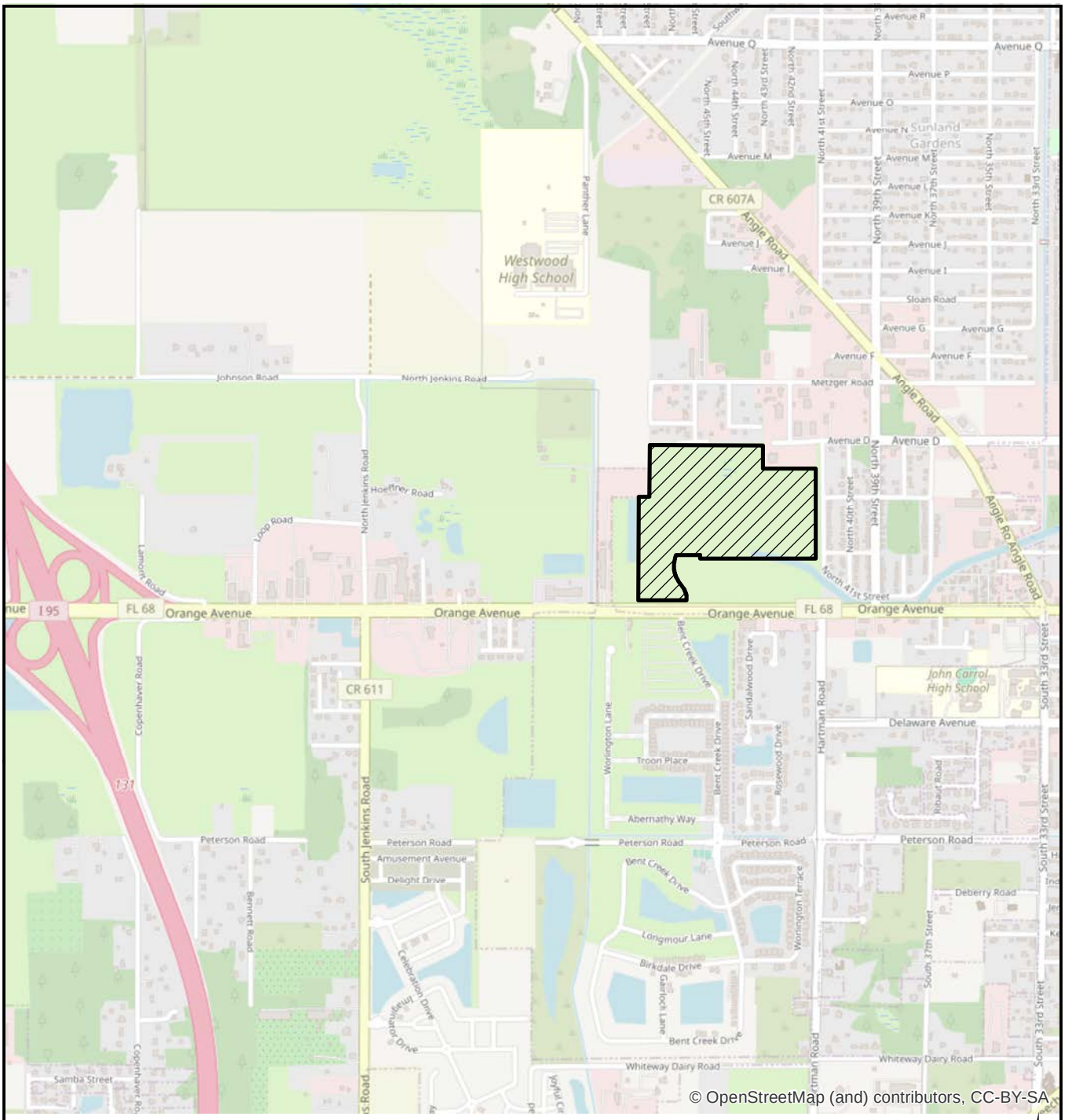
Other protected avian species which may occur on or near the site include the bald eagle. No eagles or eagle nests were observed on-site during the recent site visits. The closest bald eagle nest to the project site is located approximately 1.5 miles to the northwest on the Eagle Bend project site (nest SL011). Figures 5 and 6 in Appendix A provide a database download of recorded eagle nests and wading bird colonies found on state agency websites.

As with most sites in south Florida, sandy uplands, pastures and ditch banks with herbaceous vegetation serve as potential burrowing and foraging habitat for the state-threatened gopher tortoise. During the site visits, several potentially occupied burrows of this species were observed within the project site's native upland area as well as along the trails and ditch banks within the woodland pasture. A systematic gopher tortoise survey will be required within the entire development footprint's upland areas prior to new construction activities. Tortoises in harm's way will have to be relocated to a state-approved receiver site accordingly.

Other wildlife observations included red-bellied woodpecker, blue jay, mocking bird, red-shouldered hawk, black vulture, coyote scat, various rodent species, marsh rabbit, black racer and brown anole.

APPENDIX A

Figure 1: Location Map
Figure 2: USGS Quadrangle Map
Figure 3: 2023 Aerial Photograph
Figure 4: Land Cover Map
Figure 5: Bald Eagle Nest Database Mapping
Figure 6: Wading Bird Colonies Database Mapping



LEGEND

▨ - SITE (63.0+/- AC)

0 2,000 Feet

N

MILLCREEK
LOCATION MAP

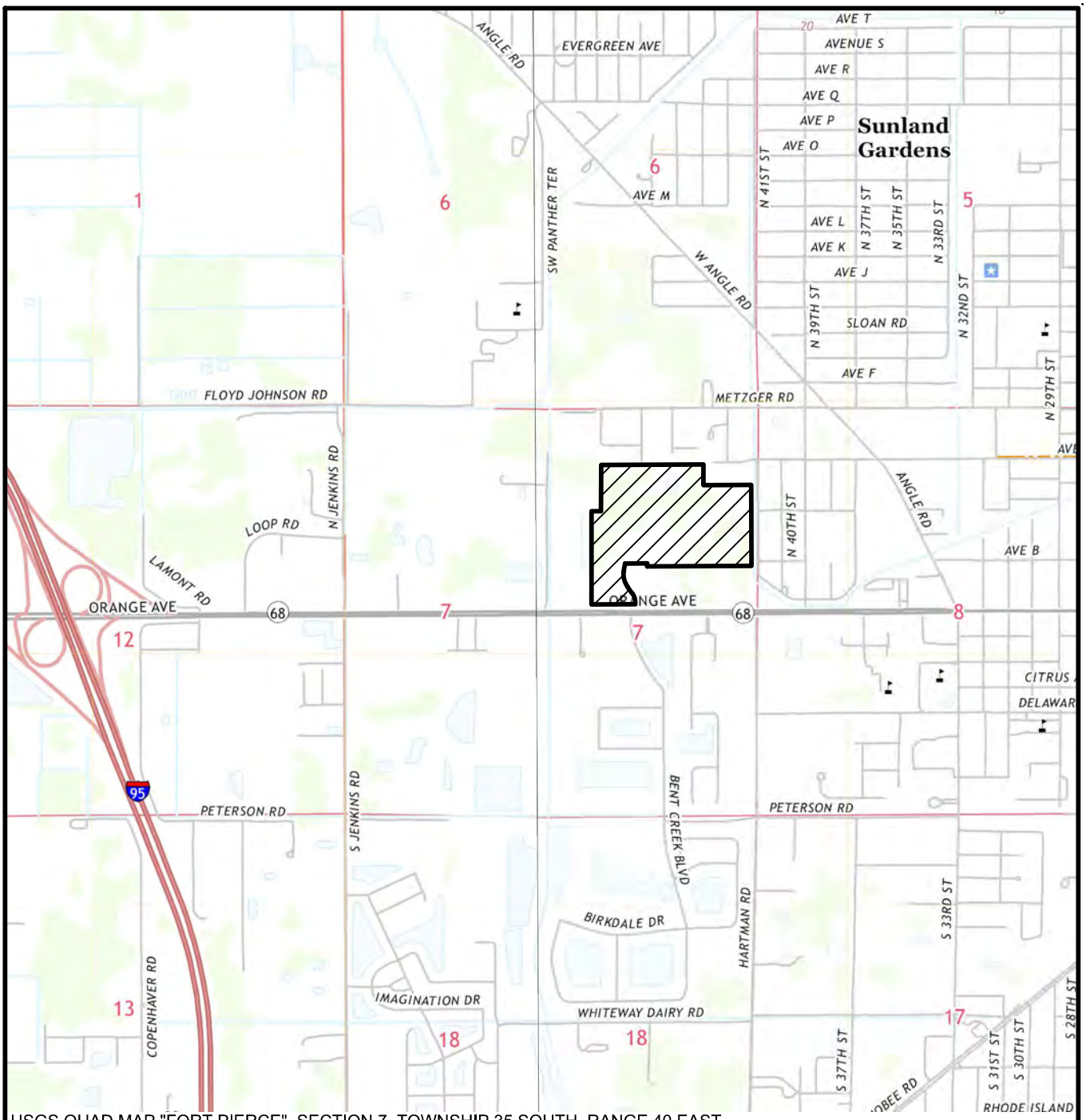
EW Consultants, Inc.

1000 SE Monterey Commons Blvd., Suite 208
Stuart, FL 34996
772-287-8771 Fax 772-287-2988
www.ewconsultants.com

JULY 2024

FIGURE

1



USGS QUAD MAP "FORT PIERCE", SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST,
CITY OF FORT PIERCE, ST LUCIE COUNTY, FLORIDA, LATITUDE 27°27'02" LONGITUDE -80°22'10"

LEGEND

▨ - SITE (63.0± AC)

0 1000

SCALE IN FEET

MILLCREEK

QUAD MAP

EW CONSULTANTS, INC.

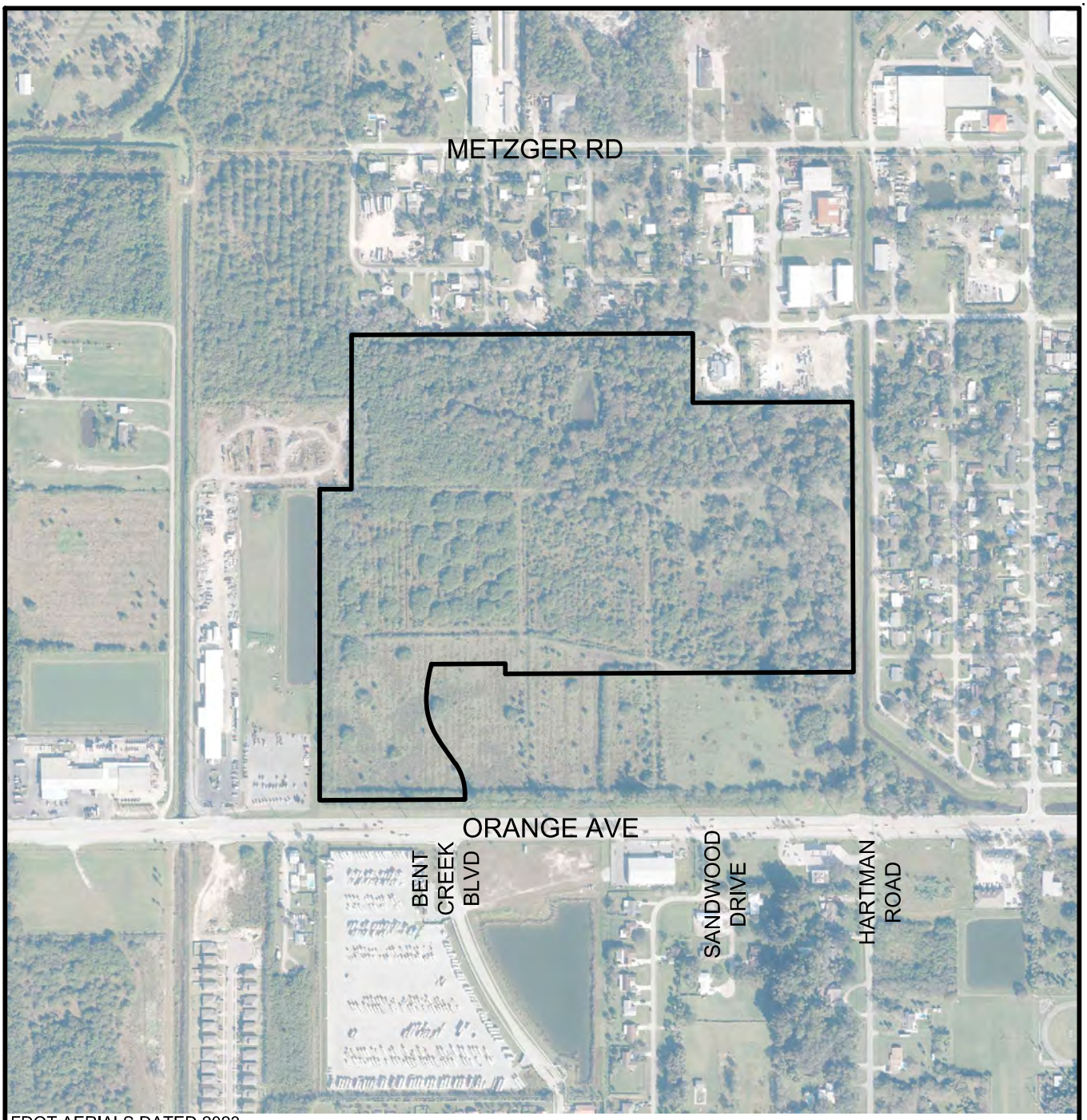
1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 FAX 772-287-2988
WWW.EWCONSULTANTS.COM

JULY 2024

FIGURE

2

Millcreek.dwg QUAD



FDOT AERIALS DATED 2023

0 600
SCALE IN FEET

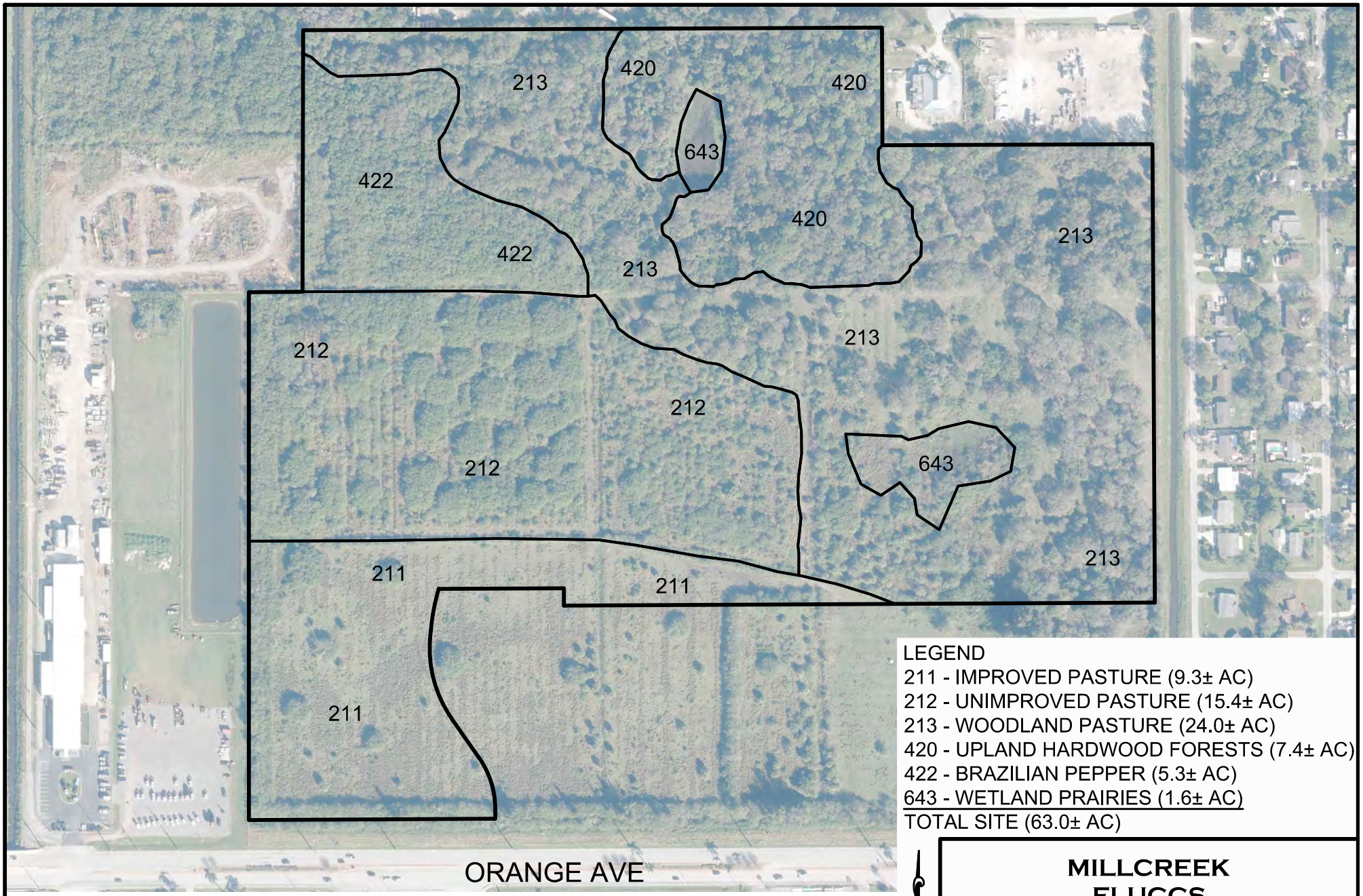
MILLCREEK
AERIAL

EW CONSULTANTS, INC.
1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 FAX 772-287-2988
WWW.EWCONSULTANTS.COM

JULY 2024

FIGURE
3

Millcreek.dwg AERIAL



LEGEND
211 - IMPROVED PASTURE (9.3± AC)
212 - UNIMPROVED PASTURE (15.4± AC)
213 - WOODLAND PASTURE (24.0± AC)
420 - UPLAND HARDWOOD FORESTS (7.4± AC)
422 - BRAZILIAN PEPPER (5.3± AC)
643 - WETLAND PRAIRIES (1.6± AC)
TOTAL SITE (63.0± AC)

FDOT AERIALS DATED 2023

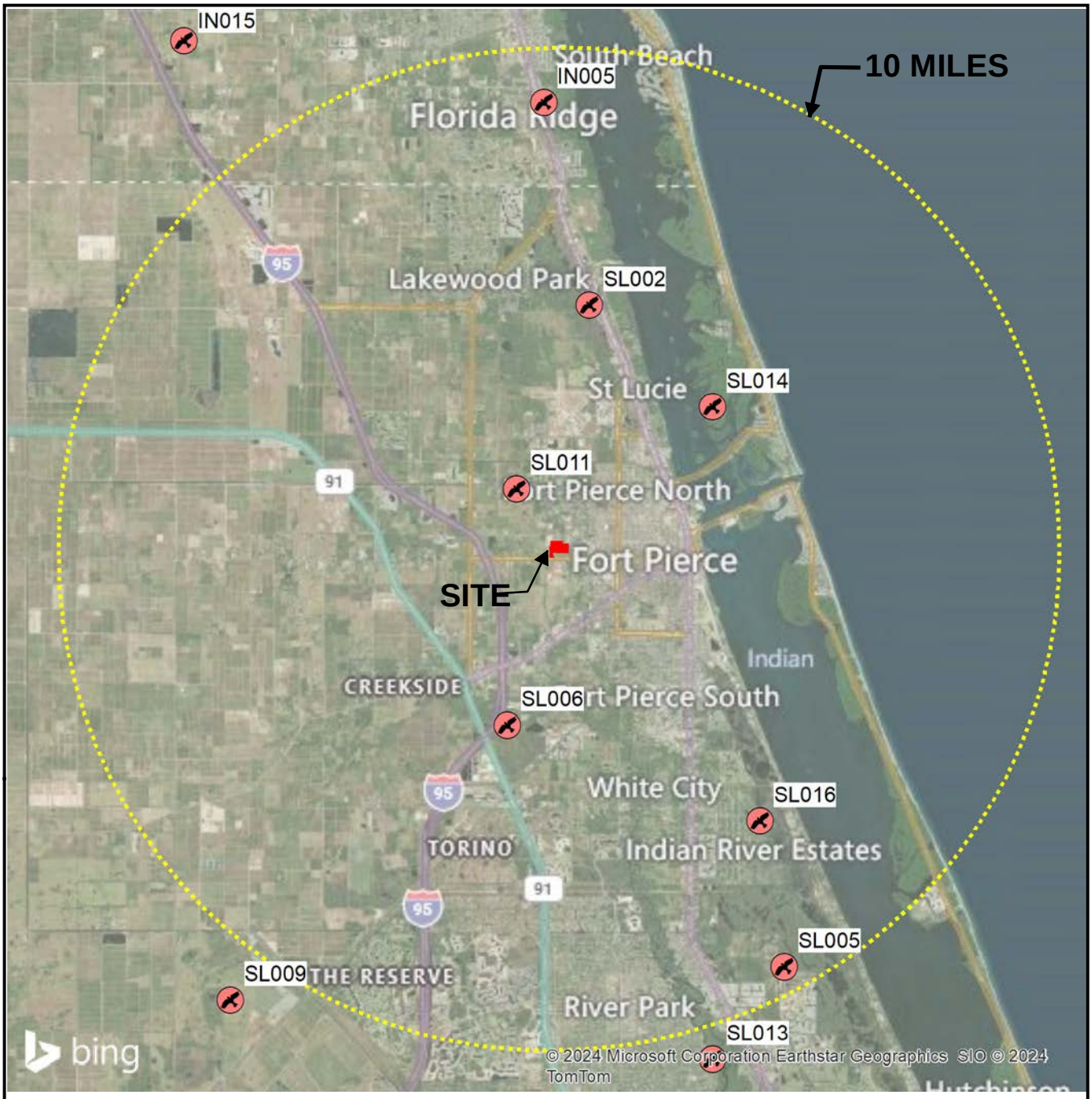
0 300
SCALE IN FEET

MILLCREEK FLUCCS

EW CONSULTANTS, INC.
1000 SE MONTEREY COMMONS BLVD., SUITE 208
STUART, FL 34996
772-287-8771 · FAX 772-287-2988
WWW.EWCONSULTANTS.COM

JULY 2024
FIGURE 4

Millcreek.dwg FLUCCS



LEGEND

FFWCC EAGLE NESTING 2016

0 3 Miles

N

MILLCREEEK EAGLES

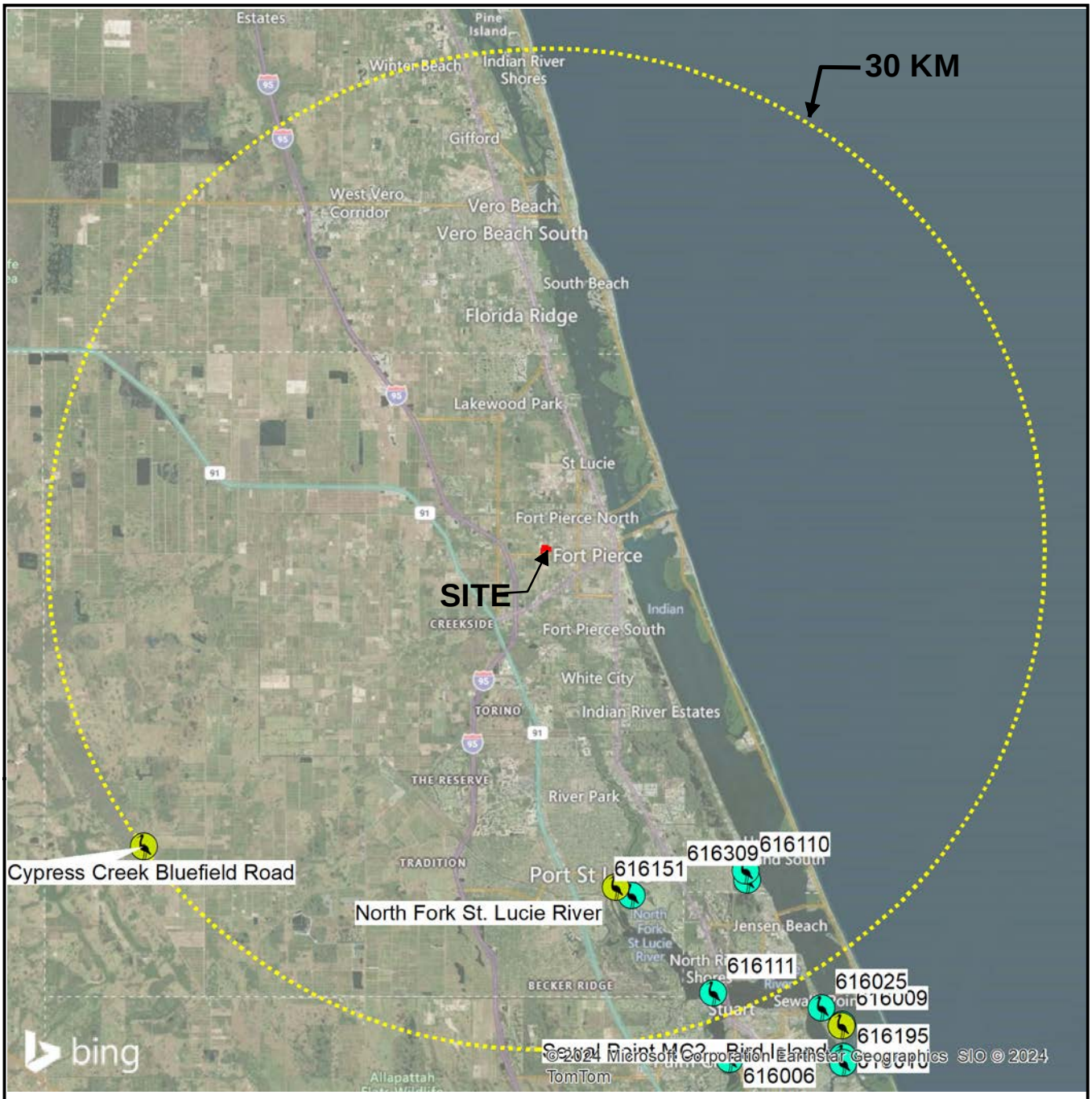
EW CONSULTANTS, INC.

1000 SE Monterey Commons Blvd., Suite 208
Stuart, FL 34996
772-287-8771 Fax 772-287-2988
www.ewconsultants.com

JULY 2024

FIGURE

5



LEGEND

0 7 Miles

- FFWCC WOST COLONIES 2009-2018
- FFWCC 1999 WOODSTORK NESTING COLONIES & WADING BIRD ROOKERY

N

MILLCREEEK
WADING BIRDS

EW CONSULTANTS, INC.

EW Consultants, Inc.

1000 SE Monterey Commons Blvd., Suite 208
Stuart, FL 34996
772-287-8771 Fax 772-287-2988
www.ewconsultants.com

JULY 2024

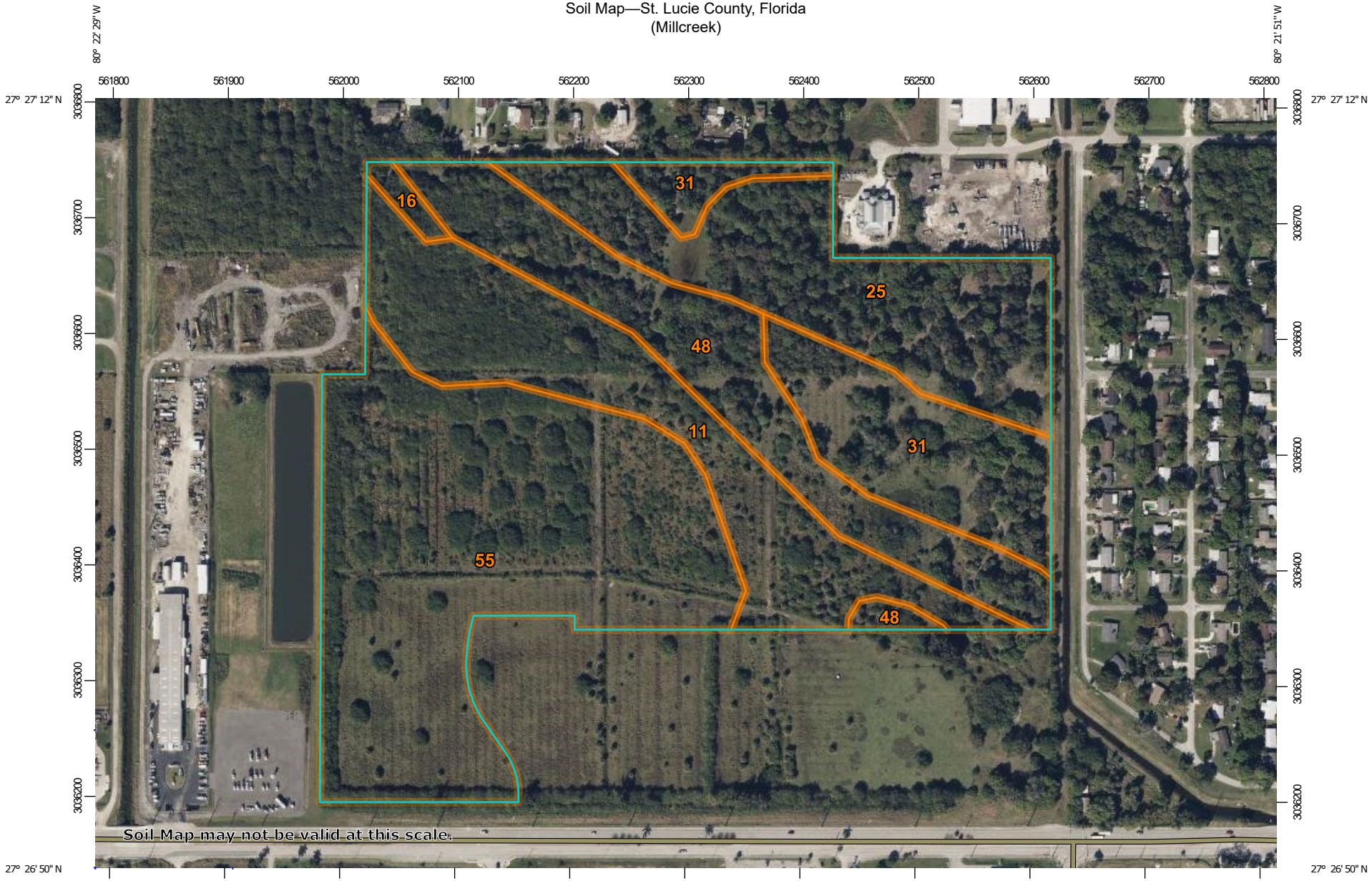
FIGURE

6

APPENDIX B

USDA Soils Report

Soil Map—St. Lucie County, Florida
(Millcreek)



Map Scale: 1:4,700 if printed on A landscape (11" x 8.5") sheet.

N

Meters
0 50 100 200 300

Feet
0 200 400 800 1200

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

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 17, Sep 6, 2023

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
11	Chobee loamy sand, frequently ponded, 0 to 1 percent slopes	11.4	18.1%
16	Hilolo loamy sand, 0 to 2 percent slopes	0.5	0.8%
25	Nettles and Oldsmar sands	11.0	17.5%
31	Pepper and EauGallie sands	7.7	12.1%
48	Wabasso sand, 0 to 2 percent slopes	9.7	15.4%
55	Winder loamy sand	22.8	36.1%
Totals for Area of Interest		**63.0**	**100.0%**

EXHIBIT 1

SFWMD Wetland Determination

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

April 18, 2022

** Delivered via email*

Larry Suchman *
Suchman Real Estate Grp
14411 S Dixie Hwy
Palmetto Bay, FL 33178

Subject: Millcreek
Application No. 220204-32957
Informal Wetland Determination No. 56-106938-P
St Lucie County

Dear Larry Suchman:

The District reviewed your request for an informal determination of the jurisdictional wetland and other surface water boundaries within the subject property, which is located as shown on the attached Exhibit 1. A joint site inspection was conducted on March 24, 2022.

Based on the information provided and the results of the site inspection, jurisdictional wetlands and other surface waters as defined in Chapter 62-340, Florida Administrative Code, exist on the property. Exhibit 2, attached, identifies the boundaries of the property inspected and the approximate landward limits of the wetlands and other surface waters.

This correspondence is an informal jurisdictional wetland determination pursuant to Section 373.421(6), Florida Statutes, and Section 7.3 of Environmental Resource Permit Applicant's Handbook Volume I. It does not bind the District, its agents or employees, nor does it convey any legal rights, expressed or implied. Persons obtaining this informal jurisdictional determination are not entitled to rely upon it for purposes of compliance with provision of law or District rules.

Sincerely,

Laura Layman

Laura Layman
Section Leader

c: Anthony Adams, EDC, Inc *

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website (http://my.sfwmd.gov/ePermitting) and searching under this application number 220204-32957 .

Exhibit No. 1.0_Location Map

Exhibit No. 2.0_Wetland/OSW Boundary Map

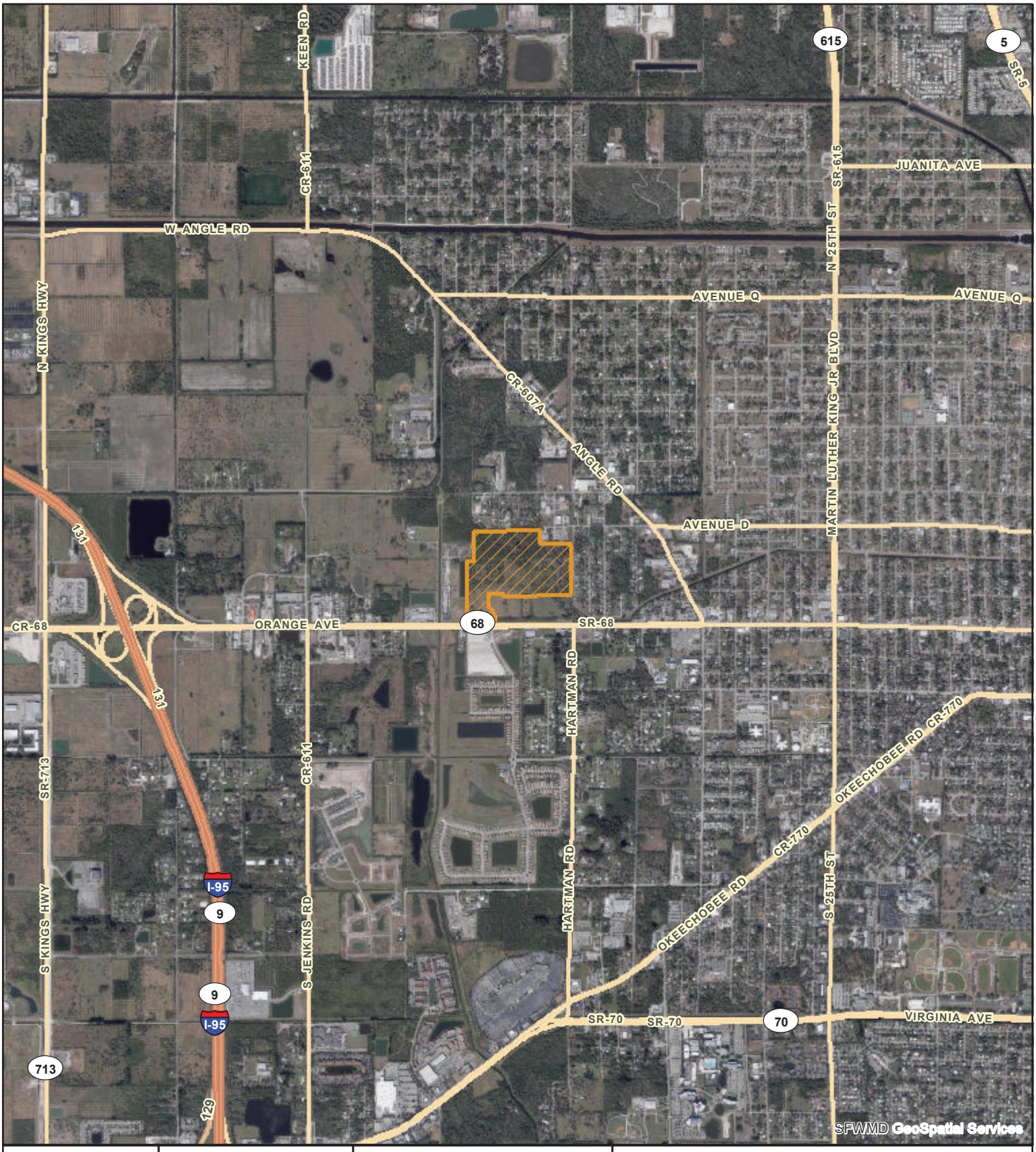


Exhibit No:1.0	Exhibit Created On: 2022-02-21	ST. LUCIE COUNTY, FL

REGULATION DIVISION

Project Name: Millcreek

Application

Application Number: 220204-32957

0 2,450 4,900 Feet

N

sfwmd.gov

Created by IT GIS Section

South Florida Water Management District



ENGINEERS SURVEYORS ENVIRONMENTAL
10250 VILLAGE PARKWAY
SUITE 201
PORT ST. LUCIE, FL 34987
• 772-462-2455
• www.edc-inc.com
F.B.P.E. CERTIFICATE OF AUTHORIZATION 99.35
L.B. CERTIFICATE OF AUTHORIZATION 8098

AAA	DESIGNED BY
AAA	DRAWN BY
21-539 Wetlands	FILENAME
RH 24X36	LAYOUT
AS SHOWN	SCALE
MARCH-2022	DATE

DATE	#	REVISION COMMENTS

21-539 Millcreek 62ac.

Jurisdictional Wetland Map

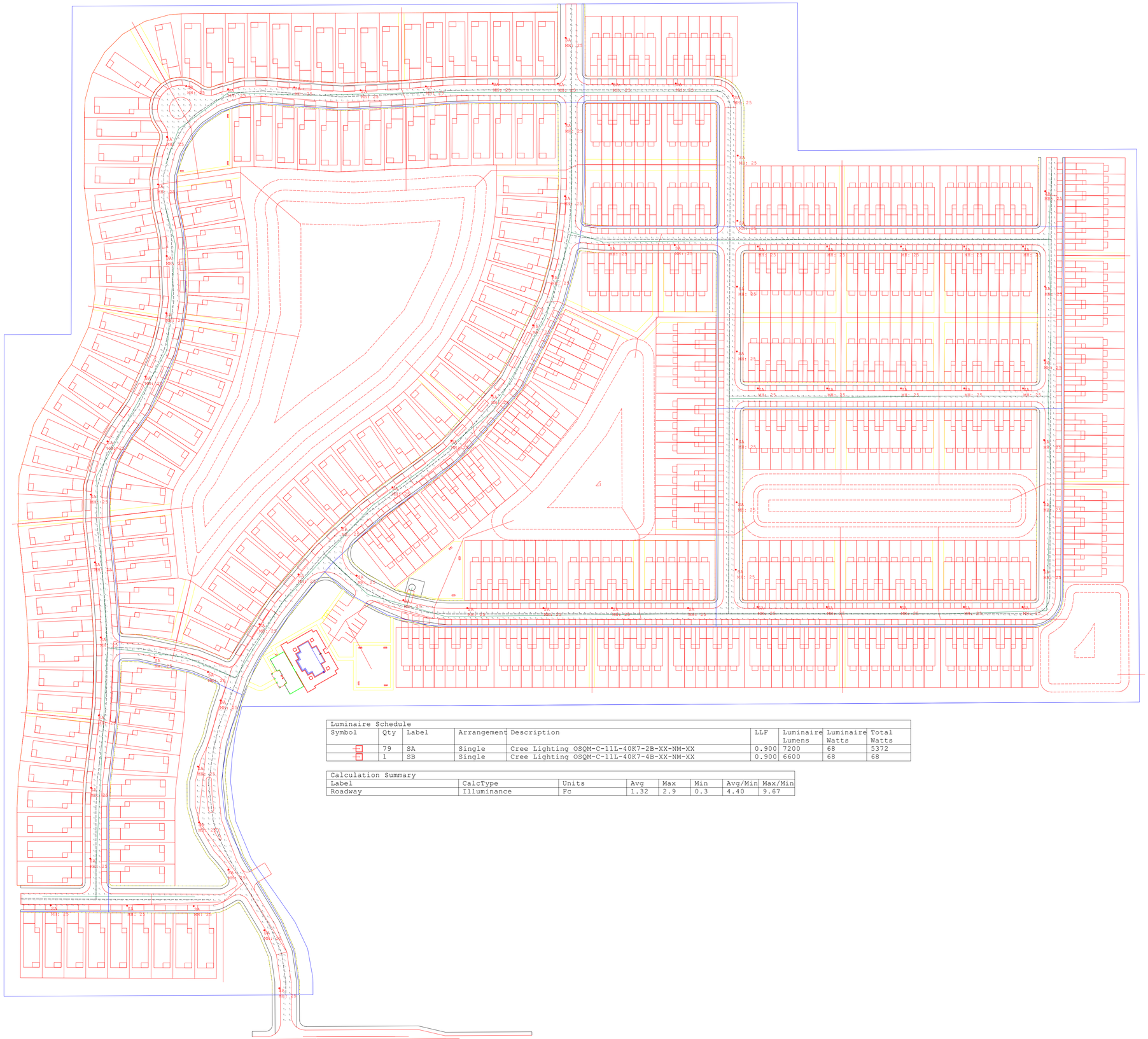
SAINT LUCIE COUNTY FLORIDA

MONTH-YEAR

10250 SW VILLAGE PARKWAY - SUITE 201
PORT SAINT LUCIE, FL 34987
• 772-462-2455

21-539

1 OF 1



Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	79	SA	Single	Cree Lighting OSQM-C-11L-40K7-2B-XX-NM-XX	0.900	7200	68	5372
	1	SB	Single	Cree Lighting OSQM-C-11L-40K7-4B-XX-NM-XX	0.900	6600	68	68

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Roadway	Illuminance	Fc	1.32	2.9	0.3	4.40	9.67

OSQ Series

OSQ™ LED Area/Flood Luminaire featuring Patented NanoComfort™ Technology – Version C

Rev. Date: V3 04/17/2023

Product Description

The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site providing even, quality illumination. Medium is suitable upgrade for HID applications up to 400 Watts. Large is suitable upgrade for HID applications up to 1000 Watts. Extra Large is suitable upgrade for HID applications up to multiple 1000 Watts.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, high-mast and internal roadways

Performance Summary

Utilizes Patented NanoComfort™ Technology

Utilizes Cree TrueWhite® Technology on 5000K Luminaires

Assembled in the USA by Cree Lighting from US and imported parts

Initial Delivered Lumens: 4,000 - 75,000

Efficacy: Up to 171 LPW

CRI: Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)

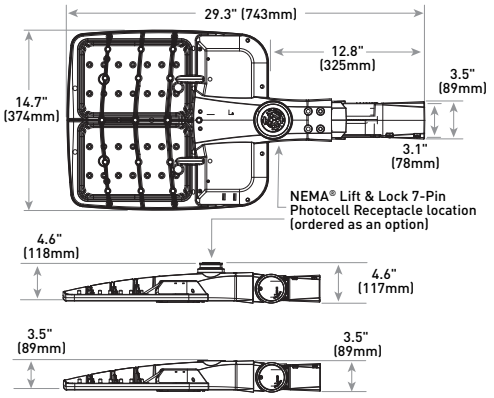
CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty†: 10 years for luminaire; 10 years for Colorfast DeltaGuard® finish; 5 years for BML sensor; up to 5 years for Synapse® accessories; 1 year for luminaire accessories

† See http://creelighting.com/warranty for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

OSQM - AA Mount





Luminaire	Weight
OSQM	19.3 lbs. (8.8kg)

Note: For OSQL, OSQX and additional mounts, refer to drawings beginning on page 26.

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Mount:** OSQ-ML-C-AA-BK + **Luminaire:** OSQM-C-4L-30K7-2M-UL-NM-BK

Mount (Luminaire must be ordered separately)*

OSQ-

Medium/Large Mounts
OSQ-ML-C-AA Adjustable Arm
OSQ-ML-C-DA Direct Arm
OSQ-ML-C-TM Trunnion Mount

Extra Large Mounts
OSQ-X-C-AA Adjustable Arm
OSQ-X-C-DA Direct Arm

Color Options: **SV** Silver, **BZ** Bronze, **BK** Black, **WH** White

* Reference fixture mounting drill pattern, EPA, and pole configuration suitability data beginning on page 14.

Luminaire (Mount must be ordered separately)

OSQ		C								
Family	**Size**	**Series**	**Lumen Package†**	**CCT/ CRI**	**Optic**	**Voltage**	**Mount**	**Color Options**	**Controls***	**Options**
OSQ	**M** Medium **L** Large **X** Extra Large	C	**Medium** **4L** 4,000 Lumens **6L** 6,000 Lumens **9L** 9,000 Lumens **11L** 11,000 Lumens **16L** 16,000 Lumens **Large** **22L** 22,000 Lumens **30L** 30,000 Lumens **40L** 40,000 Lumens **Extra Large** **50L** 50,000 Lumens **65L** 65,000 Lumens **75L** 75,000 Lumens	**30K7** 3000K, 70 CRI **40K7** 4000K, 70 CRI **50K9** 5000K, 90 CRI **57K7** 5700K, 70 CRI	**Asymmetric** **2M** Type II Mid **2B** Type II Mid w/ Factory-Installed Backlight Shield **3M** Type III Mid **3B** Type III Mid w/ Factory-Installed Backlight Shield **4M** Type IV Mid **4B** Type IV Mid w/ Factory-Installed Backlight Shield **AF** Automotive FrontlineOptic™ **AB** Automotive-FrontlineOptic™ w/Factory-Installed Backlight Shield **Symmetric** **5M** Type V Mid **5N** Type V Narrow **33** NEMA® 3x3 **44** NEMA® 4x4 **55** NEMA® 5x5 **66** NEMA® 6x6 **75** NEMA® 7x5	**UL** Universal 120-277V **UH** Universal 347-480V - Not available with 4L, 40L or 75L lumen packages **UE** Universal 277-480V - Available only with 40L and 75L lumen packages	**NM** No Mount - Must specify mount from table above - Mount ships separately	**BK** Black **BZ** Bronze **SV** Silver **WH** White	**BML Bluetooth® Technology Enabled Multi-Level Sensor** - Utilizes a multifunction sensor - Refer to BML spec sheet for details - 20-40' sensor lens installed on luminaire; 8-20' sensor lens and aisle shroud included - Intended for downlight applications at 0° tilt - Not available with Q or X options or Synapse TL7-B2 or TL7-HVG accessories **Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1 Field Adjustable Output** - Must select Q9, Q8, Q7, Q6, Q5, Q4, Q3, Q2, or Q1 - Offers full range adjustability - Refer to pages 15-25 for power and lumen values - Not available with BML or X options or Synapse TL7-B2 or TL7-HVG accessories **X8/X7/X6/X5/X4/X3/X2/X1 Locked Lumen Output** - Must select X8, X7, X6, X5, X4, X3, X2, or X1 - Not available with BML or Q options - X1 option not available with the following lumen package/voltage offerings: 9L/UL, 16L/UL, 16L/UH, 30L/UL, 30L/UH, 65L/UL, 65L/UH - X2 option not available 9L/UL lumen package/voltage - Lumen output is permanently locked to the setting selected - Refer to pages 15-25 for power and lumen values	**20KV 20kV/10kA Surge Suppression** - Replaces standard 10kV/5kA surge protection **F Fuse** - Compatible with 120V, 277V or 347V (phase to neutral) - Consult factory if fusing is required for 208V, 240V or 480V (phase to phase) - When code dictates fusing, use time delay fuse **N Utility Label and NEMA® Lift & Lock 7-Pin Photocell Receptacle** - External utility label per ANSI C136.15-2020 - 7-pin receptacle per ANSI C136.41 - Available only with OSQM & OSQL luminaires - Intended for downlight applications with maximum 45° tilt - Factory connected 0-10V dim leads - Requires photocell or shorting cap by others **R NEMA® Lift & Lock 7-Pin Photocell Receptacle** - 7-pin receptacle per ANSI C136.41 - Intended for downlight applications with maximum 45° tilt - Factory connected 0-10V dim leads - Requires photocell or shorting cap by others - Refer to page 2 for compatible Synapse control offerings **RL Rotate Left** - LED and optic are rotated to the left - Refer to RR/RL configuration diagram on page 26 for optic directionality - Not for use with symmetric optics **RR Rotate Right** - LED and optic are rotated to the right - Refer to RR/RL configuration diagram on page 26 for optic directionality - Not for use with symmetric optics

† Lumen Package codes identify approximate light output only. Actual lumen output levels vary by CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values
* Luminaire comes standard with 0-10V dimming

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING®

Product Specifications

CREE LIGHTING NANOCOMFORT™ TECHNOLOGY

Cree Lighting's NanoComfort™ Technology ends the trade-offs in outdoor lighting by providing superior glare reduction and visual comfort in high-efficiency illumination delivered precisely where it is needed. The basic building block of NanoComfort™Technology is a compact 4x4 array of LEDs. Each of the 16 LEDs in a module is in contact with its own acrylic polymer lens to capture and precisely direct light. With NanoComfort™ Technology, the acrylic optics are cut and sculpted into facets that relieve the glare and harshness while improving visual comfort – all while retaining superb efficacy and control.

CREE TRUEWHITE® TECHNOLOGY

A revolutionary way to generate high-quality white light, Cree TrueWhite® Technology is a patented approach that delivers an exclusive combination of 90+ CRI, beautiful light characteristics and lifelong color consistency, all while maintaining high luminous efficacy – a true no compromise solution.

CONSTRUCTION & MATERIALS

- Slim, low profile design minimizes wind load requirements
- Luminaire housing is rugged die cast aluminum with an integral, weathertight LED driver compartment and high-performance heat sink
- Acrylic optic w/clear tempered glass lens
- Convenient interlocking mounting method on direct arm. Mounting adaptor is rugged die cast aluminum and mounts to 3" (76mm) or larger square or round pole, secured by two 5/16-18 UNC bolts spaced on 2" (51mm) centers. Refer to page 14 for fixture mounting drill pattern
- Adjustable arm mount adapters are rugged die cast aluminum
- OSQ-ML-C-AA mounts to a horizontal or vertical 2" (51mm) IP, 2.375" (60mm) O.D. tenon and can be adjusted 180˚ in 2.5˚ increments
- OSQ-X-C-AA mounts to a horizontal or vertical 2" (51mm) IP, 2.375-2.50" (60-64mm) O.D. steel tenon and can be adjusted 180˚ in 5.0˚ increments. **NOTE: Tenon length must be a minimum of 3.75" (95mm), and tenon must be steel**
- Trunnion mount is constructed of A500 and A1011 steel and is adjustable from 0-180˚ in 15˚ degree increments. Trunnion mount secures to surface with (1) 3/4" bolt or (2) 1/2" or 3/8" bolts
- Luminaires include 15" (381mm) 18/5 cord exiting the luminaire
- Designed for uplight and downlight applications. Uplight orientation not suitable for use with N or R options
- Exclusive Colorfast DeltaGuard® finish features an E-Coat epoxy primer with an ultra-durable powder topcoat, providing excellent resistance to corrosion, ultraviolet degradation and abrasion. Silver, bronze, black, and white are available

Weight

Mount	Housing Size		
	Medium	Large	Extra Large
Direct Arm	19.7 lbs. (8.9kg)	28.8 lbs. (13.1kg)	45.8 lbs. (20.8kg)
Adjustable Arm	19.3 lbs. (8.8kg)	28.4 lbs. (12.9kg)	48.6 lbs. (22.0kg)
Trunnion	23.2 lbs. (10.5kg)	32.3 lbs. (14.7kg)	N/A

For BML sensor add 0.1 lbs. (45g), and for NEMA receptacle, add 0.3 lbs. (136g).

ELECTRICAL SYSTEM

- **Input Voltage:** 120-277V, 277-480V or 347-480V, 50/60Hz, Class 1 drivers
- **Power Factor:** > 0.9 at full load
- **Total Harmonic Distortion:** < 20% at full load
- Integral 10kV/5kA surge suppression protection standard; 20kV/10kA surge suppression protection optional
- When code dictates fusing, a slow blow fuse or type C/D breaker should be used to address inrush current
- Designed with 0-10V dimming capabilities. Controls by others
- Refer to Dimming spec sheet for details
- **Maximum 10V Source Current:** 1.8mA
- **Operating Temperature Range:** -40˚C - +40˚C (-40˚F - +104˚F)

REGULATORY & VOLUNTARY QUALIFICATIONS

- cULus Listed (UL1598)
- Suitable for wet locations
- Meets NEMA C82.77 standards
- Drivers and LEDs are UL certified in accordance with UL8750
- Meets requirements of IP66 per IEC 60529 when ordered without N or R options
- Certified to ANSI C136.31-2018, 3G bridge and overpass vibration standards
- ANSI C136.2 10kV/5kA (standard) and 20kV/10kA (optional) surge suppression protection tested in accordance with IEEE/ANSI C62.41.2
- Meets FCC Part 15, Subpart B, Class A limits for conducted and radiated emissions
- Luminaire and finish endurance tested to withstand 5,000 hours of elevated ambient salt fog conditions as defined in ASTM Standard B 117
- Lens meets IK07 requirements per IEC 60068-2
- Assembled in the USA by Cree Lighting from US and imported parts
- Meets Buy American requirements within ARRA
- RoHS compliant. Consult factory for additional details
- Dark Sky Friendly, IDA Approved when ordered with 30K CCT and direct arm mount only. Please refer to https://www.darksky.org/our-work/lighting/lighting-for-industry/fsa/fsa-products/ for most current information (Pending)
- ⚠ **CA RESIDENTS WARNING:** Cancer and Reproductive Harm – www.p65warnings.ca.gov

Product Specifications

SYNAPSE® SIMPLYSNAP INTELLIGENT CONTROL

The Synapse SimplySNAP platform is a highly intuitive connected lighting solution featuring zone dimming, motion sensing, and daylight harvesting with utility-grade power monitoring and support of up to 1000 nodes per gateway. The system features a reliable and robust self-healing mesh network with a browser-based interface that runs on smartphones, tablets, and PCs. The Twist-Lock Lighting Controller (TL7-B2 or TL7-HVG) and Site Controller (SS450-002) take the OSQ Series to a new performance plateau, providing extreme energy productivity, code compliance and a better light experience.

Synapse Wireless Control Accessories

Twist-Lock Lighting Controller
TL7-B2
- Suitable for 120-277V (UL) voltage only
- Requires NEMA/ANSI C136.41 7-Pin Dimming Receptacle
- Not for use with BML or Q options
- Provides On/Off switching, dimming, power metering, digital sensor input, and status monitoring of luminaire
- Refer to TL7-B2 spec sheet for details

Twist-Lock Lighting Controller
TL7-HVG
- Suitable for 120-480V (UL, UE and UH) voltages
- Requires NEMA/ANSI C136.41 7-Pin Dimming Receptacle
- Not for use with BML or Q options
- Provides On/Off switching, dimming, power metering, digital sensor input, and status monitoring of luminaire
- Refer to TL7-HVG spec sheet for details

SimplySNAP Central Base Station
CBSSW-450-002
- Includes On-Site Controller (SS450-002) and 5-button switch
- Indoor and Outdoor rated
- Refer to CBSSW-450-002 spec sheet for details

Synapse Wireless Sensor
WSN-DPM
- Motion and light sensor
- Control multiple zones
- Refer to WSN-DPM spec sheet for details

SimplySNAP On-Site Controller
SS450-002
- Verizon® LTE-enabled
- Designed for indoor applications
- Refer to SS450-002 spec sheet for details

Building Management System (BMS) Gateway
BMS-GW-002
- Required for BACnet integration
- Refer to BMS-GW-002 spec sheet for details

Outdoor Antennas
(Optional, for increased range, 8dB gain)
KIT-ANT420SM
- Kit includes antenna, 20' cable and bracket

KIT-ANT360
- Kit includes antenna, 30' cable and bracket

KIT-ANT600
- Kit includes antenna, 50' cable and bracket
- Refer to Outdoor antenna spec sheet for details

Electrical Data*

Lumen Package	System Watts 120-480V	Utility Label Wattage	Total Current (A)					
			120V	208V	240V	277V	347V	480V
4L**	26	30	0.21	0.12	0.11	0.09	N/A	N/A
6L	37	40	0.31	0.18	0.15	0.13	0.11	0.08
9L	55	60	0.46	0.27	0.23	0.20	0.16	0.12
11L	68	70	0.57	0.33	0.28	0.25	0.20	0.14
16L	97	100	0.81	0.47	0.40	0.35	0.28	0.20
22L	131	130	1.09	0.63	0.55	0.47	0.38	0.27
30L	175	180	1.46	0.84	0.73	0.63	0.50	0.36
40L	236	240	1.96	1.13	0.98	0.85	0.68	0.49
50L	297	N/A	2.48	1.43	1.24	1.07	0.86	0.62
65L	384	N/A	3.20	1.85	1.60	1.39	1.11	0.80
75L	447	N/A	3.73	2.15	1.86	1.61	1.29	0.93

* Electrical data at 25˚C (77˚F). Actual wattage may differ by +/- 10% when operating between 120-277V, 277-480V or 347-480V+/-10%.
** Available with UL voltage only.

OSQ-C Series Ambient Adjusted Lumen Maintenance[1]

Ambient	Initial LMF	25K hr Reported[2] LMF	50K hr Reported[2] LMF	75K hr Reported[2] LMF	100K hr Reported[2] LMF
5˚C (41˚F)	1.02	0.99	0.93	0.88	0.83
10˚C (50˚F)	1.02	0.98	0.93	0.87	0.82
15˚C (59˚F)	1.01	0.98	0.92	0.87	0.82
20˚C (68˚F)	1.01	0.97	0.92	0.86	0.81
25˚C (77˚F)	1.00	0.97	0.91	0.86	0.81

[1] Lumen maintenance values at 25˚C (77˚F) are calculated per IES TM-21 based on IES LM-80 report data for the LED package and in-situ luminaire testing. Luminaire ambient temperature factors (LATF) have been applied to all lumen maintenance factors. Please refer to the Temperature Zone Reference Document for outdoor average nighttime ambient conditions.
[2] In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are up to 6x the tested duration in the IES LM-80 report for the LED.

Accessories

Field-Installed

Backlight Shield
OSQ-M-C-BLSF (Medium)
OSQ-L-C-BLSF (Large)
OSQ-X-C-BLSF (Extra Large)
- Not for use with rotated optics

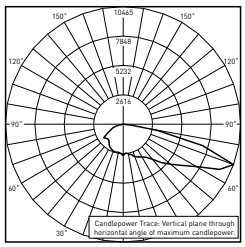
Bird Spikes
OSQ-M-C-BRDSPK
OSQ-L-C-BRDSPK
OSQ-X-C-BRDSPK

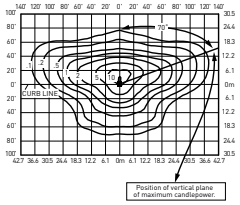
Shorting Cap
XA-XSLSHRT

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult:
https://creelighting.com/products/outdoor/area/osq-series

2M





PRELIMINARY RESTL Test Report
OSQ Luminaire w/2M Optic
Initial Delivered Lumens: 15,560

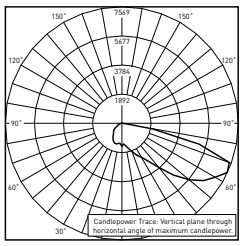
OSQL-C-40L-40K7-2M-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 38,000
Initial FC at grade

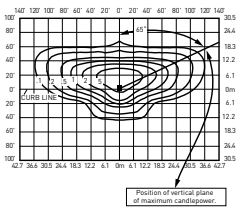
Type II Mid Distribution

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	3,650	B1 U1 G1	3,800	B1 U1 G1	2,590	B1 U1 G1	3,800	B1 U1 G1
6L	5,475	B1 U1 G1	5,700	B1 U1 G1	3,880	B1 U1 G1	5,700	B1 U1 G1
9L	8,225	B2 U1 G2	8,550	B2 U1 G2	5,825	B1 U1 G1	8,550	B2 U1 G2
11L	10,025	B2 U1 G2	10,450	B2 U1 G2	7,100	B2 U1 G2	10,450	B2 U1 G2
16L	14,650	B3 U1 G3	15,200	B3 U1 G3	10,325	B2 U1 G2	15,200	B3 U1 G3
22L	20,100	B3 U1 G3	20,900	B3 U1 G3	14,200	B3 U1 G3	20,900	B3 U1 G3
30L	27,400	B3 U1 G3	28,500	B3 U1 G3	19,400	B3 U1 G3	28,500	B3 U1 G3
40L	36,500	B4 U1 G4	38,000	B4 U1 G4	25,900	B3 U1 G3	38,000	B4 U1 G4
50L	45,600	B4 U1 G5	47,500	B4 U1 G5	32,300	B3 U1 G4	47,500	B4 U1 G5
65L	59,300	B4 U1 G5	61,800	B4 U1 G5	42,000	B4 U1 G4	61,800	B4 U1 G5
75L	68,400	B5 U1 G5	71,300	B5 U1 G5	48,500	B4 U1 G5	71,300	B5 U1 G5

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf. Valid with no tilt

2B





PRELIMINARY RESTL Test Report
OSQ Luminaire w/2B Optic
Initial Delivered Lumens: 10,422

OSQL-C-40L-40K7-2B-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 26,200
Initial FC at grade

Type II Mid w/BLS Distribution

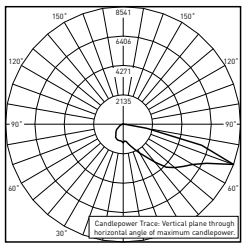
Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	2,510	B1 U1 G1	2,620	B1 U1 G1	1,780	B0 U1 G1	2,620	B1 U1 G1
6L	3,760	B1 U1 G1	3,920	B1 U1 G1	2,670	B1 U1 G1	3,920	B1 U1 G1
9L	5,650	B1 U1 G1	5,875	B1 U1 G1	4,000	B1 U1 G1	5,875	B1 U1 G1
11L	6,900	B1 U1 G2	7,200	B1 U1 G2	4,890	B1 U1 G1	7,200	B1 U1 G2
16L	10,075	B2 U1 G2	10,450	B2 U1 G2	7,100	B1 U1 G2	10,450	B2 U1 G2
22L	13,800	B2 U1 G2	14,375	B2 U1 G2	9,775	B1 U1 G2	14,375	B2 U1 G2
30L	18,800	B2 U1 G3	19,600	B2 U1 G3	13,350	B2 U1 G2	19,600	B2 U1 G3
40L	25,100	B3 U1 G3	26,200	B3 U1 G3	17,800	B2 U1 G3	26,200	B3 U1 G3
50L	31,400	B3 U1 G4	32,700	B3 U1 G4	22,200	B3 U1 G3	32,700	B3 U1 G4
65L	40,800	B3 U1 G4	42,500	B3 U1 G4	28,900	B3 U1 G3	42,500	B3 U1 G4
75L	47,100	B3 U1 G4	49,000	B3 U1 G5	33,300	B3 U1 G4	49,000	B3 U1 G5

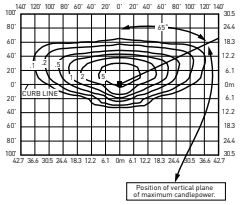
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf. Valid with no tilt

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: https://creelighting.com/products/outdoor/area/osq-series

2M W/OSQ-*-C-BLSF





PRELIMINARY RESTL Test Report
OSQ Luminaire w/2M Optic w/OSQ-M-C-BLSF
Initial Delivered Lumens: 9,579

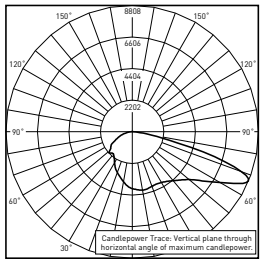
OSQL-C-40L-40K7-2M-UL w/OSQ-L-C-BLSF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 26,200
Initial FC at grade

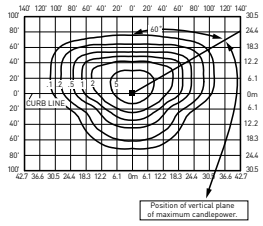
Type II Mid Distribution w/OSQ-*-C-BLSF

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	2,510	B1 U1 G1	2,620	B1 U1 G1	1,780	B0 U1 G1	2,620	B1 U1 G1
6L	3,760	B1 U1 G1	3,920	B1 U1 G1	2,670	B1 U1 G1	3,920	B1 U1 G1
9L	5,650	B1 U1 G1	5,875	B1 U1 G1	4,000	B1 U1 G1	5,875	B1 U1 G1
11L	6,900	B1 U1 G2	7,200	B1 U1 G2	4,890	B1 U1 G1	7,200	B1 U1 G2
16L	10,075	B1 U1 G2	10,450	B1 U1 G2	7,100	B1 U1 G2	10,450	B1 U1 G2
22L	13,800	B2 U1 G2	14,375	B2 U1 G2	9,775	B1 U1 G2	14,375	B2 U1 G2
30L	18,800	B2 U1 G3	19,600	B2 U1 G3	13,350	B2 U1 G2	19,600	B2 U1 G3
40L	25,100	B3 U1 G3	26,200	B3 U1 G4	17,800	B2 U1 G3	26,200	B3 U1 G4
50L	31,400	B3 U1 G4	32,700	B3 U1 G4	22,200	B3 U1 G3	32,700	B3 U1 G4
65L	40,800	B3 U1 G4	42,500	B3 U1 G5	28,900	B3 U1 G4	42,500	B3 U1 G5
75L	47,100	B3 U1 G5	49,000	B3 U1 G5	33,300	B3 U1 G4	49,000	B3 U1 G5

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf. Valid with no tilt

3M





RESTL Test Report #: PL17240-001A
OSQM-C-16L-57K7-3M-UL-NM-WH
Initial Delivered Lumens: 15,444

OSQL-C-40L-40K7-3M-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 38,000
Initial FC at grade

Type III Mid Distribution

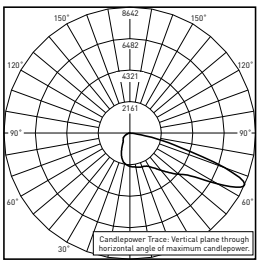
Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	3,650	B1 U0 G1	3,800	B1 U0 G1	2,590	B1 U0 G1	3,800	B1 U0 G1
6L	5,475	B1 U0 G1	5,700	B1 U0 G1	3,880	B1 U0 G1	5,700	B1 U0 G1
9L	8,225	B2 U0 G2	8,550	B2 U0 G2	5,825	B1 U0 G1	8,550	B2 U0 G2
11L	10,025	B2 U0 G2	10,450	B2 U0 G2	7,100	B2 U0 G2	10,450	B2 U0 G2
16L	14,650	B3 U0 G3	15,200	B3 U0 G3	10,325	B2 U0 G2	15,200	B3 U0 G3
22L	20,100	B3 U0 G3	20,900	B3 U0 G3	14,200	B3 U0 G3	20,900	B3 U0 G3
30L	27,400	B3 U0 G3	28,500	B3 U0 G3	19,400	B3 U0 G3	28,500	B3 U0 G3
40L	36,500	B4 U0 G4	38,000	B4 U0 G4	25,900	B3 U0 G3	38,000	B4 U0 G4
50L	45,600	B4 U0 G4	47,500	B4 U0 G4	32,300	B3 U0 G4	47,500	B4 U0 G4
65L	59,300	B5 U0 G5	61,800	B5 U0 G5	42,000	B4 U0 G4	61,800	B5 U0 G5
75L	68,400	B5 U0 G5	71,300	B5 U0 G5	48,500	B4 U0 G4	71,300	B5 U0 G5

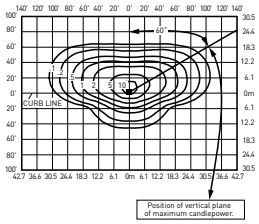
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf. Valid with no tilt

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: https://creelighting.com/products/outdoor/area/osq-series

3B





RESTL Test Report #: PL17366-001A
OSQM-C-16L-57K7-3B-UL-NM-WH
Initial Delivered Lumens: 10,081

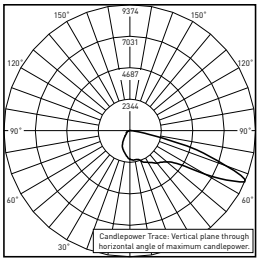
OSQL-C-40L-40K7-3B-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 26,200
Initial FC at grade

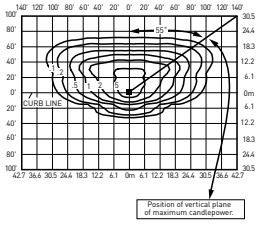
Type III Mid w/BLS Distribution

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	2,510	B1 U0 G1	2,620	B1 U0 G1	1,780	B0 U0 G1	2,620	B1 U0 G1
6L	3,760	B1 U0 G1	3,920	B1 U0 G1	2,670	B1 U0 G1	3,920	B1 U0 G1
9L	5,650	B1 U0 G1	5,875	B1 U0 G1	4,000	B1 U0 G1	5,875	B1 U0 G1
11L	6,900	B1 U0 G2	7,200	B1 U0 G2	4,890	B1 U0 G1	7,200	B1 U0 G2
16L	10,075	B2 U0 G2	10,450	B2 U0 G2	7,100	B1 U0 G2	10,450	B2 U0 G2
22L	13,800	B2 U0 G2	14,375	B2 U0 G2	9,775	B2 U0 G2	14,375	B2 U0 G2
30L	18,800	B3 U0 G3	19,600	B3 U0 G3	13,350	B2 U0 G2	19,600	B3 U0 G3
40L	25,100	B3 U0 G3	26,200	B3 U0 G3	17,800	B3 U0 G3	26,200	B3 U0 G3
50L	31,400	B3 U0 G4	32,700	B3 U0 G4	22,200	B3 U0 G3	32,700	B3 U0 G4
65L	40,800	B3 U0 G4	42,500	B4 U0 G4	28,900	B3 U0 G4	42,500	B4 U0 G4
75L	47,100	B4 U0 G5	49,000	B4 U0 G5	33,300	B3 U0 G4	49,000	B4 U0 G5

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf. Valid with no tilt

3M W/OSQ-*-C-BLSF





RESTL Test Report#: PL17054-001A
OSQM-C-16L-57K7-3M-UL-NM-WH-R w/ OSQ-M-C-BLSF
Initial Delivered Lumens: 10,227

OSQL-C-40L-40K7-3M-UL w/OSQ-L-C-BLSF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 26,200
Initial FC at grade

Type III Mid Distribution w/OSQ-*-C-BLSF

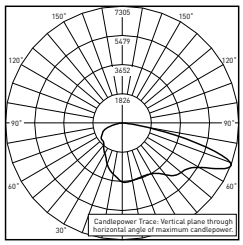
Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	2,510	B1 U1 G1	2,620	B1 U1 G1	1,780	B0 U1 G1	2,620	B1 U1 G1
6L	3,760	B1 U1 G1	3,920	B1 U1 G1	2,670	B1 U1 G1	3,920	B1 U1 G1
9L	5,650	B1 U1 G1	5,875	B1 U1 G2	4,000	B1 U1 G1	5,875	B1 U1 G2
11L	6,900	B1 U1 G2	7,200	B1 U1 G2	4,890	B1 U1 G1	7,200	B1 U1 G2
16L	10,075	B2 U1 G2	10,450	B2 U1 G2	7,100	B1 U1 G2	10,450	B2 U1 G2
22L	13,800	B2 U2 G2	14,375	B2 U2 G2	9,775	B2 U1 G2	14,375	B2 U2 G2
30L	18,800	B3 U2 G3	19,600	B3 U2 G3	13,350	B2 U2 G2	19,600	B3 U2 G3
40L	25,100	B3 U2 G4	26,200	B3 U2 G4	17,800	B3 U2 G3	26,200	B3 U2 G4
50L	31,400	B3 U2 G4	32,700	B3 U2 G4	22,200	B3 U2 G3	32,700	B3 U2 G4
65L	40,800	B3 U2 G5	42,500	B3 U2 G5	28,900	B3 U2 G4	42,500	B3 U2 G5
75L	47,100	B4 U2 G5	49,000	B4 U2 G5	33,300	B3 U2 G4	49,000	B4 U2 G5

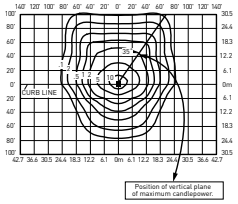
* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf. Valid with no tilt

Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult: https://creelighting.com/products/outdoor/area/osq-series

4M





RESTL Test Report #: PL17299-001A
OSQM-C-16L-57K7-4M-UL-NM-WH
Initial Delivered Lumens: 15,584

OSQL-C-40L-40K7-4M-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 38,000
Initial FC at grade

Type IV Mid Distribution

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	3,650	B1 U0 G1	3,800	B1 U0 G1	2,590	B1 U0 G1	3,800	B1 U0 G1
6L	5,475	B1 U0 G1	5,700	B1 U0 G1	3,880	B1 U0 G1	5,700	B1 U0 G1
9L	8,225	B2 U0 G2	8,550	B2 U0 G2	5,825	B1 U0 G1	8,550	B2 U0 G2
11L	10,025	B2 U0 G2	10,450	B2 U0 G2	7,100	B2 U0 G1	10,450	B2 U0 G2
16L	14,650	B3 U0 G2	15,200	B3 U0 G2	10,325	B2 U0 G2	15,200	B3 U0 G2
22L	20,100	B3 U0 G3	20,900	B3 U0 G3	14,200	B3 U0 G2	20,900	B3 U0 G3
30L	27,400	B3 U0 G3	28,500	B3 U0 G3	19,400	B3 U0 G3	28,500	B3 U0 G3
40L	36,500	B4 U0 G4	38,000	B4 U0 G4	25,900	B3 U0 G3	38,000	B4 U0 G4
50L	45,600	B4 U0 G4	47,500	B4 U0 G4	32,300	B4 U0 G3	47,500	B4 U0 G4
65L	59,300	B5 U0 G5	61,800	B5 U0 G5	42,000	B4 U0 G4	61,800	B5 U0 G5
75L	68,400	B5 U0 G5	71,300	B5 U0 G5	48,500	B4 U0 G4	71,300	B5 U0 G5

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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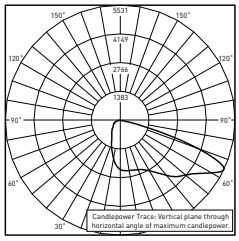
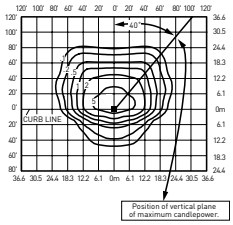
4B





RESTL Test Report #: PL17367-001A
OSQM-C-16L-57K7-4B-UL-NM-WH
Initial Delivered Lumens: 9,812

OSQL-C-40L-40K7-4B-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 24,000
Initial FC at grade

Type IV Mid w/BLS Distribution

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	2,300	B1 U0 G0	2,400	B1 U0 G0	1,630	B0 U0 G0	2,400	B1 U0 G0
6L	3,440	B1 U0 G1	3,590	B1 U0 G1	2,440	B1 U0 G0	3,590	B1 U0 G1
9L	5,175	B1 U0 G1	5,400	B1 U0 G1	3,670	B1 U0 G1	5,400	B1 U0 G1
11L	6,325	B1 U0 G1	6,600	B1 U0 G1	4,480	B1 U0 G1	6,600	B1 U0 G1
16L	9,225	B2 U0 G2	9,575	B2 U0 G2	6,525	B1 U0 G1	9,575	B2 U0 G2
22L	12,625	B2 U0 G2	13,175	B2 U0 G2	8,950	B2 U0 G2	13,175	B2 U0 G2
30L	17,200	B3 U0 G2	18,000	B3 U0 G2	12,225	B2 U0 G2	18,000	B3 U0 G2
40L	23,000	B3 U0 G3	24,000	B3 U0 G3	16,300	B3 U0 G2	24,000	B3 U0 G3
50L	28,700	B3 U0 G3	29,900	B3 U0 G3	20,400	B3 U0 G2	29,900	B3 U0 G3
65L	37,400	B3 U0 G4	38,900	B3 U0 G4	26,500	B3 U0 G3	38,900	B3 U0 G4
75L	43,100	B4 U0 G4	44,900	B4 U0 G4	30,500	B3 U0 G3	44,900	B4 U0 G4

* Initial delivered lumens at 25˚C (77˚F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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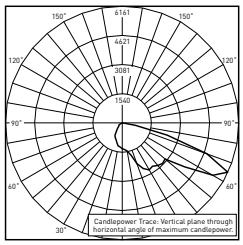
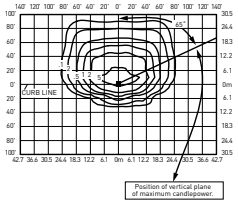
4M W/OSQ-*-C-BLSF





PRELIMINARY RESTL Test Report
OSQ Luminaire w/4M Optic w/OSQ-M-C-BLSF
Initial Delivered Lumens: 9,345

OSQL-C-40L-40K7-4M-UL w/OSQ-L-C-BLSF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 24,000
Initial FC at grade

Type IV Mid Distribution w/OSQ-*-C-BLSF

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	2,300	B0 U1 G1	2,400	B1 U1 G1	1,630	B0 U1 G1	2,400	B1 U1 G1
6L	3,440	B1 U1 G1	3,590	B1 U1 G1	2,440	B1 U1 G1	3,590	B1 U1 G1
9L	5,175	B1 U1 G1	5,400	B1 U1 G1	3,670	B1 U1 G1	5,400	B1 U1 G1
11L	6,325	B1 U1 G2	6,600	B1 U1 G2	4,480	B1 U1 G1	6,600	B1 U1 G2
16L	9,225	B1 U1 G2	9,575	B1 U1 G2	6,525	B1 U1 G2	9,575	B1 U1 G2
22L	12,625	B2 U1 G2	13,175	B2 U1 G2	8,950	B1 U1 G2	13,175	B2 U1 G2
30L	17,200	B2 U1 G3	18,000	B2 U1 G3	12,225	B2 U1 G2	18,000	B2 U1 G3
40L	23,000	B3 U1 G3	24,000	B3 U1 G3	16,300	B2 U1 G2	24,000	B3 U1 G3
50L	28,700	B3 U1 G4	29,900	B3 U1 G4	20,400	B2 U1 G3	29,900	B3 U1 G4
65L	37,400	B3 U1 G4	38,900	B3 U1 G4	26,500	B3 U1 G4	38,900	B3 U1 G4
75L	43,100	B3 U1 G5	44,900	B3 U1 G5	30,500	B3 U1 G4	44,900	B3 U1 G5

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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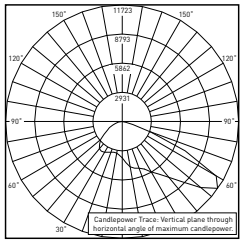
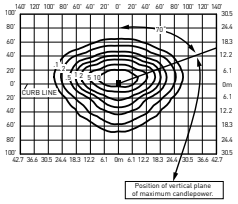
AF





PRELIMINARY RESTL Test Report
OSQ Luminaire w/AF Optic
Initial Delivered Lumens: 15,866

OSQL-C-40L-40K7-AF-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 38,000
Initial FC at grade

Automotive FrontLineOptic™ Distribution

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	3,650	B1 U1 G1	3,800	B1 U1 G1	2,590	B1 U1 G1	3,800	B1 U1 G1
6L	5,475	B1 U1 G1	5,700	B1 U1 G1	3,880	B1 U1 G1	5,700	B1 U1 G1
9L	8,225	B2 U1 G1	8,550	B2 U1 G1	5,825	B1 U1 G1	8,550	B2 U1 G1
11L	10,025	B2 U1 G2	10,450	B2 U1 G2	7,100	B2 U1 G1	10,450	B2 U1 G2
16L	14,650	B3 U1 G2	15,200	B3 U1 G2	10,325	B2 U1 G2	15,200	B3 U1 G2
22L	20,100	B3 U1 G3	20,900	B3 U1 G3	14,200	B2 U1 G2	20,900	B3 U1 G3
30L	27,400	B3 U1 G3	28,500	B3 U1 G3	19,400	B3 U1 G3	28,500	B3 U1 G3
40L	36,500	B4 U1 G3	38,000	B4 U1 G3	25,900	B3 U1 G3	38,000	B4 U1 G3
50L	45,600	B4 U1 G4	47,500	B4 U1 G4	32,300	B3 U1 G3	47,500	B4 U1 G4
65L	59,300	B5 U1 G4	61,800	B5 U1 G4	42,000	B4 U1 G3	61,800	B5 U1 G4
75L	68,400	B5 U1 G4	71,300	B5 U1 G4	48,500	B4 U1 G4	71,300	B5 U1 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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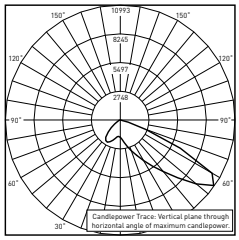
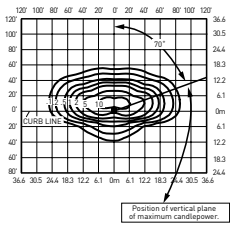
AB



PRELIMINARY RESTL Test Report
OSQ Luminaire w/AB Optic
Initial Delivered Lumens: 11,393



OSQL-C-40L-40K7-AB-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 26,200
Initial FC at grade

Automotive FrontLineOptic™ w/BLS Distribution

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	2,510	B1 U1 G0	2,620	B1 U1 G0	1,780	B0 U1 G0	2,620	B1 U1 G0
6L	3,760	B1 U1 G0	3,920	B1 U1 G1	2,670	B1 U1 G0	3,920	B1 U1 G1
9L	5,650	B1 U1 G1	5,875	B1 U1 G1	4,000	B1 U1 G1	5,875	B1 U1 G1
11L	6,900	B1 U1 G1	7,200	B1 U1 G1	4,890	B1 U1 G1	7,200	B1 U1 G1
16L	10,075	B2 U1 G1	10,450	B2 U1 G1	7,100	B1 U1 G1	10,450	B2 U1 G1
22L	13,800	B2 U1 G2	14,375	B2 U1 G2	9,775	B2 U1 G1	14,375	B2 U1 G2
30L	18,800	B2 U1 G2	19,600	B2 U1 G2	13,350	B2 U1 G2	19,600	B2 U1 G2
40L	25,100	B3 U1 G2	26,200	B3 U1 G2	17,800	B2 U1 G2	26,200	B3 U1 G2
50L	31,400	B3 U1 G2	32,700	B3 U1 G2	22,200	B3 U1 G2	32,700	B3 U1 G2
65L	40,800	B3 U1 G3	42,500	B3 U1 G3	28,900	B3 U1 G2	42,500	B3 U1 G3
75L	47,100	B3 U1 G3	49,000	B4 U1 G3	33,300	B3 U1 G2	49,000	B4 U1 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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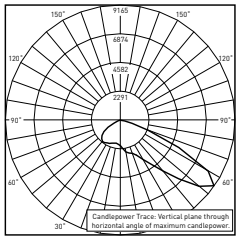
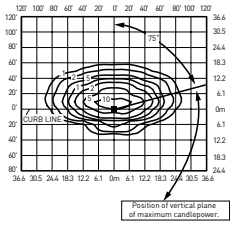
AF W/OSQ-*-C-BLSF



PRELIMINARY RESTL Test Report
OSQ Luminaire w/AF Optic w/OSQ-M-C-BLSF
Initial Delivered Lumens: 9,783



OSQL-C-40L-40K7-AF-UL w/OSQ-L-C-BLSF
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 26,200
Initial FC at grade

Automotive FrontLineOptic™ w/OSQ-*-C-BLSF

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	2,510	B1 U1 G0	2,620	B1 U1 G0	1,780	B0 U1 G0	2,620	B1 U1 G0
6L	3,760	B1 U1 G0	3,920	B1 U1 G1	2,670	B1 U1 G0	3,920	B1 U1 G1
9L	5,650	B1 U1 G1	5,875	B1 U1 G1	4,000	B1 U1 G1	5,875	B1 U1 G1
11L	6,900	B1 U1 G1	7,200	B1 U1 G1	4,890	B1 U1 G1	7,200	B1 U1 G1
16L	10,075	B2 U1 G1	10,450	B2 U1 G1	7,100	B1 U1 G1	10,450	B2 U1 G1
22L	13,800	B2 U1 G2	14,375	B2 U1 G2	9,775	B2 U1 G1	14,375	B2 U1 G2
30L	18,800	B3 U1 G2	19,600	B3 U1 G2	13,350	B2 U1 G2	19,600	B3 U1 G2
40L	25,100	B3 U1 G2	26,200	B3 U1 G2	17,800	B2 U1 G2	26,200	B3 U1 G2
50L	31,400	B3 U1 G2	32,700	B3 U1 G2	22,200	B3 U1 G2	32,700	B3 U1 G2
65L	40,800	B3 U1 G3	42,500	B3 U1 G3	28,900	B3 U1 G2	42,500	B3 U1 G3
75L	47,100	B4 U1 G3	49,000	B4 U1 G3	33,300	B3 U1 G2	49,000	B4 U1 G3

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
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Photometry

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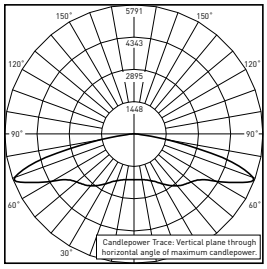
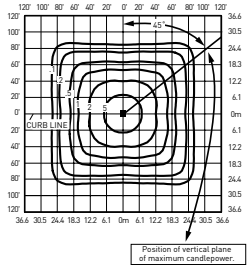
https://creelighting.com/products/outdoor/area/osq-series

5M





RESTL Test Report #: PL17290-002A
OSQM-C-16L-57K7-5M-UL-NM-WH
Initial Delivered Lumens: 15,567

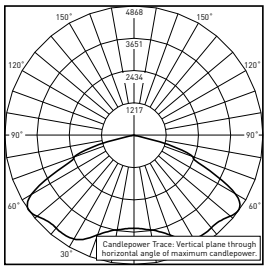
OSQL-C-40L-40K7-5M-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 40,000
Initial FC at grade

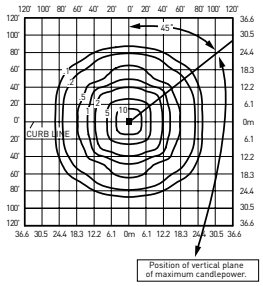
Type V Mid Distribution

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	3,840	B2 U0 G1	4,000	B2 U0 G1	2,720	B2 U0 G1	4,000	B2 U0 G1
6L	5,750	B3 U0 G1	6,000	B3 U0 G1	4,080	B2 U0 G1	6,000	B3 U0 G1
9L	8,650	B3 U0 G1	9,000	B3 U0 G1	6,125	B3 U0 G1	9,000	B3 U0 G1
11L	10,550	B3 U0 G2	11,000	B3 U0 G2	7,475	B3 U0 G1	11,000	B3 U0 G2
16L	15,400	B4 U0 G2	16,000	B4 U0 G2	10,875	B3 U0 G2	16,000	B4 U0 G2
22L	21,100	B4 U0 G2	22,000	B4 U0 G2	14,950	B4 U0 G2	22,000	B4 U0 G2
30L	28,800	B5 U0 G3	30,000	B5 U0 G3	20,400	B4 U0 G2	30,000	B5 U0 G3
40L	38,400	B5 U0 G3	40,000	B5 U0 G4	27,200	B5 U0 G3	40,000	B5 U0 G4
50L	48,000	B5 U0 G4	50,000	B5 U0 G4	34,000	B5 U0 G3	50,000	B5 U0 G4
65L	62,400	B5 U0 G5	65,000	B5 U0 G5	44,200	B5 U0 G4	65,000	B5 U0 G5
75L	72,000	B5 U0 G5	75,000	B5 U0 G5	51,000	B5 U0 G4	75,000	B5 U0 G5

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf. Valid with no tilt

5N





RESTL Test Report #: PL17333-002A
OSQM-C-16L-57K7-5N-UL-NM-WH
Initial Delivered Lumens: 16,299

OSQL-C-40L-40K7-5N-UL
Mounting Height: 25' (7.6m) A.F.G.
Initial Delivered Lumens: 40,000
Initial FC at grade

Type V Narrow Distribution

Lumen Package	3000K (70 CRI)		4000K (70 CRI)		5000K (90 CRI)		5700K (70 CRI)	
	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20	Initial Delivered Lumens*	BUG Ratings** Per TM-15-20
4L	3,840	B2 U0 G0	4,000	B2 U0 G0	2,720	B1 U0 G0	4,000	B2 U0 G0
6L	5,750	B2 U0 G0	6,000	B2 U0 G1	4,080	B2 U0 G0	6,000	B2 U0 G1
9L	8,650	B2 U0 G1	9,000	B3 U0 G1	6,125	B2 U0 G1	9,000	B3 U0 G1
11L	10,550	B3 U0 G1	11,000	B3 U0 G1	7,475	B2 U0 G1	11,000	B3 U0 G1
16L	15,400	B3 U0 G1	16,000	B3 U0 G2	10,875	B3 U0 G1	16,000	B3 U0 G2
22L	21,100	B4 U0 G2	22,000	B4 U0 G2	14,950	B3 U0 G1	22,000	B4 U0 G2
30L	28,800	B4 U0 G2	30,000	B5 U0 G2	20,400	B4 U0 G2	30,000	B5 U0 G2
40L	38,400	B5 U0 G2	40,000	B5 U0 G2	27,200	B4 U0 G2	40,000	B5 U0 G2
50L	48,000	B5 U0 G3	50,000	B5 U0 G3	34,000	B5 U0 G2	50,000	B5 U0 G3
65L	62,400	B5 U0 G3	65,000	B5 U0 G3	44,200	B5 U0 G2	65,000	B5 U0 G3
75L	72,000	B5 U0 G4	75,000	B5 U0 G4	51,000	B5 U0 G3	75,000	B5 U0 G4

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens
** For more information on the IES BUG (Backlight-Uplight-Glare) Rating visit: https://www.ies.org/wp-content/uploads/2017/03/TM-15-11BUGRatingsAddendum.pdf. Valid with no tilt

Photometry

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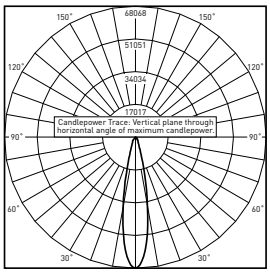
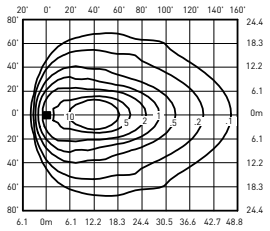
https://creelighting.com/products/outdoor/area/osq-series

33



RESTL Test Report #: PL17338-001A
OSQM-C-16L-57K7-33-UL-NM-WH
Initial Delivered Lumens: 16,127

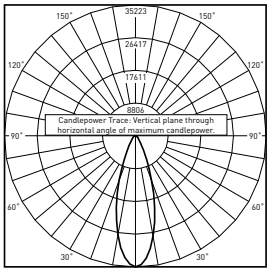


OSQL-C-40L-40K7-33-UL
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 40,000
Initial FC at grade

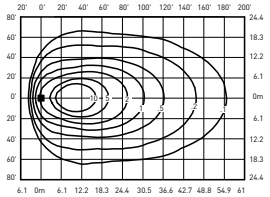
NEMA® 3x3 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	3,840	4,000	2,720	4,000
6L	5,750	6,000	4,080	6,000
9L	8,650	9,000	6,125	9,000
11L	10,550	11,000	7,475	11,000
16L	15,400	16,000	10,875	16,000
22L	21,100	22,000	14,950	22,000
30L	28,800	30,000	20,400	30,000
40L	38,400	40,000	27,200	40,000
50L	48,000	50,000	34,000	50,000
65L	62,400	65,000	44,200	65,000
75L	72,000	75,000	51,000	75,000

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

44



PRELIMINARY RESTL Test Report
OSQ Luminaire w/44 Optic
Initial Delivered Lumens: 16,001



OSQL-C-40L-40K7-44-UL
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 40,000
Initial FC at grade

NEMA® 4x4 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	3,840	4,000	2,720	4,000
6L	5,750	6,000	4,080	6,000
9L	8,650	9,000	6,125	9,000
11L	10,550	11,000	7,475	11,000
16L	15,400	16,000	10,875	16,000
22L	21,100	22,000	14,950	22,000
30L	28,800	30,000	20,400	30,000
40L	38,400	40,000	27,200	40,000
50L	48,000	50,000	34,000	50,000
65L	62,400	65,000	44,200	65,000
75L	72,000	75,000	51,000	75,000

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

Photometry

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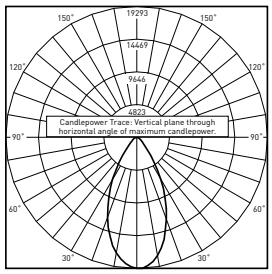
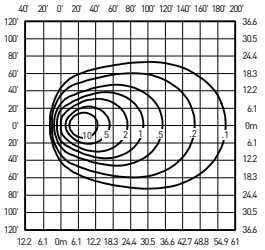
55



PRELIMINARY RESTL Test Report
OSQ Luminaire w/55 Optic
Initial Delivered Lumens: 15,967

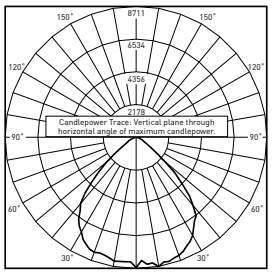


OSQL-C-40L-40K7-55-UL
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 40,000
Initial FC at grade

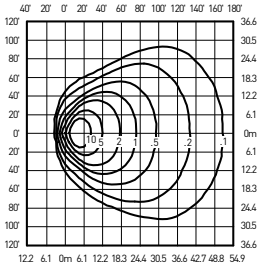
NEMA® 5x5 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	3,840	4,000	2,720	4,000
6L	5,750	6,000	4,080	6,000
9L	8,650	9,000	6,125	9,000
11L	10,550	11,000	7,475	11,000
16L	15,400	16,000	10,875	16,000
22L	21,100	22,000	14,950	22,000
30L	28,800	30,000	20,400	30,000
40L	38,400	40,000	27,200	40,000
50L	48,000	50,000	34,000	50,000
65L	62,400	65,000	44,200	65,000
75L	72,000	75,000	51,000	75,000

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

66



PRELIMINARY RESTL Test Report
OSQ Luminaire w/66 Optic
Initial Delivered Lumens: 15,952



OSQL-C-40L-40K7-66-UL
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 40,000
Initial FC at grade

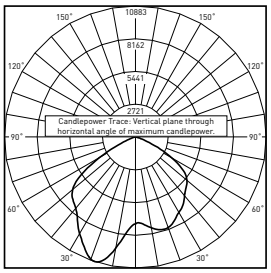
NEMA® 6x6 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	3,840	4,000	2,720	4,000
6L	5,750	6,000	4,080	6,000
9L	8,650	9,000	6,125	9,000
11L	10,550	11,000	7,475	11,000
16L	15,400	16,000	10,875	16,000
22L	21,100	22,000	14,950	22,000
30L	28,800	30,000	20,400	30,000
40L	38,400	40,000	27,200	40,000
50L	48,000	50,000	34,000	50,000
65L	62,400	65,000	44,200	65,000
75L	72,000	75,000	51,000	75,000

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

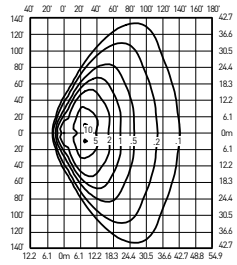
Photometry

All published luminaire photometric testing performed to IES LM-79 standards. To obtain an IES file specific to your project consult:
https://creelighting.com/products/outdoor/area/osq-series

75



RESTL Test Report #: PL17352-001A
OSQM-C-16L-57K7-75-UL-NM-WH
Initial Delivered Lumens: 16,120



OSQL-C-40L-40K7-75-UL
Mounting Height: 25' (7.6m) A.F.G., 60° Tilt
Initial Delivered Lumens: 40,000
Initial FC at grade

NEMA® 7x5 Distribution				
Lumen Package	3000K (70 CRI)	4000K (70 CRI)	5000K (90CRI)	5700K (70 CRI)
	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*	Initial Delivered Lumens*
4L	3,840	4,000	2,720	4,000
6L	5,750	6,000	4,080	6,000
9L	8,650	9,000	6,125	9,000
11L	10,550	11,000	7,475	11,000
16L	15,400	16,000	10,875	16,000
22L	21,100	22,000	14,950	22,000
30L	28,800	30,000	20,400	30,000
40L	38,400	40,000	27,200	40,000
50L	48,000	50,000	34,000	50,000
65L	62,400	65,000	44,200	65,000
75L	72,000	75,000	51,000	75,000

* Initial delivered lumens at 25°C (77°F). Actual production yield may vary between -10 and +10% of initial delivered lumens

Luminaire EPA

Adjustable Arm Mount – OSQ-ML-C-AA Weight: Medium - 19.3 lbs. (8.8kg); Large - 28.4 lbs. (12.9kg); **OSQ-X-C-DA** Weight: Extra Large - 48.6 lbs. (22kg)								
Luminaire	Single	2 @ 180˚	2 @ 90˚	3 @ 90˚	3 @ 120˚	3 @ 180˚	4 @ 180˚	4 @ 90˚
	Tenon Configuration (0˚-90˚ Tilt); If used with Cree Lighting tenons, please add tenon EPA with Luminaire EPA							
	 PB-1A*; PT-1+; PW-1A3**	 PB-2A*; PB-2R2.375; PD-2A4(180)+; PT-2(180)+; PW-2A3**	 PB-2A*; PB-2R2.375; PD-2A4(90)+; PT-2(90)+; PW-2A3**	 PB-3A*; PB-3R2.375; PD-3A4(90)+; PT-3(90)+	 PB-3A*; PB-3R2.375; PT-3(120)+	 PB-3A*; PB-3R2.375	 PB-4A*(180); PB-4R2.375	 PB-4A*(90); PB-4R2.375; PD-4A4(90)+; PT-4(90)+
	0˚ Tilt							
OSQM	0.69	1.38	1.11	1.80	2.01	1.38	1.73	2.22
OSQL	0.78	1.55	1.30	2.07	2.33	1.55	1.94	2.60
OSQX	0.98	1.95	1.65	2.63	2.97	1.95	2.44	3.31
	45˚ Tilt							
OSQM	1.41	2.81	2.10	3.50	4.23	4.22	5.63	4.19
OSQL	2.62	5.23	3.39	6.01	6.91	7.85	10.46	6.79
OSQX	4.35	8.70	5.33	9.68	9.65	13.05	17.40	10.66
	90˚ Tilt* **							
OSQM	1.89	3.79	2.58	4.48	5.56	5.68	7.57	5.17
OSQL	3.52	7.03	4.29	7.81	9.14	10.55	14.07	8.59
OSQX	5.84	11.68	6.82	12.66	12.78	17.52	23.36	13.63

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")
*** PD-2A4(90), PT-2(90), PD-3A4(90), PT-3(90), PD-4A4(90), PT-4(90) are not compatible with 90 degree tilt
+ PT & PD aluminum tenons are not suitable for use with OSQX luminaires.

Tenon EPA

Part Number	EPA
PB-1A*	None
PB-2A*	0.82
PB-3A*	1.52
PB-4A*(180)	2.22
PB-4A*(90)	1.11
PB-2R2.375	0.92
PB-3R2.375	1.62
PB-4R2.375	2.32
PD Series Tenons	0.09
PT Series Tenons	0.10
PW-1A3**	0.47
PW-2A3**	0.94
WM-2	0.08
WM-4	0.25
WM-DM	None

* Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6") for single, double or triple luminaire orientation or 4 (4"), 5 (5"), or 6 (6") for quad luminaire orientation
** These EPA values must be multiplied by the following ratio: Fixture Mounting Height/Total Pole Height. Specify pole size: 3 (3"), 4 (4"), 5 (5"), or 6 (6")

Tenons and Brackets‡ (must specify color)

Square Internal Mount Vertical Tenons (Steel)
- Mounts to 3-6" (76-152mm) square aluminum or steel poles

PB-1A* – Single
PB-2A* – 180˚ Twin
PB-3A* – 180˚ Triple
PB-4A*(90) – 90˚ Quad
PB-4A*(180) – 180˚ Quad

Square Internal Mount Horizontal Tenons (Aluminum)
- Mounts to 4" (102mm) square aluminum or steel poles
- Not for use with OSQX luminaires

PD-2A4(90) – 90˚ Twin
PD-2A4(180) – 180˚ Twin
PD-3A4(90) – 90˚ Triple
PD-4A4(90) – 90˚ Quad

Wall Mount Brackets
- Mounts to wall or roof

WM-2 – Horizontal for OSQ-ML-C-AA or OSQ-X-C-AA mounts
WM-4 – L-Shape for OSQ-ML-C-AA or OSQ-X-C-AA mounts
WM-DM – Plate for OSQ-ML-C-DA or OSQ-X-C-DA mounts

Round External Mount Vertical Tenons (Steel)
- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons

PB-2R2.375 – Twin
PB-3R2.375 – Triple
PB-4R2.375 – Quad

Round External Mount Horizontal Tenons (Aluminum)
- Mounts to 2.375" (60mm) O.D. round aluminum or steel poles or tenons
- Mounts to square pole with PB-1A* tenon
- Not for use with OSQX luminaires

PT-1 – Single (Vertical)
PT-2(90) – 90˚ Twin
PT-2(180) – 180˚ Twin
PT-3(90) – 90˚ Triple
PT-3(120) – 120˚ Triple
PT-4(90) – 90˚ Quad

Mid-Pole Bracket
- Mounts to square pole

PW-1A3** – Single
PW-2A3** – Double

Ground Mount Post
- For ground-mounted flood luminaires

PGM-1 - for OSQ-ML-C-AA or OSQ-X-C-AA mounts

‡ Refer to the Bracket and Tenons spec sheet for more details

Luminaire EPA

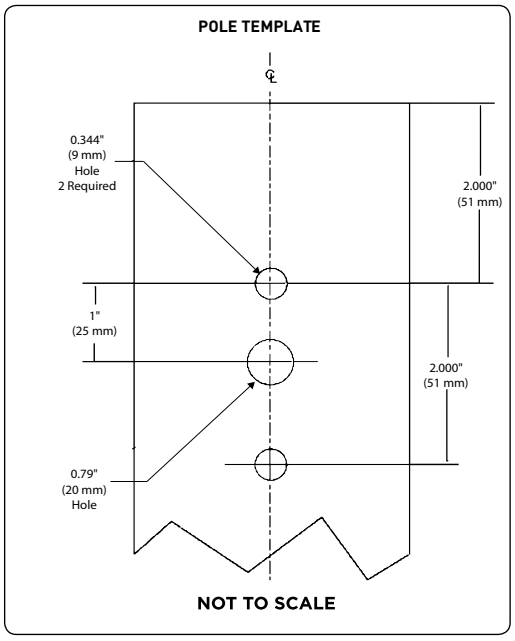
Direct Arm Mount – OSQ-ML-C-DA Weight: Medium - 19.7 lbs. (8.9kg); Large - 28.8 lbs. (13.1kg); **OSQ-X-C-DA** Weight: Extra Large - 45.8 lbs. (20.8kg)						
Luminaire	Single	2 @ 180˚	2 @ 90˚	3 @ 90˚	3 @ 120˚	4 @ 90˚
						
OSQM	0.63	1.26	0.98	1.61	1.79	1.97
OSQL	0.72	1.45	1.24	1.97	2.23	2.49
OSQX	0.91	1.83	1.52	2.43	2.74	3.04

Direct Mount Configurations

Compatibility with Direct Mount Brackets					
Size	2 @ 90˚	2 @ 180˚	3 @ 90˚	3 @ 120˚	4 @ 90˚
3" Square					
Medium/Large	✓	✓	✓	N/A	✓
Extra Large	N/A	✓	N/A	N/A	N/A
3" Round					
Medium/Large	N/A	✓	N/A	✓	N/A
Extra Large	N/A	N/A	N/A	N/A	N/A
4" Square					
Medium/Large	✓	✓	✓	N/A	✓
Extra Large	✓	✓	✓	N/A	✓
4" Round					
Medium/Large	✓	✓	✓	✓	✓
Extra Large	✓	✓	✓	✓	✓
5" Square					
Medium/Large	✓	✓	✓	N/A	✓
Extra Large	✓	✓	✓	N/A	✓
5" Round					
Medium/Large	✓	✓	✓	✓	✓
Extra Large	✓	✓	✓	✓	✓
6" + Square					
Medium/Large	✓	✓	✓	N/A	✓
Extra Large	✓	✓	✓	N/A	✓
6" + Round					
Medium/Large	✓	✓	✓	✓	✓
Extra Large	✓	✓	✓	✓	✓

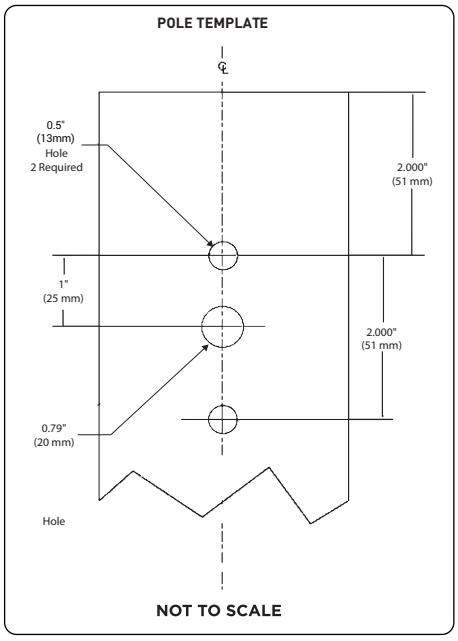
Fixture Mounting Drill Pattern for OSQ-ML-C-DA Mount

Note: When using with Cree Lighting poles, order the BLANK Fixture Mounting Drill Pattern.



Fixture Mounting Drill Pattern for OSQ-X-C-DA

Note: When using with Cree Lighting poles, order the Q Fixture Mounting Drill Pattern.



Luminaire EPA

Trunnion Mount – OSQ-ML-C-TM Weight: Medium - 23.2 lbs. (10.5kg); Large - 32.3 lbs. (14.7kg)	
Single	
Medium	**Large**
0˚ Tilt	
0.69	0.78
45˚ Tilt	
1.41	2.62
90˚ Tilt	
1.89	3.52

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings. When ordered with the N option, the luminaire will include an ANSI C136.15-2020 utility label that indicates the wattage (rounded to nearest 10W), the lumen output (rounded to nearest 1000 lumens), and the CCT of the luminaire at the selected lumen output. Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others). When ordered with the N option, the luminaire will include a utility label that indicates the wattage, lumen output, and CCT of the setting selected.

Q & X Option Power & Lumen Data – 4L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-277V	Lumen Values				Utility Label Wattage	Utility Label Lumens			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS		Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	26	3,650	3,840	2,510	2,300	30	4000 L	4000 L	3000 L	2000 L
	40K (70 CRI)		3,800	4,000	2,620	2,400		4000 L	4000 L	3000 L	2000 L
	50K (90 CRI)		2,590	2,720	1,780	1,630		3000 L	3000 L	2000 L	2000 L
	57K (70 CRI)		3,800	4,000	2,620	2,400		4000 L	4000 L	3000 L	2000 L
Q8/X8	30K (70 CRI)	24	3,480	3,660	2,390	2,190	20	3000 L	4000 L	2000 L	2000 L
	40K (70 CRI)		3,630	3,820	2,500	2,290		4000 L	4000 L	3000 L	2000 L
	50K (90 CRI)		2,460	2,590	1,690	1,550		2000 L	3000 L	2000 L	2000 L
	57K (70 CRI)		3,630	3,820	2,500	2,290		4000 L	4000 L	3000 L	2000 L
Q7/X7	30K (70 CRI)	23	3,340	3,510	2,300	2,100	20	3000 L	4000 L	2000 L	2000 L
	40K (70 CRI)		3,480	3,660	2,390	2,190		3000 L	4000 L	2000 L	2000 L
	50K (90 CRI)		2,370	2,490	1,630	1,490		2000 L	2000 L	2000 L	1000 L
	57K (70 CRI)		3,480	3,660	2,390	2,190		3000 L	4000 L	2000 L	2000 L
Q6/X6	30K (70 CRI)	22	3,220	3,390	2,220	2,030	20	3000 L	3000 L	2000 L	2000 L
	40K (70 CRI)		3,360	3,540	2,310	2,120		3000 L	4000 L	2000 L	2000 L
	50K (90 CRI)		2,280	2,400	1,570	1,440		2000 L	2000 L	2000 L	1000 L
	57K (70 CRI)		3,360	3,540	2,310	2,120		3000 L	4000 L	2000 L	2000 L
Q5/X5	30K (70 CRI)	20	2,950	3,100	2,030	1,860	20	3000 L	3000 L	2000 L	2000 L
	40K (70 CRI)		3,070	3,230	2,110	1,930		3000 L	3000 L	2000 L	2000 L
	50K (90 CRI)		2,090	2,200	1,440	1,320		2000 L	2000 L	1000 L	1000 L
	57K (70 CRI)		3,070	3,230	2,110	1,930		3000 L	3000 L	2000 L	2000 L
Q4/X4	30K (70 CRI)	18	2,680	2,820	1,840	1,690	20	3000 L	3000 L	2000 L	2000 L
	40K (70 CRI)		2,790	2,940	1,920	1,760		3000 L	3000 L	2000 L	2000 L
	50K (90 CRI)		1,900	2,000	1,310	1,200		2000 L	2000 L	1000 L	1000 L
	57K (70 CRI)		2,790	2,940	1,920	1,760		3000 L	3000 L	2000 L	2000 L
Q3/X3	30K (70 CRI)	16	2,470	2,600	1,700	1,560	20	2000 L	3000 L	2000 L	2000 L
	40K (70 CRI)		2,580	2,710	1,770	1,620		3000 L	3000 L	2000 L	2000 L
	50K (90 CRI)		1,750	1,840	1,200	1,100		2000 L	2000 L	1000 L	1000 L
	57K (70 CRI)		2,580	2,710	1,770	1,620		3000 L	3000 L	2000 L	2000 L
Q2/X2	30K (70 CRI)	15	2,220	2,340	1,530	1,400	20	2000 L	2000 L	2000 L	1000 L
	40K (70 CRI)		2,320	2,440	1,600	1,460		2000 L	2000 L	2000 L	1000 L
	50K (90 CRI)		1,580	1,660	1,090	990		2000 L	2000 L	1000 L	1000 L
	57K (70 CRI)		2,320	2,440	1,600	1,460		2000 L	2000 L	2000 L	1000 L
Q1/X1	30K (70 CRI)	13	1,970	2,070	1,350	1,240	10	2000 L	2000 L	1000 L	1000 L
	40K (70 CRI)		2,050	2,160	1,410	1,290		2000 L	2000 L	1000 L	1000 L
	50K (90 CRI)		1,400	1,470	960	880		1000 L	1000 L	1000 L	1000 L
	57K (70 CRI)		2,050	2,160	1,410	1,290		2000 L	2000 L	1000 L	1000 L

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings. When ordered with the N option, the luminaire will include an ANSI C136.15-2020 utility label that indicates the wattage (rounded to nearest 10W), the lumen output (rounded to nearest 1000 lumens), and the CCT of the luminaire at the selected lumen output. Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others). When ordered with the N option, the luminaire will include a utility label that indicates the wattage, lumen output, and CCT of the setting selected.

Q & X Option Power & Lumen Data – 6L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values				Utility Label Wattage	Utility Label Lumens			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS		Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	37	5,475	5,750	3,760	3,440	40	5000 L	6000 L	4000 L	3000 L
	40K (70 CRI)		5,700	6,000	3,920	3,590		6000 L	6000 L	4000 L	4000 L
	50K (90 CRI)		3,880	4,080	2,670	2,440		4000 L	4000 L	3000 L	2000 L
	57K (70 CRI)		5,700	6,000	3,920	3,590		6000 L	6000 L	4000 L	4000 L
Q8/X8	30K (70 CRI)	34	5,200	5,475	3,580	3,280	30	5000 L	5000 L	4000 L	3000 L
	40K (70 CRI)		5,450	5,725	3,740	3,430		5000 L	6000 L	4000 L	3000 L
	50K (90 CRI)		3,700	3,890	2,540	2,330		4000 L	4000 L	3000 L	2000 L
	57K (70 CRI)		5,450	5,725	3,740	3,430		5000 L	6000 L	4000 L	3000 L
Q7/X7	30K (70 CRI)	32	4,990	5,250	3,430	3,140	30	5000 L	5000 L	3000 L	3000 L
	40K (70 CRI)		5,200	5,475	3,580	3,280		5000 L	5000 L	4000 L	3000 L
	50K (90 CRI)		3,550	3,730	2,440	2,230		4000 L	4000 L	2000 L	2000 L
	57K (70 CRI)		5,200	5,475	3,580	3,280		5000 L	5000 L	4000 L	3000 L
Q6/X6	30K (70 CRI)	30	4,820	5,075	3,320	3,040	30	5000 L	5000 L	3000 L	3000 L
	40K (70 CRI)		5,050	5,300	3,470	3,170		5000 L	5000 L	3000 L	3000 L
	50K (90 CRI)		3,430	3,610	2,360	2,160		3000 L	4000 L	2000 L	2000 L
	57K (70 CRI)		5,050	5,300	3,470	3,170		5000 L	5000 L	3000 L	3000 L
Q5/X5	30K (70 CRI)	28	4,420	4,650	3,040	2,780	30	4000 L	5000 L	3000 L	3000 L
	40K (70 CRI)		4,610	4,850	3,170	2,900		5000 L	5000 L	3000 L	3000 L
	50K (90 CRI)		3,140	3,300	2,160	1,980		3000 L	3000 L	2000 L	2000 L
	57K (70 CRI)		4,610	4,850	3,170	2,900		5000 L	5000 L	3000 L	3000 L
Q4/X4	30K (70 CRI)	25	4,010	4,220	2,760	2,530	30	4000 L	4000 L	3000 L	3000 L
	40K (70 CRI)		4,180	4,400	2,880	2,640		4000 L	4000 L	3000 L	3000 L
	50K (90 CRI)		2,840	2,990	1,960	1,790		3000 L	3000 L	2000 L	2000 L
	57K (70 CRI)		4,180	4,400	2,880	2,640		4000 L	4000 L	3000 L	3000 L
Q3/X3	30K (70 CRI)	23	3,710	3,900	2,550	2,340	20	4000 L	4000 L	3000 L	2000 L
	40K (70 CRI)		3,870	4,070	2,660	2,440		4000 L	4000 L	3000 L	2000 L
	50K (90 CRI)		2,630	2,770	1,810	1,660		3000 L	3000 L	2000 L	2000 L
	57K (70 CRI)		3,870	4,070	2,660	2,440		4000 L	4000 L	3000 L	2000 L
Q2/X2	30K (70 CRI)	20	3,340	3,510	2,300	2,100	20	3000 L	4000 L	2000 L	2000 L
	40K (70 CRI)		3,480	3,660	2,390	2,190		3000 L	4000 L	2000 L	2000 L
	50K (90 CRI)		2,370	2,490	1,630	1,490		2000 L	2000 L	2000 L	1000 L
	57K (70 CRI)		3,480	3,660	2,390	2,190		3000 L	4000 L	2000 L	2000 L
Q1/X1	30K (70 CRI)	18	2,950	3,100	2,030	1,860	20	3000 L	3000 L	2000 L	2000 L
	40K (70 CRI)		3,070	3,230	2,110	1,930		3000 L	3000 L	2000 L	2000 L
	50K (90 CRI)		2,090	2,200	1,440	1,320		2000 L	2000 L	1000 L	1000 L
	57K (70 CRI)		3,070	3,230	2,110	1,930		3000 L	3000 L	2000 L	2000 L

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings. When ordered with the N option, the luminaire will include an ANSI C136.15-2020 utility label that indicates the wattage (rounded to nearest 10W), the lumen output (rounded to nearest 1000 lumens), and the CCT of the luminaire at the selected lumen output. Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others). When ordered with the N option, the luminaire will include a utility label that indicates the wattage, lumen output, and CCT of the setting selected.

Q & X Option Power & Lumen Data – 9L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values				Utility Label Wattage	Utility Label Lumens			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS		Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	55	8,225	8,650	5,650	5,175	60	8000 L	9000 L	6000 L	5000 L
	40K (70 CRI)		8,550	9,000	5,875	5,400		9000 L	9000 L	6000 L	5000 L
	50K (90 CRI)		5,825	6,125	4,000	3,670		6000 L	6000 L	4000 L	4000 L
	57K (70 CRI)		8,550	9,000	5,875	5,400		9000 L	9000 L	6000 L	5000 L
Q8/X8	30K (70 CRI)	53	7,850	8,250	5,400	4,940	50	8000 L	8000 L	5000 L	5000 L
	40K (70 CRI)		8,150	8,575	5,600	5,125		8000 L	9000 L	6000 L	5000 L
	50K (90 CRI)		5,550	5,850	3,830	3,500		6000 L	6000 L	4000 L	4000 L
	57K (70 CRI)		8,150	8,575	5,600	5,125		8000 L	9000 L	6000 L	5000 L
Q7/X7	30K (70 CRI)	50	7,500	7,900	5,175	4,730	50	8000 L	8000 L	5000 L	5000 L
	40K (70 CRI)		7,825	8,225	5,375	4,930		8000 L	8000 L	5000 L	5000 L
	50K (90 CRI)		5,325	5,600	3,660	3,350		5000 L	6000 L	4000 L	3000 L
	57K (70 CRI)		7,825	8,225	5,375	4,930		8000 L	8000 L	5000 L	5000 L
Q6/X6	30K (70 CRI)	48	7,275	7,650	5,000	4,580	50	7000 L	8000 L	5000 L	5000 L
	40K (70 CRI)		7,550	7,950	5,200	4,760		8000 L	8000 L	5000 L	5000 L
	50K (90 CRI)		5,150	5,425	3,550	3,250		5000 L	5000 L	4000 L	3000 L
	57K (70 CRI)		7,550	7,950	5,200	4,760		8000 L	8000 L	5000 L	5000 L
Q5/X5	30K (70 CRI)	43	6,650	7,000	4,580	4,190	40	7000 L	7000 L	5000 L	4000 L
	40K (70 CRI)		6,925	7,275	4,760	4,360		7000 L	7000 L	5000 L	4000 L
	50K (90 CRI)		4,710	4,950	3,240	2,960		5000 L	5000 L	3000 L	3000 L
	57K (70 CRI)		6,925	7,275	4,760	4,360		7000 L	7000 L	5000 L	4000 L
Q4/X4	30K (70 CRI)	40	6,025	6,350	4,150	3,800	40	6000 L	6000 L	4000 L	4000 L
	40K (70 CRI)		6,275	6,600	4,320	3,950		6000 L	7000 L	4000 L	4000 L
	50K (90 CRI)		4,280	4,500	2,940	2,700		4000 L	5000 L	3000 L	3000 L
	57K (70 CRI)		6,275	6,600	4,320	3,950		6000 L	7000 L	4000 L	4000 L
Q3/X3	30K (70 CRI)	36	5,575	5,875	3,840	3,520	40	6000 L	6000 L	4000 L	4000 L
	40K (70 CRI)		5,800	6,100	3,990	3,650		6000 L	6000 L	4000 L	4000 L
	50K (90 CRI)		3,940	4,150	2,710	2,490		4000 L	4000 L	3000 L	2000 L
	57K (70 CRI)		5,800	6,100	3,990	3,650		6000 L	6000 L	4000 L	4000 L
Q2/X2*	30K (70 CRI)	32	5,025	5,275	3,450	3,160	30	5000 L	5000 L	3000 L	3000 L
	40K (70 CRI)		5,225	5,500	3,600	3,290		5000 L	6000 L	4000 L	3000 L
	50K (90 CRI)		3,560	3,740	2,450	2,240		4000 L	4000 L	2000 L	2000 L
	57K (70 CRI)		5,225	5,500	3,600	3,290		5000 L	6000 L	4000 L	3000 L
Q1/X1*	30K (70 CRI)	29	4,430	4,660	3,050	2,790	30	4000 L	5000 L	3000 L	3000 L
	40K (70 CRI)		4,610	4,850	3,170	2,900		5000 L	5000 L	3000 L	3000 L
	50K (90 CRI)		3,140	3,300	2,160	1,980		3000 L	3000 L	2000 L	2000 L
	57K (70 CRI)		4,610	4,850	3,170	2,900		5000 L	5000 L	3000 L	3000 L

* X2 and X1 options not available with 9L lumen package with UL voltage.

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings. When ordered with the N option, the luminaire will include an ANSI C136.15-2020 utility label that indicates the wattage (rounded to nearest 10W), the lumen output (rounded to nearest 1000 lumens), and the CCT of the luminaire at the selected lumen output. Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others). When ordered with the N option, the luminaire will include a utility label that indicates the wattage, lumen output, and CCT of the setting selected.

Q & X Option Power & Lumen Data – 11L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values				Utility Label Wattage	Utility Label Lumens			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS		Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	68	10,025	10,550	6,900	6,325	70	10000 L	11000 L	7000 L	6000 L
	40K (70 CRI)		10,450	11,000	7,200	6,600		10000 L	11000 L	7000 L	7000 L
	50K (90 CRI)		7,100	7,475	4,890	4,480		7000 L	7000 L	5000 L	4000 L
	57K (70 CRI)		10,450	11,000	7,200	6,600		10000 L	11000 L	7000 L	7000 L
Q8/X8	30K (70 CRI)	65	9,575	10,075	6,600	6,025	70	10000 L	10000 L	7000 L	6000 L
	40K (70 CRI)		9,975	10,500	6,875	6,300		10000 L	11000 L	7000 L	6000 L
	50K (90 CRI)		6,775	7,125	4,660	4,270		7000 L	7000 L	5000 L	4000 L
	57K (70 CRI)		9,975	10,500	6,875	6,300		10000 L	11000 L	7000 L	6000 L
Q7/X7	30K (70 CRI)	62	9,175	9,650	6,300	5,775	60	9000 L	10000 L	6000 L	6000 L
	40K (70 CRI)		9,550	10,050	6,575	6,025		10000 L	10000 L	7000 L	6000 L
	50K (90 CRI)		6,500	6,825	4,460	4,090		7000 L	7000 L	4000 L	4000 L
	57K (70 CRI)		9,550	10,050	6,575	6,025		10000 L	10000 L	7000 L	6000 L
Q6/X6	30K (70 CRI)	59	8,875	9,325	6,100	5,575	60	9000 L	9000 L	6000 L	6000 L
	40K (70 CRI)		9,250	9,725	6,350	5,825		9000 L	10000 L	6000 L	6000 L
	50K (90 CRI)		6,275	6,600	4,320	3,950		6000 L	7000 L	4000 L	4000 L
	57K (70 CRI)		9,250	9,725	6,350	5,825		9000 L	10000 L	6000 L	6000 L
Q5/X5	30K (70 CRI)	53	8,100	8,525	5,575	5,100	50	8000 L	9000 L	6000 L	5000 L
	40K (70 CRI)		8,450	8,900	5,825	5,325		8000 L	9000 L	6000 L	5000 L
	50K (90 CRI)		5,750	6,050	3,960	3,620		6000 L	6000 L	4000 L	4000 L
	57K (70 CRI)		8,450	8,900	5,825	5,325		8000 L	9000 L	6000 L	5000 L
Q4/X4	30K (70 CRI)	49	7,375	7,750	5,075	4,640	50	7000 L	8000 L	5000 L	5000 L
	40K (70 CRI)		7,675	8,075	5,275	4,840		8000 L	8000 L	5000 L	5000 L
	50K (90 CRI)		5,200	5,475	3,580	3,280		5000 L	5000 L	4000 L	3000 L
	57K (70 CRI)		7,675	8,075	5,275	4,840		8000 L	8000 L	5000 L	5000 L
Q3/X3	30K (70 CRI)	44	6,800	7,150	4,680	4,280	40	7000 L	7000 L	5000 L	4000 L
	40K (70 CRI)		7,075	7,450	4,870	4,460		7000 L	7000 L	5000 L	4000 L
	50K (90 CRI)		4,820	5,075	3,320	3,040		5000 L	5000 L	3000 L	3000 L
	57K (70 CRI)		7,075	7,450	4,870	4,460		7000 L	7000 L	5000 L	4000 L
Q2/X2	30K (70 CRI)	39	6,100	6,425	4,200	3,850	40	6000 L	6000 L	4000 L	4000 L
	40K (70 CRI)		6,375	6,700	4,380	4,010		6000 L	7000 L	4000 L	4000 L
	50K (90 CRI)		4,330	4,560	2,980	2,730		4000 L	5000 L	3000 L	3000 L
	57K (70 CRI)		6,375	6,700	4,380	4,010		6000 L	7000 L	4000 L	4000 L
Q1/X1	30K (70 CRI)	35	5,400	5,675	3,710	3,400	40	5000 L	6000 L	4000 L	3000 L
	40K (70 CRI)		5,625	5,925	3,870	3,550		6000 L	6000 L	4000 L	4000 L
	50K (90 CRI)		3,830	4,030	2,640	2,410		4000 L	4000 L	3000 L	2000 L
	57K (70 CRI)		5,625	5,925	3,870	3,550		6000 L	6000 L	4000 L	4000 L

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings. When ordered with the N option, the luminaire will include an ANSI C136.15-2020 utility label that indicates the wattage (rounded to nearest 10W), the lumen output (rounded to nearest 1000 lumens), and the CCT of the luminaire at the selected lumen output. Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others). When ordered with the N option, the luminaire will include a utility label that indicates the wattage, lumen output, and CCT of the setting selected.

Q & X Option Power & Lumen Data – 16L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values				Utility Label Wattage	Utility Label Lumens			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS		Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	97	14,650	15,400	10,075	9,225	100	15000 L	15000 L	10000 L	9000 L
	40K (70 CRI)		15,200	16,000	10,450	9,575		15000 L	16000 L	10000 L	10000 L
	50K (90 CRI)		10,325	10,875	7,100	6,525		10000 L	11000 L	7000 L	7000 L
	57K (70 CRI)		15,200	16,000	10,450	9,575		15000 L	16000 L	10000 L	10000 L
Q8/X8	30K (70 CRI)	93	13,975	14,700	9,600	8,800	90	14000 L	15000 L	10000 L	9000 L
	40K (70 CRI)		14,550	15,300	10,000	9,175		15000 L	15000 L	10000 L	9000 L
	50K (90 CRI)		9,850	10,375	6,775	6,225		10000 L	10000 L	7000 L	6000 L
	57K (70 CRI)		14,550	15,300	10,000	9,175		15000 L	15000 L	10000 L	9000 L
Q7/X7	30K (70 CRI)	87	13,375	14,075	9,200	8,425	90	13000 L	14000 L	9000 L	8000 L
	40K (70 CRI)		13,900	14,625	9,575	8,750		14000 L	15000 L	10000 L	9000 L
	50K (90 CRI)		9,450	9,950	6,500	5,950		9000 L	10000 L	7000 L	6000 L
	57K (70 CRI)		13,900	14,625	9,575	8,750		14000 L	15000 L	10000 L	9000 L
Q6/X6	30K (70 CRI)	84	12,950	13,625	8,900	8,150	80	13000 L	14000 L	9000 L	8000 L
	40K (70 CRI)		13,450	14,150	9,250	8,475		13000 L	14000 L	9000 L	8000 L
	50K (90 CRI)		9,150	9,625	6,300	5,775		9000 L	10000 L	6000 L	6000 L
	57K (70 CRI)		13,450	14,150	9,250	8,475		13000 L	14000 L	9000 L	8000 L
Q5/X5	30K (70 CRI)	76	11,825	12,450	8,150	7,450	80	12000 L	12000 L	8000 L	7000 L
	40K (70 CRI)		12,275	12,925	8,450	7,750		12000 L	13000 L	8000 L	8000 L
	50K (90 CRI)		8,350	8,775	5,750	5,250		8000 L	9000 L	6000 L	5000 L
	57K (70 CRI)		12,275	12,925	8,450	7,750		12000 L	13000 L	8000 L	8000 L
Q4/X4	30K (70 CRI)	70	10,750	11,300	7,400	6,775	70	11000 L	11000 L	7000 L	7000 L
	40K (70 CRI)		11,175	11,750	7,675	7,025		11000 L	12000 L	8000 L	7000 L
	50K (90 CRI)		7,575	7,975	5,225	4,780		8000 L	8000 L	5000 L	5000 L
	57K (70 CRI)		11,175	11,750	7,675	7,025		11000 L	12000 L	8000 L	7000 L
Q3/X3	30K (70 CRI)	62	9,925	10,450	6,825	6,250	60	10000 L	10000 L	7000 L	6000 L
	40K (70 CRI)		10,325	10,850	7,100	6,500		10000 L	11000 L	7000 L	7000 L
	50K (90 CRI)		7,000	7,375	4,820	4,420		7000 L	7000 L	5000 L	4000 L
	57K (70 CRI)		10,325	10,850	7,100	6,500		10000 L	11000 L	7000 L	7000 L
Q2/X2	30K (70 CRI)	55	8,925	9,400	6,150	5,625	60	9000 L	9000 L	6000 L	6000 L
	40K (70 CRI)		9,275	9,750	6,375	5,850		9000 L	10000 L	6000 L	6000 L
	50K (90 CRI)		6,300	6,625	4,330	3,970		6000 L	7000 L	4000 L	4000 L
	57K (70 CRI)		9,275	9,750	6,375	5,850		9000 L	10000 L	6000 L	6000 L
Q1*	30K (70 CRI)	50	7,900	8,300	5,425	4,970	50	8000 L	8000 L	5000 L	5000 L
	40K (70 CRI)		8,200	8,625	5,650	5,175		8000 L	9000 L	6000 L	5000 L
	50K (90 CRI)		5,550	5,850	3,830	3,500		6000 L	6000 L	4000 L	4000 L
	57K (70 CRI)		8,200	8,625	5,650	5,175		8000 L	9000 L	6000 L	5000 L

* X1 option not available with 16L lumen package.

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings. When ordered with the N option, the luminaire will include an ANSI C136.15-2020 utility label that indicates the wattage (rounded to nearest 10W), the lumen output (rounded to nearest 1000 lumens), and the CCT of the luminaire at the selected lumen output. Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others). When ordered with the N option, the luminaire will include a utility label that indicates the wattage, lumen output, and CCT of the setting selected.

Q & X Option Power & Lumen Data – 22L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values				Utility Label Wattage	Utility Label Lumens			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS		Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	131	20,100	21,100	13,800	12,625	130	20000 L	21000 L	14000 L	13000 L
	40K (70 CRI)		20,900	22,000	14,375	13,175		21000 L	22000 L	14000 L	13000 L
	50K (90 CRI)		14,200	14,950	9,775	8,950		14000 L	15000 L	10000 L	9000 L
	57K (70 CRI)		20,900	22,000	14,375	13,175		21000 L	22000 L	14000 L	13000 L
Q8/X8	30K (70 CRI)	126	19,100	20,100	13,150	12,050	130	19000 L	20000 L	13000 L	12000 L
	40K (70 CRI)		20,000	21,000	13,725	12,575		20000 L	21000 L	14000 L	13000 L
	50K (90 CRI)		13,550	14,250	9,325	8,525		14000 L	14000 L	9000 L	9000 L
	57K (70 CRI)		20,000	21,000	13,725	12,575		20000 L	21000 L	14000 L	13000 L
Q7/X7	30K (70 CRI)	119	18,300	19,300	12,625	11,550	120	18000 L	19000 L	13000 L	12000 L
	40K (70 CRI)		19,100	20,100	13,150	12,050		19000 L	20000 L	13000 L	12000 L
	50K (90 CRI)		13,000	13,675	8,950	8,200		13000 L	14000 L	9000 L	8000 L
	57K (70 CRI)		19,100	20,100	13,150	12,050		19000 L	20000 L	13000 L	12000 L
Q6/X6	30K (70 CRI)	114	17,800	18,700	12,225	11,200	110	18000 L	19000 L	12000 L	11000 L
	40K (70 CRI)		18,400	19,400	12,675	11,625		18000 L	19000 L	13000 L	12000 L
	50K (90 CRI)		12,575	13,225	8,650	7,925		13000 L	13000 L	9000 L	8000 L
	57K (70 CRI)		18,400	19,400	12,675	11,625		18000 L	19000 L	13000 L	12000 L
Q5/X5	30K (70 CRI)	103	16,200	17,000	11,125	10,175	100	16000 L	17000 L	11000 L	10000 L
	40K (70 CRI)		16,900	17,800	11,650	10,650		17000 L	18000 L	12000 L	11000 L
	50K (90 CRI)		11,475	12,075	7,900	7,225		11000 L	12000 L	8000 L	7000 L
	57K (70 CRI)		16,900	17,800	11,650	10,650		17000 L	18000 L	12000 L	11000 L
Q4/X4	30K (70 CRI)	95	14,725	15,500	10,125	9,275	100	15000 L	16000 L	10000 L	9000 L
	40K (70 CRI)		15,300	16,100	10,525	9,650		15000 L	16000 L	11000 L	10000 L
	50K (90 CRI)		10,425	10,975	7,175	6,575		10000 L	11000 L	7000 L	7000 L
	57K (70 CRI)		15,300	16,100	10,525	9,650		15000 L	16000 L	11000 L	10000 L
Q3/X3	30K (70 CRI)	84	13,600	14,300	9,350	8,575	80	14000 L	14000 L	9000 L	9000 L
	40K (70 CRI)		14,175	14,925	9,750	8,950		14000 L	15000 L	10000 L	9000 L
	50K (90 CRI)		9,625	10,125	6,625	6,075		10000 L	10000 L	7000 L	6000 L
	57K (70 CRI)		14,175	14,925	9,750	8,950		14000 L	15000 L	10000 L	9000 L
Q2/X2	30K (70 CRI)	75	12,250	12,875	8,425	7,700	80	12000 L	13000 L	8000 L	8000 L
	40K (70 CRI)		12,750	13,425	8,775	8,050		13000 L	13000 L	9000 L	8000 L
	50K (90 CRI)		8,675	9,125	5,975	5,475		9000 L	9000 L	6000 L	5000 L
	57K (70 CRI)		12,750	13,425	8,775	8,050		13000 L	13000 L	9000 L	8000 L
Q1/X1	30K (70 CRI)	68	10,825	11,375	7,450	6,825	70	11000 L	11000 L	7000 L	7000 L
	40K (70 CRI)		11,275	11,850	7,750	7,100		11000 L	12000 L	8000 L	7000 L
	50K (90 CRI)		7,650	8,050	5,275	4,820		8000 L	8000 L	5000 L	5000 L
	57K (70 CRI)		11,275	11,850	7,750	7,100		11000 L	12000 L	8000 L	7000 L

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings. When ordered with the N option, the luminaire will include an ANSI C136.15-2020 utility label that indicates the wattage (rounded to nearest 10W), the lumen output (</= 24,000 lumens rounded to nearest 1000 lumens, > 24,001 lumens rounded to the nearest 2000 lumens), and the CCT of the luminaire at the selected lumen output. Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others). When ordered with the N option, the luminaire will include a utility label that indicates the wattage, lumen output, and CCT of the setting selected.

Q & X Option Power & Lumen Data – 30L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values				Utility Label Wattage	Utility Label Lumens			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS		Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	175	27,400	28,800	18,800	17,200	130	28000 L	28000 L	19000 L	17000 L
	40K (70 CRI)		28,500	30,000	19,600	18,000		28000 L	30000 L	20000 L	18000 L
	50K (90 CRI)		19,400	20,400	13,350	12,225		19000 L	20000 L	13000 L	12000 L
	57K (70 CRI)		28,500	30,000	19,600	18,000		28000 L	30000 L	20000 L	18000 L
Q8/X8	30K (70 CRI)	168	26,100	27,500	18,000	16,500	170	26000 L	28000 L	18000 L	17000 L
	40K (70 CRI)		27,200	28,600	18,700	17,100		28000 L	28000 L	19000 L	17000 L
	50K (90 CRI)		18,500	19,500	12,750	11,675		19000 L	20000 L	13000 L	12000 L
	57K (70 CRI)		27,200	28,600	18,700	17,100		28000 L	28000 L	19000 L	17000 L
Q7/X7	30K (70 CRI)	158	25,000	26,300	17,200	15,800	160	26000 L	26000 L	17000 L	16000 L
	40K (70 CRI)		26,000	27,400	17,900	16,400		26000 L	28000 L	18000 L	16000 L
	50K (90 CRI)		17,700	18,600	12,150	11,150		18000 L	19000 L	12000 L	11000 L
	57K (70 CRI)		26,000	27,400	17,900	16,400		26000 L	28000 L	18000 L	16000 L
Q6/X6	30K (70 CRI)	152	24,200	25,500	16,700	15,300	150	24000 L	26000 L	17000 L	15000 L
	40K (70 CRI)		25,200	26,500	17,300	15,900		26000 L	26000 L	17000 L	16000 L
	50K (90 CRI)		17,100	18,000	11,775	10,775		17000 L	18000 L	12000 L	11000 L
	57K (70 CRI)		25,200	26,500	17,300	15,900		26000 L	26000 L	17000 L	16000 L
Q5/X5	30K (70 CRI)	137	22,100	23,300	15,200	13,950	140	22000 L	23000 L	15000 L	14000 L
	40K (70 CRI)		23,000	24,200	15,800	14,500		23000 L	24000 L	16000 L	15000 L
	50K (90 CRI)		15,700	16,500	10,800	9,875		16000 L	17000 L	11000 L	10000 L
	57K (70 CRI)		23,000	24,200	15,800	14,500		23000 L	24000 L	16000 L	15000 L
Q4/X4	30K (70 CRI)	126	20,100	21,100	13,800	12,625	130	20000 L	21000 L	14000 L	13000 L
	40K (70 CRI)		20,900	22,000	14,375	13,175		21000 L	22000 L	14000 L	13000 L
	50K (90 CRI)		14,225	14,975	9,800	8,975		14000 L	15000 L	10000 L	9000 L
	57K (70 CRI)		20,900	22,000	14,375	13,175		21000 L	22000 L	14000 L	13000 L
Q3/X3	30K (70 CRI)	113	18,500	19,500	12,750	11,675	110	19000 L	20000 L	13000 L	12000 L
	40K (70 CRI)		19,300	20,300	13,275	12,150		19000 L	20000 L	13000 L	12000 L
	50K (90 CRI)		13,150	13,825	9,050	8,275		13000 L	14000 L	9000 L	8000 L
	57K (70 CRI)		19,300	20,300	13,275	12,150		19000 L	20000 L	13000 L	12000 L
Q2/X2	30K (70 CRI)	100	16,700	17,600	11,500	10,550	100	17000 L	18000 L	12000 L	11000 L
	40K (70 CRI)		17,400	18,300	11,975	10,950		17000 L	18000 L	12000 L	11000 L
	50K (90 CRI)		11,825	12,450	8,150	7,450		12000 L	12000 L	8000 L	7000 L
	57K (70 CRI)		17,400	18,300	11,975	10,950		17000 L	18000 L	12000 L	11000 L
Q1*	30K (70 CRI)	90	14,725	15,500	10,125	9,275	90	15000 L	16000 L	10000 L	9000 L
	40K (70 CRI)		15,400	16,200	10,600	9,700		15000 L	16000 L	11000 L	10000 L
	50K (90 CRI)		10,450	11,000	7,200	6,600		10000 L	11000 L	7000 L	7000 L
	57K (70 CRI)		15,400	16,200	10,600	9,700		15000 L	16000 L	11000 L	10000 L

* X1 option not available with 30L lumen package.

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings. When ordered with the N option, the luminaire will include an ANSI C136.15-2020 utility label that indicates the wattage (rounded to nearest 10W), the lumen output (</= 24,000 lumens rounded to nearest 1000 lumens, > 24,001 lumens rounded to the nearest 2000 lumens), and the CCT of the luminaire at the selected lumen output. Additional dimming functionality is available when a dimming control (by others) is used in the 7-Pin receptacle.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others). When ordered with the N option, the luminaire will include a utility label that indicates the wattage, lumen output, and CCT of the setting selected.

Q & X Option Power & Lumen Data – 40L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values				Utility Label Wattage	Utility Label Lumens			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS		Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	236	36,500	38,400	25,100	23,000	130	36000 L	38000 L	26000 L	23000 L
	40K (70 CRI)		38,000	40,000	26,200	24,000		38000 L	40000 L	26000 L	24000 L
	50K (90 CRI)		25,900	27,200	17,800	16,300		26000 L	28000 L	18000 L	16000 L
	57K (70 CRI)		38,000	40,000	26,200	24,000		38000 L	40000 L	26000 L	24000 L
Q8/X8	30K (70 CRI)	212	34,800	36,600	23,900	21,900	210	34000 L	36000 L	24000 L	22000 L
	40K (70 CRI)		36,300	38,200	25,000	22,900		36000 L	38000 L	26000 L	23000 L
	50K (90 CRI)		24,600	25,900	16,900	15,500		24000 L	26000 L	17000 L	16000 L
	57K (70 CRI)		36,300	38,200	25,000	22,900		36000 L	38000 L	26000 L	23000 L
Q7/X7	30K (70 CRI)	203	33,400	35,100	23,000	21,000	200	34000 L	36000 L	23000 L	21000 L
	40K (70 CRI)		34,800	36,600	23,900	21,900		34000 L	36000 L	24000 L	22000 L
	50K (90 CRI)		23,700	24,900	16,300	14,925		24000 L	24000 L	16000 L	15000 L
	57K (70 CRI)		34,800	36,600	23,900	21,900		34000 L	36000 L	24000 L	22000 L
Q6/X6	30K (70 CRI)	195	32,200	33,900	22,200	20,300	200	32000 L	34000 L	22000 L	20000 L
	40K (70 CRI)		33,600	35,400	23,100	21,200		34000 L	36000 L	23000 L	21000 L
	50K (90 CRI)		22,800	24,000	15,700	14,375		23000 L	24000 L	16000 L	14000 L
	57K (70 CRI)		33,600	35,400	23,100	21,200		34000 L	36000 L	23000 L	21000 L
Q5/X5	30K (70 CRI)	176	29,500	31,000	20,300	18,600	180	30000 L	32000 L	20000 L	19000 L
	40K (70 CRI)		30,700	32,300	21,100	19,300		30000 L	32000 L	21000 L	19000 L
	50K (90 CRI)		20,900	22,000	14,375	13,175		21000 L	22000 L	14000 L	13000 L
	57K (70 CRI)		30,700	32,300	21,100	19,300		30000 L	32000 L	21000 L	19000 L
Q4/X4	30K (70 CRI)	160	26,800	28,200	18,400	16,900	160	26000 L	28000 L	18000 L	17000 L
	40K (70 CRI)		27,900	29,400	19,200	17,600		28000 L	30000 L	19000 L	18000 L
	50K (90 CRI)		19,000	20,000	13,075	11,975		19000 L	20000 L	13000 L	12000 L
	57K (70 CRI)		27,900	29,400	19,200	17,600		28000 L	30000 L	19000 L	18000 L
Q3/X3	30K (70 CRI)	144	24,700	26,000	17,000	15,600	140	24000 L	26000 L	17000 L	16000 L
	40K (70 CRI)		25,800	27,100	17,700	16,200		26000 L	28000 L	18000 L	16000 L
	50K (90 CRI)		17,500	18,400	12,025	11,025		18000 L	18000 L	12000 L	11000 L
	57K (70 CRI)		25,800	27,100	17,700	16,200		26000 L	28000 L	18000 L	16000 L
Q2/X2	30K (70 CRI)	129	22,200	23,400	15,300	14,025	130	22000 L	23000 L	15000 L	14000 L
	40K (70 CRI)		23,200	24,400	16,000	14,625		23000 L	24000 L	16000 L	15000 L
	50K (90 CRI)		15,800	16,600	10,850	9,950		16000 L	17000 L	11000 L	10000 L
	57K (70 CRI)		23,200	24,400	16,000	14,625		23000 L	24000 L	16000 L	15000 L
Q1/X1	30K (70 CRI)	111	19,700	20,700	13,525	12,400	110	20000 L	21000 L	14000 L	12000 L
	40K (70 CRI)		20,500	21,600	14,125	12,925		21000 L	22000 L	14000 L	13000 L
	50K (90 CRI)		13,925	14,650	9,575	8,775		14000 L	15000 L	10000 L	9000 L
	57K (70 CRI)		20,500	21,600	14,125	12,925		21000 L	22000 L	14000 L	13000 L

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others).

Q & X Option Power & Lumen Data – 50L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	297	45,600	48,000	31,400	28,700
	40K (70 CRI)		47,500	50,000	32,700	29,900
	50K (90 CRI)		32,300	34,000	22,200	20,400
	57K (70 CRI)		47,500	50,000	32,700	29,900
Q8/X8	30K (70 CRI)	285	43,500	45,800	29,900	27,400
	40K (70 CRI)		45,300	47,700	31,200	28,600
	50K (90 CRI)		30,800	32,400	21,200	19,400
	57K (70 CRI)		45,300	47,700	31,200	28,600
Q7/X7	30K (70 CRI)	269	41,700	43,900	28,700	26,300
	40K (70 CRI)		43,400	45,700	29,900	27,400
	50K (90 CRI)		29,600	31,100	20,300	18,600
	57K (70 CRI)		43,400	45,700	29,900	27,400
Q6/X6	30K (70 CRI)	258	40,300	42,400	27,700	25,400
	40K (70 CRI)		42,000	44,200	28,900	26,500
	50K (90 CRI)		28,600	30,100	19,700	18,000
	57K (70 CRI)		42,000	44,200	28,900	26,500
Q5/X5	30K (70 CRI)	233	36,900	38,800	25,400	23,200
	40K (70 CRI)		38,400	40,400	26,400	24,200
	50K (90 CRI)		26,100	27,500	18,000	16,500
	57K (70 CRI)		38,400	40,400	26,400	24,200
Q4/X4	30K (70 CRI)	215	33,500	35,200	23,000	21,100
	40K (70 CRI)		34,900	36,700	24,000	22,000
	50K (90 CRI)		23,800	25,000	16,300	14,975
	57K (70 CRI)		34,900	36,700	24,000	22,000
Q3/X3	30K (70 CRI)	191	30,900	32,500	21,300	19,500
	40K (70 CRI)		32,200	33,900	22,200	20,300
	50K (90 CRI)		22,000	23,100	15,100	13,825
	57K (70 CRI)		32,200	33,900	22,200	20,300
Q2/X2	30K (70 CRI)	170	27,900	29,300	19,200	17,500
	40K (70 CRI)		29,000	30,500	19,900	18,300
	50K (90 CRI)		19,700	20,700	13,525	12,400
	57K (70 CRI)		29,000	30,500	19,900	18,300
Q1/X1	30K (70 CRI)	153	24,600	25,900	16,900	15,500
	40K (70 CRI)		25,700	27,000	17,700	16,200
	50K (90 CRI)		17,400	18,300	11,975	10,950
	57K (70 CRI)		25,700	27,000	17,700	16,200

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others).

Q & X Option Power & Lumen Data – 65L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	384	59,300	62,400	40,800	37,400
	40K (70 CRI)		61,800	65,000	42,500	38,900
	50K (90 CRI)		42,000	44,200	28,900	26,500
	57K (70 CRI)		61,800	65,000	42,500	38,900
Q8/X8	30K (70 CRI)	365	56,600	59,500	38,900	35,600
	40K (70 CRI)		58,900	62,000	40,500	37,100
	50K (90 CRI)		40,100	42,200	27,600	25,300
	57K (70 CRI)		58,900	62,000	40,500	37,100
Q7/X7	30K (70 CRI)	347	54,200	57,000	37,300	34,100
	40K (70 CRI)		56,500	59,400	38,800	35,600
	50K (90 CRI)		38,400	40,400	26,400	24,200
	57K (70 CRI)		56,500	59,400	38,800	35,600
Q6/X6	30K (70 CRI)	332	52,500	55,200	36,100	33,100
	40K (70 CRI)		54,700	57,500	37,600	34,400
	50K (90 CRI)		37,200	39,100	25,600	23,400
	57K (70 CRI)		54,700	57,500	37,600	34,400
Q5/X5	30K (70 CRI)	301	47,900	50,400	33,000	30,200
	40K (70 CRI)		49,900	52,500	34,300	31,400
	50K (90 CRI)		33,900	35,700	23,300	21,400
	57K (70 CRI)		49,900	52,500	34,300	31,400
Q4/X4	30K (70 CRI)	276	43,500	45,800	29,900	27,400
	40K (70 CRI)		45,300	47,700	31,200	28,600
	50K (90 CRI)		30,800	32,400	21,200	19,400
	57K (70 CRI)		45,300	47,700	31,200	28,600
Q3/X3	30K (70 CRI)	247	40,200	42,300	27,700	25,300
	40K (70 CRI)		41,900	44,100	28,800	26,400
	50K (90 CRI)		28,500	30,000	19,600	18,000
	57K (70 CRI)		41,900	44,100	28,800	26,400
Q2/X2	30K (70 CRI)	220	36,200	38,100	24,900	22,800
	40K (70 CRI)		37,700	39,700	26,000	23,800
	50K (90 CRI)		25,700	27,000	17,700	16,200
	57K (70 CRI)		37,700	39,700	26,000	23,800
Q1*	30K (70 CRI)	195	31,900	33,600	22,000	20,100
	40K (70 CRI)		33,300	35,000	22,900	21,000
	50K (90 CRI)		22,600	23,800	15,600	14,250
	57K (70 CRI)		33,300	35,000	22,900	21,000

* X1 option not available with 65L lumen package.

Field Adjustable Output (Q9/Q8/Q7/Q6/Q5/Q4/Q3/Q2/Q1) Option Description:

The Field Adjustable Output option enables the OSQ area luminaires to be tuned to the exact needs of a particular application through multiple levels of adjustment. When ordered with the Q option, the luminaire will be shipped from the factory at the selected Q setting and will be fully adjustable between the nine settings.

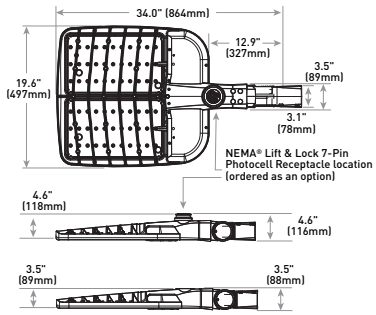
Locked Lumen Output (X8/X7/X6/X5/X4/X3/X2/X1) Option Description:

The Locked Lumen Output option on this page permanently locks the lumen output on the OSQ area luminaire to the setting selected. When ordered with the X option, the luminaire will be shipped from the factory at the lumen output setting selected and will only be able to be adjusted down in the field through a dimming control (by others).

Q & X Option Power & Lumen Data – 75L Lumen Package

Q/X Option Setting	CCT/CRI	System Watts 120-480V	Lumen Values			
			Asymmetric	Symmetric	2M, 3M, AF w/BLS	4M w/BLS
Q9 (Full Power)	30K (70 CRI)	447	68,400	72,000	47,100	43,100
	40K (70 CRI)		71,300	75,000	49,000	44,900
	50K (90 CRI)		48,500	51,000	33,300	30,500
	57K (70 CRI)		71,300	75,000	49,000	44,900
Q8/X8	30K (70 CRI)	426	65,300	68,700	44,900	41,100
	40K (70 CRI)		68,100	71,600	46,800	42,900
	50K (90 CRI)		46,300	48,700	31,800	29,200
	57K (70 CRI)		68,100	71,600	46,800	42,900
Q7/X7	30K (70 CRI)	404	62,500	65,800	43,000	39,400
	40K (70 CRI)		65,200	68,600	44,900	41,100
	50K (90 CRI)		44,300	46,600	30,500	27,900
	57K (70 CRI)		65,200	68,600	44,900	41,100
Q6/X6	30K (70 CRI)	387	60,500	63,600	41,600	38,100
	40K (70 CRI)		63,000	66,300	43,400	39,700
	50K (90 CRI)		42,900	45,100	29,500	27,000
	57K (70 CRI)		63,000	66,300	43,400	39,700
Q5/X5	30K (70 CRI)	350	55,300	58,200	38,100	34,900
	40K (70 CRI)		57,600	60,600	39,600	36,300
	50K (90 CRI)		39,200	41,200	26,900	24,700
	57K (70 CRI)		57,600	60,600	39,600	36,300
Q4/X4	30K (70 CRI)	321	50,200	52,800	34,500	31,600
	40K (70 CRI)		52,400	55,100	36,000	33,000
	50K (90 CRI)		35,600	37,400	24,500	22,400
	57K (70 CRI)		52,400	55,100	36,000	33,000
Q3/X3	30K (70 CRI)	287	46,400	48,800	31,900	29,200
	40K (70 CRI)		48,400	50,900	33,300	30,500
	50K (90 CRI)		32,900	34,600	22,600	20,700
	57K (70 CRI)		48,400	50,900	33,300	30,500
Q2/X2	30K (70 CRI)	256	41,700	43,900	28,700	26,300
	40K (70 CRI)		43,500	45,800	29,900	27,400
	50K (90 CRI)		29,600	31,100	20,300	18,600
	57K (70 CRI)		43,500	45,800	29,900	27,400
Q1/X1	30K (70 CRI)	227	36,900	38,800	25,400	23,200
	40K (70 CRI)		38,400	40,400	26,400	24,200
	50K (90 CRI)		26,100	27,500	18,000	16,500
	57K (70 CRI)		38,400	40,400	26,400	24,200

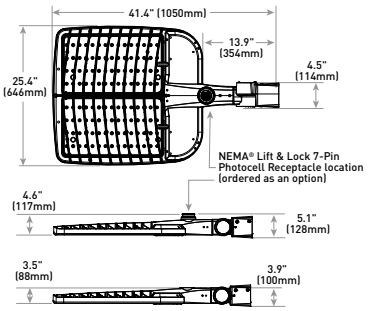
OSQL - AA Mount



Luminaire	Weight
OSQL	28.4 lbs. (12.9kg)

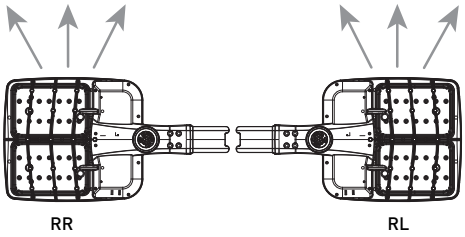
Note: For OSQM w/AA mount, refer to drawing on page 1.

OSQX - AA Mount

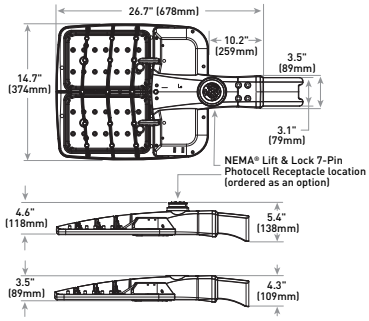


Luminaire	Weight
OSQX	48.6 lbs. (22.0kg)

RR/RL Configuration



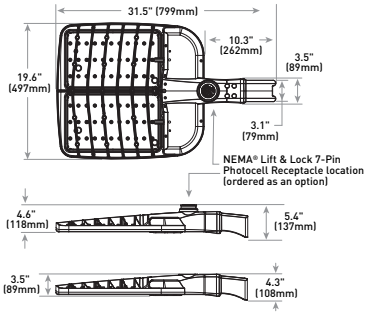
OSQM - DA Mount



Luminaire	Weight
OSQM	19.7 lbs. (8.9kg)

Note: Refer to page 14 for fixture mounting drill pattern.

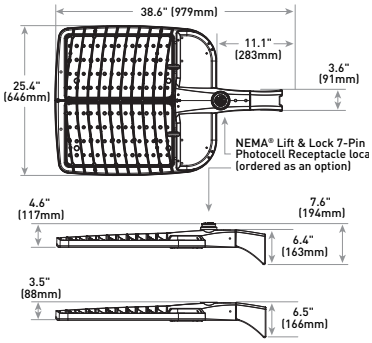
OSQL - DA Mount



Luminaire	Weight
OSQL	28.8 lbs. (13.1kg)

Note: Refer to page 14 for fixture mounting drill pattern.

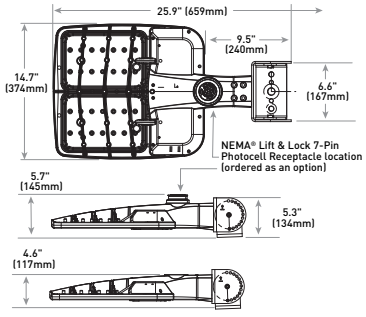
OSQX-DA Mount



Luminaire	Weight
OSQX	45.8 lbs. (20.8kg)

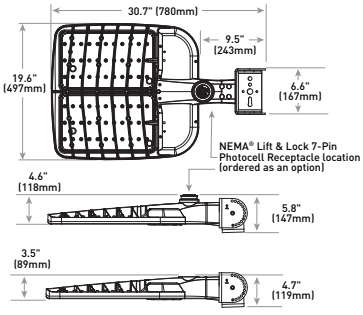
Note: Refer to page 14 for fixture mounting drill pattern.

OSQM - Trunnion Mount



Luminaire	Weight
OSQM	23.2 lbs. (10.5kg)

OSQL - Trunnion Mount



Luminaire	Weight
OSQL	32.3 lbs. (14.7kg)

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A COMPANY OF *IDEAL INDUSTRIES, INC.*

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
(772) 742 1555
redtaildg.com
todm@redtaildg.com

LEGAL DESCRIPTION
(Source: Submitted ALTA Survey)

PARCEL A:

A PARCEL OF LAND LYING IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE S 1/2 OF THE SE 1/4 OF THE NE 1/4 OF THE NE 1/4; AND THE SW 1/4 OF THE NE 1/4 OF THE NE 1/4; AND SE 1/4 OF THE NW 1/4 OF THE NE 1/4; LESS THE NORTH 50 FEET THEREOF; AND SE 1/4 OF THE NE 1/4, LESS THE NORTH 254.5 FEET SOUTH 294.5 FEET OF THE EAST 300 FEET OF THE SE 1/4 OF THE SE 1/4 OF THE NE 1/4; AND THE EAST 791.25 FEET OF THE SW 1/4 OF THE NE 1/4; LESS RIGHTS OF WAY FOR PUBLIC ROADS AND DRAINAGE CANALS AS TO ALL OF SAID PARCELS; ALL IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. LESS AND EXCEPT THE SOUTH 600.00 FEET THEREOF.

PARCEL B:

A PARCEL OF LAND LYING IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE WEST 725.27 FEET OF THE SOUTH 600.00 FEET OF THE FOLLOWING DESCRIBED PROPERTY: THE EAST 791.25 FEET OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 7, LESS RIGHT-OF- WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

LESS AND EXCEPT THE FOLLOWING PARCEL:

A PORTION OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7; THENCE NORTH 00° 00'56" EAST ALONG THE EAST LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 40.00 FEET; THENCE SOUTH 89° 42'09" WEST ALONG A LINE 40 FEET NORTH FROM AND PARALLEL WITH, AS MEASURED AT RIGHT ANGLES TO THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 65.98 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 89° 42'09" WEST ALONG SAID PARALLEL LINE FOR 157.17 FEET; THENCE NORTH 00° 17'51" WEST, FOR 92.93 FEET TO A POINT OF CURVATURE WITH A CURVE CONCAVE TO THE SOUTHWEST, SAID CURVE HAVING A RADIUS OF 206.46 FEET AND A CENTRAL ANGLE OF 34° 44'37"; THENCE NORTHWESTERLY ALONG SAID CURVE FOR 125.20 FEET TO A POINT OF TANGENCY; THENCE NORTH 35° 02'28N WEST, FOR 109.91 FEET TO A POINT OF CURVATURE WITH A CURVE

CONCAVE TO THE EAST, SAID CURVE HAVING A RADIUS OF 280.00 FEET AND A CENTRAL ANGLE OF 39° 48'56"; THENCE NORTHERLY ALONG SAID CURVE FOR 194.58 FEET TO A POINT OF TANGENCY, THENCE NORTH 04° 46'28" EAST, FOR 18.58 FEET TO A POINT OF CURVATURE WITH A CURVE CONCAVE TO THE EAST, SAID CURVE HAVING A RADIUS OF 477.11 AND A CENTRAL ANGLE OF 11° 47'43" THENCE NORTHERLY ALONG SAID CURVE FOR 98.22 FEET; THENCE NORTH 89° 42'09" EAST ALONG A LINE 640 FEET NORTH FROM AND PARALLEL WITH, AS MEASURED AT RIGHT ANGLES TO THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 288.42 FEET; THENCE SOUTH 00° 00'56" WEST ALONG THE EAST LINE OF THE WEST 725.27 FEET OF THE EAST 791.25 FEET OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 600.01 FEET TO THE POINT OF BEGINNING.

AND FURTHER EXCEPTING ANY PART LYING WITHIN THAT CERTAIN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 3210, PAGE 468, OF THE PUBLIC RECORDS OF SAID COUNTY.

SUBJECT TO EXISTING EASEMENTS, RIGHTS-OF-WAY, COVENANTS, RESERVATIONS AND RESTRICTIONS OF RECORD, IF ANY.

SAID LANDS LYING AND SITUATE IN ST LUCIE COUNTY, FLORIDA.

EDWIN M. FRY, Jr., CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 2795650 OR BOOK 2483 PAGE 1551, Recorded 02/09/2006 at 02:53 PM
Doc Tax: $34650.00

Prepared by and Return to:

Richard W. Hawthorne, Esq.
Foley & Lardner LLP
One Independent Drive, Suite 1300
Jacksonville, FL 32202
061784/0102

Tax Parcel # 2407-144-0001-000-5
2407-124-0001-000-3
2408-233-0001-000-1

SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED is made this 31st day of January, 2006, by and between **FM FLORIDA LAND COMPANY LLC**, a Delaware limited liability company, whose address for notices is 1682 West Hibiscus Boulevard, Melbourne, Florida 32901 (the "Grantor"), and **FM MILLCREEK HOLDING, LLC**, a Florida limited liability company, whose address for notices is 1682 West Hibiscus Boulevard, Melbourne, Florida 32901 (the "Grantee").

W I T N E S S E T H:

That the Grantor, in consideration of the sum of Ten Dollars and other valuable consideration paid by the Grantee, receipt and sufficiency of which is acknowledged, has granted, bargained and sold to the Grantee, its successors and assigns forever, the following described real property located in St. Lucie County, Florida (the "Property").

See **Exhibit A** attached hereto and incorporated herein.

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

To have and to hold the same in fee simple forever.

The benefits and obligations hereunder shall inure to and be binding upon the successors and assigns of the respective parties hereto, and the Grantor warrants that, except as provided on **Exhibit B** attached hereto as to which matters this conveyance is expressly made subject, at the time of delivery of this deed, the Property was free from all encumbrances made by the Grantor and that Grantor will warrant and defend the same against lawful claims and demands of all persons claiming, by, through or under the Grantor but against none other. Grantor warrants that the Property is not homestead property.

CLERK'S NOTE: This transaction is a conveyance of real estate to a wholly-owned entity. The real estate is encumbered with a mortgage securing the principal sum of $4,950,000. Accordingly, pursuant to Crescent Miami Center, LLC v. Department of Revenue, SC03-2063 (May 19, 2005), deed documentary stamp taxes in the amount of $34,650.00 are being paid in connection with the recordation of this document based on the outstanding principal sum secured by the mortgage.

IN WITNESS WHEREOF, the undersigned Grantor has executed this instrument as of the day and year first above written.

Signed and sealed in the presence of:

Nandra R. Ramnarine
Print or type name

Jannine Henzell
Print or type name

"GRANTOR"

FM FLORIDA LAND COMPANY, LLC, a Delaware limited liability company

By: Forte Macaulay Development Consultants, Inc., a Florida corporation
Its Manager

By: _____
Name: HUGH M. EVANS, JR.
Title: President

STATE OF FLORIDA
COUNTY OF BREVARD

The foregoing instrument was acknowledged before me this 27th day of January, 2006, by Hugh M. Evans, Jr., as President of Forte Macaulay Development Consultants, Inc., a Florida corporation, the Manager of FM Florida Land Company, LLC, a Delaware limited liability company. Such person did not take an oath and: *(notary must check applicable box)*

- ☑ is/are personally known to me.
- ☐ produced a current _____ driver's license as identification.
- ☐ produced _____ as identification.

{Notary Seal must be affixed}

_____
Signature of Notary

Nandra R. Ramnarine
Name of Notary
Commission Number (if not legible on seal): _____
My Commission Expires (if not legible on seal): _____

Notary Public State of Florida
Nandra R Ramnarine
My Commission DD488190
Expires 01/10/2010

Exhibit "A"
Legal Description

Parcel A:

A parcel of land lying in Section 7, Township 35 South, Range 40 East, St. Lucie County, Florida. Being more particularly described as follows:

PARCEL 1:

The S ½ of the SE ¼ of the NE ¼ of the NE ¼; and the SW ¼ of the NE ¼ of the NE ¼; and SE ¼ of the NW ¼ of the NE ¼; LESS the North 50 feet thereof; and SE ¼ of the NE ¼, LESS the North 254.5 feet of the South 294.5 feet of the East 300 feet of the SE ¼ of the SE ¼ of the NE ¼; and the East 791.25 feet of the SW ¼ of the NE ¼; LESS rights of way for public roads and drainage canals as to all of said parcels; all in Section 7, Township 35 South, Range 40 East, St. Lucie County, Florida.

PARCEL 2:

The North 254.5 feet of the South 294.5 feet of the East 300 feet of the SE ¼ of the SE ¼ of the NE ¼ of Section 7, Township 35 South, Range 40 East, St. Lucie County, Florida.

PARCEL 3:

That part of the West 25 feet of the SW ¼ of the SW ¼ of the NW ¼ of Section 8, Township 35 South, Range 40 East, which lies North of Orange Avenue Extension and South of the drainage canal (said 25 foot strip being approximately 355 feet North and South); LESS and except that portion taken for Road Right of Way as described as Parcel No. 211 in Official Records Book 1415, Page 421, St. Lucie County, Florida.

LESS AND EXCEPT THE SOUTH 600.00 FEET THEREOF.

Parcel B:

A parcel of land lying in Section 7, Township 35 South, Range 40 East, St. Lucie County, Florida. Being more particularly described as follows:

The West 725.27 feet of the South 600.00 feet of the following described property:

The East 791.25 feet of the Southwest quarter of the Northeast quarter of said Section 7, Less Right-of-Way for public roads and drainage canals.

LESS AND EXCEPT THE FOLLOWING PARCEL:

A portion of the Southwest Quarter (SE ¼) of the Northeast Quarter (NE ¼) of Section 7, Township 35 South, Range 40 East, St. Lucie County, Florida being more particularly described as follows:

Commence at the Southeast corner of the Southwest Quarter (SW ¼) of the Northeast Quarter (NE ¼) of said Section 7; thence North 00°00'56" East along the east line of the Southwest Quarter (SW ¼) of the Northeast Quarter (NE ¼) of said Section 7, for 40.00 feet; thence South 89°42'09" West along a line 40 feet north from and parallel with, as measured at right angles to the South line of the Southwest Quarter (SW ¼) of the Northeast Quarter (NE ¼) of said Section 7, for 65.98 feet to the Point of Beginning; Thence continue South 89°42'09" West along said parallel line, for 157.17 feet; Thence North 00°17'51" West, for 92.93 feet to a Point of Curvature with a curve concave to the Southwest, said curve having a radius of 206.46 feet and a central angle of 34°44'37"; Thence Northwesterly along said curve for 125.20 feet to a Point of Tangency; Thence North 35°02'28" West, for 109.91 feet to a Point of Curvature with a curve concave to the East, said curve having a radius of 280.00 feet and a central angle of 39°48'56"; Thence Northerly along said curve for 194.58 feet to a Point of Tangency; Thence North 04° 46'28" East, for 18.58 feet to a Point of Curvature with a curve concave to the East, said curve having a radius of 477.11 and a central angle of 11°47'43"; Thence Northerly along said curve for 98.22 feet; Thence North 89°42'09" East along a line 640 feet North from and Parallel with, as measured at right angles to the South line of the Southwest Quarter (SW ¼) of the Northeast Quarter (NE ¼) of said Section 7, for 288.42 feet; Thence South 00°00'56" West along the East line of the West 725.27 feet of the East 791.25 feet of the Southwest Quarter (SW ¼) of the Northeast Quarter (NE ¼) of said Section 7, for 600.01 feet to the Point of Beginning.

Subject to existing easements, rights-of-way, covenants, reservations and restrictions of record, if any.

Said lands lying and situate in St. Lucie County, Florida.

Exhibit B

1. Real estate taxes and assessments for the year 2006 and subsequent years, not yet due and payable.

2. Reservation as set forth in instrument recorded in O.R. Book 629, page 913 of the public records of St. Lucie County, Florida.

3. Easement granted to Florida Power & Light Company by instrument recorded in Deed Book 74, page 238 of the public records of St. Lucie County, Florida.

4. Easement granted to Florida Power & Light Company by instrument recorded in O.R. Book 190, page 1094 of the public records of St. Lucie County, Florida.

5. Subordination of Utility Interests as set forth in instrument recorded in O.R. Book 1415, page 770 of the public records of St. Lucie County, Florida.

6. Easement and Right of Way as set forth in instrument recorded in O.R. Book 1415, page 421, as affected by Agreed Stipulated Final Judgment recorded in O.R. Book 1669, page 2211, both of the public records of St. Lucie County, Florida.

7. Mortgage, Security Agreement and Assignment of Leases and Rents in favor of Branch Banking and Trust Company recorded in O.R. Book 2430, page 2550 of the public records of St. Lucie County, Florida.

8. Rights of tenants pursuant to unrecorded Lease Agreement dated November 18, 2005 between Orange Avenue Development, LLC, as lessor, and Harry B. Albritton, as lessee, as assigned to FM Florida Land Company, LLC pursuant to Assignment and Assumption of Lease dated November 28, 2005.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	Residential/Industrial	IND/MXD (SLC)	IL/RS-4 (SLC)
South	Commercial	CC (FP) COM (SLC)	C-3 (FP) CG (SLC)
East	Residential	RH (SLC)	IL/RS-4 (SLC)
West	Industrial	I/CI (FP) IND (SLC)	I-1 (FP) IL (SLC)

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	RM	PD	12 du/ac	62.51	X
****Proposed**					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) Other: 0.125 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 114,140
**Proposed Zoning/FLU	Total gallons per day
**Change in Demand	Total gallons per day

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day 114,140
**Proposed Zoning/FLU	Total gallons per day
**Change in Demand	Total gallons per day

C. Parks and Recreation (Residential Classifications Only): allowed per zoning / proposed
(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	923.55 ac	907.4 ac	-16.15 ac
Urban District	5 acres per 1,000 people	230.89 ac	226.85 ac	-4.04 ac
Community	2.5 acres per 1,000 people	115.45 ac	113.42 ac	-2.02 ac
Neighborhood	1.36 acres per 1,000 people	62.80 ac	61.70 ac	-1.10 ac

D. Public Schools (Residential Classifications Only): Zoning allows for 750 du
Single Family: (du x 0.405 = students/70% K-8/30% High) Site plan proposed (439 du)
Multi-family: (du x 0.207 = students/70% K-8/30% High)

	K-8	High
School Name	Samuel Gaines Academy	Westwood High School
City	Fort Pierce	Fort Pierce
Distance	1.80 Miles	0.80 Miles
Current Zoning/FLU Enrollment Demand	zoning 525 (proposed 178)	zoning 225 (proposed 53)
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	per zoning 100 yards / per proposed site plan 60 yards
**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	See attached Stormwater/Drainage Statement

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

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning/FLU	proposed plan 3,367	proposed plan 215/282
****Proposed Zoning/FLU**		
***Change in Demand**	Trips	Trips
Impact to Capacity	The number of trips will decrease from the max per zoning (750 du allowed per zoning, 439 du proposed)	

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: 439 Single Family: 130 Multifamily: 309 (tow
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	1/2/3	44/86/0	29.5/21.5/11.5		
Single-family, attached	1/2/3	108/71/130	29.5/21.5/11.5		
Multi-family					
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**

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

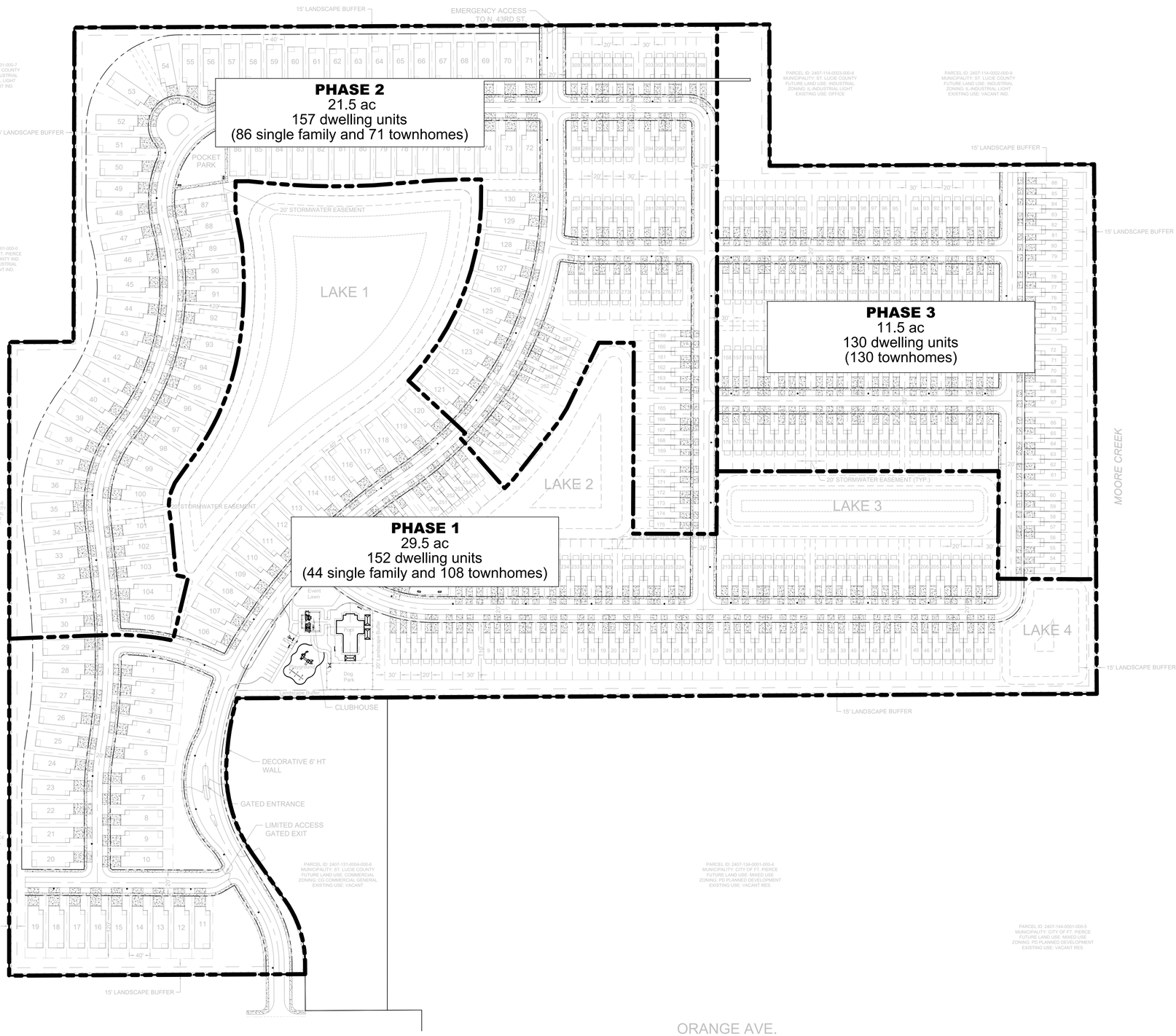
B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☑ No
If yes, what is the size of the structure(s) to be demolished or re-used? _____

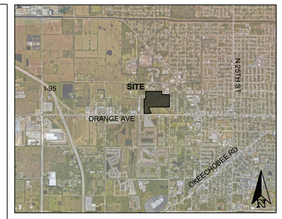
2. What is the current use of the structure to be demolished or re-used? _____

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





LOCATION MAP
NTS

LEGEND

- OVERALL PROPERTY LINE
- PROPOSED BUILDING
- PROPOSED CURB AND GUTTER
- PROPOSED LOT LINES
- PROPOSED STORMWATER EASEMENT
- PROPOSED WALL
- LANDSCAPE BUFFER
- ROADWAY CENTERLINE
- PROPOSED CONCRETE SIDEWALK

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THIS CONCEPTUAL PLAN IS INTENDED FOR DESIGN PURPOSES ONLY AND MAY OR MAY NOT COMPLY WITH ALL COUNTY LAND DEVELOPMENT REGULATIONS.THIS INSTRUMENT MAY NOT BE UTILIZED FOR ANY OTHER PURPOSE OR BY OTHERS THAN INTENDED WITHOUT EXPRESS WRITTEN CONSENT FROM REDTAIL DG.

OWNER
FM MILLCREEK HOLDING LLC
1698 W HIBISCUS BLVD.,
UNIT STE. A
MELBOURNE, FL 32901-2639

PLANNER
REDTAIL DESIGN GROUP
TOD MOWERY, AICP
100 S. 2ND STREET, UNIT 209
FORT PIERCE, FLORIDA 34950
772.742.1555

ENGINEER
THOMAS ENGINEERING GROUP
BRANDON M. ULMER, PE
840 SE OSCEOLA ST.
STUART, FLORIDA 34994
772.888.3138

SURVEYOR
EDC, INC.
MICHAEL T. OWEN, PSM
10250 VILLAGE PKWY., UNIT 201
PORT ST. LUCIE, FLORIDA 34987
772.462.2455

LANDSCAPER
LANDSCAPE DESIGN ASSOCIATES
SABINE MARCKS, RLA
2511D NW 182ND AVE
HIGH SPRINGS, FL 32643
352.210.5765

GRAPHIC SCALE
0 100 200
1" = 100'

REDTAIL DG
p. 772.742.1555
todm@redtaildg.com

TM — DESIGNED BY
AH — DRAWN BY
RDTL_SIT-FS PHASING.DWG — FILENAME
SIT — LAYOUT
1" = 100' — SCALE
8/30/2024 — DATE

REVISION COMMENTS — DATE

MILLCREEK
ORANGE AVE.
PHASING PLAN
CITY OF FT. PIERCE FLORIDA

1 OF 1

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

DESIGN REVIEW

Property Information

Property address or Location: North of Orange Avenue across Bent Creek Drive close to the Hartman Road intersection

Parcel ID #(s): 2407-124-0001-000-3

Project description: Planned Development Amendment that proposes the development of the residential area of the PD on the parcel 2407-124-0001-000-3

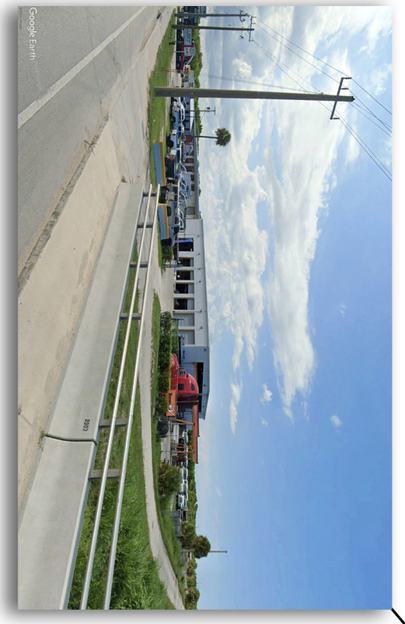
FM Millcreek Holding LLC	Redtail Design Group
Property Owner(s)	**Applicant/Representative, Title, Company**
1698 W Hibiscus Blvd, Unit Ste A	100 S. 2nd Street
Street Address	Street Address
Melbourne FL 32901-2639	Fort Pierce FL 34950
City State Zip	City State Zip
321 953-3300	772-742-1555
Phone Number	Phone Number
bonnie.fmdc@gmail.com	todm@redtaildg.com
Email Address	Email Address

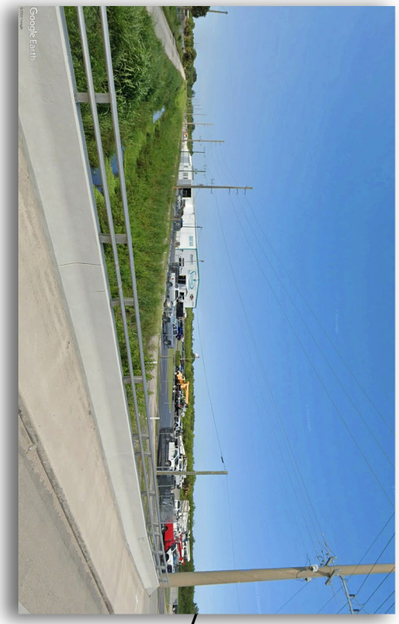
Property Owner(s) Acknowledgements: *- This application will not be considered complete without the signature of all property owners of record, which shall serve as an acknowledgement of the submission of this application. The property owner's signature below shall also authorize the Applicant (if other 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.*

Peterka

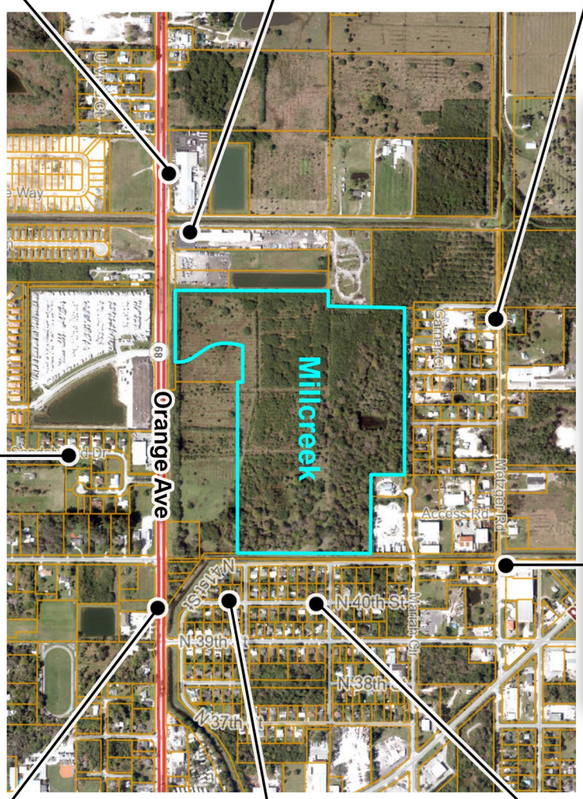
~~*Property Owner(s) Signature(s)*~~
Authorized Agent

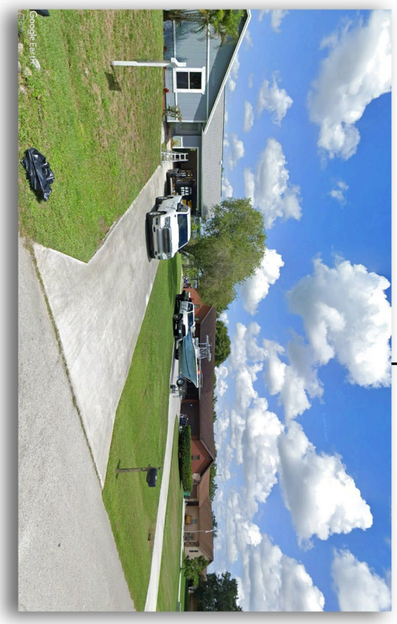
APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS
CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM
For more information, please refer to the website:
https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi



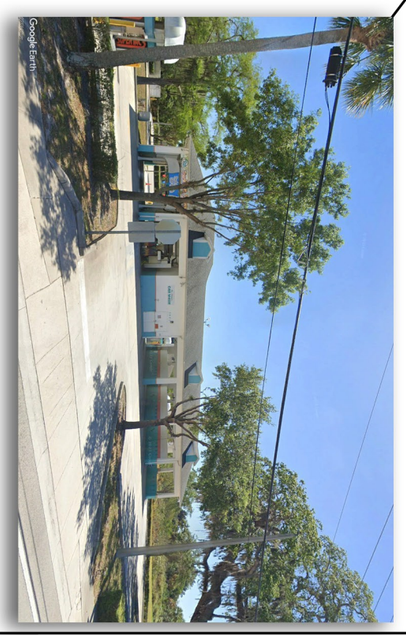


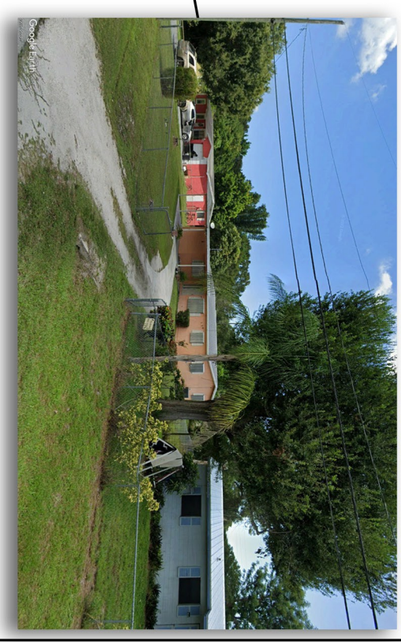














SHEET 01 of 01

7/19/2024

MILLCREEK

LOCAL ARCHITECTURAL STYLES

TM
Designed by

VP
Drawn by

REDTAIL LLC
100 S. 2nd Street
Fort Pierce, FL 34950







DREAM FINDERS HOMES

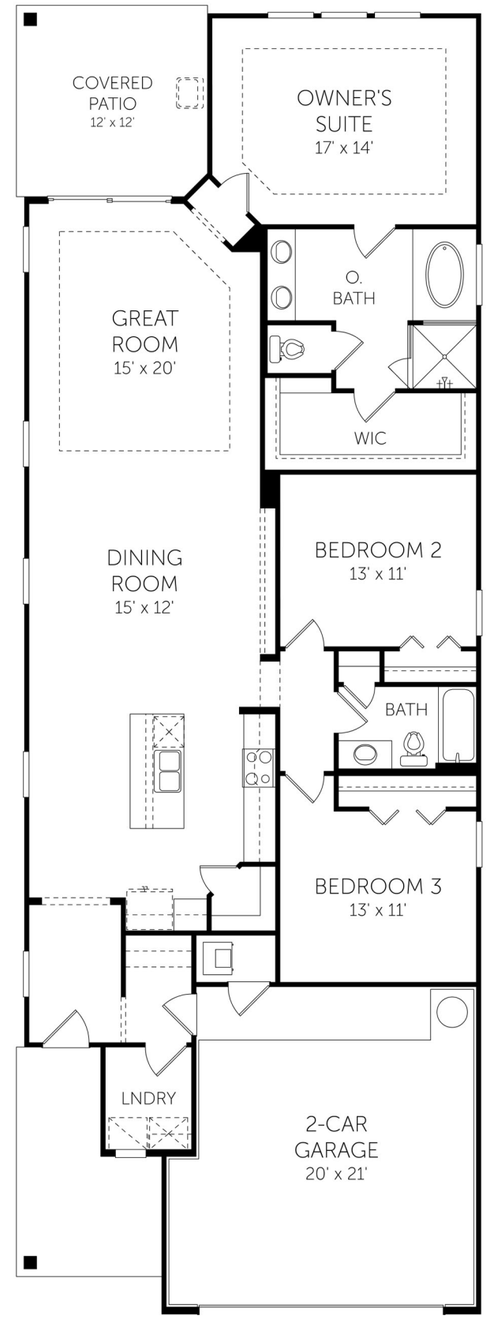
Avondale 1,864 SQFT

First Floor

3 Beds

2 Full Baths

No Options Selected



DREAMFINDERSHOMES.COM
Dream Finders Homes reserves the right to change elevations, specifications, materials and pricing without prior notice. Variations within the floor plans and elevations do exist. Square footage are approximate and will vary. Options may differ from what is shown per community, please contact a sales consultant for more information. © 2024 Dream Finders Homes CBC1257579

REDTAIL LLC
100 S. 2nd Street
Fort Pierce, FL 34950

TM Designed by

VP Drawn by

MILLCREEK

AVONDALE MODEL

SINGLE FAMILY DETACHED

7/19/2024





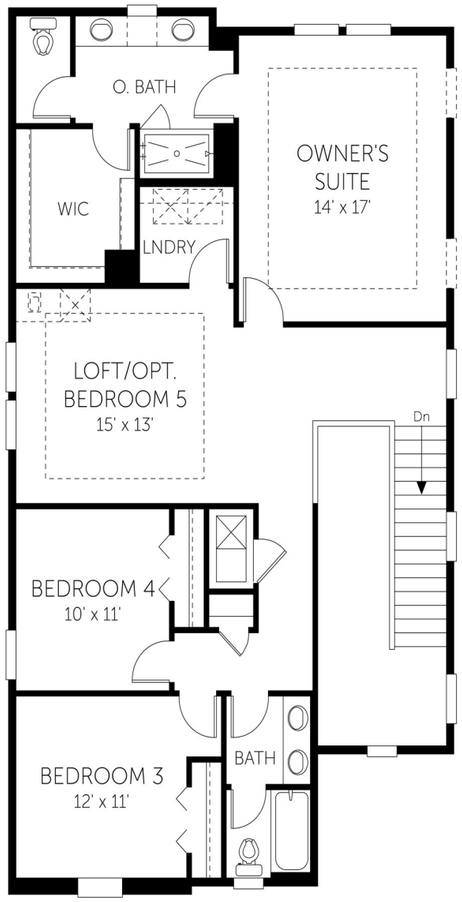


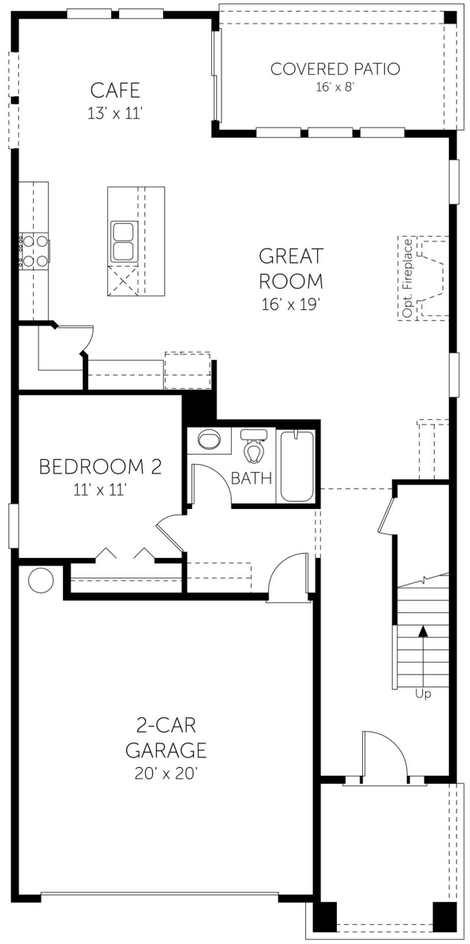
DREAM FINDERS HOMES

Vilano

Second Floor
4 Beds
3 Full Baths
1 Garage
2,500 Sq. Ft.

No Options Selected





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REDTAIL LDC
100 S. 2nd Street
Fort Pierce, FL 34950

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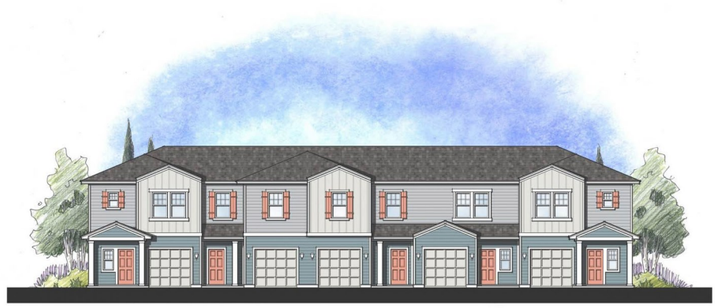
MILLCREEK
VILANO MODEL
SINGLE FAMILY DETACHED

7/19/2024

SHEET 01 of 01

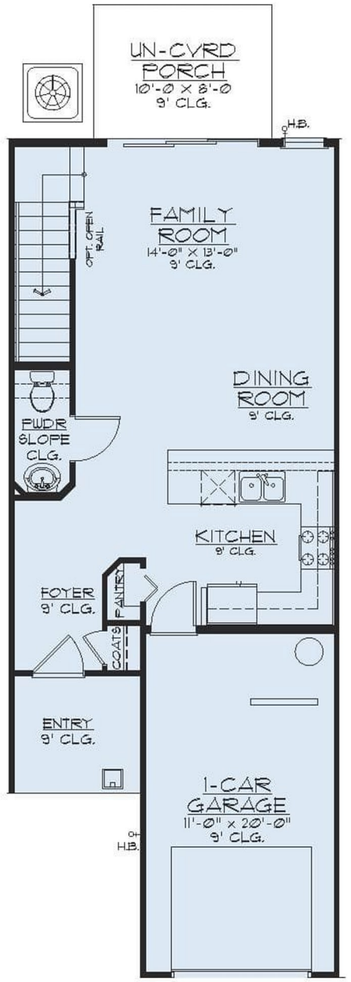



OPTION 2

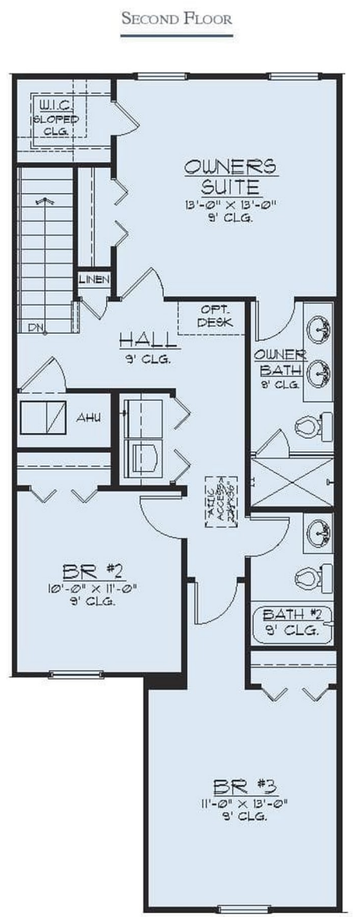

OPTION 3

WARBLER

3 BEDROOM | 2.5 BATH | 1 CAR GARAGE | 1,438 SQ. FT. LIVING AREA



First Floor



Second Floor

DREAM FINDERS HOMES
HOMES BUILT TO FIT YOUR LIFESTYLE

DREAMFINDERSHOMES.COM

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CBC1257579

REDTAIL LLC
100 S. 2nd Street
Fort Pierce, FL 34950

TM Designed by

VP Drawn by

MILLCREEK

WARBLER MODEL
TOWNHOME

7/19/2024

SHEET 01 of 01





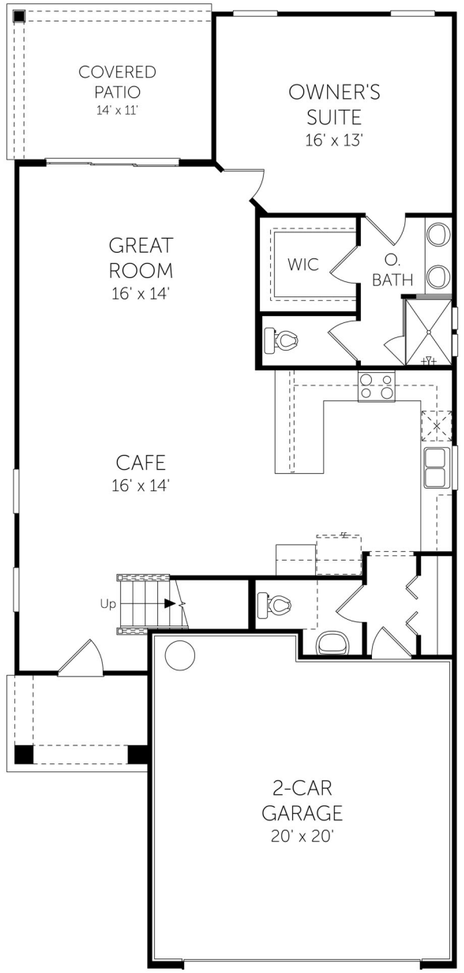


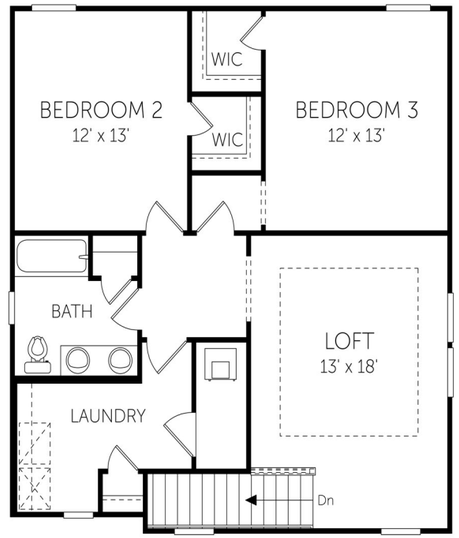
DREAM FINDERS HOMES

Stockton

First Floor
3 Beds
2 Full Baths | 1 Half Bath
2,098 Sq. Ft.

No Options Selected





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REDTAIL LLC
100 S. 2nd Street
Fort Pierce, FL 34950

TM Designed by
VP Drawn by

MILLCREEK
STOCKTON MODEL
SINGLE FAMILY DETACHED

7/19/2024

SHEET 01 of 01

Instrument Prepared By:

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MILLCREEK RESIDENTIAL
PLANNED DEVELOPMENT AND TRAFFIC CONTRIBUTION AGREEMENT

THIS PLANNED DEVELOPMENT AND TRAFFIC CONTRIBUTION AGREEMENT ("Agreement"), made and entered into this___day of _____, 2024, by and between DREAM FINDERS HOMES, LLC, hereinafter referred to as the "Applicant", and CITY OF FORT PIERCE, a political subdivision of the State of Florida, hereinafter referred to as the "City".

WITNESSETH:

WHEREAS, Applicant is the developer of the property situated in CITY OF FORT PIERCE, Florida, and more particularly described in the legal description attached and incorporated as **Exhibit 1**; and

WHEREAS, it is the desire of Applicant to develop a Planned Development ("PD") to be known as MILLCREEK consisting of 62.51 acres with 439 single family and townhome dwelling units ("DUs"); and

WHEREAS, as part of the development, Applicant is proposing significant contributions to the roadway network to mitigate the PD's impacts to further satisfy Fort Pierce transportation concurrency requirements; and

WHEREAS, this type of development is permitted in the City subject to a binding written document negotiated between Applicant and City in order to introduce flexibility into the development regulations in a manner that is mutually beneficial to the City and the development, and to encourage enlightened and imaginative approaches to community planning.

NOW, THEREFORE, the parties do hereby agree as follows:

1. TRAFFIC CONTRIBUTION IMPROVEMENTS

    1. Applicant agrees that traffic contribution improvements (the "Improvements") will be undertaken and carried out in accordance with the following:

        i. Applicant will construct, subject to approval by FDOT, a traffic signal at the intersection of Orange Avenue and Bent Creek Drive, which will align with the primary access to the PD.

        ii. In addition, the Applicant will make the following intersection improvements at Orange Avenue and Bent Creek Drive:

            1. Eastbound:

                a. _____

                b. _____

            2. Westbound:

                a. _____

                b. _____

    2. The timetable for development, which is attached as **Exhibit 2**.

    3. The conditions and requirements agreed to by the City and Applicant as set forth in the Special Conditions, attached and incorporated as **Exhibit 3**.

    4. Permits and authorizations granted in accordance with such laws, ordinances and regulations as may be in effect at the time of such approval.

2. VESTED RIGHTS

Applicant shall have the right to construct the proposed Improvements in accordance with applicable laws, ordinances and regulations, the provisions and requirements of this Agreement, the

approved master site plan, final site plans, construction plans, landscape plans, preserve area management plans, and subdivision plats, hereinafter sometimes collectively referred to as development orders. Applicant, its successors, assigns, shall have no vested rights in any expired development orders for this development. The City shall be held harmless from any and all liability stemming from any disputes between Applicant, its successors, assigns, predecessors in title or other property owners regarding any development under this Agreement.

3. DESTRUCTION

In the event that all or a portion of the proposed Improvements should be destroyed by a storm, fire, or other common disaster, Applicant, its grantees, successors or assigns shall have the right to rebuild and/or repair so long as there is strict compliance with the approved master site plan, final site plan(s), subdivision plat(s), and development orders.

4. CHANGES OR AMENDMENTS

There shall at all times be strict adherence to the provisions of this Agreement and the approved development orders. Any change or amendment to this Agreement and/or approved development orders shall only be made in accordance with the City's Code of Ordinances.

1. Notwithstanding Paragraph 4, Applicant, its successors in interest and the City may amend or terminate this Agreement without securing the consent of other property owners whose property is subject to this Agreement, unless such amendment or termination directly and materially modifies the allowable uses or entitlements of such owners' property.

5. BREACH OF AGREEMENT

    1. Development of MILLCREEK and the proposed Improvements shall at all times be in compliance with this Agreement and any approved development orders. Failure to comply with a development order may result in the suspension of that development order, the cessation of the City processing of all applications for development on the subject property and any associated phases, or termination of the development order.

    2. Any person, including the Board of City Commissioners, hereinafter sometimes referred to as Board, or any member of the City Commission, may file a complaint with the City Manager alleging that a development order has been violated, that unauthorized development has occurred, or that misrepresentation, fraud, deceit, deliberate error or omission, or a material omission that should have been disclosed regarding information required in a development application has occurred.

    3. The above provisions shall not be interpreted to provide an exclusive remedy, and the City may pursue any appropriate remedy at law or equity in the event Applicant or his successors in interest fail to abide by the provisions of this Agreement.

6. JURISDICTION

    This Agreement shall be governed by the laws of the State of Florida, and any and all legal action instituted because of this Agreement shall be instituted in the City of Fort Pierce, County of St. Lucie, Florida

7. SUCCESSORS AND ASSIGNS

    This Agreement shall be binding upon the parties hereto, their successors in interest, heirs, assigns, and personal representatives.

8. NOTICE

Any notice, request, demand, consent, approval, or other communication required or permitted by this Agreement shall be given or made in writing and shall be served as elected by the party giving the notice by any of the following methods: (i) hand delivery to the other party; (ii) delivery by commercial overnight courier service; (iii) mailed by registered or certified mail (postage prepaid), return receipt requested; or (iv) mailed by regular U.S. mail. For purposes of notice, the addressees are as follows:

APPLICANT: Maston Crapps
Regional VP of Land
Dream Finders Homes, LLC
14701 Philips Hwy., Suite 300
Jacksonville, FL 32256

CITY: City Manager
City of Ft. Pierce
100 N US Hwy 1
Fort Pierce, FL 34950

With required copy to:
City Attorney
City of Ft. Pierce
100 N US Hwy 1
Fort Pierce, FL 34950

Notice given in accordance with the provisions of this Section shall be deemed to be delivered and effective on the date of hand delivery; or on the second day after the date of the deposit with an overnight courier; or on the date upon which the return receipt is signed, or delivery is refused, or the notice is designated by the postal authorities as not delivered if mailed; or on the second business day after the date of mailing by regular U.S. mail. Either party may change its address for the purpose of this Section by written notice to the other party given in accordance with the provisions of this Section.

9. ENTIRE AGREEMENT

This Agreement incorporates and includes all prior and contemporaneous negotiations, correspondence, conversations, agreements, and understanding applicable to the matters contained herein, and the parties agree that there are no commitments, agreements, or understandings concerning the subject matter of this Agreement that are not contained in this document. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior or contemporaneous representations or agreements, whether oral or written.

10. SEVERABILITY

If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, to any extent, be held invalid or unenforceable for the remainder of this Agreement, then the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected, and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

SIGNATURES TO FOLLOW ON NEXT PAGE

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be made and entered into the day and year first written. The date of this Agreement shall be the date on which this Agreement was approved by the City Commission of Fort Pierce.

APPLICANT: DREAM FINDERS HOMES, LLC,
A Florida limited liability company

By: _____
Its: _____

Witness: _____
Print: _____

Witness: _____
Print: _____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me this _____ day of _____, 2024, by _____, as _____ of Sunrise Residential, LLC, a Florida limited liability company, who [__] is personally known to me [__] has produced _____ as identification.

_____
Notary Public - State of Florida
(NOTARY SEAL) My Commission Expires:

CITY OF FT. PIERCE

ATTEST: BOARD OF CITY COMMISSIONERS
CITY OF FT. PIERCE, FLORIDA

_____
City Mayor

By: _____
Print

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

(COMMISSION SEAL) _____

EXHIBIT 1
[LEGAL DESCRIPTION OF THE OVERALL TRACT]

Parcel ID Numbers: 2407-124-0001-000-3

LEGAL DESCRIPTION:

PARCEL A:

A PARCEL OF LAND LYING IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE S 1/2 OF THE SE 1/4 OF THE NE 1/4 OF THE NE 1/4; AND THE SW 1/4 OF THE NE 1/4 OF THE NE 1/4; AND SE 1/4 OF THE NW 1/4 OF THE NE 1/4; LESS THE NORTH 50 FEET THEREOF; AND SE 1/4 OF THE NE 1/4, LESS THE NORTH 254.5 FEET SOUTH 294.5 FEET OF THE EAST 300 FEET OF THE SE 1/4 OF THE SE 1/4 OF THE NE 1/4; AND THE EAST 791.25 FEET OF THE SW 1/4 OF THE NE 1/4; LESS RIGHTS OF WAY FOR PUBLIC ROADS AND DRAINAGE CANALS AS TO ALL OF SAID PARCELS; ALL IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. LESS AND EXCEPT THE SOUTH 600.00 FEET THEREOF.

PARCEL B:

A PARCEL OF LAND LYING IN SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA. BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE WEST 725.27 FEET OF THE SOUTH 600.00 FEET OF THE FOLLOWING DESCRIBED PROPERTY:

THE EAST 791.25 FEET OF THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SAID SECTION 7, LESS RIGHT–OF– WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

LESS AND EXCEPT THE FOLLOWING PARCEL:

A PORTION OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7; THENCE NORTH 00°00'56" EAST ALONG THE EAST LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 40.00 FEET; THENCE SOUTH 89°42'09" WEST ALONG A LINE 40 FEET NORTH FROM AND PARALLEL WITH, AS MEASURED AT RIGHT ANGLES TO THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 65.98 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 89°42'09" WEST ALONG SAID PARALLEL LINE FOR 157.17 FEET; THENCE NORTH 00°17'51" WEST, FOR 92.93 FEET TO A POINT OF CURVATURE WITH A CURVE CONCAVE TO THE SOUTHWEST, SAID CURVE HAVING A RADIUS OF 206.46 FEET AND A CENTRAL ANGLE OF 34°44'37"; THENCE NORTHWESTERLY ALONG SAID CURVE FOR 125.20 FEET TO A POINT OF TANGENCY; THENCE NORTH 35°02'28N WEST, FOR 109.91 FEET TO A POINT OF CURVATURE WITH A CURVE CONCAVE TO THE EAST, SAID CURVE HAVING A RADIUS OF 280.00 FEET AND A CENTRAL ANGLE OF 39°48'56"; THENCE NORTHERLY ALONG SAID CURVE FOR 194.58 FEET TO A POINT OF TANGENCY, THENCE NORTH 04°46'28" EAST, FOR 18.58 FEET TO A POINT OF CURVATURE WITH A CURVE CONCAVE TO THE EAST, SAID CURVE HAVING A RADIUS OF 477.11 AND A CENTRAL ANGLE OF 11°47'43" THENCE NORTHERLY ALONG SAID CURVE FOR 98.22 FEET; THENCE NORTH 89°42'09" EAST ALONG A LINE 640 FEET NORTH FROM AND PARALLEL WITH, AS MEASURED AT RIGHT ANGLES TO THE SOUTH LINE OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 288.42 FEET; THENCE SOUTH 00°00'56" WEST ALONG THE EAST LINE OF THE WEST 725.27 FEET OF THE EAST 791.25 FEET OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SAID SECTION 7, FOR 600.01 FEET TO THE POINT OF BEGINNING.

AND FURTHER EXCEPTING ANY PART LYING WITHIN THAT CERTAIN WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 3210, PAGE 468, OF THE PUBLIC RECORDS OF SAID COUNTY.

SUBJECT TO EXISTING EASEMENTS, RIGHTS–OF–WAY, COVENANTS, RESERVATIONS AND RESTRICTIONS OF RECORD, IF ANY.

SAID LANDS LYING AND SITUATE IN ST LUCIE COUNTY, FLORIDA.

EXHIBIT 2

[TIMETABLE FOR PLANNED DEVELOPMENT AND TRAFFIC IMPROVEMENTS]

PHASE SCHEDULE

Phase 1 (___Months)

-
-
-
-

Phase 2 (___Months)

-
-
-

Phase 3 (___Months)

-
-
-

EXHIBIT 3

[SPECIAL CONDITIONS OF DEVELOPMENT]

1. The phasing of the project, outlined in Exhibit 2 of this agreement, shall adhere to City Code Sections 125- 212(b)(6) and 125-212(c)(1)(c): Phasing. Each phase of development must be so planned and so related to previous development, surrounding properties, and the available public facilities and services, that failure to proceed with subsequent phases will not adversely impact drainage, utilities, parking or the traffic flow of the completed phases.

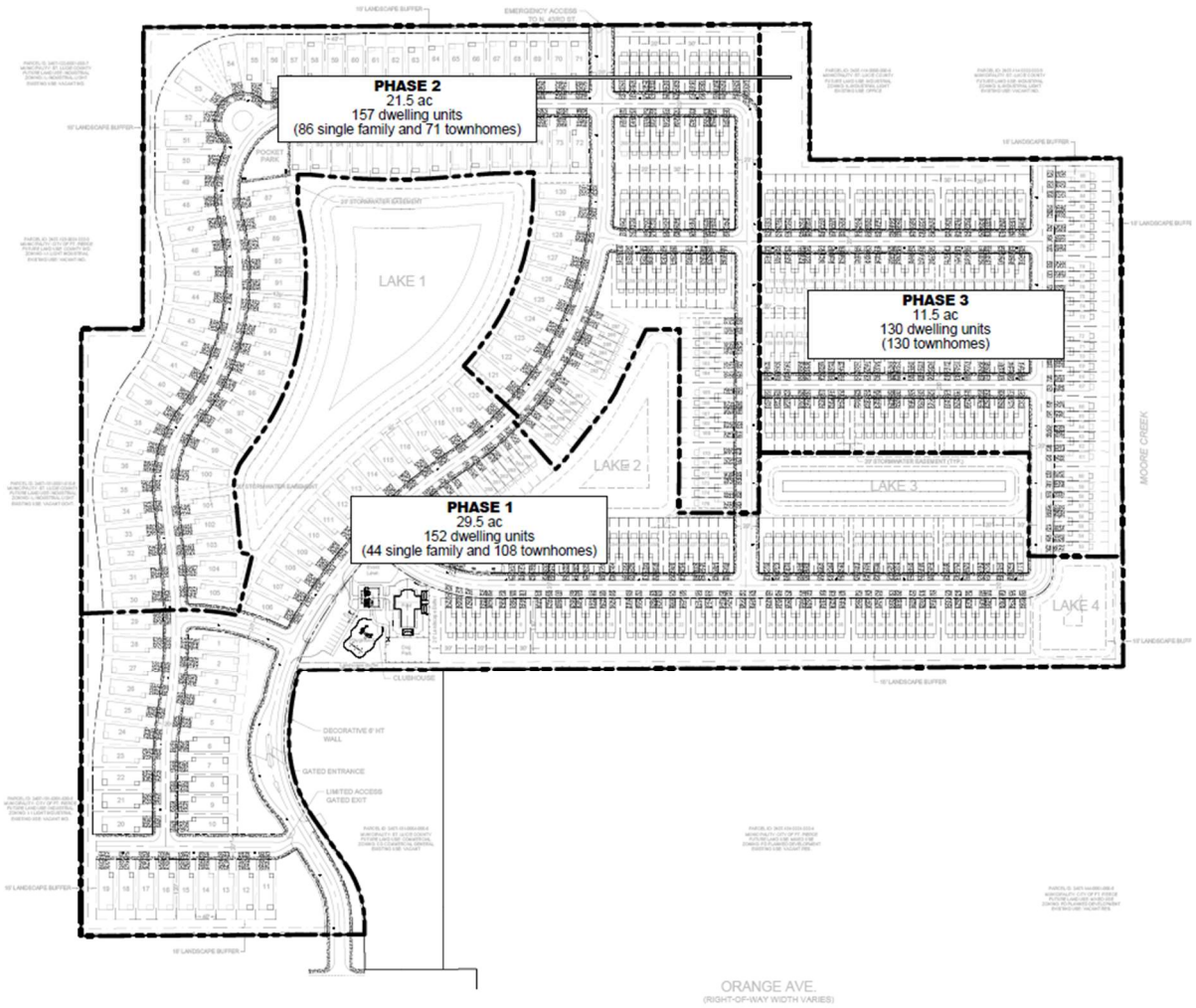


Fig 1. Phasing Plan

2. Any Final PD plan shall conform to the requirements of the City Code of Ordinances and be subject to the general standards for approval of Planned Development Zoning at section 125-212 – Planned Development Zone (PD).
3. The Final PD site plan submittal shall contain all documents, plans and analysis as required as required per section 215-213 of the City's Code Of Ordinances
4. A Unity of Title with the St. Lucie County Clerk of Courts and a Parcel Combination with the St. Lucie County Property Appraiser shall be completed prior to the issuance of any Building Permit.
5. The following Documents form part of the Millcreek Master Planned Development.

PD SITE PLAN	by _____ on March 15, 2024 - REG. _____(_____)
BOUNDARY SURVEY	by _____. License # _____ on _____, 2024.
TOPOGRAPHIC SURVEY	by _____. License # _____ on _____, 2024.
LANDSCAPE PLAN	by _____ on _____, 2024 - REG. #_____ (_____)
MASTER STORMWATER REPORT	by _____. License #_____ on _____, 2023.
TRAFFIC IMPACT ANALYSIS	by _____ (Revision _____ 2024) dated _____, 2024.
ENVIRONMENTAL ASSESSMENT	by _____ on _____ 2024.

Technical Review Committee **3. c.**

Meeting Date: 10/17/2024

REQUESTED ACTION

Final Planned Development - Sunrise Lakes - 3804 Sunrise Boulevard

SUMMARY

The applicant is proposing forty-four (44) single-family residences on 11.54 acres at 3804 Sunrise Boulevard in Fort Pierce, FL. Currently, the property is zoned R-1 with a future land use of RL. The site was recently annexed into the City of Ft. Pierce. The site is bordered by single family RS-3 SLC zoning on the south and west. To the north is a cemetery and the east is a Florida Department of Transportation building, both with industrial zoning. The applicant is proposing a rezoning of Planned Development (Final PD) with 3.81 units per acre.

LOCATION

3804 Sunrise Boulevard

RESPONSIBLE STAFF

3804 Sunrise Boulevard

RECOMMENDATION

TBD

Attachments

TRC Packet

Form Review

Form Started By: Vennis Gilmore Started On: 10/03/2024 05:55 PM

Final Approval Date: 10/04/2024

KMA Engineering & Surveying, LLC
3001 Industrial Avenue 2
Ft. Pierce, FL 32946
Phone: (772) 569-5505 Fax: (772) 569-1455

June 7, 2024

City of Fort Pierce
Planning Department
100 N. US Highway 1
Fort Pierce, FL 34950

Re: Sunrise Residential Project Description

We are proposing forty-four (44) single-family residences on 11.54 acres at 3804 Sunrise Boulevard in Fort Pierce, FL. Currently the property is zoned R-3 with a future land use of RM. The site was recently annexed into the City of Ft. Pierce and has an existing Zoning of RS-3 and an existing Future Land Use of RM. The site is bordered by single family RS-3 zoning on the south and west. To the north is a cemetery and the east is a Florida Department of Transportation building, both with industrial zoning. We are proposing a rezoning of Planned Development (PD) with 3.81 units per acre. Below is a table comparing the requested changes from the R-3 zoning

Zoning Requirement	**R-3**	**PD**
Min. Lot Size	7,200 SF	4,920 SF
Min. Lot Width	65’	60’
Min. Lot Depth	100’	70’ (82’ proposed)
Min. Front Yard Depth	25’	15’,20’ for garage
Min. Side Yard Depth	15’	5’
Min. Rear Yard Depth	15’	15’
Max Lot Coverage	35%	40%
Max Building Height	35’	45’
Density	6 units per acre	3.81 units per acre

We are also requesting a reduction of the minimum right-of-way width for the interior roadway from 60’ to 50’. This is common in other municipalities and a proposed section can be found in the civil plans

The site will consist of one ungated entrance in the northwest corner of the site off of Sunrise Boulevard. The 44 residences will be connected by one looped road with an interior sidewalk.

Drainage will be conveyed through interconnected inlets and pipes to three (3) separate dry ponds. The dry ponds will be planted with a variety of wax myrtles and sand cordgrass instead of typically bahia sod. This will add to the aesthetics of the project as well as nutrient removal from the stormwater.

A 10’ landscape buffer will be provided along the perimeter of the site. The south property line contains a 60’ drainage easement. Vegetation in that area will remain untouched but a landscape buffer will occur on the south portion of the easement.

The project will contain a looped water main and a private lift station for the utilities. Dry utilities will be provided in the 10’ utility easement shown on the front of the lots

KMA Engineering & Surveying, LLC
3001 Industrial Avenue 2
Ft. Pierce, FL 32946
Phone: (772) 569-5505 Fax: (772) 569-1455

A bus stop will be provided onsite and a Routed Bus Plan has been included in the civil drawings. An open space area between lot 35 and lot 50 will be utilized for an amenity center. Future plans will be provided for the City's review.

No phasing is proposed for this project as all infrastructure will be built in one phase. It is possible building permits will be pulled in phases but not until after all infrastructure is complete.

There are no previously approved site plans for this site

The main Public Benefit of the project is the deceased density. Currently the project allows for 6 units per acre which would allow for sixty-nine(69) single family residents. This decreases the number of traffic trips on the existing roads. The decrease in lots size and setbacks allows for a shared amenity lot that all the residents can enjoy.

Should you have any questions or require additional information, please feel free to contact this office at your earliest convenience.

Sincerely,

Blaine Bergstresser, P.E.
Florida License No. 84598

CONSTRUCTION PLANS

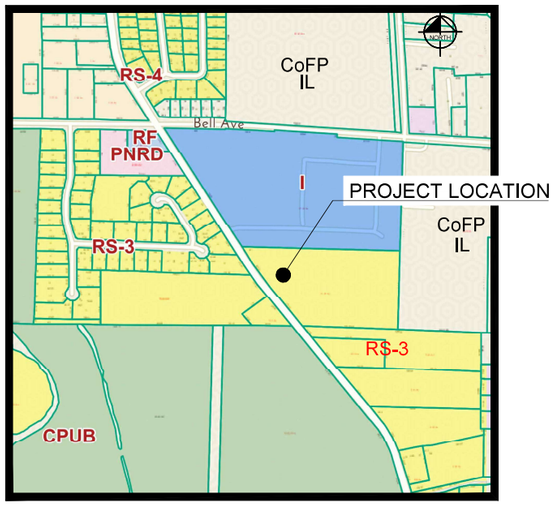
FOR

SUNRISE LAKES

LOCATED AT

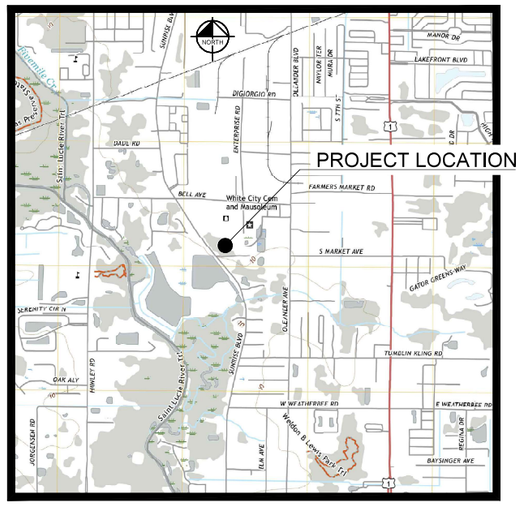
3804 SUNRISE BLVD, FORT PIERCE, FLORIDA

SECTION 33, TOWNSHIP 35S, RANGE 40E



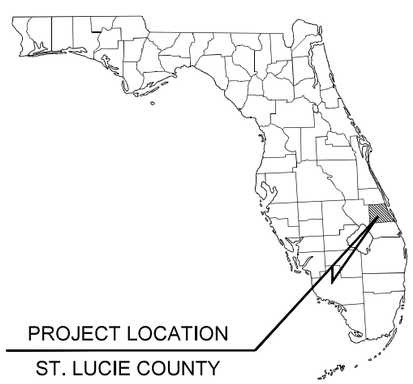
LOCATION MAP

SCALE: NOT TO SCALE



VICINITY MAP

SCALE: NOT TO SCALE



LEGAL DESCRIPTION

THE SOUTH 546 FEET OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4, LYING EAST OF WHITE CITY ROAD (SUNRISE BOULEVARD) IN SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, SAID LAND LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

SHEET INDEX	
Sheet Number	Sheet Title
C-100	COVER
C-101	GENERAL NOTES
C-200	SITE PLAN
C-201	PRELIMINARY PLAT
C-300	MASTER PAVING GRADING & DRAINAGE PLAN
C-301	PAVING GRADING & DRAINAGE DETAILS
C-302	PAVING GRADING & DRAINAGE DETAILS
C-303	GRADING SECTIONS
C-400	MASTER UTILITIES PLAN
C-500	FPUA DETAILS-01
C-501	FPUA DETAILS-02
C-502	FPUA DETAILS-03
C-503	FPUA DETAILS-04
C-504	FPUA DETAILS-05
C-600	EXISTING CONDITIONS & DEMOLITION
C-601	PHASE ONE EROSION CONTROL
C-700	ROUTING PLAN BUS
C-701	ROUTING PLAN FIRE
--	PHOTO-01

PROJECT TEAM

OWNER/DEVELOPER
DT VENTURES 1, LLC.
PO BOX 92280
ROCHESTER,NY 14692

LANDSCAPE ARCHITECT
PAUL GOULAS, RLA
LANDSCAPE ARCHITECTURAL SERVICES
1708 SE JOY HAVEN ST
PORT ST.LUCIE,FL 34983
772-631-8400

CIVIL ENGINEER
BLAINE BERGSTRESSER, P.E.
KMA ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
772- 569-5505
BLAINEB@KMAFL.COM

SURVEYOR
DOUG WALKER, PSM
PRINCIPAL MERIDIAN SURVEYING,INC
4546 CAMBRIDGE ST.
WEST PALM BEACH,FL 33415
561-478-7764

PERMITTING AGENCIES

FORT PIERCE UTILITY AUTHORITY
SHANE OSTRANDER
1701 S. 37TH STREET
FORT PIERCE, FL 34984
SOTRANDER@FPUA.COM
772-466-1600

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
316 NW 5TH ST
OKEECHOBEE, FL 34972
863-462-5260

NORTH ST LUCIE RIVER WATER CONTROL DISTRICT
PATRICIA KUTA
14666 ORANGE AVENUE
FORT PIERCE, FL 34945
NSLRWCD@BELLSOUTH.NET
772-461-5050

CITY OF FORT PIERCE
CESAR FLORES
100 NORTH US 1
FORT PIERCE, FL 34950
CFLORES@CITYOFFORTPIERCE.COM
772-467-3730

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES

CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

LICENSE
BLAINE ROBERT BERGSTRESSER
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-COVER

SHEET TITLE: COVER

SHEET NUMBER: C-100

Plotted on Tuesday, July 09, 2024 - 12:14 PM by Blaine Bergstresser

GENERAL

1. THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, AND, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
3. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. A LIST OF THE UTILITY COMPANIES WHICH THE CONTRACTOR MUST CALL BEFORE COMMENCING WORK IS PROVIDED ON THE COVER SHEET OF THESE CONSTRUCTION PLANS. THIS LIST SERVES AS A GUIDE ONLY AND IS NOT INTENDED TO LIMIT THE UTILITY COMPANIES WHICH THE CONTRACTOR MAY WISH TO NOTIFY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
8. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND DESIGN ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTORS RESPONSIBILITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
11. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
12. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.

EROSION CONTROL

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
5. EROSION CONTROL PLAN MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. THE CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY CEASED.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRED IN THESE AREAS. REFER TO SECTION 981 OF THE STANDARD SPECIFICATIONS FOR SEEDING AND MAINTENANCE REQUIREMENTS.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED AS SOON AS POSSIBLE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFF SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE EROSION CONTROL PLAN AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.
21. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACK FILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

POTABLE WATER AND SANITARY SEWER SYSTEM

1. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES GRAVITY SEWER LINES AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
5. ALL PHASES OF INSTALLATION, INCLUDING UNLOADING, TRENCHING, LAYING AND BACK FILLING, SHALL BE DONE IN A FIRST CLASS WORKMANLIKE MANNER. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
8. UNDERGROUND LINES SHALL BE SURVEYED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.
9. CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.

MAINTENANCE

ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED. FOR MAINTENANCE REQUIREMENTS REFER TO SECTION 981 OF THE OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION).
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED TO 55 CUBIC YARDS / ACRE.
7. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

STORM DRAINAGE SYSTEM

1. STANDARD INDEXES REFER TO THE 2021/2022 EDITION OF F.D.O.T. "STANDARD PLANS FOR ROADWAY CONSTRUCTION"
2. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS.
3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURES, WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS, WHICH ARE NOT INCLUDED IN LENGTHS.
4. ALL DRAINAGE STRUCTURE GRATES AND COVERS, EITHER EXISTING OR PROPOSED SHALL BE TRAFFIC RATED FOR H-20 LOADINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY UPGRADES TO EXISTING DRAINAGE STRUCTURES.
5. CONSTRUCTION OF THE ENTIRE STORMWATER MANAGEMENT SYSTEM SHOWN ON THE PLANS MUST BE COMPLETE AND ALL DISTURBED AREAS STABILIZED IN ACCORDANCE WITH THE PERMITTED PLANS AND CONDITIONS PRIOR TO ANY OF THE FOLLOWING: ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY FOR ANY LOT; INITIATION OF INTENDED USE OF THE INFRASTRUCTURE; OR TRANSFER OF RESPONSIBILITY FOR MAINTENANCE OF THE SYSTEM TO A LOCAL GOVERNMENT OR OTHER RESPONSIBLE ENTITY.
6. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER JURISDICTION REGULATIONS (MANUFACTURER'S RECOMMENDATIONS SHALL BE UTILITIZED IF MORE STRINGENT).
7. STORM WATER PIPES, STRUCTURES, MINIMUM COVER AND INSTALLATION PROCEDURES TO BE IN ACCORDANCE WITH SOUTH FLORIDA WATER MANAGEMENT DISTRICT STANDARDS.

PAVING/GRADING TESTING AND INSPECTION

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE SOILS REPORT. UPON COMPLETION OF WORK THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.
2. A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS AND GEOTECHNICAL REPORT, THE VARIOUS AGENCIES AND PERMIT CONDITIONS. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THESE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

DRAINAGE SYSTEM TESTING AND INSPECTION

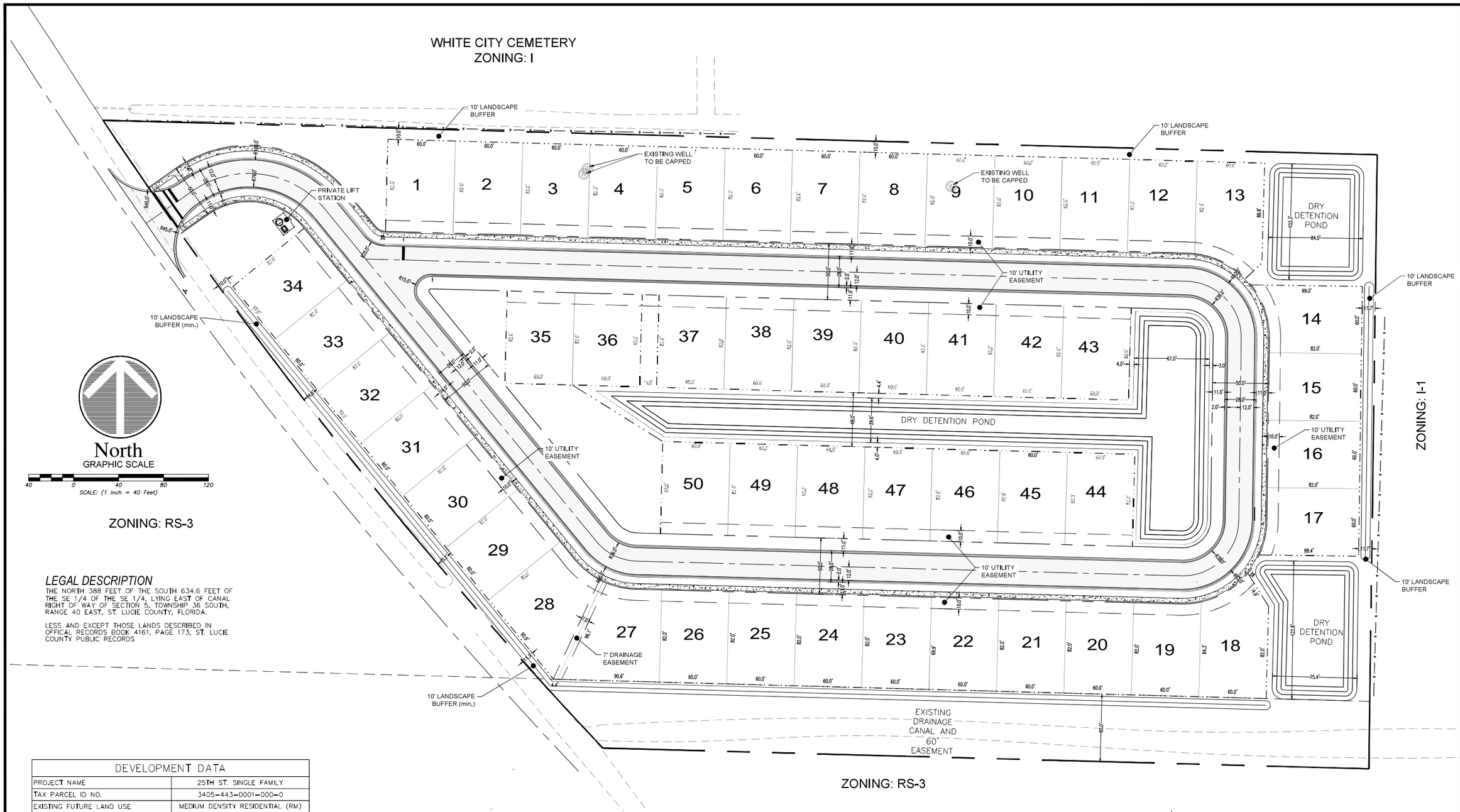
1. THE STORM DRAINAGE PIPING SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 2 FULL BUSINESS DAYS IN ADVANCE TO SCHEDULE INSPECTION.
2. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE REINSPECTED BY THE OWNER'S ENGINEER PRIOR TO APPROVAL FOR CERTIFICATE OF OCCUPANCY PURPOSES. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS AT THE CONTRACTORS EXPENSE AND PRIOR TO FINAL ACCEPTANCE.

PAVING, GRADING AND DRAINAGE

1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN COUNTY'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR FDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
2. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
3. TRAFFIC CONTROL ON ALL FDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
4. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
5. ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN.
6. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
7. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
8. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
9. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
11. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.
12. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO FDOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
13. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
14. ALL CUT OR FILL SLOPES SHALL BE 4 (HORIZONTAL) :1 (VERTICAL) OR FLATTER UNLESS OTHERWSE SHOWN.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
16. THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE BARRIERS. AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES THE WATER QUALITY STANDARDS IN CHAPTER 17-302, FLORIDA ADMINISTRATIVE CODE.
17. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
18. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE ENVIRONMENTAL RESOURCE PERMIT COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.
19. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
20. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

DEMOLITION

1. CONTRACTOR SHALL SUBMIT DEMOLITION SCHEDULE TO OWNER PRIOR TO PROCEEDING WITH DEMOLITION ACTIVITIES.
2. EXTENT OF SITE CLEARING IS SHOWN ON DRAWINGS.
3. CONTRACTOR SHALL CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
4. CONTRACTOR SHALL PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN "EXISTING TO REMAIN".
5. CONTRACTOR SHALL RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
6. CONTRACTOR SHALL REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF-SITE IN A LEGAL MANNER.
7. CONTRACTOR SHALL DEMOLISH AND COMPLETELY REMOVE FROM SITE MATERIAL INDICATED ON PLAN OR NOTES "TO BE REMOVED".
8. CONTRACTOR SHALL PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION
9. ALL MATERIAL REMOVED FROM THIS SITE BY THE CONTRACTOR SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER.
10. REFER TO THE TOPOGRAPHIC SURVEY FOR ADDITIONAL DETAILS OF EXISTING STRUCTURES, ETC., LOCATED WITHIN THE PROJECT SITE. UNLESS OTHERWISE NOTED, ALL EXISTING BUILDINGS, STRUCTURES, SLABS, CONCRETE, ASPHALT, DEBRIS PILES, SIGNS, AND ALL APPURTENANCES ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND PROPERLY DISPOSED OF IN A LEGAL MANNER AS PART OF THIS CONTRACT. SOME ITEMS TO BE REMOVED MAY NOT BE DEPICTED ON THE TOPOGRAPHIC SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND DETERMINE THE FULL EXTENT OF ITEMS TO BE REMOVED. IF ANY ITEMS ARE IN QUESTION, THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO REMOVAL OF SAID ITEMS.
11. THE CONTRAC



LEGAL DESCRIPTION

THE NORTH 388 FEET OF THE SOUTH 634.6 FEET OF THE SE 1/4 OF THE SE 1/4, LYING EAST OF CANAL RIGHT OF WAY OF SECTION 5, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA.

LESS AND EXCEPT THOSE LANDS DESCRIBED IN OFFICAL RECORDS BOOK 4161, PAGE 173, ST. LUCIE COUNTY PUBLIC RECORDS

DEVELOPMENT DATA	
PROJECT NAME	25TH ST. SINGLE FAMILY
TAX PARCEL ID NO.	3405-443-0001-000-0
EXISTING FUTURE LAND USE	MEDIUM DENSITY RESIDENTIAL (RM)
PROPOSED FUTURE LAND USE	MEDIUM DENSITY RESIDENTIAL (RM)
EXISTING ZONING	RS-3
PROPOSED ZONING	PLANNED DEVELOPMENT ZONE (PD)
PROJECT USE	SINGLE-FAMILY RESIDENTIAL
MAXIMUM ALLOWABLE DENSITY	RS-3 - 6 DU/AC
PROPOSED DENSITY	PD - 3.81 DU/AC

OPEN SPACE CALCUALTION			
TOTAL AREA OF SUBJECT PARCEL	502,682 SF	11.54 AC	100.00%
REQUIRED OPEN SPACE AREA	100,536 SF	2.31 AC	20.00%
AREA OF WETLAND BUFFER	0 SF	0.00 AC	0.00%
AREA OF RETENTION PONDS*	30,161 SF	0.69 AC	6.00%
AREA OF GREEN SPACE	119,476 SF	2.74 AC	23.77%
PROVIDED OPEN SPACE AREA	149,637 SF	3.44 AC	29.77%

*PER SECTION 125-212(b)(3)...stormwater detention and retention facilities providing that no more than 30 percent of the overall open space requirement shall be satisfied in this manner

LAND USE BREAKDOWN			
TOTAL AREA OF SUBJECT PARCEL	502,682 SF	11.54 AC	100.00%
AREA OF ONSITE WETLAND	0 SF	0.00 AC	0.00%
AREA OF WETLAND BUFFER	0 SF	0.00 AC	0.00%
TOTAL DEVELOPMENT AREA	502,682 SF	11.54 AC	100.00%
TOTAL DEVELOPMENT AREA	502,682 SF	11.54 AC	100.00%
AREA OF PROPOSED BUILDINGS	150,000 SF	3.44 AC	29.84%
AREA OF PROPOSED IMPERVIOUS	63,131 SF	1.45 AC	12.56%
AREA OF PROPOSED LOT IMPERVIOUS	30,000 SF	0.69 AC	5.97%
AREA OF PROPOSED RETENTION BASE	32,933 SF	0.76 AC	6.55%
TOTAL PROPOSED IMPERVIOUS AREA	276,064 SF	6.34 AC	54.92%
AREA OF PROPOSED LOT PERVIOUS	80,253 SF	1.84 AC	15.96%
AREA OF PROPOSED RETENTION BANK	28,870 SF	0.66 AC	5.74%
AREA OF PROPOSED GREEN SPACE	119,476 SF	2.74 AC	23.77%
TOTAL PROPOSED PERVIOUS AREA	228,599 SF	5.25 AC	45.48%

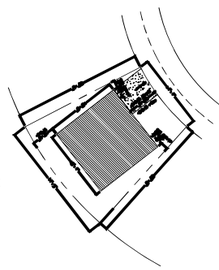
ZONING	PD
MIN. LOT SIZE	4,920 SF
MIN. LOT WIDTH	60'
MIN. LOT DEPTH	70' (82 PROPOSED)
MIN. ROAD FRONTAGE	25'
MAX. LOT COVERAGE	40%
BUILDING HEIGHT (1 STORY)	45'
MAX. GROSS DENSITY (DU/AC.)	12 DU/AC. (3.81 DU/AC. PROPOSED)
MIN. SETBACKS	
FRONT	15'
SIDE (INTERIOR)	5'
SIDE (CORNER)	5'
GARAGE	20'
REAR	15'

CIVIL ENGINEER
KMA ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
PHONE: (772) 569-5505

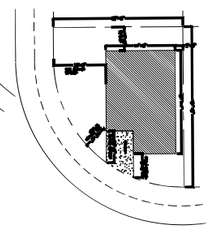
OWNER/DEVELOPER
DT VENTURES 1, LLC.
PO BOX 92280
ROCHESTER,NY 14692

NOTES

1. AIR CONDITIONER UNITS WILL HAVE A 5' SIDE SETBACK.



CURVATURE LOT DETAIL
SCALE: N.T.S.



CORNER LOT DETAIL
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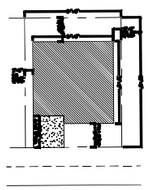

REGULAR LOT DETAIL
SCALE: N.T.S.

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3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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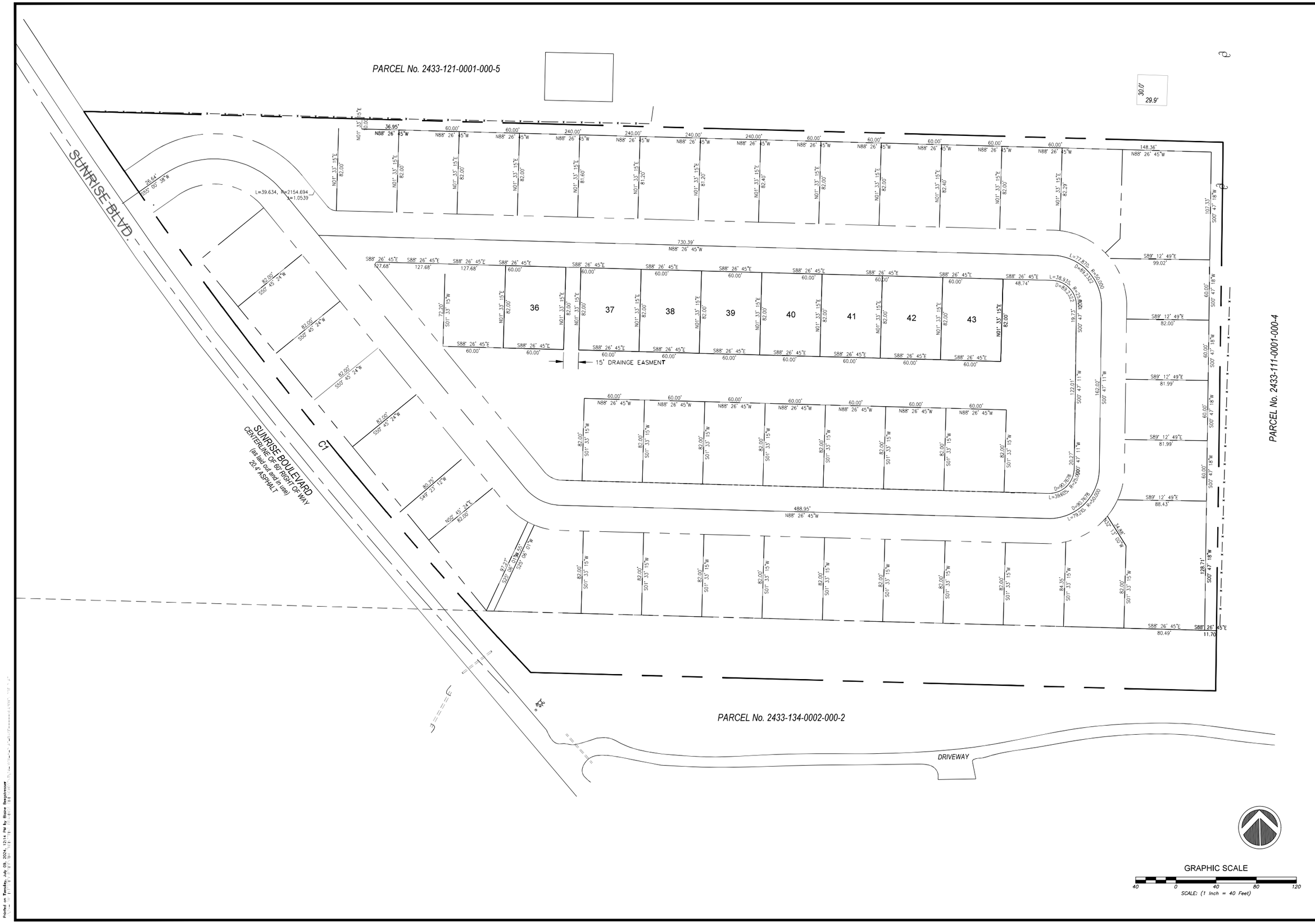
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-SITE

SHEET TITLE: SITE PLAN

SHEET NUMBER: C-200

Plotted on Tuesday, July 09, 2024, 12:14 PM by Blaine Bergstresser
I:\Projects\2024\24-1001 - 25th St. Single Family\Civil\Site\24-1001-SITE.dwg



KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER
LICENSE
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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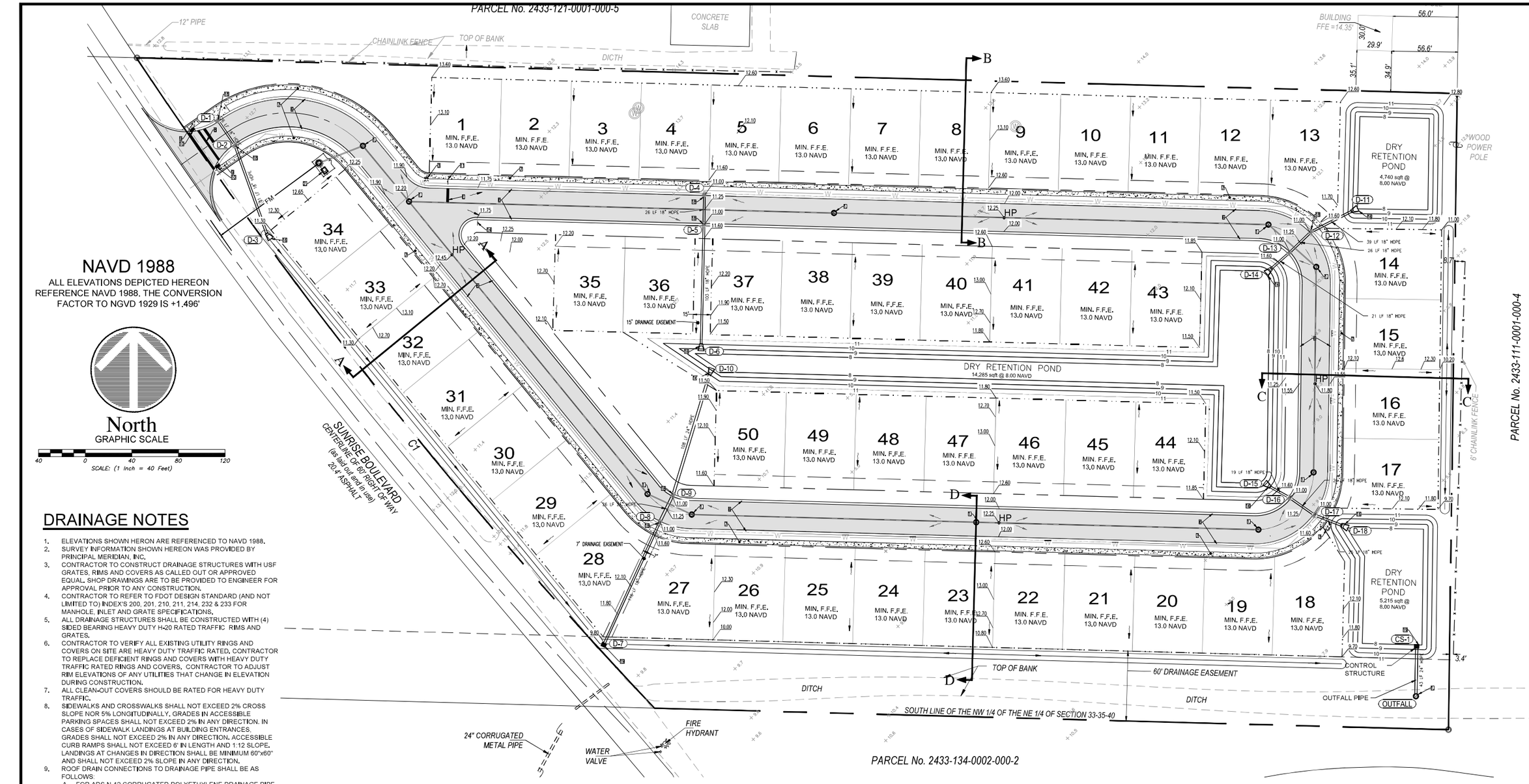
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-X-PLAT-BASE

SHEET TITLE:
PRELIMINARY PLAT

SHEET NUMBER:
C-201



NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988. THE CONVERSION FACTOR TO NGVD 1929 IS +1.496'

North

GRAPHIC SCALE

40 0 40 80 120

SCALE: (1 Inch = 40 Feet)

DRAINAGE NOTES

1. ELEVATIONS SHOWN HERON ARE REFERENCED TO NAVD 1988.
2. SURVEY INFORMATION SHOWN HEREON WAS PROVIDED BY PRINCIPAL MERIDIAN, INC.
3. CONTRACTOR TO CONSTRUCT DRAINAGE STRUCTURES WITH USF GRATES, RIMS AND COVERS AS CALLED OUT OR APPROVED EQUAL. SHOP DRAWINGS ARE TO BE PROVIDED TO ENGINEER FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
4. CONTRACTOR TO REFER TO FDOT DESIGN STANDARD (AND NOT LIMITED TO) INDEX'S 200, 201, 210, 211, 214, 232 & 233 FOR MANHOLE, INLET AND GRATE SPECIFICATIONS.
5. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED WITH (4) SIDED BEARING HEAVY DUTY H-20 RATED TRAFFIC RIMS AND GRATES.
6. CONTRACTOR TO VERIFY ALL EXISTING UTILITY RINGS AND COVERS ON SITE ARE HEAVY DUTY TRAFFIC RATED. CONTRACTOR TO REPLACE DEFICIENT RINGS AND COVERS WITH HEAVY DUTY TRAFFIC RATED RINGS AND COVERS. CONTRACTOR TO ADJUST RIM ELEVATIONS OF ANY UTILITIES THAT CHANGE IN ELEVATION DURING CONSTRUCTION.
7. ALL CLEAN-OUT COVERS SHOULD BE RATED FOR HEAVY DUTY TRAFFIC.
8. SIDEWALKS AND CROSSWALKS SHALL NOT EXCEED 2% CROSS SLOPE NOR 5% LONGITUDINALLY. GRADES IN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION. IN CASES OF SIDEWALK LANDINGS AT BUILDING ENTRANCES, GRADES SHALL NOT EXCEED 2% IN ANY DIRECTION. ACCESSIBLE CURB RAMPS SHALL NOT EXCEED 6' IN LENGTH AND 1:12 SLOPE. LANDINGS AT CHANGES IN DIRECTION SHALL BE MINIMUM 60"x60" AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.
9. ROOF DRAIN CONNECTIONS TO DRAINAGE PIPE SHALL BE AS FOLLOWS:
   A. FOR ADS N-12 CORRUGATED POLYETHYLENE DRAINAGE PIPE USE ADS DUAL WALL FABRICATED REDUCING SADDLE TEE 4"-24" DIAMETER.
   B. FOR RCP DRAINAGE PIPE MAKE CONNECTION PER FDOT INDEX 280,CONCRETE COLLAR FOR JOINING MAINLINE PIPE AND STUB PIPE DETAIL
   C. NOTIFY CONSULTANT FOR CONNECTION METHOD TO STEEL PIPE.
10. ALL DRAINAGE PIPE JOINTS SHALL BE FILTER FABRIC WRAPPED PER FDOT INDEX #280, ALL DRAINAGE PIPE JOINTS NEED TO BE FILTER FABRIC WRAPPED REGARDLESS OF MATERIAL.
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
12. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE.
13. EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
14. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION.
15. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
16. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
17. ALL CATCH BASINS WITHIN PROPOSED TRAFFIC AREAS SHALL HAVE BICYCLE PROOF GRATES.
18. CONTRACTOR TO FLUSH AND VACUUM ENTIRE ON-SITE STORM WATER SYSTEM UPON COMPLETION OF PROPOSED WORK.
19. MINIMUM DRAINAGE PIPE SHALL BE 15 INCHES PER CITY OF FORT PIERCE LAND DEVELOPMENT ORDINANCE SEC 119-3 DESIGN STANDARDS; STORMWATER MANAGEMENT; APPROVALS.

DRAINAGE STRUCTURE TABLE

CONSTRUCT D-1
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-2
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-3
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-4
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-5
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-6
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-7
TYPE 'C' D.B.I.
GRATE TOP = 10.00
N INV = 7.00
SUMP = 6.00

CONSTRUCT D-8
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-9
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-10
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-11
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-12
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-13
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-14
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-15
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-16
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-17
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-18
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT CS-1
TYPE 'C' D.B.I.
GRATE TOP = 18.50
ORIFICE =
S INV = 6.00
SUMP = 5.00

CONSTRUCT OUTFALL

CONSTRUCTION NOTES

1	SEWER MANHOLE
2	LIFT STATION
3	FIRE HYDRANT
4	FDOT TYPE 'D' CURB
5	FDOT TYPE 'F' CURB
6	MODIFIED MIAMI CURB
7	CONCRETE SIDEWALK per DETAIL
8	CROSSWALK per DETAILS
9	CURB RAMP per DETAILS
10	2' TACTILE SURFACE
11	R1-1 STOP SIGN
12	W11-2 PEDISTRIAN SIGN w/ W16-7PL
13	R2-1 SPEED SIGN
14	D3 STREET NAME SIGN
15	MITERED END SECTION
16	FLARED END SECTION
17	YARD DRAIN per DETAIL
18	MIAMI CURB INLET
19	DITCH BOTTOM INLET

HATCH PATTERN L LEGEND

- DENOTES ASPHALT PAVEMENT
- DENOTES CONCRETE PAVEMENT
- DENOTES RIGHT-OF-WAY DEDICATION

STRIPING NOTES

A	6" SOLID WHITE
B	6" DOUBLE YELLOW
C	12" SOLID WHITE
D	18" SOLID WHITE
E	24" SOLID WHITE
F	R.P.M.'s per FDOT INDEX 706-001
G	6" WHITE (6'-10' SKIP)
H	6" WHITE (10'-30' SKIP)
J	6" WHITE (2'-4' SKIP)
K	TURN ARROW per FDOT INDEX 711-001
L	18" YELLOW STRIPE

LINEWORK & SYMBOL LEGEND

- DENOTES PROPERTY BOUNDARY
- DENOTES RIGHT-OF-WAY
- DENOTES CENTERLINE
- DENOTES EASEMENT
- DENOTES FENCE LINE
- DENOTES DRAINAGE PIPE
- (S) DENOTES SEWER MANHOLE
- DENOTES FIRE HYDRANT
- DENOTES GATE VALVE
- DENOTES LIGHT POLE
- DENOTES STREET SIGN
- DENOTES RUNOFF OVERLAND FLOW
- 20.5 / 20.0 DENOTES PROPOSED ELEVATIONS
- x 22.0 DENOTES EXISTING GRADES
- DENOTES DRAINAGE STRUCTURE refer to table this sheet
- DENOTES DITCH BOTTOM INLET
- (J) DENOTES JUNCTION BOX
- (Y) DENOTES YARD DRAIN
- (D) DENOTES DRAINAGE STRUCTURE
- DENOTES MITERED/FLARED END SECTION

PARCEL No. 2433-111-0001-000-4

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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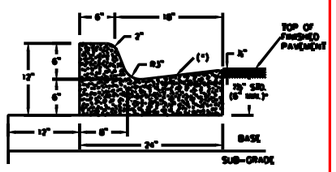
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-PGD

SHEET TITLE: MASTER PAVING GRADING & DRAINAGE PLAN

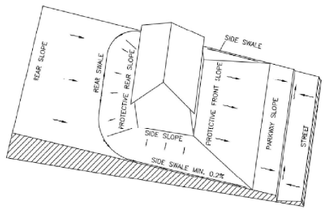
SHEET NUMBER: C-300

Printed on Tuesday, July 09, 2024 - 12:15 PM by Blaine Bergstresser
I:\Projects\2024\24-1001 - Integrity 1st - Sunrise Lakes\Civil\Plan Set\24-1001-PGD.dwg



* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6" UNLESS OTHERWISE SHOWN ON THE PLANS. ASPHALT SURFACE ON HIGH SIDE TO BE FLUSH WITH LIP OF CURB OR CURB & GUTTER.

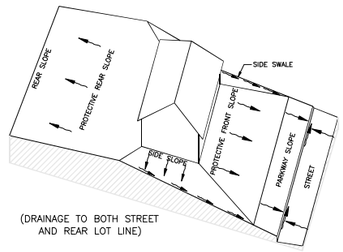
TYPE "F" CURB AND GUTTER
N.T.S



(DRAINAGE TO STREET)

NOTES:
1. ALL SLOPES GREATER THAN 6:1 SHALL BE SODDED.
2. ROOF RUNOFF FROM SIDES AND REAR OF HOUSES SHALL BE DIRECTED TOWARD SIDE AND REAR YARD SWALES ACCORDINGLY.

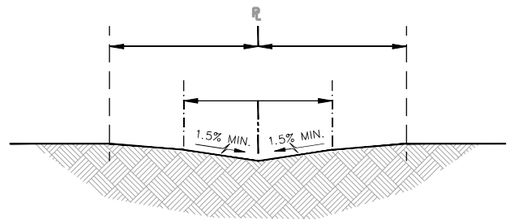
TYPE 'A' LOT GRADING DETAIL
N.T.S.



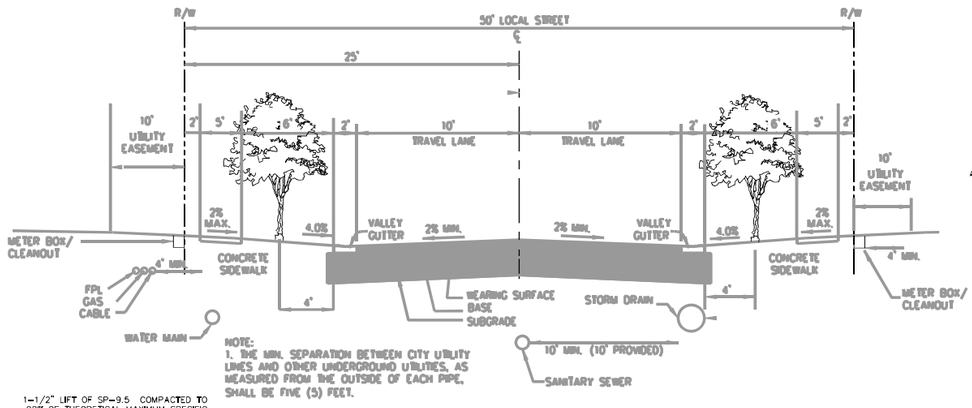
(DRAINAGE TO BOTH STREET AND REAR LOT LINE)

NOTES:
1. ALL SLOPES GREATER THAN 6:1 SHALL BE SODDED.
2. ROOF RUNOFF FROM SIDES AND REAR OF HOUSES SHALL BE DIRECTED TOWARD SIDE AND REAR YARD SWALES ACCORDINGLY.

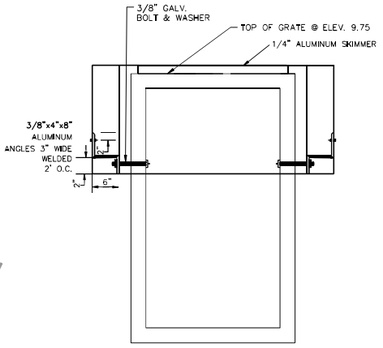
TYPE 'B' LOT GRADING DETAIL
N.T.S.

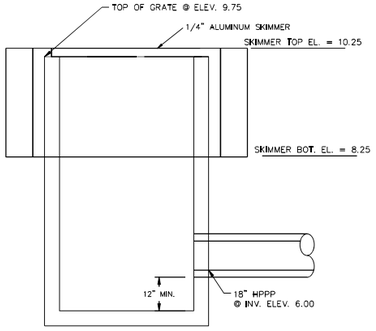


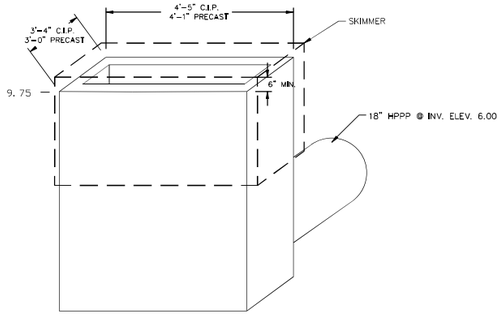
TYPICAL LOT SWALE SECTION
N.T.S.



NOTE:
1. THE MIN. SEPARATION BETWEEN CITY UTILITY LINES AND OTHER UNDERGROUND UTILITIES, AS MEASURED FROM THE OUTSIDE OF EACH PIPE, SHALL BE FIVE (5) FEET.

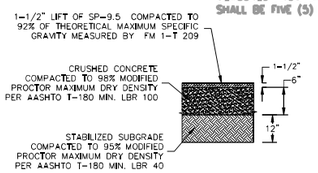




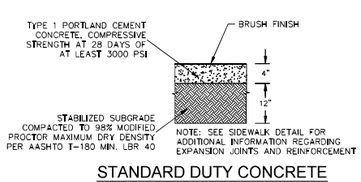


CONTROL STRUCTURE NOTES:
1. CONTRACTOR TO REFER TO FDOT FY 2021-22 STANDARD PLANS INDEX 425-052 FOR REBAR SPACING AND SIZING.

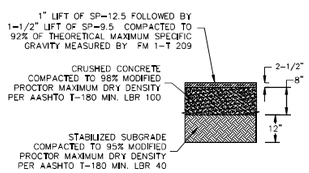
CONTROL STRUCTURE (CS-01)
FDOT TYPE 'C' STRUCTURE



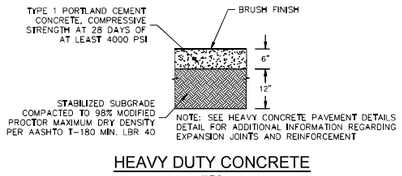
STANDARD DUTY ASPHALT
N.T.S



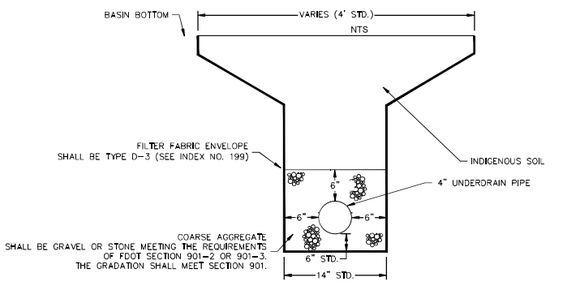
STANDARD DUTY CONCRETE
N.T.S



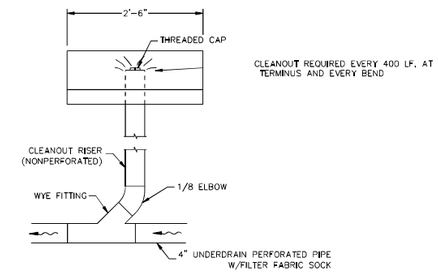
HEAVY DUTY ASPHALT
N.T.S



HEAVY DUTY CONCRETE
N.T.S



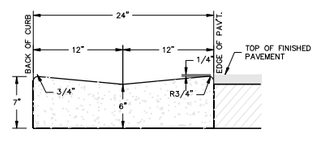
UNDERDRAIN TRENCH
N.T.S



NOTE:
CONTRACTOR TO REFER TO THE GEOTECHNICAL REPORT FOR SITE WORK SPECIFICATIONS.

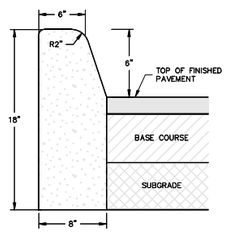
CRUSHED CONCRETE SHALL BE FROM AN FDOT APPROVED PLANT.

CRUSHED CONCRETE GRADATION SHALL BE AVAILABLE ON SITE AND SUBMITTED FOR THE AS-BUILT.



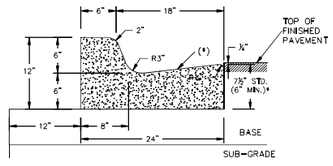
ALL CONCRETE SHALL BE 3,000 PSI

VALLEY GUTTER SECTION
PGKH21A.DWG N.T.S.



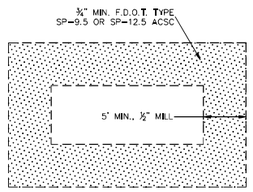
ALL CONCRETE SHALL BE 3,000 PSI

TYPE "D" CURB
PGKH22A.DWG N.T.S.

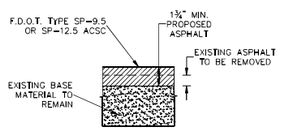


* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6" UNLESS OTHERWISE SHOWN ON THE PLANS. ASPHALT SURFACE ON HIGH SIDE TO BE FLUSH WITH LIP OF CURB OR CURB & GUTTER.

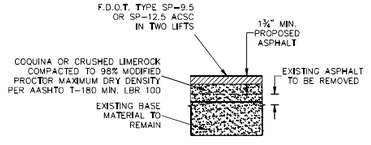
TYPE "F" CURB AND GUTTER
N.T.S



OPTION #1
MILL AND RESURFACE



OPTION #2
PAVEMENT REMOVAL AND OVERLAY



OPTION #3
PAVEMENT REMOVAL AND OVERLAY WITH ADDITIONAL BASE MATERIAL

ASPHALT PAVEMENT RESTORATION
N.T.S

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I:\...\Engineering\C-301 Paving Grading & Drainage Details.dwg

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ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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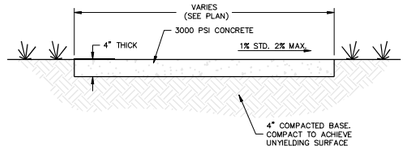
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-PGD

SHEET TITLE:
PAVING GRADING & DRAINAGE DETAILS

SHEET NUMBER:
C-301

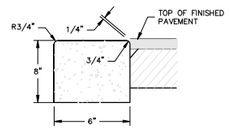


NOTE
SEE SITE PLAN FOR SPECIFIC SIDEWALK LOCATIONS.

SIDEWALK CONSTRUCTION SHALL BE PER FDOT DESIGN STANDARDS INDEX 522-001. DETECTABLE WARNINGS AND CURB RAMPS SHALL BE PER INDEX 522-002.

TYPICAL 4" SIDEWALK SECTION

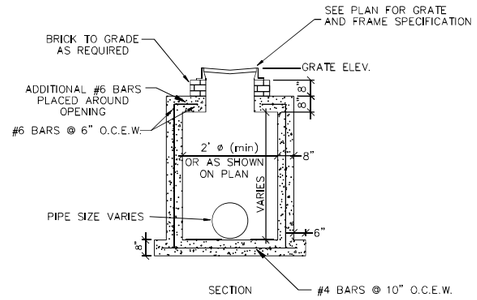
N.T.S.



ALL CONCRETE SHALL BE 3,000 PSI

6" EDGE CURB

PGKH24A.DWG N.T.S.



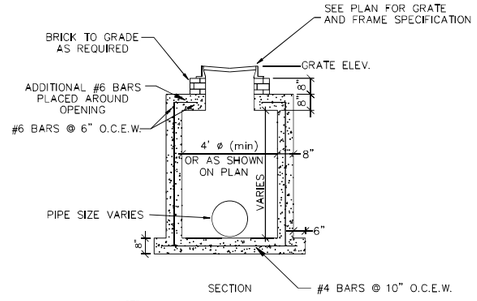
NOTE:

1. TYPE II CEMENT 4000 P.S.I.

2. WALL REINFORCEMENT A.S.T.M. DESIGNATION A185-64 OR EQUAL TO A.S.T.M. C-478.

TYPE C STORM INLET DETAIL

N.T.S



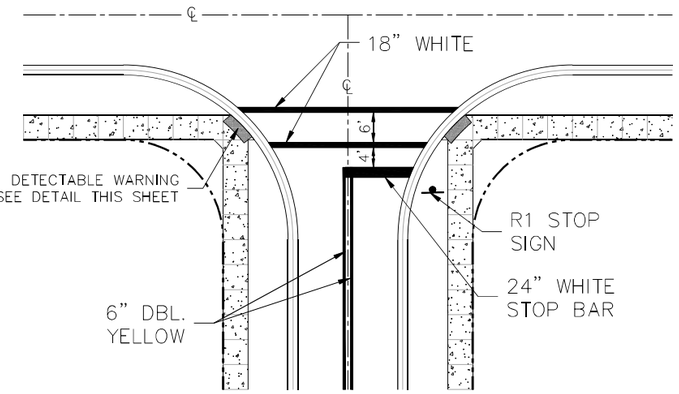
NOTE:

1. TYPE II CEMENT 4000 P.S.I.

2. WALL REINFORCEMENT A.S.T.M. DESIGNATION A185-64 OR EQUAL TO A.S.T.M. C-478.

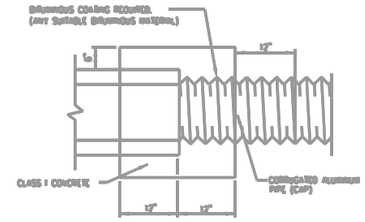
TYPE D STORM INLET DETAIL

N.T.S



TYPICAL CROSSWALK AND STOP BAR DETAIL

N.T.S.



CONCRETE COLLAR DETAIL

N.T.S.

TABLE OF SIDEWALK THICKNESS - 'T'	
LOCATION	'T'
RESIDENTIAL AREAS	4"
AT DRIVEWAYS AND OTHER AREAS	6"

NOTE: CONCRETE TO BE 3,000 P.S.I. AT 28 DAYS

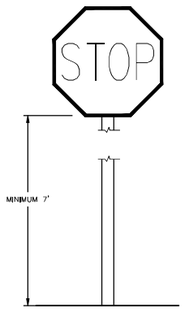
TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
'A'	P.C. AND P.T. OF CURVES.
'B'	5'- 0" CENTER TO CENTER ON SIDEWALKS. (NOT LESS THAN 4' AND NOT GREATER THAN 10')
'C'	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES. JUNCTION OF EXISTING AND NEW SIDEWALKS AT INTERVALS NOT GREATER THAN 100'.



R1-1
30" X 30"

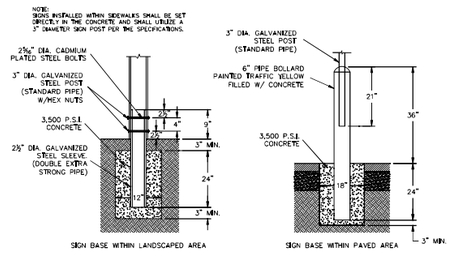
STOP SIGN DIMENSIONS

N.T.S.



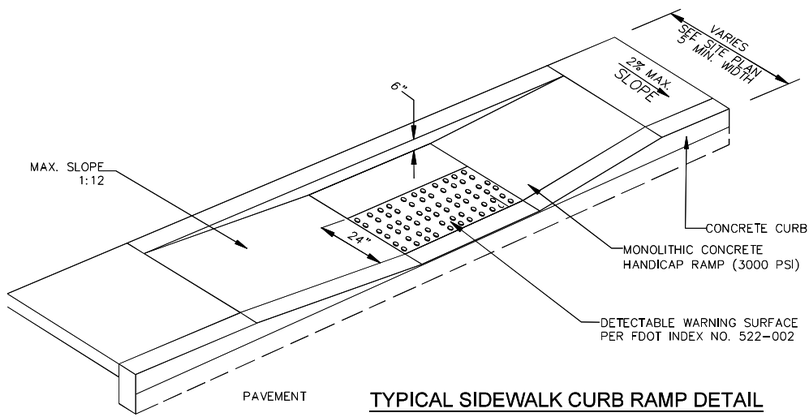
REQUIRED SIGN HEIGHT

N.T.S

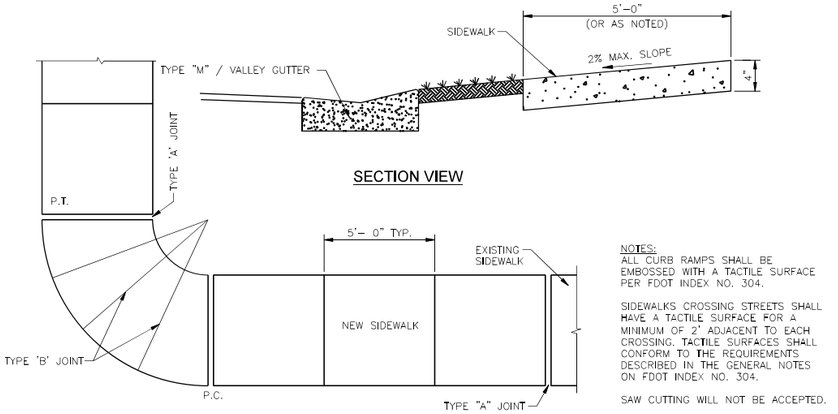


SIGN BASE

N.T.S



TYPICAL SIDEWALK CURB RAMP DETAIL



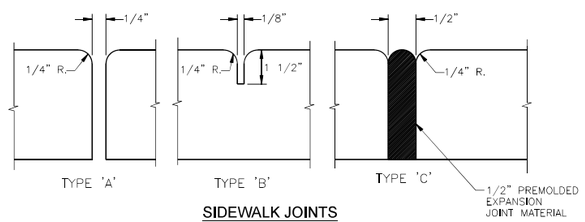
SECTION VIEW

PLAN

NOTES:
ALL CURB RAMPS SHALL BE EMBOSSED WITH A TACTILE SURFACE PER FDOT INDEX NO. 304.

SIDEWALKS CROSSING STREETS SHALL HAVE A TACTILE SURFACE FOR A MINIMUM OF 2' ADJACENT TO EACH CROSSING. TACTILE SURFACES SHALL CONFORM TO THE REQUIREMENTS DESCRIBED IN THE GENERAL NOTES ON FDOT INDEX NO. 304.

SAW CUTTING WILL NOT BE ACCEPTED.



SIDEWALK JOINTS

SIDEWALK CONSTRUCTION

N.T.S.

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

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02/24/2022

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DATE:	04/02/2024
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SHEET TITLE:
PAVING GRADING & DRAINAGE DETAILS

SHEET NUMBER:
C-302

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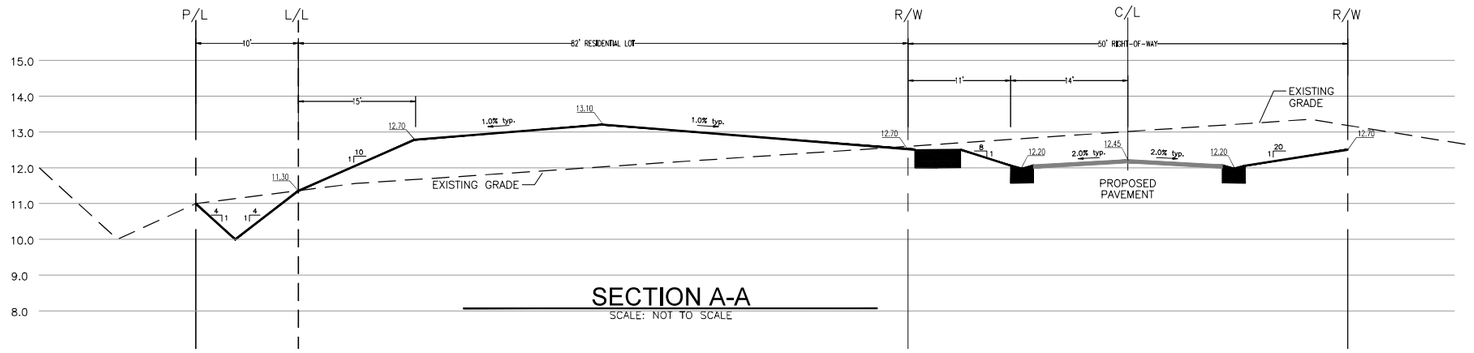
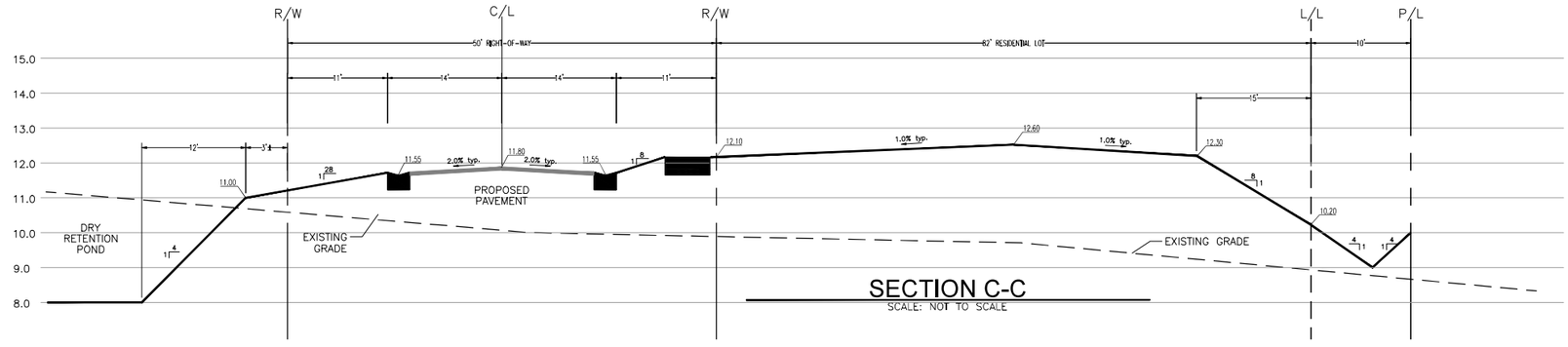


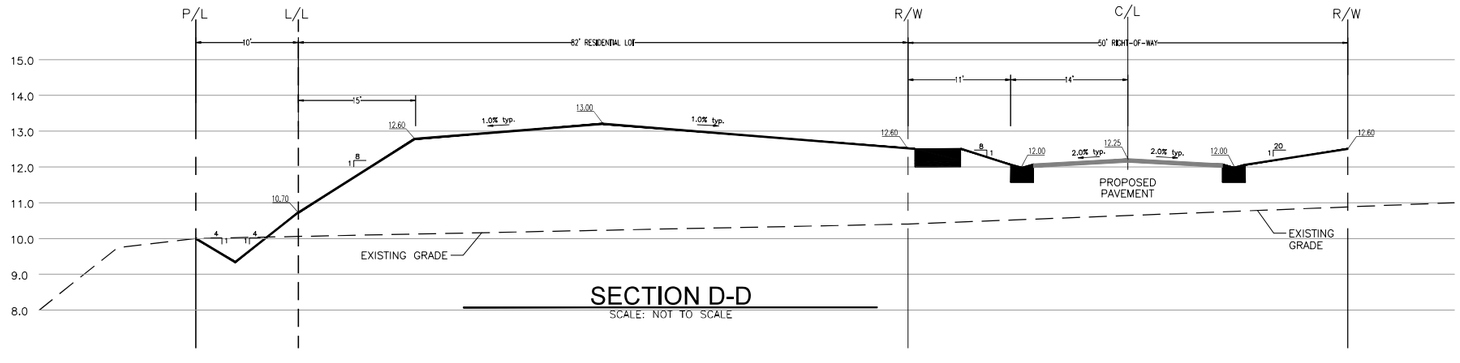
SECTION A-A
SCALE: NOT TO SCALE



SECTION B-B
SCALE: NOT TO SCALE



SECTION C-C
SCALE: NOT TO SCALE



SECTION D-D
SCALE: NOT TO SCALE

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FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

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PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER
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DATE:	04/02/2024
CAD I.D.	24-1001-PGD

SHEET TITLE:
GRADING SECTIONS

SHEET NUMBER:
C-303

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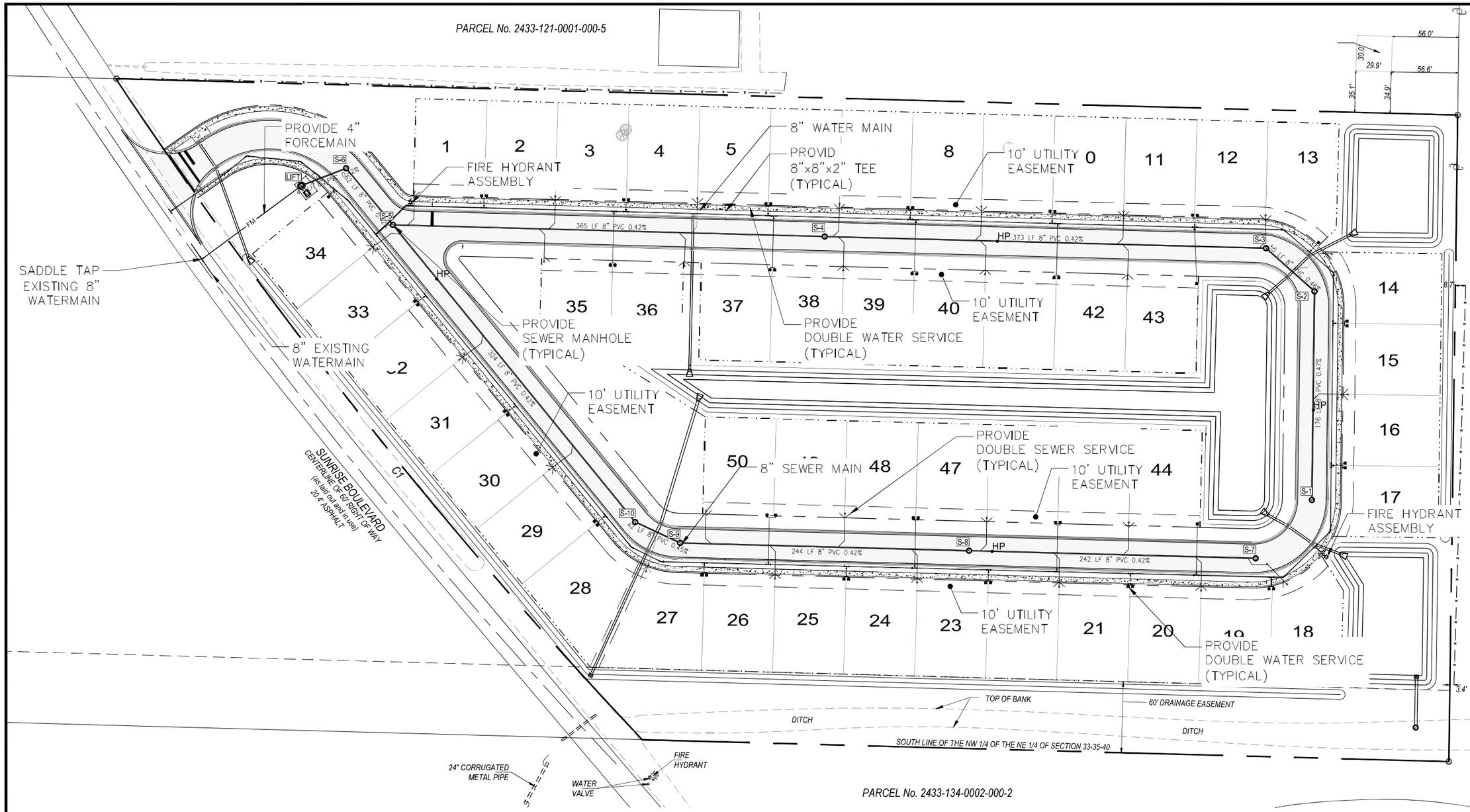

UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPREITE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
3. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
4. SANITARY SEWER PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS:
   8" PVC SDR26 PER ASTM D 3034 DEPTHS LESS THAN 15'
5. WATER LINES SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON PLANS:
   6" AND LARGER, PVC C-900 PER ASTM D 2241
   CLASS 200 UNDER ROADS, OTHERWISE CLASS 150
6. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 36" COVER ON ALL WATERLINES AND FORCEMAINS.
9. CROSSINGS AND CONFLICTS MUST BE PER FPUA SPECIFICATIONS.
10. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
11. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 COMPRESSION STRENGTH AT 3000 P.S.I.
12. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
13. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320 FAC.
14. VALVES ARE NOT TO BE PLACED IN CURBS, SIDEWALKS, OR DRIVEWAYS.
15. ALL MANHOLES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO BEGINNING PAVING.
16. DRIVEWAY APRON IS SHOWN FOR REFERENCE ONLY. DRIVEWAYS ARE TO BE CONSTRUCTED AND PERMITTED AS PART OF THE BUILDING PERMIT PROCESS.
17. TRACER WIRE MUST BE INSTALLED PER FPUA SPEC./QPL.
18. THE PROPERTY OWNER, CONTRACTOR,AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICK UP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROPERTY LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FORM THE EDGE OF PAVEMENT TO THE PROPERTY LINE.

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE PROJECT DESIGN AND NOTIFYING OWNER AND ENGINEER OF ANY POTENTIAL COST SAVINGS, CONFLICTS, OR DISCREPANCIES IN PLANS PRIOR TO FINAL CONTRACT FOR CONSTRUCTION.
2. CONTRACTOR AND SURVEYOR SHALL COORDINATE WITH KMA ENGINEERING & SURVEYING DAILY PRIOR TO CONSTRUCTION STAKE OUT TO ASSURE PROPER CONSTRUCTION.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UNDERGROUND UTILITY NOTIFICATION CENTER AT 811 AND ANY OTHER POTENTIALLY AFFECTED UTILITY PROVIDERS FOR INSTALLATION OF NECESSARY CONDUIT AND CONFLICT AVOIDANCE, ANY NECESSARY UTILITY ADJUSTMENTS/RELOCATIONS, AND FOR GENERAL COORDINATION WITH THESE UTILITY PROVIDERS: FLORIDA POWER AND LIGHT, CITY OF FELLSMERE UTILITY DEPARTMENT, INDIAN RIVER COUNTY UTILITY DEPARTMENT, COMCAST CABLE, AT&T & FLORIDA GAS.
4. CONTRACTOR IS TO EXERCISE CAUTION WHEN WORKING NEAR OVERHEAD OR UNDERGROUND UTILITY LINES. THE LOCATIONS OF THE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE THE RESPONSIBILITY OF THE CONTRACTOR AND UTILITY PROVIDER TO FIELD LOCATE PRIOR TO WORKING IN THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGED UTILITIES RESULTING FROM THE CONTRACTOR'S WORK.
5. THE CONTRACTOR SHALL VERIFY ALL EXISTING TIE-INS FOR DRAINAGE, WATER, SEWER, PAVING, AND ELEVATIONS, AS NECESSARY, PRIOR TO CONSTRUCTION COMMENCEMENT. THE CONTRACTOR SHALL VERIFY THE ACCURACY AND SUITABILITY OF ALL CONSTRUCTION STAKE-OUTS PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ASSURE COMPLIANCE WITH PLANS, CROSS SECTIONS, DETAILS, AND PERMITS.
6. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ALL CONSTRUCTION PERMITS AND BONDS HAVE BEEN ACQUIRED PRIOR TO COMMENCING CONSTRUCTION. A COPY OF THE APPROVED CONSTRUCTION PLAN AND ALL PERMITS AND BONDS SHALL BE LOCATED ON THE JOB SITE AT ALL TIMES.
7. THE CONTRACTOR SHALL ENSURE ADEQUATE HORIZONTAL AND VERTICAL SEPARATION AS NECESSARY FOR FDEP AND LOCAL UTILITY PROVIDER SPECIFICATIONS (INCLUDING SERVICES). THESE SEPARATION DISTANCES SHALL BE MEASURED BY THE SURVEYOR AND SUPPLIED TO THE PROJECT ENGINEER ON AS-BUILT PLANS. CONTRACTOR SHALL RECORD ALL SEPARATION DISTANCES ON FIELD SET OF CONSTRUCTION DOCUMENTS.
8. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS AND LABOR TO COMPLETELY CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS AND IN CONFORMANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
9. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT AN AS-BUILT SURVEY CERTIFIED BY A REGISTERED, LICENSED SURVEYOR OF ALL CONSTRUCTED IMPROVEMENTS AT PROJECT COMPLETION.
10. NO DESIGN CHANGES ARE TO OCCUR TO THE APPROVED CONSTRUCTION PLANS WITHOUT PRIOR APPROVAL OF THE PROJECT ENGINEER.

UTILITIES LEGEND

- DENOTES PROPERTY BOUNDARY
- DENOTES RIGHT-OF-WAY
- DENOTES CENTERLINE
- DENOTES EASEMENT
- DENOTES FENCE LINE
- DENOTES WATER MAIN (WM)
- DENOTES FORCE MAIN (FM)
- DENOTES SEWER MAIN (S)
- DENOTES STORM DRAIN
- DENOTES SEWER MANHOLE
- DENOTES FIRE HYDRANT
- DENOTES GATE VALVE
- DENOTES BLOW-OFF & SAMPLE POINT
- DENOTES BEND FITTING
- DENOTES TEE FITTING
- DENOTES WATER SERVICE
- DENOTES SEWER SERVICE
- DENOTES MITERED END SECTION
- DENOTES DITCH BOTTOM INLET
- DENOTES DRAINAGE STRUCTURE
- DENOTES YARD DRAIN
- DENOTES LIGHT POLE

North
GRAPHIC SCALE
40 0 40 80 120
SCALE: (1 Inch = 40 Feet)

NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988. THE CONVERSION FACTOR TO NGVD 1929 IS +1.496'

PARCEL No. 2433-111-0001-000-4

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

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PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

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DATE:	04/02/2024
CAD I.D.	24-1001-UTILITIES

SHEET TITLE: MASTER UTILITIES PLAN

SHEET NUMBER: C-400

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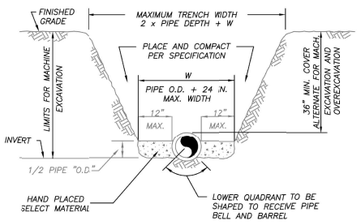
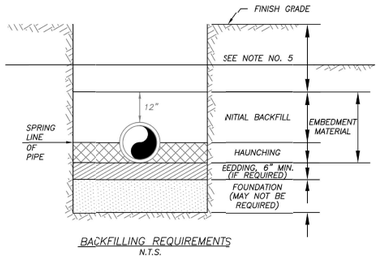


NOTES:

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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	

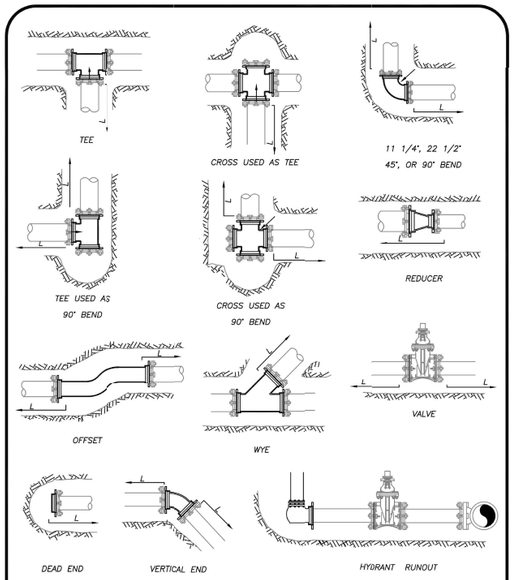


BACKFILLING REQUIREMENTS
N.T.S.

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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	



MECHANICAL JOINT ANCHORING REQUIREMENTS
N.T.S.

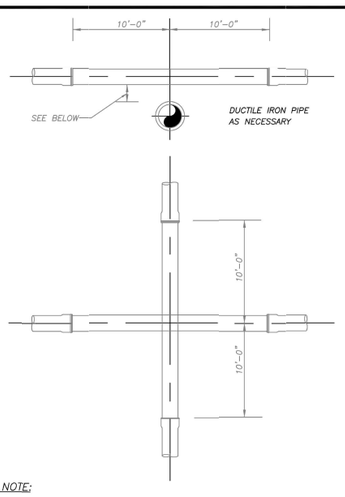
MECHANICAL JOINT ANCHORING REQUIREMENTS			M-3
03-09 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	

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 OF 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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	

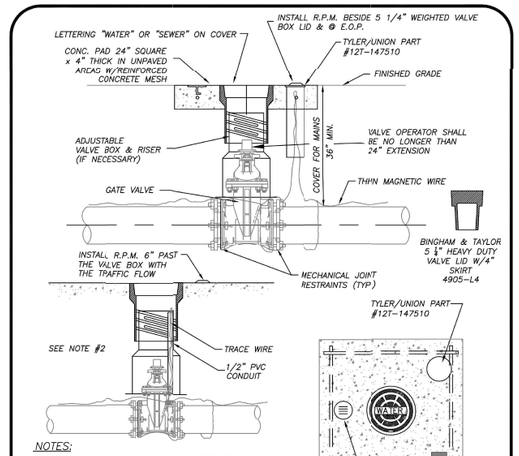


NOTE:

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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	



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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.: 24-1001
DRAWN BY: SCB
CHECKED BY: BRB
DATE: 04/02/2024
CAD I.D.: 24-1001-FPUA DETAILS

SHEET TITLE: FPUA DETAILS-01

SHEET NUMBER: C-500

Plotted on Tuesday, July 09, 2024, 12:16 PM by Blaine Bergstresser
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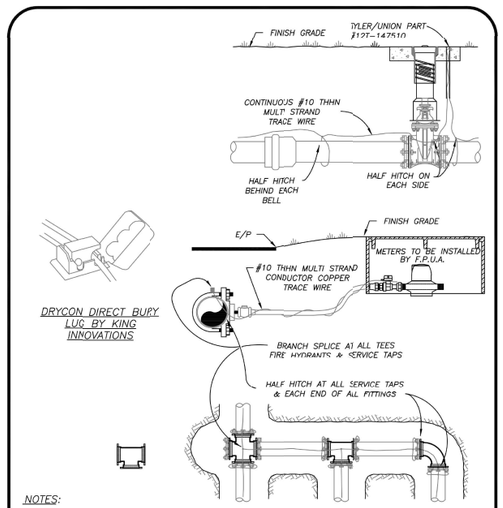


NOTES:

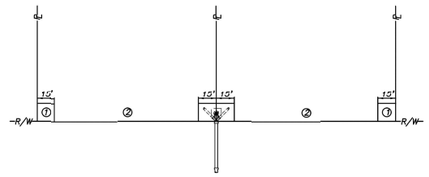
1) TRACE WIRE IS REQUIRED ON ALL PIPE AS NOTED BY UTILITIES ENGINEER AND SHOWN IN STANDARD DETAILS.
2) INCLUDE ALL COST OF MATERIAL & LABOR IN PRICE OF PIPE.
3) CONTRACTOR IS RESPONSIBLE FOR CONTINUITY OF ALL TRACE WIRE.

TRACE WIRE
(N.T.S.)

FPUA COMMUNITY PROUD	TRACE WIRE DETAIL	M-11
03-09 DATE: CONCRETE SLAB REVISION: SLL BY: JLC APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE:	
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1

GENERAL POLICY

WHERE COST JUSTIFIED AND OPERATIONALLY FEASIBLE, IT IS THE GEVERAL POLICY OF THE F.P.U.A. TO PROVIDE WATER, ELECTRIC, SEWER AND GAS SERVICE FROM THE STREET SIDE OF A PIECE OF PROPERTY. DEPENDING ON FACTORS SUCH AS LOCATION OF EXISTING SUPPLY SOURCE FACILITIES, REAR OR SIDE LOT LINE SUPPLY MAY BE AUTHORIZED, BUT ONLY WITH PRIOR APPROVAL FROM THE F.P.U.A.

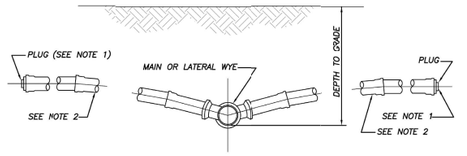


NOTES:

1. THE PREFERRED POINT OF CONNECTION TO THE F.P.U.A. SEWER LATERAL, AREA ①, SHALL BE LOCATED IN THE CORNER OF THE PROPERTY SELECTED BY THE F.P.U.A. AS THE BEST LOCATION FOR THE LATERAL. EVERY EFFORT WILL BE MADE TO SELECT THE CORNER WHERE TWO LATERALS CAN BE CONNECTED IN A "Y" CONFIGURATION AS SHOWN.
2. IF PHYSICAL BARRIERS OR OTHER OBSTACLES PREVENT THE CONNECTION OF THE BUILDING SERVICE LINE TO THE F.P.U.A. SEWER LATERAL WITHIN AREA ①, THE F.P.U.A. ENGINEERING DEPARTMENT MAY AUTHORIZE THE CONNECTION ALONG THE PORTION OF THE R/W LINE MARKED AREA ②.
3. HORIZONTAL SEPARATION OF WATER AND WASTEWATER SERVICES SHOULD BE A MINIMUM OF SIX FEET AND PREFERABLY 10 FEET.
4. THE WASTEWATER LATERAL SHALL BE LOCATED WITHIN RIGHT-OF-WAY AND TERMINATE AT THE PROPERTY LINE.
5. THE F.P.U.A. SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF THE WASTEWATER LATERAL WITHIN THE EASEMENT OR RIGHT-OF-WAY, UP TO THE POINT OF CONNECTION.

WASTEWATER SERVICE PLACEMENT
(N.T.S.)

FPUA COMMUNITY PROUD	WASTEWATER SERVICE PLACEMENT POLICY	S-1
02-08 DATE: 02-15 REVISION: SLL BY: JLC APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1

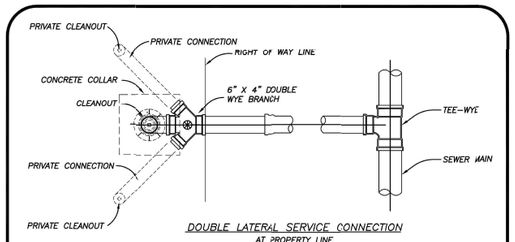


NOTES:

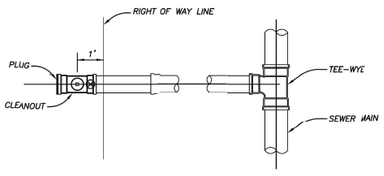
1) BALL TYPE WASTEWATER LOCATOR BY 3M CORP. OR APPROVED EQUAL.
2) MINIMUM SLOPE OF 1/8" PER FOOT, USE GREATER SLOPE WHERE POSSIBLE.
3) SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT.
4) INSTALL CLEANOUT AT THE PROPERTY LINE. REFER TO DETAIL S-1 FOR SPECIFIC PROPERTY LAYOUT.

SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD	SERVICE CONNECTION WASTEWATER	S-2
02-08 DATE: REVISION: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1



DOUBLE LATERAL SERVICE CONNECTION
AT PROPERTY LINE

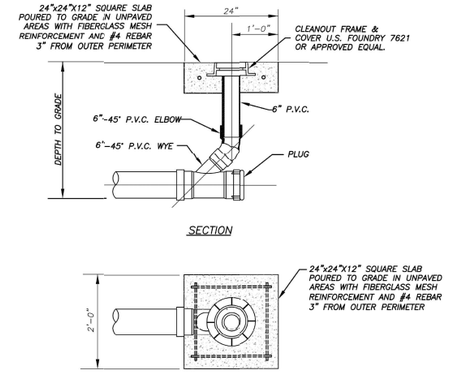


SINGLE SERVICE LATERAL CONNECTION

⊛ = 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.)

FPUA COMMUNITY PROUD	SERVICE CONNECTION WASTEWATER	S-3
02-08 DATE: REVISION: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 312602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1



SECTION

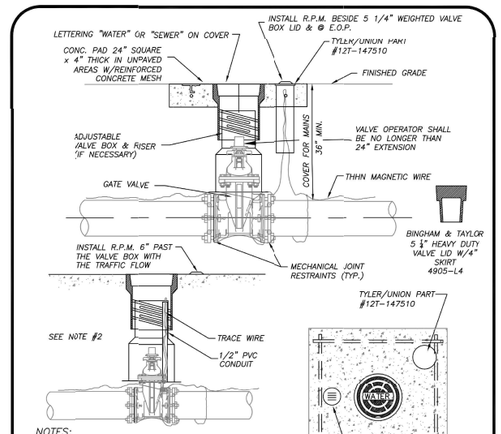
PLAN

NOTES:

1) SEE DETAIL S-3 FOR DOUBLE SERVICE CONNECTION.

RESIDENTIAL CLEANOUT DETAIL
(N.T.S.)

FPUA COMMUNITY PROUD	TERMINAL CLEANOUT DETAIL RESIDENTIAL	S-4A
10-06 DATE: REVISION: RBE BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 3



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.

FPUA COMMUNITY PROUD	TYPICAL GATE VALVE & VALVE BOX DETAIL	M-6
03-04 DATE: CONCRETE SLAB REVISION: SLL BY: JLC APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE:	
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1

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3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

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PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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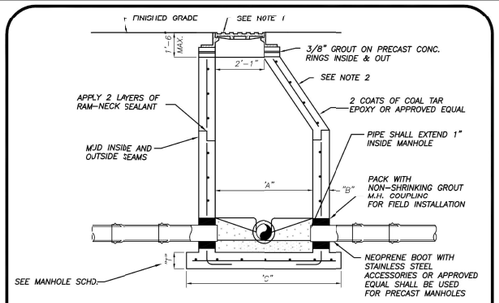
PROJECT No.: 24-1001
DRAWN BY: SCB
CHECKED BY: BRB
DATE: 04/02/2024
CAD I.D.: 24-1001-FPUA DETAILS

SHEET TITLE:
FPUA DETAILS-02

SHEET NUMBER:
C-501

Printed on Tuesday, July 09, 2024 - 12:15 PM by Blaine Bergstresser
I:\...\...\...



PIPE DIA.	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	4'-0"	"B"	76"	8"
30"-36"	5'-0"	"B"	88"	10"
42"-48"	6'-0"	"B"	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.

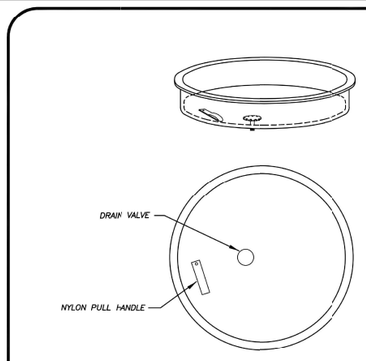
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.

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.)

FPUA COMMUNITY PROUD	PRECAST MANHOLE DEPTH 5'- 0" & GREATER	S-7
02-08 DATE: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # SEWER DETAIL 200602.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



NOTES:

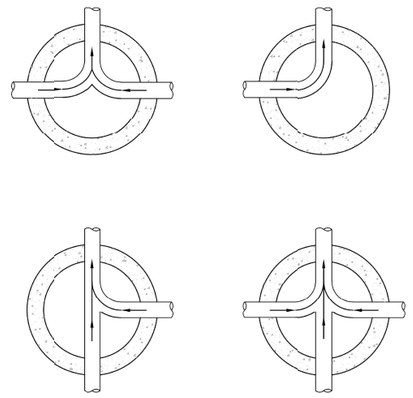
1) SEWER RAIN GUARDS SHALL BE INSTALLED ON ALL MANHOLES WHERE GRAVITY MAINS ARE 12" OR LESS AND IN AREAS DESIGNATED BY ENGINEER TO BE IN A FLOOD AREA.

2) SEWER RAIN GUARDS SHALL BE MANUFACTURED BY PARSON ENVIRONMENTAL PRODUCTS, INC., PART # PMI-23S (PARSON MANHOLE INSERTS) WITH DOUBLE VALVING, OR APPROVED EQUAL.

3) RAINGUARDS MUST BE "SNUG" FIT.

RAINGUARD DETAIL
(N.T.S.)

FPUA COMMUNITY PROUD	RAINGUARD DETAIL	S-11
03-09 DATE: DESIGNED: SLL DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # SEWER DETAIL 200602.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



NOTES:

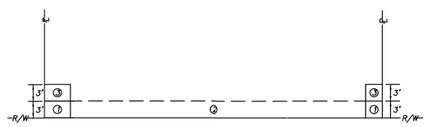
1) INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.

2) SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.

FPUA COMMUNITY PROUD	FLOW PATTERNS FOR INVERT CHANNELS	S-12
DATE: DESIGNED: JJM DRAWN BY: JJM APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # SEWER DETAIL 200902.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1

GENERAL POLICY

WHERE COST JUSTIFIED AND OPERATIONALLY FEASIBLE, IT IS THE GENERAL POLICY OF THE F.P.U.A. TO PROVIDE WATER, ELECTRIC, SEWER AND GAS SERVICE FROM THE STREET SIDE OF A PIECE OF PROPERTY, DEPENDING ON FACTORS SUCH AS LOCATION OF EXISTING SUPPLY SOURCE FACILITIES, REAR OR SIDE LOT LINE SUPPLY MAY BE AUTHORIZED, BUT ONLY WITH PRIOR APPROVAL FROM THE F.P.U.A.



NOTES:

1. THE PREFERRED POINT OF CONNECTION TO THE F.P.U.A. WATER METER, AREA ① SHALL BE LOCATED IN THE CORNER OF THE PROPERTY SELECTED BY THE F.P.U.A. AS THE BEST LOCATION FOR THE WATER METER. EVERY EFFORT WILL BE MADE TO SELECT THE CORNER WHERE TWO WATER SERVICES AND METERS CAN BE CONNECTED.

2. IF PHYSICAL BARRIERS OR OTHER OBSTACLES PREVENT THE CONNECTION OF THE BUILDING SERVICE LINE TO THE F.P.U.A. WATER SERVICE, WITHIN AREA ①, THE F.P.U.A. ENGINEERING DEPARTMENT MAY AUTHORIZE THE CONNECTION ALONG THE PORTION OF THE R/W LINE MARKED AREA ②, OR ALONG THE PROPERTY LINES MARKED AREA ③.

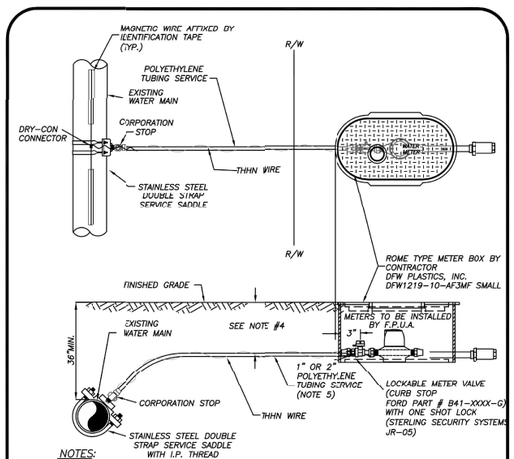
3. HORIZONTAL SEPARATION OF WATER AND WASTEWATER SERVICES SHOULD BE A MINIMUM OF 6 FEET AND PREFERABLY 10 FEET.

4. ALL METERS SHALL BE INSTALLED IN AN UNRESTRICTED AREA FOLLOWING EASE OF ACCESS AND PROVIDING ADEQUATE PROTECTION.

5. THE F.P.U.A. SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF THE WATER LATERAL WITHIN THE EASEMENT OR RIGHT-OF-WAY, UP TO THE POINT OF CONNECTION.

WATER METER PLACEMENT
(N.T.S.)

FPUA COMMUNITY PROUD	WATER METER PLACEMENT POLICY	W-1
03-08 02-15 DATE: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # WATER DETAILS 200602.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



NOTES:

1. BLUE 10 GALGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.

2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.

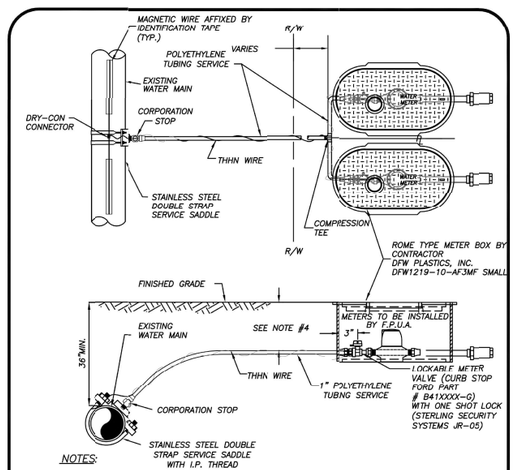
3. 1" & 3/4" METER SIZES SHALL REQUIRE A LOCKABLE METER VALVE. (CURB STOP)

4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

5. FOR 2" COMMERCIAL SERVICE INSTALLATIONS, FPUA WILL INSTALL ABOVE GROUND METER PER DETAIL W-8.

TYPICAL SINGLE WATER SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD	TYPICAL SINGLE WATER SERVICE CONNECTION	W-2
13-09 DESIGN DATE: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # WATER DETAILS 200602.DWG SCALE: N.T.S. DATE: 2020	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



NOTES:

1. BLUE 10 GALGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.

2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.

3. 1" & 3/4" METER SIZES SHALL REQUIRE A 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".

TYPICAL DOUBLE WATER SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD	TYPICAL DOUBLE WATER SERVICE CONNECTION	W-3
13-09 DESIGN DATE: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # WATER DETAILS 200602.DWG SCALE: N.T.S. DATE: 2020	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

LICENSE
BLAINE ROBERT BERGSTRESSER
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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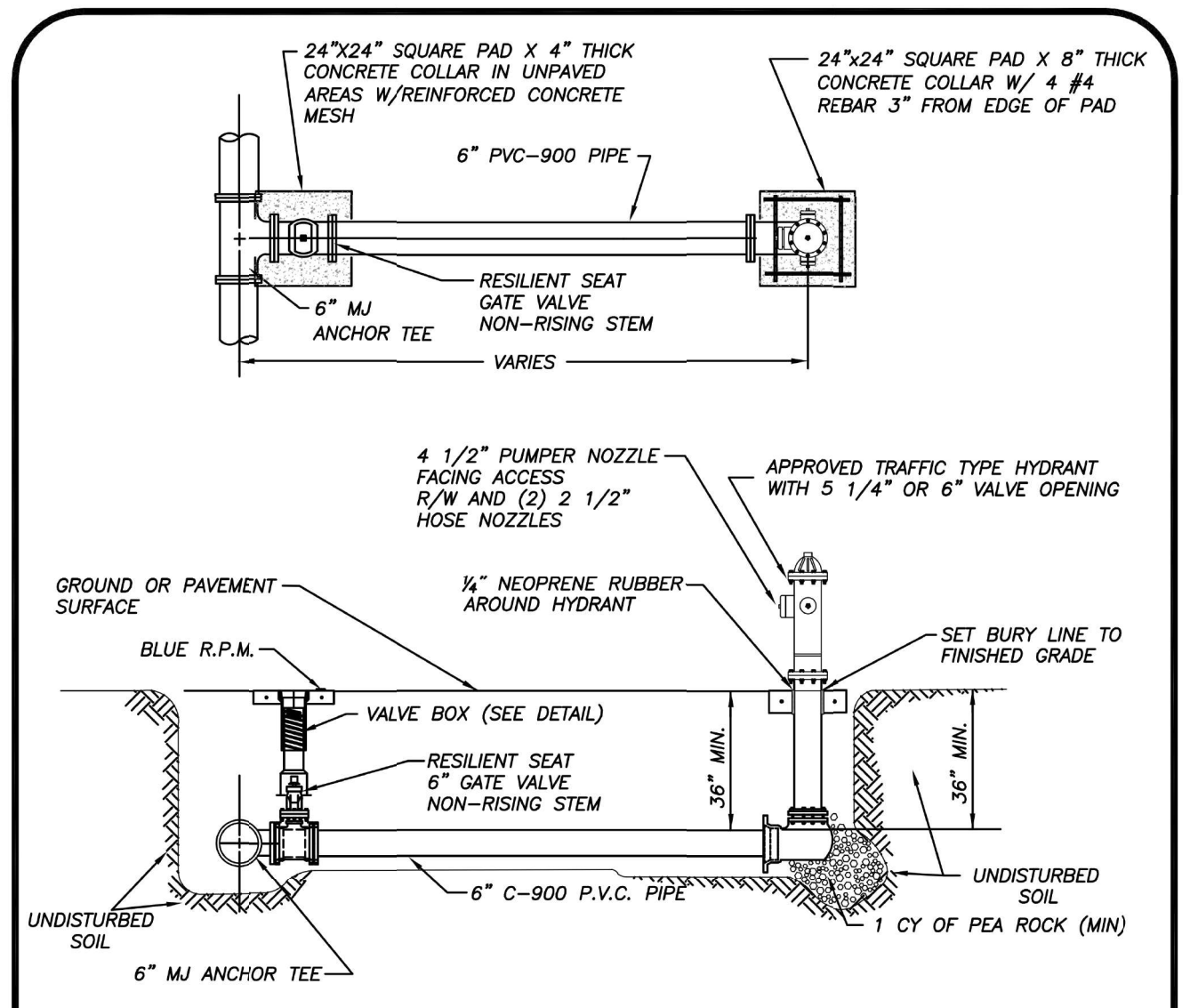
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-FPUA DETAILS

SHEET TITLE:
FPUA DETAILS-03

SHEET NUMBER:
C-502

Plotted on Tuesday, July 09, 2024, 12:16 PM by Blaine Bergstresser
C:\Users\blaine\Desktop\Projects\24-1001 Sunrise Lakes\CAD\Sheets\24-1001-FPUA DETAILS.dwg



NOTES:

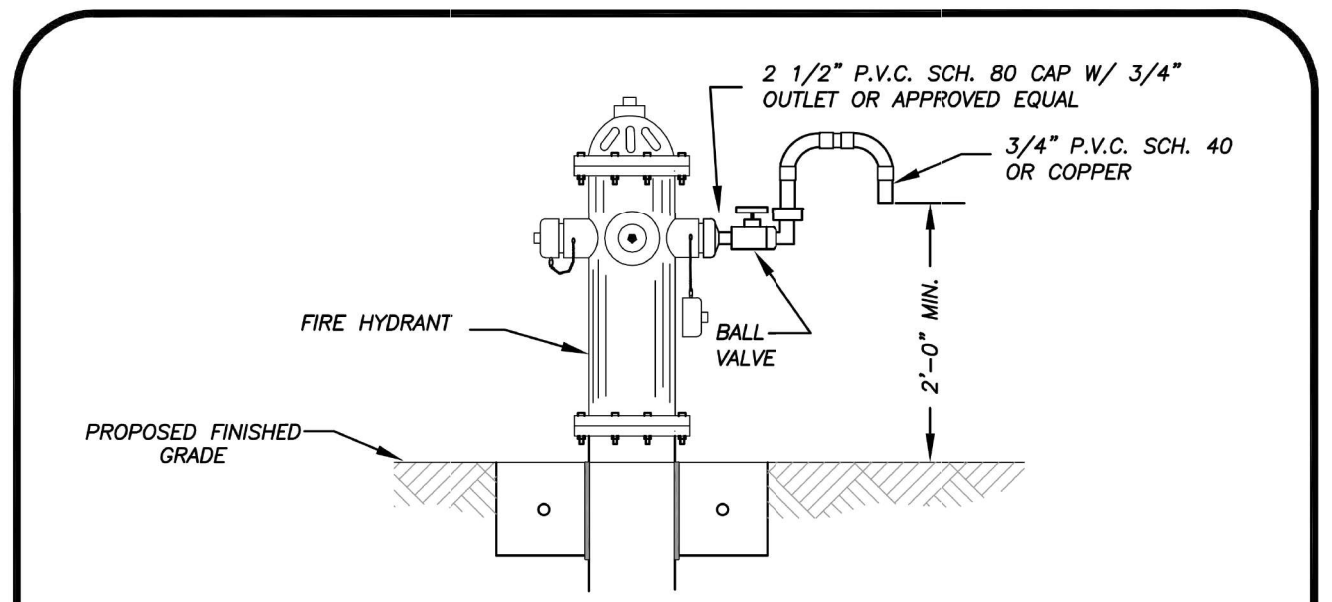
1. HYDRANT SHALL BE INSTALLED PLUMB & TRUE.
2. HYDRANT SHALL BE PAINTED CARNIVAL RED FROM FACTORY.
3. HEEL TO REST IN UNDISTURBED SOIL.
4. THE ONLY HYDRANTS ACCEPTABLE ARE: MUELLER SUPER CENTURION 250 OR AMERICAN DARLING B-84-B-5.
5. HYDRANT ASSEMBLY MUST BE RESTRAINED TO TEE.
6. ALL FITTINGS SHALL BE 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.)

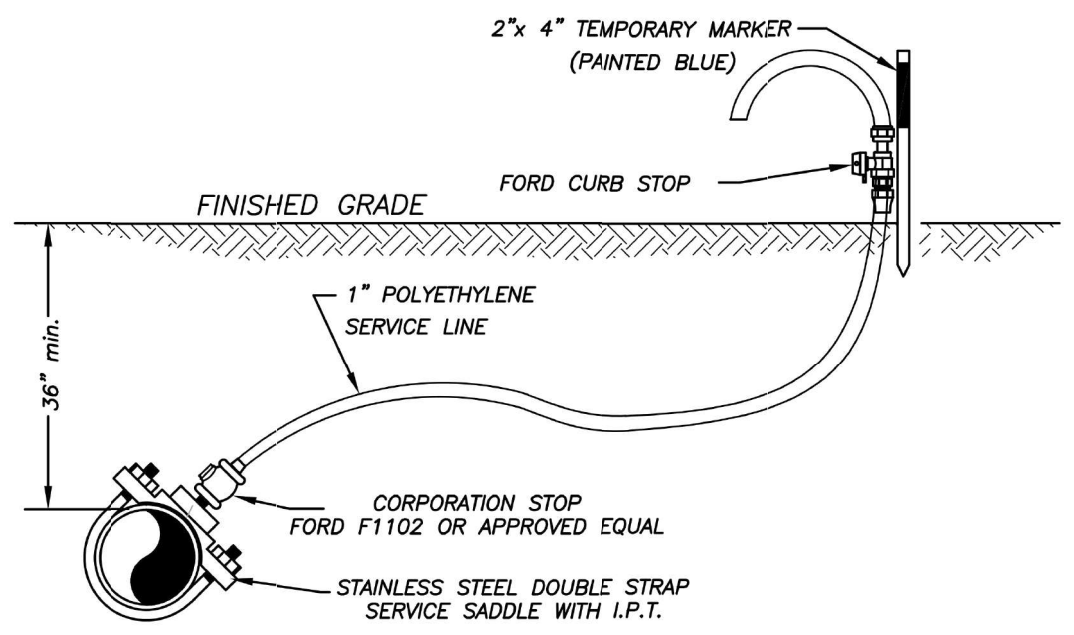
FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 37TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600

TYPICAL FIRE HYDRANT ASSEMBLY				W-5
03-09	DESIGN	SLL	JLC	
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATERDETAIL.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1



BACTERIOLOGICAL SAMPLING POINT @ FIRE HYDRANT

(N.T.S.)



BACTERIOLOGICAL SAMPLING POINT @ WATER MAIN

(N.T.S.)

NOTE:

AFTER TESTING REMOVE 1" P.E. LINE AND CAP WITH BRASS PLUG AT CORPORATION STOP.

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 37TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600

BACTERIOLOGICAL SAMPLING PONIT DETAIL				W-6
03-09	02-15	SLL	JLC	
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATERDETAIL.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1

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.

FORT PIERCE UTILITIES AUTHORITY

WATER DISTRIBUTION				G-1 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 2

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 REQUIRE-MENTS 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 CONSISITING 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 COMMMENCING 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.

FORT PIERCE UTILITIES AUTHORITY

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.

FORT PIERCE UTILITIES AUTHORITY

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

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.: 24-1001
DRAWN BY: SCB
CHECKED BY: BRB
DATE: 04/02/2024
CAD I.D.: 24-1001-FPUA DETAILS

SHEET TITLE: FPUA DETAILS-04

SHEET NUMBER: C-503

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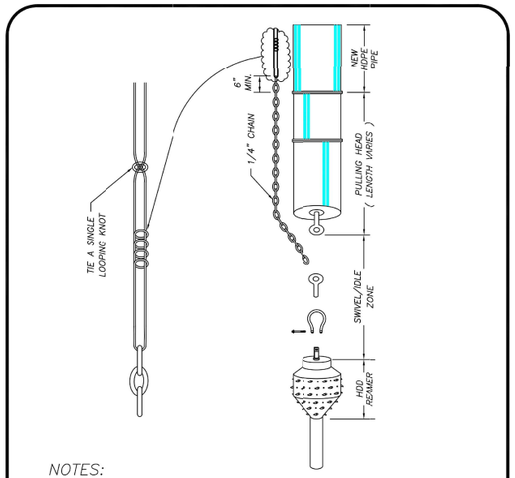
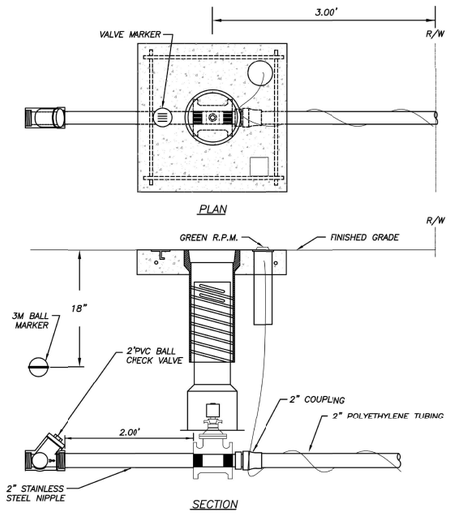


NOTES:

1. WHERE DIRECTIONAL DRILLING LENGTHS EXCEED 750 LINEAR FEET AND/OR HDPE PIPE DIAMETER EXCEED 12 INCHES, A SECOND LENGTH OF TRACE WIRE SHALL BE INSTALLED.
2. TRACE WIRE SHALL CONFORM TO THE FOLLOWING SPECIFICATION:
   MANUFACTURER – COPPERHEAD INDUSTRIES, LLC
   PART NUMBER – 1245B-EHS-500 / 1245B-EHS-1000 / 1245B-EHS-2500
   PART NUMBER DESCRIPTION – 12 (AWG), 45 (JACKET MIL), B (JACKET COLOR: B=BLUE, G=GREEN, ETC.) – EHS (EXTRA HIGH STRENGTH-HARD DRAWN / 1150# BREAKING LOAD STRENGTH) – 500 (WIRE LENGTH IN FEET)

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 25TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600

DIRECTIONAL BORE WIRE ATTACHMENT				M-16
03-09	CONCRETE SLAB	SLL	JLC	WATER/WASTEWATER ENGINEERING
DATE:	REVISION:	BY:	APPD:	
DESIGNED: JLC		COMPUTER FILE # MISC DETAILS 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL		SCALE:		
APPROVED: JLC		DATE: 2015		SHEET 1 OF 1



NOTES:

1. FORCE MAIN CONNECTION SHALL CONSIST OF A 2" TAPPING SADDLE, 2" STAINLESS STEEL NIPPLE AND 2" THREADED RESILIENT SEAT GATE VALVE
2. GREEN 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.
3. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 25TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600

GRINDER STATION CONNECTION				S-16
03-09	DESIGN	SLL	JLC	WATER/WASTEWATER ENGINEERING
DATE:	REVISION:	BY:	APPD:	
DESIGNED: JLC		COMPUTER FILE # COMPUTER#		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL		SCALE: N.T.S. SCALE		
APPROVED: JLC		DATE: 2010		SHEET 1 OF 1

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
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DATE:	04/02/2024
CAD I.D.:	24-1001-FPUA DETAILS

SHEET TITLE:
FPUA DETAILS-05

SHEET NUMBER:
C-504

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PARCEL No. 2433-121-0001-000-5

12" PIPE

CHAINLINK FENCE

TOP OF BANK

N88°26'45"W

DITCH

CONCRETE SLAB

1133.77'

WOOD POWER POLE

BUILDING FFE =14.35'

56.0'

30.0'

29.9'

56.6'

35.1'

34.9'

EAS

WOOD POWER POLE

WELL TO BE ABANDONED

WELL TO BE ABANDONED

CONSTRUCTION ENTRANCE

8.7'

546.05'

S00°47'11"W

6' CHAINLINK FENCE

PARCEL No. 2433-111-0001-000-4

North

GRAPHIC SCALE

40 0 40 80 120

SCALE: (1 Inch = 40 Feet)

NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988. THE CONVERSION FACTOR TO NGVD 1929 IS +1.496'

SUNRISE BOULEVARD
CENTERLINE OF 80' RIGHT OF WAY
(as laid out and in use)
20.4' ASPHALT

C1

3.4'

TOP OF BANK

60' DRAINAGE EASEMENT

DITCH

DITCH

SOUTH LINE OF THE NW 1/4 OF THE NE 1/4 OF SECTION 33-35-40

N88°26'45"W

681.50'

24" CORRUGATED METAL PIPE

FIRE HYDRANT

WATER VALVE

PARCEL No. 2433-134-0002-000-2

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I:\2024\24-1001\Drawings\Civil\24-1001 EX CON.dwg

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FORT PIERCE, FL 34946
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FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

LICENSE
BLAINE ROBERT BERGSTRESSER
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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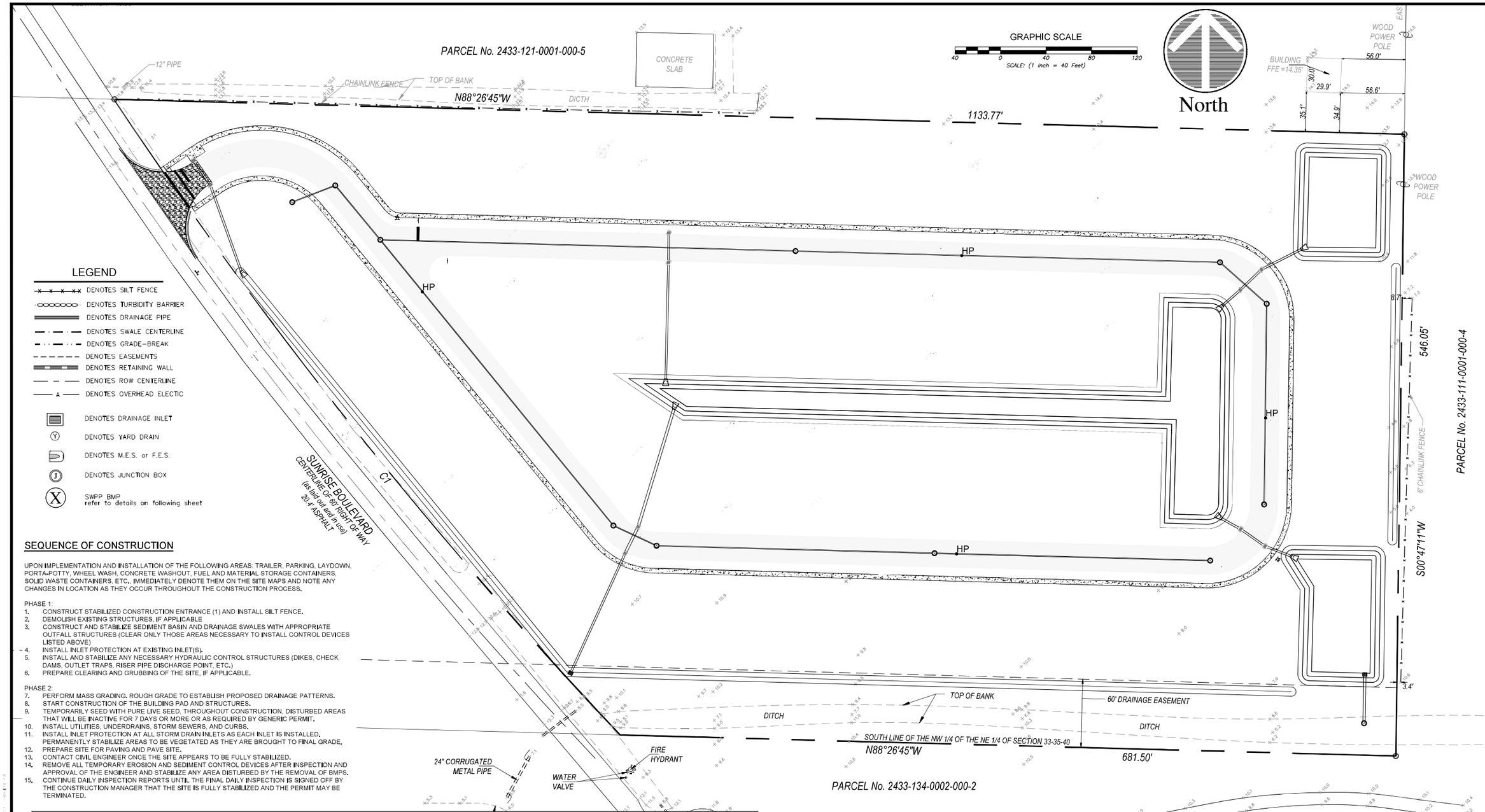
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-EX CON

SHEET TITLE:
EXISTING CONDITIONS & DEMOLITION

SHEET NUMBER:
C-600



LEGEND

- DENOTES SILT FENCE
- DENOTES TURBIDITY BARRIER
- DENOTES DRAINAGE PIPE
- DENOTES SWALE CENTERLINE
- DENOTES GRADE-BREAK
- DENOTES EASEMENTS
- DENOTES RETAINING WALL
- DENOTES ROW CENTERLINE
- DENOTES OVERHEAD ELECTIC
- DENOTES DRAINAGE INLET
- (Y) DENOTES YARD DRAIN
- DENOTES M.E.S. or F.E.S.
- (J) DENOTES JUNCTION BOX
- (X) SWPP BMP refer to details on following sheet

SEQUENCE OF CONSTRUCTION

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

PHASE 1:

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1) AND INSTALL SILT FENCE.
2. DEMOLISH EXISTING STRUCTURES, IF APPLICABLE
3. CONSTRUCT AND STABILIZE SEDIMENT BASIN AND DRAINAGE SWALES WITH APPROPRIATE OUTFALL STRUCTURES (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL CONTROL DEVICES LISTED ABOVE)
4. INSTALL INLET PROTECTION AT EXISTING INLET(S).
5. INSTALL AND STABILIZE ANY NECESSARY HYDRAULIC CONTROL STRUCTURES (DIKES, CHECK DAMS, OUTLET TRAPS, RISER PIPE DISCHARGE POINT, ETC.)
6. PREPARE CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.

PHASE 2:

7. PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
8. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
9. TEMPORARILY SEED WITH PURE LIVE SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE OR AS REQUIRED BY GENERIC PERMIT.
10. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, AND CURBS.
11. INSTALL INLET PROTECTION AT ALL STORM DRAIN INLETS AS EACH INLET IS INSTALLED, PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
12. PREPARE SITE FOR PAVING AND PAVE SITE.
13. CONTACT CIVIL ENGINEER ONCE THE SITE APPEARS TO BE FULLY STABILIZED.
14. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER INSPECTION AND APPROVAL OF THE ENGINEER AND STABILIZE ANY AREA DISTURBED BY THE REMOVAL OF BMPS.
15. CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION IS SIGNED OFF BY THE CONSTRUCTION MANAGER THAT THE SITE IS FULLY STABILIZED AND THE PERMIT MAY BE TERMINATED.

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TEMPORARY CONSTRUCTION EXITS																								
TEMPORARY CONTROL MEASURES																								
SEDIMENT CONTROL BASINS																								
STRIP & STOCKPILE TOPSOIL																								
ROUGH GRADE																								
STORM FACILITIES																								
SITE CONSTRUCTION																								
PERMANENT CONTROL STRUCTURES																								
FOUNDATION / BUILDING CONSTRUCTION																								
FINISH GRADING																								
LANDSCAPING/SEED/FINAL STABILIZATION																								

MAINTENANCE

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.

HALT ALL ACTIVITIES AND CONTACT THE CONSULTANT TO PERFORM INSPECTION AND CERTIFICATION OF BMPS. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE-CONSTRUCTION MEETING WITH CONSULTANT AND ALL GROUND-DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS NECESSARY FOR CONSTRUCTION

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

SITE PREPARATION SHOULD BE IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION

NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988. THE CONVERSION FACTOR TO NGVD 1929 IS +1.496'

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-EX CON

SHEET TITLE:
PHASE ONE EROSION CONTROL

SHEET NUMBER:
C-601

Plotted on Tuesday, July 09, 2024 - 12:16 PM by Blaine Bergstresser
I:\...\24-1001 SUNRISE LAKES\...

WHITE CITY CEMETERY
ZONING: I
PARCEL No. 2433-121-0001-000-5

SET MAG NAIL & DISK / LB 8261 ELEVATION = 13.56'

12" PIPE

CHAINLINK FENCE

TOP OF BANK

DITCH

CONCRETE SLAB

BUS STATION

10' LANDSCAPE BUFFER

10' LANDSCAPE BUFFER (min.)

MOUNTABLE MIAMI CURB

DRY DETENTION POND

DRY DETENTION POND

DRY DETENTION POND

WOOD POWER POLE

WOOD POWER POLE

EAST LINE

BUILDING FFE =14.35'

56.0'

30.0'

29.9'

56.6'

35.1'

34.9'

8.7'

3.4'

6' CHAINLINK FENCE

1 2 3 4 5 6 7 8 9 10 11 12 13

14 15 16 17

18 19 20 21 22 23 24 25 26 27

28 29 30 31 32 33 34

35 36 37 38 39 40 41 42 43

44 45 46 47 48 49 50

SUNRISE BOULEVARD
CENTERLINE OF 60' RIGHT-OF-WAY
(as laid out and in use)
20.4' ASPHALT

C1

7' DRAINAGE EASEMENT

10' LANDSCAPE BUFFER (min.)

TOP OF BANK

60' DRAINAGE EASEMENT

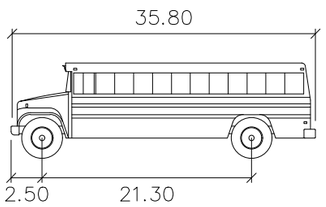
DITCH

North
GRAPHIC SCALE
40 0 40 80 120
SCALE: (1 Inch = 40 Feet)

ZONING: RS-3

ZONING: RS-3

ZONING: I-1
PARCEL No. 2433-111-0001-000-4



S–BUS–36

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 37.6

LINEWORK & SYMBOL LEGEND

- DENOTES PROPERTY BOUNDARY
- DENOTES RIGHT-OF-WAY
- DENOTES CENTERLINE
- DENOTES EASEMENT
- DENOTES FENCE LINE
- DENOTES DRAINAGE PIPE
- DENOTES SEWER MANHOLE
- DENOTES FIRE HYDRANT
- DENOTES GATE VALVE
- DENOTES LIGHT POLE
- DENOTES STREET SIGN
- DENOTES RUNOFF OVERLAND FLOW
- 20.5 / 20.0 — DENOTES PROPOSED ELEVATIONS
- x 22.0 — DENOTES EXISTING GRADES
- DENOTES DRAINAGE STRUCTURE refer to table this sheet
- DENOTES DITCH BOTTOM INLET
- DENOTES JUNCTION BOX
- DENOTES YARD DRAIN
- DENOTES DRAINAGE STRUCTURE
- DENOTES MITERED/FLARED END SECTION

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT
INTEGRITY 1ST CONSTRUCTION GROUP

LICENSE NO. 84598 STATE OF FLORIDA BLAINE ROBERT BERGSTRESSER PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-BUS-TURN

SHEET TITLE:
ROUTING PLAN BUS

SHEET NUMBER:
C-700

Printed on Tuesday, July 09, 2024 - 12:16 PM by Blaine Bergstresser

SET MAG NAIL
& DISK / LB 8261
ELEVATION = 13.56'

WHITE CITY CEMETERY
ZONING: I
PARCEL No. 2433-121-0001-000-5

12" PIPE
CHAINLINK FENCE
TOP OF BANK
DITCH
CONCRETE SLAB
BUS STATION
FIRE HYDRANT
10' LANDSCAPE BUFFER
10' LANDSCAPE BUFFER (min.)
MOUNTABLE MIAMI CURB
DRY DETENTION POND
DRY DETENTION POND
WOOD POWER POLE
EAST LINE
BUILDING FFE =14.35'
56.0'
30.0'
29.9'
56.6'
35.1'
34.9'
8.7'
6' CHAINLINK FENCE
3.4'
1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17
18 19 20 21 22 23 24 25 26 27
28 29 30 31 32 33 34
35 36 37 38 39 40 41 42 43
44 45 46 47 48 49 50
C1
SUNRISE BOULEVARD
CENTERLINE OF 80' RIGHT-OF-WAY
(as laid out and in use)
20.4' ASPHALT
7' DRAINAGE EASEMENT
10' LANDSCAPE BUFFER (min.)
TOP OF BANK
60' DRAINAGE EASEMENT
DITCH

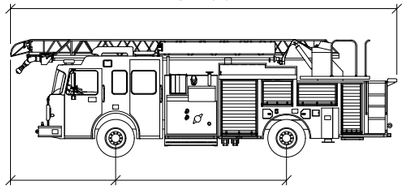
North
GRAPHIC SCALE
40 0 40 80 120
SCALE: (1 Inch = 40 Feet)

ZONING: RS-3

ZONING: RS-3

ZONING: I-1
PARCEL No. 2433-111-0001-000-4

37.00



10.06 16.33

Smeal Aerial RM 55ft

	feet
Width	: 8.33
Track	: 7.88
Lock to Lock Time	: 6.0
Steering Angle	: 48.0

LINEWORK & SYMBOL LEGEND

- DENOTES PROPERTY BOUNDARY
- DENOTES RIGHT-OF-WAY
- DENOTES CENTERLINE
- DENOTES EASEMENT
- DENOTES FENCE LINE
- DENOTES DRAINAGE PIPE
- DENOTES SEWER MANHOLE
- DENOTES FIRE HYDRANT
- DENOTES GATE VALVE
- DENOTES LIGHT POLE
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- DENOTES RUNOFF OVERLAND FLOW
- 20.5 / 20.0 DENOTES PROPOSED ELEVATIONS
- x 22.0 DENOTES EXISTING GRADES
- DENOTES DRAINAGE STRUCTURE refer to table this sheet
- DENOTES DITCH BOTTOM INLET
- DENOTES JUNCTION BOX
- DENOTES YARD DRAIN
- DENOTES DRAINAGE STRUCTURE
- DENOTES MITERED/FLARED END SECTION

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ENGINEERING & SURVEYING, LLC.
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FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

LICENSE NO. 84598 STATE OF FLORIDA BLAINE ROBERT BERGSTRESSER PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-BUS-TURN

SHEET TITLE:
ROUTING PLAN FIRE

SHEET NUMBER:
C-701

Printed on Tuesday, July 09, 2024, 12:16 PM by Blaine Bergstresser

WHITE CITY CEMETERY
ZONING: I

DRY DETENTION POND

DRY DETENTION POND

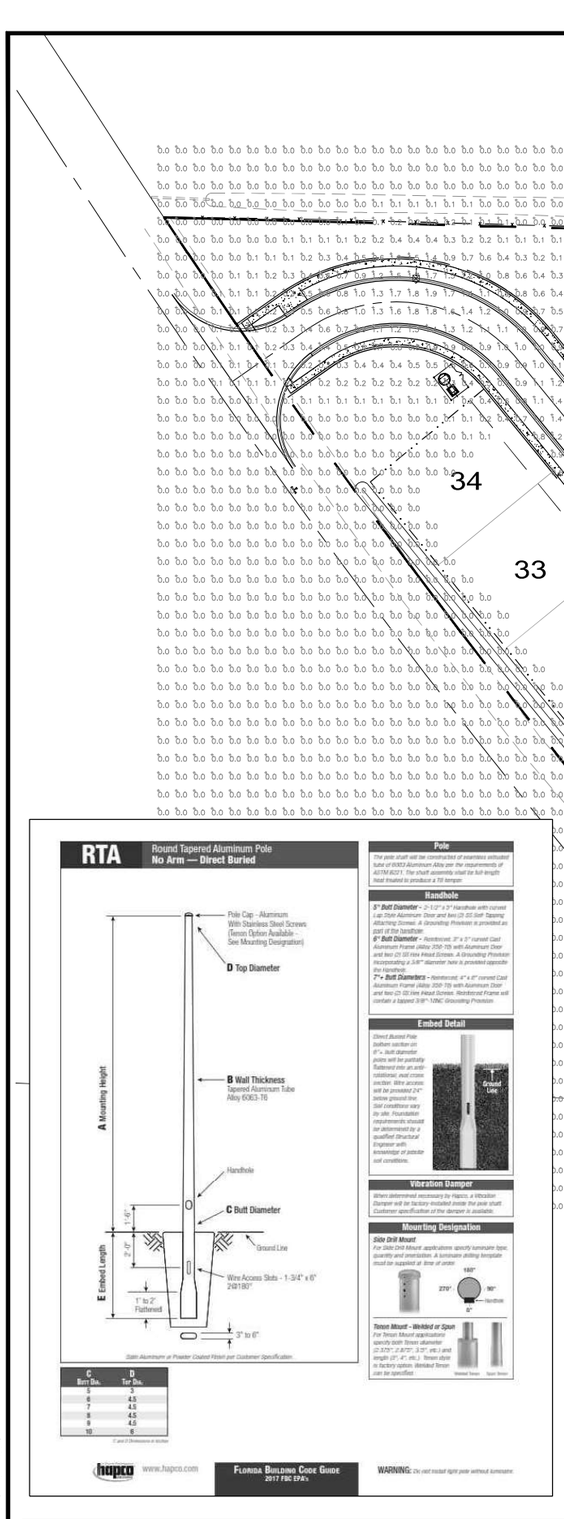
DRY DETENTION POND

EXISTING DRAINAGE CANAL AND 60' EASEMENT

ZONING: RS-3

ZONING: I-1

ZONING: RS-3



Landreth Lighting Luminaire Schedule

Symbol	Manufacturer	Qty	Label	Arrangement	Description	LLF	BUG Rating	Arranged Watts	Arranged Lumens
	Lithonia Lighting	15	SLA	Single	DSX0 LED P5 30K 70CRI T3M MVOLT RPA NLTAIR2 PIRHN HS FINISH TBD: MOUNTED 25' AFG ON ROUND TAPERED ALUMINUM DIRECT BURIED POLE	1.000	B1-U0-G3	90.12	10055

Landreth Lighting Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Entire Site	Illuminance	Fc	0.26	2.0	0.0	N.A.	N.A.
Drive Lane	Illuminance	Fc	1.20	2.0	0.5	2.40	4.00

North

GRAPHIC SCALE

40 0 40 80 120

SCALE: (1 Inch = 40 Feet)

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FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

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FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-PHOTO

SHEET TITLE:
PHOTO-01

SHEET NUMBER:

Plotted on Tuesday, July 09, 2024 - 12:17 PM by Blaine Bergstresser

100% GOPHER TORTOISE SURVEY
COMPLETION REPORT

3804 SUNRISE BLVD, FORT PIERCE, FL – 11.34 ACRES
SAINT LUCIE COUNTY
PARCEL ID: 2433-123-0001-000-1
SECTION 33, TOWNSHIP 35 SOUTH AND RANGE 40 EAST

Prepared for:

DT VENTURES 1 LLC
PO Box 92280
Rochester, NY 14692-0280

Prepared By:

Patrick Zuloaga

Florida Fish and Wildlife Conservation Commission Gopher Tortoise Agent

Permit No.: GTA-13-00002D

January 26, 2024

TABLE OF CONTENTS

□□□r□d□□□

INTRODUCTION

An upland habitat survey for gopher tortoise (*Gopherus polyphemus*) was conducted on the approximately 11.34-acre property located on 3804 Sunrise Blvd, Fort Pierce, Florida (see Figure 1). The survey included review of 100% of potential gopher tortoise habitat within the subject property.

The objectives of the survey were to document gopher tortoise burrows within the construction footprint of the property to confirm presence/absence, document the status and location of gopher tortoise burrows, and approximate the number of tortoises that would need relocation. The results of the survey determine the subsequent actions required to develop the subject property.

This Survey Report provides a summary of the survey activities conducted, including methods used and areas surveyed. Survey activities were executed according to the burrow survey methodology from the Florida Fish and Wildlife Conservation Commission (FWC) Gopher Tortoise Permitting Guidelines, April 2008, Revised April 2023, Appendix 4 Methods for Burrow Surveys on Development (Donor) and Recipient Sites, 100% Burrow Survey Protocol. Survey activities were conducted on January 25 and the morning January 26, 2024. The information contained herein is based on the findings from the field survey.

SITE LOCATION AND DESCRIPTION

The ±11.34-acre property is located in White City, a census-designated place (CDP) in Saint Lucie County within Section 33, Township 35 South and Range 40 East. The subject property is along the east side of Sunrise Blvd. The Saint Lucie County Property Appraiser lists the Property Parcel ID as 2433-123-0001-000-1. The Future Land Use designation is residential.

The vegetative component of the subject property is predominantly exotic vegetation, shrub brushland, cabbage palms and scattered hardwoods. An isolated waterbody is present within the north west corner and a water filled ditch runs along the southern boundary of the subject property. The Florida Cooperative Land Cover (CLC) System developed by the Florida Fish and Wildlife Conservation Commission (FWC) classifies the land cover as 1821 – Low Structure Density and 18332 – Fallow Orchards. The predominant land cover classification is Fallow Orchards (1832). Figure 2 provides the CLC map for the subject property.

The vegetative community was characterized in the field as a degraded mixed upland community consisting of shallow ridge and furrows with a sparse canopy and dense shrub stratum. The ridge and furrow landform is a result of the historic orchard land use. The canopy stratum consists primarily of cabbage palm (*Sabal palmetto*), and laurel oak (*Quercus laurifolia*). The shrub stratum consisted of dense ceaserweed (*Urena lobata*), Jack-in-the-bush (*Chromolaena odorata*), Brazillian pepper (*Schinus terebinthifolia*), and shoebutton ardisia (*Ardisia elliptica*). Ground cover stratum was generally limited due to the dense canopy, shrub and vine cover. Limited areas with herbaceous vegetative cover were observed providing suitable forage for gopher tortoises.

The Natural Resources Conservation Service (NRCS) Web Soil Survey lists five soil types within the subject property. Table 1 provides a summary of the soil types present within the subject property. Figure 3 provides the NRCS Web Soil Survey graphically for the subject property. A brief description of each soils type follows.

Table 1. Web Soil Survey Summary

Map Unit Symbol	Map Unit Name	Acres	Percent of property
□□	□□□□□□□□□d□□r□ □□□□□□□d□□	□□□□	□□□□□ □
□□	□r□□□□□□□□□□□□□r□□□□□□□□□□	□□□□	□□□□□ □
□□□	S□□□□□□□□□d□□ □□□□□□□□□□d□□	□□□□	□□□□□ □
□□□	T□□□□□□d□P□□ □□□□□□d□□	□□□□	□□□□□ □
□□□	□ □d□r□□□□ □□□□d□	□□□□	□□□□□ □
Totals for Area of Interest		**11.1**	**100.0%**

Ankona and Farmton sands is poorly drained soil found in flatwoods on marine terraces. The seasonal high-water table is at a depth of 6 to 18 inches. The gopher tortoise burrowing suitability is rated as "less suited". Less Suited rating states that these soils have characteristics that may limit establishment, maintenance, or use of the site by gopher tortoise. Colonization and population densities may be below average or restricted in the area due to the limiting factors even though all of the other species habitat requirements are met (USDA, 2024).

Arents are Somewhat poorly drained sandy soils found on rises in marine terraces. Depth to water is 18 to 36 inches. This soils type is listed as not rated in the Web Soil Survey gopher tortoise burrowing suitability.

Susanna and Wauchula sands are poorly drained soil found in flatwoods on marine terraces. The seasonal high-water table is at a depth of 6 to 18 inches. The gopher tortoise burrowing suitability is rated as "unsuitable". These soils have characteristics that may limit establishment, maintenance, or use of the site by gopher tortoise. Areas of included soils with better drainage may provide suitable soil properties in some locations (USDA, 2024).

Tantile and Pomona sands are poorly drained soil found in flatwoods on marine terraces. The seasonal high-water table is at a depth of 6 to 18 inches. The gopher tortoise burrowing suitability is rated as "unsuitable" (USDA, 2024).

Winder loamy sand is poorly drained soil found in flats on marine terraces. The seasonal high-water table is at a depth of 12 to 18 inches. The gopher tortoise burrowing suitability is rated as "less suited" (USDA, 2024).

METHODS

The survey activities were completed by an FWC gopher tortoise agent and performed in accordance with those specified in Appendix 4 of the FWC Guidelines. Equipment utilized during the survey included a camera, Trimble DGPS unit, and a handheld datalogger running Solo Field mapping software.

The pedestrian survey was conducted by walking pre-determined transects in an approximate east-west orientation at 50-foot spacing across 100 percent of the subject property (see Figure 4). Apparent burrow activity status (active, inactive, or abandoned), size (juvenile <5 in.; subadult 5-8 in.; adult >8 in.), GPS coordinates, and photographs were recorded for each burrow encountered along each transect. Burrows that were not clearly made by a tortoise were not recorded.

RESULTS/DISCUSSION

The 100 % pedestrian survey of the project area resulted in no potentially occupied burrows. Multiple burrows from other burrowing fauna (i.e., armadillo *[Dasypus novemcinctus*]) were noted during the survey. Figure 4 provides the survey design graphically.

An apparent high-water table and dense vegetative cover provides poor quality gopher tortoise habitat throughout the majority of the subject property. Ponding, saturated soils, and organic soils were observed throughout the property. Optimal forage species (i.e., asgrasses and forbes) were generally absent due to the dense canopy and shrub, and cover. Additionally, approximately 50 percent of the soil types on the property are classified as "unsuitable" while the other 50 percent are listed as "less suited".

In Florida, gopher tortoises are categorized as Threatened on the Endangered Species List and are therefore protected by state law, Chapter 68A - 27.003, FL Administrative Code. An FWC relocation permit is required prior to any disturbance to a burrow or handling of a tortoise. Please note that ground disturbances within 25 feet in any direction from the burrow is prohibited until a relocation permit has been obtained and the tortoise has been relocated to either and offsite recipient site or a suitable onsite relocation area. The findings of this survey are valid for a period of ninety days. A resurvey must be completed prior to construction activities that will occur beyond the ninety-day period.

REFERENCES

Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permitting Guidelines. Revised April 2023. 133 pp.

U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey. Accessed 1/25/2024.

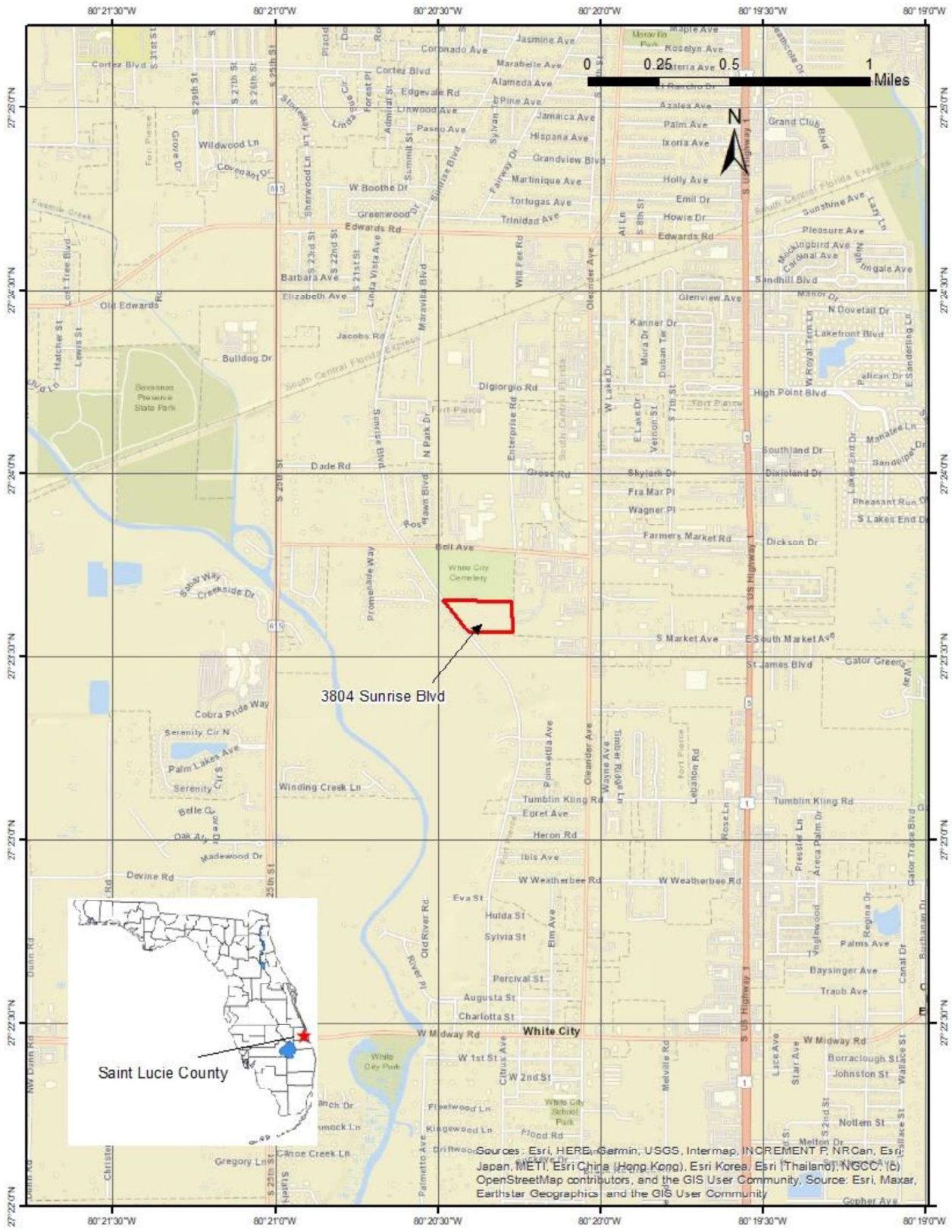


Figure 1. Project Location Map

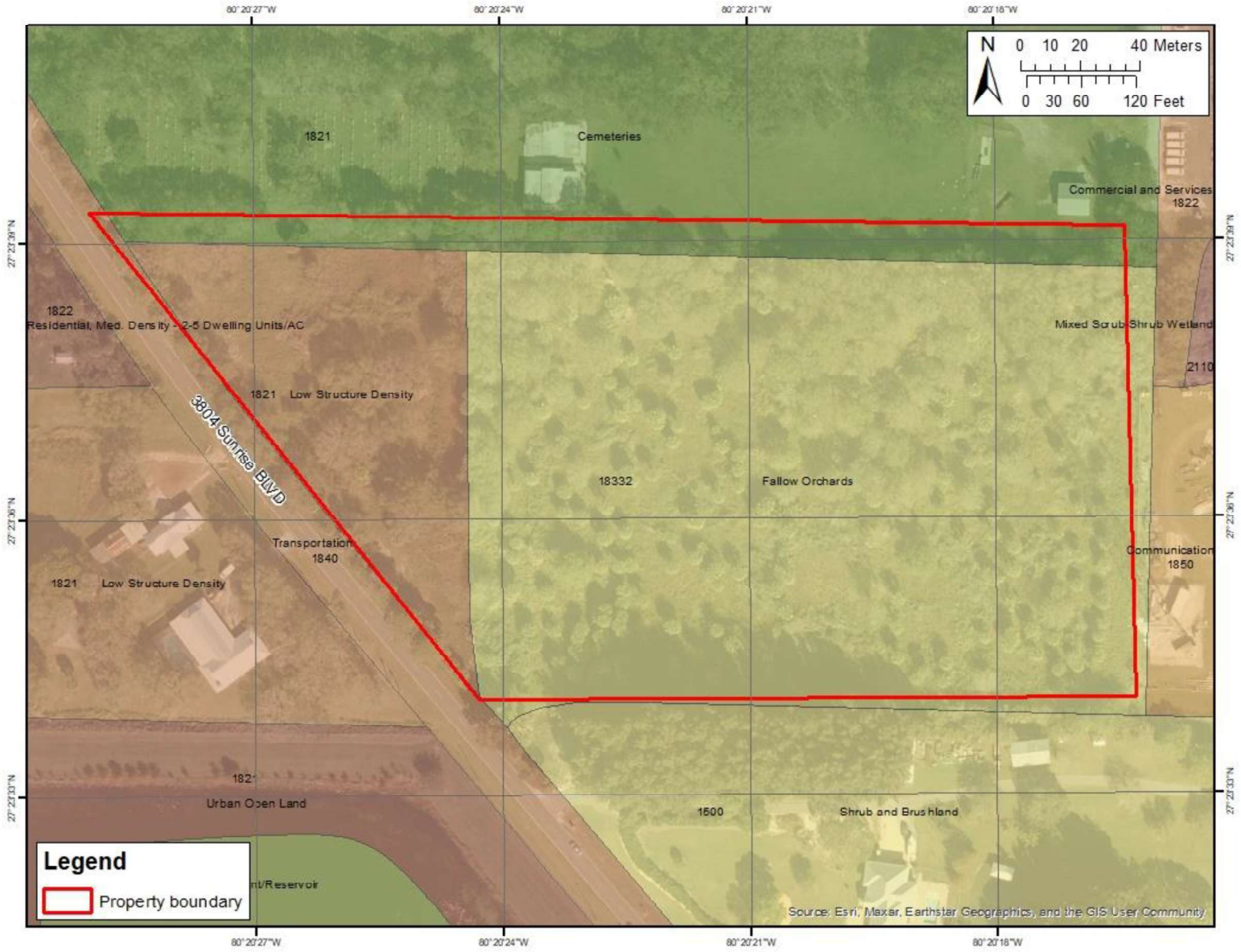


Figure 2. Cooperative Land Cover Map

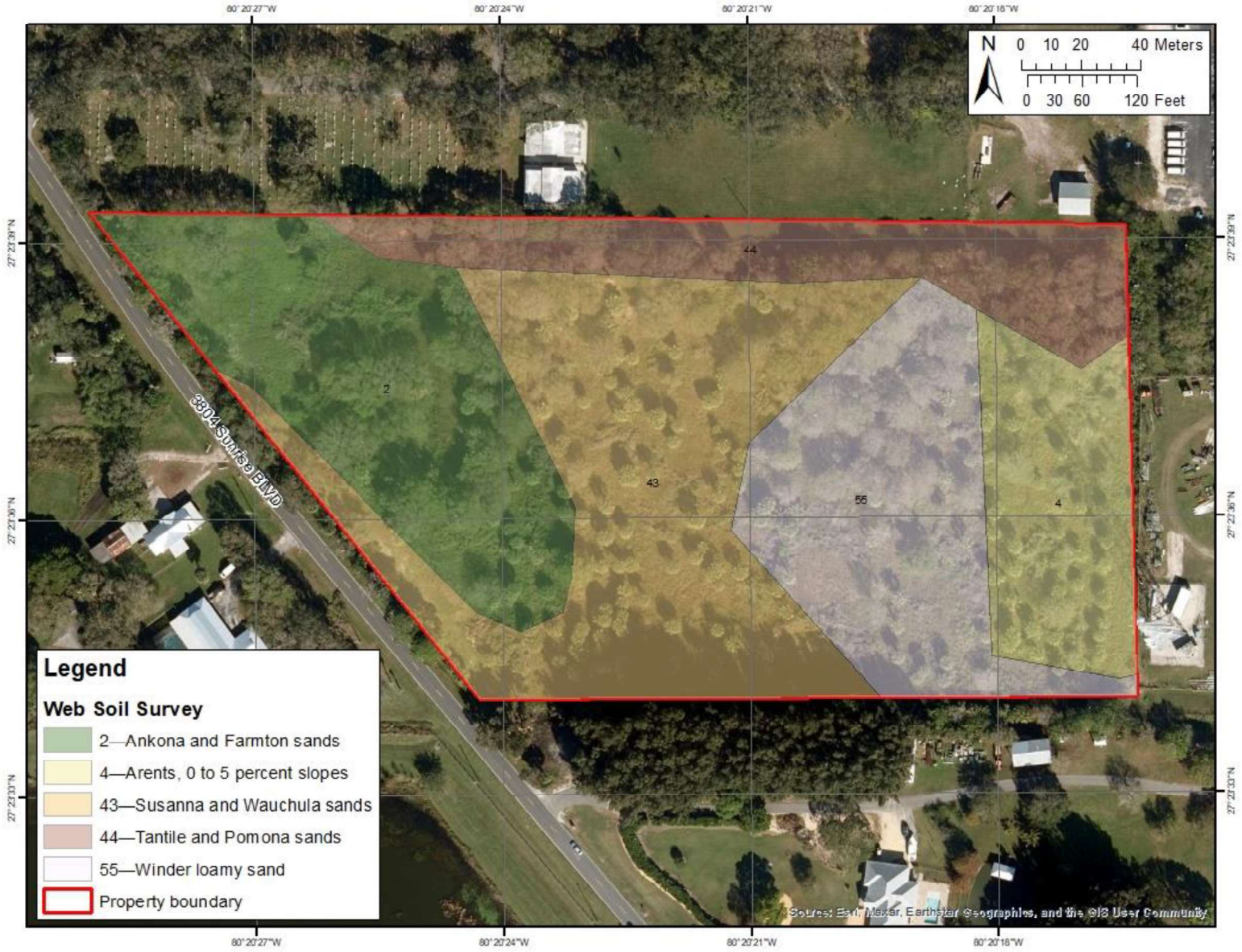


Figure 3. Soils Map

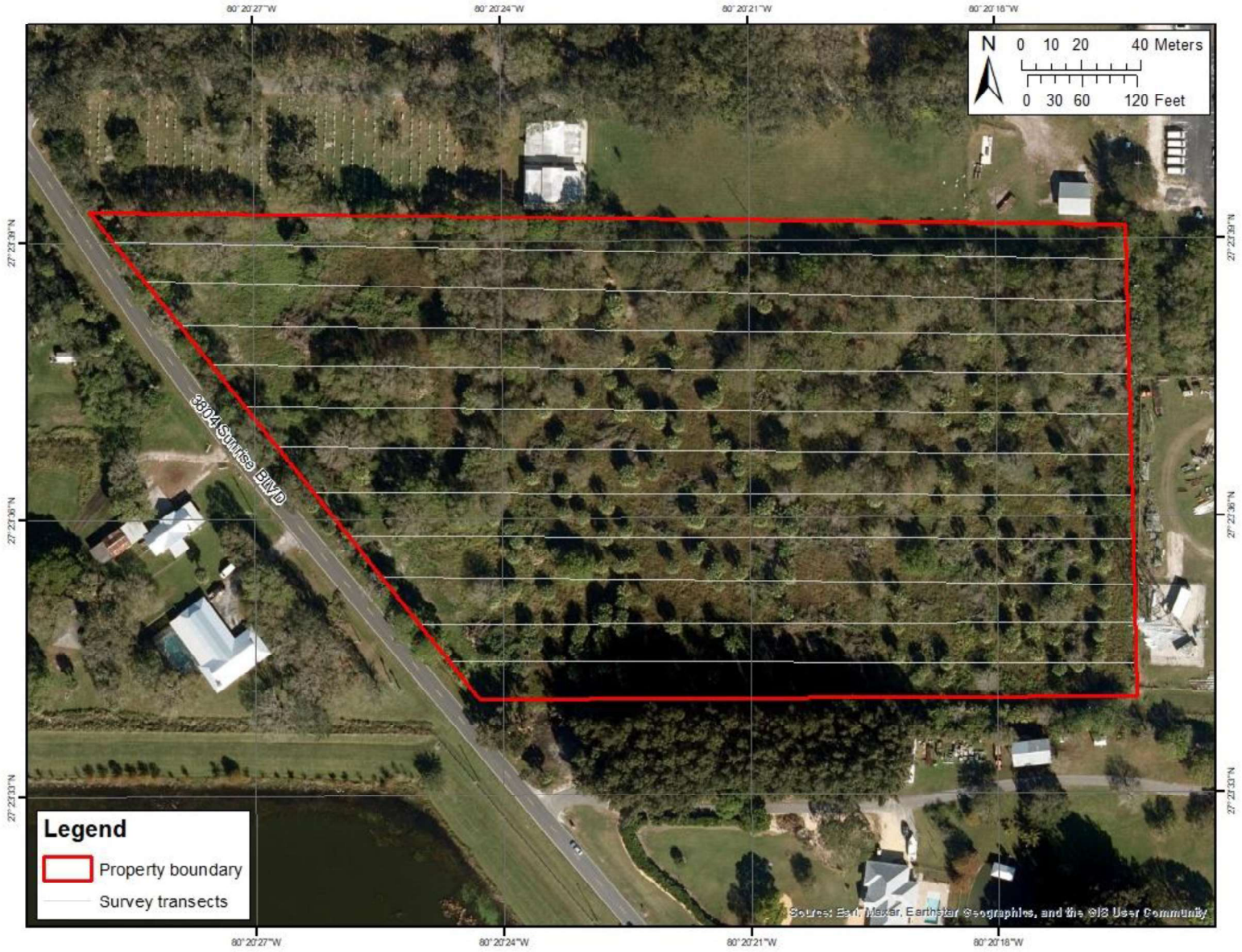


Figure 4. Gopher Tortoise Survey Map

80°20'27"W
80°20'24"W
80°20'21"W
80°20'18"W
27°23'39"N
27°23'36"N

N
0 10 20 40 Meters
0 30 60 120 Feet

3804 Sunrise BLVD

DRY DETENTION POND

DRY DETENTION POND

DRY DETENTION POND

Legend

Species

- Slash pine (Pinus elliottii)
- Laurel oak (Quercus laurifolia)
- Live oak (Quercus virginiana)
- Sabal palm (Sabal palmetto)
- Impact Trees
- Preserved Trees

Stormwater Management Report

for

Sunset Lakes

St Lucie County, Florida

June 2024

Prepared By:

KMA Engineering & Surveying LLC
2345 14th Avenue Suite 3; Vero Beach, FL 32960
Ph: (772) 569-5505
http://kmafl.com

Certificate of Authorization No. 33705
Engineer's Project No. 20-1045

Blaine R. Bergstresser, P.E.
Florida Lic. No. 84598
Date: 6/7/2024

1. Purpose

The purpose of this report is to provide St Lucie County, the NSLRWCD, and the SFWMD with calculations and documentation which demonstrates that the proposed surface water management system meets the criteria of the master stormwater management system.

2. Background

The subkect parcel consists of some 11.54 acres; the development will include the entirety of the property area. Additional work outside the immediate parcel boundary may include improvements to the Sunrise Boulevard right-of-way, as determined by the county per planning approval.

The site is currently undeveloped; the majority of the site is native forest, consistent with the FLUCCS "Mixed Upland Forest" designation. No wetland areas have been observed on the parcel. According the USGS, the parcel is comprised of 40% "Susanna" sands, 20% "WInder loamy" sands, 20% "Ankona" sands, and 20% others; this mixture of group A/D, B/D, and C/D soils averages to B/D hydrologic group soil. Existing elevations ranging from about 14 NAVD along the north property line to 9.0 NAVD along the south; the existing grades appear to direct stormwater runoff from the north to the south. The southern portion of the property consists of a drainage easement with an east-west ditch that collects runoff. Ultimately, runoff resolves itself to the county right-of-way, where it crosses Sunrise Blvd. and enters the county stormwater management and preservation area know as Platt's Creek. Platt's Creek has a direct connection to the North St Lucie River and the NSLRWCD.

The property is bordered on the south by private residences, on the east by an FDOT storage yard (and cell tower), on the west by Surrise Boulevard, and to the north by the White City Cemetery. Stormwater runoff from offsite is controlled from entering the subject parcel. The parcel is is a FEMA "X" Flood Zone.

3. Proposed System

The proposed Surface-Water Management System (SMS) for the project includes a series of interconnected dry retention ponds capable of providing the necessary water quality treatment and nutrient abatement as required by the state and the district. These will also provide the necessary attenuation required to comply with NSLRWCD's outfall limitations. Outfall shall be controlled by a single drop structure with discharge to the existing ditch along the south of the property, where it will be conveyed to the county right-of-way, and into the Platts's Creek Conservatory.

The SMS has been designed such that the peak stage for the 10-year/24-hour event shall not cause flooding within the proposed vehicular use areas, that the peak stage for the 25-year/3-day event shall not exceed the perimeter berm for the project, and the 100-year/3-day event with Zero discharge shall not stage above the proposed Finish Floor Elevation (14.00 NAVD).

Saint Lucie County Property Appraiser



4/18/2024

1:4,514

0 187.5 375 750 ft

0 55 110 220 m

4. Drainage Calculcations

Proposed Site Data

Area	SF	AC	%
Project Area	502,793	11.54	100.00
Offsite Area	0	0.00	0.00
Drainage Area	502,793	11.54	100.00
Impervious Areas:			
Vehicle Use Areas	65,100	1.49	12.95
Structures (Roofs)	100,000	2.30	19.89
Other Pavement	70,258	1.61	13.97
Dry Pond Base	24,240	0.56	4.82
Wetlands Preserve	0	0.00	0.00
Total Impervious	259,598	5.96	51.63
Pervious Area:			
Dry Retention Bank	24,890	0.57	4.95
Pervious Areas	218,305	5.01	43.42
Total Pervious	243,195	5.58	48.37

Soil Storage

Wet Season
Water Table Elevation = 7.00 NAVD
Avg. Grade Elevation = 11.5 NAVD
Depth to Wet Season W.T. = **4.5 FT**

Soil Storage - Reference SFWMD Permit Manual Vol IV						
Depth to	**Coastal (1)**		**Flatwoods (2)**		**Depression (3)**	
W.T. (ft)	**Storage (in)**	**CN**	**Storage (in)**	**CN**	**Storage (in)**	**CN**
1.0	0.6	94	0.6	94	0.6	94
1.5	1.6	87	1.6	87	1.4	88
2.0	2.5	80	2.5	80	2.1	83
2.5	4.6	70	4.0	72	3.3	76
3.0	6.6	60	5.4	65	4.4	69
3.5	8.8	54	7.2	59	5.6	65
4.0	10.9	48	**9.0**	53	6.8	60

Soil Storage = 9.0 inches
Soil Moisture Storage, S = (0.75)(% Pervious)(Soil Storage)

S =	3.26 inches

Water Quality Calculations

1.0 Inch Over the Project Area

1.0 inch * 1ft / 12in * 11.54 (Drainage Area (AC)) = 0.96 (Treated Volume) ac-ft

OR

2.5 Inches Times the Percent Impervious

(Site Area) 11.54 (Project Area (AC)) - (0.56 (Lakes (AC)*) + 0.00 (Wetlands (AC)*) + 2.30 (Roofs)) = 8.69 (Site Area Acres)

(Impervious Area) 8.69 (Site Area (AC)) - 5.58 (Pervious Area (AC)) = 3.11 (Impervious Area) ac

(% Impervious) Impervious Area / Site Area (AC) * 100 % = 35.8%

(2.5 in. * % Imp.) 2.50 inches * 35.8% (Percent Impervious) = 0.89 (Inches To Be Treated) inches

(Treated Volume) 0.89 (Treated Inches) * 1ft / 12 inches * 8.69 (Site Area (AC)) = 0.65 (Treated Volume) ac-ft

Required Wet Detention	=	**0.96 ac-ft**
Required Dry Detention	=	**0.72 ac-ft**
Required Retention	=	**0.48 ac-ft**
IMPAIRED BASIN Required Detention (@ 150%)	=	**0.72 ac-ft** ⇦
Required Retention per BMPTRAINS	=	**0.00 ac-ft**

The "IMPAIRED BASIN" value is the required retention volume necessary to meet SFWMD Water Quality requirements. The retention volume required to achieve the necessary pollution removal per the BMPTRAINS model is 1.154 AC-ft. Refer to details on the preceding pages…

Water Quality is Provided at:	**Elev.**	**9.09 NAVD**	(Dry Retention Area)
Pollution Removal is Achieved at:	**Elev.**	**9.62 NAVD**	(Dry Retention Area)

(See Stage-Storage Section)

Set OVERFLOW at Elevation 9.75 NAVD

STAGE STORAGE CALCULATIONS - DEVELOPED BASIN

SITE DATA/GRADING TABLE

DESCRIPTION	AREA (AC)	GRADING		REMARKS
		From	To	
EXFILTRATION	0.000	8.00	10.00	VERTICAL
RT BANK	0.571	8.00	11.00	LINEAR
RT BOT	0.556	8.00	11.00	VERTICAL
ROW	2.377	11.00	12.70	LINEAR
LOT SWALE	0.843	11.70	13.10	VERTICAL
OPEN	0.566	11.00	11.50	LINEAR
OTHER	0.000	12.00	13.00	LINEAR
	4.91		*REC*	

103530
36736
24650

STAGE-AREA/STORAGE TABLE

STAGE (FT)	AREAS								STORAGE VOLUME (ACFT)	STAGE (FT)
	EXFILTRATION	RT BANK	RT BOT	ROW	LOT SWALE	OPEN	OTHER	**TOTAL**		
8.00	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.556	0.000	8.000
8.25	0.00	0.05	0.56	0.00	0.00	0.00	0.00	0.604	0.145	8.250
8.50	0.00	0.10	0.56	0.00	0.00	0.00	0.00	0.652	0.302	8.500
8.75	0.00	0.14	0.56	0.00	0.00	0.00	0.00	0.699	0.471	8.750
9.00	0.00	0.19	0.56	0.00	0.00	0.00	0.00	0.747	0.652	9.000
9.25	0.00	0.24	0.56	0.00	0.00	0.00	0.00	0.795	0.844	9.250
9.50	0.00	0.29	0.56	0.00	0.00	0.00	0.00	0.842	1.049	9.500
9.75	0.00	0.33	0.56	0.00	0.00	0.00	0.00	0.890	1.265	9.750
10.00	0.00	0.38	0.56	0.00	0.00	0.00	0.00	0.937	1.494	10.000
10.25	0.00	0.43	0.56	0.00	0.00	0.00	0.00	0.985	1.734	10.250
10.50	0.00	0.48	0.56	0.00	0.00	0.00	0.00	1.033	1.986	10.500
10.75	0.00	0.52	0.56	0.00	0.00	0.00	0.00	1.080	2.250	10.750
11.00	0.00	0.57	0.56	0.00	0.00	0.00	0.00	1.128	2.527	11.000
11.25	0.00	0.57	0.56	0.35	0.00	0.28	0.00	1.760	2.888	11.250
11.50	0.00	0.57	0.56	0.70	0.00	0.57	0.00	2.393	3.407	11.500
11.75	0.00	0.57	0.56	1.05	0.84	0.57	0.00	3.586	4.154	11.750
12.00	0.00	0.57	0.56	1.40	0.84	0.57	0.00	3.935	5.094	12.000
12.25	0.00	0.57	0.56	1.75	0.84	0.57	0.00	4.285	6.122	12.250
12.50	0.00	0.57	0.56	2.10	0.84	0.57	0.00	4.634	7.236	12.500
12.75	0.00	0.57	0.56	2.38	0.84	0.57	0.00	4.914	8.430	12.750
13.00	0.00	0.57	0.56	2.38	0.84	0.57	0.00	4.914	9.658	13.000
13.25	0.00	0.57	0.56	2.38	0.84	0.57	0.00	4.914	10.887	13.250
13.50	0.00	0.57	0.56	2.38	0.84	0.57	0.00	4.914	12.115	13.500
13.75	0.00	0.57	0.56	2.38	0.84	0.57	0.00	4.914	13.344	13.750
14.00	0.00	0.57	0.56	2.38	0.84	0.57	0.00	4.914	14.572	14.000
14.25	0.00	0.57	0.56	2.38	0.84	0.57	0.00	4.914	15.801	14.250
14.50	0.00	0.57	0.56	2.38	0.84	0.57	0.00	4.914	17.029	14.500

STAGE STORAGE CALCULATIONS - POST BASIN

SITE DATA/GRADING TABLE

DESCRIPTION	AREA (ACRE)	GRADING		REMARKS
		From	To	
EXFILT	0.000	8.00	11.00	VERTICAL
DRY RT	0.556	8.00	11.00	VERTICAL
DRY RT BANK	0.571	8.00	11.00	LINEAR
	1.13			

WATER QUALITY VOLUME = 0.721 ACFT

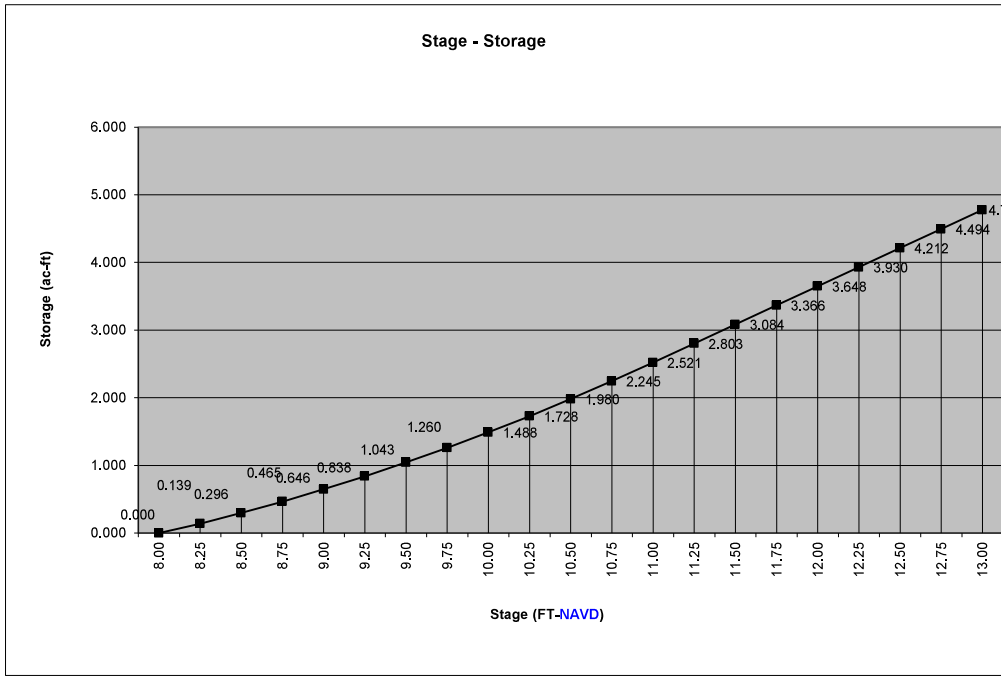
0.72 ACFT COORESPONDS TO AN ELEVATION OF **9.10** 9.00 9.25
0.65 0.84

NUTRIENT ABATEMENT VOLUME = 1.154 ACFT

1.15 ACFT COORESPONDS TO AN ELEVATION OF **9.63** 9.50 9.75
1.04 1.26

EXFILTRATION & RETENTION POND - COMBINED STORAGE

STAGE (FT)	AREAS				STORAGE VOLUME (ACFT)	STAGE (FT)
	EXFILT	DRY RT	DRY RT BANK	TOTAL		
8.00	0.00	0.56	0.00	0.56	0.000	8.00
8.25	0.00	0.56	0.05	0.60	0.139	8.25
8.50	0.00	0.56	0.10	0.65	0.296	8.50
8.75	0.00	0.56	0.14	0.70	0.465	8.75
9.00	0.00	0.56	0.19	0.75	0.646	9.00
9.25	0.00	0.56	0.24	0.79	0.838	9.25
9.50	0.00	0.56	0.29	0.84	1.043	9.50
9.75	0.00	0.56	0.33	0.89	1.260	9.75
10.00	0.00	0.56	0.38	0.94	1.488	10.00
10.25	0.00	0.56	0.43	0.99	1.728	10.25
10.50	0.00	0.56	0.48	1.03	1.980	10.50
10.75	0.00	0.56	0.52	1.08	2.245	10.75
11.00	0.00	0.56	0.57	1.13	2.521	11.00
11.25	0.00	0.56	0.57	1.13	2.803	11.25
11.50	0.00	0.56	0.57	1.13	3.084	11.50
11.75	0.00	0.56	0.57	1.13	3.366	11.75
12.00	0.00	0.56	0.57	1.13	3.648	12.00
12.25	0.00	0.56	0.57	1.13	3.930	12.25
12.50	0.00	0.56	0.57	1.13	4.212	12.50
12.75	0.00	0.56	0.57	1.13	4.494	12.75
13.00	0.00	0.56	0.57	1.13	4.776	13.00
13.25	0.00	0.56	0.57	1.13	5.058	13.25
13.50	0.00	0.56	0.57	1.13	5.340	13.50
13.75	0.00	0.56	0.57	1.13	5.622	13.75
14.00	0.00	0.56	0.57	1.13	5.904	14.00
14.25	0.00	0.56	0.57	1.13	6.186	14.25
14.50	0.00	0.56	0.57	1.13	6.468	14.50
14.75	0.00	0.56	0.57	1.13	6.750	14.75
15.00	0.00	0.56	0.57	1.13	7.032	15.00



Pre-development Discharge

We have included a PRE Development routing model to determine the rate at which runoff leaves the parcel. All events are listed in the ICPR report, compared to the POST Development outfall rates. For all events, the PRE Development rate exceeds the POST Development rate.

There may be additional restrictions on outfall rate, in accordance with NSLRWCD limited discharge requirements. At the time of this report, we are in coordination with County and District officials to determine our legal positive outfall and decide the criteria the project must conform to.

Tailwater Justification

As noted above, we are currently coordinating with County and District officials to determine the legal positive outfall for the site, and decide which authority dictates mandates on that outfall. For the purposes of the preliminary report, we have used the existing ditch to the south of the property, as runoff from the parcel has been in the past. We do not have any information at present as to a time-stage relationship within the ditch. Again, we are currently coordinating...

Post-Development Stage & Discharge

(See Output From ICPR Software)

Event	Rainfall (in.)	Max Stage (FT-NAVD)	PRE Q (cfs)	POST Q (cfs)
25yr-3 day (Berm)	10.00	10.86 < 11.00 Berm	26.21	16.63
10yr-1 day (Roads)	6.00	10.15 < 11.00 Inlet (Min. Pavement)	16.71	7.94
10yr-3 day (Discharge)	8.50	NA	22.52	16.14
100yr-3 day (FFE)	12.23	12.83 < 14.00 FFE (zero discharge)	35.35	0.00

Conclusion

As demonstrated in this drainage report, all the proposed improvements meet the development criteria for St. Lucie County, the NSLRWCD, and the SFWMD for stormwater management and flood protection. All minimum elevations are met for the proposed site improvements, and the discharge rates POST Development are less than PRE Development rates. Please refer to the included ICPR Report for complete details.

Furthermore, we have demonstrated adequate pollution abatement through the use of the dry retention systems. Per the BMPTRAINS Report, the proposed development will generate less-than-or-equal-to nitrogen and phosphorus discharge relative to Pre Development conditions. Please refer to the included BMPTRAINS Report for complete details.

Exfiltration Trench Calculations

EXFILTRATION Volume Provided =	0.000	AC-FT	Exfiltration
FS = 2.0 (per SWERP Vol.II Sect. 4.4) =	0.000	AC-FT	
Required Treatment Volume =	1.154	AC-FT	BMPTRAINS
Additional (Dry Retention) Required =	1.154	AC-FT	DryRetention

Required Minimum Length of Exfiltration Trench, L_{REQ} :

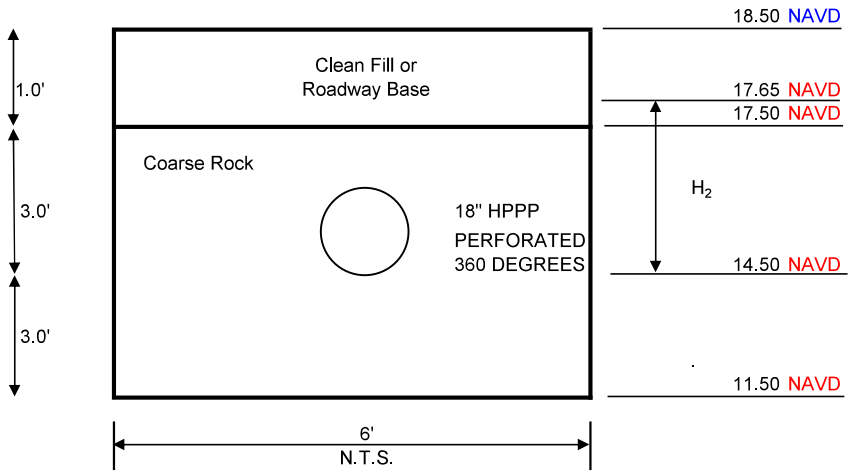
$$L_{REQ} = \frac{V_{REQ}}{K\,(H_2W + 2H_2D_U - D_U^2 + 2H_2D_S) + (1.39 * 10^{-4})\,WD_U}$$

Standard Exfiltration Trench Required Length		
V_{REQ}=	0.000	(ac-ft)
V_{REQ}=	0.000	(ac-in)
K=	1.40E-04	(cfs/ft^2) - ft head
H_2=	3.20	ft
W=	6.00	ft
D_u=	3.00	ft
D_s=	3.00	ft
L_{REQ}=	**0**	**ft**

Volume of Exfiltration Trench Provided, V_{PRO} :

$$V_{PRO} = L_{PRO} * [K\,(H_2W + 2H_2D_U - D_U^2 + 2H_2D_S) + (1.39 * 10^{-4})\,WD_U]$$

Standard Exfiltration Trench Volume Provided			
L_{PRO}=	0	ft	(From design)
K=	1.40E-04	(cfs/ft^2) - ft head	
H_2=	3.20	ft	
W=	6.00	ft	
D_u=	3.00	ft	
D_s=	3.00	ft	
V_{PRO}=	0.00	(ac-in)	
V_{PRO} =	**0.000**	**(ac-ft)**	



ROUTING MODEL CHARACTERISTICS

"PRE" DRAINAGE BASIN CHARACTERISTICS

SITE DATA (CURVE NUMBER) PRE-CONDITION BASIN

GROUND COVER (CONDITION)	SOIL GROUP	AREA (ACRES)	%	CN	AREA × CN
DRAINAGE AREA - NON DCIA		11.54			
BUILDINGS	B/D	0.00	0.0%	98	0
PAVEMENT	B/D	0.00	0.0%	98	0
OTHER IMPERVIOUS	B/D	0.00	0.0%	98	0
WETLANDS	B/D	0.00	0.0%	98	0
PERVIOUS AREA	B/D	11.54	100.0%	77	889
	TOTAL	11.54	100.0%		77

SITE DATA (AREAS BREAKDOWN)

ONSITE AREA	11.54 AC-ft	502793 sqft
OFFSITE TRIBUTARY	0.00 AC-ft	0 sqft
BASIN TOTAL	11.54 AC-ft	502793 sqft
DCIA	0.00 AC-ft	449686 sqft
TOTAL IMPERVIOUS AREA	0.00 AC-ft	
VEHICLE USE AREA =	0.00 AC-ft	0 sqft
BUILDINGS & STRUCTURES =	0.00 AC-ft	0 sqft
OTHER IMPERVIOUS =	0.00 AC-ft	0 sqft
WETLANDS =	0.00 AC-ft	0 sqft
TOTAL PERVIOUS AREA	11.54 AC-ft	
WETLAND BANK =	0.00 AC-ft	0 sqft
GREEN SPACE =	11.54 AC-ft	502793 sqft
IMPERVIOUS AREA LESS ROOFS/WETLANDS =	0.00 AC-ft	
IMPERVIOUS AREA LESS WET SWM AREAS =	0.00 AC-ft	
DRAINAGE AREA LESS WET DETENTION =	11.54 AC-ft	
PERCENTAGE IMPERVIOUS =	0.00%	

RUNOFF

FREQUENCY, YR.	10-YR, 24-HR.	10-YR, 72-HR.	25-YR, 72-HR.	100-YR, 72-HR.
RAINFALL, P (24-HOUR)	6.00 inches	9.50 inches	10.00 inches	12.00 inches
SOIL STORAGE, S	2.99 inches	2.99 inches	2.99 inches	2.99 inches
RUNOFF, Q (IN)	3.48 inches	6.67 inches	7.14 inches	9.04 inches
RUNOFF VOLUME (ACFT)	3.35 AC-ft	6.41 AC-ft	6.86 AC-ft	8.69 AC-ft

RATIONAL METHOD RUNOFF COEFFICIENT = 0.2
(ASSUMING IMPERVIOUS = 0.9 & PERVIOUS = 0.2 & EXCLUDES LAKE AREA)

TIME OF CONCENTRATION

2YR-24HR RAINFALL = 4.80 inches

Sub-Area	FLOW LEGNTH (ft)	SLOPE (ft/ft)	MANNING'S DESC.	MANNING'S n-VALUE	FLOW AREA (sf)	PW (ft)	HYDRO RADIUS (ft)	TRAVEL VELOCITY (ft/sec)	TIME (hr)
BASIN ONE									
SHEET	100	0.0085	WOODS	0.400					0.4115
SHALLOW	300	0.0085	UNPAVED					1.488	0.0560
CHANNEL	100	0.0085	POOR	0.080	12.000	32.000	0.375	0.890	0.0312
PIPED	0	0.0050	24-inch	0.013	3.142	6.283	1.000	8.105	0.0000

Time of Concentration = 0.499 hours
= 30 minutes

ROUTING MODEL CHARACTERISTICS

"POST" DRAINAGE BASIN CHARACTERISTICS

SITE DATA (CURVE NUMBER) - NON-DCIA

GROUND COVER (CONDITION)	SOIL GROUP	AREA (sqft)	AREA (acres)	%	CN	AREA × CN
NON-DCIA AREA			10.12	87.65%		
IMPERVIOUS	B/D	173258	3.98	39.3%	98	390
OTHER	B/D	0	0.00	0.0%	98	0
WET DETENTION/RETETNION	B/D	24240	0.56	5.5%	60	33
PERVIOUS	B/D	243195	5.58	55.2%	60	335
	TOTAL		10.12	100.0%		75 CURVE NUMBER
						76 W/O WET DETENTION

SITE DATA (AREAS BREAKDOWN)

TOTAL PARCEL AREA	11.54 AC-ft		502793 sqft
LESS ROW DEDICATION	0.00 AC-ft		0 sqft
PLUS OFFSITE TRIBUTARY	0.00 AC-ft		0 sqft
BASIN TOTAL	11.54 AC-ft		502793 sqft
DCIA	1.43 AC-ft		62100 sqft
		% DCIA	
TOTAL IMPERVIOUS AREA	5.96 AC-ft		
VEHICLE USE AREA =	1.36 AC-ft	100.00%	59100 sqft
STRUCTURES =	2.30 AC-ft	0.00%	100000 sqft
DRIVEWAYS =	0.14 AC-ft	50.00%	6000 sqft
SIDEWALKS & PATHS =	0.47 AC-ft	0.00%	20258 sqft
LOT IMPERVIOUS =	1.15 AC-ft	0.00%	50000 sqft
DRY RETENTION BOTTOM =	0.56 AC-ft	0.00%	24240 sqft
WET SWM AREAS =	0.00 AC-ft	0.00%	0 sqft
TOTAL PERVIOUS AREA	5.58 AC-ft		
DRY RETENTION BANKS =	0.57 AC-ft		24890 sqft
CONVEYENCE SWALES =	0.00 AC-ft		0 sqft
PRESERVE AREA =	0.00 AC-ft		0 sqft
GREEN SPACE =	5.01 AC-ft		218305 sqft
IMPERVIOUS AREA LESS ROOFS/WETLANDS =	3.11 AC-ft		
IMPERVIOUS AREA LESS WET SWM AREAS =	5.40 AC-ft		235358 sqft
DRAINAGE AREA LESS SWM AREAS =	10.99 AC-ft		
PERCENTAGE IMPERVIOUS =	51.63%		
DIRECTLY CONNECTED IMPERVIOUS AREA =	12.35%		

RUNOFF

FREQUENCY, YR.	10-YR, 24-HR.	10-YR, 72-HR.	25-YR, 72-HR.	100-YR, 72-HR.
RAINFALL, P (24-HOUR)	6.00 inches	9.50 inches	10.00 inches	12.00 inches
SOIL STORAGE, S	3.19 inches	3.19 inches	3.19 inches	3.19 inches
RUNOFF, Q (IN)	3.36 inches	6.52 inches	6.98 inches	8.87 inches
RUNOFF VOLUME (ACFT)	3.23 AC-ft	6.27 AC-ft	6.72 AC-ft	8.53 AC-ft

RATIONAL METHOD RUNOFF COEFFICIENT = 0.59

(ASSUMING IMPERVIOUS = 0.9 & PERVIOUS = 0.2 & EXCLUDES LAKE AREA)

TIME OF CONCENTRATION

2YR-24HR RAINFALL = 4.80 inches

FLOW DESIGNATION	FLOW LEGNTH (ft)	SLOPE (ft/ft)	MANNING'S DESC.	n-VALUE	FLOW AREA (sf)	PW (ft)	HYDRO RADIUS (ft)	TRAVEL VELOCITY (ft/sec)	TIME (hr)
SHEET	100	0.0050	GRASS	0.240					0.3381
SHALLOW	200	0.0050	UNPAVED					1.141	0.0487
CHANNEL	0	0.0100	GUTTER	0.080	2.000	4.000	0.500	1.171	0.0000
PIPED	250	0.0050	18-inch	0.013	1.767	4.712	0.750	6.684	0.0104

Time of Concentration = 0.397 hours

= 24 minutes

Nutrient Loading/Abatement Requirements

ALL POLLUTANT LOADING CONCENTRATIONS LISTED HEREIN ARE BASED BMPTRAINS LAND USE CLASSIFICATIONS (SEE ATTACHED), SUMMERIZED BELOW…

EXISTING CONDITIONS

LAND USE	RUNOFF	NITROGEN	PHOSPHORUS	ANNUAL C
PRE - APOPKA FORESTS	4.94 AC-ft/yr	1.250 mg/l	0.080 mg/l	0.092

TOTAL ANNUAL PHOSPHORUS = 0.49 kg/yr PRE DEVELOPMENT LOADING
TOTAL ANNUAL NITROGEN = 7.62 kg/yr PRE DEVELOPMENT LOADING

POST DEVELOPMENT CONDITIONS

POLLUTANT LOADING CONCENTRATIONS ARE BASED BMPTRAINS LAND USE CLASSIFICATIONS (SEE ATTACHED), SUMMERIZED BELOW…

LAND USE	RUNOFF	NITROGEN	PHOSPHORUS	ANNUAL C
POST - SINGLE FAMILY	9.09 AC-ft/yr	2.07 mg/l	0.33 mg/l	0.169

TOTAL ANNUAL PHOSPHORUS = 3.67 kg/yr POST DEVELOPMENT LOADING
TOTAL ANNUAL NITROGEN = 23.21 kg/yr POST DEVELOPMENT LOADING

REMOVAL REQUIREMENT

=(POST LOADING-PRE LOADING) / POST LOADING

87% PHOSPHORUS REMOVAL
67% NITROGEN REMOVAL

ACCORDING TO THE BMPTRAINS MODEL THE SYSTEM SHALL HAVE TO RETAIN 1.154 ACFT OF RUNOFF TO BALANCE DISCHARGE PRE-V-POST…

1.154 ACFT CORRESPONDS TO AN ELEVATION OF **9.63**

TO REMOVE THE REQUISTE NUTRIENTS, WE HAVE SPECIFIED DRY RETENTION PONDS.

...

Appendix A

IRCP Stormwater Routing Model

Simple Basin: PRE

Scenario:	PRE
Node:	DITCH
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	30.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH256
Peaking Factor:	256.0
Area:	11.5400 ac
Curve Number:	77.0
% Impervious:	0.00
% DCIA:	0.00
% Direct:	0.00
Rainfall Name:	

Comment:

Simple Basin: POST

Scenario:	PRELIM
Node:	STORAGE
Hydrograph Method:	NRCS Unit Hydrograph
Infiltration Method:	Curve Number
Time of Concentration:	24.0000 min
Max Allowable Q:	0.00 cfs
Time Shift:	0.0000 hr
Unit Hydrograph:	UH323
Peaking Factor:	323.0
Area:	11.5400 ac
Curve Number:	60.0
% Impervious:	51.63
% DCIA:	12.35
% Direct:	0.00
Rainfall Name:	

Comment:

Node: DITCH

Scenario:	PRE
Type:	Time/Stage
Base Flow:	0.00 cfs
Initial Stage:	6.00 ft

Warning Stage: 9999.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	6.00
0	0	0	9999.0000	6.00

Comment:

Node: NSLRWCD

Scenario: PRELIM
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 6.00 ft
Warning Stage: 9999.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	6.00
0	0	0	9999.0000	6.00

Comment:

Node: STORAGE

Scenario: PRELIM
Type: Stage/Area
Base Flow: 0.00 cfs
Initial Stage: 8.00 ft
Warning Stage: 11.00 ft

Stage [ft]	Area [ac]	Area [ft2]
8.00	0.5560	24219
8.25	0.6040	26310
8.50	0.6520	28401
8.75	0.6990	30448
9.00	0.7470	32539
9.25	0.7950	34630
9.50	0.8420	36678
9.75	0.8900	38768
10.00	0.9370	40816
10.25	0.9850	42907
10.50	1.0330	44997
10.75	1.0800	47045

Stage [ft]	Area [ac]	Area [ft2]
11.00	1.1280	49136
11.25	1.7600	76666
11.50	2.3930	104239
11.75	3.5860	156206
12.00	3.9350	171409
12.25	4.2850	186655
12.50	4.6340	201857
12.75	4.9140	214054
13.00	4.9140	214054
13.25	4.9140	214054
13.50	4.9140	214054
13.75	4.9140	214054
14.00	4.9140	214054
14.25	4.9140	214054
14.50	4.9140	214054

Comment:

Drop Structure Link: CS-1		Upstream Pipe		Downstream Pipe	
Scenario:	PRELIM	Invert:	6.00 ft	Invert:	6.00 ft
From Node:	STORAGE	Manning's N:	0.0110	Manning's N:	0.0110
To Node:	NSLRWCD	Geometry: Circular		Geometry: Circular	
Link Count:	1	Max Depth:	1.50 ft	Max Depth:	1.50 ft
Flow Direction:	Both	Bottom Clip			
Solution:	Combine	Default:	0.00 ft	Default:	0.00 ft
Increments:	0	Op Table:		Op Table:	
Pipe Count:	1	Ref Node:		Ref Node:	
Damping:	0.0000 ft	Manning's N:	0.0000	Manning's N:	0.0000
Length:	50.00 ft	Top Clip			
FHWA Code:	1	Default:	0.00 ft	Default:	0.00 ft
Entr Loss Coef:	0.00	Op Table:		Op Table:	
Exit Loss Coef:	0.00	Ref Node:		Ref Node:	
Bend Loss Coef:	0.00	Manning's N:	0.0000	Manning's N:	0.0000
Bend Location:	0.00 dec				
Energy Switch:	Energy				

Pipe Comment:

Weir Component		Bottom Clip	
Weir:	1	Default:	0.00 ft
Weir Count:	1	Op Table:	
Weir Flow Direction:	Both	Ref Node:	
Damping:	0.0000 ft	Top Clip	
Weir Type:	Horizontal	Default:	0.00 ft
Geometry Type:	Rectangular		

Invert:	9.75 ft		
Control Elevation:	9.75 ft	Op Table:	
Max Depth:	2.00 ft	Ref Node:	
Max Width:	3.00 ft	Discharge Coefficients	
Fillet:	0.00 ft	Weir Default:	3.200
		Weir Table:	
		Orifice Default:	0.600
		Orifice Table:	

Weir Comment:

Drop Structure Comment:

Simulation: 100YR-72HR

Scenario: PRE
Run Date/Time: 6/7/2024 8:24:30 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	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:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Fact:			
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:	12.23 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: PRE
Run Date/Time: 6/7/2024 8:24:31 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	48.0000

	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:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft		
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	6.00 in
Edge Length Option:	Automatic	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: PRE
Run Date/Time: 6/7/2024 8:24:32 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	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:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Fact:			
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:	8.40 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: PRE
Run Date/Time: 6/7/2024 8:24:33 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	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:
Green-Ampt Set:
Vertical Layers Set:
Impervious Set:

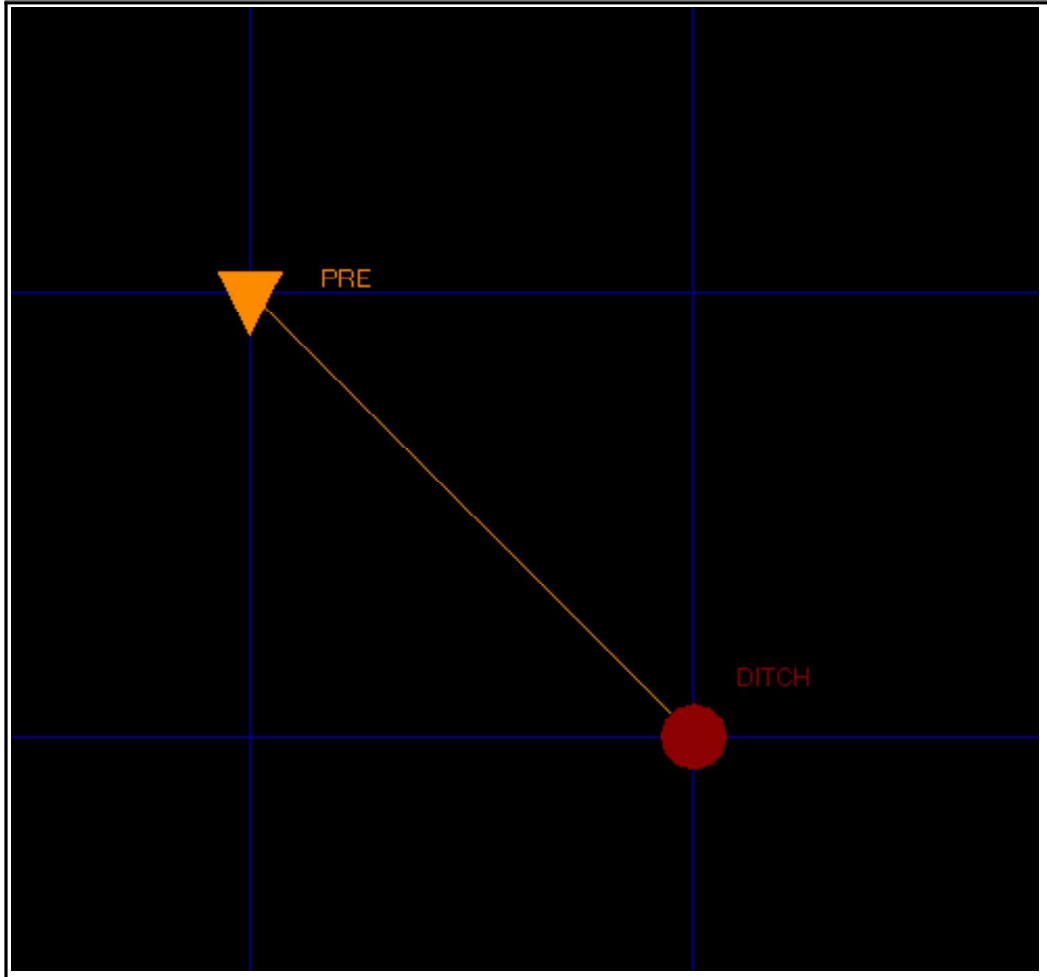
Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec
IA Recovery Time: 24.0000 hr

Fact:			
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:	9.50 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:

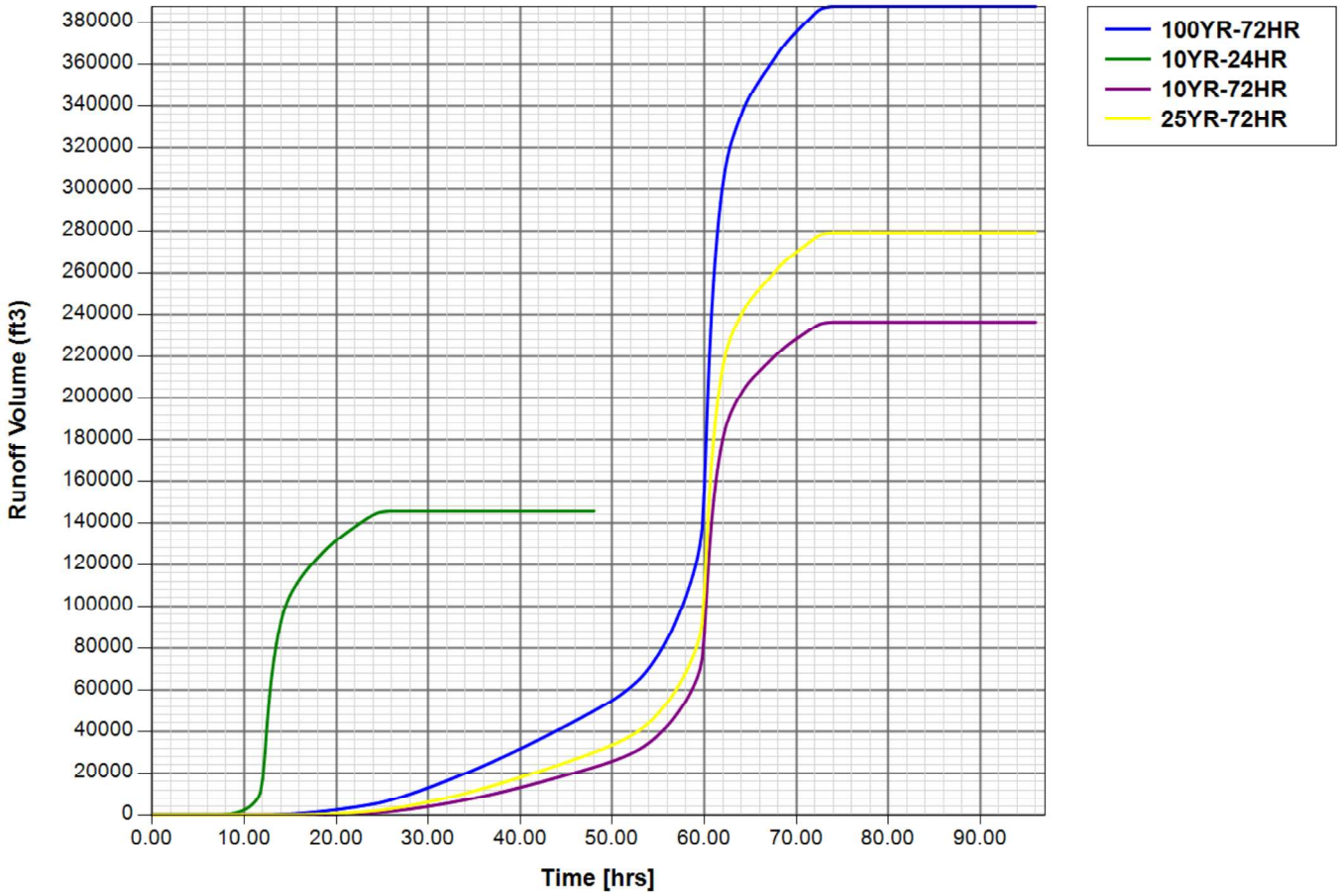
Background Image: PRE



Simple Basin Runoff Summary [PRE]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
PRE	100YR-72HR	35.36	60.2000	12.23	9.25	11.5400	77.0	0.00	0.00
PRE	10YR-24HR	16.71	12.3167	6.00	3.48	11.5400	77.0	0.00	0.00
PRE	10YR-72HR	22.52	60.2000	8.40	5.64	11.5400	77.0	0.00	0.00
PRE	25YR-72HR	26.22	60.2000	9.50	6.66	11.5400	77.0	0.00	0.00

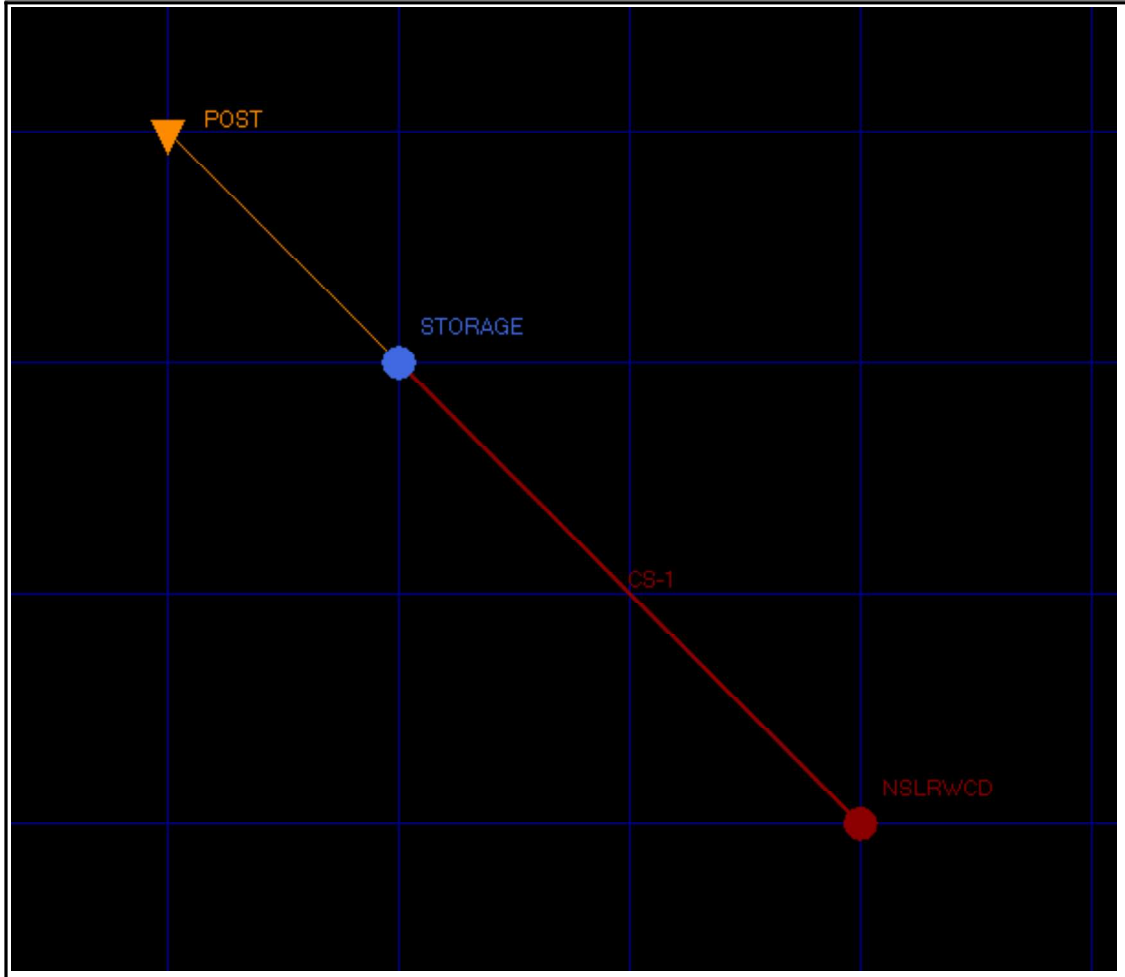
Simple Basin Runoff Volume: PRE



Node Max Conditions [PRE]

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]
DITCH	100YR-72HR	9999.00	6.00	0.0000	35.35	0.00	0
DITCH	10YR-24HR	9999.00	6.00	0.0000	16.71	0.00	0
DITCH	10YR-72HR	9999.00	6.00	0.0000	22.52	0.00	0
DITCH	25YR-72HR	9999.00	6.00	0.0000	26.21	0.00	0

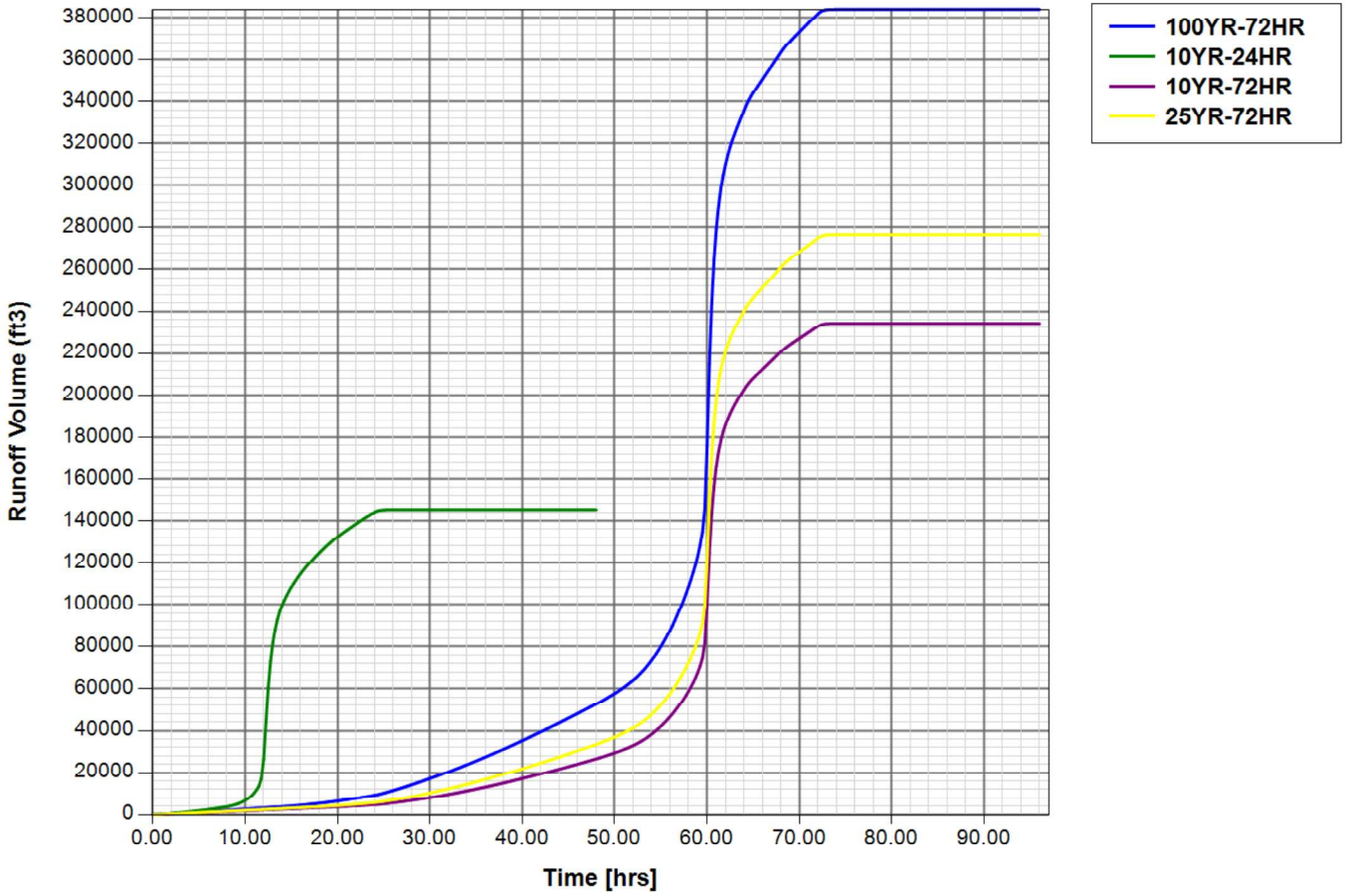
Background Image: PRELIM



Simple Basin Runoff Summary [PRELIM]

Basin Name	Sim Name	Max Flow [cfs]	Time to Max Flow [hrs]	Total Rainfall [in]	Total Runoff [in]	Area [ac]	Equivalent Curve Number	% Imperv	% DCIA
POST	100YR-72HR	45.18	60.1167	12.23	9.16	11.5400	76.2	51.63	12.35
POST	10YR-24HR	21.06	12.2000	6.00	3.47	11.5400	76.8	51.63	12.35
POST	10YR-72HR	28.56	60.1167	8.40	5.59	11.5400	76.4	51.63	12.35
POST	25YR-72HR	33.34	60.1167	9.50	6.60	11.5400	76.3	51.63	12.35

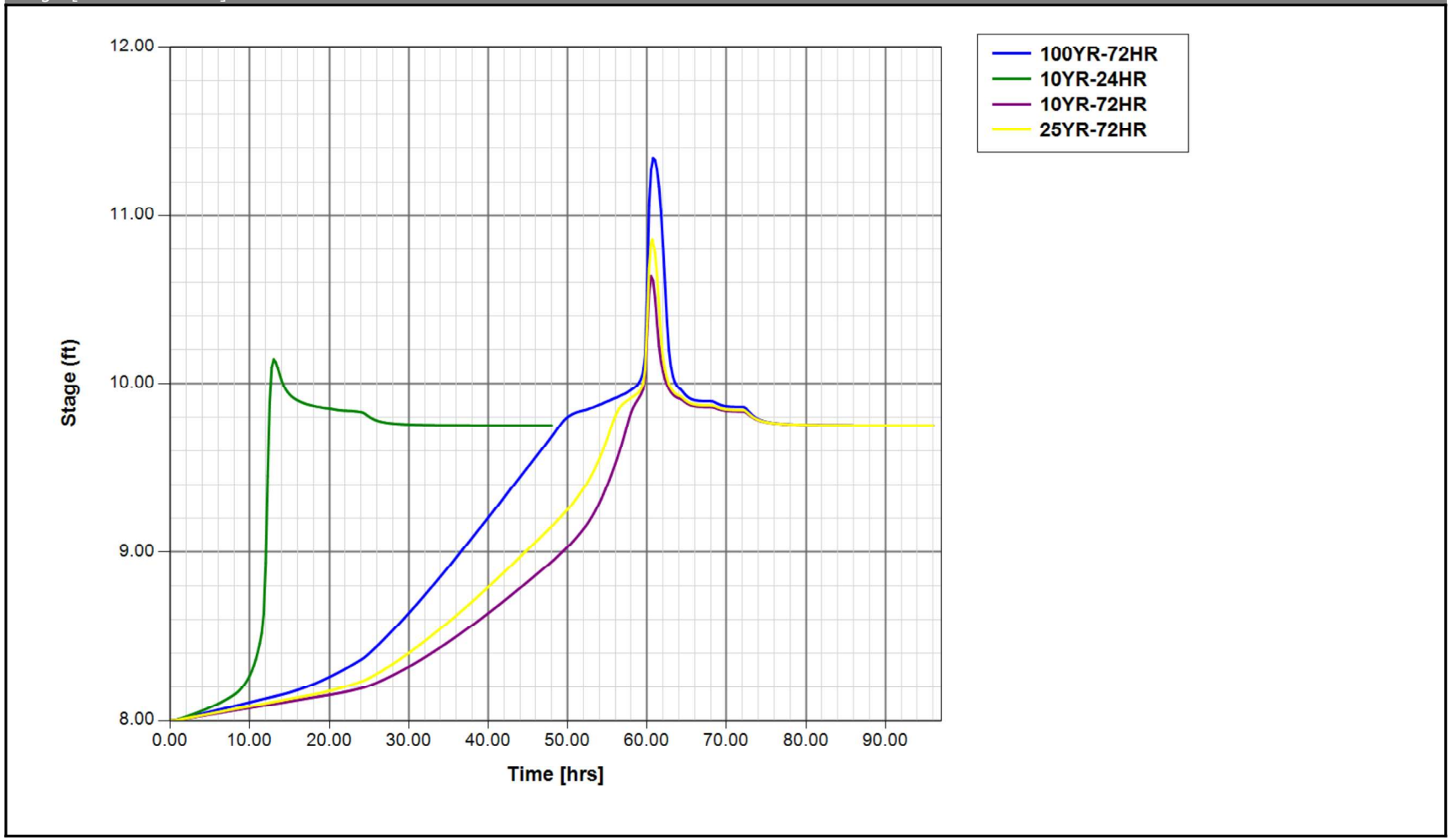
Simple Basin Runoff Volume: POST



Node Max Conditions [PRELIM]

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]
NSLRWCD	100YR-72HR	9999.00	6.00	0.0000	17.63	0.00	0
NSLRWCD	10YR-24HR	9999.00	6.00	0.0000	7.94	0.00	0
NSLRWCD	10YR-72HR	9999.00	6.00	0.0000	16.14	0.00	0
NSLRWCD	25YR-72HR	9999.00	6.00	0.0000	16.63	0.00	0
STORAGE	100YR-72HR	11.00	11.34	-0.0010	45.18	17.63	86573
STORAGE	10YR-24HR	11.00	10.15	0.0010	21.06	7.95	42029
STORAGE	10YR-72HR	11.00	10.64	-0.0010	28.56	16.14	46130
STORAGE	25YR-72HR	11.00	10.86	0.0010	33.34	16.63	47961

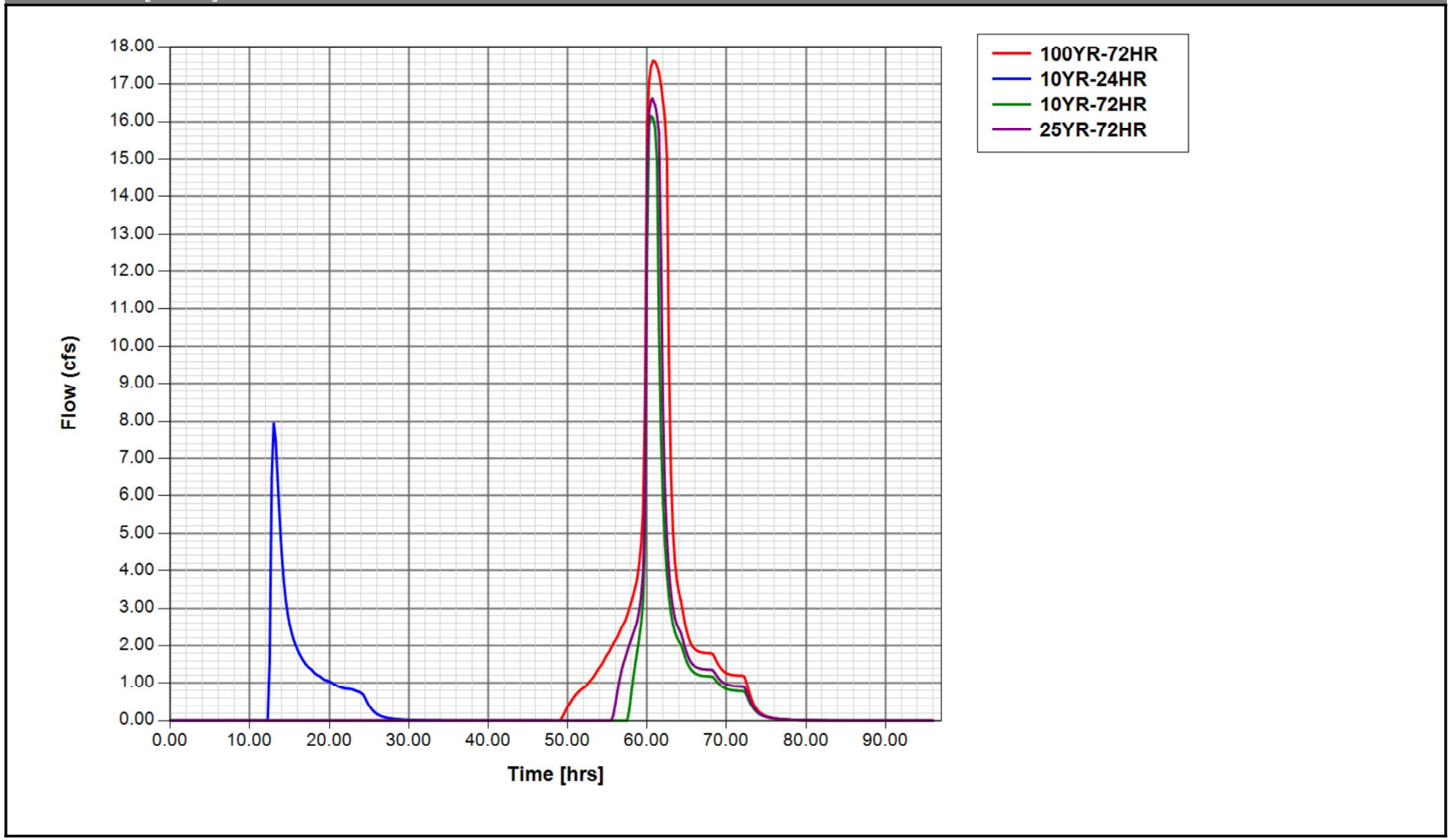
Stage [Node: STORAGE]



Link Min/Max Conditions [PRELIM]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
CS-1 - Pipe	100YR-72HR	17.63	0.00	0.05	0.00	0.00	0.00
CS-1 - Weir: 1	100YR-72HR	17.63	0.00	0.04	2.94	2.94	2.94
CS-1 - Pipe	10YR-24HR	7.94	0.00	-0.04	0.00	0.00	0.00
CS-1 - Weir: 1	10YR-24HR	7.95	0.00	0.03	2.01	2.01	2.01
CS-1 - Pipe	10YR-72HR	16.14	0.00	-0.05	0.00	0.00	0.00
CS-1 - Weir: 1	10YR-72HR	16.14	0.00	-0.04	2.69	2.69	2.69
CS-1 - Pipe	25YR-72HR	16.63	0.00	0.05	0.00	0.00	0.00
CS-1 - Weir: 1	25YR-72HR	16.63	0.00	0.04	2.77	2.77	2.77

Link Flow: CS-1 [PRELIM]



Node Max Conditions [PRE]

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]
DITCH	100YR-72HR	9999.00	6.00	0.0000	35.35	0.00	0
DITCH	10YR-24HR	9999.00	6.00	0.0000	16.71	0.00	0
DITCH	10YR-72HR	9999.00	6.00	0.0000	22.52	0.00	0
DITCH	25YR-72HR	9999.00	6.00	0.0000	26.21	0.00	0

PRE

Node Max Conditions [PRELIM]

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]
NSLRWCD	100YR-72HR	9999.00	6.00	0.0000	17.63	0.00	0
NSLRWCD	10YR-24HR	9999.00	6.00	0.0000	7.94	0.00	0
NSLRWCD	10YR-72HR	9999.00	6.00	0.0000	16.14	0.00	0
NSLRWCD	25YR-72HR	9999.00	6.00	0.0000	16.63	0.00	0

POST

Simulation: 100YR-72HR

Scenario: PRELIM
Run Date/Time: 6/7/2024 8:06:59 AM
Program Version: ICPR4 4.07.08

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	96.0000

	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:	
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	

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:	12.23 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:

Link: CS-1

Scenario: PRELIM
Type: Drop Structure
From Node: STORAGE
To Node: NSLRWCD
Link Count: 1
Flow Direction: None

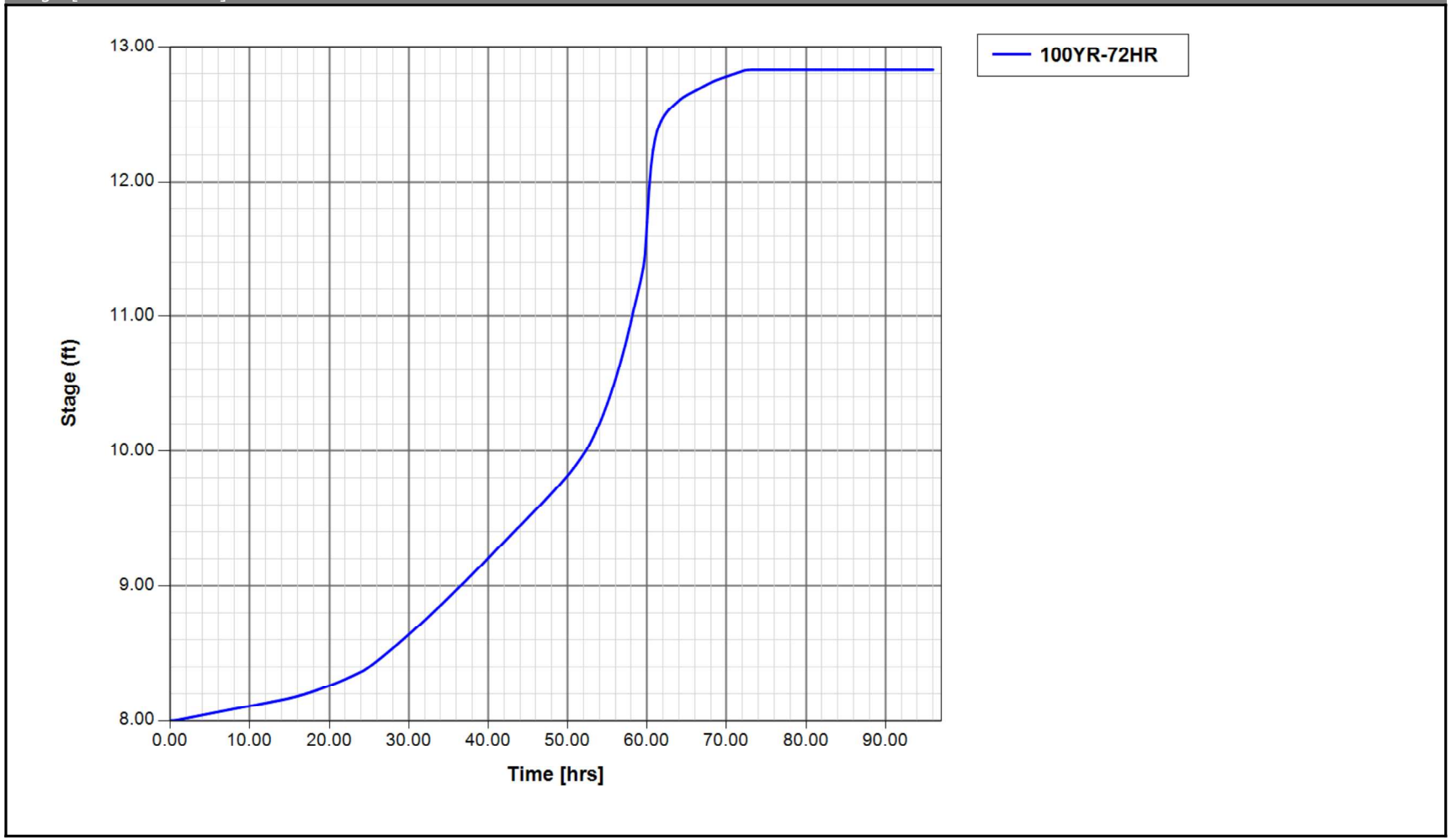
Link Min/Max Conditions [PRELIM]

Link Name	Sim Name	Max Flow [cfs]	Min Flow [cfs]	Min/Max Delta Flow [cfs]	Max Us Velocity [fps]	Max Ds Velocity [fps]	Max Avg Velocity [fps]
CS-1 - Pipe	100YR-72HR	0.00	0.00	0.00	0.00	0.00	0.00
CS-1 - Weir: 1	100YR-72HR	0.00	0.00	0.00	0.00	0.00	0.00

Node Max Conditions [PRELIM]

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]
STORAGE	100YR-72HR	11.00	12.83	0.0010	45.18	0.00	214054

Stage [Node: STORAGE]



Appendix B

IRCP Retention Recovery Model

Appendix C

USGS Soil Survey & Geotechnical Report

United States Department of Agriculture

NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for St. Lucie County, Florida

Sunrise Cove Subdivision



April 19, 2024

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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Contents

Preface.....2
How Soil Surveys Are Made.....5
Soil Map.....8
Soil Map.....9
Legend.....10
Map Unit Legend.....11
Map Unit Descriptions.....11
St. Lucie County, Florida.....13
2—Ankona and Farmton sands.....13
4—Arents, 0 to 5 percent slopes.....15
43—Susanna and Wauchula sands.....16
44—Tantile and Pomona sands.....20
55—Winder loamy sand.....23
References.....27

How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report
Soil Map



Map Scale: 1:1,770 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 25 50 100 150

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 17, Sep 6, 2023

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
2	Ankona and Farmton sands	2.1	22.0%
4	Arents, 0 to 5 percent slopes	1.2	12.1%
43	Susanna and Wauchula sands	3.7	37.6%
44	Tantile and Pomona sands	0.5	5.0%
55	Winder loamy sand	2.3	23.2%
Totals for Area of Interest		**9.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or

landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

St. Lucie County, Florida

2—Ankona and Farmton sands

Map Unit Setting

National map unit symbol: 1jptv
Elevation: 0 to 200 feet
Mean annual precipitation: 49 to 58 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Ankona and similar soils: 50 percent
Farmton and similar soils: 40 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ankona

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 11 inches: sand
E - 11 to 38 inches: sand
Bh - 38 to 48 inches: loamy sand
Btg - 48 to 57 inches: sandy loam
Cg - 57 to 80 inches: loamy fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 31 to 50 inches to ortstein
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 1.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: C/D
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)

Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Description of Farmton

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 7 inches: sand
E - 7 to 34 inches: sand
Bh - 34 to 50 inches: sand
Btg - 50 to 80 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: B/D
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Minor Components

Electra

Percent of map unit: 4 percent
Landform: Rises on marine terraces, knolls on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F155XY150FL - Sandy Upland Mesic Flatwoods and Hammocks on Rises and Knolls
Other vegetative classification: Sandy soils on rises and knolls of mesic uplands (G156BC131FL)
Hydric soil rating: No

Waveland

Percent of map unit: 3 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Lawnwood

Percent of map unit: 3 percent
Landform: Marine terraces on flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

4—Arents, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 1jptx
Elevation: 0 to 30 feet
Mean annual precipitation: 49 to 58 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Arents and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Arents

Setting

Landform: Rises on marine terraces
Landform position (three-dimensional): Rise
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Altered marine deposits

Typical profile

C1 - 0 to 10 inches: sand
C2 - 10 to 51 inches: sand

A/Eb - 51 to 80 inches: sand

Properties and qualities

Slope: 0 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: About 18 to 36 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 6s
Hydrologic Soil Group: A
Ecological site: F156BY041FL - Sandy Over Loamy Pine Flatwoods and Hammocks
Forage suitability group: Forage suitability group not assigned (G156BC999FL)
Other vegetative classification: Forage suitability group not assigned (G156BC999FL)
Hydric soil rating: No

Minor Components

Canaveral

Percent of map unit: 5 percent
Landform: Dunes on marine terraces, ridges on marine terraces
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156BY060FL - High Sandy Pine and Scrub on Knolls and Ridges
Other vegetative classification: Forage suitability group not assigned (G156BC999FL)
Hydric soil rating: No

Sanitary landfill

Percent of map unit: 5 percent
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Hydric soil rating: Unranked

43—Susanna and Wauchula sands

Map Unit Setting

National map unit symbol: 1jpw5
Elevation: 0 to 30 feet
Mean annual precipitation: 49 to 58 inches

Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Susanna and similar soils: 41 percent
Wauchula and similar soils: 39 percent
Minor components: 20 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Susanna

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: sand
E - 6 to 25 inches: sand
Bh - 25 to 29 inches: loamy sand
Btg - 29 to 48 inches: sandy loam
Cg - 48 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 12 to 31 inches to ortstein
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F156BY041FL - Sandy Over Loamy Pine Flatwoods and Hammocks
Forage suitability group: Sandy over loamy soils on flats of hydric or mesic lowlands (G156BC241FL)
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G156BC241FL)
Hydric soil rating: No

Description of Wauchula

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf

Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: sand
Eg - 6 to 22 inches: sand
Bh - 22 to 34 inches: sand
Bw - 34 to 38 inches: sand
Btg - 38 to 50 inches: sandy loam
Cg - 50 to 80 inches: loamy sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 8.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F156BY041FL - Sandy Over Loamy Pine Flatwoods and Hammocks
Forage suitability group: Sandy over loamy soils on flats of hydric or mesic lowlands (G156BC241FL)
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G156BC241FL)
Hydric soil rating: No

Minor Components

Ankona

Percent of map unit: 3 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Chobee

Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave

Ecological site: R156BY021FL - Mineral Isolated Marshes and Swamps
Other vegetative classification: Loamy and clayey soils on stream terraces, flood plains, or in depressions (G156BC345FL)
Hydric soil rating: Yes

Riviera

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F156BY041FL - Sandy Over Loamy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G156BC241FL)
Hydric soil rating: Yes

Winder, drained and bedded

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Concave, convex
Across-slope shape: Linear
Ecological site: F156BY030FL - Wet Hardwood Forests
Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic lowlands (G156BC341FL)
Hydric soil rating: No

Pineda

Percent of map unit: 2 percent
Landform: Flats on marine terraces, drainageways on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: F156BY041FL - Sandy Over Loamy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G156BC241FL)
Hydric soil rating: Yes

Pepper

Percent of map unit: 2 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Tantile

Percent of map unit: 2 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear

Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Wabasso

Percent of map unit: 2 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Nettles

Percent of map unit: 2 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

44—Tantile and Pomona sands

Map Unit Setting

National map unit symbol: 1jpw6
Elevation: 0 to 120 feet
Mean annual precipitation: 49 to 58 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Not prime farmland

Map Unit Composition

Tantile and similar soils: 45 percent
Pomona and similar soils: 43 percent
Minor components: 12 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tantile

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex

Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 5 inches: sand
Eg - 5 to 26 inches: sand
Bh - 26 to 34 inches: sand
Bt - 34 to 49 inches: loamy sand
E'g - 49 to 69 inches: sand
Btg - 69 to 80 inches: fine sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 18 to 31 inches to ortstein
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Very low (about 1.2 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Description of Pomona

Setting

Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 5 inches: sand
E - 5 to 26 inches: sand
Bh - 26 to 39 inches: sand
E' - 39 to 51 inches: sand
Btg - 51 to 72 inches: sandy loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.57 in/hr)
Depth to water table: About 6 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Moderate (about 6.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 4w
Hydrologic Soil Group: A/D
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Forage suitability group: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Minor Components

Pepper

Percent of map unit: 3 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Nettles

Percent of map unit: 3 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Ankona

Percent of map unit: 3 percent
Landform: Flatwoods on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Lawnwood

Percent of map unit: 3 percent

Landform: Marine terraces on flatwoods
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: F156BY040FL - Sandy Pine Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

55—Winder loamy sand

Map Unit Setting

National map unit symbol: 1jpwk
Elevation: 0 to 30 feet
Mean annual precipitation: 49 to 58 inches
Mean annual air temperature: 70 to 77 degrees F
Frost-free period: 350 to 365 days
Farmland classification: Farmland of unique importance

Map Unit Composition

Winder, drained and bedded, and similar soils: 67 percent
Winder, hydric, and similar soils: 15 percent
Minor components: 18 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Winder, Drained And Bedded

Setting

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Concave, convex
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: loamy sand
E - 6 to 12 inches: sand
Btg1 - 12 to 33 inches: sandy clay loam
Btg2 - 33 to 49 inches: sandy loam
Cg1 - 49 to 61 inches: loamy sand
Cg2 - 61 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: High
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 12 to 18 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F155XY140FL - Loamy and Clayey Hardwood Hammocks
Forage suitability group: Loamy and clayey soils on flats of hydric or mesic lowlands (G156BC341FL)
Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic lowlands (G156BC341FL)
Hydric soil rating: No

Description of Winder, Hydric

Setting

Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: Sandy and loamy marine deposits

Typical profile

A - 0 to 6 inches: loamy sand
E - 6 to 12 inches: sand
Btg1 - 12 to 33 inches: sandy clay loam
Btg2 - 33 to 49 inches: sandy loam
Cg1 - 49 to 61 inches: loamy sand
Cg2 - 61 to 80 inches: sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 5 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Sodium adsorption ratio, maximum: 4.0
Available water supply, 0 to 60 inches: Low (about 5.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3w
Hydrologic Soil Group: C/D
Ecological site: F155XY140FL - Loamy and Clayey Hardwood Hammocks

Forage suitability group: Loamy and clayey soils on flats of hydric or mesic lowlands (G156BC341FL)
Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic lowlands (G156BC341FL)
Hydric soil rating: Yes

Minor Components

Floridana
Percent of map unit: 3 percent
Landform: Depressions on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Concave
Across-slope shape: Concave
Ecological site: R155XY080FL - Sandy over Loamy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy over loamy soils on stream terraces, flood plains, or in depressions (G156BC245FL)
Hydric soil rating: Yes

Hallandale
Percent of map unit: 3 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Interfluve, talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F156AY360FL - Subtropical Moist Hammocks of Miami Ridge / Atlantic Coastal Strip
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Pineda
Percent of map unit: 3 percent
Landform: Flats on marine terraces, drainageways on marine terraces
Landform position (three-dimensional): Dip
Down-slope shape: Linear
Across-slope shape: Concave
Ecological site: R155XY080FL - Sandy over Loamy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G156BC241FL)
Hydric soil rating: Yes

Riviera
Percent of map unit: 3 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Linear
Across-slope shape: Linear
Ecological site: R155XY080FL - Sandy over Loamy Freshwater Isolated Marshes and Swamps
Other vegetative classification: Sandy over loamy soils on flats of hydric or mesic lowlands (G156BC241FL)
Hydric soil rating: Yes

Winder, shell substratum, hydric

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Concave, linear
Across-slope shape: Linear
Ecological site: F155XY140FL - Loamy and Clayey Hardwood Hammocks
Other vegetative classification: Loamy and clayey soils on flats of hydric or mesic lowlands (G156BC341FL)
Hydric soil rating: Yes

Wabasso, gravelly substratum

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

Wabasso

Percent of map unit: 2 percent
Landform: Flats on marine terraces
Landform position (three-dimensional): Talf
Down-slope shape: Convex
Across-slope shape: Linear
Ecological site: F155XY120FL - Sandy Flatwoods and Hammocks
Other vegetative classification: Sandy soils on flats of mesic or hydric lowlands (G156BC141FL)
Hydric soil rating: No

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Appendix D

BMPTRAINS Nutrient Abatement Report

BMPTRAINS Complete Report Ver 4.3.2

Project: SUNRISE COVE Date: 6/6/2024 4:01:55 PM

Site and Catchment Information

Analysis: Net Improvement

Catchment Name	SUBDIVISION
Rainfall Zone	Florida Zone 2
Annual Mean Rainfall	56.00

Pre-Condition Landuse Information

Landuse	SJRWMD Apopka Forests/Abandoned Tree Crops: TN=1.250 TP=0.080
Area (acres)	11.54
Rational Coefficient (0-1)	0.09
Non DCIA Curve Number	77.00
DCIA Percent (0-100)	0.00
Nitrogen EMC (mg/l)	1.250
Phosphorus EMC (mg/l)	0.080
Runoff Volume (ac-ft/yr)	4.944
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	7.620
Phosphorus Loading (kg/yr)	0.488

Post-Condition Landuse Information

Landuse	Single-Family: TN=2.070 TP=0.327
Area (acres)	11.54
Rational Coefficient (0-1)	0.17
Non DCIA Curve Number	75.00
DCIA Percent (0-100)	12.28
Wet Pond Area (ac)	0.00
Nitrogen EMC (mg/l)	2.070
Phosphorus EMC (mg/l)	0.327
Runoff Volume (ac-ft/yr)	9.094
Groundwater N (kg/yr)	0.000
Groundwater P (kg/yr)	0.000
Nitrogen Loading (kg/yr)	23.212
Phosphorus Loading (kg/yr)	3.667

Catchment Number: 1 Name: SUBDIVISION

Project: SUNRISE COVE
Date: 6/6/2024

Retention Design

Retention Depth (in)	1.200
Retention Volume (ac-ft)	1.154

Watershed Characteristics

Catchment Area (acres)	11.54
Contributing Area (acres)	11.540
Non-DCIA Curve Number	75.00
DCIA Percent	12.28
Rainfall Zone	Florida Zone 2
Rainfall (in)	56.00

Surface Water Discharge

Required TN Treatment Efficiency (%)	67
Provided TN Treatment Efficiency (%)	87
Required TP Treatment Efficiency (%)	87
Provided TP Treatment Efficiency (%)	87

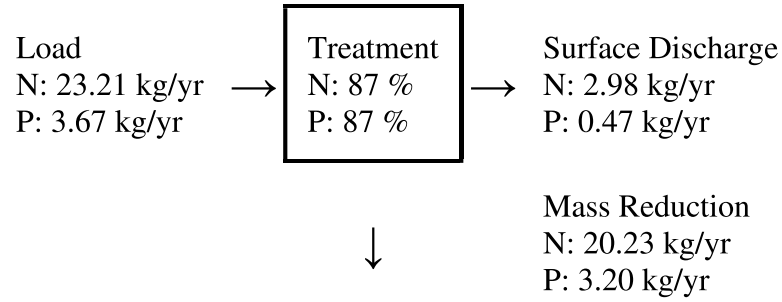
Media Mix Information

Type of Media Mix	Not Specified
Media N Reduction (%)	
Media P Reduction (%)	

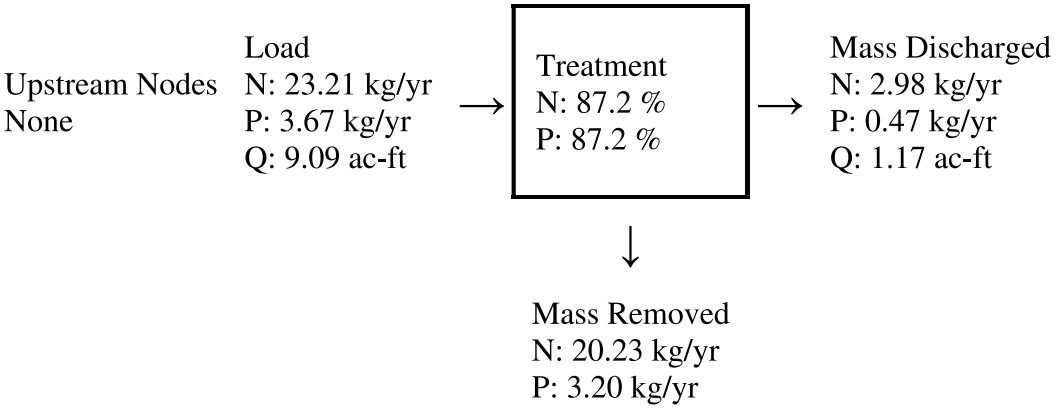
Groundwater Discharge (Stand-Alone)

Treatment Rate (MG/yr)	0.000
TN Mass Load (kg/yr)	20.231
TN Concentration (mg/L)	0.000
TP Mass Load (kg/yr)	3.196
TP Concentration (mg/L)	0.000

Load Diagram for Retention (stand-alone)



Load Diagram for Retention (As Used In Routing)



Summary Treatment Report Version: 4.3.2

Project: SUNRISE COVE

Date:6/6/2024

Analysis Type: Net Improvement
BMP Types:
Catchment 1 - (SUBDIVISION) Retention
Based on % removal values to the nearest percent

Routing Summary
Catchment 1 Routed to Outlet

Total nitrogen target removal met? **Yes**
Total phosphorus target removal met? **Yes**

Summary Report

Nitrogen

Surface Water Discharge		
Total N pre load	7.62 kg/yr	
Total N post load	23.21 kg/yr	
Target N load reduction	67 %	
Target N discharge load	7.62 kg/yr	
Percent N load reduction	87 %	
Provided N discharge load	2.98 kg/yr	6.57 lb/yr
Provided N load removed	20.23 kg/yr	44.61 lb/yr

Phosphorus

Surface Water Discharge		
Total P pre load	.488 kg/yr	
Total P post load	3.667 kg/yr	
Target P load reduction	87 %	
Target P discharge load	.488 kg/yr	
Percent P load reduction	87 %	
Provided P discharge load	.471 kg/yr	1.04 lb/yr
Provided P load removed	3.196 kg/yr	7.047 lb/yr

Appendix E

FEMA FIRM

National Flood Hazard Layer FIRMette

FEMA

80°20'40"W 27°23'52"N



80°20'3"W 27°23'21"N

0 250 500 1,000 1,500 2,000 Feet

1:6,000

Basemap Imagery Source: USGS National Map 2023

Legend

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

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*
- Effective LOMRs
- Area of Undetermined Flood Hazard *Zone D*

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

OTHER FEATURES
- 20.2 / 17.5 Cross Sections with 1% Annual Chance / Water Surface Elevation
- Coastal Transect
- Base Flood Elevation Line (BFE)
- Limit of Study
- Jurisdiction Boundary
- Coastal Transect Baseline
- Profile Baseline
- Hydrographic Feature

MAP PANELS
- Digital Data Available
- No Digital Data Available
- Unmapped

N

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on 6/6/2024 at 6:46 PM and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Saint Lucie County Property Appraiser



4/18/2024

1:4,514

0 187.5 375 750 ft

0 55 110 220 m

KMA Engineering & Surveying, LLC
3001 Industrial Avenue 2
Ft. Pierce, FL 32946
Phone: (772) 569-5505 Fax: (772) 569-1455

June 7, 2024

City of Fort Pierce
Planning Department
100 N. US Highway 1
Fort Pierce, FL 34950

Re: Sunrise Residential PD Benefits

The main Public Benefit of the project is the deceased density. Currently the project allows for 6 units per acre which would allow for sixty-nine(69) single family residents. This decreases the number of traffic trips on the existing roads. The decrease in lots size and setbacks allows for a shared amenity lot that all the residents can enjoy.

Should you have any questions or require additional information, please feel free to contact this office at your earliest convenience.

Sincerely,

Blaine Bergstresser, P.E.
Florida License No. 84598

KMA Engineering & Surveying, LLC
3001 Industrial Avenue 2
Ft. Pierce, FL 32946
Phone: (772) 569-5505 Fax: (772) 569-1455

July 5, 2024

City of Fort Pierce
Planning Department
100 N. US Highway 1
Fort Pierce, FL 34950

Re: Sunrise Lakes PD Zoning Agreement

Legal Description
The south 546 feet of the northwest ¼ of the northeast ¼, lying east of White City Road (Sunrise Boulevard) in Section 33, Township 35 South, Range 40 East, said land lying and being in St. Lucie County, Florida.

Legal Owners
DT Ventures 1, LLC

Development Timeline
January 2025 to July 2028

Phasing
Project will be constructed in one phase

Zoning Requirement	R-3	PD
Min. Lot Size	7,200 SF	4,920 SF
Min. Lot Width	65'	60'
Min. Lot Depth	100'	70' (82' proposed)
Min. Front Yard Depth	25'	15',20' for garage
Min. Side Yard Depth	15'	5'
Min. Rear Yard Depth	15'	15'
Max Lot Coverage	35%	40%
Max Building Height	35'	45'
Density	6 units per acre	3.81 units per acre

Public Facilities
Fort Pierce Water and Sewer Authority (FPUA)- Water and Sewer provider. Water and sewer available for project

St. Lucie County- Sunrise Boulevard provides access to the site

North St. Lucie River Water Control District (NSLRWCD)- Existing canal on south end of property provides drainage outfall for the project

St. Lucie County School District- White City Elementary School Forest Grove Middle School, Fort Pierce Central High School

KMA Engineering & Surveying, LLC
3001 Industrial Avenue 2
Ft. Pierce, FL 32946
Phone: (772) 569-5505 Fax: (772) 569-1455

Public Dedications
Existing drainage easement

Required Permits
City of Ft. Pierce Building Permit
Fort Pierce Utility Authority Permit
South Florida Water Management District (SFWMD) Environmental Resource Permit
North St. Lucie Water Control District Connection Permit
St. Lucie County Site Development Permit
Florida Department of Environmental Protection Water Main Extension Permit
Florida Department of Environmental Protection Domestic Wastewater Collection/Transmission System

Required Permits
The development proposed is consistent with local government's comprehensive plan and land development regulations

Conditions, Terms and Restrictions
TBD

Conditions, Terms and Restrictions
Failure of the agreement to address a particular permit, condition, term, or restriction shall not relieve the developer of the necessity of complying with the law governing said permitting requirements, conditions, term, or restriction.

Should you have any questions or require additional information, please feel free to contact this office at your earliest convenience.

Sincerely,

Blaine Bergstresser, P.E.
Florida License No. 84598

KMA Engineering & Surveying, LLC
3001 Industrial Avenue 2
Ft. Pierce, FL 32946
Phone: (772) 569-5505 Fax: (772) 569-1455

June 7, 2024

City of Fort Pierce
Planning Department
100 N. US Highway 1
Fort Pierce, FL 34950

Re: Sunrise Residential Project Description

We are proposing forty-four (44) single-family residences on 11.54 acres at 3804 Sunrise Boulevard in Fort Pierce, FL. Currently the property is zoned R-3 with a future land use of RM. The site was recently annexed into the City of Ft. Pierce and has an existing Zoning of RS-3 and an existing Future Land Use of RM. The site is bordered by single family RS-3 zoning on the south and west. To the north is a cemetery and the east is a Florida Department of Transportation building, both with industrial zoning. We are proposing a rezoning of Planned Development (PD) with 3.81 units per acre. Below is a table comparing the requested changes from the R-3 zoning

Zoning Requirement	**R-3**	**PD**
Min. Lot Size	7,200 SF	4,920 SF
Min. Lot Width	65’	60’
Min. Lot Depth	100’	70’ (82’ proposed)
Min. Front Yard Depth	25’	15’,20’ for garage
Min. Side Yard Depth	15’	5’
Min. Rear Yard Depth	15’	15’
Max Lot Coverage	35%	40%
Max Building Height	35’	45’
Density	6 units per acre	3.81 units per acre

We are also requesting a reduction of the minimum right-of-way width for the interior roadway from 60’ to 50’. This is common in other municipalities and a proposed section can be found in the civil plans

The site will consist of one ungated entrance in the northwest corner of the site off of Sunrise Boulevard. The 44 residences will be connected by one looped road with an interior sidewalk.

Drainage will be conveyed through interconnected inlets and pipes to three (3) separate dry ponds. The dry ponds will be planted with a variety of wax myrtles and sand cordgrass instead of typically bahia sod. This will add to the aesthetics of the project as well as nutrient removal from the stormwater.

A 10’ landscape buffer will be provided along the perimeter of the site. The south property line contains a 60’ drainage easement. Vegetation in that area will remain untouched but a landscape buffer will occur on the south portion of the easement.

The project will contain a looped water main and a private lift station for the utilities. Dry utilities will be provided in the 10’ utility easement shown on the front of the lots

KMA Engineering & Surveying, LLC
3001 Industrial Avenue 2
Ft. Pierce, FL 32946
Phone: (772) 569-5505 Fax: (772) 569-1455

A bus stop will be provided onsite and a Routed Bus Plan has been included in the civil drawings. An open space area between lot 35 and lot 50 will be utilized for an amenity center. Future plans will be provided for the City's review.

No phasing is proposed for this project as all infrastructure will be built in one phase. It is possible building permits will be pulled in phases but not until after all infrastructure is complete.

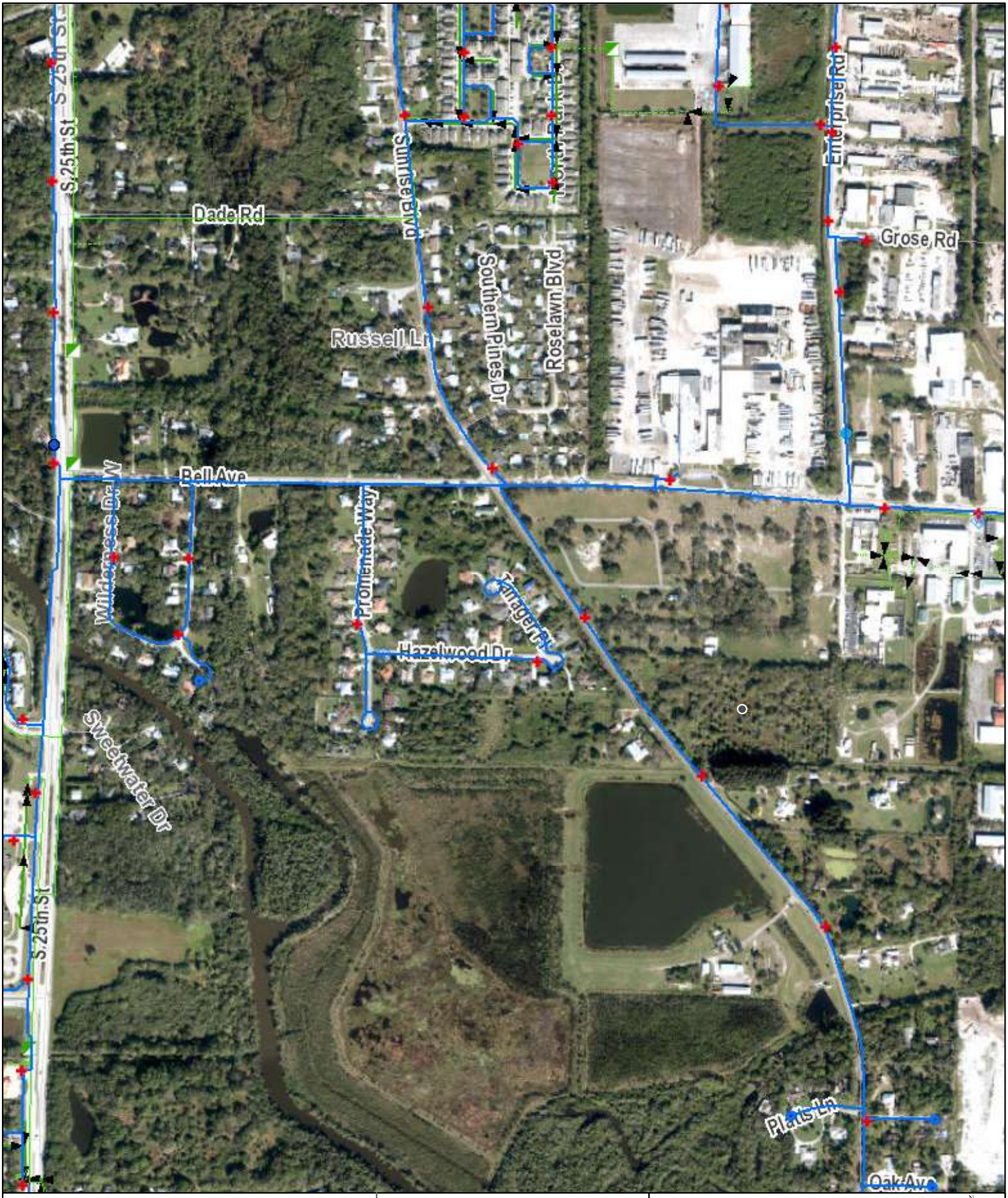
There are no previously approved site plans for this site

The main Public Benefit of the project is the deceased density. Currently the project allows for 6 units per acre which would allow for sixty-nine(69) single family residents. This decreases the number of traffic trips on the existing roads. The decrease in lots size and setbacks allows for a shared amenity lot that all the residents can enjoy.

Should you have any questions or require additional information, please feel free to contact this office at your earliest convenience.

Sincerely,

Blaine Bergstresser, P.E.
Florida License No. 84598



Legend

- Electric Primary Wire
- Transmission Wire
- Gas Main
- Fiber Optic Cable
- Potable Water Main
- Raw Water Main
- Wastewater Force Main
- WW Gravity Main
- Pole
- Fuse

Transformers

- Overhead
- Pad Mount

Valves

- Gas
- Water
- Raw Water
- Waste Water
- Fire Hydrant
- Well
- Lift Station

Disclaimer:

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811 Know what's below. Call before you dig.

Date: 3/25/2024

FPUA COMMUNITY PROUD

N

1 inch = 700 feet

FPUA Web Map

Created By:
Name

(772) 466-1600
FAX (772) 461-1938

KMA
ENGINEERING & SURVEYING

Sunrise Lakes

STORMWATER MAINTENANCE PLAN

AND SEDIMENTATION AND EROSION CONTROL PLAN

I. Project Description

The project consists of fifty (50) single family lots and an amenity center,. The project is served by a stormwater management system that provides stormwater attenuation and water quality pretreatment in accordance with City of Fort Pierce requirements.

The system contains the following features:

Storm Sewer
Stormwater Inlets
Dry Detention Ponds

II. Sedimentation and Erosion Control Measures

A silt fence shall be constructed around the perimeter of the construction areas before construction commences, as shown on the plans. Refer to the Florida Sediment and Erosion Control Manual, latest edition for requirements. Sedimentation and erosion control measures shall be monitored continuously and maintained as necessary.

During periods of dry weather and windy conditions, wind erosion can be a problem in areas that have not been stabilized. When these conditions occur, the soil shall be wetted down as necessary.

III. Pre-construction Meeting and Construction Monitoring Requirements

A pre-construction meeting will be held between the contractor, County inspector and KMA Engineering & Surveying representatives prior to release of the plans. Construction monitoring requirements will be reviewed at the meeting and are specified on the Paving and Drainage Plan (Construction Field Observations)

IV. Release into Service

Prior to release into service, the stormwater system shall be certified by the engineer-of-record, including the submittal of as-built drawings. The following items, at a minimum, will be required:

1. Remove any debris and vegetation in the storm sewer system.
2. After clean-up and stabilization of grassed area, all sedimentation and erosion control temporary measures, such as filter cloth at inlet grates, silt fences, turbidity barriers, hay bales, etc., shall be removed.
3. Removal of all nuisance exotic vegetation.
4. Permanent stabilization of all lake banks, swales, etc.

V. Operation & Maintenance

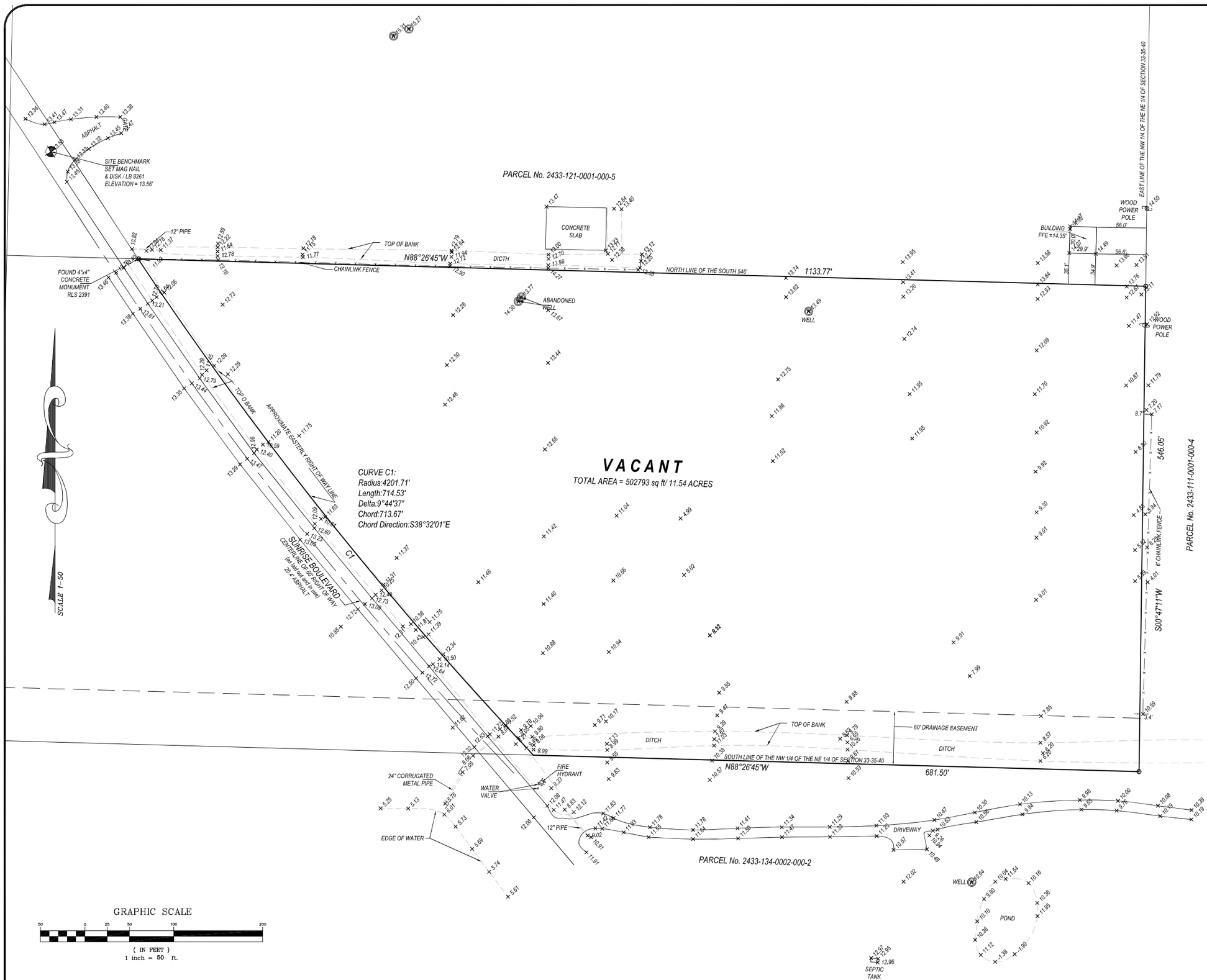
Sunrise Lakes Homeowners Assocaition shall be responsible for the implementation of the Stormwater Maintenance Plan including all catch basins, pipes, and retention pond areas. Maintenance shall occur on a regular basis, monthly or quarterly, and after any severe rainfall events, and shall consist of the following:

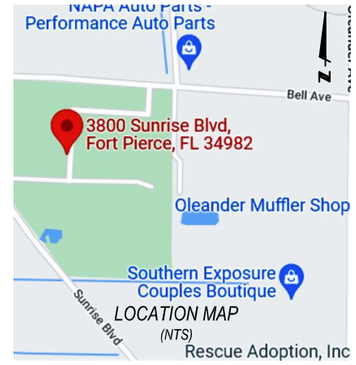
1. All silt, debris, and vegetation shall be removed from all catch basins and pipes.

2. Any deterioration to the structures shall be repaired promptly.
3. No chemicals, oils, greases, or similar wastes shall come in to contact with the stormwater management system. This could result in clogging of the soil in the retention pond areas.
4. No grass clippings shall be disposed of in the system. This will cause clogging of the system and will create ideal conditions for breeding mosquitoes.
5. Inspect the discharge pipes at least once per year to ensure the system is functioning properly.
6. Silt in culverts and inlets shall be removed at least every six months and no less than once a year in order to prevent clogging of the storm pipe and inlets.
7. All nuisance exotic vegetation shall be removed on a monthly basis. All re-growth shall be removed effectively.
8. No fertilizer is to be applied to the grass within the retention area.
9. Lake banks shall be inspected for erosion or shoals at least every six months and no less than one year. Should erosion or shoals appear, they shall be corrected immediately to prevent further issues with the system.
10. Operation and maintenance of all operable control structures.

Blaine Bergstresser,
P.E.

FL Lic. No.84598





PROPERTY ADDRESS:
3804 SUNRISE BLVD
FORT PIERCE, FLORIDA 34982

FLOOD ZONE: *"X"*
PANEL NO: *12111C 0189K*
DATE: *FEBRUARY 19, 2020*

CERTIFIED TO:
DT VENTURES 1 LLC, A FLORIDA LLC.
OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
RAHMAN LE PLLC
ATTORNEYS' TITLE FUND SERVICES LLC

LEGAL DESCRIPTION:
THE SOUTH 546 FEET OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4, LYING EAST OF WHITE CITY ROAD (SUNRISE BOULEVARD) IN SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, SAID LAND LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

SURVEYORS' NOTES:
1. I HEREBY CERTIFY THIS SURVEY MEETS STANDARDS OF PRACTICE SET FORTH IN RULE 5J-17.050-.052, OF THE FLORIDA ADMINISTRATIVE CODE, ADOPTED BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, PURSUANT TO CHAPTER 472.027 OF THE FLORIDA STATUTES.
2. THE SURVEY MAP AND REPORT AND THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OR VERIFIED ELECTRONIC SIGNATURE OF A FLORIDA LICENSED SURVEYOR AND MAPPER..
3. UNDERGROUND OR OBSCURED IMPROVEMENTS WERE NOT LOCATED.
4. DIMENSIONS ARE RECORD AND FIELD UNLESS OTHERWISE NOTED.
5. STATED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS.
6. THIS FIRM'S CERTIFICATE OF AUTHORIZATION NUMBER IS LB 8261.
7. 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.
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11. NO FIELD VISIT WAS COMPLETED AT THE TIME OF THIS RECERTIFICATION

JOB#	PURPOSE	FIELD	DRAFT	DATE
22-0387	RECERTIFY BOUNDARY SURVEY	DB	AK CD	12-19-23 06-25-22

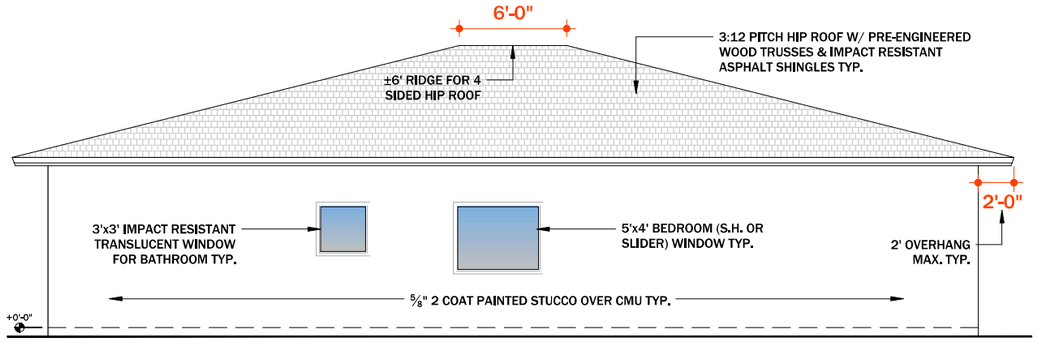
DOUG WALKER
Florida Registration Number
7211
STATE OF FLORIDA
SURVEYOR AND MAPPER

SIGNED
DOUG WALKER, CERTIFIED SURVEYOR AND MAPPER
PROFESSIONAL LAND SURVEYOR
FLORIDA CERTIFICATE No. 7211

BOUNDARY AND TOPOGRAPHIC SURVEY

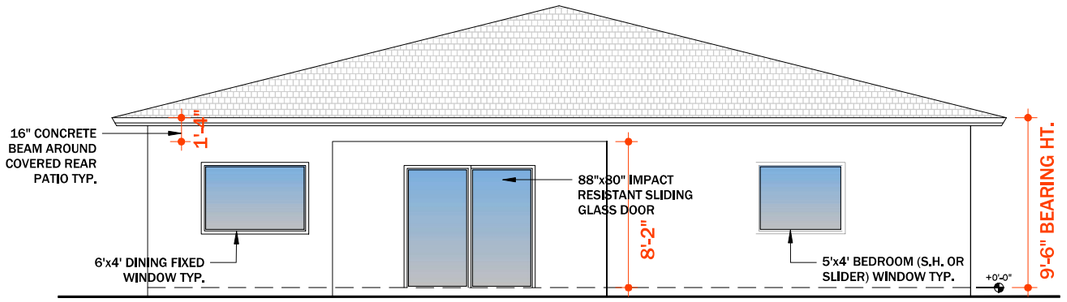
PRINCIPAL MERIDIAN SURVEYING, Inc.
LICENSED BUSINESS No. 8261
4546 CAMBRIDGE STREET
WEST PALM BEACH, FL 33415
OFFICE 561-478-7764

"IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT TO ALTER THESE PLANS AND SPECIFICATIONS. THIS DOCUMENT CONTAINS PROPERTY INFORMATION AND SHALL NOT BE USED, OR REPRODUCED, OR ITS CONTENTS DISCLOSED, IN WHOLE OR IN PART, WITHOUT THE PRIOR WRITTEN CONSENT OF ALL TERRAIN ARCHITECT, LLC - LICENSE #AR100808
CONTRACTOR(S) SHALL VERIFY EXISTING CONDITIONS AND CORRELATE DIMENSIONS PRIOR TO PROVIDING THE WORK DETAILED IN THESE DRAWINGS, AND SHALL PROMPTLY NOTIFY THE DESIGNER OF ANY DISCREPANCIES."



5 PROPOSED SIDE ELEVATION

SCALE: 1/4" = 1'-0"

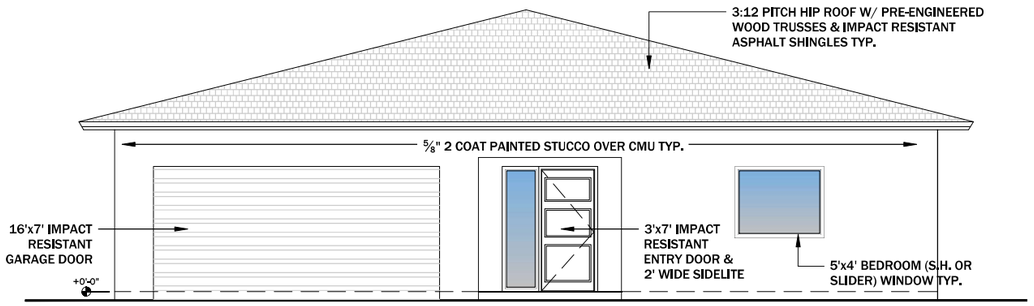


4 PROPOSED REAR ELEVATION

SCALE: 1/4" = 1'-0"

3 PROPOSED SIDE ELEVATION

SCALE: 1/4" = 1'-0"

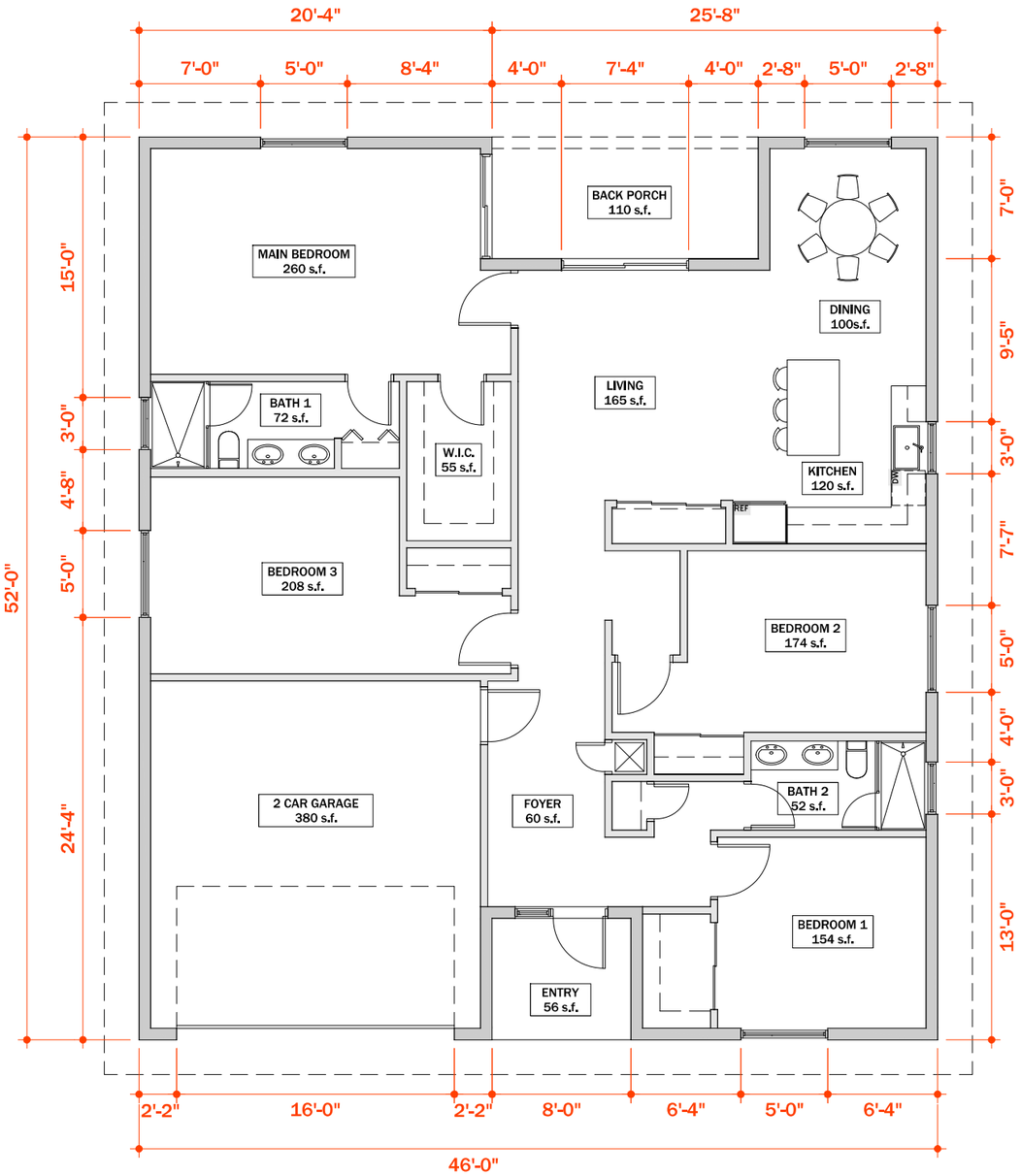


2 PROPOSED FRONT ELEVATION

SCALE: 1/4" = 1'-0"

HOUSE MODEL A: 4 BED 2 BATH / 2,392 S.F.

TOTAL FOOTPRINT: 2,392 S.F.
HVAC SPACE: 1,818 S.F.



1 PROPOSED FLOOR PLAN

SCALE: 1/4" = 1'-0"

VARIES

© 2024 LLC

ALL TERRAIN ARCHITECT

OFFICES:
8051 N TAMIAMI TRAIL
E6
SARASOTA
FL 34243

21266 SUMMERTRACE CIR.
BOCA RATON
FL 33428

PROJECT
SUNRISE LAKES RESIDENTIAL COMMUNITY

3804 SUNRISE BLVD
FORT PIERCE
FL 34982

DATE: 4/15/2024
PROJECT # 24101

REVISION	DATE
1	
2	
3	
4	
5	
6	

NOTES:
1. DO NOT SCALE THE DRAWINGS DUE TO SHEET & PLOTTING DIFFERENTIAL. FOLLOW THE DIMENSIONS & ALWAYS FIELD VERIFY

SCHEMATIC DESIGN

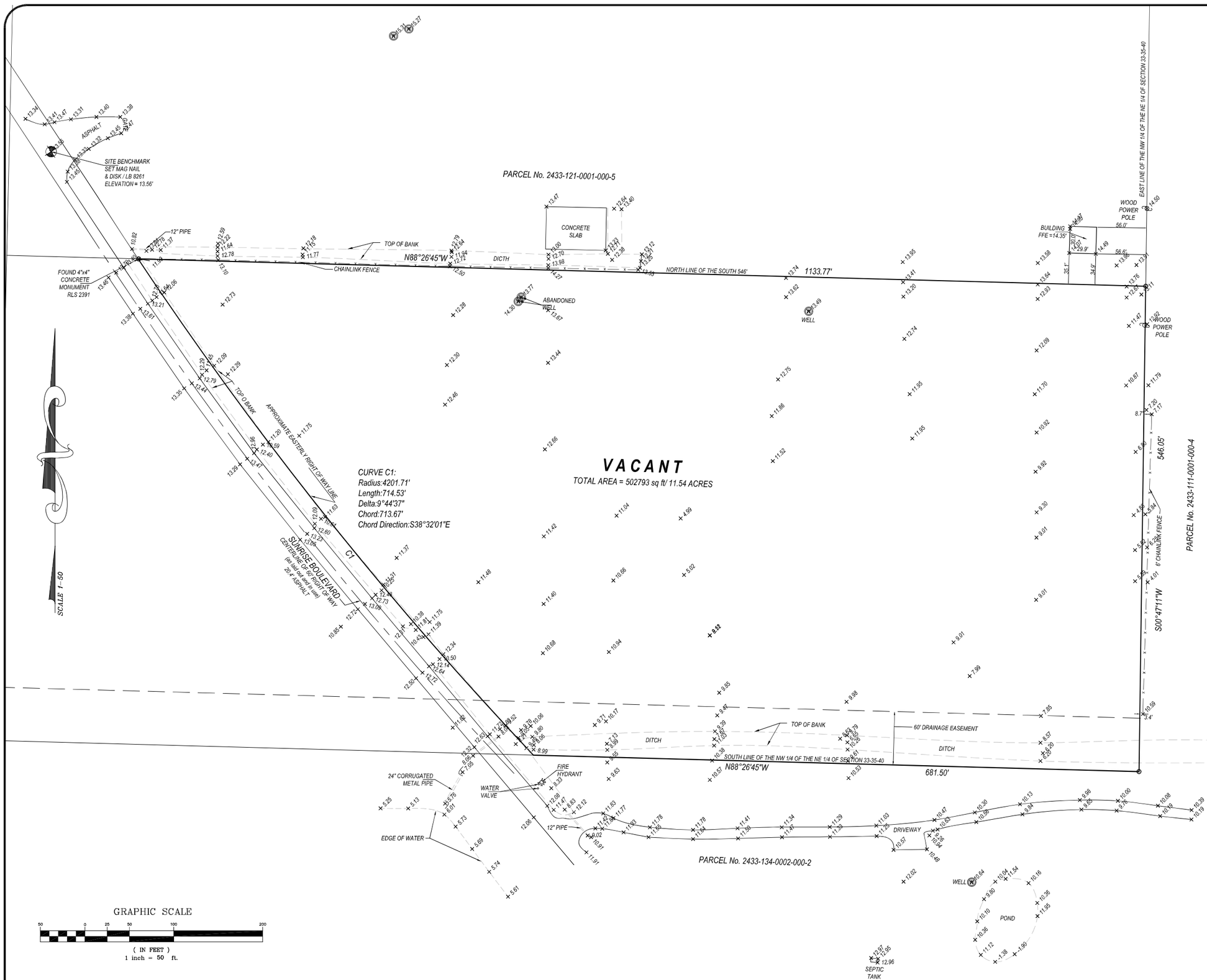
STATE OF FLORIDA
ARTHUR MOLINARI
AR 100808
REGISTERED ARCHITECT

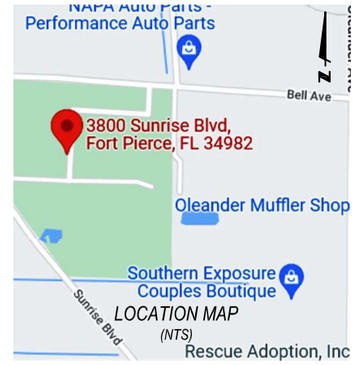
MODEL A PLAN & ELEVATIONS

0' 1' 2' 4' 8'
SCALE: 1/4" = 1'-0"

A-1.0

DRAWN BY: ATA





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SIGNED
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PROFESSIONAL LAND SURVEYOR
FLORIDA CERTIFICATE No. 7211

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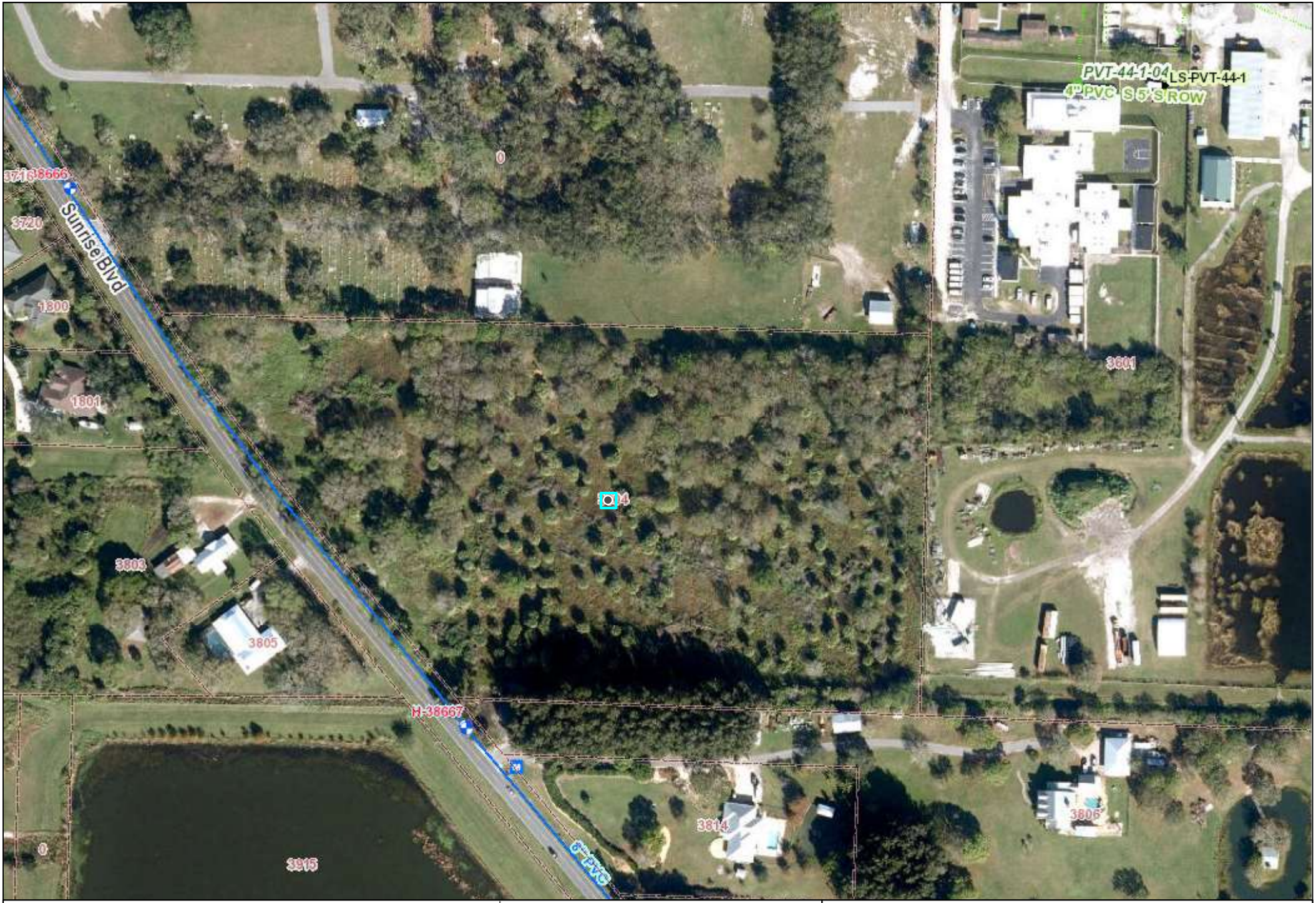
OFFICE 561-478-7764



Legend

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- Transmission Wire
- Gas Main
- Fiber Optic Cable
- Potable Water Main
- Raw Water Main
- Wastewater Force Main
- WW Gravity Main
- Pole
- Fuse

Transformers

- Overhead
- Pad Mount

Valves

- Gas
- Water
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- Fire Hydrant
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Date: 3/25/2024

FPUA COMMUNITY PROUD

N

1 inch = 200 feet

FPUA Web Map

Created By:
Name

(772) 466-1600
FAX (772) 461-1938

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	Cemetary	P/F	Institution
South	SFR	RU	RS-3 Cou
East	State Use		Light IND
West	SFR	RU	RS-3 Cou

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	RM	RS-3 Cou	RS-3-6 DU/AC	11.54	X & AE
****Proposed**	RM	PD	PD 2.24 DU/AC	11.54	□□□

II. Public Facilities Information:

A. Potable Water:	
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B. Wastewater:	
r	R d r d r r d r d d d O r r d r r
D d	M
rr	T r d
Pr d	T r d
D d	T r d

C. Parks and Recreation (Residential Classifications Only):
D r OS

Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	r r			
Urban District	r r			
Community	r r			
Neighborhood	r r			

D. Public Schools (Residential Classifications Only):
S d d
M d d

	K-8	High
School Name	White City Elementary & Forest Grove Middle	Fort Pierce Central
City	Fort Pierce	Fort Pierce
Distance	1.5 mi & 1.2 mi	0.8 mi
Current Zoning/FLU Enrollment Demand		
****Proposed Zoning/FLU Enrollment Demand**		
****Change in Demand**		

E. Solid Waste: Residential (rd r rd r rd r rd r

Demand Analysis	M
Current Zoning/FLU	RS-3
****Proposed Zoning/FLU**	PD
***Change in Demand**	

F. Stormwater:
P r d r d d r d r r d d r d r r r r r d d OS r d r Pr P
R S r r r d r r d r

Impact	

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

G. Transportation Analysis: Complete ITE Trip Generation Data Form M r TE d r M R d		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	M	M
Current Zoning/FLU	RS-3	
****Proposed Zoning/FLU**	PD	
***Change in Demand**	Tr	Tr 40 AM, 52 PM
Impact to Capacity	Meets Concurrency	

IV. Project Description

PHASING
r r r r ☐ ☑
r r r r d d
T Pr R d 50 S 50 M
r d r
M d d r
r P T

RESIDENTIAL DATA					
Type	**Phase**	**Number of Units**	**Acres**	**Expected beginning date**	**Expected completion date**
S d d		50	11.54		
S d					
M					
O r					

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**

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MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 5282370 OR BOOK 5087 PAGE 2982, Recorded 12/27/2023 11:19:18 AM Doc Tax: $6405.00

Prepared by and return to:
Javed Rahman, Attorney at Law
RAHMAN | LE PLLC
1000 Southwest 86th Court
Miami, FL 33144
(305) 542-0402
File No 23-407

Parcel Identification No 2433-123-0001-000-1

[Space Above This Line For Recording Data]

WARRANTY DEED

(STATUTORY FORM – SECTION 689.02, F.S.)

This indenture made the 21 day of **December, 2023** between **CONGREGATION OF THE SACRED HEART OF JESUS INC, a Florida Not for Profit corporation**, whose post office address is **2921 Northeast 48th Street, Lighthouse Point, FL 33064**, of the County of Broward, State of Florida, Grantor, to **DT VENTURES 1 LLC, a Florida limited liability company**, whose post office address is **PO Box 92280, Rochester, NY 14692**, of the County of Monroe, State of New York, 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 DOLLARS (U.S.$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:

The South 546 feet of the Northwest 1/4 of the Northeast 1/4, lying East of the White City Road (Sunrise Boulevard), in Section 33, Township 35 South, Range 40 East, said land lying and being in Saint Lucie County, Florida.

a/k/a 3804 Sunrise Boulevard, Fort Pierce, FL 34982 *(for informational purposes only)*

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

Subject to taxes for 2024 and subsequent years, not yet due and payable; covenants, restrictions, easements, reservations and limitations of record, if any, but said reference shall not operate to reimpose same.

TO HAVE AND TO HOLD the same in fee simple forever.

And Grantor hereby covenant with the Grantee that the Grantor is lawfully seized of said land in fee simple, that Grantor have good right and lawful authority to sell and convey said land and that the Grantor hereby fully warrant 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, 2023.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]
[SIGNATURE PAGE FOLLOWS]

WARRANTY DEED – Signature Page
PIN: 2433-123-0001-000-1

In Witness Whereof, Grantor have hereunto set Grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

WITNESS 1
PRINT NAME: Javed Rahman
WITNESS 1
ADDRESS: 1000 SW 86th Ct. Miami FL

CONGREGATION OF THE SACRED HEART OF JESUS INC,
a Florida Not For Profit Corporation

By: _____
Peter Tan Le, President

WITNESS 2
PRINT NAME: Chabeli Roqueta
WITNESS 2
ADDRESS: 1000 SW 86th Ct. Miami FL

STATE OF FLORIDA
COUNTY OF Miami-Dade

The foregoing instrument was acknowledged before me by means of (X) physical presence or ( ) online notarization this 21 day of December, 2023 by Peter Tan Le, President of Congregation of the Sacred Heart of Jesus Inc, a Florida Not for Profit corporation, on behalf of the corporation.

[Notary Seal]

Javed Rahman
Comm.#HH000009
Expires: May 14, 2024
Bonded Thru Aaron Notary

Signature of Notary Public
Print, Type/Stamp Name of Notary

Personally known: _____ OR Produced Identification: X Type of Identification Produced: FL

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 5282370 OR BOOK 5087 PAGE 2982, Recorded 12/27/2023 11:19:18 AM Doc Tax: $6405.00

Prepared by and return to:
Javed Rahman, Attorney at Law
RAHMAN | LE PLLC
1000 Southwest 86th Court
Miami, FL 33144
(305) 542-0402
File No 23-407

Parcel Identification No 2433-123-0001-000-1

[Space Above This Line For Recording Data]

WARRANTY DEED

(STATUTORY FORM – SECTION 689.02, F.S.)

This indenture made the 21 day of **December, 2023** between **CONGREGATION OF THE SACRED HEART OF JESUS INC, a Florida Not for Profit corporation**, whose post office address is **2921 Northeast 48th Street, Lighthouse Point, FL 33064**, of the County of Broward, State of Florida, Grantor, to **DT VENTURES 1 LLC, a Florida limited liability company**, whose post office address is **PO Box 92280, Rochester, NY 14692**, of the County of Monroe, State of New York, 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 DOLLARS (U.S.$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:

The South 546 feet of the Northwest 1/4 of the Northeast 1/4, lying East of the White City Road (Sunrise Boulevard), in Section 33, Township 35 South, Range 40 East, said land lying and being in Saint Lucie County, Florida.

a/k/a 3804 Sunrise Boulevard, Fort Pierce, FL 34982 *(for informational purposes only)*

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

Subject to taxes for 2024 and subsequent years, not yet due and payable; covenants, restrictions, easements, reservations and limitations of record, if any, but said reference shall not operate to reimpose same.

TO HAVE AND TO HOLD the same in fee simple forever.

And Grantor hereby covenant with the Grantee that the Grantor is lawfully seized of said land in fee simple, that Grantor have good right and lawful authority to sell and convey said land and that the Grantor hereby fully warrant 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, 2023.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]
[SIGNATURE PAGE FOLLOWS]

WARRANTY DEED – Signature Page
PIN: 2433-123-0001-000-1

In Witness Whereof, Grantor have hereunto set Grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

WITNESS 1
PRINT NAME: Javed Rahman
WITNESS 1
ADDRESS: 1000 SW 86th Ct. Miami FL

CONGREGATION OF THE SACRED HEART OF JESUS INC,
a Florida Not For Profit Corporation

By: _____
Peter Tan Le, President

WITNESS 2
PRINT NAME: Chabeli Roqueta
WITNESS 2
ADDRESS: 1000 SW 86th Ct. Miami FL

STATE OF FLORIDA
COUNTY OF Miami-Dade

The foregoing instrument was acknowledged before me by means of (X) physical presence or ( ) online notarization this 21 day of December, 2023 by Peter Tan Le, President of Congregation of the Sacred Heart of Jesus Inc, a Florida Not for Profit corporation, on behalf of the corporation.

[Notary Seal]

Javed Rahman
Comm.#HH000009
Expires: May 14, 2024
Bonded Thru Aaron Notary

Signature of Notary Public
Print, Type/Stamp Name of Notary

Personally known: _____ OR Produced Identification: X Type of Identification Produced: FL

Record and Return To:
This Instrument Prepared By:

Logan F. Wellmeier, Esq.
Dean, Mead, Minton & Moore
1903 S 25th Street, Suite 200
Fort Pierce, Florida 34947
(772) 464-7700

[blank space above line reserved for recording data]

PLANNED DEVELOPMENT (PD) ZONING DEVELOPMENT AGREEMENT

THIS PLANNED DEVELOPMENT (PD) ZONING DEVELOPMENT AGREEMENT (this "**Agreement**") is made and entered into this ___day of _____, 2024, (the "**Effective Date**") by and between DT VENTURES 1 LLC, a Florida limited liability company (the "**Applicant**"), and the CITY OF FORT PIERCE, a political subdivision of the State of Florida (the "**City**").

WITNESSETH:

WHEREAS, Applicant is the owner and developer of certain real property in the city limits of Fort Pierce, Florida, more particularly described in the legal description attached hereto and incorporated herein as **Exhibit "A"** (the "**Property"**); and

WHEREAS, Applicant intends to develop a Planned Development ("**PD**") to be known as "Sunrise Lakes" consisting of 11.54 acres with 50 single family dwelling units ("**DU**s") (the "**Project**"); and

WHEREAS, Section 125-212 of the Code of Ordinances of the City requires that the Applicant enter into this Agreement with the City as a condition of approval of the Project.

NOW, THEREFORE, the parties do hereby agree as follows:

1. Duration of Agreement. This Agreement shall be effective, shall run with the land and shall be binding on all parties and all persons claiming under it for an initial term of five (5) years from the Effective Date hereof (the "**Expiration Date**"). The Expiration Date may be extended for a period of five (5) years after approval by the Board of City Commissioners (the "**Board**") at a public hearing, unless an instrument has been recorded agreeing to release, amend or modify this Agreement in whole, or in part, as provided below. The foregoing notwithstanding, if the expiration date of any development approvals associated with this Agreement or with the Property are ever extended to a date that is later than the Expiration Date, the Expiration Date shall automatically extend to that later date. A proposed timeline of development is specified on **Exhibit "B"**, attached hereto and by this reference incorporated herein (the "**Development Timeline**").

2. Phasing Requirements. The Development shall be constructed in one Phase.

3. <u>Development Requirements for the Project.</u> The Project shall conform to the following requirements:

A. Lot and Building Dimensions:

i. **Min. Lot Size -** 4,920 square feet
ii. **Min. Lot Width –** 60 feet
iii. **Min. Lot Depth -** 70 feet
iv. **Min. Front Yard Depth –** 15 feet for main structure,20 feet for garage
v. **Min. Side Yard Depth -** 5 feet
vi. **Min. Rear Yard Depth -** 15 feet
vii. **Max Lot Coverage -** 40%
viii. **Max Building Height -** 45 feet
ix. **Density –** 4.33 units per acre
x. **Minimum right-of-way width for the interior roadway** – 50 feet

B. Entrances. The site will consist of one ungated entrance in the northwest corner of the site providing ingress from and egress to Sunrise Boulevard. The DUs will be connected by one looped road with an interior sidewalk.

C. Drainage. Stormwater drainage will be conveyed through interconnected inlets and pipes to three (3) separate dry ponds. The dry ponds will be planted with a variety of wax myrtles and sand cordgrass instead of typical bahia sod, to add to the aesthetics of the Project as well as provide for nutrient removal from the stormwater.

D. Landscaping. Applicant shall provide a 10-foot landscape buffer along the perimeter of the site, with a 10-foot landscape buffer along the southern property line along a 60-foot drainage easement.

E. Utilities. The Project will contain a looped water main and a private lift station to serve the Project's wastewater needs. Dry utility lines and infrastructure will be provided in the 10-foot utility easement shown on the front of each lot.

F. Public Transit Stop and Amenity Center. A bus stop will be provided onsite, and a Routed Bus Plan has been included in the civil drawings. An open space area between lot 35 and lot 50 will be utilized for an amenity center. Future plans will be provided for the City's review.

G. Public Benefit. The Project represents a decreased density from the maximum density permitted by the underlying Future Land Use Designation (Low-density residential (RL)), which permits 6.5 DUs per acre, or seventy-five (75) DUs total. The Project, at 50 DUs, represents a significantly lower number of traffic trips on the existing public roads than does the permitted density.

4. **Public Facilities that will Service the Development.**

A. **Fort Pierce Water and Sewer Authority (FPUA)-** Water and Sewer provider, with water and sewer available to provide for the Project.

B. **St. Lucie County Road Infrastructure-** Sunrise Boulevard provides access to the site.

C. **North St. Lucie River Water Control District (NSLRWCD)**- Existing canal on south end of property provides sufficient drainage outfall to accommodate the Project.

D. **St. Lucie County School District**- White City Elementary School, Forest Grove Middle School, and Fort Pierce Central High School are available to serve the Project.

5. **Reservation or Dedication of Land for Public Purposes.** The south property line contains a 60-foot drainage easement, which shall continue to serve its public drainage-related function through construction and after the development of the Project.

6. **Description of Local Development Permits Required for the Development**. The Development shall require the following approvals:

A. City of Ft. Pierce Building Permit
B. Fort Pierce Utility Authority Permit
C. South Florida Water Management District (SFWMD) Environmental Resource Permit
D. North St. Lucie Water Control District Connection Permit
E. Florida Department of Environmental Protection Water Main Extension Permit
F. Florida Department of Environmental Protection Domestic Wastewater Collection/Transmission System Permit

7. **Project Compliance.** By entering into this Agreement, the Board finds that the Project is consistent with the City's comprehensive plan and land development code. Any failure of this Agreement to address a particular permit, condition, term, or restriction shall not relieve the Applicant of the necessity of complying with the law governing said permitting requirements, conditions, terms, or restrictions. Attached hereto as **Exhibit "C"** is a list of any conditions, terms, restrictions, or other requirements determined by the Board for the public health, safety, or welfare of its citizens.

8. **Destruction.** In the event that all or a portion of the Development should be destroyed by a storm, fire, or other common disaster, Applicant, its grantees, successors or assigns shall have the right to rebuild and/or repair so long as there is strict compliance with the approved master site plan, final site plan(s), subdivision plat(s), and development orders.

9. **Modification, Amendment, and Release.** This Agreement may not be modified, amended, or released, except by written instrument signed by the Board and the Applicant, provided that such modification, amendment, or release has been approved by the Board after public hearing. Notwithstanding anything contained hereinto the contrary, Applicant, its successors in interest and the Board may amend or terminate this Agreement without securing the consent of other property owners

whose property is affected by this Agreement, unless such amendment or termination directly and materially modifies the allowable uses or entitlements of such owners' property.

10. **Governing Law**. This Agreement and the construction and enforcement thereof shall be interpreted under the laws of the State of Florida. The parties hereto agree without reservation of any rights under federal or state law, that in any litigation arising under this Agreement, the parties hereto waive the right to trial before a jury and all such litigation shall be litigated only in a non-jury hearing in the State Courts of Florida, St. Lucie County.

11. **Successors and Assigns.** This Agreement shall be deemed to be a covenant running with the land and shall be binding upon the heirs, legal representatives, successors and assigns of the Applicant and any person, firm, corporation or entity who or which may become the successor in interest to the Property. No subsequent transfer of the Property or any assignment of interest therein shall relieve or discharge the Applicant from any term, condition, obligation or duties set out in this Agreement.

12. **Notice**. Any notice, request, demand, consent, approval, or other communication required or permitted by this Agreement shall be given or made in writing and shall be served as elected by the party giving the notice by any of the following methods: (i) hand delivery to the other party; (ii) delivery by commercial overnight courier service; (iii) mailed by registered or certified mail (postage prepaid), return receipt requested; (iv) mailed by regular U.S. mail; or (v) sent by electronic mail (Email). For purposes of notice, the addressees are as follows:

APPLICANT: DT VENTURES 1 LLC

_____

_____

CITY: City Manager
City of Ft. Pierce
100 N US Hwy 1
Fort Pierce, FL
34950

With required copy to:
City Attorney
City of Ft. Pierce
100 N US Hwy 1
Fort Pierce, FL
34950

Notice given in accordance with the provisions of this Section shall be deemed to be delivered and effective on the date of hand delivery; or on the second day after the date of the deposit with an overnight courier; or on the date upon which the return receipt is signed, or delivery is refused, or the notice is designated by the postal authorities as not delivered if mailed; or on the second business day after the date of mailing by regular U.S. mail. Either party may change its address for the purpose of this Section by written notice to the other party given in accordance with the provisions of this Section.

13. **Entire Agreement.** This Agreement incorporates and includes all prior and contemporaneous negotiations, correspondence, conversations, agreements, and understanding applicable to the matters contained herein, and the parties agree that there are no commitments, agreements, or understandings concerning the subject matter of this Agreement that are not contained in this document. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior or contemporaneous representations or agreements, whether oral or written.

14. **Severability.** If any term or provision of this Agreement, or the application thereof to any person or circumstance shall, to any extent, be held invalid or unenforceable for the remainder of this Agreement, then the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected, and every other term and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

15. **Rights of Assignment to Lender**. All rights of the Applicant hereunder may be collaterally assigned to any lender for the Property as security for any loan or construction loan, and in the event of a foreclosure or deed-in-lieu of foreclosure, the lender and/or grantee of any deed-in-lieu of foreclosure, and their respective successors and assigns, shall be bound by this Agreement and entitled to enforce the rights of the Applicant hereunder.

16. **Counterparts.** This Agreement may be executed in any number of identical counterparts each of which shall be deemed to be an original for all purposes but all of which shall constitute one and the same instrument, and a copy of such signature received through electronic transmission shall bind the party whose signature is so received as if such signature were an original. In making proof of this Agreement, it shall not be necessary to produce or account for more of such counterparts than are required to show that each party hereto executed at least one such counterpart.

(SIGNATURES TO FOLLOW ON NEXT PAGE)

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be made and entered into the day and year first written. The date of this Agreement shall be the date on which this Agreement was approved by the City Commission of Fort Pierce.

WITNESSES:

APPLICANT

DT VENTURES 1 LLC, a Florida limited liability company

_____
Print Name: _____
Address: _____
_____

By: _____
Name: _____
Its: _____

_____
Print Name: _____
Address: _____
_____

STATE OF FLORIDA
COUNTY OF _____

The foregoing instrument was acknowledged before me by means of [ ] physical presence or [ ] online notarization, this ___ day of _____, 2024, by _____, as _____ of DT Ventures, 1 LLC, on behalf of said company. Said person is (check one) □ personally known to me, □ produced a driver's license (issued by a state of the United States within the last five (5) years) as identification, or □ produced other identification, to wit: _____.

_____
Print Name: _____
Notary Public, State of Florida
Commission No.: _____
My Commission Expires: _____

CITY OF FT. PIERCE

ATTEST: BOARD OF CITY COMMISSIONERS
CITY OF FT. PIERCE, FLORIDA

_____ By: _____
City Mayor Print

APPROVED AS TO FORM AND
LEGAL SUFFICIENCY:

_____
City Attorney

EXHIBIT A
[LEGAL DESCRIPTION OF THE PROPERTY]

The South 546 feet of the Northwest 1/4 of the Northeast 1/4, lying East of the White City Road (Sunrise Boulevard), in Section 33, Township 35 South, Range 40 East, said land lying and being in Saint Lucie County, Florida.

a/k/a 3804 Sunrise Boulevard, Fort Pierce, FL 34982 (*for informational purposes only)*

EXHIBIT B
[DEVELOPMENT TIMELINE]

Approvals…….	February, 2025
Infrastructure Construction……...	February 2025 - May 2025
Home Construction……	May 2025 – May 2026

EXHIBIT C
[CONDITIONS OF DEVELOPMENT]

CONSTRUCTION PLANS

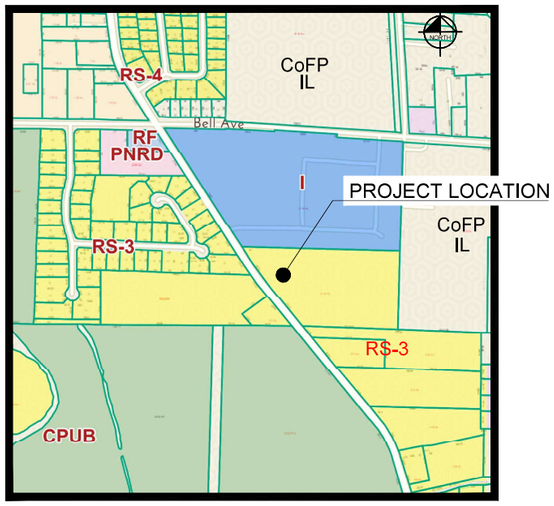
FOR

SUNRISE LAKES

LOCATED AT

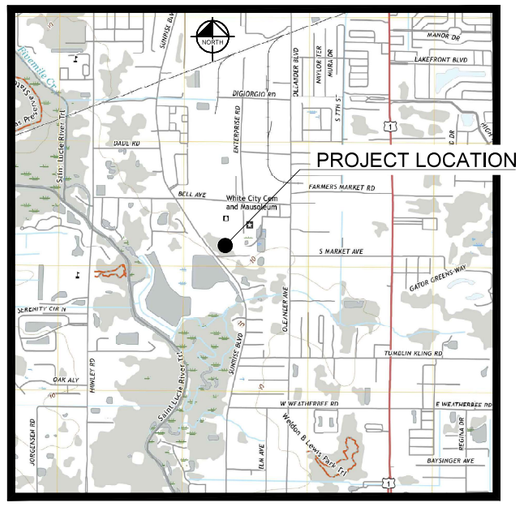
3804 SUNRISE BLVD, FORT PIERCE, FLORIDA

SECTION 33, TOWNSHIP 35S, RANGE 40E



LOCATION MAP

SCALE: NOT TO SCALE



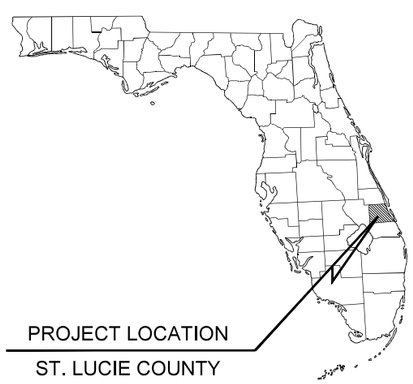
VICINITY MAP

SCALE: NOT TO SCALE

SHEET INDEX	
Sheet Number	Sheet Title
C-100	COVER
C-101	GENERAL NOTES
C-200	SITE PLAN
C-201	PRELIMINARY PLAT
C-300	MASTER PAVING GRADING & DRAINAGE PLAN
C-301	PAVING GRADING & DRAINAGE DETAILS
C-302	PAVING GRADING & DRAINAGE DETAILS
C-303	GRADING SECTIONS
C-400	MASTER UTILITIES PLAN
C-500	FPUA DETAILS-01
C-501	FPUA DETAILS-02
C-502	FPUA DETAILS-03
C-503	FPUA DETAILS-04
C-504	FPUA DETAILS-05
C-600	EXISTING CONDITIONS & DEMOLITION
C-601	PHASE ONE EROSION CONTROL
C-700	ROUTING PLAN BUS
C-701	ROUTING PLAN FIRE
--	PHOTO-01

LEGAL DESCRIPTION

THE SOUTH 546 FEET OF THE NORTHWEST 1/4 OF THE NORTHEAST 1/4, LYING EAST OF WHITE CITY ROAD (SUNRISE BOULEVARD) IN SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, SAID LAND LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.



PROJECT TEAM

OWNER/DEVELOPER
DT VENTURES 1, LLC.
PO BOX 92280
ROCHESTER,NY 14692

LANDSCAPE ARCHITECT
PAUL GOULAS, RLA
LANDSCAPE ARCHITECTURAL SERVICES
1708 SE JOY HAVEN ST
PORT ST.LUCIE,FL 34983
772-631-8400

CIVIL ENGINEER
BLAINE BERGSTRESSER, P.E.
KMA ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
772- 569-5505
BLAINEB@KMAFL.COM

SURVEYOR
DOUG WALKER, PSM
PRINCIPAL MERIDIAN SURVEYING,INC
4546 CAMBRIDGE ST.
WEST PALM BEACH,FL 33415
561-478-7764

PERMITTING AGENCIES

FORT PIERCE UTILITY AUTHORITY
SHANE OSTRANDER
1701 S. 37TH STREET
FORT PIERCE, FL 34984
SOTRANDER@FPUA.COM
772-466-1600

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
SOUTH FLORIDA WATER MANAGEMENT DISTRICT
316 NW 5TH ST
OKEECHOBEE, FL 34972
863-462-5260

NORTH ST LUCIE RIVER WATER CONTROL DISTRICT
PATRICIA KUTA
14666 ORANGE AVENUE
FORT PIERCE, FL 34945
NSLRWCD@BELLSOUTH.NET
772-461-5050

CITY OF FORT PIERCE
CESAR FLORES
100 NORTH US 1
FORT PIERCE, FL 34950
CFLORES@CITYOFFORTPIERCE.COM
772-467-3730

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES

CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-COVER

SHEET TITLE: COVER

SHEET NUMBER: C-100

Plotted on Tuesday, July 09, 2024 - 12:14 PM by Blaine Bergstresser

GENERAL

1. THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, AND, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
3. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. A LIST OF THE UTILITY COMPANIES WHICH THE CONTRACTOR MUST CALL BEFORE COMMENCING WORK IS PROVIDED ON THE COVER SHEET OF THESE CONSTRUCTION PLANS. THIS LIST SERVES AS A GUIDE ONLY AND IS NOT INTENDED TO LIMIT THE UTILITY COMPANIES WHICH THE CONTRACTOR MAY WISH TO NOTIFY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
8. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND DESIGN ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTORS RESPONSIBILITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
11. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
12. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.

EROSION CONTROL

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
3. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
5. EROSION CONTROL PLAN MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. THE CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY CEASED.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRED IN THESE AREAS. REFER TO SECTION 981 OF THE STANDARD SPECIFICATIONS FOR SEEDING AND MAINTENANCE REQUIREMENTS.
15. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED AS SOON AS POSSIBLE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFF SITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE EROSION CONTROL PLAN AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.
21. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACK FILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

POTABLE WATER AND SANITARY SEWER SYSTEM

1. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES GRAVITY SEWER LINES AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
5. ALL PHASES OF INSTALLATION, INCLUDING UNLOADING, TRENCHING, LAYING AND BACK FILLING, SHALL BE DONE IN A FIRST CLASS WORKMANLIKE MANNER. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
8. UNDERGROUND LINES SHALL BE SURVEYED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.
9. CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.

MAINTENANCE

ALL MEASURES STATED ON THE EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED. FOR MAINTENANCE REQUIREMENTS REFER TO SECTION 981 OF THE OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION).
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED TO 55 CUBIC YARDS / ACRE.
7. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

STORM DRAINAGE SYSTEM

1. STANDARD INDEXES REFER TO THE 2021/2022 EDITION OF F.D.O.T. "STANDARD PLANS FOR ROADWAY CONSTRUCTION"
2. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS.
3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURES, WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS, WHICH ARE NOT INCLUDED IN LENGTHS.
4. ALL DRAINAGE STRUCTURE GRATES AND COVERS, EITHER EXISTING OR PROPOSED SHALL BE TRAFFIC RATED FOR H-20 LOADINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY UPGRADES TO EXISTING DRAINAGE STRUCTURES.
5. CONSTRUCTION OF THE ENTIRE STORMWATER MANAGEMENT SYSTEM SHOWN ON THE PLANS MUST BE COMPLETE AND ALL DISTURBED AREAS STABILIZED IN ACCORDANCE WITH THE PERMITTED PLANS AND CONDITIONS PRIOR TO ANY OF THE FOLLOWING: ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY FOR ANY LOT; INITIATION OF INTENDED USE OF THE INFRASTRUCTURE; OR TRANSFER OF RESPONSIBILITY FOR MAINTENANCE OF THE SYSTEM TO A LOCAL GOVERNMENT OR OTHER RESPONSIBLE ENTITY.
6. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER JURISDICTION REGULATIONS (MANUFACTURER'S RECOMMENDATIONS SHALL BE UTILITIZED IF MORE STRINGENT).
7. STORM WATER PIPES, STRUCTURES, MINIMUM COVER AND INSTALLATION PROCEDURES TO BE IN ACCORDANCE WITH SOUTH FLORIDA WATER MANAGEMENT DISTRICT STANDARDS.

PAVING/GRADING TESTING AND INSPECTION

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE SOILS REPORT. UPON COMPLETION OF WORK THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.
2. A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS AND GEOTECHNICAL REPORT, THE VARIOUS AGENCIES AND PERMIT CONDITIONS. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THESE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

DRAINAGE SYSTEM TESTING AND INSPECTION

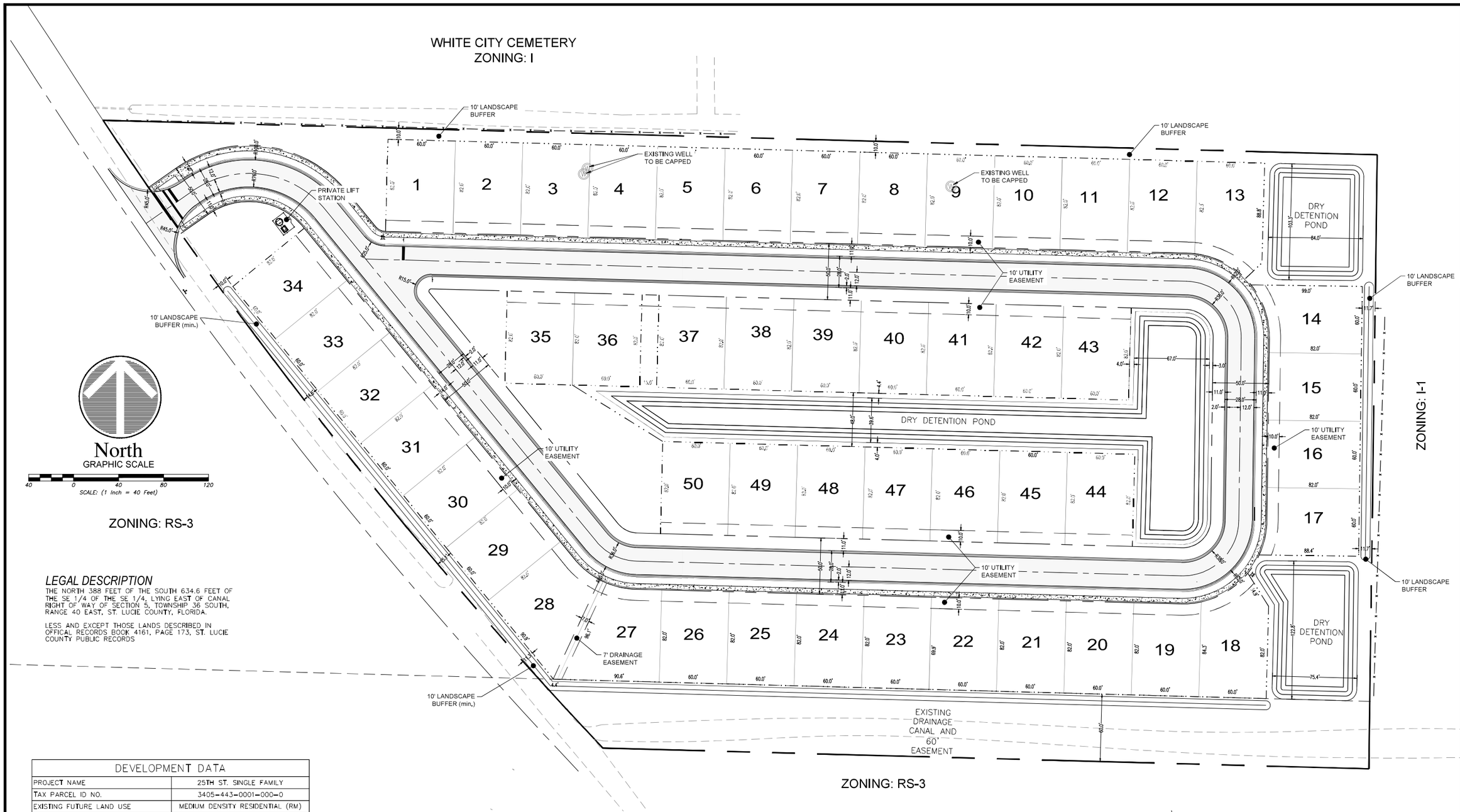
1. THE STORM DRAINAGE PIPING SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 2 FULL BUSINESS DAYS IN ADVANCE TO SCHEDULE INSPECTION.
2. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE REINSPECTED BY THE OWNER'S ENGINEER PRIOR TO APPROVAL FOR CERTIFICATE OF OCCUPANCY PURPOSES. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS AT THE CONTRACTORS EXPENSE AND PRIOR TO FINAL ACCEPTANCE.

PAVING, GRADING AND DRAINAGE

1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN COUNTY'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR FDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
2. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
3. TRAFFIC CONTROL ON ALL FDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
4. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
5. ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN.
6. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
7. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
8. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
9. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
11. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.
12. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO FDOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
13. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
14. ALL CUT OR FILL SLOPES SHALL BE 4 (HORIZONTAL) :1 (VERTICAL) OR FLATTER UNLESS OTHERWSE SHOWN.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
16. THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE BARRIERS. AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES THE WATER QUALITY STANDARDS IN CHAPTER 17-302, FLORIDA ADMINISTRATIVE CODE.
17. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
18. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE ENVIRONMENTAL RESOURCE PERMIT COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.
19. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
20. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

DEMOLITION

1. CONTRACTOR SHALL SUBMIT DEMOLITION SCHEDULE TO OWNER PRIOR TO PROCEEDING WITH DEMOLITION ACTIVITIES.
2. EXTENT OF SITE CLEARING IS SHOWN ON DRAWINGS.
3. CONTRACTOR SHALL CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
4. CONTRACTOR SHALL PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN "EXISTING TO REMAIN".
5. CONTRACTOR SHALL RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
6. CONTRACTOR SHALL REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF-SITE IN A LEGAL MANNER.
7. CONTRACTOR SHALL DEMOLISH AND COMPLETELY REMOVE FROM SITE MATERIAL INDICATED ON PLAN OR NOTES "TO BE REMOVED".
8. CONTRACTOR SHALL PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION
9. ALL MATERIAL REMOVED FROM THIS SITE BY THE CONTRACTOR SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER.
10. REFER TO THE TOPOGRAPHIC SURVEY FOR ADDITIONAL DETAILS OF EXISTING STRUCTURES, ETC., LOCATED WITHIN THE PROJECT SITE. UNLESS OTHERWISE NOTED, ALL EXISTING BUILDINGS, STRUCTURES, SLABS, CONCRETE, ASPHALT, DEBRIS PILES, SIGNS, AND ALL APPURTENANCES ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND PROPERLY DISPOSED OF IN A LEGAL MANNER AS PART OF THIS CONTRACT. SOME ITEMS TO BE REMOVED MAY NOT BE DEPICTED ON THE TOPOGRAPHIC SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND DETERMINE THE FULL EXTENT OF ITEMS TO BE REMOVED. IF ANY ITEMS ARE IN QUESTION, THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO REMOVAL OF SAID ITEMS.
11. THE CONTRAC



LEGAL DESCRIPTION

THE NORTH 388 FEET OF THE SOUTH 634.6 FEET OF THE SE 1/4 OF THE SE 1/4, LYING EAST OF CANAL RIGHT OF WAY OF SECTION 5, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA.

LESS AND EXCEPT THOSE LANDS DESCRIBED IN OFFICAL RECORDS BOOK 4161, PAGE 173, ST. LUCIE COUNTY PUBLIC RECORDS

DEVELOPMENT DATA	
PROJECT NAME	25TH ST. SINGLE FAMILY
TAX PARCEL ID NO.	3405-443-0001-000-0
EXISTING FUTURE LAND USE	MEDIUM DENSITY RESIDENTIAL (RM)
PROPOSED FUTURE LAND USE	MEDIUM DENSITY RESIDENTIAL (RM)
EXISTING ZONING	RS-3
PROPOSED ZONING	PLANNED DEVELOPMENT ZONE (PD)
PROJECT USE	SINGLE-FAMILY RESIDENTIAL
MAXIMUM ALLOWABLE DENSITY	RS-3 - 6 DU/AC
PROPOSED DENSITY	PD - 3.81 DU/AC

OPEN SPACE CALCUALTION			
TOTAL AREA OF SUBJECT PARCEL	502,682 SF	11.54 AC	100.00%
REQUIRED OPEN SPACE AREA	100,536 SF	2.31 AC	20.00%
AREA OF WETLAND BUFFER	0 SF	0.00 AC	0.00%
AREA OF RETENTION PONDS*	30,161 SF	0.69 AC	6.00%
AREA OF GREEN SPACE	119,476 SF	2.74 AC	23.77%
PROVIDED OPEN SPACE AREA	149,637 SF	3.44 AC	29.77%

*PER SECTION 125-212(b)(3)...stormwater detention and retention facilities providing that no more than 30 percent of the overall open space requirement shall be satisfied in this manner

LAND USE BREAKDOWN			
TOTAL AREA OF SUBJECT PARCEL	502,682 SF	11.54 AC	100.00%
AREA OF ONSITE WETLAND	0 SF	0.00 AC	0.00%
AREA OF WETLAND BUFFER	0 SF	0.00 AC	0.00%
TOTAL DEVELOPMENT AREA	502,682 SF	11.54 AC	100.00%
TOTAL DEVELOPMENT AREA	502,682 SF	11.54 AC	100.00%
AREA OF PROPOSED BUILDINGS	150,000 SF	3.44 AC	29.84%
AREA OF PROPOSED IMPERVIOUS	63,131 SF	1.45 AC	12.56%
AREA OF PROPOSED LOT IMPERVIOUS	30,000 SF	0.69 AC	5.97%
AREA OF PROPOSED RETENTION BASE	32,933 SF	0.76 AC	6.55%
TOTAL PROPOSED IMPERVIOUS AREA	276,064 SF	6.34 AC	54.92%
AREA OF PROPOSED LOT PERVIOUS	80,253 SF	1.84 AC	15.96%
AREA OF PROPOSED RETENTION BANK	28,870 SF	0.66 AC	5.74%
AREA OF PROPOSED GREEN SPACE	119,476 SF	2.74 AC	23.77%
TOTAL PROPOSED PERVIOUS AREA	228,599 SF	5.25 AC	45.48%

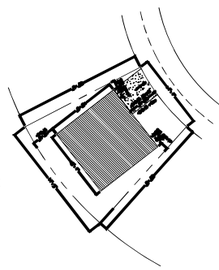
ZONING	PD
MIN. LOT SIZE	4,920 SF
MIN. LOT WIDTH	60'
MIN. LOT DEPTH	70' (82 PROPOSED)
MIN. ROAD FRONTAGE	25'
MAX. LOT COVERAGE	40%
BUILDING HEIGHT (1 STORY)	45'
MAX. GROSS DENSITY (DU/AC.)	12 DU/AC. (3.81 DU/AC. PROPOSED)
MIN. SETBACKS	
FRONT	15'
SIDE (INTERIOR)	5'
SIDE (CORNER)	5'
GARAGE	20'
REAR	15'

CIVIL ENGINEER
KMA ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
PHONE: (772) 569-5505

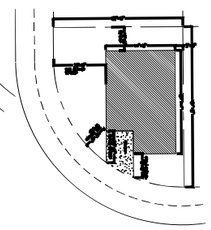
OWNER/DEVELOPER
DT VENTURES 1, LLC.
PO BOX 92280
ROCHESTER,NY 14692

NOTES

1. AIR CONDITIONER UNITS WILL HAVE A 5' SIDE SETBACK.



CURVATURE LOT DETAIL
SCALE: N.T.S.



CORNER LOT DETAIL
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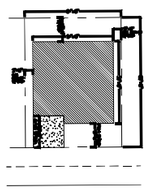

REGULAR LOT DETAIL
SCALE: N.T.S.

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3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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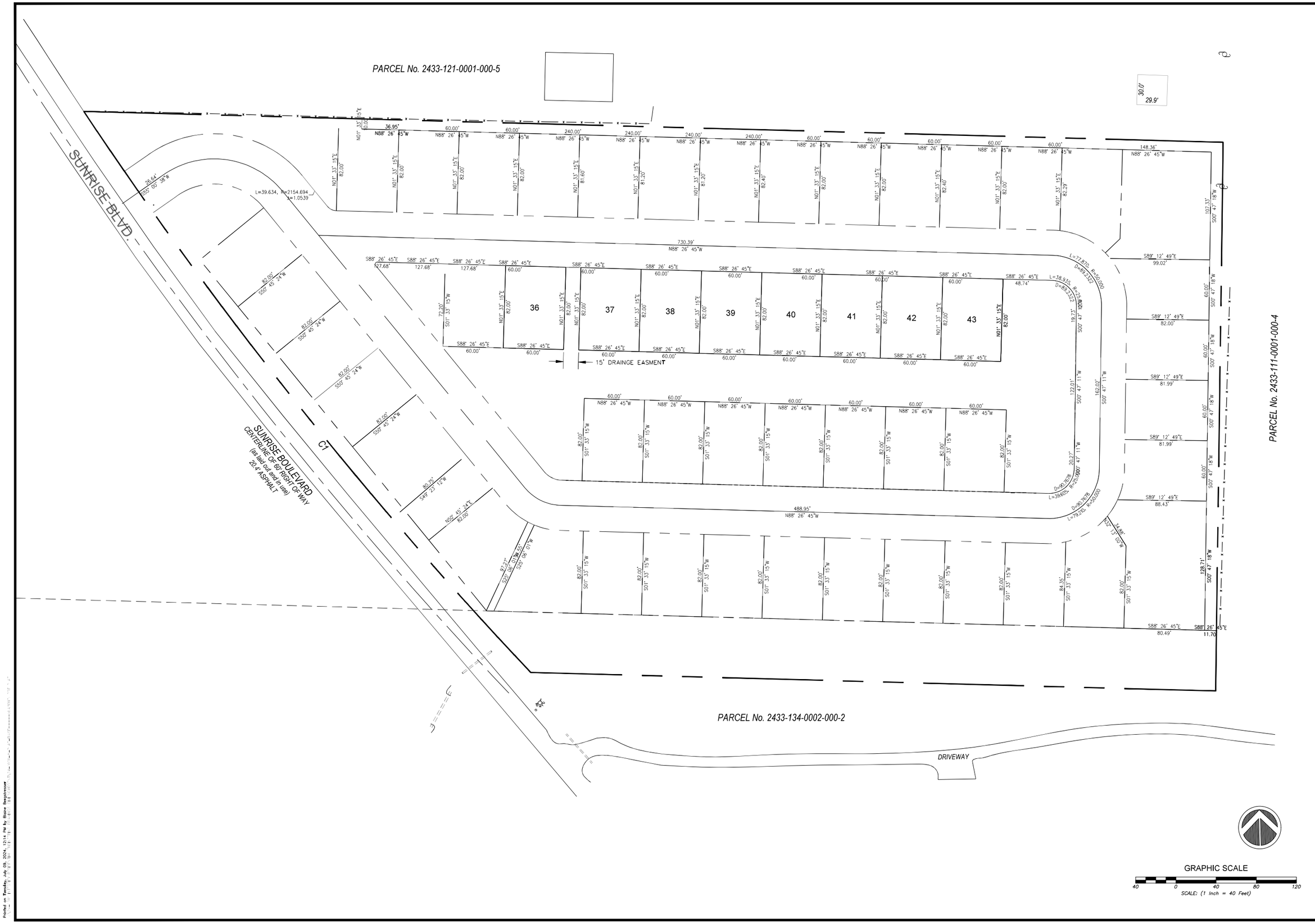
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-SITE

SHEET TITLE: SITE PLAN

SHEET NUMBER: C-200

Plotted on Tuesday, July 09, 2024, 12:14 PM by Blaine Bergstresser
I:\Projects\2024\24-1001 - 25th St. Single Family\Civil\Site\24-1001-SITE.dwg



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ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER
LICENSE
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

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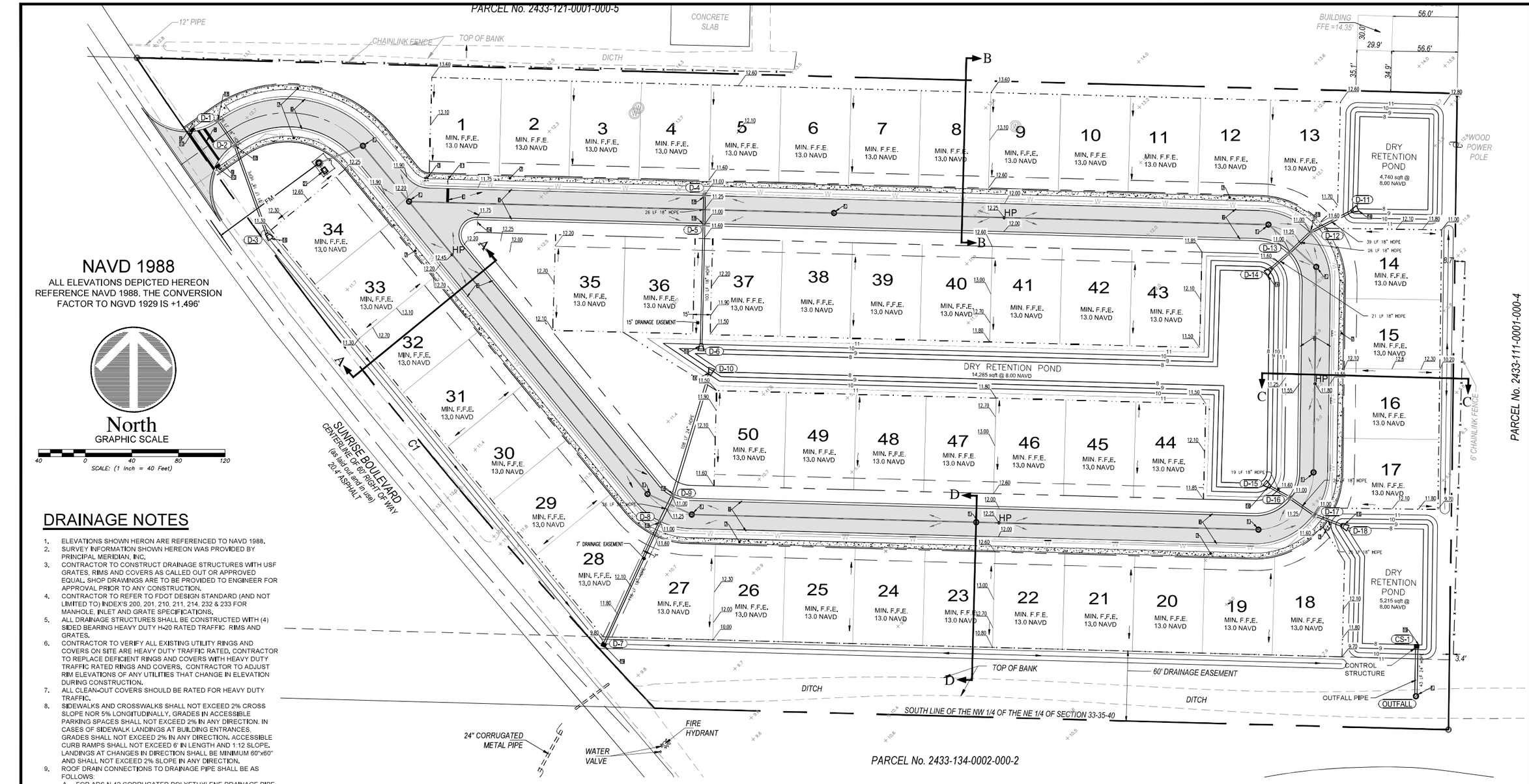
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-X-PLAT-BASE

SHEET TITLE:
PRELIMINARY PLAT

SHEET NUMBER:
C-201



NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988. THE CONVERSION FACTOR TO NGVD 1929 IS +1.496'

North

GRAPHIC SCALE

40 0 40 80 120

SCALE: (1 Inch = 40 Feet)

DRAINAGE NOTES

1. ELEVATIONS SHOWN HERON ARE REFERENCED TO NAVD 1988.
2. SURVEY INFORMATION SHOWN HEREON WAS PROVIDED BY PRINCIPAL MERIDIAN, INC.
3. CONTRACTOR TO CONSTRUCT DRAINAGE STRUCTURES WITH USF GRATES, RIMS AND COVERS AS CALLED OUT OR APPROVED EQUAL. SHOP DRAWINGS ARE TO BE PROVIDED TO ENGINEER FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
4. CONTRACTOR TO REFER TO FDOT DESIGN STANDARD (AND NOT LIMITED TO) INDEX'S 200, 201, 210, 211, 214, 232 & 233 FOR MANHOLE, INLET AND GRATE SPECIFICATIONS.
5. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED WITH (4) SIDED BEARING HEAVY DUTY H-20 RATED TRAFFIC RIMS AND GRATES.
6. CONTRACTOR TO VERIFY ALL EXISTING UTILITY RINGS AND COVERS ON SITE ARE HEAVY DUTY TRAFFIC RATED. CONTRACTOR TO REPLACE DEFICIENT RINGS AND COVERS WITH HEAVY DUTY TRAFFIC RATED RINGS AND COVERS. CONTRACTOR TO ADJUST RIM ELEVATIONS OF ANY UTILITIES THAT CHANGE IN ELEVATION DURING CONSTRUCTION.
7. ALL CLEAN-OUT COVERS SHOULD BE RATED FOR HEAVY DUTY TRAFFIC.
8. SIDEWALKS AND CROSSWALKS SHALL NOT EXCEED 2% CROSS SLOPE NOR 5% LONGITUDINALLY. GRADES IN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION. IN CASES OF SIDEWALK LANDINGS AT BUILDING ENTRANCES, GRADES SHALL NOT EXCEED 2% IN ANY DIRECTION. ACCESSIBLE CURB RAMPS SHALL NOT EXCEED 6' IN LENGTH AND 1:12 SLOPE. LANDINGS AT CHANGES IN DIRECTION SHALL BE MINIMUM 60"x60" AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.
9. ROOF DRAIN CONNECTIONS TO DRAINAGE PIPE SHALL BE AS FOLLOWS:
   A. FOR ADS N-12 CORRUGATED POLYETHYLENE DRAINAGE PIPE USE ADS DUAL WALL FABRICATED REDUCING SADDLE TEE 4"-24" DIAMETER.
   B. FOR RCP DRAINAGE PIPE MAKE CONNECTION PER FDOT INDEX 280,CONCRETE COLLAR FOR JOINING MAINLINE PIPE AND STUB PIPE DETAIL
   C. NOTIFY CONSULTANT FOR CONNECTION METHOD TO STEEL PIPE.
10. ALL DRAINAGE PIPE JOINTS SHALL BE FILTER FABRIC WRAPPED PER FDOT INDEX #280, ALL DRAINAGE PIPE JOINTS NEED TO BE FILTER FABRIC WRAPPED REGARDLESS OF MATERIAL.
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
12. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE.
13. EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
14. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION.
15. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
16. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
17. ALL CATCH BASINS WITHIN PROPOSED TRAFFIC AREAS SHALL HAVE BICYCLE PROOF GRATES.
18. CONTRACTOR TO FLUSH AND VACUUM ENTIRE ON-SITE STORM WATER SYSTEM UPON COMPLETION OF PROPOSED WORK.
19. MINIMUM DRAINAGE PIPE SHALL BE 15 INCHES PER CITY OF FORT PIERCE LAND DEVELOPMENT ORDINANCE SEC 119-3 DESIGN STANDARDS; STORMWATER MANAGEMENT; APPROVALS.

DRAINAGE STRUCTURE TABLE

CONSTRUCT D-1
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-2
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-3
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-4
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-5
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-6
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-7
TYPE 'C' D.B.I.
GRATE TOP = 10.00
N INV = 7.00
SUMP = 6.00

CONSTRUCT D-8
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-9
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-10
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-11
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-12
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-13
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-14
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-15
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT D-16
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-17
MIAMI CURB INLET
GRATE TOP = 11.00
W INV = 8.00
S INV = 8.00
SUMP = 7.00

CONSTRUCT D-18
CONCRETE END SECTION
E INV = 9.00

CONSTRUCT CS-1
TYPE 'C' D.B.I.
GRATE TOP = 18.50
ORIFICE =
S INV = 6.00
SUMP = 5.00

CONSTRUCT OUTFALL

CONSTRUCTION NOTES

1	SEWER MANHOLE
2	LIFT STATION
3	FIRE HYDRANT
4	FDOT TYPE 'D' CURB
5	FDOT TYPE 'F' CURB
6	MODIFIED MIAMI CURB
7	CONCRETE SIDEWALK per DETAIL
8	CROSSWALK per DETAILS
9	CURB RAMP per DETAILS
10	2' TACTILE SURFACE
11	R1-1 STOP SIGN
12	W11-2 PEDISTRIAN SIGN w/ W16-7PL
13	R2-1 SPEED SIGN
14	D3 STREET NAME SIGN
15	MITERED END SECTION
16	FLARED END SECTION
17	YARD DRAIN per DETAIL
18	MIAMI CURB INLET
19	DITCH BOTTOM INLET

HATCH PATTERN L LEGEND

- DENOTES ASPHALT PAVEMENT
- DENOTES CONCRETE PAVEMENT
- DENOTES RIGHT-OF-WAY DEDICATION

STRIPING NOTES

A	6" SOLID WHITE
B	6" DOUBLE YELLOW
C	12" SOLID WHITE
D	18" SOLID WHITE
E	24" SOLID WHITE
F	R.P.M.'s per FDOT INDEX 706-001
G	6" WHITE (6'-10' SKIP)
H	6" WHITE (10'-30' SKIP)
J	6" WHITE (2'-4' SKIP)
K	TURN ARROW per FDOT INDEX 711-001
L	18" YELLOW STRIPE

LINEWORK & SYMBOL LEGEND

- DENOTES PROPERTY BOUNDARY
- DENOTES RIGHT-OF-WAY
- DENOTES CENTERLINE
- DENOTES EASEMENT
- DENOTES FENCE LINE
- DENOTES DRAINAGE PIPE
- (S) DENOTES SEWER MANHOLE
- DENOTES FIRE HYDRANT
- DENOTES GATE VALVE
- DENOTES LIGHT POLE
- DENOTES STREET SIGN
- DENOTES RUNOFF OVERLAND FLOW
- 20.5 / 20.0 DENOTES PROPOSED ELEVATIONS
- x 22.0 DENOTES EXISTING GRADES
- DENOTES DRAINAGE STRUCTURE refer to table this sheet
- DENOTES DITCH BOTTOM INLET
- (J) DENOTES JUNCTION BOX
- (Y) DENOTES YARD DRAIN
- (D) DENOTES DRAINAGE STRUCTURE
- DENOTES MITERED/FLARED END SECTION

PARCEL No. 2433-111-0001-000-4

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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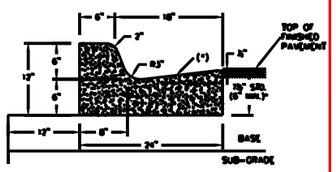
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-PGD

SHEET TITLE: MASTER PAVING GRADING & DRAINAGE PLAN

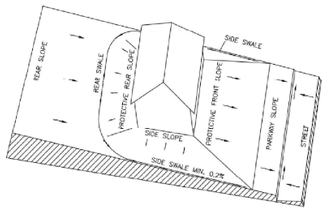
SHEET NUMBER: C-300

Printed on Tuesday, July 09, 2024 - 12:15 PM by Blaine Bergstresser
I:\Projects\2024\24-1001 - Integrity 1st - Sunrise Lakes\Civil\Plan Set\24-1001-PGD.dwg



* WHEN USED ON HIGH SIDE OF ROADWAYS, THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6" UNLESS OTHERWISE SHOWN ON THE PLANS. ASPHALT SURFACE ON HIGH SIDE TO BE FLUSH WITH LIP OF CURB OR CURB & GUTTER.

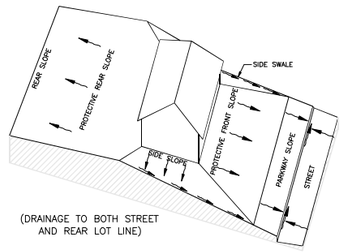
TYPE "F" CURB AND GUTTER
N.T.S



(DRAINAGE TO STREET)

NOTES:
1. ALL SLOPES GREATER THAN 6:1 SHALL BE SODDED.
2. ROOF RUNOFF FROM SIDES AND REAR OF HOUSES SHALL BE DIRECTED TOWARD SIDE AND REAR YARD SWALES ACCORDINGLY.

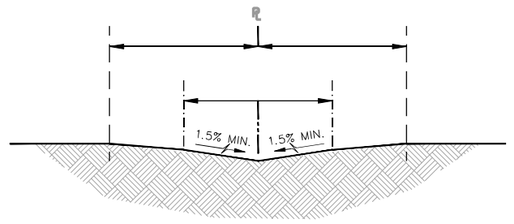
TYPE 'A' LOT GRADING DETAIL
N.T.S.



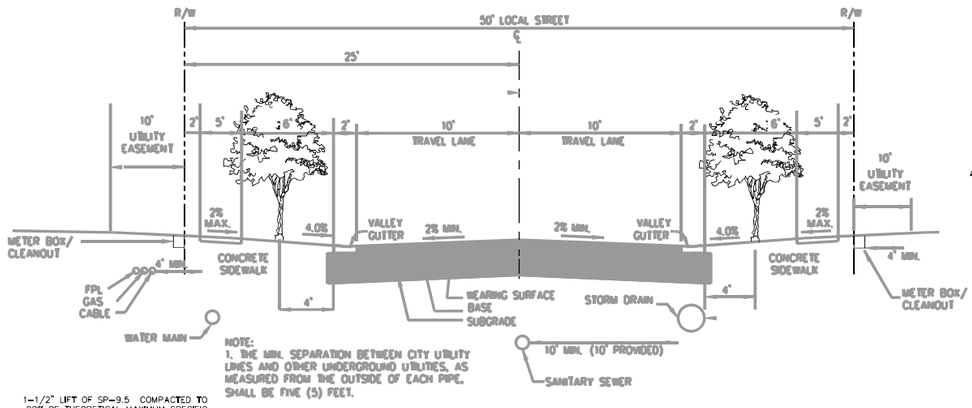
(DRAINAGE TO BOTH STREET AND REAR LOT LINE)

NOTES:
1. ALL SLOPES GREATER THAN 6:1 SHALL BE SODDED.
2. ROOF RUNOFF FROM SIDES AND REAR OF HOUSES SHALL BE DIRECTED TOWARD SIDE AND REAR YARD SWALES ACCORDINGLY.

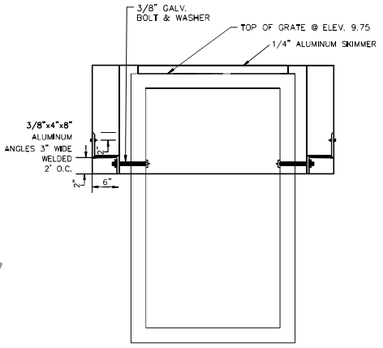
TYPE 'B' LOT GRADING DETAIL
N.T.S.

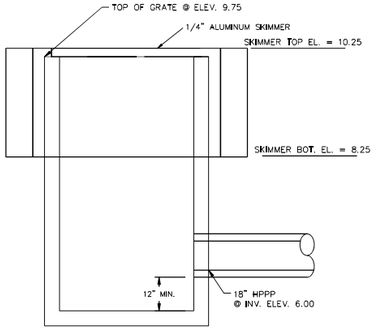


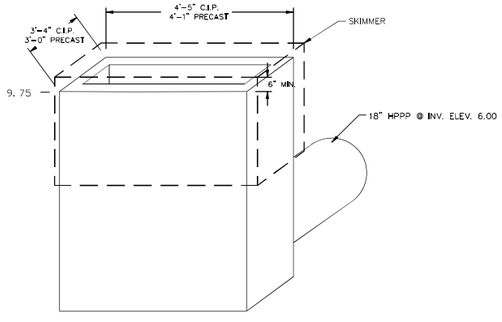
TYPICAL LOT SWALE SECTION
N.T.S.



NOTE:
1. THE MIN. SEPARATION BETWEEN CITY UTILITY LINES AND OTHER UNDERGROUND UTILITIES, AS MEASURED FROM THE OUTSIDE OF EACH PIPE, SHALL BE FIVE (5) FEET.

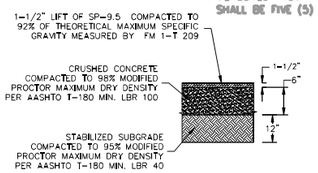






CONTROL STRUCTURE NOTES:
1. CONTRACTOR TO REFER TO FDOT FY 2021-22 STANDARD PLANS INDEX 425-052 FOR REBAR SPACING AND SIZING.

CONTROL STRUCTURE (CS-01)
FDOT TYPE 'C' STRUCTURE



STANDARD DUTY ASPHALT
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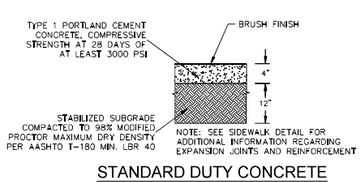
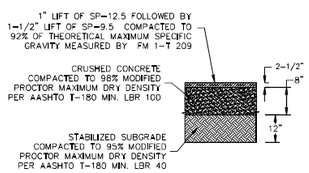
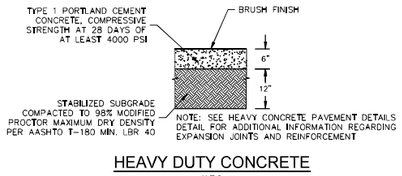


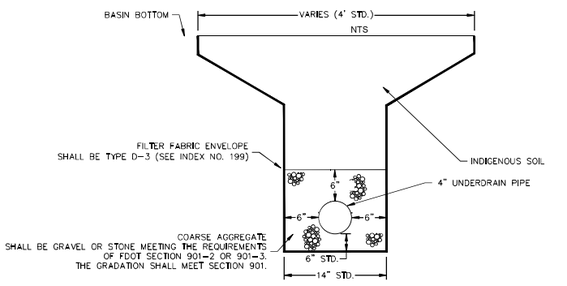
STANDARD DUTY CONCRETE
N.T.S



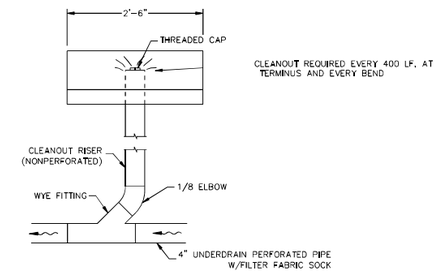
HEAVY DUTY ASPHALT
N.T.S



HEAVY DUTY CONCRETE
N.T.S



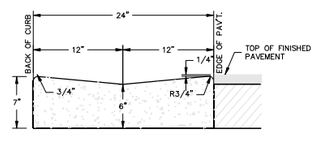
UNDERDRAIN TRENCH
N.T.S



NOTE:
CONTRACTOR TO REFER TO THE GEOTECHNICAL REPORT FOR SITE WORK SPECIFICATIONS.

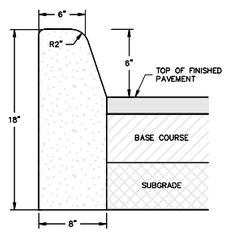
CRUSHED CONCRETE SHALL BE FROM AN FDOT APPROVED PLANT.

CRUSHED CONCRETE GRADATION SHALL BE AVAILABLE ON SITE AND SUBMITTED FOR THE AS-BUILT.



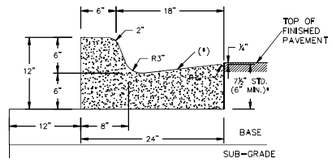
ALL CONCRETE SHALL BE 3,000 PSI

VALLEY GUTTER SECTION
PGKH21A.DWG N.T.S.



ALL CONCRETE SHALL BE 3,000 PSI

TYPE "D" CURB
PGKH22A.DWG N.T.S.



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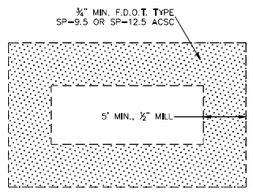
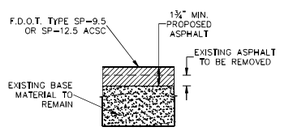
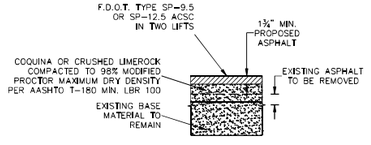
TYPE "F" CURB AND GUTTER
N.T.S



OPTION #1
MILL AND RESURFACE



OPTION #2
PAVEMENT REMOVAL AND OVERLAY



OPTION #3
PAVEMENT REMOVAL AND OVERLAY WITH ADDITIONAL BASE MATERIAL

ASPHALT PAVEMENT RESTORATION
N.T.S

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I:\...\Engineering\C-301 Paving Grading & Drainage Details.dwg

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ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
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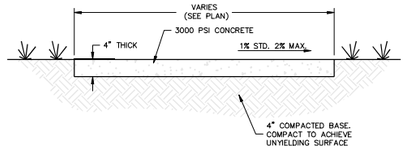
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-PGD

SHEET TITLE:
PAVING GRADING & DRAINAGE DETAILS

SHEET NUMBER:
C-301

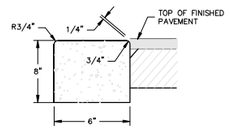


NOTE
SEE SITE PLAN FOR SPECIFIC SIDEWALK LOCATIONS.

SIDEWALK CONSTRUCTION SHALL BE PER FDOT DESIGN STANDARDS INDEX 522-001. DETECTABLE WARNINGS AND CURB RAMPS SHALL BE PER INDEX 522-002.

TYPICAL 4" SIDEWALK SECTION

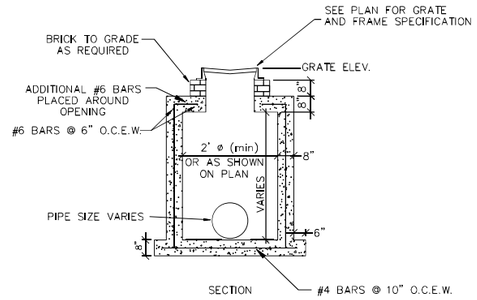
N.T.S.



ALL CONCRETE SHALL BE 3,000 PSI

6" EDGE CURB

PGKH24A.DWG N.T.S.



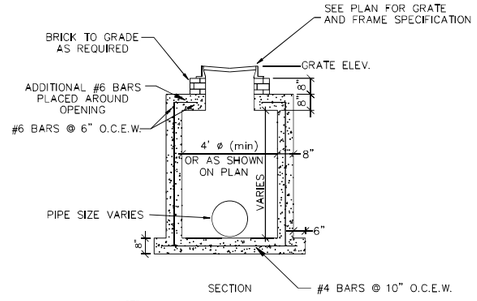
NOTE:

1. TYPE II CEMENT 4000 P.S.I.

2. WALL REINFORCEMENT A.S.T.M. DESIGNATION A185-64 OR EQUAL TO A.S.T.M. C-478.

TYPE C STORM INLET DETAIL

N.T.S



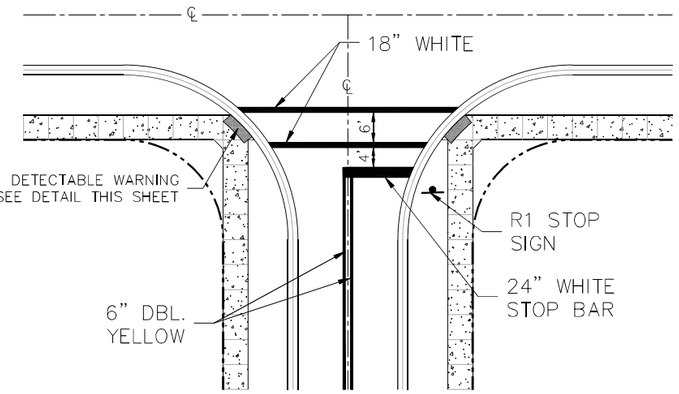
NOTE:

1. TYPE II CEMENT 4000 P.S.I.

2. WALL REINFORCEMENT A.S.T.M. DESIGNATION A185-64 OR EQUAL TO A.S.T.M. C-478.

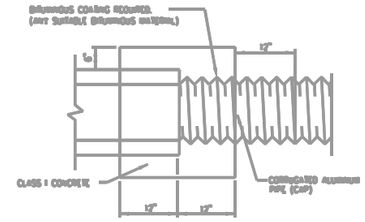
TYPE D STORM INLET DETAIL

N.T.S



TYPICAL CROSSWALK AND STOP BAR DETAIL

N.T.S.



CONCRETE COLLAR DETAIL

N.T.S.

TABLE OF SIDEWALK THICKNESS - 'T'	
LOCATION	'T'
RESIDENTIAL AREAS	4"
AT DRIVEWAYS AND OTHER AREAS	6"

NOTE: CONCRETE TO BE 3,000 P.S.I. AT 28 DAYS

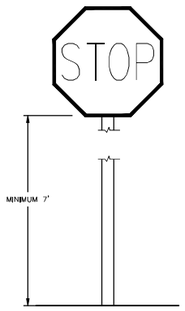
TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
'A'	P.C. AND P.T. OF CURVES.
'B'	5'- 0" CENTER TO CENTER ON SIDEWALKS. (NOT LESS THAN 4' AND NOT GREATER THAN 10')
'C'	WHERE SIDEWALK ABUTS CONCRETE CURBS, DRIVEWAYS AND SIMILAR STRUCTURES. JUNCTION OF EXISTING AND NEW SIDEWALKS AT INTERVALS NOT GREATER THAN 100'.



R1-1
30" X 30"

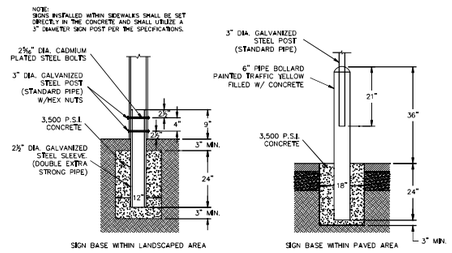
STOP SIGN DIMENSIONS

N.T.S.



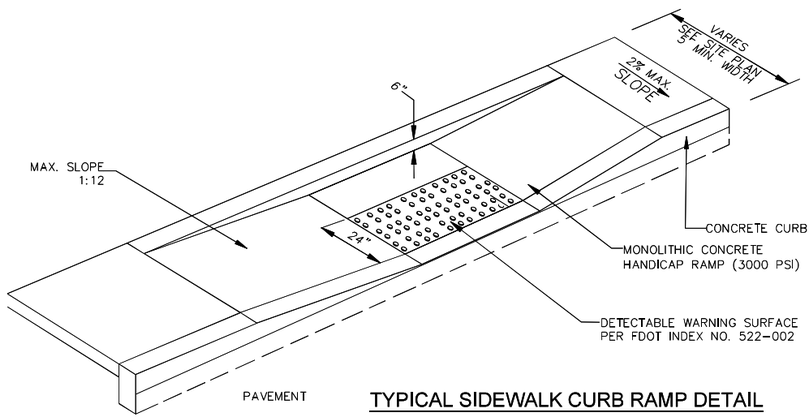
REQUIRED SIGN HEIGHT

N.T.S

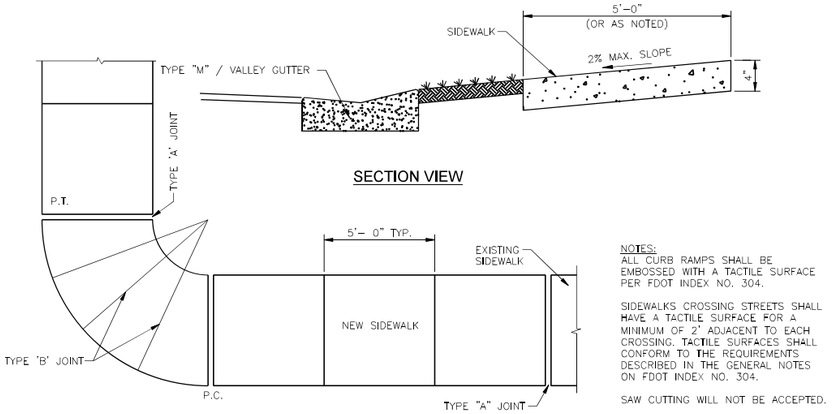


SIGN BASE

N.T.S



TYPICAL SIDEWALK CURB RAMP DETAIL



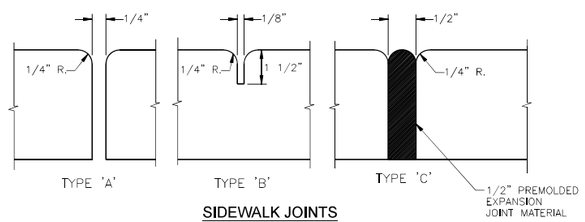
SECTION VIEW

PLAN

NOTES:
ALL CURB RAMPS SHALL BE EMBOSSED WITH A TACTILE SURFACE PER FDOT INDEX NO. 304.

SIDEWALKS CROSSING STREETS SHALL HAVE A TACTILE SURFACE FOR A MINIMUM OF 2' ADJACENT TO EACH CROSSING. TACTILE SURFACES SHALL CONFORM TO THE REQUIREMENTS DESCRIBED IN THE GENERAL NOTES ON FDOT INDEX NO. 304.

SAW CUTTING WILL NOT BE ACCEPTED.



SIDEWALK JOINTS

SIDEWALK CONSTRUCTION

N.T.S.

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
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02/24/2022

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CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-PGD

SHEET TITLE:
PAVING GRADING & DRAINAGE DETAILS

SHEET NUMBER:
C-302

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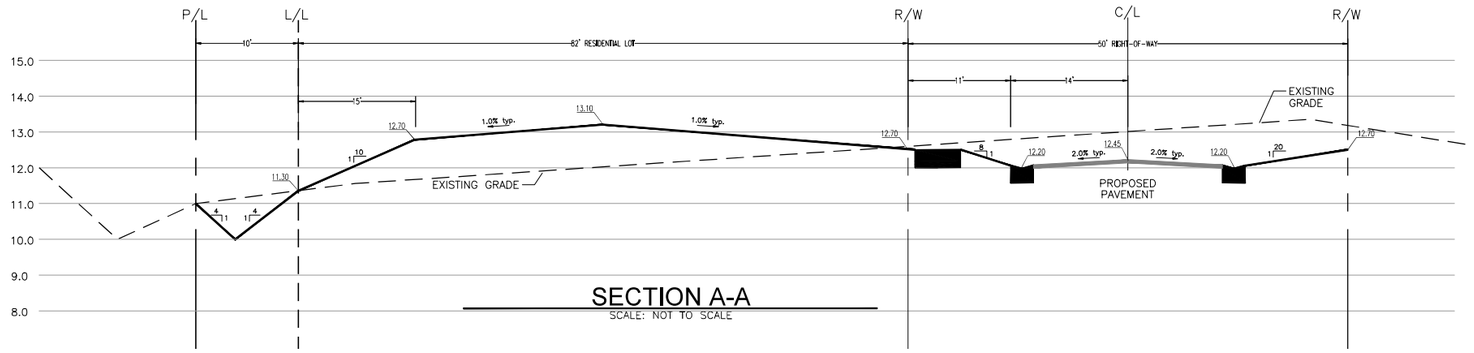
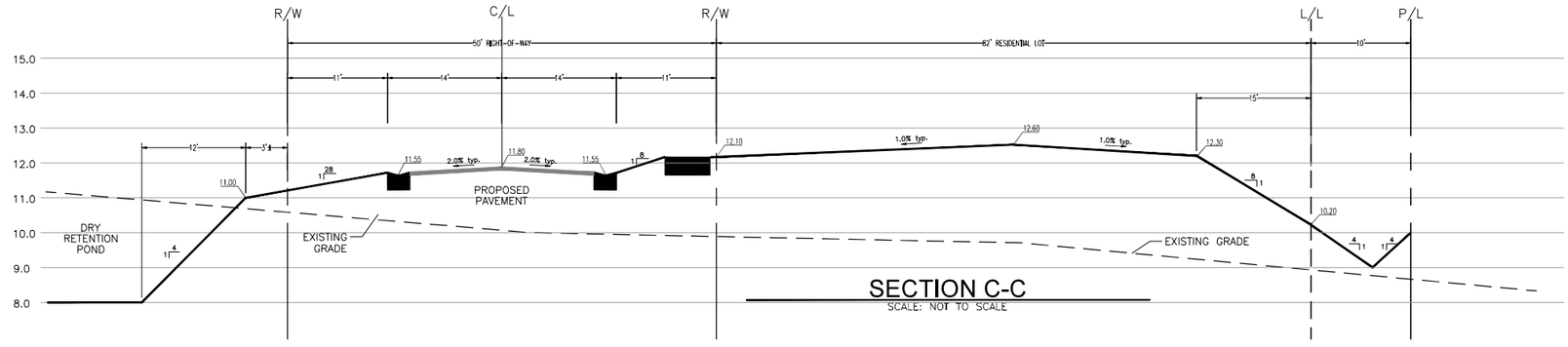


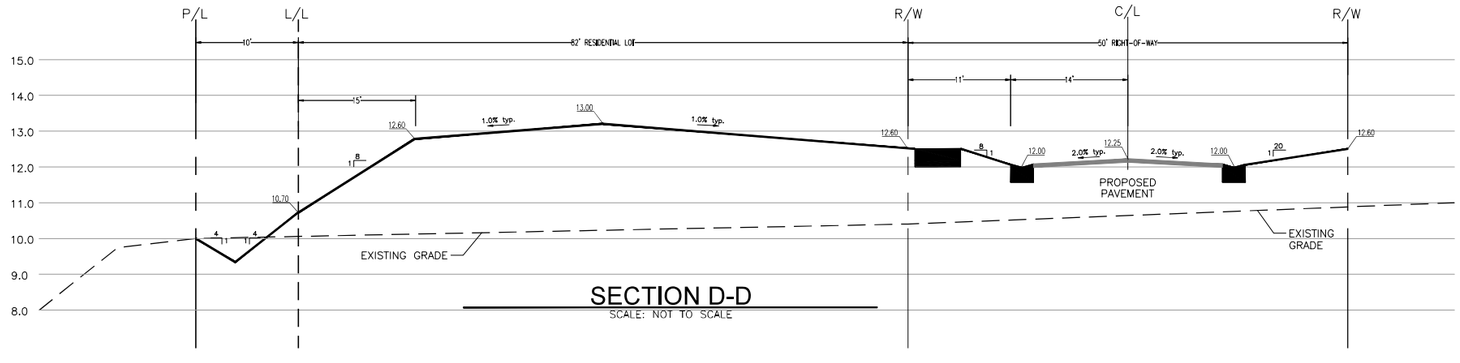
SECTION A-A
SCALE: NOT TO SCALE



SECTION B-B
SCALE: NOT TO SCALE



SECTION C-C
SCALE: NOT TO SCALE



SECTION D-D
SCALE: NOT TO SCALE

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FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER
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FLORIDA LICENSE No. 84598
02/24/2022

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CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-PGD

SHEET TITLE:
GRADING SECTIONS

SHEET NUMBER:
C-303

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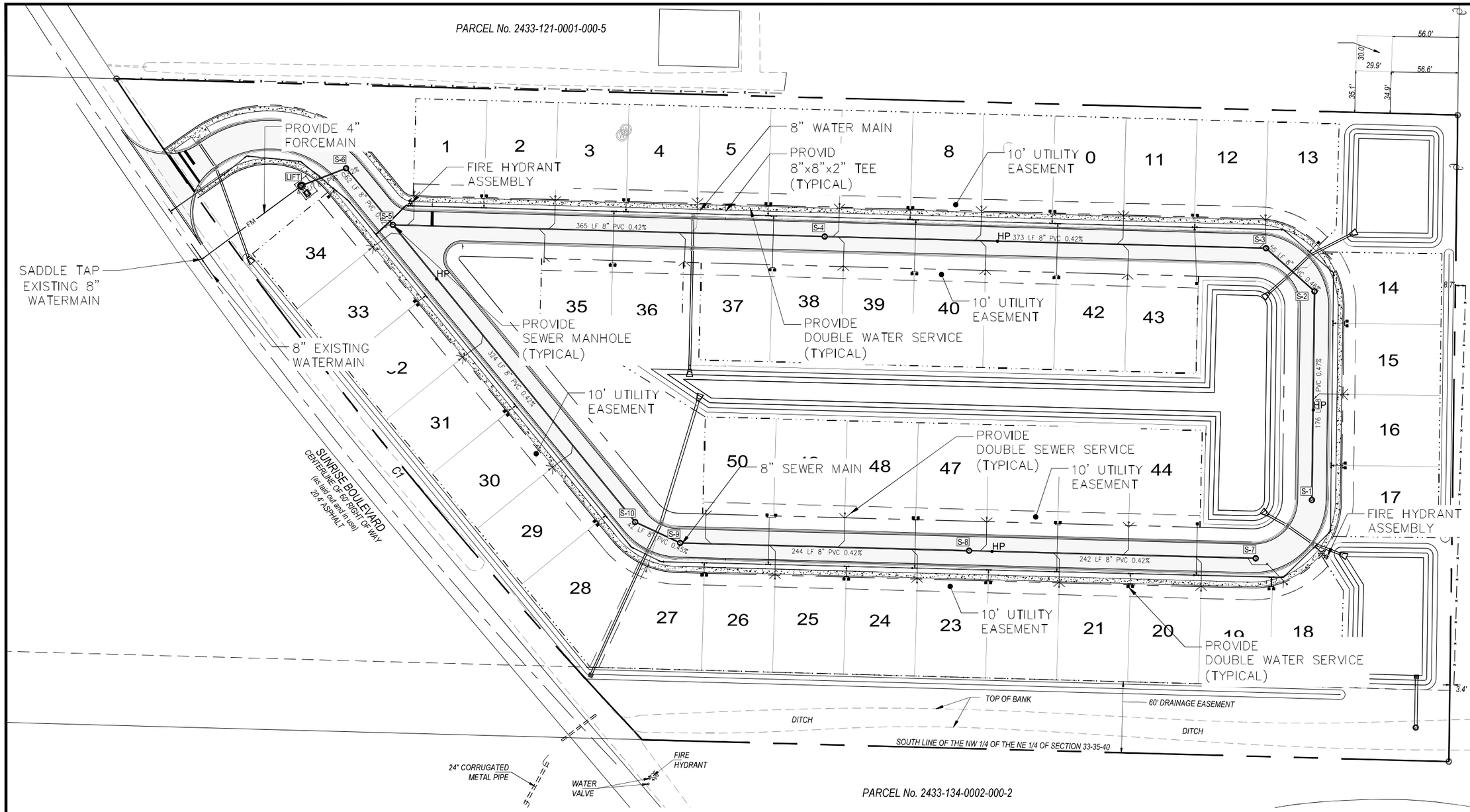

UTILITY NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPREITE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
3. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
4. SANITARY SEWER PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS:
   8" PVC SDR26 PER ASTM D 3034 DEPTHS LESS THAN 15'
5. WATER LINES SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON PLANS:
   6" AND LARGER, PVC C-900 PER ASTM D 2241
   CLASS 200 UNDER ROADS, OTHERWISE CLASS 150
6. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 36" COVER ON ALL WATERLINES AND FORCEMAINS.
9. CROSSINGS AND CONFLICTS MUST BE PER FPUA SPECIFICATIONS.
10. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
11. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 COMPRESSION STRENGTH AT 3000 P.S.I.
12. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
13. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320 FAC.
14. VALVES ARE NOT TO BE PLACED IN CURBS, SIDEWALKS, OR DRIVEWAYS.
15. ALL MANHOLES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO BEGINNING PAVING.
16. DRIVEWAY APRON IS SHOWN FOR REFERENCE ONLY. DRIVEWAYS ARE TO BE CONSTRUCTED AND PERMITTED AS PART OF THE BUILDING PERMIT PROCESS.
17. TRACER WIRE MUST BE INSTALLED PER FPUA SPEC./QPL.
18. THE PROPERTY OWNER, CONTRACTOR,AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICK UP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROPERTY LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FORM THE EDGE OF PAVEMENT TO THE PROPERTY LINE.

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR REVIEWING THE PROJECT DESIGN AND NOTIFYING OWNER AND ENGINEER OF ANY POTENTIAL COST SAVINGS, CONFLICTS, OR DISCREPANCIES IN PLANS PRIOR TO FINAL CONTRACT FOR CONSTRUCTION.
2. CONTRACTOR AND SURVEYOR SHALL COORDINATE WITH KMA ENGINEERING & SURVEYING DAILY PRIOR TO CONSTRUCTION STAKE OUT TO ASSURE PROPER CONSTRUCTION.
3. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE UNDERGROUND UTILITY NOTIFICATION CENTER AT 811 AND ANY OTHER POTENTIALLY AFFECTED UTILITY PROVIDERS FOR INSTALLATION OF NECESSARY CONDUIT AND CONFLICT AVOIDANCE, ANY NECESSARY UTILITY ADJUSTMENTS/RELOCATIONS, AND FOR GENERAL COORDINATION WITH THESE UTILITY PROVIDERS: FLORIDA POWER AND LIGHT, CITY OF FELLSMERE UTILITY DEPARTMENT, INDIAN RIVER COUNTY UTILITY DEPARTMENT, COMCAST CABLE, AT&T & FLORIDA GAS.
4. CONTRACTOR IS TO EXERCISE CAUTION WHEN WORKING NEAR OVERHEAD OR UNDERGROUND UTILITY LINES. THE LOCATIONS OF THE UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE AND ARE THE RESPONSIBILITY OF THE CONTRACTOR AND UTILITY PROVIDER TO FIELD LOCATE PRIOR TO WORKING IN THE AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY DAMAGED UTILITIES RESULTING FROM THE CONTRACTOR'S WORK.
5. THE CONTRACTOR SHALL VERIFY ALL EXISTING TIE-INS FOR DRAINAGE, WATER, SEWER, PAVING, AND ELEVATIONS, AS NECESSARY, PRIOR TO CONSTRUCTION COMMENCEMENT. THE CONTRACTOR SHALL VERIFY THE ACCURACY AND SUITABILITY OF ALL CONSTRUCTION STAKE-OUTS PRIOR TO COMMENCEMENT OF CONSTRUCTION TO ASSURE COMPLIANCE WITH PLANS, CROSS SECTIONS, DETAILS, AND PERMITS.
6. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT ALL CONSTRUCTION PERMITS AND BONDS HAVE BEEN ACQUIRED PRIOR TO COMMENCING CONSTRUCTION. A COPY OF THE APPROVED CONSTRUCTION PLAN AND ALL PERMITS AND BONDS SHALL BE LOCATED ON THE JOB SITE AT ALL TIMES.
7. THE CONTRACTOR SHALL ENSURE ADEQUATE HORIZONTAL AND VERTICAL SEPARATION AS NECESSARY FOR FDEP AND LOCAL UTILITY PROVIDER SPECIFICATIONS (INCLUDING SERVICES). THESE SEPARATION DISTANCES SHALL BE MEASURED BY THE SURVEYOR AND SUPPLIED TO THE PROJECT ENGINEER ON AS-BUILT PLANS. CONTRACTOR SHALL RECORD ALL SEPARATION DISTANCES ON FIELD SET OF CONSTRUCTION DOCUMENTS.
8. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING ALL MATERIALS AND LABOR TO COMPLETELY CONSTRUCT THE PROJECT AS SHOWN ON THE PLANS AND IN CONFORMANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
9. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT AN AS-BUILT SURVEY CERTIFIED BY A REGISTERED, LICENSED SURVEYOR OF ALL CONSTRUCTED IMPROVEMENTS AT PROJECT COMPLETION.
10. NO DESIGN CHANGES ARE TO OCCUR TO THE APPROVED CONSTRUCTION PLANS WITHOUT PRIOR APPROVAL OF THE PROJECT ENGINEER.

UTILITIES LEGEND

- DENOTES PROPERTY BOUNDARY
- DENOTES RIGHT-OF-WAY
- DENOTES CENTERLINE
- DENOTES EASEMENT
- DENOTES FENCE LINE
- DENOTES WATER MAIN (WM)
- DENOTES FORCE MAIN (FM)
- DENOTES SEWER MAIN (S)
- DENOTES STORM DRAIN
- DENOTES SEWER MANHOLE
- DENOTES FIRE HYDRANT
- DENOTES GATE VALVE
- DENOTES BLOW-OFF & SAMPLE POINT
- DENOTES BEND FITTING
- DENOTES TEE FITTING
- DENOTES WATER SERVICE
- DENOTES SEWER SERVICE
- DENOTES MITERED END SECTION
- DENOTES DITCH BOTTOM INLET
- DENOTES DRAINAGE STRUCTURE
- DENOTES YARD DRAIN
- DENOTES LIGHT POLE

North
GRAPHIC SCALE
40 0 40 80 120
SCALE: (1 Inch = 40 Feet)

NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988. THE CONVERSION FACTOR TO NGVD 1929 IS +1.496'

PARCEL No. 2433-111-0001-000-4

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

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02/24/2022

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DATE:	04/02/2024
CAD I.D.	24-1001-UTILITIES

SHEET TITLE: MASTER UTILITIES PLAN

SHEET NUMBER: C-400

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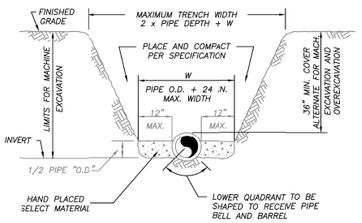
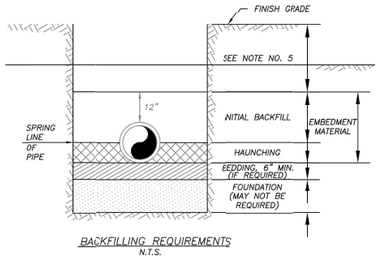


NOTES:

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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	

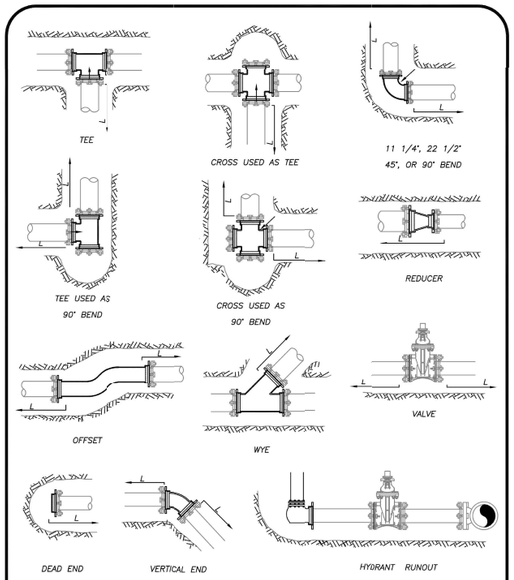


BACKFILLING REQUIREMENTS
N.T.S.

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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	



MECHANICAL JOINT ANCHORING REQUIREMENTS
N.T.S.

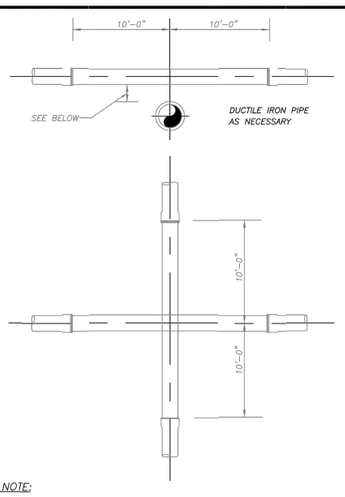
MECHANICAL JOINT ANCHORING REQUIREMENTS			M-3
03-09 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	

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 OF 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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	

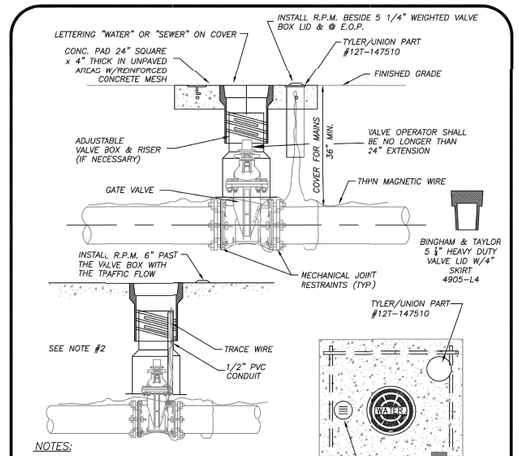


NOTE:

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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	



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 DATE:	CONCRETE SLAB REVISION:	SLL BY:	JLC APPD:
DESIGNED: JLC	COMPUTER FILE #: MISC. DETAILS 200602.DWG		WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE:		FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2015	SHEET: 1 OF 1	

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.: 24-1001
DRAWN BY: SCB
CHECKED BY: BRB
DATE: 04/02/2024
CAD I.D.: 24-1001-FPUA DETAILS

SHEET TITLE: FPUA DETAILS-01

SHEET NUMBER: C-500

Plotted on Tuesday, July 09, 2024, 12:16 PM by Blaine Bergstresser
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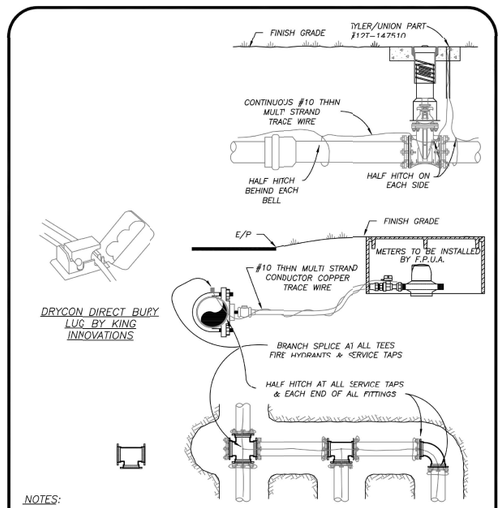


NOTES:

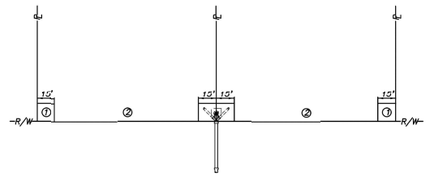
1) TRACE WIRE IS REQUIRED ON ALL PIPE AS NOTED BY UTILITIES ENGINEER AND SHOWN IN STANDARD DETAILS.
2) INCLUDE ALL COST OF MATERIAL & LABOR IN PRICE OF PIPE.
3) CONTRACTOR IS RESPONSIBLE FOR CONTINUITY OF ALL TRACE WIRE.

TRACE WIRE
(N.T.S.)

FPUA COMMUNITY PROUD	TRACE WIRE DETAIL	M-11
03-09 DATE: CONCRETE SLAB REVISION: SLL BY: JLC APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE:	
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1

GENERAL POLICY

WHERE COST JUSTIFIED AND OPERATIONALLY FEASIBLE, IT IS THE GEVERAL POLICY OF THE F.P.U.A. TO PROVIDE WATER, ELECTRIC, SEWER AND GAS SERVICE FROM THE STREET SIDE OF A PIECE OF PROPERTY. DEPENDING ON FACTORS SUCH AS LOCATION OF EXISTING SUPPLY SOURCE FACILITIES, REAR OR SIDE LOT LINE SUPPLY MAY BE AUTHORIZED, BUT ONLY WITH PRIOR APPROVAL FROM THE F.P.U.A.

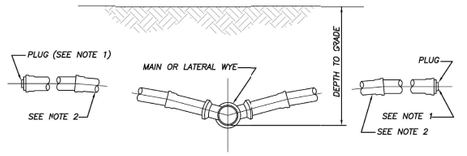


NOTES:

1. THE PREFERRED POINT OF CONNECTION TO THE F.P.U.A. SEWER LATERAL, AREA ①, SHALL BE LOCATED IN THE CORNER OF THE PROPERTY SELECTED BY THE F.P.U.A. AS THE BEST LOCATION FOR THE LATERAL. EVERY EFFORT WILL BE MADE TO SELECT THE CORNER WHERE TWO LATERALS CAN BE CONNECTED IN A "Y" CONFIGURATION AS SHOWN.
2. IF PHYSICAL BARRIERS OR OTHER OBSTACLES PREVENT THE CONNECTION OF THE BUILDING SERVICE LINE TO THE F.P.U.A. SEWER LATERAL WITHIN AREA ①, THE F.P.U.A. ENGINEERING DEPARTMENT MAY AUTHORIZE THE CONNECTION ALONG THE PORTION OF THE R/W LINE MARKED AREA ②.
3. HORIZONTAL SEPARATION OF WATER AND WASTEWATER SERVICES SHOULD BE A MINIMUM OF SIX FEET AND PREFERABLY 10 FEET.
4. THE WASTEWATER LATERAL SHALL BE LOCATED WITHIN RIGHT-OF-WAY AND TERMINATE AT THE PROPERTY LINE.
5. THE F.P.U.A. SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF THE WASTEWATER LATERAL WITHIN THE EASEMENT OR RIGHT-OF-WAY, UP TO THE POINT OF CONNECTION.

WASTEWATER SERVICE PLACEMENT
(N.T.S.)

FPUA COMMUNITY PROUD	WASTEWATER SERVICE PLACEMENT POLICY	S-1
02-08 DATE: 02-15 REVISION: SLL BY: JLC APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1

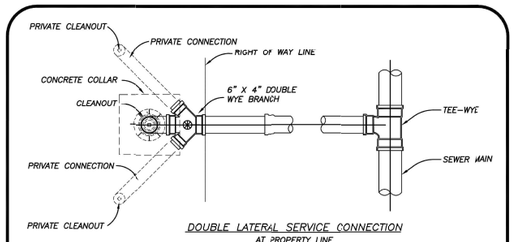


NOTES:

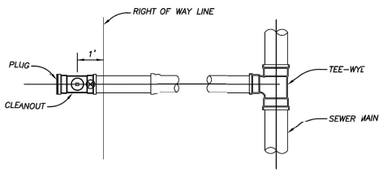
1) BALL TYPE WASTEWATER LOCATOR BY 3M CORP. OR APPROVED EQUAL.
2) MINIMUM SLOPE OF 1/8" PER FOOT, USE GREATER SLOPE WHERE POSSIBLE.
3) SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT.
4) INSTALL CLEANOUT AT THE PROPERTY LINE. REFER TO DETAIL S-1 FOR SPECIFIC PROPERTY LAYOUT.

SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD	SERVICE CONNECTION WASTEWATER	S-2
02-08 DATE: REVISION: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1



DOUBLE LATERAL SERVICE CONNECTION
AT PROPERTY LINE

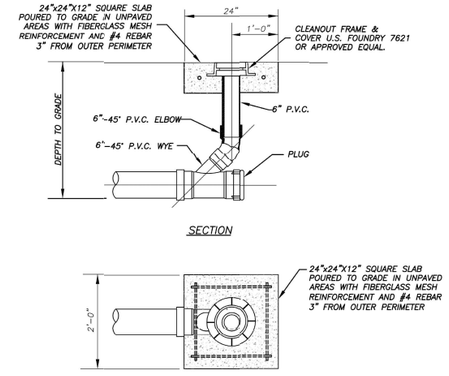


SINGLE SERVICE LATERAL CONNECTION

⊛ = 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.)

FPUA COMMUNITY PROUD	SERVICE CONNECTION WASTEWATER	S-3
02-08 DATE: REVISION: BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 312602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1



SECTION

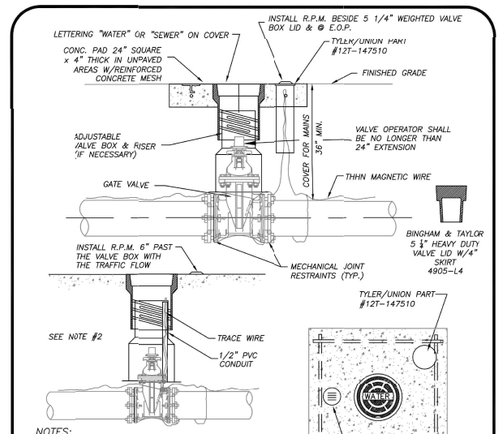
PLAN

NOTES:

1) SEE DETAIL S-3 FOR DOUBLE SERVICE CONNECTION.

RESIDENTIAL CLEANOUT DETAIL
(N.T.S.)

FPUA COMMUNITY PROUD	TERMINAL CLEANOUT DETAIL RESIDENTIAL	S-4A
10-06 DATE: REVISION: RBE BY: APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # SEWER DETAIL 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 3



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.

FPUA COMMUNITY PROUD	TYPICAL GATE VALVE & VALVE BOX DETAIL	M-6
03-04 DATE: CONCRETE SLAB REVISION: SLL BY: JLC APPD:		WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG	FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE:	
APPROVED: JLC	DATE: 2015	SHEET 1 OF 1

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ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

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PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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DATE: 04/02/2024
CAD I.D.: 24-1001-FPUA DETAILS

SHEET TITLE:
FPUA DETAILS-02

SHEET NUMBER:
C-501

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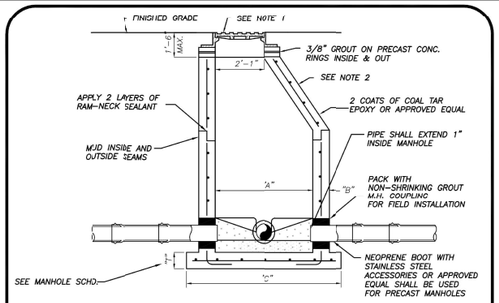


PIPE DIA.	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	4'-0"	"B"	76"	8"
30"-36"	5'-0"	"B"	88"	10"
42"-48"	6'-0"	"B"	100"	12"

TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.

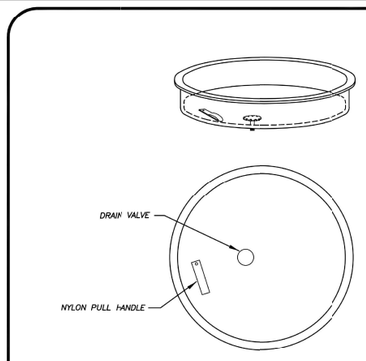
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.

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.)

FPUA COMMUNITY PROUD	PRECAST MANHOLE DEPTH 5'- 0" & GREATER	S-7
02-08 DATE: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # SEWER DETAIL 200602.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



NOTES:

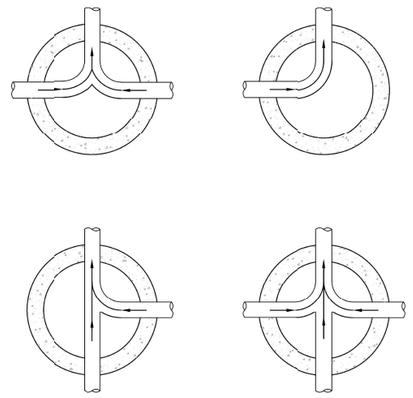
1) SEWER RAIN GUARDS SHALL BE INSTALLED ON ALL MANHOLES WHERE GRAVITY MAINS ARE 12" OR LESS AND IN AREAS DESIGNATED BY ENGINEER TO BE IN A FLOOD AREA.

2) SEWER RAIN GUARDS SHALL BE MANUFACTURED BY PARSON ENVIRONMENTAL PRODUCTS, INC., PART # PMI-23S (PARSON MANHOLE INSERTS) WITH DOUBLE VALVING, OR APPROVED EQUAL.

3) RAINGUARDS MUST BE "SNUG" FIT.

RAINGUARD DETAIL
(N.T.S.)

FPUA COMMUNITY PROUD	RAINGUARD DETAIL	S-11
03-09 DATE: DESIGNED: SLL DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # SEWER DETAIL 200602.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



NOTES:

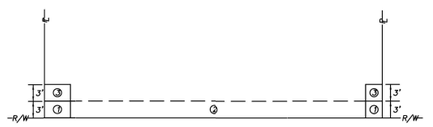
1) INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS.

2) SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.

FPUA COMMUNITY PROUD	FLOW PATTERNS FOR INVERT CHANNELS	S-12
DATE: DESIGNED: JJM DRAWN BY: JJM APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # SEWER DETAIL 200902.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1

GENERAL POLICY

WHERE COST JUSTIFIED AND OPERATIONALLY FEASIBLE, IT IS THE GENERAL POLICY OF THE F.P.U.A. TO PROVIDE WATER, ELECTRIC, SEWER AND GAS SERVICE FROM THE STREET SIDE OF A PIECE OF PROPERTY, DEPENDING ON FACTORS SUCH AS LOCATION OF EXISTING SUPPLY SOURCE FACILITIES, REAR OR SIDE LOT LINE SUPPLY MAY BE AUTHORIZED, BUT ONLY WITH PRIOR APPROVAL FROM THE F.P.U.A.



NOTES:

1. THE PREFERRED POINT OF CONNECTION TO THE F.P.U.A. WATER METER, AREA ① SHALL BE LOCATED IN THE CORNER OF THE PROPERTY SELECTED BY THE F.P.U.A. AS THE BEST LOCATION FOR THE WATER METER. EVERY EFFORT WILL BE MADE TO SELECT THE CORNER WHERE TWO WATER SERVICES AND METERS CAN BE CONNECTED.

2. IF PHYSICAL BARRIERS OR OTHER OBSTACLES PREVENT THE CONNECTION OF THE BUILDING SERVICE LINE TO THE F.P.U.A. WATER SERVICE, WITHIN AREA ①, THE F.P.U.A. ENGINEERING DEPARTMENT MAY AUTHORIZE THE CONNECTION ALONG THE PORTION OF THE R/W LINE MARKED AREA ②, OR ALONG THE PROPERTY LINES MARKED AREA ③.

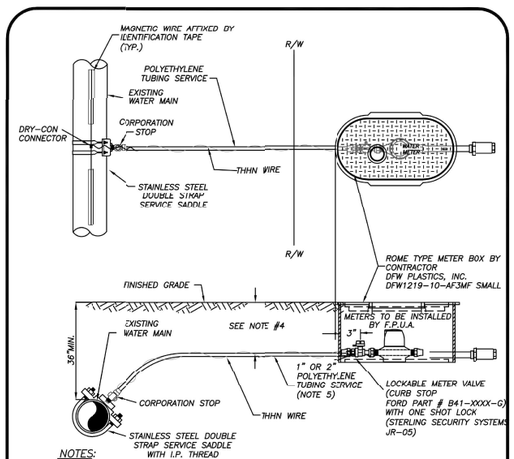
3. HORIZONTAL SEPARATION OF WATER AND WASTEWATER SERVICES SHOULD BE A MINIMUM OF 6 FEET AND PREFERABLY 10 FEET.

4. ALL METERS SHALL BE INSTALLED IN AN UNRESTRICTED AREA FOLLOWING EASE OF ACCESS AND PROVIDING ADEQUATE PROTECTION.

5. THE F.P.U.A. SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF THE WATER LATERAL WITHIN THE EASEMENT OR RIGHT-OF-WAY, UP TO THE POINT OF CONNECTION.

WATER METER PLACEMENT
(N.T.S.)

FPUA COMMUNITY PROUD	WATER METER PLACEMENT POLICY	W-1
03-08 02-15 DATE: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # WATER DETAILS 200602.DWG SCALE: N.T.S. DATE: 2010	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



NOTES:

1. BLUE 10 GALGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.

2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.

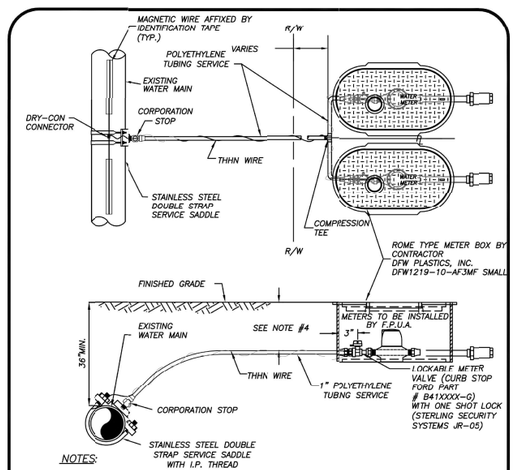
3. 1" & 3/4" METER SIZES SHALL REQUIRE A LOCKABLE METER VALVE. (CURB STOP)

4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

5. FOR 2" COMMERCIAL SERVICE INSTALLATIONS, FPUA WILL INSTALL ABOVE GROUND METER PER DETAIL W-8.

TYPICAL SINGLE WATER SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD	TYPICAL SINGLE WATER SERVICE CONNECTION	W-2
13-09 DESIGN DATE: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # WATER DETAILS 200602.DWG SCALE: N.T.S. DATE: 2020	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1



NOTES:

1. BLUE 10 GALGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.

2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.

3. 1" & 3/4" METER SIZES SHALL REQUIRE A 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".

TYPICAL DOUBLE WATER SERVICE CONNECTION
(N.T.S.)

FPUA COMMUNITY PROUD	TYPICAL DOUBLE WATER SERVICE CONNECTION	W-3
13-09 DESIGN DATE: DESIGNED: JLC DRAWN BY: SLL APPROVED: JLC	REVISION: BY: APPD: COMPUTER FILE # WATER DETAILS 200602.DWG SCALE: N.T.S. DATE: 2020	WATER/WASTEWATER ENGINEERING FT. PIERCE UTILITIES AUTHORITY SHEET 1 OF 1

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

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PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

LICENSE
BLAINE ROBERT BERGSTRESSER
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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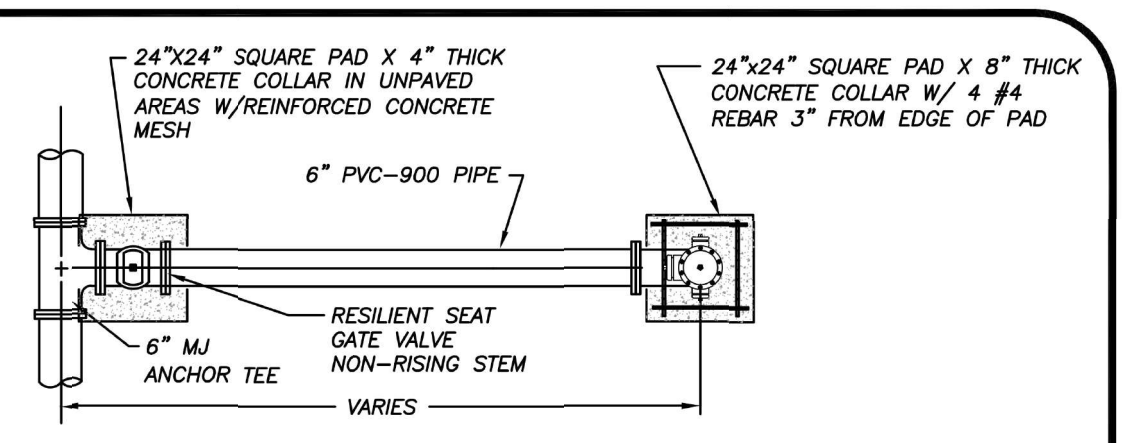
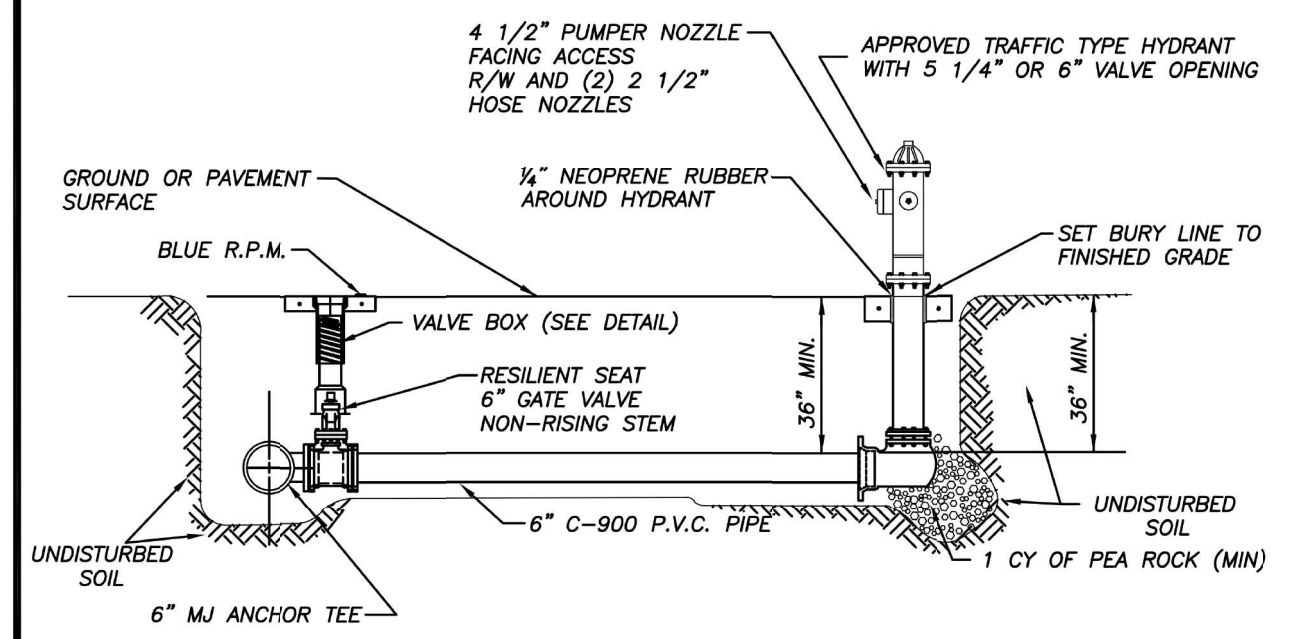
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-FPUA DETAILS

SHEET TITLE:
FPUA DETAILS-03

SHEET NUMBER:
C-502

Plotted on Tuesday, July 09, 2024, 12:16 PM by Blaine Bergstresser
C:\Users\blaine\Desktop\Projects\24-1001 Sunrise Lakes\CAD\Sheets\24-1001-FPUA DETAILS.dwg





NOTES:

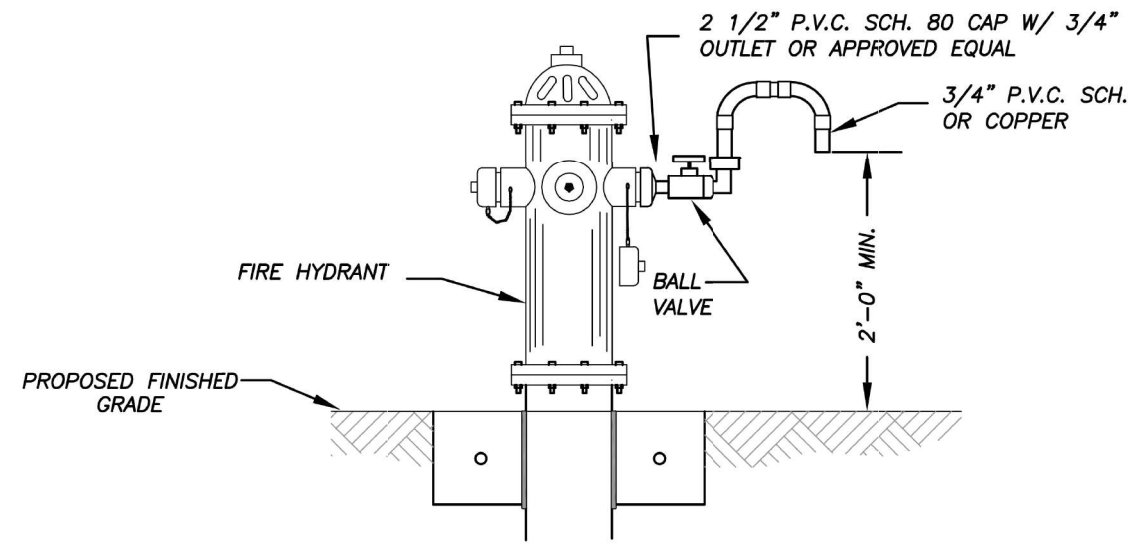
1. HYDRANT SHALL BE INSTALLED PLUMB & TRUE.
2. HYDRANT SHALL BE PAINTED CARNIVAL RED FROM FACTORY.
3. HEEL TO REST IN UNDISTURBED SOIL.
4. THE ONLY HYDRANTS ACCEPTABLE ARE: MUELLER SUPER CENTURION 250 OR AMERICAN DARLING B-84-B-5.
5. HYDRANT ASSEMBLY MUST BE RESTRAINED TO TEE.
6. ALL FITTINGS SHALL BE 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.)

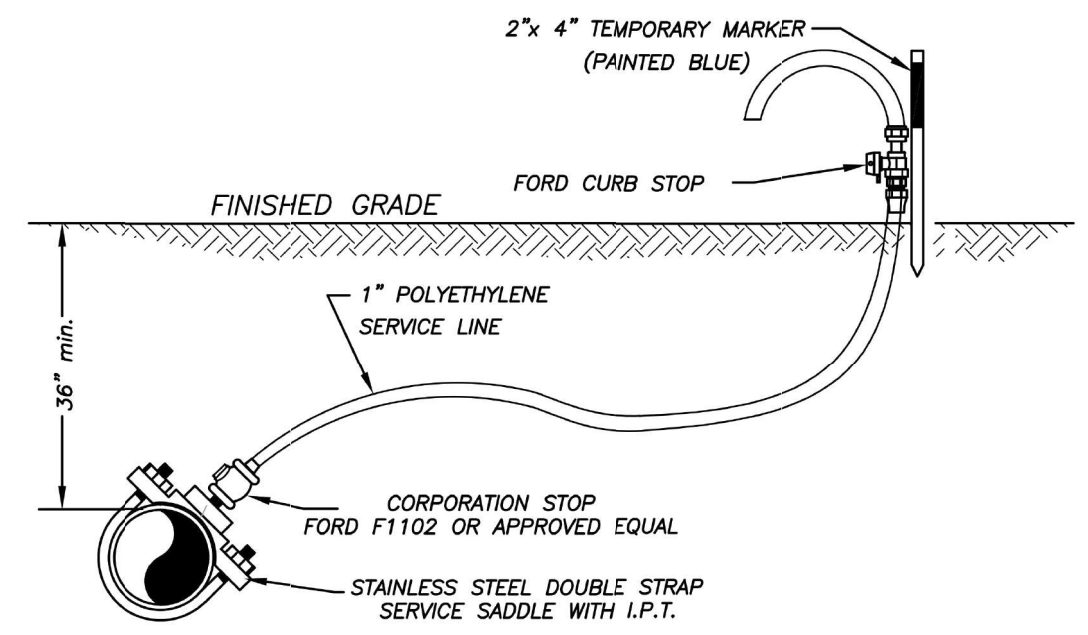
FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 37TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600

TYPICAL FIRE HYDRANT ASSEMBLY				W-5
03-09	DESIGN	SLL	JLC	
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATERDETAIL.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1



BACTERIOLOGICAL SAMPLING POINT @ FIRE HYDRANT

(N.T.S.)



BACTERIOLOGICAL SAMPLING POINT @ WATER MAIN

(N.T.S.)

NOTE:

AFTER TESTING REMOVE 1" P.E. LINE AND CAP WITH BRASS PLUG AT CORPORATION STOP.

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 37TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600

BACTERIOLOGICAL SAMPLING PONIT DETAIL				W-6
03-09	02-15	SLL	JLC	
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JLC	COMPUTER FILE # WATERDETAIL.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1

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.

FORT PIERCE UTILITIES AUTHORITY

WATER DISTRIBUTION				G-1 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 2

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 REQUIRE-MENTS 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 CONSISITING 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 COMMMENCING 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.

FORT PIERCE UTILITIES AUTHORITY

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.

FORT PIERCE UTILITIES AUTHORITY

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

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-FPUA DETAILS

SHEET TITLE: FPUA DETAILS-04

SHEET NUMBER: C-503

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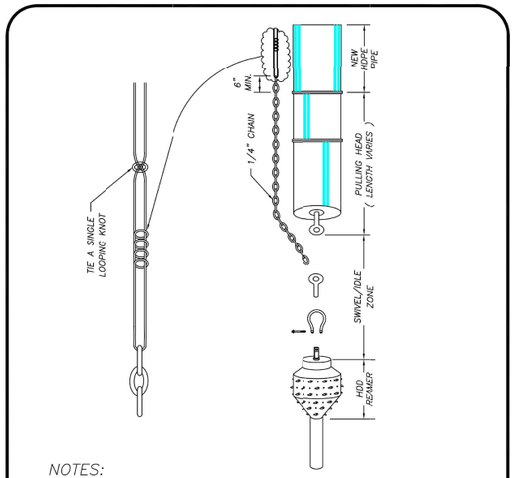
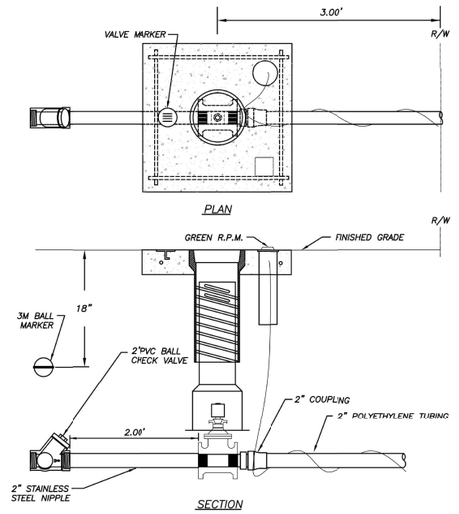


NOTES:

1. WHERE DIRECTIONAL DRILLING LENGTHS EXCEED 750 LINEAR FEET AND/OR HDPE PIPE DIAMETER EXCEED 12 INCHES, A SECOND LENGTH OF TRACE WIRE SHALL BE INSTALLED.
2. TRACE WIRE SHALL CONFORM TO THE FOLLOWING SPECIFICATION:
   MANUFACTURER – COPPERHEAD INDUSTRIES, LLC
   PART NUMBER – 1245B-EHS-500 / 1245B-EHS-1000 / 1245B-EHS-2500
   PART NUMBER DESCRIPTION – 12 (AWG), 45 (JACKET MIL), B (JACKET COLOR: B=BLUE, G=GREEN, ETC.) – EHS (EXTRA HIGH STRENGTH-HARD DRAWN / 1150# BREAKING LOAD STRENGTH) – 500 (WIRE LENGTH IN FEET)

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 25TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600

DIRECTIONAL BORE WIRE ATTACHMENT				M-16
03-09	CONCRETE SLAB	SLL	JLC	WATER/WASTEWATER ENGINEERING
DATE:	REVISION:	BY:	APPD:	
DESIGNED: JLC		COMPUTER FILE # MISC DETAILS 200602.DWG		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL		SCALE:		
APPROVED: JLC		DATE: 2015		SHEET 1 OF 1



NOTES:

1. FORCE MAIN CONNECTION SHALL CONSIST OF A 2" TAPPING SADDLE, 2" STAINLESS STEEL NIPPLE AND 2" THREADED RESILIENT SEAT GATE VALVE
2. GREEN 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.
3. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY WATER/WASTEWATER ENGINEERING 1701 SOUTH 25TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600

GRINDER STATION CONNECTION				S-16
03-09	DESIGN	SLL	JLC	WATER/WASTEWATER ENGINEERING
DATE:	REVISION:	BY:	APPD:	
DESIGNED: JLC		COMPUTER FILE # COMPUTER#		FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: SLL		SCALE: N.T.S. SCALE		
APPROVED: JLC		DATE: 2010		SHEET 1 OF 1

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-FPUA DETAILS

SHEET TITLE:
FPUA DETAILS-05

SHEET NUMBER:
C-504

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PARCEL No. 2433-121-0001-000-5

12" PIPE

CHAINLINK FENCE

TOP OF BANK

N88°26'45"W

DITCH

CONCRETE SLAB

1133.77'

WOOD POWER POLE

BUILDING FFE =14.35'

56.0'

30.0'

29.9'

56.6'

35.1'

34.9'

EAS

WOOD POWER POLE

WELL TO BE ABANDONED

WELL TO BE ABANDONED

CONSTRUCTION ENTRANCE

8.7'

546.05'

S00°47'11"W

6' CHAINLINK FENCE

PARCEL No. 2433-111-0001-000-4

North

GRAPHIC SCALE

40 0 40 80 120

SCALE: (1 Inch = 40 Feet)

NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988. THE CONVERSION FACTOR TO NGVD 1929 IS +1.496'

SUNRISE BOULEVARD
CENTERLINE OF 80' RIGHT OF WAY
(as laid out and in use)
20.4' ASPHALT

C1

3.4'

TOP OF BANK

60' DRAINAGE EASEMENT

DITCH

DITCH

SOUTH LINE OF THE NW 1/4 OF THE NE 1/4 OF SECTION 33-35-40

N88°26'45"W

681.50'

24" CORRUGATED METAL PIPE

FIRE HYDRANT

WATER VALVE

PARCEL No. 2433-134-0002-000-2

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I:\2024\24-1001\Drawings\Civil\24-1001 EX CON.dwg

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3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

LICENSE
BLAINE ROBERT BERGSTRESSER
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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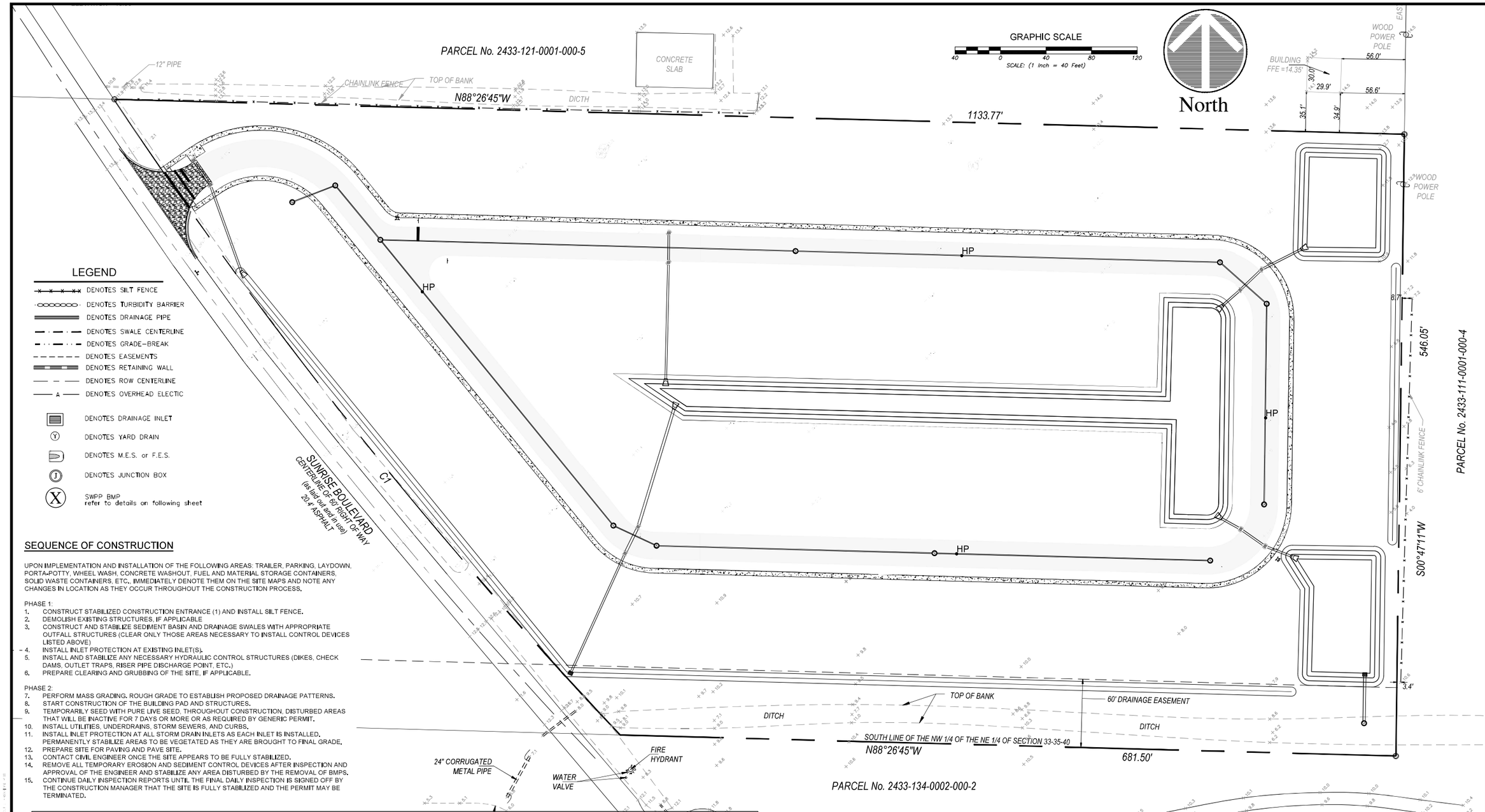
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-EX CON

SHEET TITLE:
EXISTING CONDITIONS & DEMOLITION

SHEET NUMBER:
C-600



LEGEND

- DENOTES SILT FENCE
- DENOTES TURBIDITY BARRIER
- DENOTES DRAINAGE PIPE
- DENOTES SWALE CENTERLINE
- DENOTES GRADE-BREAK
- DENOTES EASEMENTS
- DENOTES RETAINING WALL
- DENOTES ROW CENTERLINE
- DENOTES OVERHEAD ELECTIC
- DENOTES DRAINAGE INLET
- (Y) DENOTES YARD DRAIN
- DENOTES M.E.S. or F.E.S.
- (J) DENOTES JUNCTION BOX
- (X) SWPP BMP refer to details on following sheet

SEQUENCE OF CONSTRUCTION

UPON IMPLEMENTATION AND INSTALLATION OF THE FOLLOWING AREAS: TRAILER, PARKING, LAYDOWN, PORTA-POTTY, WHEEL WASH, CONCRETE WASHOUT, FUEL AND MATERIAL STORAGE CONTAINERS, SOLID WASTE CONTAINERS, ETC., IMMEDIATELY DENOTE THEM ON THE SITE MAPS AND NOTE ANY CHANGES IN LOCATION AS THEY OCCUR THROUGHOUT THE CONSTRUCTION PROCESS.

PHASE 1:

1. CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE (1) AND INSTALL SILT FENCE.
2. DEMOLISH EXISTING STRUCTURES, IF APPLICABLE
3. CONSTRUCT AND STABILIZE SEDIMENT BASIN AND DRAINAGE SWALES WITH APPROPRIATE OUTFALL STRUCTURES (CLEAR ONLY THOSE AREAS NECESSARY TO INSTALL CONTROL DEVICES LISTED ABOVE)
4. INSTALL INLET PROTECTION AT EXISTING INLET(S).
5. INSTALL AND STABILIZE ANY NECESSARY HYDRAULIC CONTROL STRUCTURES (DIKES, CHECK DAMS, OUTLET TRAPS, RISER PIPE DISCHARGE POINT, ETC.)
6. PREPARE CLEARING AND GRUBBING OF THE SITE, IF APPLICABLE.

PHASE 2:

7. PERFORM MASS GRADING, ROUGH GRADE TO ESTABLISH PROPOSED DRAINAGE PATTERNS.
8. START CONSTRUCTION OF THE BUILDING PAD AND STRUCTURES.
9. TEMPORARILY SEED WITH PURE LIVE SEED, THROUGHOUT CONSTRUCTION, DISTURBED AREAS THAT WILL BE INACTIVE FOR 7 DAYS OR MORE OR AS REQUIRED BY GENERIC PERMIT.
10. INSTALL UTILITIES, UNDERDRAINS, STORM SEWERS, AND CURBS.
11. INSTALL INLET PROTECTION AT ALL STORM DRAIN INLETS AS EACH INLET IS INSTALLED, PERMANENTLY STABILIZE AREAS TO BE VEGETATED AS THEY ARE BROUGHT TO FINAL GRADE.
12. PREPARE SITE FOR PAVING AND PAVE SITE.
13. CONTACT CIVIL ENGINEER ONCE THE SITE APPEARS TO BE FULLY STABILIZED.
14. REMOVE ALL TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER INSPECTION AND APPROVAL OF THE ENGINEER AND STABILIZE ANY AREA DISTURBED BY THE REMOVAL OF BMPS.
15. CONTINUE DAILY INSPECTION REPORTS UNTIL THE FINAL DAILY INSPECTION IS SIGNED OFF BY THE CONSTRUCTION MANAGER THAT THE SITE IS FULLY STABILIZED AND THE PERMIT MAY BE TERMINATED.

SOIL EROSION/SEDIMENTATION CONTROL OPERATION TIME SCHEDULE

NOTE: GENERAL CONTRACTOR TO COMPLETE TABLE WITH THEIR SPECIFIC PROJECT SCHEDULE

CONSTRUCTION SEQUENCE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
TEMPORARY CONSTRUCTION EXITS																								
TEMPORARY CONTROL MEASURES																								
SEDIMENT CONTROL BASINS																								
STRIP & STOCKPILE TOPSOIL																								
ROUGH GRADE																								
STORM FACILITIES																								
SITE CONSTRUCTION																								
PERMANENT CONTROL STRUCTURES																								
FOUNDATION / BUILDING CONSTRUCTION																								
FINISH GRADING																								
LANDSCAPING/SEED/FINAL STABILIZATION																								

MAINTENANCE

ALL MEASURES STATED ON THIS SITE MAP, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.
2. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
4. THE CONSTRUCTION EXITS SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION EXITS AS CONDITIONS DEMAND.
5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AREA AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.

HALT ALL ACTIVITIES AND CONTACT THE CONSULTANT TO PERFORM INSPECTION AND CERTIFICATION OF BMPS. GENERAL CONTRACTOR SHALL SCHEDULE AND CONDUCT STORM WATER PRE-CONSTRUCTION MEETING WITH CONSULTANT AND ALL GROUND-DISTURBING CONTRACTORS BEFORE PROCEEDING WITH CONSTRUCTION.

CONTRACTOR TO BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS NECESSARY FOR CONSTRUCTION

THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTOR'S BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE.

SITE PREPARATION SHOULD BE IN ACCORDANCE WITH GEOTECHNICAL INVESTIGATION

NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988. THE CONVERSION FACTOR TO NGVD 1929 IS +1.496'

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-EX CON

SHEET TITLE:
PHASE ONE EROSION CONTROL

SHEET NUMBER:
C-601

Plotted on Tuesday, July 09, 2024 - 12:16 PM by Blaine Bergstresser
I:\...\24-1001 SUNRISE LAKES\...

WHITE CITY CEMETERY
ZONING: I
PARCEL No. 2433-121-0001-000-5

SET MAG NAIL
& DISK / LB 8261
ELEVATION = 13.56'

12" PIPE

CHAINLINK FENCE

TOP OF BANK

DITCH

CONCRETE SLAB

BUS STATION

10' LANDSCAPE BUFFER

EAST LINE

WOOD POWER POLE

BUILDING FFE =14.35'

56.0'

30.0'

29.9'

56.6'

35.1'

34.9'

MOUNTABLE MIAMI CURB

DRY DETENTION POND

WOOD POWER POLE

10' LANDSCAPE BUFFER

8.7'

10' LANDSCAPE BUFFER (min.)

DRY DETENTION POND

6' CHAINLINK FENCE

10' LANDSCAPE BUFFER

DRY DETENTION POND

7' DRAINAGE EASEMENT

10' LANDSCAPE BUFFER (min.)

3.4'

TOP OF BANK

60' DRAINAGE EASEMENT

DITCH

1 2 3 4 5 6 7 8 9 10 11 12 13

14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50

SUNRISE BOULEVARD
CENTERLINE OF 60' RIGHT-OF-WAY
(as laid out and in use)
20.4' ASPHALT

C1

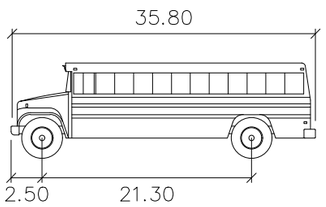
North
GRAPHIC SCALE
40 0 40 80 120
SCALE: (1 Inch = 40 Feet)

ZONING: RS-3

ZONING: RS-3

ZONING: I-1
PARCEL No. 2433-111-0001-000-4

ZONING: RS-3



S-BUS-36

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 37.6

LINEWORK & SYMBOL LEGEND

- DENOTES PROPERTY BOUNDARY
- DENOTES RIGHT-OF-WAY
- DENOTES CENTERLINE
- DENOTES EASEMENT
- DENOTES FENCE LINE
- DENOTES DRAINAGE PIPE
- DENOTES SEWER MANHOLE
- DENOTES FIRE HYDRANT
- DENOTES GATE VALVE
- DENOTES LIGHT POLE
- DENOTES STREET SIGN
- DENOTES RUNOFF OVERLAND FLOW
- 20.5 / 20.0 DENOTES PROPOSED ELEVATIONS
- x 22.0 DENOTES EXISTING GRADES
- DENOTES DRAINAGE STRUCTURE refer to table this sheet
- DENOTES DITCH BOTTOM INLET
- DENOTES JUNCTION BOX
- DENOTES YARD DRAIN
- DENOTES DRAINAGE STRUCTURE
- DENOTES MITERED/FLARED END SECTION

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT
INTEGRITY 1ST CONSTRUCTION GROUP

LICENSE
BLAINE ROBERT BERGSTRESSER
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-BUS-TURN

SHEET TITLE:
ROUTING PLAN BUS

SHEET NUMBER:
C-700

Printed on Tuesday, July 09, 2024 - 12:16 PM by Blaine Bergstresser
I:\1 JOBS\2024\24-1001 SUNRISE LAKES\CAD\SHEETS\24-1001-BUS-TURN.dwg

SET MAG NAIL
& DISK / LB 8261
ELEVATION = 13.56'

WHITE CITY CEMETERY
ZONING: I
PARCEL No. 2433-121-0001-000-5

12" PIPE
CHAINLINK FENCE
TOP OF BANK
DITCH
CONCRETE SLAB
BUS STATION
FIRE HYDRANT
10' LANDSCAPE BUFFER
10' LANDSCAPE BUFFER (min.)
MOUNTABLE MIAMI CURB
DRY DETENTION POND
DRY DETENTION POND
WOOD POWER POLE
EAST LINE
BUILDING FFE =14.35'
56.0'
30.0'
29.9'
56.6'
35.1'
34.9'
8.7'
6' CHAINLINK FENCE
3.4'
1 2 3 4 5 6 7 8 9 10 11 12 13
14 15 16 17
18 19 20 21 22 23 24 25 26 27
28 29 30 31 32 33 34
35 36 37 38 39 40 41 42 43
44 45 46 47 48 49 50
C1
SUNRISE BOULEVARD
CENTERLINE OF 80' RIGHT-OF-WAY
(as laid out and in use)
20.4' ASPHALT
7' DRAINAGE EASEMENT
10' LANDSCAPE BUFFER (min.)
TOP OF BANK
60' DRAINAGE EASEMENT
DITCH

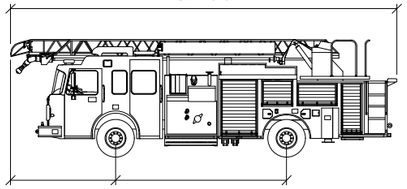
North
GRAPHIC SCALE
40 0 40 80 120
SCALE: (1 Inch = 40 Feet)

ZONING: RS-3

ZONING: RS-3

ZONING: I-1
PARCEL No. 2433-111-0001-000-4

37.00



10.06 16.33

Smeal Aerial RM 55ft

	feet
Width	: 8.33
Track	: 7.88
Lock to Lock Time	: 6.0
Steering Angle	: 48.0

LINEWORK & SYMBOL LEGEND

- DENOTES PROPERTY BOUNDARY
- DENOTES RIGHT-OF-WAY
- DENOTES CENTERLINE
- DENOTES EASEMENT
- DENOTES FENCE LINE
- DENOTES DRAINAGE PIPE
- DENOTES SEWER MANHOLE
- DENOTES FIRE HYDRANT
- DENOTES GATE VALVE
- DENOTES LIGHT POLE
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- DENOTES RUNOFF OVERLAND FLOW
- 20.5 / 20.0 DENOTES PROPOSED ELEVATIONS
- x 22.0 DENOTES EXISTING GRADES
- DENOTES DRAINAGE STRUCTURE refer to table this sheet
- DENOTES DITCH BOTTOM INLET
- DENOTES JUNCTION BOX
- DENOTES YARD DRAIN
- DENOTES DRAINAGE STRUCTURE
- DENOTES MITERED/FLARED END SECTION

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ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
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FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT:
INTEGRITY 1ST CONSTRUCTION GROUP

LICENSE NO. 84598 STATE OF FLORIDA BLAINE ROBERT BERGSTRESSER PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-BUS-TURN

SHEET TITLE:
ROUTING PLAN FIRE

SHEET NUMBER:
C-701

Printed on Tuesday, July 09, 2024, 12:16 PM by Blaine Bergstresser

WHITE CITY CEMETERY
ZONING: I

DRY DETENTION POND

DRY DETENTION POND

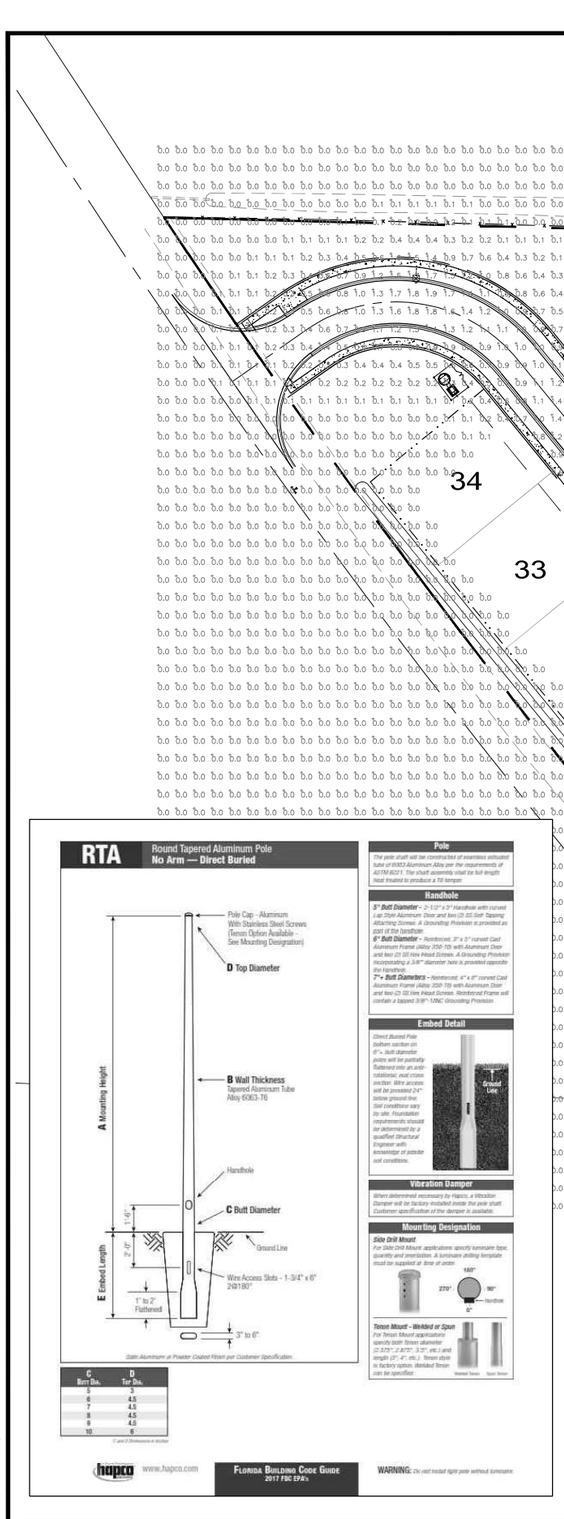
DRY DETENTION POND

EXISTING DRAINAGE CANAL AND 60' EASEMENT

ZONING: RS-3

ZONING: I-1

ZONING: RS-3



Landreth Lighting Luminaire Schedule

Symbol	Manufacturer	Qty	Label	Arrangement	Description	LLF	BUG Rating	Arranged Watts	Arranged Lumens
	Lithonia Lighting	15	SLA	Single	DSX0 LED P5 30K 70CRI T3M MVOLT RPA NLTAIR2 PIRHN HS FINISH TBD: MOUNTED 25' AFG ON ROUND TAPERED ALUMINUM DIRECT BURIED POLE	1.000	B1-U0-G3	90.12	10055

Landreth Lighting Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Entire Site	Illuminance	Fc	0.26	2.0	0.0	N.A.	N.A.
Drive Lane	Illuminance	Fc	1.20	2.0	0.5	2.40	4.00

North

GRAPHIC SCALE

40 0 40 80 120

SCALE: (1 Inch = 40 Feet)

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ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
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FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

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PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-PHOTO

SHEET TITLE:
PHOTO-01

SHEET NUMBER:

Plotted on Tuesday, July 09, 2024 - 12:17 PM by Blaine Bergstresser

100% GOPHER TORTOISE SURVEY
COMPLETION REPORT

3804 SUNRISE BLVD, FORT PIERCE, FL – 11.34 ACRES
SAINT LUCIE COUNTY
PARCEL ID: 2433-123-0001-000-1
SECTION 33, TOWNSHIP 35 SOUTH AND RANGE 40 EAST

Prepared for:

DT VENTURES 1 LLC
PO Box 92280
Rochester, NY 14692-0280

Prepared By:

Patrick Zuloaga

Florida Fish and Wildlife Conservation Commission Gopher Tortoise Agent

Permit No.: GTA-13-00002D

January 26, 2024

TABLE OF CONTENTS

□□□r□d□□□

INTRODUCTION

An upland habitat survey for gopher tortoise (*Gopherus polyphemus*) was conducted on the approximately 11.34-acre property located on 3804 Sunrise Blvd, Fort Pierce, Florida (see Figure 1). The survey included review of 100% of potential gopher tortoise habitat within the subject property.

The objectives of the survey were to document gopher tortoise burrows within the construction footprint of the property to confirm presence/absence, document the status and location of gopher tortoise burrows, and approximate the number of tortoises that would need relocation. The results of the survey determine the subsequent actions required to develop the subject property.

This Survey Report provides a summary of the survey activities conducted, including methods used and areas surveyed. Survey activities were executed according to the burrow survey methodology from the Florida Fish and Wildlife Conservation Commission (FWC) Gopher Tortoise Permitting Guidelines, April 2008, Revised April 2023, Appendix 4 Methods for Burrow Surveys on Development (Donor) and Recipient Sites, 100% Burrow Survey Protocol. Survey activities were conducted on January 25 and the morning January 26, 2024. The information contained herein is based on the findings from the field survey.

SITE LOCATION AND DESCRIPTION

The ±11.34-acre property is located in White City, a census-designated place (CDP) in Saint Lucie County within Section 33, Township 35 South and Range 40 East. The subject property is along the east side of Sunrise Blvd. The Saint Lucie County Property Appraiser lists the Property Parcel ID as 2433-123-0001-000-1. The Future Land Use designation is residential.

The vegetative component of the subject property is predominantly exotic vegetation, shrub brushland, cabbage palms and scattered hardwoods. An isolated waterbody is present within the north west corner and a water filled ditch runs along the southern boundary of the subject property. The Florida Cooperative Land Cover (CLC) System developed by the Florida Fish and Wildlife Conservation Commission (FWC) classifies the land cover as 1821 – Low Structure Density and 18332 – Fallow Orchards. The predominant land cover classification is Fallow Orchards (1832). Figure 2 provides the CLC map for the subject property.

The vegetative community was characterized in the field as a degraded mixed upland community consisting of shallow ridge and furrows with a sparse canopy and dense shrub stratum. The ridge and furrow landform is a result of the historic orchard land use. The canopy stratum consists primarily of cabbage palm (*Sabal palmetto*), and laurel oak (*Quercus laurifolia*). The shrub stratum consisted of dense ceaserweed (*Urena lobata*), Jack-in-the-bush (*Chromolaena odorata*), Brazillian pepper (*Schinus terebinthifolia*), and shoebutton ardisia (*Ardisia elliptica*). Ground cover stratum was generally limited due to the dense canopy, shrub and vine cover. Limited areas with herbaceous vegetative cover were observed providing suitable forage for gopher tortoises.

The Natural Resources Conservation Service (NRCS) Web Soil Survey lists five soil types within the subject property. Table 1 provides a summary of the soil types present within the subject property. Figure 3 provides the NRCS Web Soil Survey graphically for the subject property. A brief description of each soils type follows.

Table 1. Web Soil Survey Summary

Map Unit Symbol	Map Unit Name	Acres	Percent of property
□□	□□□□□□□□□d□□r□ □□□□□□□d□□	□□□□	□□□□□ □
□□	□r□□□□□□□□□□□□□r□□□□□□□□□□	□□□□	□□□□□ □
□□□	S□□□□□□□□□d□□ □□□□□□□□□□d□□	□□□□	□□□□□ □
□□□	T□□□□□□d□P□□ □□□□□□d□□	□□□□	□□□□□ □
□□□	□ □d□r□□□□ □□□□d□	□□□□	□□□□□ □
Totals for Area of Interest		**11.1**	**100.0%**

Ankona and Farmton sands is poorly drained soil found in flatwoods on marine terraces. The seasonal high-water table is at a depth of 6 to 18 inches. The gopher tortoise burrowing suitability is rated as "less suited". Less Suited rating states that these soils have characteristics that may limit establishment, maintenance, or use of the site by gopher tortoise. Colonization and population densities may be below average or restricted in the area due to the limiting factors even though all of the other species habitat requirements are met (USDA, 2024).

Arents are Somewhat poorly drained sandy soils found on rises in marine terraces. Depth to water is 18 to 36 inches. This soils type is listed as not rated in the Web Soil Survey gopher tortoise burrowing suitability.

Susanna and Wauchula sands are poorly drained soil found in flatwoods on marine terraces. The seasonal high-water table is at a depth of 6 to 18 inches. The gopher tortoise burrowing suitability is rated as "unsuitable". These soils have characteristics that may limit establishment, maintenance, or use of the site by gopher tortoise. Areas of included soils with better drainage may provide suitable soil properties in some locations (USDA, 2024).

Tantile and Pomona sands are poorly drained soil found in flatwoods on marine terraces. The seasonal high-water table is at a depth of 6 to 18 inches. The gopher tortoise burrowing suitability is rated as "unsuitable" (USDA, 2024).

Winder loamy sand is poorly drained soil found in flats on marine terraces. The seasonal high-water table is at a depth of 12 to 18 inches. The gopher tortoise burrowing suitability is rated as "less suited" (USDA, 2024).

METHODS

The survey activities were completed by an FWC gopher tortoise agent and performed in accordance with those specified in Appendix 4 of the FWC Guidelines. Equipment utilized during the survey included a camera, Trimble DGPS unit, and a handheld datalogger running Solo Field mapping software.

The pedestrian survey was conducted by walking pre-determined transects in an approximate east-west orientation at 50-foot spacing across 100 percent of the subject property (see Figure 4). Apparent burrow activity status (active, inactive, or abandoned), size (juvenile <5 in.; subadult 5-8 in.; adult >8 in.), GPS coordinates, and photographs were recorded for each burrow encountered along each transect. Burrows that were not clearly made by a tortoise were not recorded.

RESULTS/DISCUSSION

The 100 % pedestrian survey of the project area resulted in no potentially occupied burrows. Multiple burrows from other burrowing fauna (i.e., armadillo *[Dasypus novemcinctus*]) were noted during the survey. Figure 4 provides the survey design graphically.

An apparent high-water table and dense vegetative cover provides poor quality gopher tortoise habitat throughout the majority of the subject property. Ponding, saturated soils, and organic soils were observed throughout the property. Optimal forage species (i.e., asgrasses and forbes) were generally absent due to the dense canopy and shrub, and cover. Additionally, approximately 50 percent of the soil types on the property are classified as "unsuitable" while the other 50 percent are listed as "less suited".

In Florida, gopher tortoises are categorized as Threatened on the Endangered Species List and are therefore protected by state law, Chapter 68A - 27.003, FL Administrative Code. An FWC relocation permit is required prior to any disturbance to a burrow or handling of a tortoise. Please note that ground disturbances within 25 feet in any direction from the burrow is prohibited until a relocation permit has been obtained and the tortoise has been relocated to either and offsite recipient site or a suitable onsite relocation area. The findings of this survey are valid for a period of ninety days. A resurvey must be completed prior to construction activities that will occur beyond the ninety-day period.

REFERENCES

Florida Fish and Wildlife Conservation Commission Gopher Tortoise Permitting Guidelines. Revised April 2023. 133 pp.

U.S. Department of Agriculture, Natural Resources Conservation Service, Web Soil Survey. Accessed 1/25/2024.

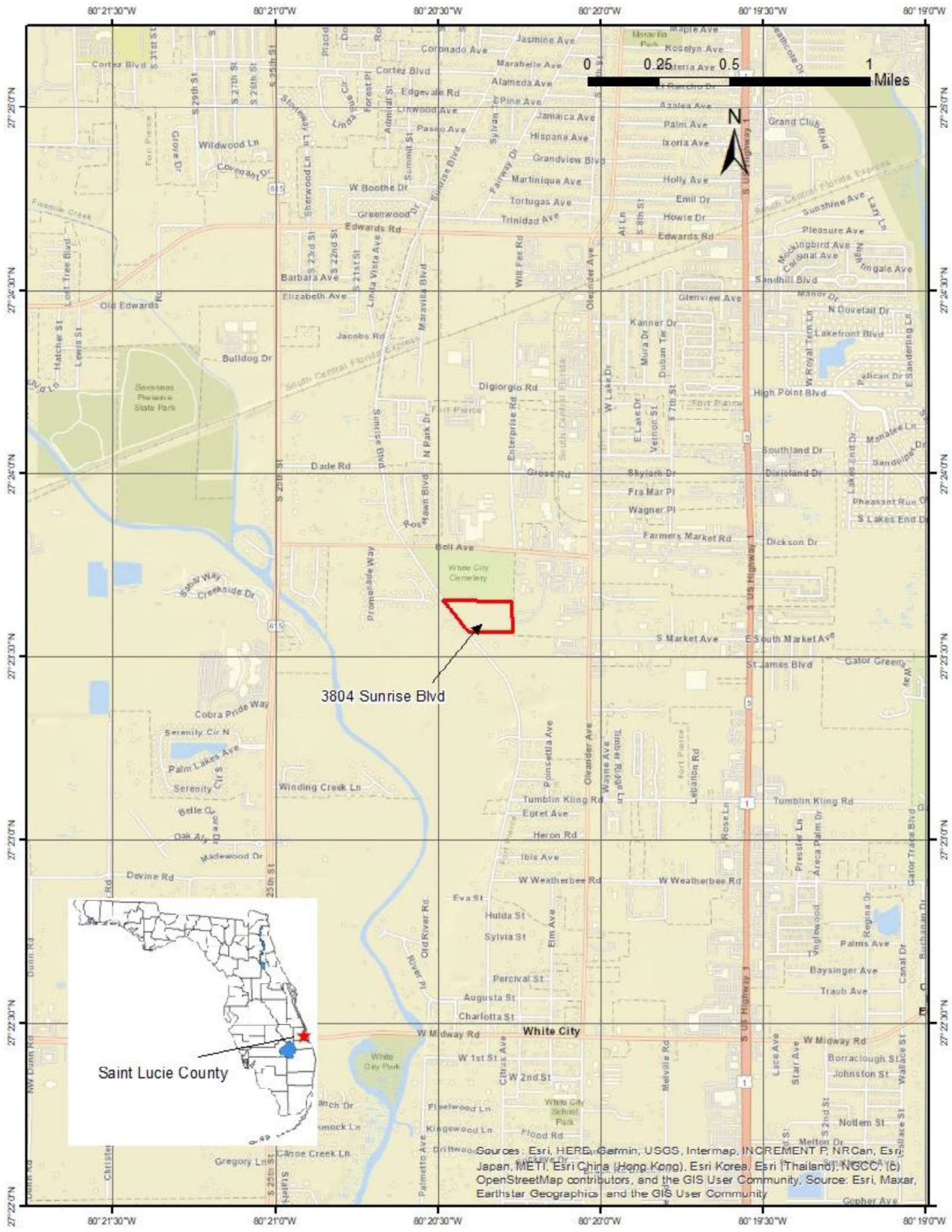


Figure 1. Project Location Map

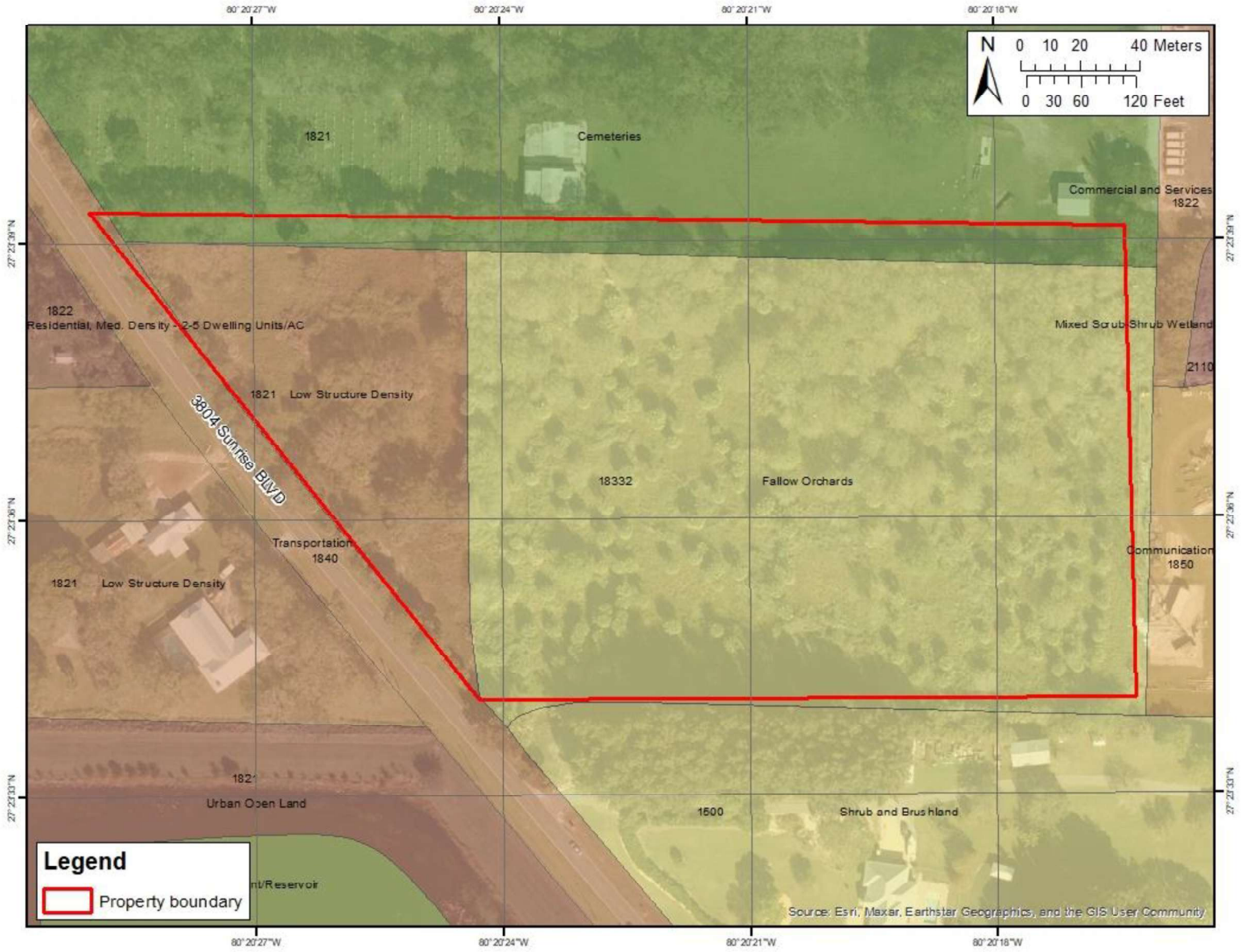


Figure 2. Cooperative Land Cover Map

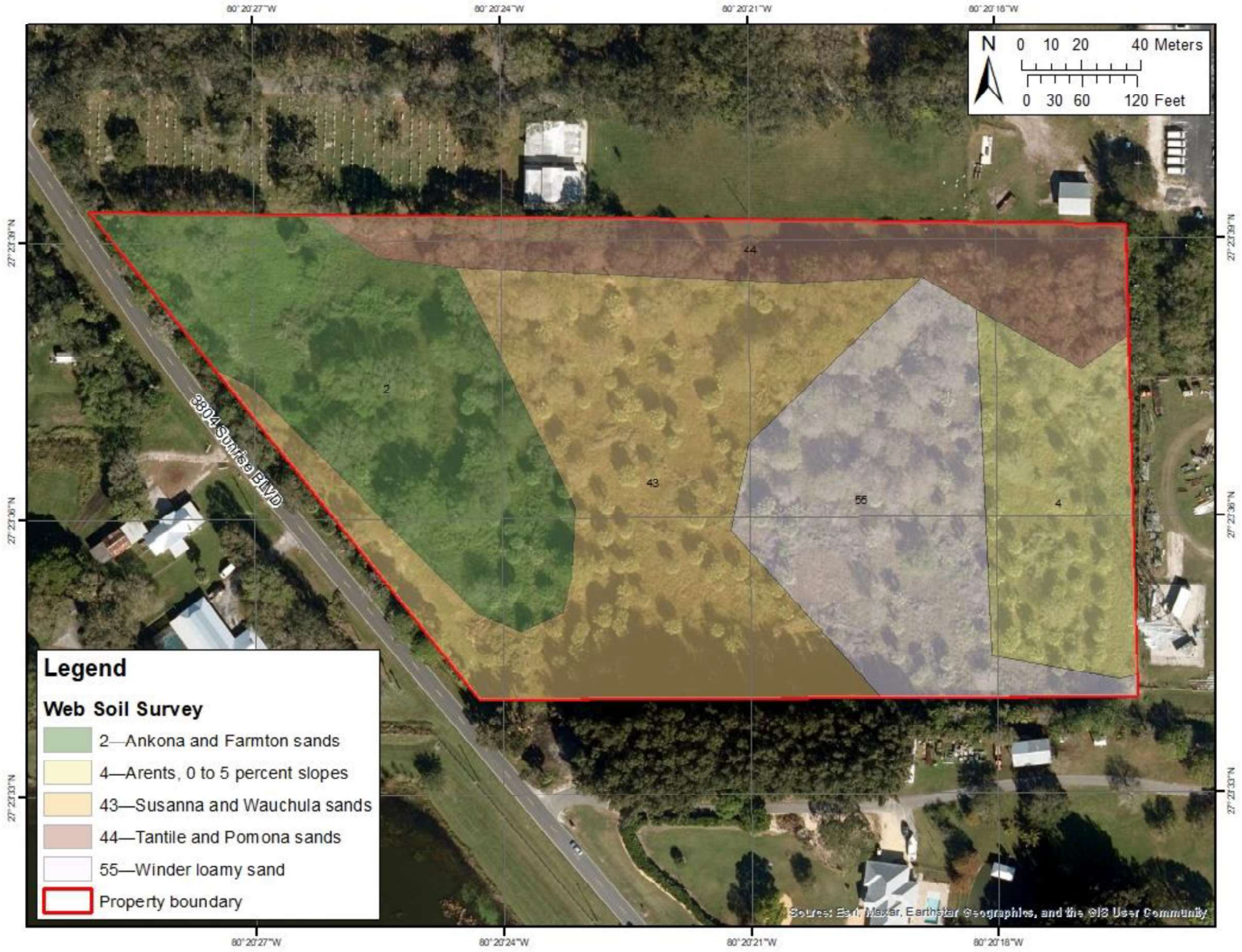


Figure 3. Soils Map

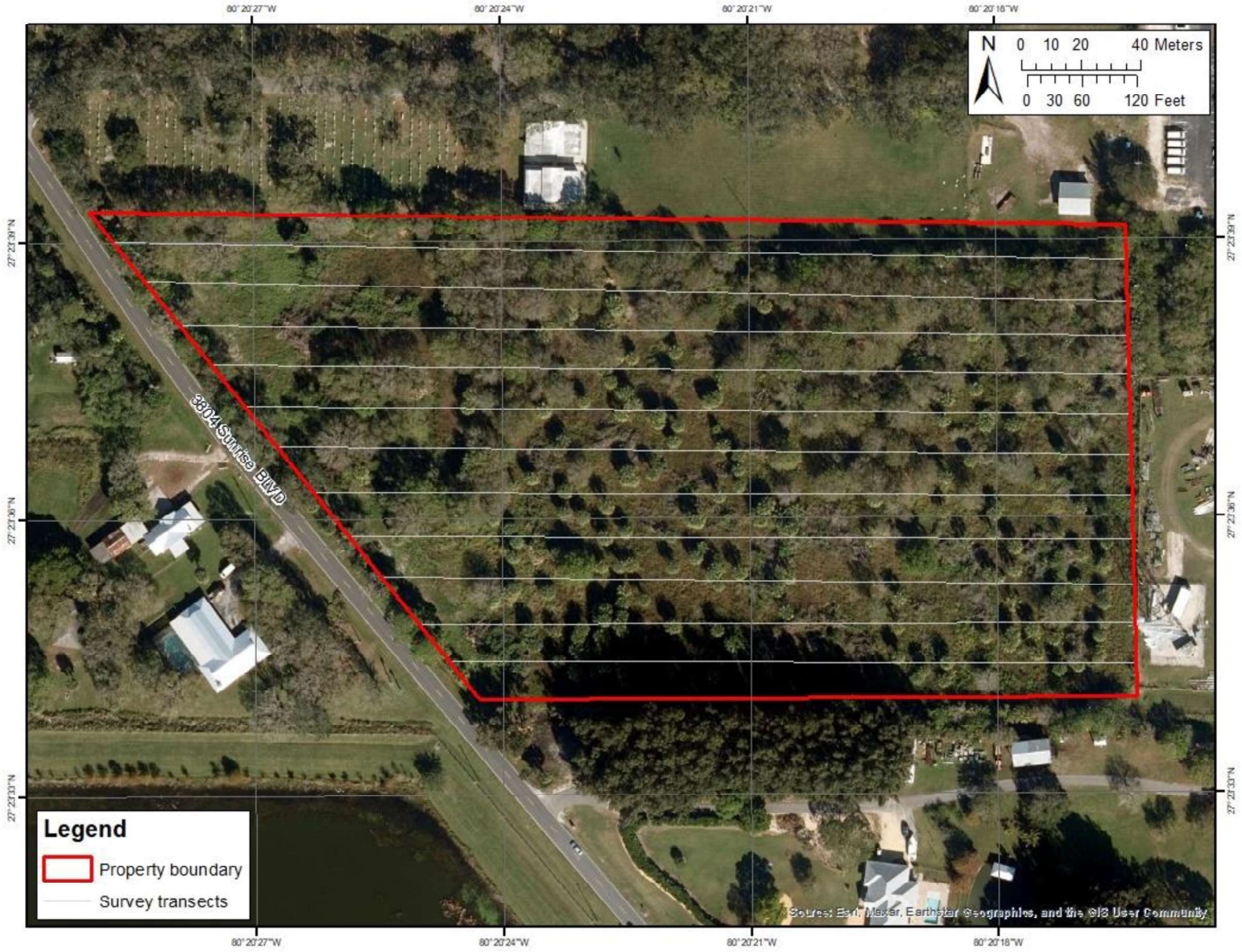
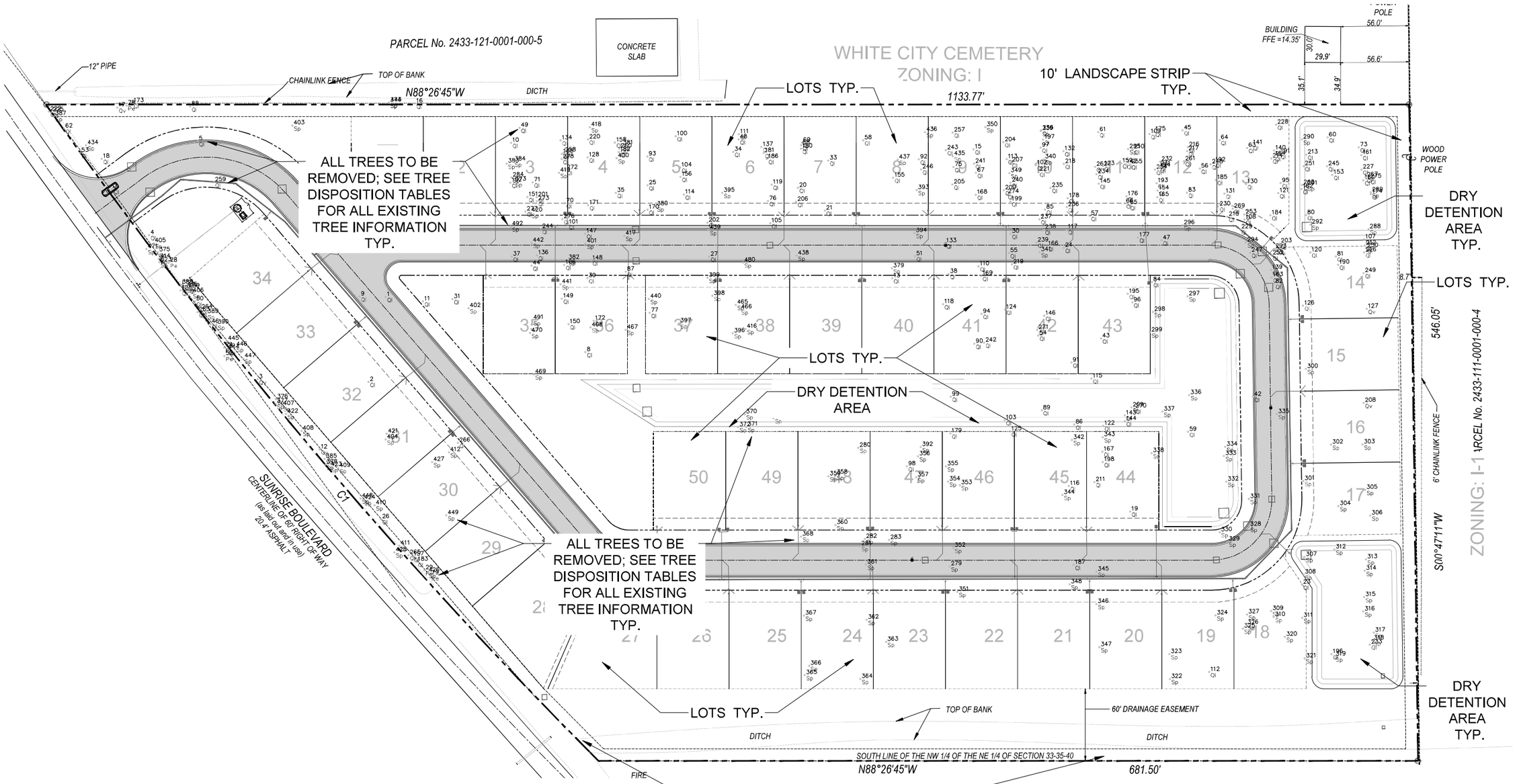


Figure 4. Gopher Tortoise Survey Map



*SEE SHEET TD-2 FOR TREE INVENTORY TABLES

*SEE SHEET TD-3 FOR TREE MITIGATION TABLES & DATA

DRAWING INDEX:

TD-1: EXISTING TREE DISPOSITION PLAN

TD-2: TREE INVENTORY TABLES

TD-3: TREE MITIGATION TABLES & DATA

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

KMA

SUNRISE PROPERTY

3904 Sunrise Blvd.
City of Fort Pierce, Florida

Tree Disposition Plan

Revisions		
Date	Init.	Description
9.12.24	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By: PG
Checked By: PG
Municipal Project:
Scale:

NORTH

SCALE: 1" = 40'

0 20' 40' 80'

TD-1

TREE INVENTORY & DISPOSITION

TREE #	SIZE DBH	TYPE	DISPOSITION
0	54	Laurel Oak	To Be Removed
1	40	Laurel Oak	To Be Removed
2	35	Laurel Oak	To Be Removed
3	35	Live Oak	To Be Removed
4	33	Laurel Oak	To Be Removed
5	31	Laurel Oak	To Be Removed
6	30.6	Laurel Oak	To Be Removed
7	30	Laurel Oak	To Be Removed
8	30	Laurel Oak	To Be Removed
9	29	Laurel Oak	To Be Removed
10	27.2	Laurel Oak	To Be Removed
11	27	Laurel Oak	To Be Removed
12	27	Live Oak	To Be Removed
13	26.5	Laurel Oak	To Be Removed
14	26	Laurel Oak	To Be Removed
15	26	Laurel Oak	To Be Removed
16	26	Laurel Oak	To Be Removed
17	26	Live Oak	To Be Removed
18	25.5	Laurel Oak	To Be Removed
19	25	Laurel Oak	To Be Removed
20	24.6	Laurel Oak	To Be Removed
21	24.4	Laurel Oak	To Be Removed
22	24	Sash Pine	To Be Removed
23	24	Laurel Oak	To Be Removed
24	24	Laurel Oak	To Be Removed
25	24	Laurel Oak	To Be Removed
26	23.5	Laurel Oak	To Be Removed
27	23.5	Laurel Oak	To Be Removed
28	23	Sash Pine	To Be Removed
29	23	Sash Pine	To Be Removed
30	23	Laurel Oak	To Be Removed
31	23	Laurel Oak	To Be Removed
32	22	Sash Pine	To Be Removed
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445	10'CT MIN	Sabal Palm	To Be Removed
446	10'CT MIN	Sabal Palm	To Be Removed
447	10'CT MIN	Sabal Palm	To Be Removed
448	10'CT MIN	Sabal Palm	To Be Removed
449	10'CT MIN	Sabal Palm	To Be Removed
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452	10'CT MIN	Sabal Palm	To Be Removed
453	10'CT MIN	Sabal Palm	To Be Removed
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457	10'CT MIN	Sabal Palm	To Be Removed
458	10'CT MIN	Sabal Palm	To Be Removed
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481	10'CT MIN	Sabal Palm	To Be Removed
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500	10'CT MIN	Sabal Palm	To Be Removed
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529	10'CT MIN	Sabal Palm	To Be Removed
530	10'CT MIN	Sabal Palm	To Be Removed
531	10'CT MIN	Sabal Palm	To Be Removed
532	10'CT MIN	Sabal Palm	To Be Removed

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

KMA

SUNRISE PROPERTY

3904 Sunrise Blvd.
City of Fort Pierce, Florida

Tree Inventory & Disposition Tables

Revisions		
Date	Init.	Description
9.12.24	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT — PAUL A. GOULAS — LA 6666807 — STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

TD-2

LAUREL OAKS REQUIRING MITIGATION

TREE #	SIZE DBH	TYPE
0	54	Laurel Oak
1	40	Laurel Oak
2	35	Laurel Oak
4	33	Laurel Oak
5	31	Laurel Oak
6	30.6	Laurel Oak
7	30	Laurel Oak
8	30	Laurel Oak
9	29	Laurel Oak
10	27.2	Laurel Oak
11	27	Laurel Oak
13	26.5	Laurel Oak
14	26	Laurel Oak
15	26	Laurel Oak
16	26	Laurel Oak
18	25.5	Laurel Oak
19	25	Laurel Oak
20	24.6	Laurel Oak
21	24.4	Laurel Oak
23	24	Laurel Oak
24	24	Laurel Oak
25	24	Laurel Oak
26	23.5	Laurel Oak
27	23.5	Laurel Oak
30	23	Laurel Oak
31	23	Laurel Oak
33	22	Laurel Oak
34	22	Laurel Oak
35	22	Laurel Oak
36	21.9	Laurel Oak
37	21.6	Laurel Oak
38	21	Laurel Oak
39	21	Laurel Oak
40	20	Laurel Oak
41	20	Laurel Oak
42	20	Laurel Oak
43	20	Laurel Oak
44	20	Laurel Oak
45	19.4	Laurel Oak
46	19.3	Laurel Oak
47	19.2	Laurel Oak
48	19	Laurel Oak
49	19	Laurel Oak
50	18.6	Laurel Oak
51	18.5	Laurel Oak
53	18	Laurel Oak
54	18	Laurel Oak
55	17.5	Laurel Oak
56	17.5	Laurel Oak
57	17.3	Laurel Oak
58	17.3	Laurel Oak
59	17.2	Laurel Oak
60	17.2	Laurel Oak
61	17.1	Laurel Oak
62	17	Laurel Oak
63	17	Laurel Oak
64	17	Laurel Oak
65	17	Laurel Oak
66	17	Laurel Oak
67	17	Laurel Oak
68	17	Laurel Oak
69	17	Laurel Oak
70	17	Laurel Oak
71	17	Laurel Oak
72	16.6	Laurel Oak
73	16.6	Laurel Oak
75	16.5	Laurel Oak
76	16.5	Laurel Oak
77	16.4	Laurel Oak
80	16	Laurel Oak
81	16	Laurel Oak
82	16	Laurel Oak
83	16	Laurel Oak
84	16	Laurel Oak
85	16	Laurel Oak
86	16	Laurel Oak
87	16	Laurel Oak
88	16	Laurel Oak
89	15.8	Laurel Oak
90	15.5	Laurel Oak
91	15.5	Laurel Oak
92	15.5	Laurel Oak
93	15.2	Laurel Oak
94	15.1	Laurel Oak
95	15	Laurel Oak
96	15	Laurel Oak
97	15	Laurel Oak
98	15	Laurel Oak
99	15	Laurel Oak
100	15	Laurel Oak
101	14.9	Laurel Oak
102	14.5	Laurel Oak
103	14.5	Laurel Oak
104	14.5	Laurel Oak
105	14.5	Laurel Oak
106	14.4	Laurel Oak
107	14	Laurel Oak
108	14	Laurel Oak
109	14	Laurel Oak
110	14	Laurel Oak
Total	**1999.9**	

LIVE OAKS REQUIRING MITIGATION

TREE #	SIZE DBH	TYPE
3	35	Live Oak
12	27	Live Oak
17	26	Live Oak
127	12.4	Live Oak
Total	**100.4**	

PINE TREES REQUIRING MITIGATION

TREE #	SIZE DBH	TYPE
22	24	Slash Pine
28	23	Slash Pine
29	23	Slash Pine
32	22	Slash Pine
52	18	Slash Pine
74	16.5	Slash Pine
78	16	Slash Pine
79	16	Slash Pine
Total	**158.5**	

SABAL PALMS REQUIRING MITIGATION

TREE #	SIZE CT	TYPE
279	10' MIN	Sabal Palm
280	10' MIN	Sabal Palm
281	10' MIN	Sabal Palm
282	10' MIN	Sabal Palm
283	10' MIN	Sabal Palm
284	10' MIN	Sabal Palm
285	10' MIN	Sabal Palm
286	10' MIN	Sabal Palm
287	10' MIN	Sabal Palm
288	10' MIN	Sabal Palm
289	10' MIN	Sabal Palm
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527	10' MIN	Sabal Palm
528	10' MIN	Sabal Palm
529	10' MIN	Sabal Palm
530	10' MIN	Sabal Palm
531	10' MIN	Sabal Palm
532	10' MIN	Sabal Palm
Total	254	

Mitigation Data:

Total DBH of Native Trees 14" DBH & Larger to be Removed: 2,258.8" DBH

Total Sabal Palms 10' CT & Larger to be Removed: 254 Palms

Tree Mitigation Method TBD

Mitigation Notes:

1. Tree mitigation is for the removal of healthy existing native trees 14" dbh & greater.
2. Palm mitigation is for the removal of existing native palms10' clear trunk height & greater.

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

KMA

SUNRISE PROPERTY

3904 Sunrise Blvd.
City of Fort Pierce, Florida

Tree Mitigation Tables & Data

Revisions

Date	Init.	Description
9.12.24	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

TD-3

Legal Description

The south 546 feet of the northwest ¼ of the northeast ¼, lying east of White City Road (Sunrise Boulevard) in Section 33, Township 35 South, Range 40 East, said land lying and being in St. Lucie County, Florida.

WHITE CITY CEMETERY
ZONING: I

DRY DETENTION POND

DRY DETENTION POND

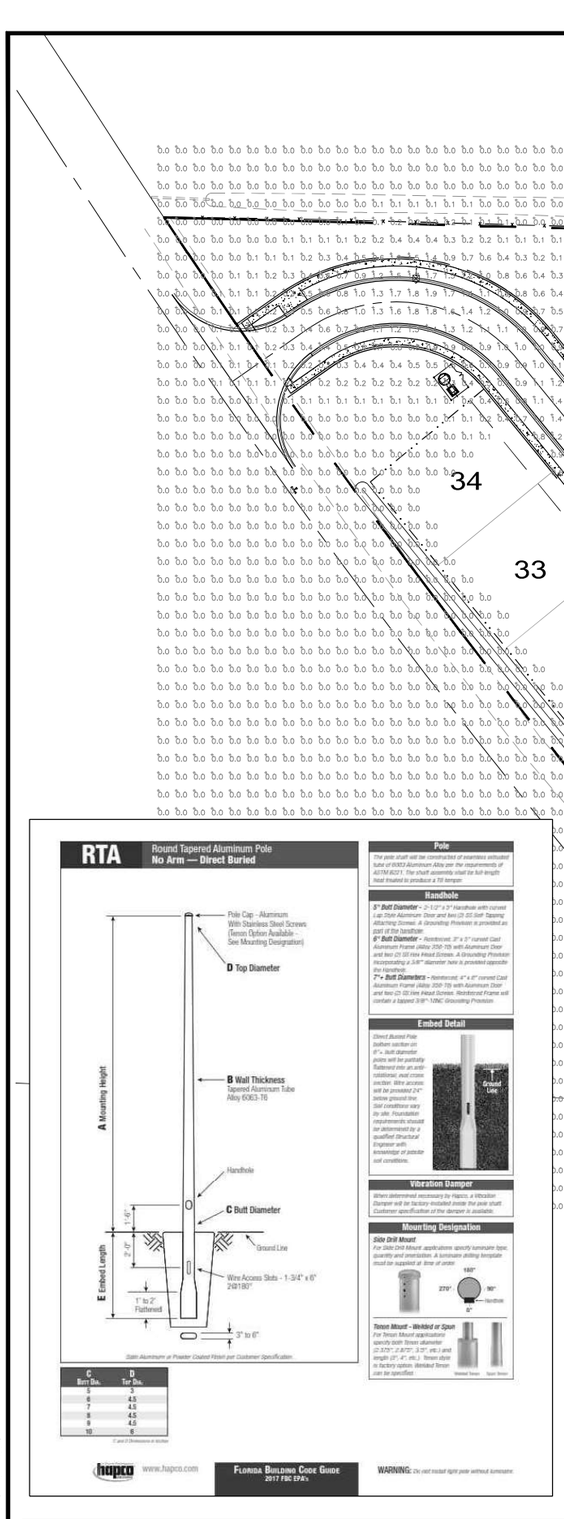
DRY DETENTION POND

EXISTING DRAINAGE CANAL AND 60' EASEMENT

ZONING: RS-3

ZONING: I-1

ZONING: RS-3



Landreth Lighting Luminaire Schedule

Symbol	Manufacturer	Qty	Label	Arrangement	Description	LLF	BUG Rating	Arranged Watts	Arranged Lumens
	Lithonia Lighting	15	SLA	Single	DSX0 LED P5 30K 70CRI T3M MVOLT RPA NLTAIR2 PIRHN HS FINISH TBD: MOUNTED 25' AFG ON ROUND TAPERED ALUMINUM DIRECT BURIED POLE	1.000	B1-U0-G3	90.12	10055

Landreth Lighting Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Entire Site	Illuminance	Fc	0.26	2.0	0.0	N.A.	N.A.
Drive Lane	Illuminance	Fc	1.20	2.0	0.5	2.40	4.00

North

GRAPHIC SCALE

40 0 40 80 120

SCALE: (1 Inch = 40 Feet)

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT
SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT
INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
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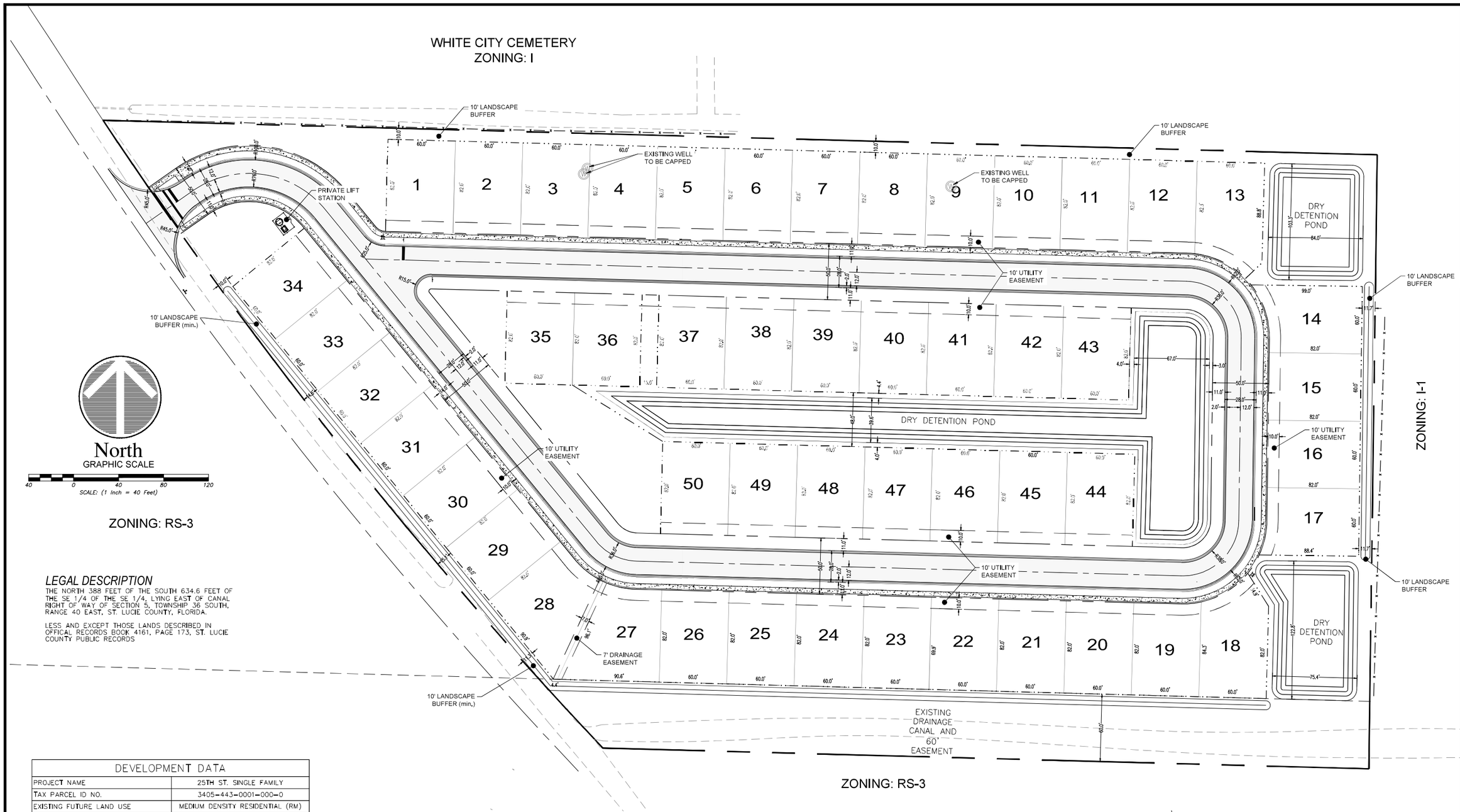
www.callsunshine.com

PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.:	24-1001-PHOTO

SHEET TITLE:
PHOTO-01

SHEET NUMBER:

Plotted on Tuesday, July 09, 2024 - 12:17 PM by Blaine Bergstresser



LEGAL DESCRIPTION

THE NORTH 388 FEET OF THE SOUTH 634.6 FEET OF THE SE 1/4 OF THE SE 1/4, LYING EAST OF CANAL RIGHT OF WAY OF SECTION 5, TOWNSHIP 36 SOUTH, RANGE 40 EAST, ST. LUCIE COUNTY, FLORIDA.

LESS AND EXCEPT THOSE LANDS DESCRIBED IN OFFICAL RECORDS BOOK 4161, PAGE 173, ST. LUCIE COUNTY PUBLIC RECORDS

DEVELOPMENT DATA	
PROJECT NAME	25TH ST. SINGLE FAMILY
TAX PARCEL ID NO.	3405-443-0001-000-0
EXISTING FUTURE LAND USE	MEDIUM DENSITY RESIDENTIAL (RM)
PROPOSED FUTURE LAND USE	MEDIUM DENSITY RESIDENTIAL (RM)
EXISTING ZONING	RS-3
PROPOSED ZONING	PLANNED DEVELOPMENT ZONE (PD)
PROJECT USE	SINGLE-FAMILY RESIDENTIAL
MAXIMUM ALLOWABLE DENSITY	RS-3 - 6 DU/AC
PROPOSED DENSITY	PD - 3.81 DU/AC

OPEN SPACE CALCUALTION			
TOTAL AREA OF SUBJECT PARCEL	502,682 SF	11.54 AC	100.00%
REQUIRED OPEN SPACE AREA	100,536 SF	2.31 AC	20.00%
AREA OF WETLAND BUFFER	0 SF	0.00 AC	0.00%
AREA OF RETENTION PONDS*	30,161 SF	0.69 AC	6.00%
AREA OF GREEN SPACE	119,476 SF	2.74 AC	23.77%
PROVIDED OPEN SPACE AREA	149,637 SF	3.44 AC	29.77%

*PER SECTION 125-212(b)(3)...stormwater detention and retention facilities providing that no more than 30 percent of the overall open space requirement shall be satisfied in this manner

LAND USE BREAKDOWN			
TOTAL AREA OF SUBJECT PARCEL	502,682 SF	11.54 AC	100.00%
AREA OF ONSITE WETLAND	0 SF	0.00 AC	0.00%
AREA OF WETLAND BUFFER	0 SF	0.00 AC	0.00%
TOTAL DEVELOPMENT AREA	502,682 SF	11.54 AC	100.00%
TOTAL DEVELOPMENT AREA	502,682 SF	11.54 AC	100.00%
AREA OF PROPOSED BUILDINGS	150,000 SF	3.44 AC	29.84%
AREA OF PROPOSED IMPERVIOUS	63,131 SF	1.45 AC	12.56%
AREA OF PROPOSED LOT IMPERVIOUS	30,000 SF	0.69 AC	5.97%
AREA OF PROPOSED RETENTION BASE	32,933 SF	0.76 AC	6.55%
TOTAL PROPOSED IMPERVIOUS AREA	276,064 SF	6.34 AC	54.92%
AREA OF PROPOSED LOT PERVIOUS	80,253 SF	1.84 AC	15.96%
AREA OF PROPOSED RETENTION BANK	28,870 SF	0.66 AC	5.74%
AREA OF PROPOSED GREEN SPACE	119,476 SF	2.74 AC	23.77%
TOTAL PROPOSED PERVIOUS AREA	228,599 SF	5.25 AC	45.48%

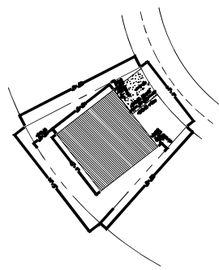
ZONING	PD
MIN. LOT SIZE	4,920 SF
MIN. LOT WIDTH	60'
MIN. LOT DEPTH	70' (82 PROPOSED)
MIN. ROAD FRONTAGE	25'
MAX. LOT COVERAGE	40%
BUILDING HEIGHT (1 STORY)	45'
MAX. GROSS DENSITY (DU/AC.)	12 DU/AC. (3.81 DU/AC. PROPOSED)
MIN. SETBACKS	
FRONT	15'
SIDE (INTERIOR)	5'
SIDE (CORNER)	5'
GARAGE	20'
REAR	15'

CIVIL ENGINEER
KMA ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
PHONE: (772) 569-5505

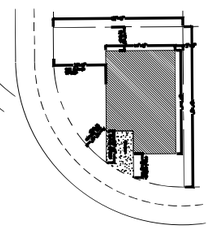
OWNER/DEVELOPER
DT VENTURES 1, LLC.
PO BOX 92280
ROCHESTER,NY 14692

NOTES

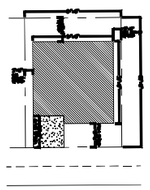
1. AIR CONDITIONER UNITS WILL HAVE A 5' SIDE SETBACK.



CURVATURE LOT DETAIL
SCALE: N.T.S.



CORNER LOT DETAIL
SCALE: N.T.S.



REGULAR LOT DETAIL
SCALE: N.T.S.

KMA
ENGINEERING & SURVEYING, LLC.
3001 INDUSTRIAL AVE 2
FORT PIERCE, FL 34946
(772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT: SUNRISE LAKES
CITY OF FORT PIERCE, FLORIDA

CLIENT: INTEGRITY 1ST CONSTRUCTION GROUP

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
02/24/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, it's free, it's the law.
www.callsunshine.com

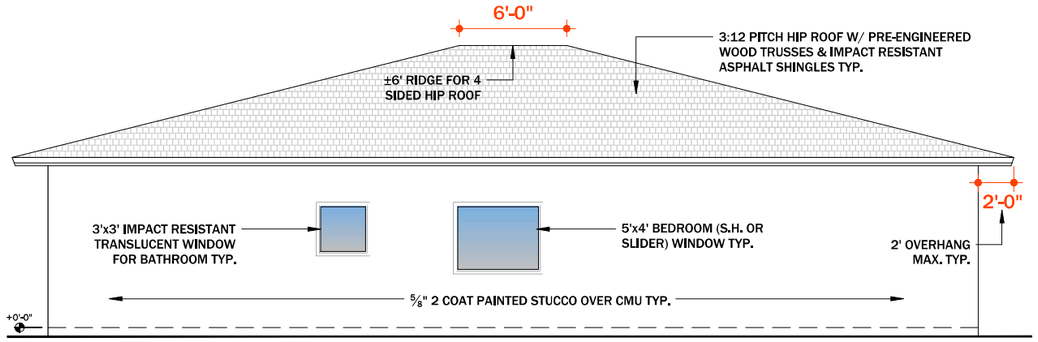
PROJECT No.:	24-1001
DRAWN BY:	SCB
CHECKED BY:	BRB
DATE:	04/02/2024
CAD I.D.	24-1001-SITE

SHEET TITLE: SITE PLAN

SHEET NUMBER: C-200

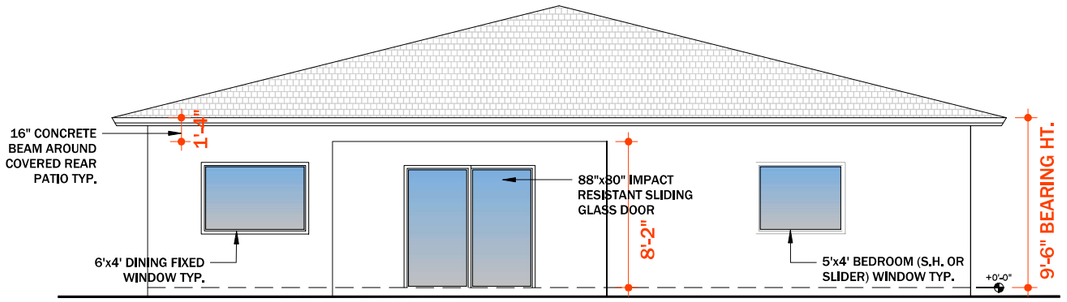
Plotted on Tuesday, July 09, 2024, 12:14 PM by Blaine Bergstresser
I:\Projects\2024\24-1001 - 25th St. Single Family\Civil\Site\24-1001-SITE.dwg

"IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED ARCHITECT TO ALTER THESE PLANS AND SPECIFICATIONS. THIS DOCUMENT CONTAINS PROPERTY INFORMATION AND SHALL NOT BE USED, OR REPRODUCED, OR ITS CONTENTS DISCLOSED, IN WHOLE OR IN PART, WITHOUT THE PRIOR WRITTEN CONSENT OF ALL TERRAIN ARCHITECT, LLC - LICENSE #AR100808
CONTRACTOR(S) SHALL VERIFY EXISTING CONDITIONS AND CORRELATE DIMENSIONS PRIOR TO PROVIDING THE WORK DETAILED IN THESE DRAWINGS, AND SHALL PROMPTLY NOTIFY THE DESIGNER OF ANY DISCREPANCIES."



5 PROPOSED SIDE ELEVATION

SCALE: 1/4" = 1'-0"

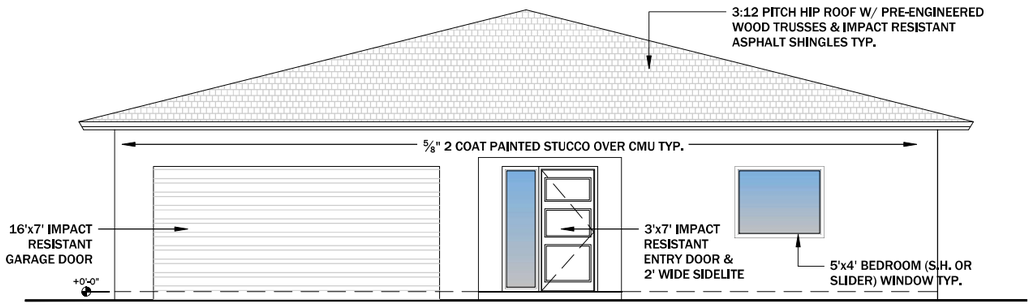


4 PROPOSED REAR ELEVATION

SCALE: 1/4" = 1'-0"

3 PROPOSED SIDE ELEVATION

SCALE: 1/4" = 1'-0"

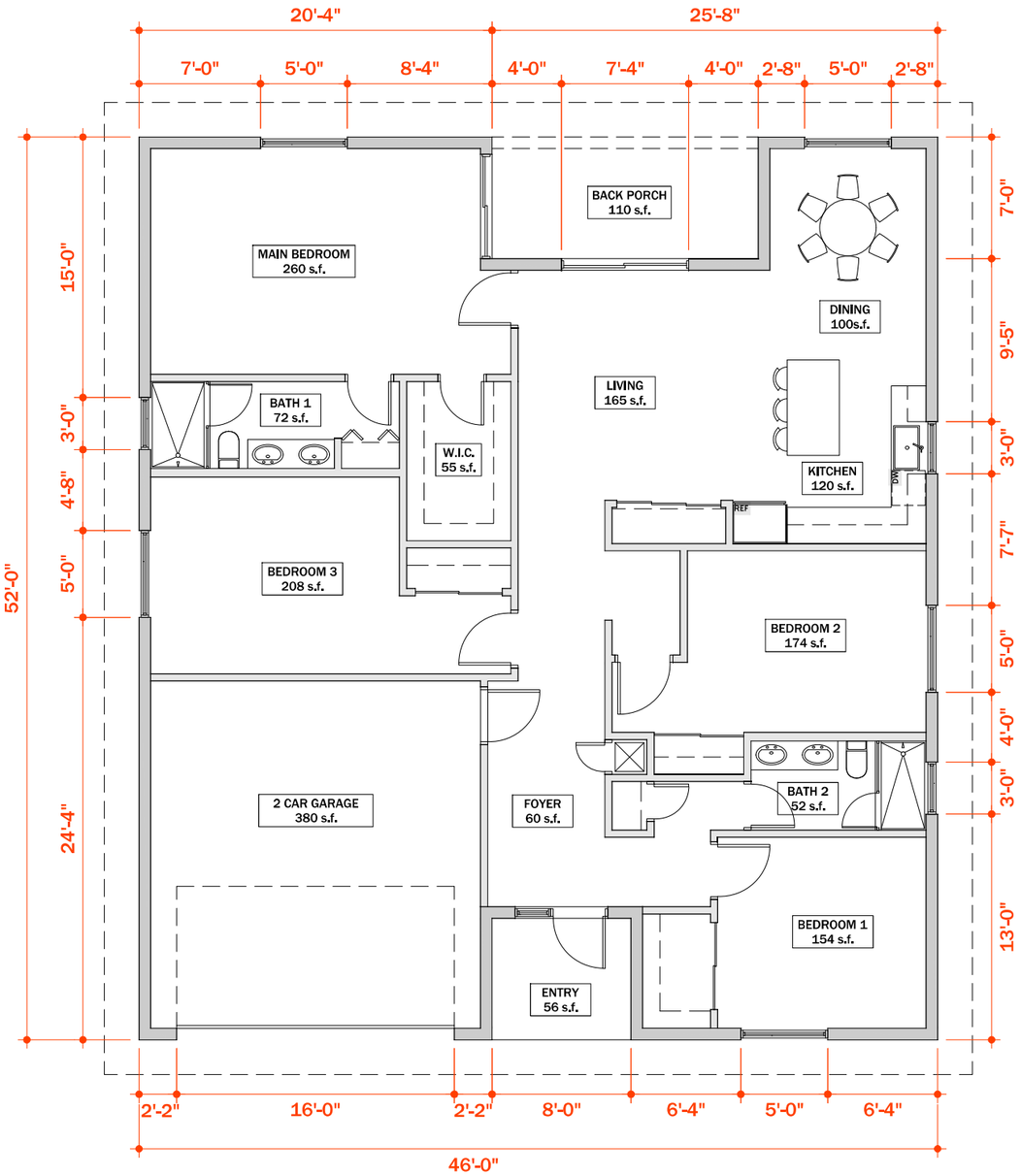


2 PROPOSED FRONT ELEVATION

SCALE: 1/4" = 1'-0"

HOUSE MODEL A: 4 BED 2 BATH / 2,392 S.F.

TOTAL FOOTPRINT: 2,392 S.F.
HVAC SPACE: 1,818 S.F.



1 PROPOSED FLOOR PLAN

SCALE: 1/4" = 1'-0"

VARIES

© 2024 LLC

ALL TERRAIN ARCHITECT

OFFICES:
8051 N TAMIAMI TRAIL
E6
SARASOTA
FL 34243

21266 SUMMERTRACE CIR.
BOCA RATON
FL 33428

PROJECT
SUNRISE LAKES RESIDENTIAL COMMUNITY

3804 SUNRISE BLVD
FORT PIERCE
FL 34982

DATE: 4/15/2024
PROJECT # 24101

REVISION	DATE
1	
2	
3	
4	
5	
6	

NOTES:
1. DO NOT SCALE THE DRAWINGS DUE TO SHEET & PLOTTING DIFFERENTIAL. FOLLOW THE DIMENSIONS & ALWAYS FIELD VERIFY

SCHEMATIC DESIGN

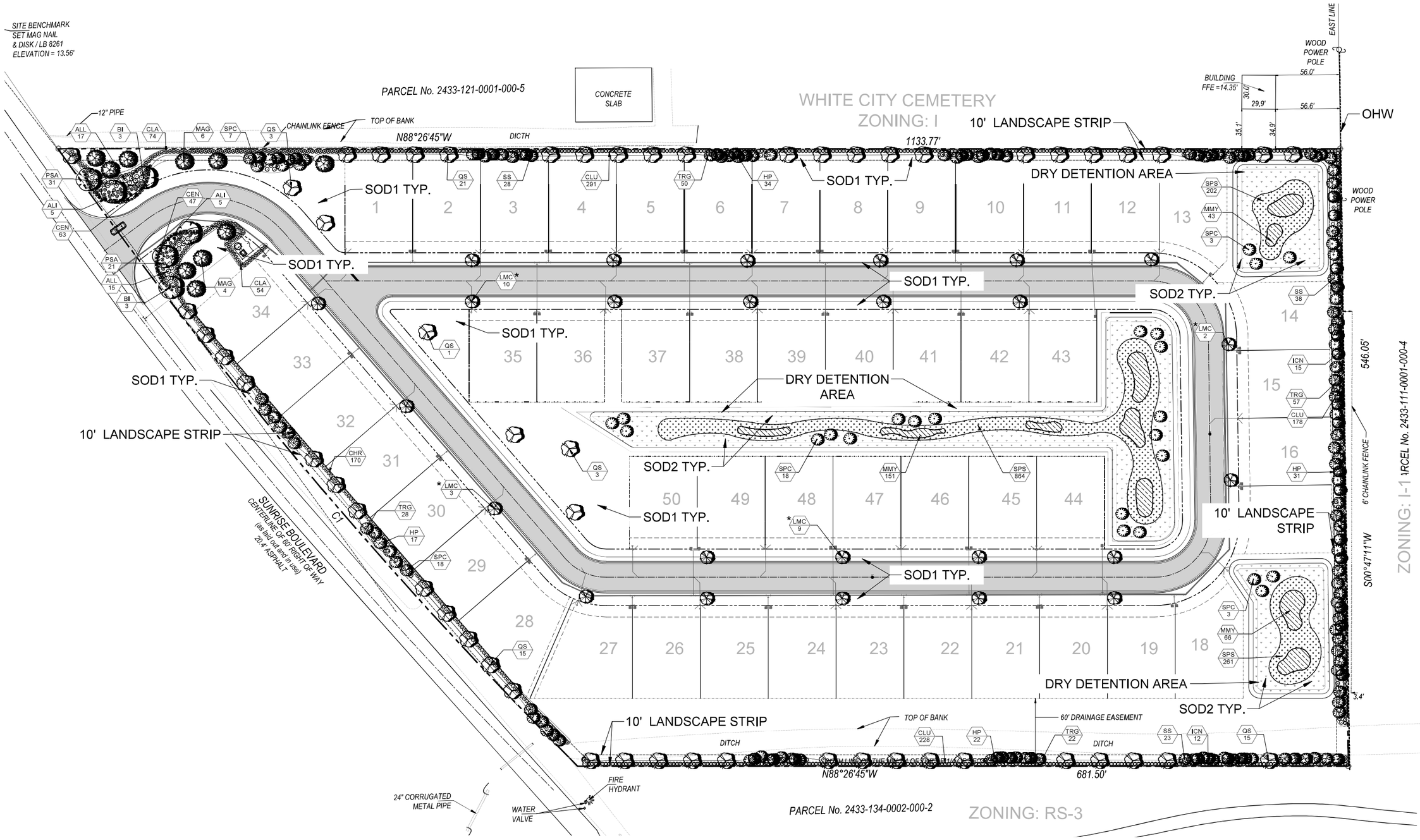
STATE OF FLORIDA
ARTHUR MOLINARI
AR 100808
REGISTERED ARCHITECT

MODEL A PLAN & ELEVATIONS

0' 1' 2' 4' 8'
SCALE: 1/4" = 1'-0"

A-1.0

DRAWN BY: ATA



*ROOT BARRIER TO BE INSTALLED WITH ALL TREES ADJACENT TO STREETS; SEE DETAIL ON SHEET LA-4 TYP.

Know what's below. Call before you dig.

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

KMA

SUNRISE PROPERTY

3904 Sunrise Blvd.
City of Fort Pierce, Florida

Detail Landscape Plan

PARCEL No. 2433-111-0001-000-4

Revisions		
Date	Init.	Description
6.05.24	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 40'

0 20' 40' 80'

LA-2

O'ROURKE
ENGINEERING & PLANNING

TRAFFIC ANALYSIS

FOR

Integrity First

Prepared for:

Mr. Guiseppe "Joe" Scionti
The Integrity First Group
1812 Aragon Ave, Suite A
Lake Worth Beach, Florida 33461

Prepared by:

O'Rourke Engineering & Planning
3725 S East Ocean Blvd, Suite 201
Stuart, Florida 34996
772-781-7918

April 16, 2024

24164.01.03

Prepared by: O'Rourke Engineering & Planning Certificate of Authorization: #26869 3725 S East Ocean Blvd, Suite 201 Stuart, Florida 34996 772-781-7918	Professional Engineer Susan E. O'Rourke, P.E. Date signed and sealed: 04/16/2024 License #: 42684

O'ROURKE
ENGINEERING & PLANNING

April 16, 2024

Mr. Guiseppe "Joe" Scionti
The Integrity First Group
1812 Aragon Ave, Suite A
Lake Worth Beach, Florida 33461

Re: Integrity First

Dear Mr. Scionti:

O'Rourke Engineering & Planning has completed the analysis of the proposed residential development located on Sunrise Boulevard in 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

C6 - Integrity First - TIA

TABLE OF CONTENTS

INTRODUCTION	1
PROJECT DESCRIPTION	1
PROJECT TRAFFIC	1
EXISTING CONDITIONS	4
PROJECT DISTRIBUTION/ ASSIGNMENT/ IMPACT	5
LINK ANALYSIS	5
INTERSECTION ANALYSIS	9
DRIVEWAY ANALYSIS	9
CONCLUSION	11

TABLES

TABLE 1: Project Trip Generation	3
TABLE 2a: AM Project Percent Impact	7
TABLE 2b: PM Project Percent Impact	7
TABLE 3a: Link Analysis – AM Peak Hour	8
TABLE 3b: Link Analysis – PM Peak Hour	8
TABLE 4: Intersection Level of Service	9

FIGURES

FIGURE 1: Project Location	2
FIGURE 2: Project Traffic Assignment	6
FIGURE 3: Driveway Volumes	10

APPENDICES

APPENDIX A: Site Plan
APPENDIX B: St. Lucie County 2023 Traffic Counts and Level of Service Report
APPENDIX C: Growth Rate & Background Projects
APPENDIX D: Intersection Analysis
APPENDIX E: Driveway Analysis

INTRODUCTION

O'Rourke Engineering & Planning was retained to prepare a traffic analysis for the proposed development consisting of 50 Single Family dwelling units located on Sunrise Boulevard in St. Lucie County, Florida. The purpose of this report is to determine the project's 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.

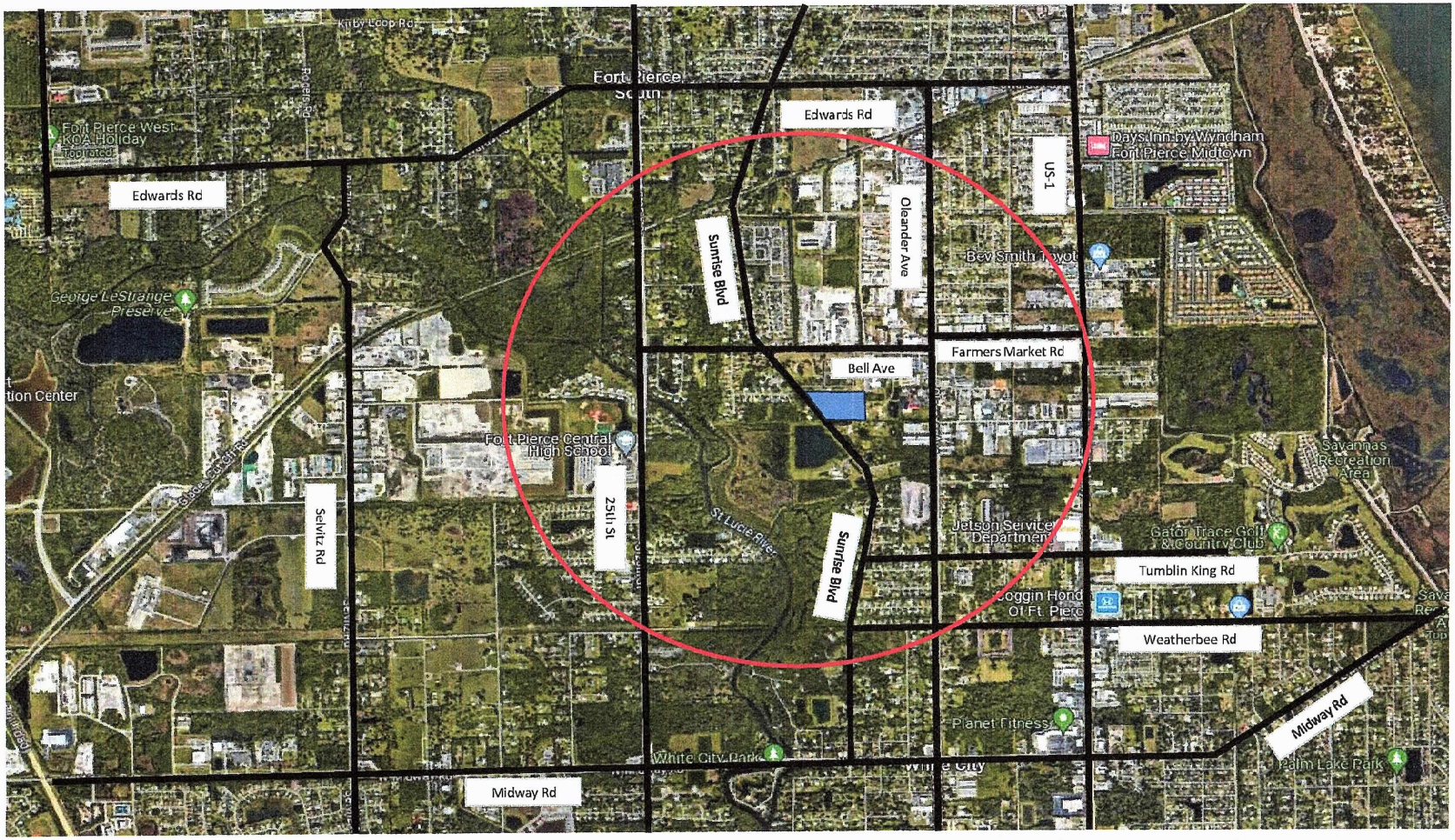
PROJECT DESCRIPTION

The proposed development located on Sunrise Boulevard in St. Lucie County, Florida, will consist of 50 Single Family dwelling units. The site is currently vacant. The project will have access to Sunrise Boulevard via one full access driveway. The project has an anticipated buildout year of 2027. The project location is shown in **Figure 1**. The number of lanes is also shown in **Figure 1**.

PROJECT TRAFFIC

To estimate future traffic generated by the development, the ITE Trip Generation, 11th Edition trip rates for Single Family Detached (Land Use Code 210) was applied to estimate the trips generated by the proposed development. These calculations are shown in **Tables 1a, 1b, and 1c**.

As shown, the project will generate 533 new daily trips. There will be 40 AM peak hour trips with 10 entering the project and 30 trips exiting the project. The project will generate 52 new PM peak hour trips. There will be 33 trips entering the project and 19 trips exiting the project in the PM peak hour.



NTS

O'ROURKE ENGINEERING & PLANNING

3725 S East Ocean Blvd, Suite 201
Stuart, Fl, 34996

Job Number:

Date:

Legend

= Project Location

= 1 Mile Radius

Figure 1

Project Location

Integrity First

Table 1 - Trip Generation

Table 1a: Daily

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Net New Trips		
					In	Out	In	Out	Total
Single Family Detached	210	50	DU	Ln(T) = 0.92Ln(X) + 2.68	50%	50%	267	266	533
TOTALS							**267**	**266**	**533**

Source: ITE 11th 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
Single Family Detached	210	50	DU	Ln(T) = 0.91Ln(X) + 0.12	25%	75%	10	30	40
TOTALS							**10**	**30**	**40**

Source: ITE 11th 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
Single Family Detached	210	50	DU	Ln(T) = 0.94Ln(X) + 0.27	63%	37%	33	19	52
TOTALS							**33**	**19**	**52**

Source: ITE 11th Edition Trip Generation Rates

EXISTING CONDITIONS

The study area is defined as the roadways upon which the project has an impact of 1% of the level of service capacity within the radius of development influence of 1 mile. 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 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.

- Sunrise Boulevard is a two-lane undivided major collector roadway with a general north/south alignment.
- Bell Avenue is a two-lane undivided major collector with an east/west alignment.
- Midway Road is a four-lane divided principal arterial with an east/west alignment.
- 25th Street is a four-lane divided principal arterial with a north/south alignment.
- Oleander Avenue is a two-lane minor arterial with a north/south alignment.

Existing Traffic Volumes/ Service Volume

Link volume data was obtained from the St. Lucie County TPO. 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 St. Lucie County 2023 Traffic Counts and Level of Service Report. Traffic volumes for the intersection of Sunrise Boulevard and Bell Avenue were counted on April 2, 2024, during the AM and PM peak periods.

Appendix B includes the St. Lucie County 2023 Traffic Counts and Level of Service Report.

PROJECT DISTRIBUTION/ ASSIGNMENT/IMPACT

The project traffic was distributed by general geographic direction and then assigned to the roadway network.

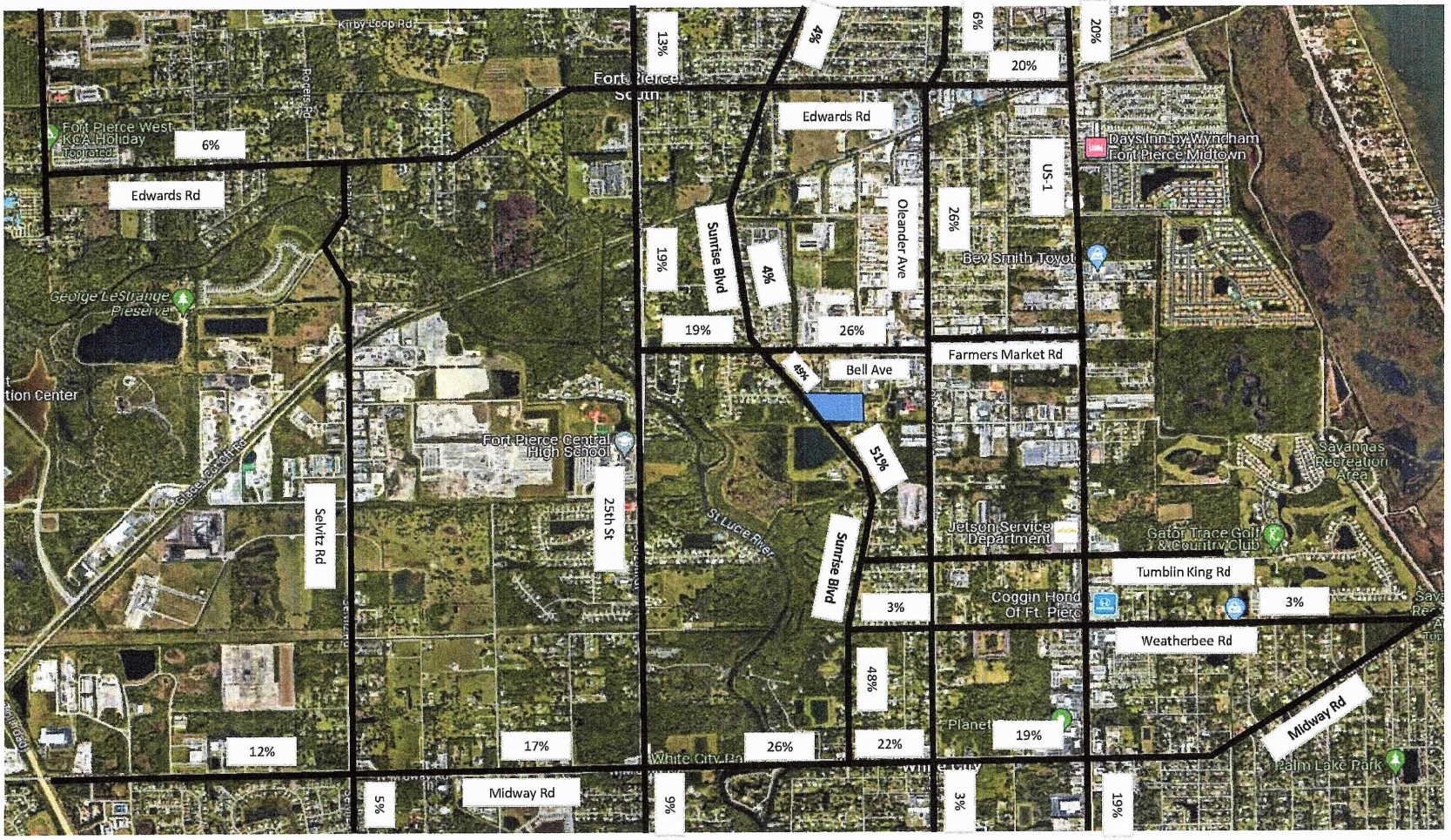
Distribution/ Assignment – This general distribution led to an assignment of trips based on the anticipated ultimate destinations and the roadway paths used to reach those destinations. The project assignment for the proposed development is shown in **Figure 2.**

Impact – Tables 2a and 2b summarize the project impact as a percent of service volume capacity. Significant is defined as 1% or more within the radius of development impact. As shown in **Tables 2a and 2b**, the project is significant on Sunrise Boulevard, Bell Avenue, and Oleander Avenue.

LINK ANALYSIS

The links where the project traffic is significant were analyzed further to ensure they will meet concurrency. A 5-year area wide growth rate was calculated using the FDOT Historical Traffic Count volumes. The calculated growth rate resulted in a rate of 1.16%. Existing traffic volumes were taken from the TPO Level of Service report and grown using the higher of 2.5% per year or 1% plus committed projects. "Other approved" unbuilt projects include Dade & Sunrise, American Silicon, Oleander Oaks, and Napa Auto. Project traffic was then added to create total traffic. **Tables 3a and 3b** summarize the results of the link analysis. As shown, the link of Oleander Avenue from Bell Avenue to Farmer's Market Road is currently operating below the adopted level of service. Based on FS 163.318 the project is not responsible for deficient links. All other significant links will remain at an acceptable level of service at project buildout.

Details of the growth rate calculation and background projects are included in **Appendix C.**



NTS

O'ROURKE ENGINEERING & PLANNING

3725 S East Ocean Blvd, Suite 201
Stuart, Fl, 34996

Job Number:

Date:

Legend

= Project Location

Figure 2

Project Percent Assignment

Integrity First

Table 2a: Percent Impact - AM Peak Hour

Segment	From	To	Direction		Lanes	Is Project Traffic More than 1%of Capacity?	LOS D Directional Peak Hour	Directional Peak Project Volume	Project Percent Assignment	Directional Percent Project of Capacity
Sunrise Blvd	Midway Rd	Project Entrance	NB	IN	2L	No	540	5	51%	0.93%
	Midway Rd	Project Entrance	SB	OUT	2L	Yes	540	15	51%	2.78%
	Project Entrance	Bell Ave	NB	OUT	2L	Yes	540	15	49%	2.78%
	Project Entrance	Bell Ave	SB	IN	2L	No	540	5	49%	0.93%
	Bell Ave	Edwards Road	NB	OUT	2L	No	750	1	4%	0.13%
	Bell Ave	Edwards Road	SB	IN	2L	No	750	0	4%	0.00%
	Edwards Road	Cortez Blvd	NB	OUT	2L	No	600	1	4%	0.17%
	Edwards Road	Cortez Blvd	SB	IN	2L	No	600	0	4%	0.00%
Bell Ave	25th St	Sunrise Blvd	EB	IN	2L	No	790	2	19%	0.25%
	25th St	Sunrise Blvd	WB	OUT	2L	No	790	6	19%	0.76%
	Sunrise Blvd	Oleander Ave	EB	OUT	2L	Yes	600	8	26%	1.33%
	Sunrise Blvd	Oleander Ave	WB	IN	2L	No	600	3	26%	0.50%
Oleander Ave	Kitterman Rd	Midway Rd	NB	IN	2L	No	750	0	3%	0.00%
	Kitterman Rd	Midway Rd	SB	OUT	2L	No	750	1	3%	0.13%
	Bell Ave	Farmer's Market Rd	NB	OUT	2L	Yes	540	8	26%	1.48%
	Bell Ave	Farmer's Market Rd	SB	IN	2L	No	540	3	26%	0.56%
	Farmer's Market Rd	Edwards Road	NB	OUT	2L	Yes	750	8	26%	1.07%
	Farmer's Market Rd	Edwards Road	SB	IN	2L	No	750	3	26%	0.40%
	Edwards Road	Wisteria Ave	NB	OUT	2L	No	750	2	6%	0.27%
	Edwards Road	Wisteria Ave	SB	IN	2L	No	750	1	6%	0.13%
Midway Rd	Selvitz Rd	25th St	EB	IN	4LD	No	2100	2	17%	0.10%
	Selvitz Rd	25th St	WB	OUT	4LD	No	2100	5	17%	0.24%
	25th St	Sunrise Blvd	EB	IN	4LD	No	2100	3	26%	0.14%
	25th St	Sunrise Blvd	WB	OUT	4LD	No	2100	8	26%	0.38%
	Sunrise Blvd	Oleander Ave	EB	OUT	4LD	No	2100	7	22%	0.33%
	Sunrise Blvd	Oleander Ave	WB	IN	4LD	No	2100	2	22%	0.10%
	Oleander Ave	US-1	EB	OUT	4LD	No	2100	6	19%	0.29%
	Oleander Ave	US-1	WB	IN	4LD	No	2100	2	19%	0.10%
25th St	Bell Ave	Edwards Road	NB	OUT	4LD	No	2100	6	19%	0.29%
	Bell Ave	Edwards Road	SB	IN	4LD	No	2100	2	19%	0.10%
	Edwards Road	Cortez Blvd	NB	OUT	4LD	No	2000	4	13%	0.20%
	Edwards Road	Cortez Blvd	SB	IN	4LD	No	2000	1	13%	0.05%
Edwards Road	McNeil Rd	Selvitz Rd	EB	IN	4LD	No	700	1	6%	0.14%
	McNeil Rd	Selvitz Rd	WB	OUT	4LD	No	700	2	6%	0.29%
	Selvitz Rd	25th St	EB	IN	2L	No	880	1	6%	0.11%
	Selvitz Rd	25th St	WB	OUT	2L	No	880	2	6%	0.23%
	Oleander Ave	US-1	EB	OUT	4LD	No	1630	6	20%	0.37%
	Oleander Ave	US-1	WB	IN	4LD	No	1630	2	20%	0.12%

Source: St. Lucie County Traffic Counts and Level of Service Report 2023

In: 10
Out: 30

Table 2b: Percent Impact - PM Peak Hour

Segment	From	To	Direction		Lanes	Is Project Traffic More than 1%of Capacity?	LOS D Directional Peak Hour	Directional Peak Project Volume	Project Percent Assignment	Directional Percent Project of Capacity
Sunrise Blvd	Midway Rd	Project Entrance	NB	IN	2L	Yes	540	17	51%	3.15%
	Midway Rd	Project Entrance	SB	OUT	2L	Yes	540	10	51%	1.85%
	Project Entrance	Bell Ave	NB	OUT	2L	Yes	540	9	49%	1.67%
	Project Entrance	Bell Ave	SB	IN	2L	Yes	540	16	49%	2.96%
	Bell Ave	Edwards Road	NB	OUT	2L	No	750	1	4%	0.13%
	Bell Ave	Edwards Road	SB	IN	2L	No	750	1	4%	0.13%
	Edwards Road	Cortez Blvd	NB	OUT	2L	No	600	1	4%	0.17%
	Edwards Road	Cortez Blvd	SB	IN	2L	No	600	1	4%	0.17%
Bell Ave	25th St	Sunrise Blvd	EB	IN	2L	No	790	6	19%	0.76%
	25th St	Sunrise Blvd	WB	OUT	2L	No	790	4	19%	0.51%
	Sunrise Blvd	Oleander Ave	EB	OUT	2L	No	600	5	26%	0.83%
	Sunrise Blvd	Oleander Ave	WB	IN	2L	Yes	600	9	26%	1.50%
Oleander Ave	Kitterman Rd	Midway Rd	NB	IN	2L	No	750	1	3%	0.13%
	Kitterman Rd	Midway Rd	SB	OUT	2L	No	750	1	3%	0.13%
	Bell Ave	Farmer's Market Rd	NB	OUT	2L	No	540	5	26%	0.93%
	Bell Ave	Farmer's Market Rd	SB	IN	2L	Yes	540	9	26%	1.67%
	Farmer's Market Rd	Edwards Road	NB	OUT	2L	No	750	5	26%	0.67%
	Farmer's Market Rd	Edwards Road	SB	IN	2L	Yes	750	9	26%	1.20%
	Edwards Road	Wisteria Ave	NB	OUT	2L	No	750	1	6%	0.13%
	Edwards Road	Wisteria Ave	SB	IN	2L	No	750	2	6%	0.27%
Midway Rd	Selvitz Rd	25th St	EB	IN	4LD	No	2100	6	17%	0.29%
	Selvitz Rd	25th St	WB	OUT	4LD	No	2100	3	17%	0.14%
	25th St	Sunrise Blvd	EB	IN	4LD	No	2100	9	26%	0.43%
	25th St	Sunrise Blvd	WB	OUT	4LD	No	2100	5	26%	0.24%
	Sunrise Blvd	Oleander Ave	EB	OUT	4LD	No	2100	4	22%	0.19%
	Sunrise Blvd	Oleander Ave	WB	IN	4LD	No	2100	7	22%	0.33%
	Oleander Ave	US-1	EB	OUT	4LD	No	2100	4	19%	0.19%
	Oleander Ave	US-1	WB	IN	4LD	No	2100	6	19%	0.29%
25th St	Bell Ave	Edwards Road	NB	OUT	4LD	No	2100	4	19%	0.19%
	Bell Ave	Edwards Road	SB	IN	4LD	No	2100	6	19%	0.29%
	Edwards Road	Cortez Blvd	NB	OUT	4LD	No	2000	2	13%	0.10%
	Edwards Road	Cortez Blvd	SB	IN	4LD	No	2000	4	13%	0.20%
Edwards Road	McNeil Rd	Selvitz Rd	EB	IN	4LD	No	700	2	6%	0.29%
	McNeil Rd	Selvitz Rd	WB	OUT	4LD	No	700	1	6%	0.14%
	Selvitz Rd	25th St	EB	IN	2L	No	880	2	6%	0.23%
	Selvitz Rd	25th St	WB	OUT	2L	No	880	1	6%	0.11%
	Oleander Ave	US-1	EB	OUT	4LD	No	1630	4	20%	0.25%
	Oleander Ave	US-1	WB	IN	4LD	No	1630	7	20%	0.43%

Source: St. Lucie County Traffic Counts and Level of Service Report 2023

In: 33
Out: 19

Table 3a: Link Analysis - AM Peak Hour

Segment	From	To	Direction		Lanes	Is Project Traffic More than 1% of Capacity?	2023 AADT [1]	D Factor	2023 Volume Peak Hour Peak Direction (TPO)	2023 Volume Peak Hour Directional [1]	Growth Rate [2]	2027 Peak Hour, Direct. Volume (2023 + Growth)	AM Commited Traffic	2027 Peak Hour, Direct. Volume (1% Growth + Committed)	Highest Growth	LOS D Directional Peak Hour	Directional Peak Project Volume	Project Percent Assignment	Directional Percent Project of Capacity	Total Traffic (Peak Direction)	Does Project Meet Concurrency?
Sunrise Blvd	Midway Rd	Project Entrance	SB	OUT	2L	Yes	3,611	0.530	218	218	2.50%	241	7	234	241	540	15	51%	2.78%	256	Yes
	Project Entrance	Bell Ave	NB	OUT	2L	Yes	3,611	0.470	218	193	2.50%	213	2	203	213	540	15	49%	2.78%	228	Yes
Bell Ave	Sunrise Blvd	Oleander Ave	EB	OUT	2L	Yes	4,600	0.480	280	258	2.50%	285	1	270	285	600	8	26%	1.33%	293	Yes
Oleander Ave	Bell Ave	Farmer's Market Rd	NB	OUT	2L	Yes	12,703	0.514	613	613	2.50%	677	86	724	724	540	8	26%	1.48%	732	Yes [3]
	Farmer's Market Rd	Edwards Road	NB	OUT	2L	Yes	12,703	0.514	613	613	2.50%	677	77	715	715	750	8	26%	1.07%	723	Yes

(1) St. Lucie County Traffic Counts and Level of Service Report 2023
(2) Growth rate calculated from FDOT Historical AADT
(3) Existing Roadway Failure, Project Not Responsible For Mitigation

In:	10
Out:	30
Years Grown	4

Table 3b: Link Analysis - PM Peak Hour

Segment	From	To	Direction		Lanes	Is Project Traffic More than 1% of Capacity?	2023 AADT [1]	D Factor	2023 Volume Peak Hour Peak Direction TPO	2023 Volume Peak Hour Directional [1]	Growth Rate [2]	2027 Peak Hour, Direct. Volume (2023 + Growth)	PM Commited Traffic	2027 Peak Hour, Direct. Volume (1% Growth + Committed)	Highest Growth	LOS D Directional Peak Hour	Directional Peak Project Volume	Project Percent Assignment	Directional Percent Project of Capacity	Total Traffic (Peak Direction)	Does Project Meet Concurrency?
Sunrise Blvd	Midway Rd	Project Entrance	NB	IN	2L	Yes	3,611	0.510	230	230	2.50%	254	7	246	254	540	17	51%	3.15%	271	Yes
	Midway Rd	Project Entrance	SB	OUT	2L	Yes	3,611	0.490	230	221	2.50%	244	4	234	244	540	10	51%	1.85%	254	Yes
	Project Entrance	Bell Ave	NB	OUT	2L	Yes	3,611	0.510	230	230	2.50%	254	7	246	254	540	9	49%	1.67%	263	Yes
	Project Entrance	Bell Ave	SB	IN	2L	Yes	3,611	0.490	230	221	2.50%	244	4	234	244	540	16	49%	2.96%	260	Yes
Bell Ave	Sunrise Blvd	Oleander Ave	WB	IN	2L	Yes	4,600	0.560	256	256	2.50%	283	1	267	283	600	9	26%	1.50%	292	Yes
Oleander Ave	Bell Ave	Farmer's Market Rd	SB	IN	2L	Yes	12,703	0.514	581	581	2.50%	641	64	669	669	540	9	26%	1.67%	678	Yes [3]
	Farmer's Market Rd	Edwards Road	SB	IN	2L	Yes	12,703	0.514	581	581	2.50%	641	56	661	661	750	9	26%	1.20%	670	Yes

(1) St. Lucie County Traffic Counts and Level of Service Report Fall 2023
(2) Growth rate calculated from FDOT Historical AADT
(3) Existing Roadway Failure, Project Not Responsible For Mitigation

In:	33
Out:	19
Years Grown	4

INTERSECTION ANALYSIS

The intersection of Bell Avenue and Sunrise Boulevard is a four-way stop, with flashing beacons. There is a single approach on all lanes except the northbound flared right turn lane. The analysis does not reflect the lane since the through and left queues could block access during the peak hour. The intersection was counted during the AM and PM peak hours on April 2, 2024. A seasonal factor of 1.01 was applied to the traffic counts. The growth rate of 2.5% was applied for 3 years, and the background projects consisting of Dade & Sunrise, Oleander Oaks, American Silicone, and Napa Auto were then added. Finally, project traffic was added to determine the 2027 total traffic.

The intersection was analyzed using HCS for unsignalized intersections. As shown in **Table 4**, the Sunrise Boulevard & Bell Avenue intersection will operate at a LOS B in the AM and PM peak hours with the existing lane configuration for Existing and Total Traffic 2027 conditions.

Appendix D includes the intersection analysis and data.

Table 4: Intersection/Driveway Level of Service

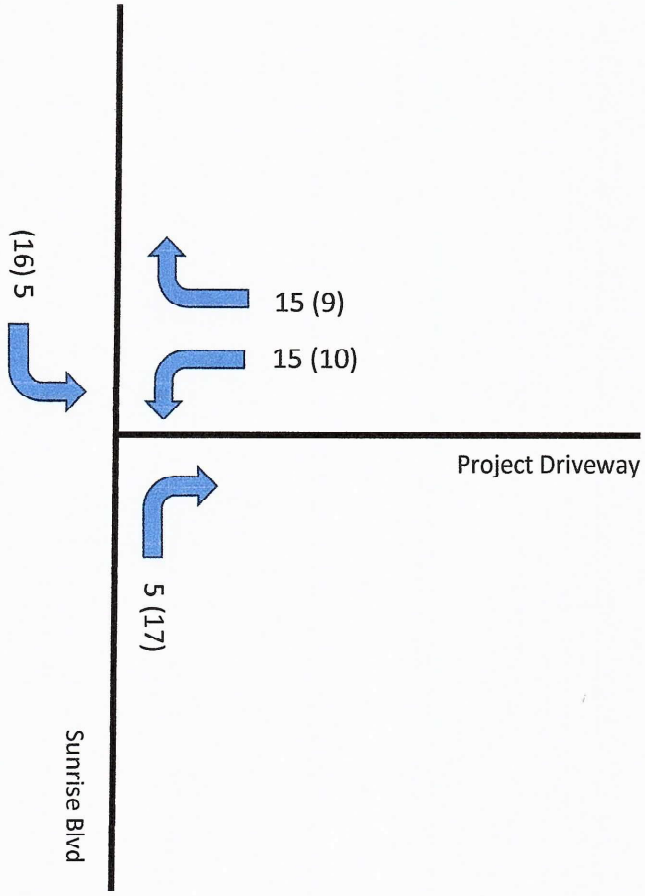
Intersection	Period	Existing		2027 wo/Project		2027 w/Project	
		Delay	LOS	Delay	LOS	Delay	LOS
Sunrise Blvd & Bell Ave	AM	11.4	B	12.7	B	13.0	B
	PM	12.3	B	14.1	B	14.7	B
Sunrise Blvd & Project Driveway	AM	N/A	N/A	N/A	N/A	11.3	B
	PM	N/A	N/A	N/A	N/A	11.6	B

DRIVEWAY ANALYSIS

There will be one project driveway located on Sunrise Boulevard. The driveway on Sunrise Boulevard will be a full access driveway. **Figure 3** illustrates the project traffic at the driveway. The FDOT multi-modal guidebook was used to determine the need for right and left turn lanes at the project driveways. Sunrise Boulevard has a posted speed limit of 35 MPH. The PM peak hour has the highest turning volumes. The Project Driveway has approximately 6% southbound left turns and an approaching volume of 263 vehicles and an opposing volume of 279 vehicles in the peak hour. Therefore, a southbound left-turn lane is not warranted at the Project Driveway. The Project Driveway has a northbound right-turn volume of 17 vehicles in the peak hour and an approach volume of 279 vehicles. Therefore, a northbound right-turn lane is not warranted at the Project Driveway.

The project driveway was analyzed using HCS for unsignalized intersections. As shown in Table 4, the Project Driveway will operate at a LOS B in the AM and PM peak hours at project buildout.

Appendix E includes the driveway analysis and data.



	IN	OUT
AM	10	30
PM	33	19

O'ROURKE ENGINEERING & PLANNING

NTS

3725 S East Ocean Blvd, Suite 201
Stuart, Fl, 34996

Job #:

Date:

Legend

Figure 3

Driveway Volumes

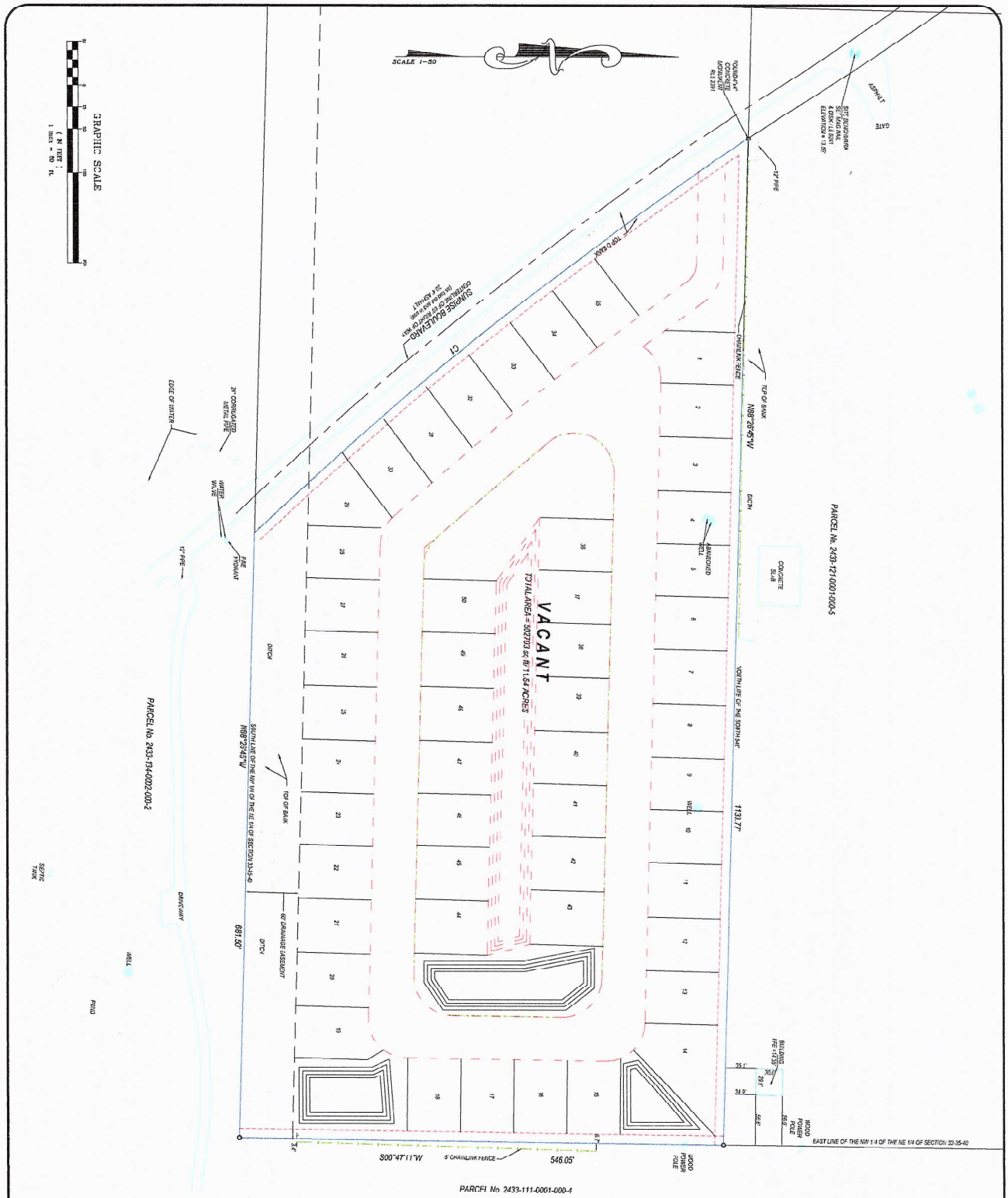
Integrity First

CONCLUSION

With 40 net new AM peak hour trips and 52 net new PM peak hour trips, all links and intersections are projected to operate at acceptable levels of service with the existing roadway network, with the exception of Oleander Avenue from Bell Avenue to Farmer's Market Road, which is currently operating below the adopted level of service. As this is an existing deficiency, the project is not responsible for improvements to this roadway. Therefore, the project meets the requirements for concurrency.

APPENDIX A

Site Plan


SCALE 1-50
GRAPHIC SCALE
(IN FEET)
1 inch = 50 ft.
SUNRISE BOULEVARD
VACANT
TOTAL AREA = 502703 sq. ft / 11.54 ACRES
PARCEL No. 2433-121-0001-000-5
PARCEL No. 2433-134-0002-000-2
PARCEL No. 2433-111-0001-000-4
N88°26'45"W
S00°47'11"W
1133.77'
681.50'
546.05'
EAST LINE OF THE NW 1/4 OF THE NE 1/4 OF SECTION 33-35-40
SOUTH LINE OF THE NW 1/4 OF THE NE 1/4 OF SECTION 33-35-40
CONCRETE SLAB
ABANDONED WELL
WELL
DITCH
TOP OF BANK
CHAINLINK FENCE
EDGE OF WATER
WATER VALVE
FIRE HYDRANT
DRIVEWAY
SEPTIC TANK
POND
WOOD POWER POLE
BUILDING FFE = 14.35'
ASPHALT
GATE
12" PIPE
21" CORRUGATED METAL PIPE
60' DRAINAGE EASEMENT
6' CHAINLINK FENCE

A1

APPENDIX B

St. Lucie County 2023 Traffic Counts and Level of Service Report

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
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
2ND ST	CITRUS AVE to ORANGE AVE	2,152	540	152	C	0.28	159	C	0.29
2ND ST	ORANGE AVE to AVENUE A	2,358	540	147	C	0.27	146	C	0.27
7TH ST	SUNRISE BLVD to GEORGIA AVE	1,700	600	113	C	0.19	133	C	0.22
7TH ST	GEORGIA AVE to DELAWARE AVE	2,700	790	203	C	0.26	217	C	0.28
7TH ST	DELAWARE AVE to CITRUS AVE	3,600	790	252	C	0.32	235	C	0.30
7TH ST	CITRUS AVE to ORANGE AVE	3,600	750	252	C	0.34	235	C	0.31
7TH ST	ORANGE AVE to AVENUE C	2,922	750	207	C	0.28	209	C	0.28
7TH ST	AVENUE C to AE BACKUS AVE	2,922	540	207	C	0.38	209	C	0.39
7TH ST	AE BACKUS AVE to AVENUE D	2,922	750	207	C	0.28	209	C	0.28
7TH ST	AVENUE D to AVENUE H	1,884	750	127	C	0.17	128	C	0.17
10TH ST	DELAWARE AVE to ORANGE AVE	1,358	600	90	C	0.15	80	C	0.13
10TH ST	ORANGE AVE to AVENUE C	1,358	600	90	C	0.15	80	C	0.13
10TH ST	AVENUE C to AVENUE D	1,358	540	90	C	0.17	80	C	0.15
13TH ST	VIRGINIA AVE to NEBRASKA AVE	6,900	750	469	D	0.63	445	D	0.59
13TH ST	NEBRASKA AVE to GEORGIA AVE	6,900	790	469	D	0.59	445	D	0.56
13TH ST	GEORGIA AVE to DELAWARE AVE	4,711	750	231	C	0.31	239	C	0.32
13TH ST	DELAWARE AVE to ORANGE AVE	4,076	750	253	C	0.34	221	C	0.30
13TH ST	ORANGE AVE to AVENUE B	3,336	750	186	C	0.25	179	C	0.24
13TH ST	AVENUE B to AVENUE D	3,336	750	186	C	0.25	179	C	0.24
13TH ST	AVENUE D to AVENUE H	2,975	750	159	C	0.21	159	C	0.21
13TH ST	AVENUE H to AVENUE I	2,975	540	159	C	0.29	159	C	0.29
13TH ST	AVENUE I to AVENUE O	2,975	540	159	C	0.29	159	C	0.29
13TH ST	AVENUE O to AVENUE Q	2,975	540	159	C	0.29	159	C	0.29
17TH ST	GEORGIA AVE to DELAWARE AVE	2,689	600	169	C	0.28	166	C	0.28
17TH ST	DELAWARE AVE to ORANGE AVE	5,700	790	290	C	0.37	274	C	0.35
17TH ST	ORANGE AVE to AVENUE D	2,505	750	140	C	0.19	133	C	0.18
17TH ST	AVENUE D to AVENUE Q	2,505	750	140	C	0.19	133	C	0.18
25TH ST	MIDWAY RD to BELL AVE	19,280	2,100	941	C	0.45	941	C	0.45

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic

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				Volume	LOS	V/C	Volume	LOS	V/C
25TH ST	BELL AVE to EDWARDS RD	19,086	2,100	1,120	C	0.53	1,117	C	0.53
25TH ST	EDWARDS RD to CORTEZ BLVD	21,959	2,000	1,072	C	0.54	1,072	C	0.54
25TH ST	CORTEZ BLVD to VIRGINIA AVE	22,500	2,000	1,324	C	0.66	1,090	C	0.55
25TH ST	VIRIGINIA AVE to NEBRASKA AVE	22,168	2,000	1,082	C	0.54	1,082	C	0.54
25TH ST	NEBRASKA AVE to OKEECHOBEE RD	22,168	2,000	1,082	C	0.54	1,082	C	0.54
25TH ST	OKEECHOBEE RD to GEORGIA AVE	21,986	1,630	1,016	D	0.62	1,053	D	0.65
25TH ST	GEORGIA AVE to DELAWARE AVE	21,986	1,630	1,016	D	0.62	1,053	D	0.65
25TH ST	DELAWARE AVE to ORANGE AVE	21,569	1,630	1,053	D	0.65	1,053	D	0.65
25TH ST	ORANGE AVE to AVENUE D	23,000	1,630	1,145	D	0.70	1,325	D	0.81
25TH ST	AVENUE D to AVENUE Q	17,945	1,630	876	D	0.54	876	D	0.54
25TH ST	AVENUE Q to JUANITA AVE	16,821	2,000	821	C	0.41	821	C	0.41
25TH ST	JUANITA AVE to ST LUCIE BLVD	16,315	2,100		B			B	
25TH ST	ST LUCIE BLVD to US 1	7,934	2,100	387	C	0.18	387	C	0.18
33RD ST	OKEECHOBEE RD to DELAWARE AVE	7,200	750	408	D	0.54	366	C	0.49
33RD ST	DELAWARE AVE to ORANGE AVE	6,285	790	290	C	0.37	290	C	0.37
35TH ST	KIRBY LOOP RD to CORTEZ BLVD	5,100	540	369	D	0.68	317	D	0.59
35TH ST	CORTEZ BLVD to VIRGINIA AVE	5,100	790	369	C	0.47	317	C	0.40
35TH ST	VIRGINIA AVE to OKEECHOBEE RD	4,639	750	228	C	0.30	246	C	0.33
53RD ST	ANGLE RD to JUANITA AVE	2,515	540	164	C	0.30	169	C	0.31
AE BACKUS AVE	7TH ST to US 1	960	750	68	C	0.09	70	C	0.09
AIROSO BLVD	PORT ST LUCIE BLVD to THORNHILL DR	17,955	2,100	1,135	C	0.54	939	C	0.45
AIROSO BLVD	THORNHILL DR to CROSSTOWN PKWY	17,955	2,100	1,135	C	0.54	939	C	0.45
AIROSO BLVD	CROSSTOWN PKWY to PRIMA VISTA BLVD	18,600	2,100	932	C	0.44	955	C	0.46
AIROSO BLVD	PRIMA VISTA BLVD to FLORESTA DR	15,302	2,000	763	C	0.38	789	C	0.40
AIROSO BLVD	FLORESTA DR to ST JAMES DR	22,893	2,100	1,290	C	0.61	1,230	C	0.59
ANGLE RD	ORANGE AVE to AVENUE D	8,603	790	421	D	0.53	404	D	0.51
ANGLE RD	AVENUE D to AVENUE Q	8,603	540	421	D	0.78	404	D	0.75
ANGLE RD	AVENUE Q to 53RD ST	8,700	600	583	D	0.97	524	D	0.87
ANGLE RD	53RD ST to KEEN RD	6,000	630	378	C	0.60	325	C	0.52

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* AADT = Annual Average Daily Traffic

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2023

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				Volume	LOS	V/C	Volume	LOS	V/C
BECKER RD	VILLAGE PKWY to I-95	5,800	3,170	441	C	0.14	398	C	0.13
BECKER RD	I-95 to SAVONA BLVD	26,500	2,000	2,031	F	1.02	1,944	D	0.97
BECKER RD	SAVONA BLVD to PORT ST LUCIE BLVD	23,000	2,100	1,443	C	0.69	1,424	C	0.68
BECKER RD	ALBACORE ST to DARWIN BLVD	17,500	1,500	995	C	0.66	986	C	0.66
BECKER RD	PORT ST LUCIE BLVD to ALBACORE ST	17,500	2,100	995	C	0.47	986	C	0.47
BECKER RD	ATHENA DR to FLORIDA'S TURNPIKE	18,000	1,500	1,476	D	0.98	1,276	C	0.85
BECKER RD	DARWIN BLVD to ATHENA DR	18,000	2,000	1,476	C	0.74	1,276	C	0.64
BECKER RD	FLORIDA'S TURNPIKE to SOUTHBEND BLVD	19,500	2,100	1,204	C	0.57	1,169	C	0.56
BECKER RD	SOUTHBEND BLVD to GILSON RD	13,000	920	939	F	1.02	1,004	F	1.09
BELL AVE	25TH ST to SUNRISE BLVD	5,900	790	398	D	0.50	359	C	0.47
BELL AVE	SUNRISE BLVD to OLEANDER AVE	4,600	600	280	C	0.47	256	C	0.43
CALIFORNIA BLVD	CAMEO BLVD to DEL RIO BLVD	8,568	750	520	D	0.69	450	D	0.60
CALIFORNIA BLVD	DEL RIO BLVD to SAVONA BLVD	13,500	920	808	C	0.88	742	C	0.81
CALIFORNIA BLVD	SAVONA BLVD to DEL RIO BLVD	12,000	920	685	C	0.75	803	C	0.87
CALIFORNIA BLVD	DEL RIO BLVD to CROSSTOWN PKWY	18,000	920	1,332	F	1.45	1,109	F	1.21
CALIFORNIA BLVD	CROSSTOWN PKWY to HEATHERWOOD BLVD	21,000	920	1,057	F	1.15	1,053	F	1.15
CALIFORNIA BLVD	HEATHERWOOD BLVD to ST LUCIE WEST BLVD	21,000	920	1,057	F	1.15	1,053	F	1.15
CALIFORNIA BLVD	ST LUCIE WEST BLVD to COUNTRY CLUB DR	9,245	920	564	C	0.61	542	C	0.59
CALIFORNIA BLVD	COUNTRY CLUB DR to UNIVERSITY BLVD	7,685	790	494	C	0.63	497	C	0.63
CALIFORNIA BLVD	UNIVERSITY BLVD to PEACOCK BLVD	7,685	630	494	C	0.78	497	C	0.79
CALIFORNIA BLVD	PEACOCK BLVD to TORINO PKWY	13,000	630	861	F	1.37	763	F	1.21
CAMEO BLVD	PORT ST LUICE BLVD to CALIFORNIA BLVD	5,100	750	363	C	0.48	315	C	0.42
CAMEO BLVD	CALIFORNIA BLVD to CROSSTOWN PKWY	10,409	790	736	D	0.93	619	D	0.78
CAMPBELL RD	PICOS RD to ORANGE AVE	814	540	80	C	0.15	58	C	0.11
CANE SLOUGH RD	US 1 to LENNARD RD	9,637	1,710	487	C	0.28	491	C	0.29
CARLTON RD	CARLTON RD (S) to OKEECHOBEE RD	676	390	40	B	0.10	41	B	0.11
CASHMERE BLVD	PEACOCK BLVD to TORINO PKWY	11,692	630	767	F	1.22	712	F	1.13
CASHMERE BLVD	DEL RIO BLVD to CROSSTOWN PKWY	10,803	920	665	C	0.72	651	C	0.71
CASHMERE BLVD	CROSSTOWN PKWY to HEATHERWOOD BLVD	12,364	920	690	C	0.75	605	C	0.66

B-3

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic

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				Volume	LOS	V/C	Volume	LOS	V/C
DELAWARE AVE	25TH ST to OKEECHOBEE RD	1,300	1,220	60	C	0.05	60	C	0.05
DELAWARE AVE	OKEECHOBEE RD to 13TH ST	11,500	790	645	D	0.82	613	D	0.78
DELAWARE AVE	13TH ST to 10TH ST	7,451	750	405	D	0.54	386	D	0.52
DELAWARE AVE	10TH ST to 7TH ST	7,451	600	405	D	0.68	386	D	0.64
DELAWARE AVE	7TH ST to US 1	6,900	750	447	D	0.60	402	D	0.54
EAST TORINO PKWY	CASHMERE BLVD to TORINO PKWY	12,553	830	740	C	0.89	731	C	0.88
EAST TORINO PKWY	TORINO PKWY to MIDWAY RD	15,500	880	1,016	F	1.16	987	F	1.12
EASY ST	US 1 to BUCHANAN DR	7,207	750	399	D	0.53	506	D	0.68
EASY ST	BUCHANAN DR to YUCCA DR	7,207	540	399	D	0.74	506	D	0.94
EDWARDS RD	JENKINS RD to MCNEIL RD	11,153	630	513	C	0.81	516	C	0.82
EDWARDS RD	MCNEIL RD to SELVITZ RD	11,153	700	513	C	0.73	516	C	0.74
EDWARDS RD	SELVITZ RD to 25TH ST	15,291	880	769	C	0.87	782	C	0.89
EDWARDS RD	25TH ST to SUNRISE BLVD	17,013	1,630	827	D	0.51	828	D	0.51
EDWARDS RD	SUNRISE BLVD to OLEANDER AVE	15,984	1,630	793	D	0.49	773	D	0.47
EDWARDS RD	OLEANDER AVE to US 1	9,722	1,630	535	C	0.33	467	C	0.29
FARMER'S MARKET RD	OLEANDER AVE to US 1	1,700	750	89	C	0.12	103	C	0.14
FLORESTA DR	OAKLYN ST to PORT ST LUCIE BLVD	14,500	920	975	F	1.06	817	C	0.89
FLORESTA DR	THORNHILL DR to CROSSTOWN PKWY	14,098	880	960	F	1.09	851	D	0.97
FLORESTA DR	PORT ST LUCIE BLVD to THORNHILL DR	14,098	880	960	F	1.09	851	D	0.97
FLORESTA DR	CROSSTOWN PKWY to PRIMA VISTA BLVD	12,183	920	675	C	0.73	619	C	0.67
FLORESTA DR	PRIMA VISTA BLVD to AIROSO BLVD	10,748	920	594	C	0.65	655	C	0.71
FLORESTA DR	SELVITZ RD to BAYSHORE BLVD	4,750	630	341	C	0.54	363	C	0.58
FLORESTA DR	AIROSO BLVD to SELVITZ RD	4,750	880	341	C	0.39	363	C	0.41
FLORIDA'S TURNPIKE	MARTIN C.L. to BECKER RD	47,500	3,020	2,270	C	0.75	2,270	C	0.75
FLORIDA'S TURNPIKE	PORT ST LUCIE BLVD to OKEECHOBEE RD	55,100	3,020	2,791	C	0.92	2,791	C	0.92
FLORIDA'S TURNPIKE	OKEECHOBEE RD to INDIAN RIVER C.L.	43,200	1,680	2,157	C	1.28	2,157	C	1.28
FT PIERCE BLVD	INDRIO RD to EMERSON AVE	3,200	540	217	C	0.40	223	C	0.41
GARDENIA AVE	OLEANDER AVE to US 1	2,780	750	214	C	0.28	204	C	0.27
GATLIN BLVD	W OF I-95 to E OF I-95	49,323	3,170	2,408	C	0.76	2,408	C	0.76

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St. Lucie Transportation Planning Organization

Coco Vista Centre
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Traffic Counts and Level of Service Report
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
MIDWAY RD	OKEECHOBEE RD to SHINN RD	6,581	760	331	C	0.44	331	C	0.44
MIDWAY RD	SHINN RD to MCCARTY RD	6,581	630	331	C	0.53	331	C	0.53
MIDWAY RD	MCCARTY RD to I-95	6,581	700	331	C	0.47	331	C	0.47
MIDWAY RD	I-95 to GLADES CUT-OFF RD	20,913	2,100	1,021	C	0.49	1,021	C	0.49
MIDWAY RD	GLADES CUT-OFF RD to EAST TORINO PKWY	23,000	2,100	1,190	C	0.57	1,256	C	0.60
MIDWAY RD	W OF SELVITZ RD to SELVITZ RD	25,000	2,100	1,245	C	0.59	1,298	C	0.62
MIDWAY RD	SELVITZ RD to CHRISTENSEN RD	23,000	2,100	1,176	C	0.56	1,166	C	0.56
MIDWAY RD	CHRISTENSEN RD to 25TH ST	23,000	2,100	1,176	C	0.56	1,166	C	0.56
MIDWAY RD	25TH ST to SUNRISE BLVD	23,000	2,100	1,245	C	0.59	1,147	C	0.55
MIDWAY RD	SUNRISE BLVD to OLEANDER AVE	23,000	2,100	1,245	C	0.59	1,147	C	0.55
MIDWAY RD	OLEANDER AVE to US 1	20,000	2,100	1,011	C	0.48	974	C	0.46
MIDWAY RD	US 1 to WALLACE ST	3,690	790	183	C	0.23	183	C	0.23
MIDWAY RD	WALLACE ST to WEATHERBEE RD	3,690	920	183	C	0.20	183	C	0.20
MIDWAY RD	WEATHERBEE RD to INDIAN RIVER DR	3,690	630	183	C	0.29	183	C	0.29
MORNINGSIDE BLVD	WESTMORELAND BLVD to PORT ST LUCIE BLVD	2,289	920	123	C	0.13	123	C	0.13
MORNINGSIDE BLVD	PORT ST LUCIE BLVD to LYNGATE DR	3,728	880	296	C	0.34	314	C	0.36
NEBRASKA AVE	25TH ST to 13TH ST	3,752	1,710	249	C	0.15	192	C	0.11
OAKRIDGE DR	MOUNTWELL ST to OAKLYN ST	7,113	700	442	C	0.63	385	C	0.55
OHIO AVE	SUNRISE BLVD to COLONIAL RD	3,875	540	205	C	0.38	227	C	0.42
OHIO AVE	COLONIAL RD to US 1	3,875	750	205	C	0.27	227	C	0.30
OKEECHOBEE RD	OKEECHOBEE C.L. to BLUEFIELD RD	11,835	1,580	618	B	0.39	665	B	0.42
OKEECHOBEE RD	BLUEFIELD RD to CARLTON RD	11,835	2,000	618	B	0.31	665	B	0.33
OKEECHOBEE RD	CARLTON RD to SNEED RD	8,931	2,100	449	B	0.21	449	B	0.21
OKEECHOBEE RD	IDEAL HOLDING RD to HEADER CANAL RD	8,931	2,100	449	B	0.21	449	B	0.21
OKEECHOBEE RD	SNEED RD to IDEAL HOLDING RD	8,931	2,100	449	B	0.21	449	B	0.21
OKEECHOBEE RD	HEADER CANAL RD to MIDWAY RD	8,931	2,450	449	B	0.18	449	B	0.18
OKEECHOBEE RD	MIDWAY RD to SHINN RD	8,931	3,110	449	B	0.14	449	B	0.14
OKEECHOBEE RD	SHINN RD to MCCARTY RD	7,079	3,240	335	B	0.10	335	B	0.10
OKEECHOBEE RD	MCCARTY RD to FLORIDA'S TURNPIKE	9,733	3,240	490	B	0.15	490	B	0.15

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic

St. Lucie Transportation Planning Organization

Coco Vista Centre
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Traffic Counts and Level of Service Report
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
OKEECHOBEE RD	FLORIDA'S TURNPIKE to KINGS HWY	9,733	2,100	490	C	0.23	490	C	0.23
OKEECHOBEE RD	KINGS HWY to CROSSROADS PKWY	23,734	4,240	1,195	C	0.28	1,195	C	0.28
OKEECHOBEE RD	CROSSROADS PKWY to I-95	25,375	4,240	1,327	C	0.31	1,327	C	0.31
OKEECHOBEE RD	I-95 to JENKINS RD	32,142	4,240	1,569	C	0.37	1,569	C	0.37
OKEECHOBEE RD	JENKINS RD to MCNEIL RD	32,142	4,040	1,569	C	0.39	1,569	C	0.39
OKEECHOBEE RD	MCNEIL RD to VIRGINIA AVE	31,230	3,170	1,524	C	0.48	1,524	C	0.48
OKEECHOBEE RD	VIRGINIA AVE to HARTMAN RD	15,500	2,100	802	C	0.38	791	C	0.38
OKEECHOBEE RD	HARTMAN RD to 35TH ST	15,500	1,630	802	D	0.49	791	D	0.49
OKEECHOBEE RD	35TH ST to 33RD ST	16,500	1,630	859	D	0.53	822	D	0.50
OKEECHOBEE RD	33RD ST to 25TH ST	16,500	1,630	859	D	0.53	822	D	0.50
OKEECHOBEE RD	25TH ST to GEORGIA AVE	12,000	1,630	695	C	0.43	616	C	0.38
OKEECHOBEE RD	GEORGIA AVE to DELAWARE AVE	12,000	1,710	695	C	0.41	616	C	0.36
OLD DIXIE HWY	US 1 to SR A1A NORTH	830	790	129	C	0.16	123	C	0.16
OLD DIXIE HWY	SR A1A NORTH to ST LUCIE BLVD	1,753	750	82	C	0.11	82	C	0.11
OLD DIXIE HWY	ST LUCIE BLVD to INDRIO RD	2,125	790	172	C	0.22	126	C	0.16
OLD DIXIE HWY	INDRIO RD to INDIAN RIVER C.L.	1,340	870	63	C	0.07	63	C	0.07
OLEANDER AVE	BEACH AVE to KITTERMAN RD	2,970	540	172	C	0.32	194	C	0.36
OLEANDER AVE	KITTERMAN RD to MIDWAY RD	6,162	750	358	C	0.48	358	C	0.48
OLEANDER AVE	MIDWAY RD to WEATHERBEE RD	6,400	750	362	C	0.48	365	C	0.49
OLEANDER AVE	WEATHERBEE RD to BELL AVE	6,400	540	362	D	0.67	365	D	0.68
OLEANDER AVE	BELL AVE to FARMER'S MARKET RD	12,703	540	613	F	1.14	581	F	1.08
OLEANDER AVE	FARMER'S MARKET RD to EDWARDS RD	12,703	750	613	D	0.82	581	D	0.78
OLEANDER AVE	EDWARDS RD to WISTERIA AVE	9,907	750	601	D	0.80	500	D	0.67
OLEANDER AVE	WISTERIA AVE to GARDENIA AVE	9,907	540	601	F	1.11	500	D	0.93
OLEANDER AVE	GARDENIA AVE to VIRGINIA AVE	9,907	790	601	D	0.76	500	D	0.63
OLEANDER AVE	VIRGINIA AVE to SUNRISE BLVD	5,500	600	309	D	0.52	320	D	0.53
ORANGE AVE	OKEECHOBEE C.L. to SNEED RD	5,195	670	303	C	0.45	289	C	0.43
ORANGE AVE	SNEED RD to HEADER CANAL RD	5,195	670	303	C	0.45	289	C	0.43
ORANGE AVE	HEADER CANAL RD to SHINN RD	5,195	670	303	C	0.45	289	C	0.43

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2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
SUNRISE BLVD	MIDWAY RD to BELL AVE	3,611	540	218	C	0.40	230	C	0.43
SUNRISE BLVD	BELL AVE to EDWARDS RD	4,050	750	267	C	0.36	270	C	0.36
SUNRISE BLVD	EDWARDS RD to CORTEZ BLVD	7,600	600	586	D	0.98	511	D	0.85
SUNRISE BLVD	CORTEZ BLVD to VIRGINIA AVE	7,600	750	586	D	0.78	511	D	0.68
SUNRISE BLVD	VIRGINIA AVE to OLEANDER AVE	6,700	750	419	D	0.56	416	D	0.56
SUNRISE BLVD	OLEANDER AVE to 7TH ST	5,053	1,540	291	C	0.19	357	C	0.23
SUNRISE BLVD	7TH ST to US 1	5,053	1,710	291	C	0.17	357	C	0.21
TIFFANY AVE	US 1 to HILLMOOR DR	17,532	2,100	992	C	0.47	904	C	0.43
TIFFANY AVE	HILLMOOR DR to VILLAGE GREEN DR	17,532	2,100	992	C	0.47	904	C	0.43
TIFFANY AVE	VILLAGE GREEN DR to LENNARD RD	4,227	2,100	205	C	0.10	199	C	0.10
TORINO PKWY	CASHMERE BLVD to CALIFORNIA BLVD	7,020	630	449	C	0.71	410	C	0.65
TORINO PKWY	CALIFORNIA BLVD to EAST TORINO PKWY	4,984	630	329	C	0.52	269	C	0.43
TRADITION PKWY	COMMUNITY BLVD to VILLAGE PKWY	7,590	1,710	794	D	0.46	770	C	0.45
TRADITION PKWY	VILLAGE PKWY to W OF I-95	46,500	3,170	2,338	C	0.74	2,116	C	0.67
TULIP BLVD	DARWIN BLVD to PORT ST LUCIE BLVD	9,314	790	610	D	0.77	551	D	0.70
TULIP BLVD	PORT ST LUCIE BLVD to PAAR DR	10,813	790	605	D	0.77	647	D	0.82
TULIP BLVD	PAAR DR to DARWIN BLVD	10,813	790	605	D	0.77	647	D	0.82
TURNPIKE FEEDER RD	TURNPIKE FEEDER RD SB RAMP to US 1	4,920	660		B			B	
TURNPIKE FEEDER RD	INDIAN PINES BLVD to TURNPIKE FEEDER RD SB R...	11,335	870	553	C	0.64	553	C	0.64
TURNPIKE FEEDER RD	INDRIO RD to INDIAN PINES BLVD	13,204	870	644	C	0.74	644	C	0.74
US 1	MARTIN C.L. to LENNARD RD	47,386	4,240	2,354	C	0.56	2,354	C	0.56
US 1	LENNARD RD to PORT ST LUCIE BLVD	47,386	4,040	2,354	C	0.58	2,354	C	0.58
US 1	PORT ST LUCIE BLVD to JENNINGS RD	32,450	3,020	1,612	C	0.53	1,612	C	0.53
US 1	JENNINGS RD to TIFFANY AVE	32,450	3,020	1,612	C	0.53	1,612	C	0.53
US 1	TIFFANY AVE to WALTON RD	32,450	3,020	1,612	C	0.53	1,612	C	0.53
US 1	WALTON RD to VILLAGE GREEN DR	44,760	3,020	2,223	C	0.74	2,223	C	0.74
US 1	VILLAGE GREEN DR to SPANISH LAKES BLVD	46,801	3,170	2,325	C	0.73	2,325	C	0.73
US 1	SPANISH LAKES BLVD to PRIMA VISTA BLVD	46,801	3,170	2,325	C	0.73	2,325	C	0.73
US 1	PRIMA VISTA BLVD to RIO MAR DR	35,621	3,170	1,769	C	0.56	1,769	C	0.56

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* AADT = Annual Average Daily Traffic

APPENDIX C

Growth Rate

&

Background Projects

Historical Growth Rate Calculation

Segment	From	To	2017 AADT	2022 AADT	5 Year Historical Growth Rate
US-1	Edwards Rd	Weatherbee Rd	33,000	34,000	0.60%
	Weatherbee Rd	Midway Rd	31,000	30,000	-0.65%
25th St	Edwards Rd	Bell Ave	18,200	15,700	-2.91%
	Bell Ave	Midway Rd	19,100	18,100	-1.07%
Sunrise Blvd	Edwards Rd	Bell Ave	3,500	3,700	1.12%
	Bell Ave	Midway Rd	1,550	2,700	11.74%
Midway Rd	25th St	US-1	15,300	17,000	2.13%
Oleander Ave	Edwards Rd	Bell Ave	7,800	10,000	5.09%
	Bell Ave	Midway Rd	6,400	7,200	2.38%
Edwards Rd	25th St	Sunrise Blvd	13,600	16,900	4.44%
	Sunrise Blvd	Oleander Ave	12,100	11,000	-1.89%
	Oleander Ave	US-1	8,500	8,300	-0.48%
Bell Ave	25th St	Sunrise Blvd	3,500	6,800	14.21%
	Sunrise Blvd	Oleander Ave	2,900	5,500	13.66%
		Total	176,450	186,900	1.16%

*Source FDOT Historical Traffic Counts

C6 - Historical Growth Rate - Integrity

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0012 - SR 5/US 1 - S OF CR 611/EDWARDS RD (COUNTY 12)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	34000 C	N 17000	S 17000	9.00	52.30	6.10
2021	30000 C	N 14000	S 16000	9.00	51.80	6.10
2020	41500 C	N 16500	S 25000	9.00	52.60	6.10
2019	33000 F	N 15500	S 17500	9.00	52.50	2.10
2018	33000 C	N 15500	S 17500	9.00	52.40	2.10
2017	33000 C	N 16000	S 17000	9.00	52.00	2.10
2016	32000 C	N 16000	S 16000	9.00	52.30	1.60
2015	30000 C	N 15000	S 15000	9.00	52.70	1.60
2014	28000 C	N 14000	S 14000	9.00	52.50	5.70
2013	30000 C	N 15000	S 15000	9.00	55.90	5.50
2012	34000 C	N 17000	S 17000	9.00	55.80	5.50
2011	29000 C	N 13500	S 15500	9.00	56.20	5.50
2010	32000 C	N 16000	S 16000	11.16	56.34	8.80
2009	33000 C	N 16500	S 16500	11.51	56.49	7.10
2008	34000 C	N 17000	S 17000	11.31	55.19	2.60
2007	45000 C	N 22000	S 23000	11.33	56.77	2.60

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

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0016 - CR 615/25 ST S - N OF CR 712/MIDWAY RD (COUNTY 171 AND 16)

YEAR	AADT	DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR
2022	18100 C	N	8800	S	9300	9.00	51.40	5.00
2021	18000 V	N	8600	S	9400	9.00	50.90	7.20
2020	18200 R	N	8700	S	9500	9.00	51.30	31.50
2019	19000 T	N	9100	S	9900	9.00	51.00	7.80
2018	19200 S	N	9200	S	10000	9.00	51.30	5.80
2017	19100 F	N	9100	S	10000	9.00	50.90	10.00
2016	18900 C	N	8900	S	10000	9.00	50.90	6.20
2015	15900 V	N	7800	S	8100	9.00	51.00	4.90
2014	15900 R	N	7800	S	8100	9.00	50.80	5.90
2013	15900 T	N	7800	S	8100	9.00	50.80	8.50
2012	15900 S	N	7800	S	8100	9.00	56.80	4.20
2011	16100 F	N	7900	S	8200	9.00	57.20	6.20
2010	16100 C	N	7900	S	8200	10.32	55.40	6.20
2009	15400 C	N	7800	S	7600	10.27	57.35	6.20
2007	12600 C	N	6100	S	6500	10.31	58.74	5.20

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
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0020 - SR 5 / US 1 - N OF CR 712/MIDWAY RD (COUNTY 20)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	30000 C	N 15000	S 15000	9.00	52.30	7.70
2021	34500 C	N 19000	S 15500	9.00	51.80	7.70
2020	27000 C	N 13500	S 13500	9.00	52.60	6.30
2019	32000 S	N 16000	S 16000	9.00	52.50	8.50
2018	32000 F	N 16000	S 16000	9.00	52.40	6.10
2017	31000 C	N 15500	S 15500	9.00	52.00	4.50
2016	31500 C	N 16000	S 15500	9.00	52.30	4.50
2015	29000 C	N 14500	S 14500	9.00	52.70	4.50
2014	29000 C	N 14500	S 14500	9.00	52.50	4.60
2013	28500 C	N 14000	S 14500	9.00	55.90	2.80
2012	32000 C	N 16000	S 16000	9.00	55.80	2.80
2011	28000 F	N 14000	S 14000	9.00	56.20	6.20
2010	28000 C	N 14000	S 14000	11.16	56.34	6.20
2009	27000 C	N 13500	S 13500	11.51	56.49	7.10
2007	39000 F			11.33	56.77	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
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2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0027 - CR 611-B/EDWARDS RD - W OF SR 5/US1 (COUNTY 173)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	8300 T	E 4100	W 4200	9.00	51.40	5.00
2021	8300 S	E 4100	W 4200	9.00	50.90	7.20
2020	8500 F	E 4200	W 4300	9.00	51.30	31.50
2019	8900 C	E 4400	W 4500	9.00	51.00	7.80
2018	8500 V	E 4200	W 4300	9.00	51.30	5.80
2017	8500 R	E 4200	W 4300	9.00	50.90	10.00
2016	8300 T	E 4100	W 4200	9.00	50.90	6.20
2015	8300 S	E 4100	W 4200	9.00	51.00	41.80
2014	8300 F	E 4100	W 4200	9.00	50.80	49.50
2013	8300 C	E 4100	W 4200	9.00	50.80	11.90
2012	9000 S	E 4500	W 4500	9.00	56.80	7.10
2011	9000 F	E 4500	W 4500	9.00	57.20	7.60
2010	9000 C	E 4500	W 4500	10.32	55.40	4.90

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
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0168 - CR 605/OLEANDER AVE - N OF CR 712/MIDWAY RD (COUNTY 139)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	7200 T	N 3600	S 3600	9.00	51.40	5.00
2021	7200 S	N 3600	S 3600	9.00	50.90	7.20
2020	7200 F	N 3600	S 3600	9.00	51.30	31.50
2019	7600 C	N 3800	S 3800	9.00	51.00	7.80
2018	6400 V	N 3200	S 3200	9.00	51.30	5.80
2017	6400 R	N 3200	S 3200	9.00	50.90	10.00
2016	6200 T	N 3100	S 3100	9.00	50.90	6.20
2015	6200 S	N 3100	S 3100	9.00	51.00	41.80
2014	6200 F	N 3100	S 3100	9.00	50.80	49.50
2013	6200 C	N 3100	S 3100	9.00	50.80	11.90
2012	6800 S	N 3300	S 3500	9.00	56.80	9.20
2011	6800 F	N 3300	S 3500	9.00	57.20	9.20
2010	6800 C	N 3300	S 3500	10.32	55.40	9.20
2009	9000 C	N 4400	S 4600	10.27	57.35	6.30
2008	10500 C	N 5200	S 5300	10.45	58.06	7.10

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
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 7002 - ON BELL AVE - E. OF SUNRISE BLVD (COUNTY 102)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	5500 R	E 3000	W 2500	9.00	51.40	5.00
2021	5500 T	E 3000	W 2500	9.00	50.90	7.20
2020	5500 S	E 3000	W 2500	9.00	51.30	31.50
2019	5700 F	E 3100	W 2600	9.00	51.00	7.80
2018	5700 C	E 3100	W 2600	9.00	51.30	5.80
2017	2900 V	E 1500	W 1400	9.00	50.90	10.00
2016	2900 R	E 1500	W 1400	9.00	50.90	6.20
2015	2900 T	E 1500	W 1400	9.00	51.00	41.80
2014	2900 S	E 1500	W 1400	9.00	50.80	49.50
2013	2900 F	E 1500	W 1400	9.00	50.80	11.90
2012	2900 C	E 1500	W 1400	9.00	56.80	7.10
2011	3000 S	E 1600	W 1400	9.00	57.20	12.40
2010	3000 F	E 1600	W 1400	10.32	55.40	12.40
2009	3000 C	E 1600	W 1400	10.27	57.35	12.40
2008	3100 C	E 1600	W 1500	10.45	58.06	8.60

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

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 7003 - ON BELL AVE - W. OF SUNRISE BLVD (COUNTY 104)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	6800 R	E 2900	W 3900	9.00	51.40	5.00
2021	6800 T	E 2900	W 3900	9.00	50.90	7.20
2020	6900 S	E 2900	W 4000	9.00	51.30	31.50
2019	7200 F	E 3000	W 4200	9.00	51.00	7.80
2018	7200 C	E 3000	W 4200	9.00	51.30	5.80
2017	3500 V	E 1700	W 1800	9.00	50.90	10.00
2016	3500 R	E 1700	W 1800	9.00	50.90	6.20
2015	3500 T	E 1700	W 1800	9.00	51.00	41.80
2014	3500 S	E 1700	W 1800	9.00	50.80	49.50
2013	3500 F	E 1700	W 1800	9.00	50.80	11.90
2012	3500 C	E 1700	W 1800	9.00	56.80	7.10
2011	3000 S	E 1500	W 1500	9.00	57.20	9.50
2010	3000 F	E 1500	W 1500	10.32	55.40	9.50
2009	3000 C	E 1500	W 1500	10.27	57.35	9.50
2008	2500 C	E 1300	W 1200	10.45	58.06	17.50

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
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 7007 - ON EDWARDS RD - W. OF SUNRISE BLVD (COUNTY 108)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	16900 R	E 8700	W 8200	9.00	51.40	5.00
2021	17000 T	E 8800	W 8200	9.00	50.90	7.20
2020	17200 S	E 8900	W 8300	9.00	51.30	31.50
2019	18000 F	E 9300	W 8700	9.00	51.00	7.80
2018	18200 C	E 9400	W 8800	9.00	51.30	5.80
2017	13600 V	E 6900	W 6700	9.00	50.90	10.00
2016	13400 R	E 6800	W 6600	9.00	50.90	6.20
2015	13200 T	E 6700	W 6500	9.00	51.00	41.80
2014	13200 S	E 6700	W 6500	9.00	50.80	49.50
2013	13200 F	E 6700	W 6500	9.00	50.80	11.90
2012	13200 C	E 6700	W 6500	9.00	56.80	7.10
2011	14200 F	E 7200	W 7000	9.00	57.20	7.60
2010	14200 C	E 7200	W 7000	10.32	55.40	4.90

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
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 7041 - SUNRISE BLVD - S OF EDWARDS RD (COUNTY 153)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	3700 T	N 1700	S 2000	9.00	51.40	5.00
2021	3700 S	N 1700	S 2000	9.00	50.90	7.20
2020	3700 F	N 1700	S 2000	9.00	51.30	31.50
2019	3900 C	N 1800	S 2100	9.00	51.00	7.80
2018	3500 V	N 1700	S 1800	9.00	51.30	5.80
2017	3500 R	N 1700	S 1800	9.00	50.90	10.00
2016	3500 T	N 1700	S 1800	9.00	50.90	6.20
2015	3500 S	N 1700	S 1800	9.00	51.00	41.80
2014	3500 F	N 1700	S 1800	9.00	50.80	49.50
2013	3500 C	N 1700	S 1800	9.00	50.80	11.90
2012	3300 S	N 1600	S 1700	9.00	56.80	3.30
2011	3300 F	N 1600	S 1700	9.00	57.20	3.30
2010	3300 C	N 1600	S 1700	10.32	55.40	3.30
2009	3700 C	N 1800	S 1900	10.27	57.35	5.20

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
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 7045 - SUNRISE BLVD - N. OF MIDWAY RD WEST (COUNTY 157)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	2700 F	N 1300	S 1400	9.00	51.40	7.40
2021	2700 C	N 1300	S 1400	9.00	50.90	7.40
2020	2500 S	N 1400	S 1100	9.00	51.30	6.00
2019	2700 F	N 1500	S 1200	9.00	51.00	6.00
2018	2700 C	N 1500	S 1200	9.00	51.30	6.00
2017	1550 S	N 750	S 800	9.00	50.90	10.00
2016	1550 F	N 750	S 800	9.00	50.90	6.20
2015	1550 C	N 750	S 800	9.00	51.00	41.80
2014	2100 V	N 1100	S 1000	9.00	50.80	49.50
2013	2100 X	N 1100	S 1000	9.00	50.80	11.90
2012	2100 T	N 1100	S 1000	9.00	56.80	7.10
2011	2100 S	N 1100	S 1000	9.00	57.20	9.80
2010	2100 F	N 1100	S 1000	10.32	55.40	9.80
2009	2100 C	N 1100	S 1000	10.27	57.35	9.80
2008	2900 C	N 1500	S 1400	10.45	58.06	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
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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 8540 - MIDWAY RD FROM OLECANDER AVE MEVILLE RD (HPMS)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	17000 R	E 8700	W 8300	9.00	51.40	5.00
2021	17100 T	E 8800	W 8300	9.00	50.90	7.20
2020	17300 S	E 8900	W 8400	9.00	51.30	31.50
2019	18100 F	E 9300	W 8800	9.00	51.00	7.80
2018	18300 C	E 9400	W 8900	9.00	51.30	5.80
2017	15300 S	E 7900	W 7400	9.00	50.90	8.80
2016	15100 F	E 7800	W 7300	9.00	50.90	8.80
2015	14900 C	E 7700	W 7200	9.00	51.00	8.80
2014	18300 F	E 8400	W 9900	9.00	50.80	6.60
2013	18300 C	E 8400	W 9900	9.00	50.80	6.60
2012	15900 C	E 8400	W 7500	9.00	56.80	6.60
2011	11400 T	0	0	9.00	57.20	7.60
2010	11400 S	E 5600	W 5800	10.32	55.40	12.00
2009	11400 F	E 5600	W 5800	10.27	57.35	12.00
2008	11600 C	E 5700	W 5900	10.45	58.06	12.00

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
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 8541 - OLEANDER AVE FROM FARMER MARKET RD TO KANNER DR (HPMS)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	10000 F	N 5400	S 4600	9.00	51.40	7.40
2021	10000 C	N 5400	S 4600	9.00	50.90	7.40
2020	9300 S	N 5100	S 4200	9.00	51.30	8.50
2019	9700 F	N 5300	S 4400	9.00	51.00	8.50
2018	9700 C	N 5300	S 4400	9.00	51.30	8.50
2017	7800 S	N 4100	S 3700	9.00	50.90	11.70
2016	7600 F	N 4000	S 3600	9.00	50.90	11.70
2015	7600 C	N 4000	S 3600	9.00	51.00	11.70
2014	9100 F	N 5000	S 4100	9.00	50.80	6.00
2013	9100 C	N 5000	S 4100	9.00	50.80	6.00
2012	8500 C	N 4200	S 4300	9.00	56.80	6.00
2011	10900 T	0	0	9.00	57.20	7.60
2010	10900 S	N 5500	S 5400	10.32	55.40	10.10
2009	10900 F	N 5500	S 5400	10.27	57.35	10.10
2008	11100 C	N 5600	S 5500	10.45	58.06	10.10

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
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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 8543 - EDWARDS RD/CR 611B FROM S 25 ST TO OLEANDER AVE (COUNTY 502) (HPMS)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	11000 T	E 6000	W 5000	9.00	51.40	5.00
2021	11000 S	E 6000	W 5000	9.00	50.90	19.60
2020	11200 F	E 6100	W 5100	9.00	51.30	19.60
2019	11700 C	E 6400	W 5300	9.00	51.00	19.60
2018	13900 C	E 7100	W 6800	9.00	51.30	5.80
2017	12100 S	E 6200	W 5900	9.00	50.90	10.60
2016	11900 F	E 6100	W 5800	9.00	50.90	10.60
2015	11700 C	E 6000	W 5700	9.00	51.00	10.60
2014	13300 F	E 6700	W 6600	9.00	50.80	5.40
2013	13300 C	E 6700	W 6600	9.00	50.80	5.40
2012	12300 C	E 6300	W 6000	9.00	56.80	5.40
2011	11800 T	0	0	9.00	57.20	7.60
2010	11800 S	E 6000	W 5800	10.32	55.40	10.60
2009	11800 F	E 6000	W 5800	10.27	57.35	10.60
2008	12000 C	E 6100	W 5900	10.45	58.06	10.60

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
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FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 8549 - S 25TH ST (CR 615) - N OF DADE RD (HPMS)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	15700 F	N 7600	S 8100	9.00	51.40	18.10
2021	15700 C	N 7600	S 8100	9.00	50.90	18.10
2020	16800 S	N 8300	S 8500	9.00	51.30	5.20
2019	17600 F	N 8700	S 8900	9.00	51.00	5.20
2018	17800 C	N 8800	S 9000	9.00	51.30	5.20
2017	18200 S	N 8900	S 9300	9.00	50.90	10.00
2016	17800 F	N 8700	S 9100	9.00	50.90	10.00
2015	17600 C	N 8600	S 9000	9.00	51.00	10.00
2014	16300 C	N 8000	S 8300	9.00	50.80	3.60
2013	14100 C	N 7300	S 6800	9.00	50.80	3.60

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

AMERICAN SILICONE (Fort Pierce, FL)

Traffic Impact Report

September 2021
Revised January 2024

Kimley»Horn

Table 1: Trip Generation Summary

	Land Use	ITE LUC	Size	Units	Trip Rate[1]	Daily Trip Generation				
						Total	In[1]		Out[1]	
DAILY	Retail	820	**7.878**	KSF	135.57	1,068	*50%*	534	*50%*	534
	Coffee/Donut Shop w/ Drive-Through	937	**2.500**	KSF	820.38	2,051	*50%*	1,026	*50%*	1,025
	General Light Industrial	110	**22.680**	KSF	4.96	112	*50%*	56	*50%*	56
	Total Generated Trips					**3,231**	**1,616**		**1,615**	
	Internal Capture[2]	23.8%				742	371		371	
	Total Driveway Trips					**2,489**	**1,245**		**1,244**	
	LUC 820 Pass-by Trips[3]	34%				*278*	*139*		*139*	
	LUC 938 Pass-by Trips[3, 4]	89%				*1,392*	*696*		*696*	
	10% of Adjacent Street Traffic Cap[5]	710				710	355		355	
	Net New External Trips					**1,779**	**890**		**889**	

	Land Use	ITE LUC	Size	Units	Trip Rate[1]	AM Peak Hour Trip Generation				
						Total	In[1]		Out[1]	
AM PEAK HOUR	Retail	820	**7.878**	KSF	0.94	7	*62%*	4	*38%*	3
	Coffee/Donut Shop w/ Drive-Through	937	**2.500**	KSF	88.99	222	*51%*	113	*49%*	109
	General Light Industrial	110	**22.680**	KSF	0.70	16	*88%*	14	*12%*	2
	Total Generated Trips					**245**	**131**		**114**	
	Internal Capture[2]	0.0%				0	0		0	
	Total Driveway Trips					**245**	**131**		**114**	
	LUC 820 Pass-by Trips[3]	34%				*4*	*2*		*2*	
	LUC 938 Pass-by Trips[3, 4]	89%				*198*	*99*		*99*	
	10% of Adjacent Street Traffic Cap[5]	39				39	20		19	
	Net New External Trips					**206**	**111**		**95**	

	Land Use	ITE LUC	Size	Units	Trip Rate[1]	PM Peak Hour Trip Generation				
						Total	In[1]		Out[1]	
PM PEAK HOUR	Retail	820	**7.878**	KSF	10.52	83	*48%*	40	*52%*	43
	Coffee/Donut Shop w/ Drive-Through	937	**2.500**	KSF	43.38	108	*50%*	54	*50%*	54
	General Light Industrial	110	**22.680**	KSF	0.63	14	*13%*	2	*87%*	12
	Total Generated Trips					**205**	**96**		**109**	
	Internal Capture[2]	33.9%				64	32		32	
	Total Driveway Trips					**141**	**64**		**77**	
	LUC 820 Pass-by Trips[3]	34%				*20*	*10*		*10*	
	LUC 938 Pass-by Trips[3, 4]	89%				*64*	*32*		*32*	
	10% of Adjacent Street Traffic Cap[5]	42				42	21		21	
	Net New External Trips					**99**	**43**		**56**	

[1] Vehicle trip rates and directional splits per data and procedures outlined in ITE Trip Generation, 10th Edition

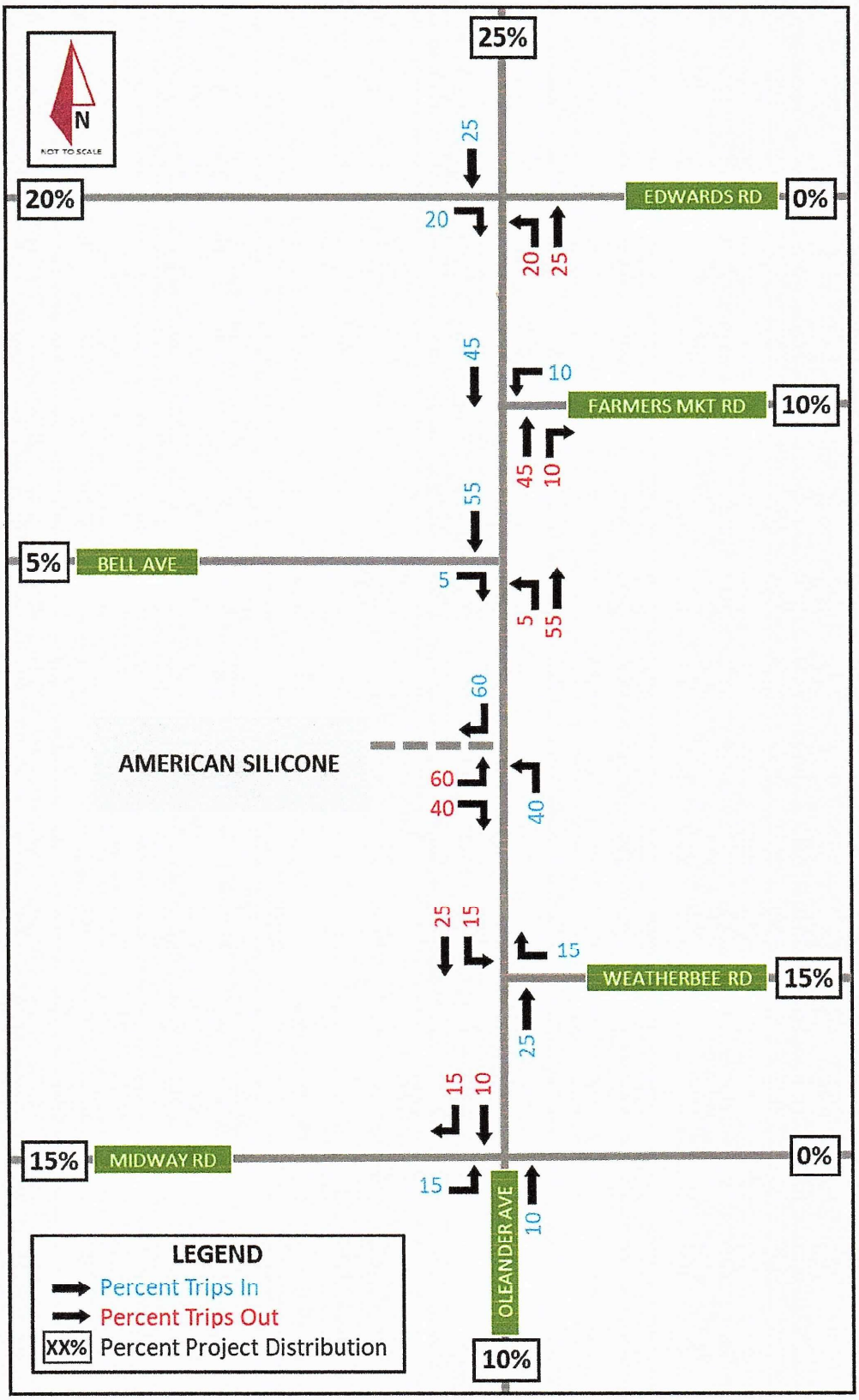
[2] Internal Capture rate per ITE Trip Generation Handbook, 3rd Edition

[3] Pass-by trip rate per ITE Trip Generation Handbook, 3rd Edition, capped at 10% of adjacent street traffic

[4] Pass-by trip rate for LUC 938 (Coffee/Donut Shop w/ Drive-Through Window and No Indoor Seating) was referenced as ITE does not provide a rate for LUC 937

[5] Adjacent Street Traffic on Oleander Avenue from latest St. Lucie TPO Traffic Counts and Level of Service Report:
Daily: 7,100 AM Peak Hour: 388 PM Peak Hour: 421

Figure 1: Project Trip Distribution



O'ROURKE
ENGINEERING & PLANNING

TRAFFIC ANALYSIS

FOR

Dade & Sunrise – Parcels North

Prepared for:

Mrs. Patricia Sesta
EDC
10250 SW Village Parkway, Suite 201
Port St. Lucie, FL 34987

Prepared by

O'Rourke Engineering & Planning
22 SE Seminole St
Stuart, Florida 34994
772-781-7918

February 11, 2022
Revised June 17, 2022
SR22012.0

Prepared by: O'Rourke Engineering & Planning Certificate of Authorization: #26869 22 SE Seminole St Stuart, Florida 34994 772-781-7918	Professional Engineer Susan E. O'Rourke, P.E. Date signed and sealed: 6/17/2022 License #: 42684

Table 1 - Trip Generation

Table 1a: Daily

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Net New Trips		
					In	Out	In	Out	Total
Multifamily Housing (Low-Rise)	220	216	DU	T = 6.41(X) + 75.31	50%	50%	730	730	1,460
TOTALS							**730**	**730**	**1,460**

Source: ITE 11th Edition Trip Generation Rates

Table 1b: AM Peak Hour

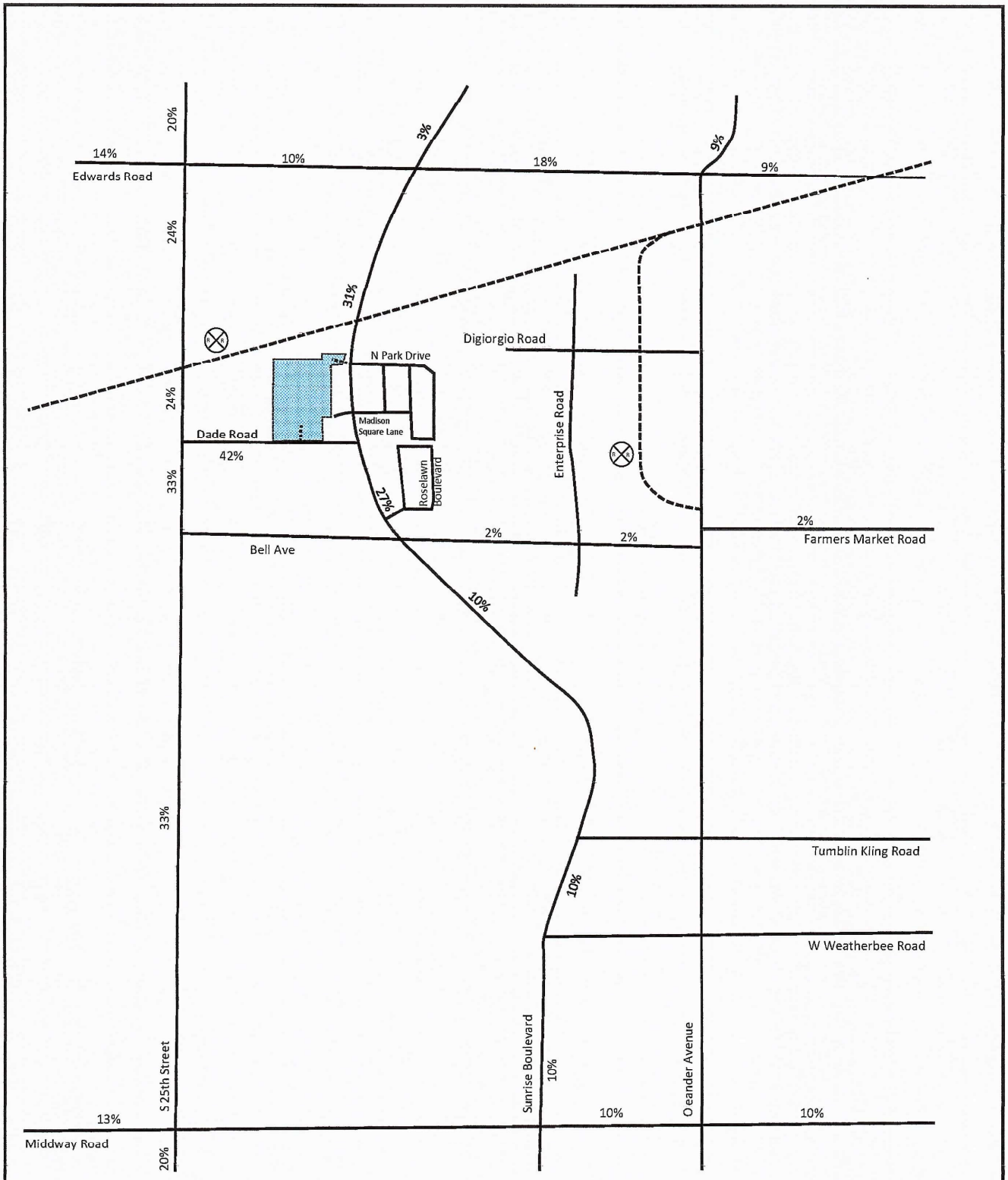
Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Net New Trips		
					In	Out	In	Out	Total
Multifamily Housing (Low-Rise)	220	216	DU	T = 0.31(X) + 22.85	24%	76%	22	68	90
TOTALS							**22**	**68**	**90**

Source: ITE 11th 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
Multifamily Housing (Low-Rise)	220	216	DU	T = 0.43(X) + 20.55	63%	37%	71	42	113
TOTALS							**71**	**42**	**113**

Source: ITE 11th Edition Trip Generation Rates



NTS 22 SE Seminole Street Stuart, Fl, 34994 Job Number: SR22012.0 Date: 06-17-22	Legend = Project Location	Figure 2 Percent Assignment Dade & Sunrise - North Parcels

NAPA Auto Parts

Traffic Impact Analysis

December 2022

Kimley»Horn

Table 1: Trip Generation Summary

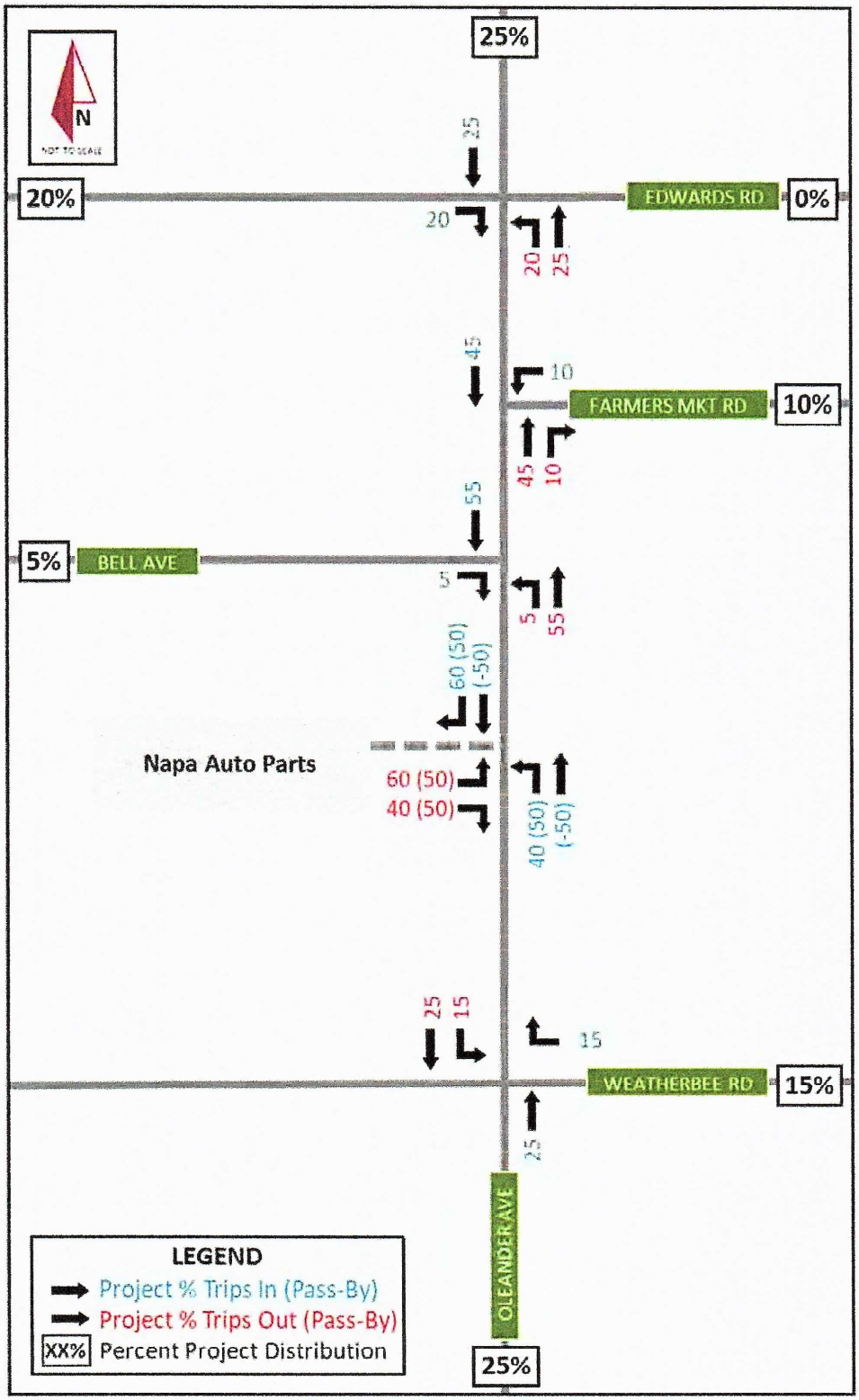
Land Use	Intensity	Daily Trips	AM Peak Hour of Adjacent Street			PM Peak Hour of Adjacent Street		
			Total	In	Out	Total	In	Out
Proposed Development								
Automobile Parts Sales	10 KSF	546	25	14	11	49	23	26
Subtotal		*546*	*25*	*14*	*11*	*49*	*23*	*26*
Pass-By Traffic								
Automobile Parts Sales	43%	235	11	6	5	21	11	10
Subtotal		*235*	*11*	*6*	*5*	*21*	*11*	*10*
Net External Trips		**311**	**14**	**8**	**6**	**28**	**12**	**16**
TOTAL NET EXTERNAL TRIPS		**311**	**14**	**8**	**6**	**28**	**12**	**16**

Note 1: Trip Generation was calculated using the data from ITE's Trip Generation Manual, 11th Edition

Automobile Parts Sales [ITE 843]

Daily	T = 54.57*X; (X is KSF)
AM Peak Hour of Adjacent Street	T = 2.51*X; (X is KSF); (55% in/ 45% out)
PM Peak Hour of Adjacent Street	T = 4.90*X; (X is KSF); (48% in/ 52% out)

Figure 1: Project Trip Distribution



OLEANDER OAKS (Fort Pierce, FL)

Traffic Impact Study

April 2021

Kimley»Horn

Table 1: Trip Generation Summary

	Land Use	ITE LUC	Size	Units	Trip Rate[1]	Daily Trip Generation				
						Total	In[1]		Out[1]	
DAILY	Single-Family Detached Housing	210	63	DU	10.79	680	50%	340	50%	340
	Total Generated Trips					**680**	**340**		**340**	
	Land Use	**ITE LUC**	**Size**	**Units**	**Trip Rate[1]**	**AM Peak Hour Trip Generation**				
						Total	**In[1]**		**Out[1]**	
AM PEAK HOUR	Single-Family Detached Housing	210	63	DU	0.79	50	25%	13	75%	37
	Total Generated Trips					**50**	**13**		**37**	
	Land Use	**ITE LUC**	**Size**	**Units**	**Trip Rate[1]**	**PM Peak Hour Trip Generation**				
						Total	**In[1]**		**Out[1]**	
PM PEAK HOUR	Single-Family Detached Housing	210	63	DU	1.03	65	63%	41	37%	24
	Total Generated Trips					**65**	**41**		**24**	

[1] Vehicle trip rates and directional splits per data and procedures outlined in ITE Trip Generation, 10th Edition

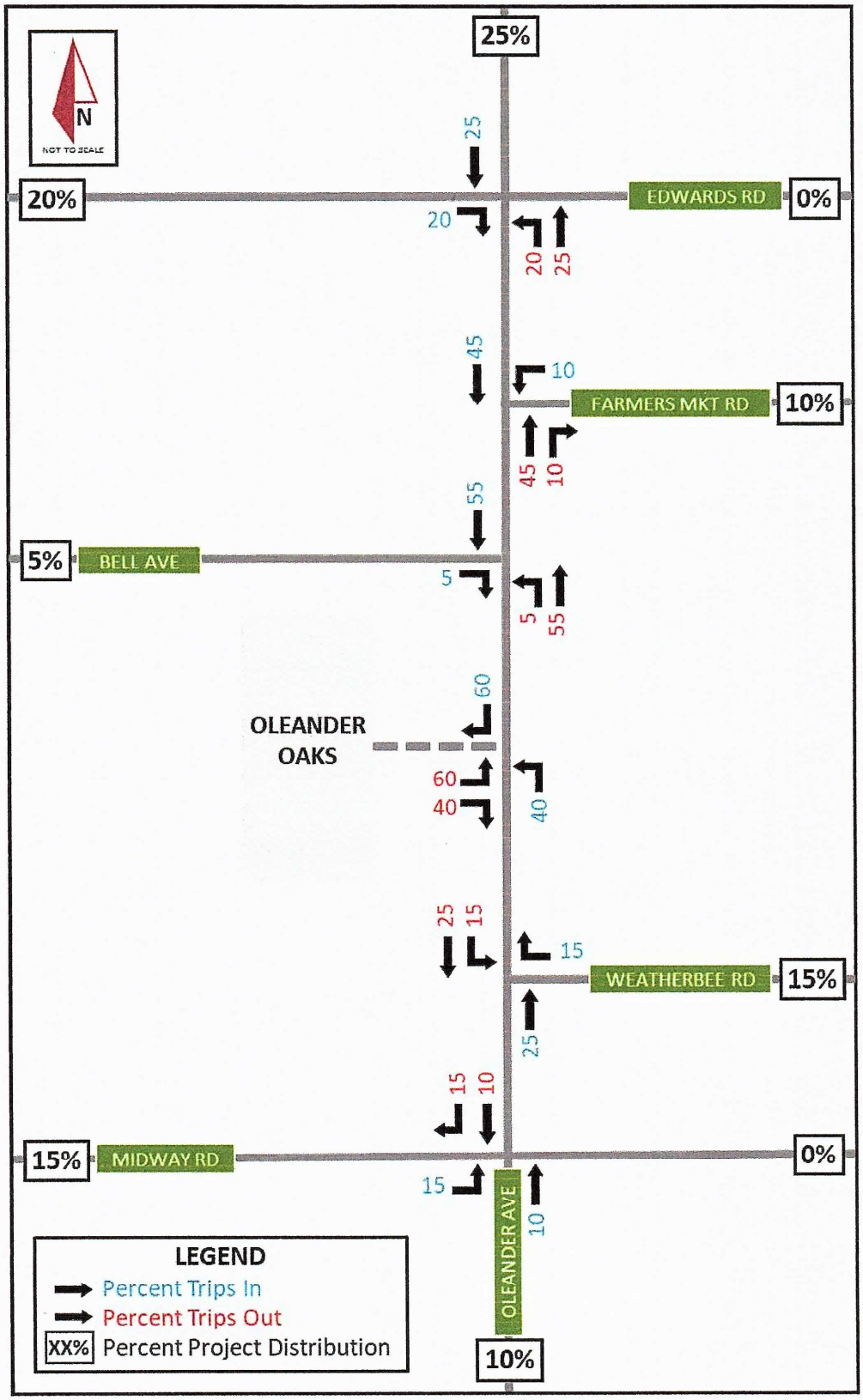
2.2 TRIP DISTRIBUTION AND TRIP ASSIGNMENT

Projected traffic demand of project trips on study roadways was derived with use of the adopted regional travel demand model. Land use data for the project was entered into a new traffic analysis zone (TAZ) within the Greater Treasure Coast Regional Planning Model (GTCRPM) set and situated within the existing roadway network to appropriately represent project access. The model was used to assign trips for all trip purposes between allocated origin and destination pairs using project buildout year model data. Trip distribution for the project was extracted from the completed model assignment and reviewed for logic. The resulting model plots showing percent of daily project distribution are provided in **Appendix C.**

Daily model project distribution was referenced to manually assign project distribution at the study area intersections and driveways in general accordance with model output. **Figure 1** shows the intersection movement project distribution surrounding Oleander Oaks used in this TIS.

Project trip distribution percentages were used to assign anticipated project trips to the study area roadways and intersections. **Figure 2** shows the anticipated AM and PM peak hour project volumes at the study area intersections.

Figure 1: Project Trip Distribution



APPENDIX D

Intersection Analysis

DE TRAFFIC

detraffic.com
(386) 341-4186
Sunrise Blvd at Bell Ave
St. Lucie County, FI

File Name : Sunrise at Bell
Site Code : 00000001
Start Date : 4/2/2024
Page No : 1

Groups Printed- Autmobiles - Commercial

	Sunrise Blvd Southbound				Bell Ave Westbound				Sunrise Blvd Northbound				Bell Ave Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	19	2	24	2	29	3	34	11	17	2	30	7	22	9	38	126
07:15 AM	4	25	4	33	3	29	4	36	19	27	3	49	8	30	11	49	167
07:30 AM	3	36	4	43	6	32	7	45	19	29	4	52	8	39	17	64	204
07:45 AM	3	32	2	37	6	35	4	45	23	27	4	54	11	34	20	65	201
Total	13	112	12	137	17	125	18	160	72	100	13	185	34	125	57	216	698
08:00 AM	5	35	4	44	5	40	9	54	17	35	6	58	10	30	24	64	220
08:15 AM	5	26	6	37	5	32	4	41	18	30	4	52	7	36	27	70	200
08:30 AM	4	25	4	33	4	28	5	37	19	24	3	46	9	31	27	67	183
08:45 AM	3	26	6	35	5	21	4	30	13	27	1	41	9	32	22	63	169
Total	17	112	20	149	19	121	22	162	67	116	14	197	35	129	100	264	772
04:00 PM	6	39	8	53	3	37	6	46	13	26	4	43	1	27	13	41	183
04:15 PM	6	28	9	43	6	40	5	51	15	35	4	54	6	30	12	48	196
04:30 PM	6	31	12	49	4	47	7	58	21	35	5	61	6	29	16	51	219
04:45 PM	5	35	11	51	4	49	6	59	19	26	5	50	5	35	19	59	219
Total	23	133	40	196	17	173	24	214	68	122	18	208	18	121	60	199	817
05:00 PM	4	37	16	57	5	52	3	60	24	29	4	57	5	43	17	65	239
05:15 PM	6	36	10	52	4	47	2	53	26	35	5	66	2	35	15	52	223
05:30 PM	4	27	9	40	2	45	4	51	24	31	4	59	5	31	20	56	206
05:45 PM	4	24	8	36	6	42	6	54	16	32	6	54	4	29	13	46	190
Total	18	124	43	185	17	186	15	218	90	127	19	236	16	138	65	219	858
Grand Total	71	481	115	667	70	605	79	754	297	465	64	826	103	513	282	898	3145
Apprch %	10.6	72.1	17.2		9.3	80.2	10.5		36	56.3	7.7		11.5	57.1	31.4		
Total %	2.3	15.3	3.7	21.2	2.2	19.2	2.5	24	9.4	14.8	2	26.3	3.3	16.3	9	28.6	
Autmobiles	67	466	112	645	66	573	75	714	292	439	62	793	97	488	278	863	3015
% Autmobiles	94.4	96.9	97.4	96.7	94.3	94.7	94.9	94.7	98.3	94.4	96.9	96	94.2	95.1	98.6	96.1	95.9
Commercial	4	15	3	22	4	32	4	40	5	26	2	33	6	25	4	35	130
% Commercial	5.6	3.1	2.6	3.3	5.7	5.3	5.1	5.3	1.7	5.6	3.1	4	5.8	4.9	1.4	3.9	4.1

2022 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL

CATEGORY: 9401 CEN.-W OF US1 TO I95

MOCF: 0.95

WEEK	DATES	SF	PSCF
1	01/01/2022 - 01/01/2022	0.99	1.04
2	01/02/2022 - 01/08/2022	0.99	1.04
3	01/09/2022 - 01/15/2022	0.98	1.03
* 4	01/16/2022 - 01/22/2022	0.97	1.02
* 5	01/23/2022 - 01/29/2022	0.96	1.01
* 6	01/30/2022 - 02/05/2022	0.96	1.01
* 7	02/06/2022 - 02/12/2022	0.95	1.00
* 8	02/13/2022 - 02/19/2022	0.94	0.99
* 9	02/20/2022 - 02/26/2022	0.94	0.99
*10	02/27/2022 - 03/05/2022	0.94	0.99
*11	03/06/2022 - 03/12/2022	0.94	0.99
*12	03/13/2022 - 03/19/2022	0.94	0.99
*13	03/20/2022 - 03/26/2022	0.95	1.00
*14	03/27/2022 - 04/02/2022	0.96	1.01
*15	04/03/2022 - 04/09/2022	0.96	1.01
*16	04/10/2022 - 04/16/2022	0.97	1.02
17	04/17/2022 - 04/23/2022	0.98	1.03
18	04/24/2022 - 04/30/2022	0.99	1.04
19	05/01/2022 - 05/07/2022	0.99	1.04
20	05/08/2022 - 05/14/2022	1.00	1.05
21	05/15/2022 - 05/21/2022	1.01	1.06
22	05/22/2022 - 05/28/2022	1.02	1.07
23	05/29/2022 - 06/04/2022	1.03	1.08
24	06/05/2022 - 06/11/2022	1.04	1.09
25	06/12/2022 - 06/18/2022	1.05	1.11
26	06/19/2022 - 06/25/2022	1.07	1.13
27	06/26/2022 - 07/02/2022	1.08	1.14
28	07/03/2022 - 07/09/2022	1.10	1.16
29	07/10/2022 - 07/16/2022	1.11	1.17
30	07/17/2022 - 07/23/2022	1.09	1.15
31	07/24/2022 - 07/30/2022	1.07	1.13
32	07/31/2022 - 08/06/2022	1.05	1.11
33	08/07/2022 - 08/13/2022	1.03	1.08
34	08/14/2022 - 08/20/2022	1.01	1.06
35	08/21/2022 - 08/27/2022	1.02	1.07
36	08/28/2022 - 09/03/2022	1.03	1.08
37	09/04/2022 - 09/10/2022	1.04	1.09
38	09/11/2022 - 09/17/2022	1.05	1.11
39	09/18/2022 - 09/24/2022	1.03	1.08
40	09/25/2022 - 10/01/2022	1.02	1.07
41	10/02/2022 - 10/08/2022	1.00	1.05
42	10/09/2022 - 10/15/2022	0.98	1.03
43	10/16/2022 - 10/22/2022	0.99	1.04
44	10/23/2022 - 10/29/2022	1.00	1.05
45	10/30/2022 - 11/05/2022	1.02	1.07
46	11/06/2022 - 11/12/2022	1.03	1.08
47	11/13/2022 - 11/19/2022	1.04	1.09
48	11/20/2022 - 11/26/2022	1.03	1.08
49	11/27/2022 - 12/03/2022	1.02	1.07
50	12/04/2022 - 12/10/2022	1.00	1.05
51	12/11/2022 - 12/17/2022	0.99	1.04
52	12/18/2022 - 12/24/2022	0.99	1.04
53	12/25/2022 - 12/31/2022	0.98	1.03

* PEAK SEASON

23-FEB-2023 09:11:22 830UPD 4_9401_PKSEASON.TXT

TURNING MOVEMENT VOLUME COUNTS

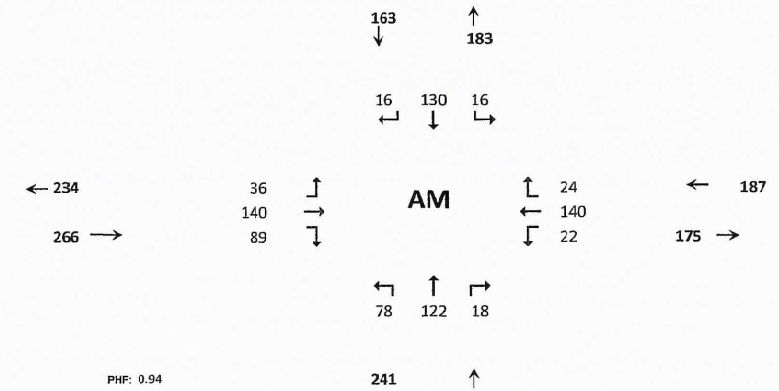
N/S STREET: Sunrise Blvd **E/W STREET:** Bell Ave **CONTROL:** AWSC

FILENAME: C6 - TMC - Sunrise Blvd & Bell Ave.xlsx

COUNT DATE: 4/2/2024 **DAY:** Tuesday **CITY:** St Lucie

REPORT DATE: 4/3/2024 **ANALYSIS YEAR:** 2024 Existing

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	11	17	2	3	19	2	7	22	9	2	23	3	126	698
7:15-7:30	19	27	3	4	25	4	8	30	11	3	29	4	167	792
7:30-7:45	19	29	4	3	36	4	8	39	17	6	32	7	204	825
7:45-8:00	23	27	4	3	32	2	11	34	20	6	35	4	201	804
8:00-8:15	17	35	6	5	35	4	10	30	24	5	40	9	220	772
8:15-8:30	18	30	4	5	26	6	7	36	27	5	32	4	200	
8:30-8:45	19	24	3	4	25	4	9	31	27	4	23	5	183	
8:45-9:00	13	27	1	3	26	6	9	32	22	5	21	4	169	
AM PEAK HOUR IS FROM:			7:30 AM TO 8:30AM											
Volumes	77	121	18	16	129	16	36	139	88	22	139	24	825	
Season Factor	78	122	18	16	130	16	36	140	89	22	140	24	833	
Growth	78	122	18	16	130	16	36	140	89	22	140	24	833	
In/Cut	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	78	122	18	16	130	16	36	140	89	22	140	24	833	

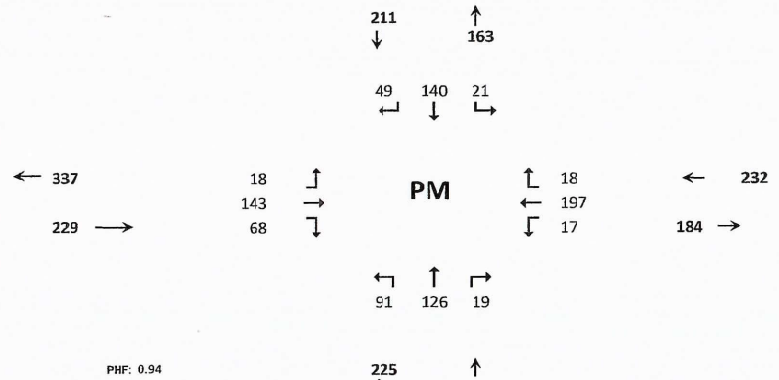


PHF: 0.94
Seasonal Factor: 1.01
Growth Rate: 1
Years Grown: 0

Trips In: 0 Trips Out: 0

Sunrise Blvd & Bell Ave
Existing

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	13	26	4	6	39	8	1	27	13	3	37	6	183	817
4:15-4:30	15	35	4	6	28	9	6	30	12	6	40	5	196	873
4:30-4:45	21	35	5	6	31	12	6	29	15	4	47	7	219	930
4:45-5:00	19	26	5	5	35	11	5	35	13	4	49	6	219	837
5:00-5:15	24	29	4	4	37	16	5	43	17	5	52	3	239	858
5:15-5:30	26	35	5	6	36	10	2	35	15	4	47	2	223	
5:30-5:45	24	31	4	4	27	9	5	31	20	2	45	4	206	
5:45-6:00	16	32	6	4	24	8	4	29	13	6	42	6	190	
PM PEAK HOUR IS FROM:			4:30 PM TO 5:30PM											
Volumes	90	125	19	21	139	49	18	142	67	17	195	18	900	
Season Factor	91	126	19	21	140	49	18	143	68	17	197	18	909	
Growth	91	126	19	21	140	49	18	143	68	17	197	18	909	
In/Cut	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	91	126	19	21	140	49	18	143	68	17	197	18	909	



PHF: 0.94
Seasonal Factor: 1.01
Growth Rate: 1
Years Grown: 0

Trips In: Trips Out:

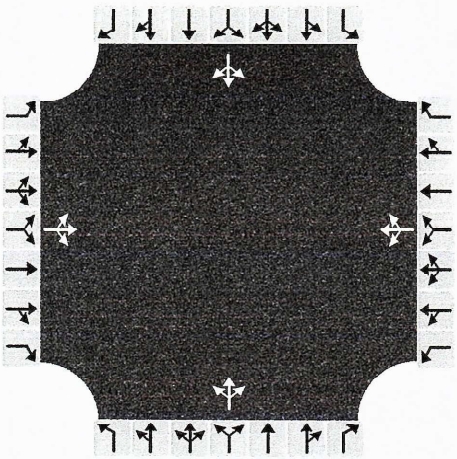
D-3

HCS All-Way Stop Control Report

General and Site Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	4/3/2024
Analysis Year	2024
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak Hour
Project Description	Existing
Intersection	Sunrise Blvd & Bell Ave
Jurisdiction	St. Lucie County
East/West Street	Bell Avenue
North/South Street	Sunrise Blvd
Peak Hour Factor	0.94

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	36	140	89	22	140	24	78	122	18	16	130	16
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	282			198			232			172		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.251			0.176			0.206			0.153		
Final Departure Headway, h_d (s)	5.27			5.52			5.59			5.64		
Final Degree of Utilization, x	0.412			0.303			0.360			0.270		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	3.27			3.52			3.59			3.64		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	282			198			232			172		
Capacity (veh/h)	684			652			644			638		
95% Queue Length, Q_{95} (veh)	2.0			1.3			1.6			1.1		
95% Queue Length, Q_{95} (ft)	50.8			33.0			40.6			27.9		
Control Delay (s/veh)	11.9			10.9			11.7			10.7		
Level of Service, LOS	B			B			B			B		
Approach Delay (s/veh) | LOS	11.9	B		10.9	B		11.7	B		10.7	B	
Intersection Delay (s/veh) | LOS	11.4						B					

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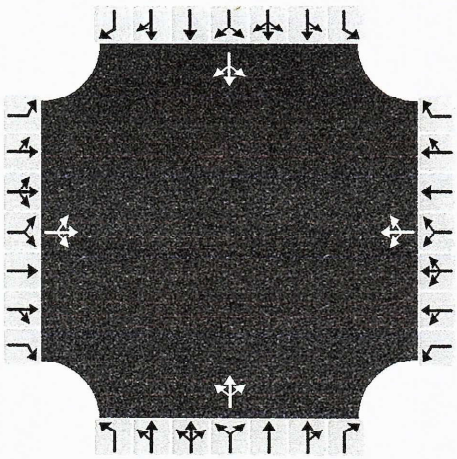
HCS All-Way Stop Control Report

General and Site Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	4/3/2024
Analysis Year	2024
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak Hour
Project Description	Existing
Intersection	Sunrise Blvd & Bell Ave
Jurisdiction	St. Lucie County
East/West Street	Bell Avenue
North/South Street	Sunrise Blvd
Peak Hour Factor	0.94

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	18	143	68	17	197	18	91	126	19	21	140	49
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	244			247			251			223		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.217			0.219			0.223			0.199		
Final Departure Headway, h_d (s)	5.64			5.76			5.81			5.73		
Final Degree of Utilization, x	0.382			0.395			0.406			0.355		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	3.64			3.76			3.81			3.73		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	244			247			251			223		
Capacity (veh/h)	638			625			619			628		
95% Queue Length, Q_{95} (veh)	1.8			1.9			2.0			1.6		
95% Queue Length, Q_{95} (ft)	45.7			48.3			50.8			40.6		
Control Delay (s/veh)	12.1			12.5			12.7			11.9		
Level of Service, LOS	B			B			B			B		
Approach Delay (s/veh) | LOS	12.1	B		12.5	B		12.7	B		11.9	B	
Intersection Delay (s/veh) | LOS	12.3						B					

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TURNING MOVEMENT VOLUME COUNTS

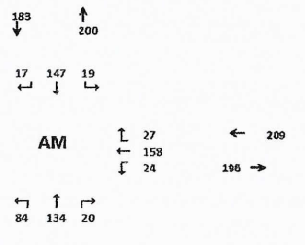
N/S STREET: Sunrise Blvd **E/W STREET:** Bell Ave **CONTROL:** AWSC
FILENAME: C6- TMC - Sunrise Blvd & Bell Ave - 4.11.23.dsx
COUNT DATE: 4/2/2024 **DAY:** Tuesday **CITY:** St Lucie
REPORT DATE: 4/3/2024 **ANALYSIS YEAR:** 2027 Background

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL:	ONE HOUR SUM
7:00-7:15	11	17	2	3	19	2	7	12	9	1	29	3	126	698
7:15-7:30	19	27	3	4	25	4	8	10	11	5	25	4	167	792
7:30-7:45	19	29	4	3	36	4	8	19	17	6	32	7	204	825
7:45-8:00	23	27	4	3	32	2	11	14	10	6	35	4	201	804
8:00-8:15	17	35	6	5	35	4	10	10	14	5	40	9	220	772
8:15-8:30	18	30	4	5	26	6	7	16	17	5	32	4	200	
8:30-8:45	19	24	3	4	25	4	9	11	17	4	28	5	183	
8:45-9:00	13	27	1	3	26	6	9	12	12	5	21	4	159	
AM PEAK HOUR IS FROM:			7:30 AM TO 8:30AM											
Volumes	77	121	18	16	129	16	36	139	68	22	139	24	625	
Season Factor	78	122	18	16	130	16	36	140	69	22	140	24	633	
Growth	84	132	20	17	140	17	39	151	96	24	151	26	697	
In/Out	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	84	132	20	17	140	17	39	151	96	24	151	26	697	
Other Projects														
Percentage	0%	10%	0%	2%	10%	0%	0%	0%	0%	0%	0%	2%	0%	
In/Out	-	IN	-	OUT	OUT	-	-	-	-	-	-	IN		
PROJECT	0	2	0	1	7	0	0	0	0	0	0	0	0	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	1	0	0	2	0	0	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	6	0	0	5	0	0	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal	0	2	0	1	7	0	0	7	0	0	7	0	24	
Total	84	134	20	19	147	17	39	158	96	24	158	27	922	

PHF: 0.94
Seasonal Factor: 1.01
Growth Rate: 1.025
Years Grown: 3

Trips In / Trips Out: 0 / 0

Project Name	Trips In	Trips Out
Dade & Sunrise	21	68
Oleander Oaks	11	37
American Silicone	111	95
Napa Auto	8	6



D-6

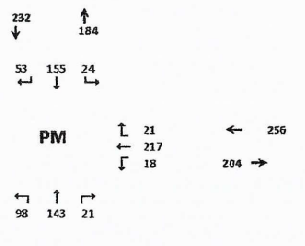
Sunrise Blvd & Bell Ave
Background

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL:	ONE HOUR SUM
4:00-4:15	13	26	4	6	39	8	1	27	19	5	37	6	183	817
4:15-4:30	15	35	4	6	28	9	6	30	12	6	40	5	196	873
4:30-4:45	21	35	5	6	31	12	6	29	16	4	47	7	219	900
4:45-5:00	19	26	5	5	35	11	5	35	19	4	49	6	219	887
5:00-5:15	24	29	4	4	37	16	5	43	17	5	52	3	239	858
5:15-5:30	26	35	5	6	36	10	2	35	15	4	47	2	223	
5:30-5:45	24	31	4	4	27	9	5	31	20	1	45	4	206	
5:45-6:00	16	32	6	4	24	8	4	29	13	6	42	6	190	
PM PEAK HOUR IS FROM:			4:30 PM TO 5:30PM											
Volumes	90	125	19	21	139	49	18	142	67	17	191	18	900	
Season Factor	91	126	19	21	140	49	18	143	68	17	197	18	909	
Growth	98	136	21	23	151	53	20	154	73	18	212	20	979	
In/Out	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	98	136	21	23	151	53	20	154	73	18	212	20	979	
Other Projects														
%	0%	10%	0%	2%	10%	0%	0%	0%	0%	0%	0%	10%		
In/Out	-	IN	-	OUT	OUT	-	-	-	-	-	-	IN		
PROJECT	0	7	0	1	4	0	0	0	0	0	0	1	14	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	2	0	0	1	0	3	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	2	0	0	3	0	5	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	1	0	0	1	0	1	

PHF: 0.94
Seasonal Factor: 1.01
Growth Rate: 1.025
Years Grown: 3

Trips In / Trips Out:

Project Name	Trips In	Trips Out
Dade & Sunrise	7	42
Oleander Oaks	41	24
American Silicone	41	56
Napa Auto	12	16

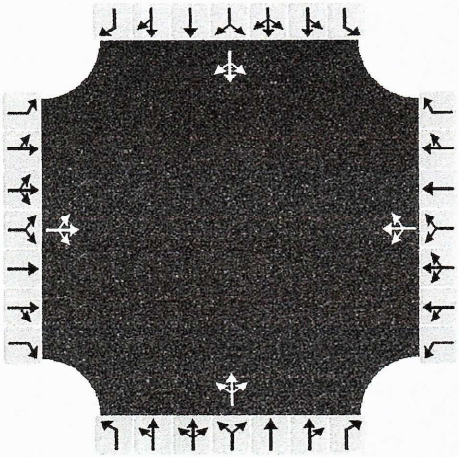


HCS All-Way Stop Control Report

General and Site Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	4/3/2024
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak Hour
Project Description	Background without Project
Intersection	Sunrise Blvd & Bell Ave
Jurisdiction	St. Lucie County
East/West Street	Bell Avenue
North/South Street	Sunrise Blvd
Peak Hour Factor	0.94

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	39	158	96	24	158	27	84	134	20	19	147	17
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	312			222			253			195		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.277			0.198			0.225			0.173		
Final Departure Headway, h_d (s)	5.54			5.81			5.88			5.95		
Final Degree of Utilization, x	0.479			0.359			0.414			0.322		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	3.54			3.81			3.88			3.95		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	312			222			253			195		
Capacity (veh/h)	650			620			612			605		
95% Queue Length, Q_{95} (veh)	2.6			1.6			2.0			1.4		
95% Queue Length, Q_{95} (ft)	66.0			40.6			50.8			35.6		
Control Delay (s/veh)	13.5			12.0			13.0			11.7		
Level of Service, LOS	B			B			B			B		
Approach Delay (s/veh) | LOS	13.5	B		12.0	B		13.0	B		11.7	B	
Intersection Delay (s/veh) | LOS	12.7						B					

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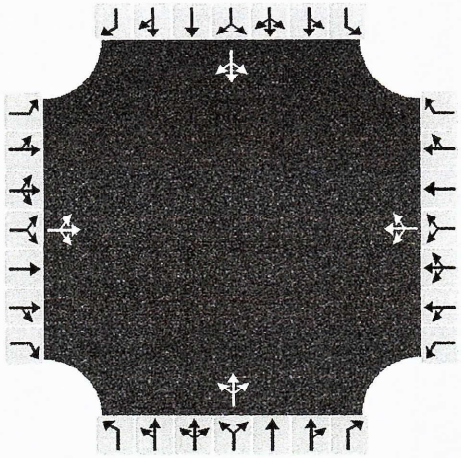
HCS All-Way Stop Control Report

General and Site Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	4/3/2024
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak Hour
Project Description	Background without Project
Intersection	Sunrise Blvd & Bell Ave
Jurisdiction	St. Lucie County
East/West Street	Bell Avenue
North/South Street	Sunrise Blvd
Peak Hour Factor	0.94

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	20	159	73	18	217	21	98	143	21	24	155	53
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	268			272			279			247		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.238			0.242			0.248			0.219		
Final Departure Headway, h_d (s)	6.03			6.13			6.18			6.12		
Final Degree of Utilization, x	0.449			0.464			0.479			0.420		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	4.03			4.13			4.18			4.12		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	268			272			279			247		
Capacity (veh/h)	597			587			582			588		
95% Queue Length, Q_{95} (veh)	2.3			2.4			2.6			2.1		
95% Queue Length, Q_{95} (ft)	58.4			61.0			66.0			53.3		
Control Delay (s/veh)	13.8			14.3			14.7			13.5		
Level of Service, LOS	B			B			B			B		
Approach Delay (s/veh) | LOS	13.8	B		14.3	B		14.7	B		13.5	B	
Intersection Delay (s/veh) | LOS	14.1						B					

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TURNING MOVEMENT VOLUME COUNTS

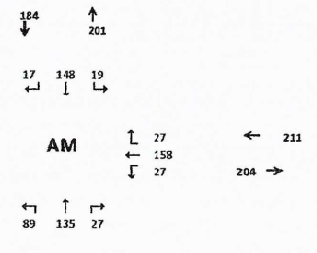
N/S STREET: Sunrise Blvd **E/W STREET:** Bell Ave **CONTROL:** AWSC
FILENAME: G6 - TMC - Sunrise Blvd & Bell Ave - 4.11.23.xlsx
COUNT DATE: 4/2/2024 **DAY:** Tuesday **CITY:** St Lucie
REPORT DATE: 4/3/2024 **ANALYSIS YEAR:** 2027 Future Total

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15	11	17	2	3	19	2	7	22	9	2	29	3	126	698
7:15-7:30	19	27	3	4	25	4	8	30	11	3	29	4	167	792
7:30-7:45	19	29	4	3	36	4	8	39	17	6	32	7	204	825
7:45-8:00	23	27	4	3	32	2	11	34	20	6	35	8	201	804
8:00-8:15	17	35	6	5	35	4	10	30	24	5	40	9	220	772
8:15-8:30	18	30	4	5	26	6	7	36	27	5	32	4	200	
8:30-8:45	19	24	3	4	25	4	9	31	27	4	28	5	183	
8:45-9:00	13	27	1	3	26	6	9	32	22	5	21	4	169	
AM PEAK HOUR IS FROM:			7:30 AM TO 8:30AM											
Volumes	77	121	18	16	129	16	36	139	88	22	139	24	825	
Season Factor	78	122	18	16	130	16	36	140	89	22	140	24	833	
Growth	84	132	20	17	140	17	39	151	96	24	151	26	897	
In/Out	OUT	OUT	OUT	-	IN	-	-	-	IN	IN	-	-		
Percentage	19%	4%	26%	0%	4%	0%	0%	0%	19%	26%	0%	0%		
PROJECT	6	1	8	0	0	0	0	0	2	3	0	0	20	
Total	89	133	27	17	141	17	39	151	98	27	151	26	917	
Other Projects														
Percentage	0%	10%	0%	2%	10%	0%	0%	0%	0%	0%	0%	2%		
In/Out	-	IN	-	OUT	OUT	-	-	-	-	-	-	IN		
PROJECT	0	2	0	1	7	0	0	0	0	0	0	0	0	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	1	0	0	2	0	0	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	6	0	0	5	0	0	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal	0	2	0	1	7	0	0	7	0	0	7	0	24	
Total	89	135	27	19	148	17	39	158	98	27	158	17	941	

PHF 0.94
Seasonal Factor 1.01
Growth Rate 1.025
Years Grown 3

Trips In	Trips Out
10	30

Project Name	Trips In	Trips Out
Dade & Sunrise	22	68
Oleander Oaks	13	37
American Silicone	111	95
Napa Auto	8	6



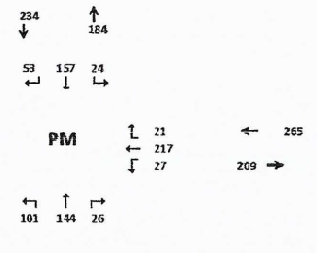
Sunrise Blvd & Bell Ave
Future Total

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	13	26	4	6	39	8	1	27	13	3	37	5	183	817
4:15-4:30	15	35	4	6	28	9	6	30	12	6	40	5	196	873
4:30-4:45	21	35	5	6	31	12	6	29	16	4	47	7	219	900
4:45-5:00	19	26	5	5	35	11	5	35	19	4	49	6	219	887
5:00-5:15	24	29	4	4	37	16	5	43	17	5	52	3	239	858
5:15-5:30	26	35	5	6	36	10	2	35	15	4	47	2	223	
5:30-5:45	24	31	4	4	27	9	5	31	20	2	45	4	206	
5:45-6:00	16	32	6	4	24	8	4	29	13	6	42	6	190	
PM PEAK HOUR IS FROM:			4:30 PM TO 5:30PM											
Volumes	90	125	19	21	139	43	18	141	67	17	195	18	900	
Season Factor	91	126	19	21	140	43	18	141	68	17	197	18	909	
Growth	98	136	21	23	151	53	20	154	73	18	212	20	979	
In/Out	OUT	OUT	OUT	-	IN	-	-	-	IN	IN	-	-		
Percentage	19%	4%	26%	0%	4%	0%	0%	0%	19%	26%	0%	0%		
PROJECT	4	1	5	0	1	0	0	0	6	9	0	0	25	
Total	101	137	26	23	153	53	20	154	79	27	212	20	1004	
Other Projects														
%	0%	10%	0%	2%	10%	0%	0%	0%	0%	0%	0%	2%		
In/Out	-	IN	-	OUT	OUT	-	-	-	-	-	-	IN		
PROJECT	0	7	0	1	4	0	0	0	0	0	0	1	14	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	2	0	0	1	0	3	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	2	0	0	3	0	5	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	1	0	0	1	0	1	

PHF 0.94
Seasonal Factor 1.01
Growth Rate 1.025
Years Grown 3

Trips In	Trips Out
35	19

Project Name	Trips In	Trips Out
Dade & Sunrise	71	42
Oleander Oaks	41	24
American Silicone	43	56
Napa Auto	12	16

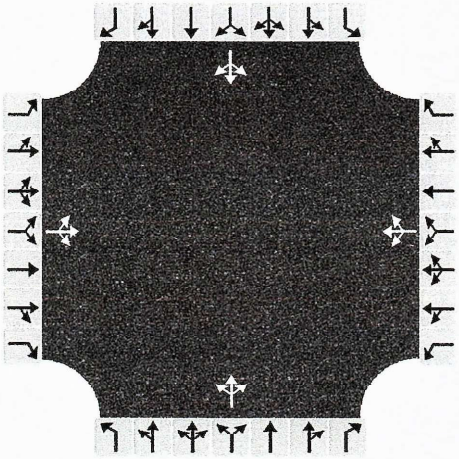


HCS All-Way Stop Control Report

General and Site Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	4/3/2024
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	AM Peak Hour
Project Description	Future Total with Project
Intersection	Sunrise Blvd & Bell Ave
Jurisdiction	St. Lucie County
East/West Street	Bell Avenue
North/South Street	Sunrise Blvd
Peak Hour Factor	0.94

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	39	158	98	27	158	27	89	135	27	19	148	17
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	314			226			267			196		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.279			0.200			0.237			0.174		
Final Departure Headway, h_d (s)	5.60			5.88			5.91			6.02		
Final Degree of Utilization, x	0.488			0.368			0.438			0.327		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	3.60			3.88			3.91			4.02		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	314			226			267			196		
Capacity (veh/h)	643			612			609			598		
95% Queue Length, Q_{95} (veh)	2.7			1.7			2.2			1.4		
95% Queue Length, Q_{95} (ft)	68.6			43.2			55.9			35.6		
Control Delay (s/veh)	13.8			12.3			13.4			11.9		
Level of Service, LOS	B			B			B			B		
Approach Delay (s/veh) | LOS	13.8	B		12.3	B		13.4	B		11.9	B	
Intersection Delay (s/veh) | LOS	13.0						B					

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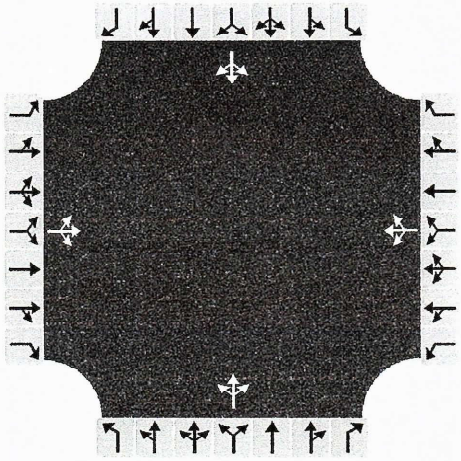
HCS All-Way Stop Control Report

General and Site Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	4/3/2024
Analysis Year	2027
Analysis Time Period (hrs)	0.25
Time Analyzed	PM Peak Hour
Project Description	Future Total with Project
Intersection	Sunrise Blvd & Bell Ave
Jurisdiction	St. Lucie County
East/West Street	Bell Avenue
North/South Street	Sunrise Blvd
Peak Hour Factor	0.94

Lanes



Turning Movement Demand Volumes

Approach	Eastbound			Westbound			Northbound			Southbound		
Movement	L	T	R	L	T	R	L	T	R	L	T	R
Volume (veh/h)	20	159	79	27	217	21	101	144	26	24	157	53
% Thrus in Shared Lane												

Lane Flow Rate and Adjustments

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	274			282			288			249		
Percent Heavy Vehicles	2			2			2			2		
Initial Departure Headway, h_d (s)	3.20			3.20			3.20			3.20		
Initial Degree of Utilization, x	0.244			0.251			0.256			0.221		
Final Departure Headway, h_d (s)	6.12			6.23			6.27			6.24		
Final Degree of Utilization, x	0.467			0.488			0.502			0.431		
Move-Up Time, m (s)	2.0			2.0			2.0			2.0		
Service Time, t_s (s)	4.12			4.23			4.27			4.24		

Capacity, Delay and Level of Service

Approach	Eastbound			Westbound			Northbound			Southbound		
Lane	L1	L2	L3	L1	L2	L3	L1	L2	L3	L1	L2	L3
Configuration	LTR			LTR			LTR			LTR		
Flow Rate, v (veh/h)	274			282			288			249		
Capacity (veh/h)	588			578			574			577		
95% Queue Length, Q_{95} (veh)	2.5			2.7			2.8			2.2		
95% Queue Length, Q_{95} (ft)	63.5			68.6			71.1			55.9		
Control Delay (s/veh)	14.4			15.0			15.4			13.9		
Level of Service, LOS	B			C			C			B		
Approach Delay (s/veh) | LOS	14.4	B		15.0	C		15.4	C		13.9	B	
Intersection Delay (s/veh) | LOS	14.7						B					

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APPENDIX E

Driveway Analysis

TURNING MOVEMENT VOLUME COUNTS

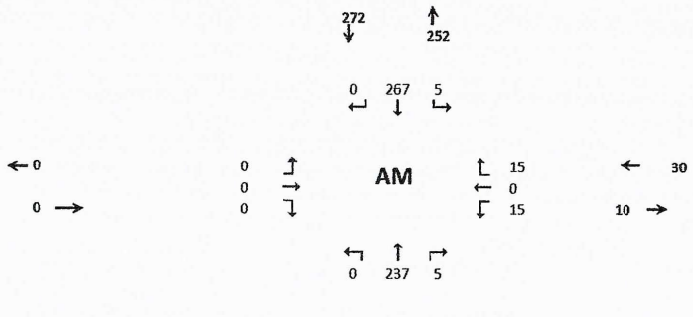
N/S STREET: Sunrise Blvd
E/W STREET: Project Driveway
CONTROL: TWSC
FILENAME: C6 - TMC - Sunrise & Project Driveway - 4.11.23.xlsx
COUNT DATE: 4/2/2024
DAY: Tuesday
CITY: St Lucie
REPORT DATE: 4/3/2024
ANALYSIS YEAR: 2027
Future Total

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15	0	30	0	0	30	0	0	0	0	0	0	0	60	371
7:15-7:30	0	49	0	0	39	0	0	0	0	0	0	0	88	433
7:30-7:45	0	52	0	0	59	0	0	0	0	0	0	0	111	455
7:45-8:00	0	54	0	0	58	0	0	0	0	0	0	0	112	446
8:00-8:15	0	58	0	0	64	0	0	0	0	0	0	0	122	428
8:15-8:30	0	52	0	0	58	0	0	0	0	0	0	0	110	
8:30-8:45	0	46	0	0	56	0	0	0	0	0	0	0	102	
8:45-9:00	0	41	0	0	53	0	0	0	0	0	0	0	94	
AM PEAK HOUR IS FROM:			7:30 AM TO 8:30AM											
Volumes	0	216	0	0	239	0	0	0	0	0	0	0	455	
Season Factor	0	218	0	0	241	0	0	0	0	0	0	0	460	
Growth	0	235	0	0	260	0	0	0	0	0	0	0	495	
In/Out	-	-	IN	IN	-	-	-	-	-	OUT	-	OUT		
Percentage	0%	0%	51%	49%	0%	0%	0%	0%	0%	51%	0%	49%		
PROJECT	0	0	5	5	0	0	0	0	0	15	0	15	40	
Total	0	235	5	5	260	0	0	0	0	15	0	15	535	
Other Projects														
Percentage	0%	10%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%		
In/Out	-	IN	-	-	OUT	-	-	-	-	-	-	-		
PROJECT	0	2	0	0	7	0	0	0	0	0	0	0	0	
Subtotal	0	2	0	0	7	0	0	0	0	0	0	0	9	
Total	0	237	5	5	267	0	0	0	0	15	0	15	544	

PHF: 0.93
Seasonal Factor: 1.01
Growth Rate: 1.025
Years Grown: 3

Trips In	Trips Out
10	30

Project Name	Trips In	Trips Out
Dade & Sunrise	22	68



E-1

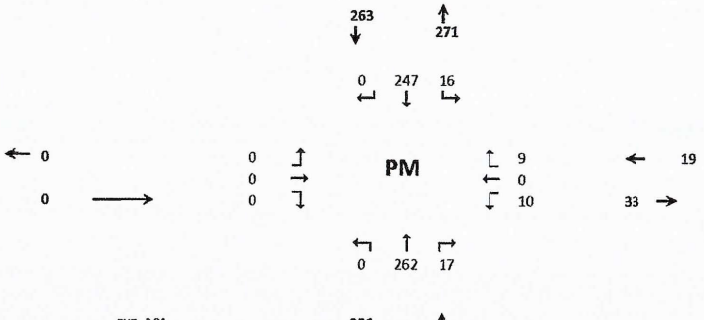
Sunrise Blvd & Project Driveway
Future Total

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	0	43	0	0	55	0	0	0	0	0	0	0	98	418
4:15-4:30	0	54	0	0	46	0	0	0	0	0	0	0	100	436
4:30-4:45	0	61	0	0	51	0	0	0	0	0	0	0	112	457
4:45-5:00	0	50	0	0	58	0	0	0	0	0	0	0	108	453
5:00-5:15	0	57	0	0	59	0	0	0	0	0	0	0	116	442
5:15-5:30	0	66	0	0	55	0	0	0	0	0	0	0	121	
5:30-5:45	0	59	0	0	49	0	0	0	0	0	0	0	108	
5:45-6:00	0	54	0	0	43	0	0	0	0	0	0	0	97	
PM PEAK HOUR IS FROM:			4:30 PM TO 5:30PM											
Volumes	0	234	0	0	223	0	0	0	0	0	0	0	457	
Season Factor	0	236	0	0	225	0	0	0	0	0	0	0	462	
Growth	0	255	0	0	243	0	0	0	0	0	0	0	497	
In/Out	-	-	IN	IN	-	-	-	-	-	OUT	-	OUT		
Percentage	0%	0%	51%	49%	0%	0%	0%	0%	0%	51%	0%	49%		
PROJECT	0	0	17	16	0	0	0	0	0	10	0	9	52	
Total	0	255	17	16	243	0	0	0	0	10	0	9	549	
Other Projects														
%	0%	10%	0%	0%	10%	0%	0%	0%	0%	0%	0%	0%		
In/Out	-	IN	-	-	OUT	-	-	-	-	-	-	-		
PROJECT	0	7	0	0	4	0	0	0	0	0	0	0	11	

PHF: 0.94
Seasonal Factor: 1.01
Growth Rate: 1.025
Years Grown: 3

Trips In	Trips Out
33	19

	Trips In	Trips Out
Dade & Sunrise	71	42



HCS Two-Way Stop-Control Report

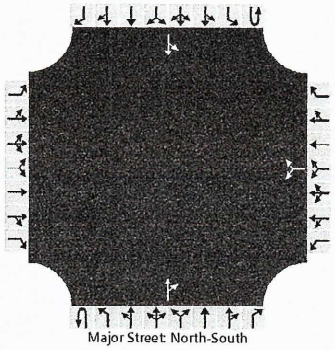
General Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	4/3/2024
Analysis Year	2027
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Future Total with Project

Site Information

Intersection	Sunrise Blvd & Project Driveway
Jurisdiction	St. Lucie County
East/West Street	Project Driveway
North/South Street	Sunrise Blvd
Peak Hour Factor	0.93
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						15		15			237	5		5	267	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							32							5		
Capacity, c (veh/h)							600							1298		
v/c Ratio							0.05							0.00		
95% Queue Length, Q_{95} (veh)							0.2							0.0		
95% Queue Length, Q_{95} (ft)							5.1							0.0		
Control Delay (s/veh)							11.3							7.8	0.0	
Level of Service (LOS)							B							A	A	
Approach Delay (s/veh)					11.3								0.2			
Approach LOS					B								A			

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HCS Two-Way Stop-Control Report

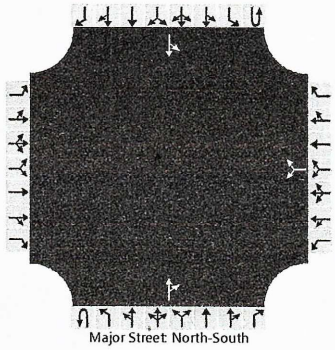
General Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	4/3/2024
Analysis Year	2027
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Future Total with Project

Site Information

Intersection	Sunrise Blvd & Project Driveway
Jurisdiction	St. Lucie County
East/West Street	Project Driveway
North/South Street	Sunrise Blvd
Peak Hour Factor	0.94
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						10		9			262	17		16	247	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							20							17		
Capacity, c (veh/h)							566							1259		
v/c Ratio							0.04							0.01		
95% Queue Length, Q_{95} (veh)							0.1							0.0		
95% Queue Length, Q_{95} (ft)							2.6							0.0		
Control Delay (s/veh)							11.6							7.9	0.1	
Level of Service (LOS)							B							A	A	
Approach Delay (s/veh)						11.6								0.6		
Approach LOS						B								A		

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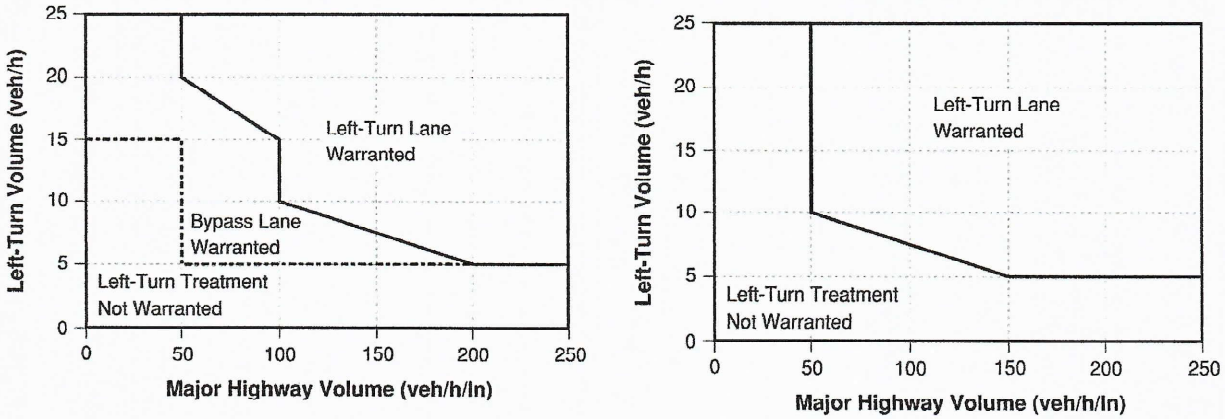
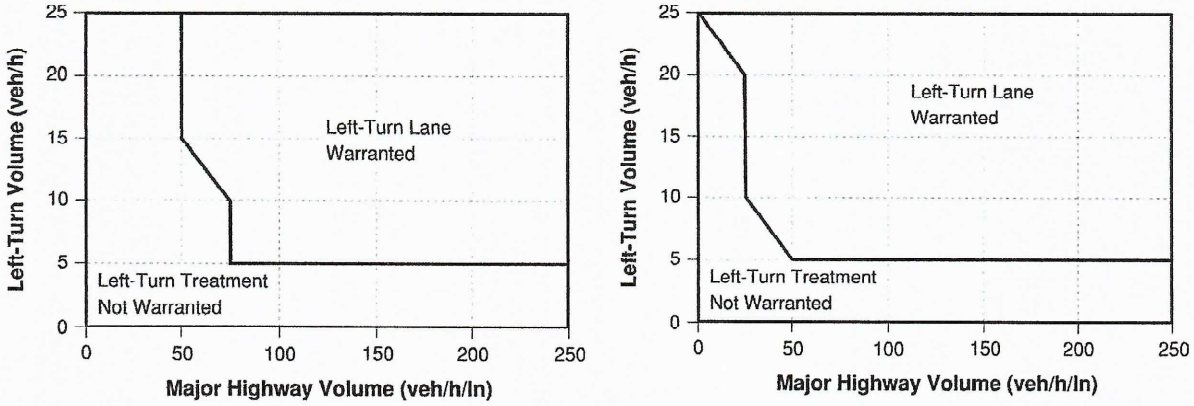
Figure 78 | Left-Turn Lane Warrants for Two-Lane Rural Roadways (Unsignalized)



(a) Three-Leg Intersections

(b) Four-Leg Intersections

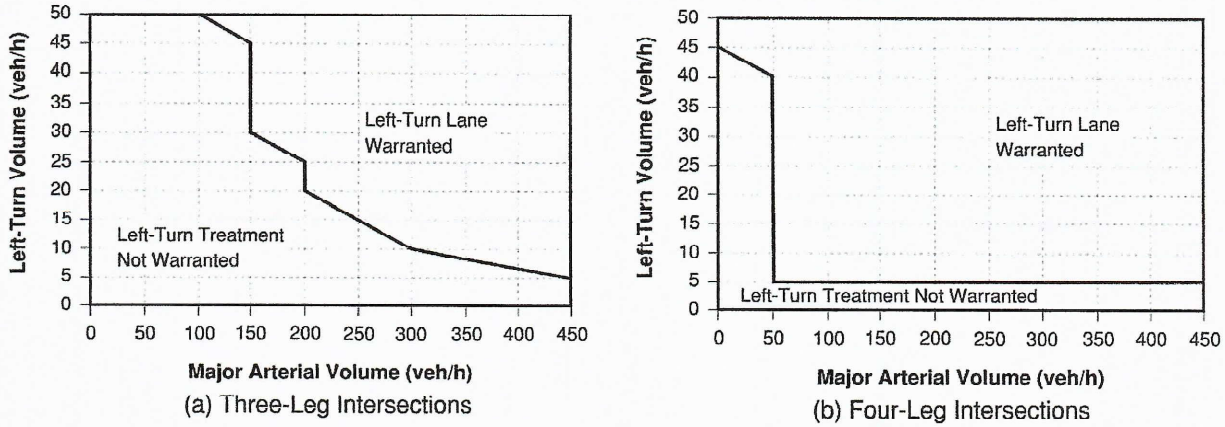
Figure 79 | Left-Turn Lane Warrants for Four-Lane Rural Roadways (Unsignalized)



(a) Three-Leg Intersections

(b) Four-Leg Intersections

Figure 80 | Left-Turn Lane Warrants for Urban and Suburban Arterials

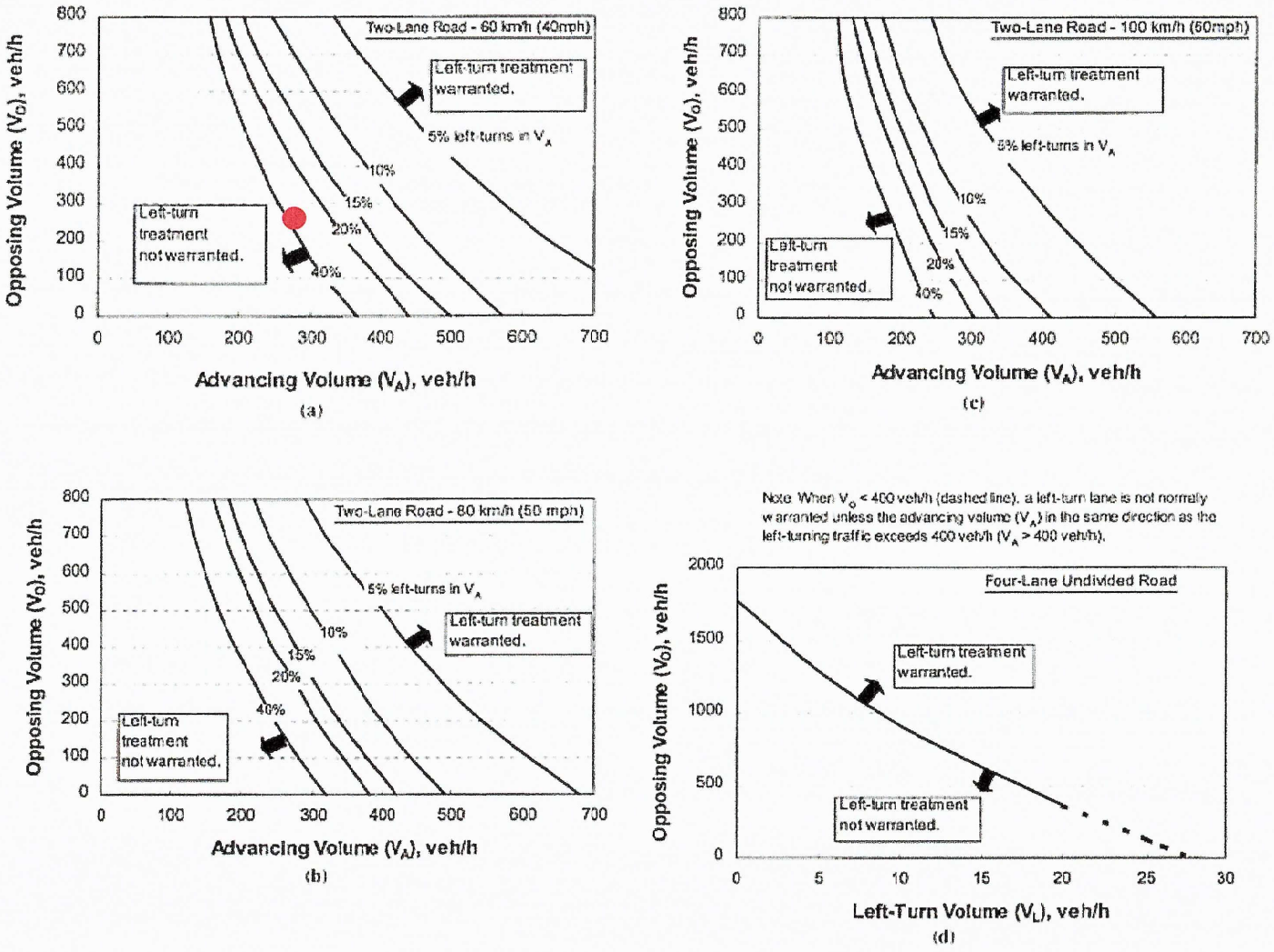


(a) Three-Leg Intersections

(b) Four-Leg Intersections

Source: NCHRP Report 745

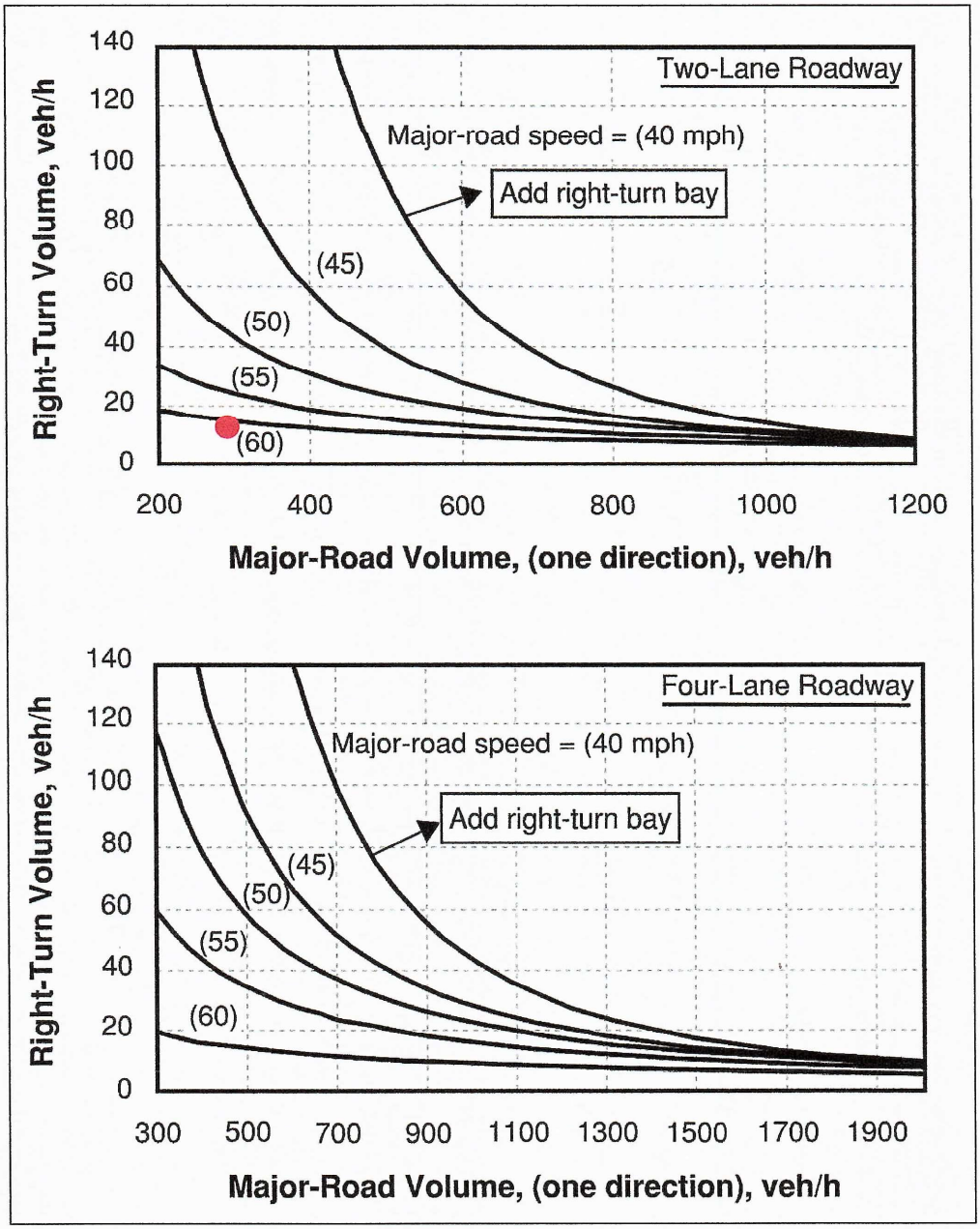
Figure 81 | Left-Turn Lane Warrants (Unsignalized Intersections) – Alternate Method



Source: NCHRP Report 457

E-5

Figure 74 | Recommended Guidelines for Exclusive Right-Turn Lanes to Unsignalized Driveway/Intersection



Source: NCHRP Report 457, TDOT Highway System Access Manual

Technical Review Committee **3. d.**

Meeting Date: 10/17/2024

REQUESTED ACTION

Major Site Plan - Weatherbee Road Townhomes - 3043-502-0015-000-5

SUMMARY

Project #: PZSITE 2024-00008

Weatherbee RD Ventures LLC proposes development for a major site plan application on a 6.79-acre parcel located in Fort Pierce, on Weatherbee Road, west of US1. The development will consist of 78 townhomes, ranging from 6 to 10 units per building. The parcel ID for the location is 3043-502-0015-000-5.

Please review and provide comments at least two days before the scheduled meeting date. All comments should be uploaded in Tyler and/or email to kdriver@cityoffortpierce.com and planning@cityoffortpierce.com. Should you require additional information, please do no hesitate to contact me directly at 772.467.3739.

LOCATION

At or near the intersection of W. Weatherbee Road and S. US Hwy 1. Parcel ID: 3403-502-0015-000-5

RESPONSIBLE STAFF

Kerry C. Driver - Planner

RECOMMENDATION

N/A

Attachments

Applicant File

Form Review

Form Started By: Kerry Driver Started On: 09/20/2024 03:05 PM

Final Approval Date: 09/20/2024

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 5321674 OR BOOK 5131 PAGE 766, Recorded 04/08/2024 08:51:58 AM Doc Tax: $5950.00

Prepared by and return to:
Kelli Ann
Liberty Title Company of America
1800 Southeast Port Saint Lucie Boulevard
Port St. Lucie, FL 34952
(772) 335-7474
File No SL-22-758

Parcel Identification No 3403-502-0015-000/5

[Space Above This Line For Recording Data]

WARRANTY DEED

(STATUTORY FORM – SECTION 689.02, F.S.)

This indenture made the **4th day of April, 2024** between **Hoffman Family Limited Partnership, a Pennsylvania Partnership**, whose post office address is **2446 Route 940, Pocono Summit, PA 18346**, of the County of Monroe, Commonwealth of Pennsylvania, Grantor, to **Weatherbee RD Ventures LLC, a Florida Limited Liability Company**, whose post office address is **2100 Southeast Ocean Boulevard, 100, Stuart, FL 34996**, of the County of Martin, State of Florida, Grantee:

Witnesseth, that said Grantor, for and in consideration of the sum of TEN DOLLARS (U.S.$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, Florida, to-wit:

The West Seven Acres of Lot 6, of the Subdivision of White City, in Section 3, Township 36 South, Range 40 East, as per Plat of said Subdivision on file in Plat Book 1, Page 23, of the Public Records of St. Lucie County, Florida, excepting therefrom all rights of ways for drainage canals and public roads.

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

Subject to taxes for 2023 and subsequent years, not yet due and payable; covenants, restrictions, easements, reservations and limitations of record, if any.

TO HAVE AND TO HOLD the same in fee simple forever.

And Grantor hereby covenant with the Grantee that the Grantor is lawfully seized of said land in fee simple, that Grantor have good right and lawful authority to sell and convey said land and that the Grantor hereby fully warrant the title to said land and will defend the same against the lawful claims of all persons whomsoever.

In Witness Whereof, Grantor have hereunto set Grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Hoffman Family Limited Partnership, a Pennsylvania Partnership

By: _____
Randy P. Hoffman, General Partner

By: _____
Robin L. Shea, General Partner

_____
WITNESS
PRINT NAME: John Boyle

_____
WITNESS
PRINT NAME: Linda Singer

541 Black Oak Dr.
Tannersville, PA. 18372
WITNESS 1 ADDRESS

155 Melrose Drive
Scotrun, PA 18355
WITNESS 2 ADDRESS

STATE OF Pennsylvania
COUNTY OF Monroe

The foregoing instrument was acknowledged before me by means of (✓) physical presence or ( ) online notarization this 4th day of April, 2024, by Randy P. Hoffman and Robin L. Shea, General Partners of Hoffman Family Limited Partnership.

_____
Signature of Notary Public
Print, Type/Stamp Name of Notary

Personally Known:_____ OR Produced Identification:_✓_
Type of Identification Produced: PA Drivers License

Commonwealth of Pennsylvania - Notary Seal
JoAnn Misuraca, Notary Public
Monroe County
My commission expires April 8, 2026
Commission number 1113699
Member, Pennsylvania Association of Notaries

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

DESIGN REVIEW

Property Information

Property address or Location _____

Parcel ID #(s) _____

Project description _____

Property Owner(s)

Street Address

City State Zip

Phone Number

Email Address

Applicant/Representative, Title, Company

Street Address

City State Zip

Phone Number

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.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North			
South			
East			
West			

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current					
****Proposed**					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) 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
**Change in Demand	Total gallons per day

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) 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 day
**Change in Demand	Total gallons per day

C. Parks and Recreation (Residential Classifications Only):
(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)
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	
****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	

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

G. Transportation Analysis: Complete ITE Trip Generation Data Form 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		

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**

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

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
(772) 742 1555
redtaildg.com
todm@redtaildg.com

GENERAL LOCATION



NARRATIVE

WEATHERBEE ROAD TOWNHOMES

Major Site Plan
September 2024

To:
Planning Department
Fort Pierce

Prepared by:

Redtail DG
100 S. 2nd Street

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
772.742.1555
www.redtaildg.com
todm@redtaildg.com

Dear Planning Department,

We are pleased to present the proposed development for a major site plan application on a 6.79-acre parcel located in Fort Pierce, on Weatherbee Road, west of US1. The development will consist of 78 thoughtfully designed townhomes, ranging from 6 to 10 units per building, tailored to offer an exceptional living experience. The plan meticulously incorporates urban design principles and sustainability practices to enhance both the aesthetic appeal and functionality of the site.

Site Design and Planning

The development is strategically positioned to harmonize with the existing urban fabric, mirroring the design characteristics observed in the eastern part of the site. This approach ensures continuity and coherence in the urban landscape, enhancing the overall visual and spatial quality of the area.

To address the city's requirements, a portion of the original parcel has been dedicated to the street right-of-way, facilitating improved connectivity and accessibility. This allocation aligns with the city's vision for efficient transportation infrastructure and supports the development's integration into the broader urban network.

Environmental and Aesthetic Enhancements

Stormwater management is a key feature of this development. We have incorporated two dry retention ponds and a central wet pond, which will serve as both a functional and aesthetic focal point. The wet pond will be enhanced with a decorative fountain, adding a visual centerpiece that enriches the site's ambiance and contributes to the overall beautification of the community.

The innovative replacement of the existing historical ditch system with advanced bioswales demonstrates our commitment to environmental stewardship and water quality improvement. These bioswales are designed to effectively manage stormwater runoff while integrating seamlessly into the landscape, thereby supporting the city's sustainability goals.

Landscaping and Density Bonuses

In line with our dedication to enhancing the site's ecological and visual attributes, we have planned an excess of 10% landscaping beyond the city's requirements. This commitment to extensive landscaping not only creates inviting green spaces but also contributes to the development's overall attractiveness and livability.

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todm@redtaildg.com

Additionally, the innovative bioswales and exceptional architectural design, along with the strategic building placement and variable setbacks, enable us to qualify for density bonuses as stipulated by city regulations. The proposed density of 11.5 dwelling units per acre, resulting in a total of 78 units, is achieved through the application of these bonuses. Specifically, the excess landscaping facilitates an additional unit per acre, while the bioswales, enhanced architecture, and thoughtful site planning contribute an additional 0.5 dwelling units per acre.

Conclusion

This development, spearheaded by the esteemed international builder DR Horton, represents a significant enhancement to the Fort Pierce community. It is designed to offer high-quality rental housing that integrates seamlessly with its surroundings while advancing environmental sustainability. The combination of advanced stormwater management systems, extensive landscaping, and innovative design solutions underscores our commitment to creating a vibrant, livable, and aesthetically pleasing community.

We believe this development will not only meet but exceed the expectations of the city and its residents, contributing positively to the quality of living and urban character of Fort Pierce. We respectfully request approval of the major site plan application to bring this vision to fruition.

Sincerely,

Peterka Vlada
Redtail DG

ALTA/NSPS LAND TITLE SURVEY

PREPARED WITH TOPOGRAPHY
FOR JEREMIAH BARON

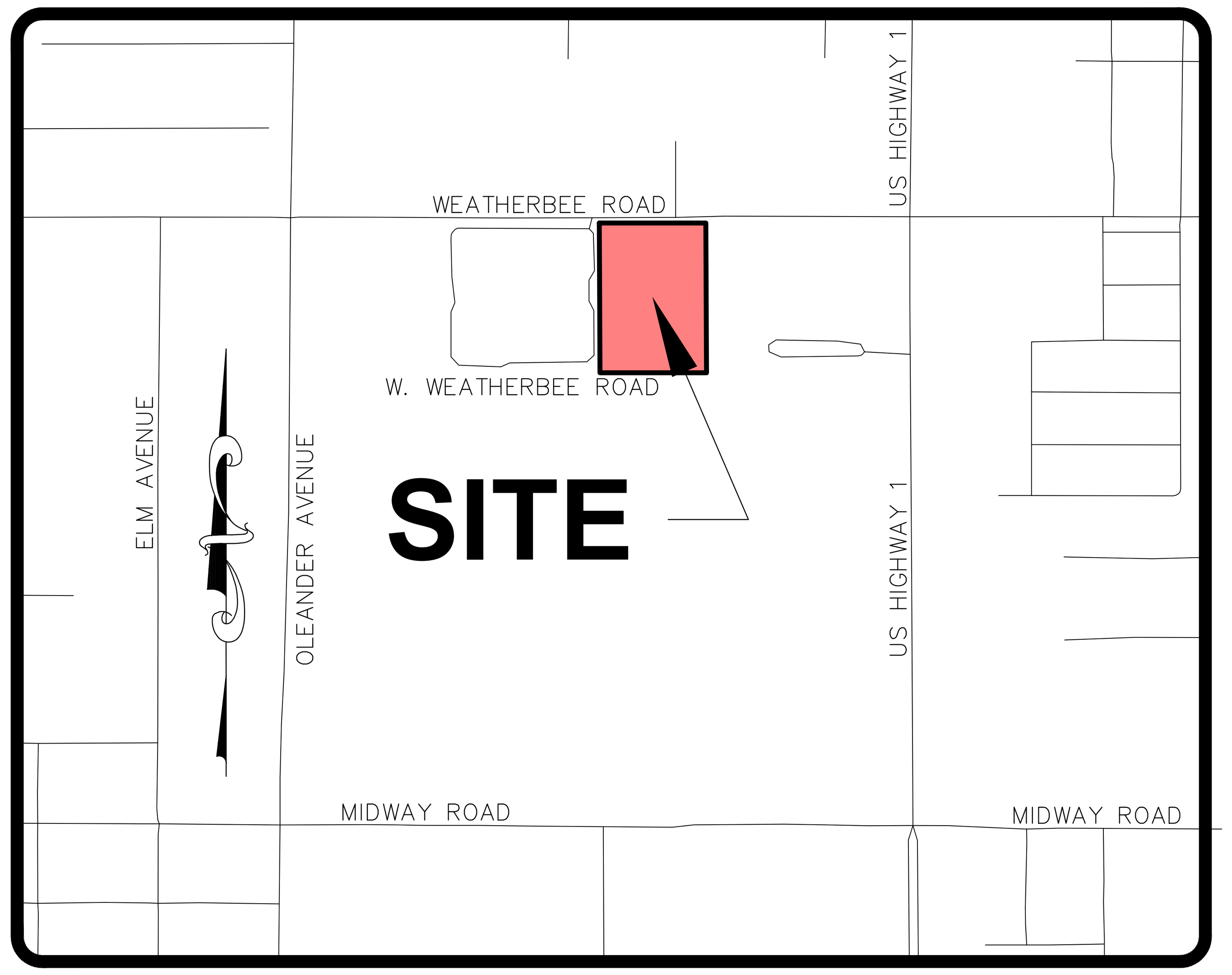
SCHEDULE B-II ITEMS

TITLE COMMITMENT PREPARED BY
OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
COMMITMENT # 22126732
COMMITMENT DATE: SEPTEMBER 9, 2022, AT 8:00 AM

1. DEFECTS, LIENS, ENCUMBRANCES, ADVERSE CLAIMS OR OTHER MATTERS, IF ANY CREATED, FIRST APPEARING IN THE PUBLIC RECORDS OR ATTACHING SUBSEQUENT TO THE EFFECTIVE DATE HEREOF BUT PRIOR TO THE DATE THE PROPOSED INSURED ACQUIRES FOR VALUE OF RECORD THE ESTATE OR INTEREST OR MORTGAGE THEREON COVERED BY THIS COMMITMENT.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
2. FACTS WHICH WOULD BE DISCLOSED BY AN ACCURATE AND COMPREHENSIVE SURVEY OF THE PREMISES HEREIN DESCRIBED.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
3. RIGHTS OR CLAIMS OF PARTIES IN POSSESSION.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
4. CONSTRUCTION, MECHANIC'S, CONTRACTORS' OR MATERIALMEN'S LIEN CLAIMS, IF ANY, WHERE NO NOTICE THEREOF APPEARS OF RECORD.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
5. EASEMENTS OR CLAIMS OF EASEMENTS NOT SHOWN BY THE PUBLIC RECORDS.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
6. GENERAL OR SPECIAL TAXES AND ASSESSMENTS REQUIRED TO BE PAID IN THE YEAR 2022 AND SUBSEQUENT YEARS.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
7. ALL MATTERS CONTAINED ON THE PLAT OF WHITE CITY, RECORDED IN PLAT BOOK 1, PAGE 23, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
   AFFECTS SUBJECT PROPERTY; SHOWN HEREON.

SYMBOL & ABBREVIATION LEGEND:

Symbol	Meaning
(A)	AIR RELEASE VALVE
AL	ARC LENGTH
ASPH	ASPHALT
BFP	BACK FLOW PREVENTER
	BENCHMARK (BM) OR GROUND CONTROL POINT (GCP)
CATV	CABLE RISER
(C)	CALCULATED
	CATCH BASIN
℄	CENTERLINE
CCR	CERTIFIED CORNER RECORD
CLF	CHAIN LINK FENCE
CHD.	CHORD
CO	CLEAN OUT
COMM RISER	COMMUNICATION RISER
CONC	CONCRETE
	CONCRETE LIGHT POST
CM	CONCRETE MONUMENT
CPP	CONCRETE POWER POLE (CPP)
	CONCRETE POWER POLE W/STREET LIGHT
	CONCRETE SIGNAL LIGHT POLE
CMP	CORRUGATED METAL PIPE
	CURB INLET
	DECORATIVE LIGHT POST
(D)	DEED
D.B.	DEED BOOK
Δ	DELTA/CENTRAL ANGLE
ø	DIAMETER (DIA.)
(D)	DRAINAGE MANHOLE
DIP	DUCTILE IRON PIPE
EOP	EDGE OF PAVEMENT
EOW	EDGE OF WATER
EB	ELECTRIC BOX
EHH	ELECTRIC HAND HOLE (EHH)
EM	ELECTRIC METER
ELEC. PANEL	ELECTRICAL PANEL
EL./ELEV.	ELEVATION
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY
F.O.	FIBER OPTIC
FOHH	FIBER OPTIC HAND HOLE
FO	FIBER OPTIC MARKER
FIBER RISER	FIBER OPTIC RISER
(M)	FIELD MEASURED
F.F.E.	FINISHED FLOOR ELEVATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FPL	FLORIDA POWER AND LIGHT
FT	FOOT
FM	FORCE MAIN
FND	FOUND
(F)	FPL MANHOLE
SQ FT.	SQUARE FEET
GAS	GAS VALVE
GIS	GEOGRAPHIC INFORMATION SYSTEMS
GND	GROUND
	GUY WIRE ANCHOR
	HANDICAP
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HWF	HOG WIRE FENCE
HYD	HYDRANT
IN	INCH
INV	INVERT
IP	IRON PIPE
IR	IRON ROD
IR/C	IRON ROD AND CAP
	IRRIGATION CONTROL VALVE
L	LENGTH
	LIGHT POST
MAG/D	MAG NAIL MAG BRAND NAIL
(M)	MAILBOX
MHWL	MEAN HIGH WATER LINE
MLWL	MEAN LOWER WATER LINE
	METAL LIGHT POST
	METAL POWER POLE
MP	METAL PIPE
MON	MONUMENT
N/D	NON DESCRIPT NAIL AND DISK
N.R.	NON-RADIAL
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988
No.	NUMBER
O.R.B.	OFFICIAL RECORDS BOOK
OHW	OVER HEAD WIRES
PG	PAGE
PCN	PARCEL CONTROL NUMBER
PK NAIL	PARKER-KALON NAIL
PK/D	PARKER-KALON NAIL & DISK
PCP	PERMANENT CONTROL POINT
PRM	PERMANENT REFERENCE MONUMENT
P.B.	PLAT BOOK
(P)	PLAT DATA
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCEMENT
P.C.C.	POINT OF COMPOUND CURVE
P.C.	POINT OF CURVATURE
P.T.	POINT OF TANGENCY
P.O.T.	POINT OF TERMINUS
PVC	POLYVINYL CHLORIDE
PLS	PROFESSIONAL LAND SURVEYOR
R	RADIUS
RGE	RANGE
RTK	REAL TIME KINEMATIC
RWV	RECLAIMED WATER VALVE
RLS	REGISTERED LAND SURVEYOR
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT-OF-WAY
R/C	ROD AND CAP
(S)	SANITARY MANHOLE
SV	SANITARY VALVE
SEC	SECTION
	PROPERTY CORNER
	RIGHT-OF-WAY CONTROL
	SIGN
	SPIGOT
	SPRINKLER VALVE
STA	STATION
	STREET SIGN
TELE RISER	TELEPHONE RISER BOX
TOE	TOE OF SLOPE
TOB	TOP OF BANK/BERM
T.O.N.	TOP OF NUT
X 0.0	TOPOGRAPHIC DATA (SOFT SURFACE)
X 0.00	TOPOGRAPHIC DATA (HARD SURFACE)
TWNSHP	TOWNSHIP
(T)	TRAFFIC HANDHOLD
TSCB	TRAFFIC SIGNAL CONTROL BOX
TYP	TYPICAL
U.E.	UTILITY EASEMENT
SS	UNDERGROUND SANITARY
DRN	UNDERGROUND STORM
UNK	UNKNOWN
UNK HH	UNKNOWN HANDHOLD
RISER BOX	UNKNOWN RISER BOX
(U)	UNKNOWN TYPE MANHOLE
VCP	VITRIFIED CLAY PIPE
W	WATER SERVICE METER (WM)
WV	WATER VALVE (WV)
(W)	WELL
WF	WOOD FENCE
	WOOD POLE STREET LIGHT
	WOOD POWER POLE



ST. LUCIE COUNTY, FLORIDA
VICINITY MAP
NO SCALE

LIDAR FLIGHT NOTES & ACCURACY REPORT:

1. THIS SITE WAS FLOWN DURING NOVEMBER 11, 2022 UTILIZING A DJI MATRICE 300 UAV.
2. FLIGHT PLANNING WAS PERFORMED WITH DJI PILOT FOR FLIGHT PLANNING AND POST-PROCESSED USING DJI TERRA AND TRIMBLE BUSINESS CENTER.
3. THE FLIGHT WAS OBSERVED BY CERTIFIED REMOTE PILOT NUMBER 4481104.
4. GROUND ELEVATIONS WERE SPOT CHECKED WITH GLOBAL POSITIONING SYSTEM (GPS) REAL TIME KINEMATIC (RTK) OBSERVATION.
5. FEATURES ARE LIMITED TO THOSE VISIBLE AT TIME OF THE FLIGHT 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:
   - VERTICAL ACCURACY IS ± 0.25' FOR OPEN AREAS
   - VERTICAL ACCURACY IS ± 0.50' AREAS OF DENSE VEGETATION.

LEGAL DESCRIPTION:

THE WEST SEVEN ACRES OF LOT 6 OF THE SUBDIVISION OF WHITE CITY IN SECTION 3, TOWNSHIP 36 SOUTH, RANGE 40 EAST, AS PER PLAT OF SAID SUBDIVISION ON FILE IN PLAT BOOK 1, AT PAGE 23, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA, EXCEPTING THEREFROM ALL RIGHTS OF WAY FOR DRAINAGE CANALS AND PUBLIC ROADS.

CONTAINING 6.79 ACRES, MORE OR LESS.

SURVEYORS NOTES AND REPORT:

1. THIS BOUNDARY SURVEY WAS PERFORMED FOR THE PURPOSE OF MAPPING EXISTING FEATURES AND CONDITIONS, AS SHOWN AND DEPICTED HEREON. I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS IS A TRUE AND ACCURATE DEPICTION OF A FIELD SURVEY PERFORMED UNDER MY DIRECTION AND COMPLETED ON NOVEMBER 29, 2022. I FURTHER CERTIFY THAT SAID DRAWING IS IN COMPLIANCE WITH THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
2. THIS SURVEY MAP AND REPRODUCTIONS THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER OR ORIGINAL ELECTRONIC SIGNATURE. 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.
3. THE LAST DATE OF FIELD WORK (AND DATA ACQUISITION) WAS NOVEMBER 29, 2022.
4. LEGAL DESCRIPTION AND MATTERS OF RECORD HEREON SHOWN IN REFERENCE TO THE TITLE COMMITMENT PREPARED BY LIBERTY TITLE COMPANY OF AMERICA, INC., COMMITMENT NUMBER 22126732, HAVING AN EFFECTIVE DATE OF SEPTEMBER 9, 2022.
5. PARCEL(S) CONTAIN A TOTAL OF 6.79 ACRES, MORE OR LESS.
6. THIS BOUNDARY SURVEY HAS BEEN REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM-EAST ZONE, NAD 83 (1990).
7. UNDERGROUND UTILITIES, UTILITY SERVICES, FOUNDATIONS, AND IMPROVEMENTS WERE NOT LOCATED AS A PART OF THIS SURVEY, UNLESS FEATURES WERE VISIBLE AT THE SURFACE LEVEL.
8. REVISIONS SHOWN HEREON DO NOT REPRESENT A "FIELD SURVEY UPDATE" UNLESS OTHERWISE NOTED.
9. BEARINGS SHOWN HEREON ARE BASED UPON GRID NORTH AND REFERENCE TO THE LINE LABELED HEREON 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 THE FLORIDA PERMANENT REFERENCE NETWORKS (FPRN) USING GPS REAL TIME KINEMATIC (RTK) OBSERVATION WITH AND ACCURACY OF ±0.06'–0.10'. SITE BENCHMARKS UTILIZED ARE SHOWN HEREON.
11. THIS SITE WAS SURVEYED UTILIZING TRIMBLE/SPECTRA HARDWARE TOGETHER WITH SPECTRA SURVEY PRO REALTIME PROCESSING AND WAS BASED ON TRIMBLE'S "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 (ZONE X) 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.

CERTIFIED TO:

1. BENJAMIN HOLDINGS LLC
2. LIBERTY TITLE
3. COMPANY OF AMERICA, INC.
4. OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

ALTA CERTIFICATION:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 7(a), 8, 13, 14, 15, 16, 17, 18, & 19 OF TABLE A THEREOF. THE FIELDWORK WAS COMPLETED ON NOVEMBER 29, 2022.

MICHAEL T. OWEN PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REGISTRATION #5556

SIGNATURE DATE:

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
MD/ABB/SPT	MTO	SV	22-424 ALTA.dwg	AS SHOWN	December 8, 2022

DATE	REVISION COMMENTS

ALTA/NSPS LAND TITLE SURVEY
PREPARED WITH TOPOGRAPHY
FOR: JEREMIAH BARON
WEST 7 ACRES OF LOT 6
SUBDIVISON OF WHITE CITY
SEC. 03, TWNSHP. 36 SOUTH, RGE. 40 EAST
ST. LUCIE COUNTY, FLORIDA

10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
☏ 772-462-2455

22-424

Z:\EDC-2022\22-424 - J Baron - 7 acres Weatherbee\SURVEY\Dwg - PDF\Survey\22-424 ALTA.dwg, 12/8/2022 4:22 PM
COPYRIGHT: 2020 BY EDC-INC: THIS FIRM EXPRESSLY RESERVES THEIR EXCLUSIVE COMMON LAW COPYRIGHT AND INTELLECTUAL PROPERTY RIGHTS TO THESE DRAWINGS WHICH MAY NOT BE DISPERSED, REPRODUCED, CHANGED OR COPIED IN ANY FORM OR MANNER, NOR ARE THEY TO BE ASSIGNED TO ANY PARTY WITHOUT THE WRITTEN CONSENT OF THIS FIRM.
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 ADOPTION BY EDC, INC. SHALL BE WITHOUT LIABILITY TO EDC, INC.

ALTA/NSPS LAND TITLE SURVEY

PREPARED WITH TOPOGRAPHY
FOR JEREMIAH BARON



SYMBOL & ABBREVIATION LEGEND:

Ⓐ	AIR RELEASE VALVE	AL	ARC LENGTH
ASPH	ASPHALT	BFP	BACK FLOW PREVENTER
	BENCHMARK (BM) OR GROUND CONTROL POINT (GCP)	CATV □	CABLE RISER
(C)	CALCULATED		CATCH BASIN
℄	CENTERLINE	CCR	CERTIFIED CORNER RECORD
CLF	CHAIN LINK FENCE	CHD.	CHORD
CO ○	CLEAN OUT	COMM RISER □	COMMUNICATION RISER
CONC	CONCRETE		CONCRETE LIGHT POST
CM	CONCRETE MONUMENT	CPP ⊠	CONCRETE POWER POLE (CPP)
	CONCRETE POWER POLE W/STREET LIGHT		CONCRETE SIGNAL LIGHT POLE
CMP	CORRUGATED METAL PIPE		CURB INLET
	DECORATIVE LIGHT POST	(D)	DEED
D.B.	DEED BOOK	Δ	DELTA/CENTRAL ANGLE
⌀	DIAMETER (DIA.)	Ⓓ	DRAINAGE MANHOLE
DIP	DUCTILE IRON PIPE	EOP	EDGE OF PAVEMENT
EOW	EDGE OF WATER	EB □	ELECTRIC BOX
EHH	ELECTRIC HAND HOLE (EHH)	EM ⊠	ELECTRIC METER
ELEC PANEL	ELECTRICAL PANEL	EL./ELEV.	ELEVATION
FEMA	FEDERAL EMERGENCY MANAGEMENT AGENCY	F.O.	FIBER OPTIC
FOHH	FIBER OPTIC HAND HOLE		FIBER OPTIC MARKER
FIBER RISER □	FIBER OPTIC RISER	(M)	FIELD MEASURED
F.F.E.	FINISHED FLOOR ELEVATION	FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FPL	FLORIDA POWER AND LIGHT	FT	FOOT
FM	FORCE MAIN	FND	FOUND
Ⓕ	FPL MANHOLE	SQ. FT.	SQUARE FEET
GAS ⋈	GAS VALVE	GIS	GEOGRAPHIC INFORMATION SYSTEMS
GND	GROUND		GUY WIRE ANCHOR
	HANDICAP	HDPE	HIGH DENSITY POLYETHYLENE PIPE
HWF	HOG WIRE FENCE		HYDRANT
IN	INCH	INV	INVERT
IP	IRON PIPE	IR	IRON ROD
IR/C	IRON ROD AND CAP		IRRIGATION CONTROL VALVE
L	LENGTH		LIGHT POST
MAG/D	MAG NAIL MAG BRAND NAIL	Ⓜ	MAILBOX
MHWL	MEAN HIGH WATER LINE	MLWL	MEAN LOWER WATER LINE
	METAL LIGHT POST		METAL POWER POLE
MP	METAL PIPE	MON	MONUMENT
N/D	NON DESCRIPT NAIL AND DISK	N.R.	NON-RADIAL
NAVD88	NORTH AMERICAN VERTICAL DATUM OF 1988	No.	NUMBER
O.R.B.	OFFICIAL RECORDS BOOK	OHW	OVER HEAD WIRES
PG	PAGE	PCN	PARCEL CONTROL NUMBER
PK NAIL	PARKER-KALON NAIL	PK/D	PARKER-KALON NAIL & DISK
PCP	PERMANENT CONTROL POINT	PRM	PERMANENT REFERENCE MONUMENT
P.B.	PLAT BOOK	(P)	PLAT DATA
P.O.B.	POINT OF BEGINNING	P.O.C.	POINT OF COMMENCEMENT
P.C.C.	POINT OF COMPOUND CURVE	P.C.	POINT OF CURVATURE
P.T.	POINT OF TANGENCY	P.O.T.	POINT OF TERMINUS
PVC	POLYVINYL CHLORIDE	PLS	PROFESSIONAL LAND SURVEYOR
R	RADIUS	RGE	RANGE
RTK	REAL TIME KINEMATIC	RWV ⋈	RECLAIMED WATER VALVE
RLS	REGISTERED LAND SURVEYOR	RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT-OF-WAY	R/C	ROD AND CAP
Ⓢ	SANITARY MANHOLE	SV ⋈	SANITARY VALVE
SEC	SECTION		PROPERTY CORNER
	RIGHT-OF-WAY CONTROL		SIGN
	SPIGOT		SPRINKLER VALVE
STA	STATION		STREET SIGN
TELE RISER □	TELEPHONE RISER BOX	TOE	TOE OF SLOPE
TOB	TOP OF BANK/BERM	T.O.N.	TOP OF NUT
X 0.0	TOPOGRAPHIC DATA (SOFT SURFACE)	X 0.00	TOPOGRAPHIC DATA (HARD SURFACE)
TWNSHP	TOWNSHIP	Ⓣ	TRAFFIC HANDHOLD
TSCB	TRAFFIC SIGNAL CONTROL BOX	TYP	TYPICAL
U.E.	UTILITY EASEMENT	SS	UNDERGROUND SANITARY
DRN	UNDERGROUND STORM	UNK	UNKNOWN
UNK	UNKNOWN HANDHOLD	RISER BOX □	UNKNOWN RISER BOX
Ⓤ	UNKNOWN TYPE MANHOLE	VCP	VITRIFIED CLAY PIPE
Ⓦ	WATER SERVICE METER (WM)	WV ⋈	WATER VALVE (WV)
	WELL	WF	WOOD FENCE
	WOOD POLE STREET LIGHT		WOOD POWER POLE

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

Z:\EDC-2022\22-424 - J Baron - 7 acres Weatherbee\SURVEY\Dwg - PDF\Survey\22-424 ALTA.dwg, 12/8/2022 4:22 PM
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F.B.P.E. CERTIFICATE OF AUTHORIZATION 9935
L.B. CERTIFICATE OF AUTHORIZATION 8098

DRAWN BY	MD/AB/BS/PT
CHECKED BY	MTD
FIELD CREW	SV
FILENAME	22-424 ALTA.dwg
SCALE	AS SHOWN
DATE	December 8, 2022

REVISION COMMENTS — DATE

ALTA/NSPS LAND TITLE SURVEY
PREPARED WITH TOPOGRAPHY
FOR: JEREMIAH BARON
WEST 7 ACRES OF LOT 6
SUBDIVISON OF WHITE CITY
SEC. 03, TWNSHP. 36 SOUTH, RGE. 40 EAST
ST. LUCIE COUNTY, FLORIDA

EDC
10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
772-462-2455

22-424

2 OF 2

Saint Lucie County Property Appraiser
Michelle Franklin CFA

Report generated: Wednesday, September 11, 2024

Parcel Report





Parcel

PARCELNO: 3403-502-0015-000-5

Property ID: 38931

Owner1: Weatherbee RD Ventures LLC

SiteAddress: WEATHERBEE RD

Owner

Owner1: Weatherbee RD Ventures LLC

Owner2:

Owner3:

MailingAddress: 2100 SE Ocean BLVD, Unit Ste 100 Stuart, FL 34996-3332

Overview

PrimaryLandUse: 0000 - Vac Residential

DistrictGroup: 0022 - Fort Pierce

Subdivision: White City Subdivision

Just/Market Value: $780,000

FinishedArea:

Acres: 7

TotalArea: 304,920

Legal Description

LegalDescription: WHITE CITY S/D 03 36 40 W 7 ACRES OF LOT 6 (MAP 34/03N) (7.00 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
2024	$780,000	$0	$780,000	$0	$223,608	$0	$223,608	$556,392	$0
2023	$780,000	$0	$780,000	$0	$203,280	$0	$203,280	$576,720	$0
2022	$600,000	$0	$600,000	$0	$184,800	$0	$184,800	$415,200	$0
2021	$168,000	$0	$168,000	$0	$168,000	$0	$168,000	$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	2023	11.2	772.8
North St. Lucie Water Management District	2013	7	168

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	7	Acre

Sales History

Sale Date	Sale Price	Sale Code	Deed Type	Grantor	Book Page	View Document
04/04/2024	$850,000	0001	DEED-WD	Hoffman Family Limited Prtnshp	5131-766	Clerk of Courts
11/27/2001	$100	XX01	DEED	Hoffman Lois	1459-2703	Clerk of Courts
12/31/1899	$0				-	Clerk of Courts

Photos



v2023-08-17

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
(772) 742 1555
redtaildg.com
todm@redtaildg.com

JUSTIFICATION STATEMENTS

In accordance with the Code of Ordinances, Section 125-243, we are submitting the following statements:

The development, which will be constructed by DR Horton, calls for the construction of ten townhouse buildings with 78 rental dwelling units for families. Each townhouse features a 12-foot driveway, a single garage, three bedrooms and two bathrooms. The planned bioswales will enhance the water quality, and extra care was taken to maintain the historical perimeter ditches. Furthermore, the proposal calls for 10% more landscape, a fountain to serve as a focal point, and the placement of the buildings to complement the eastward development and "break" the continuous façade. This produces sections of wider and narrower street profiles, enhancing the development's dynamics and aesthetics.

All of the improvements described above allow for a request for the density bonuses which we would like to kindly request. The zoning itself allows for a maximum of 10 dwelling units per acre per the code section 125-194 (a) , the improved landscaping allows for 1 additional unit per acre as per the code section 125-243 (e)(1), the placement of buildings that results in the variation of building setbacks allows for an additional 0.5 dwelling units per acres as per the code section 125-243 (e)(2). This permits 11.5 residential units per acre, which is equivalent to the 11.49 residential units per acre that is being suggested (78 residential units on 6.79 acres).. In addition to this, the architectural harmony which DR Horton provides, along with the varied use of building sizes could potentially add 0.5 dwelling units per acre.

Considering all of the above, we would kindly request the density bonuses that will allow for 78 townhomes to be developed on the site.

Looking forward to collaborating with the staff on the project,
Sincerely,

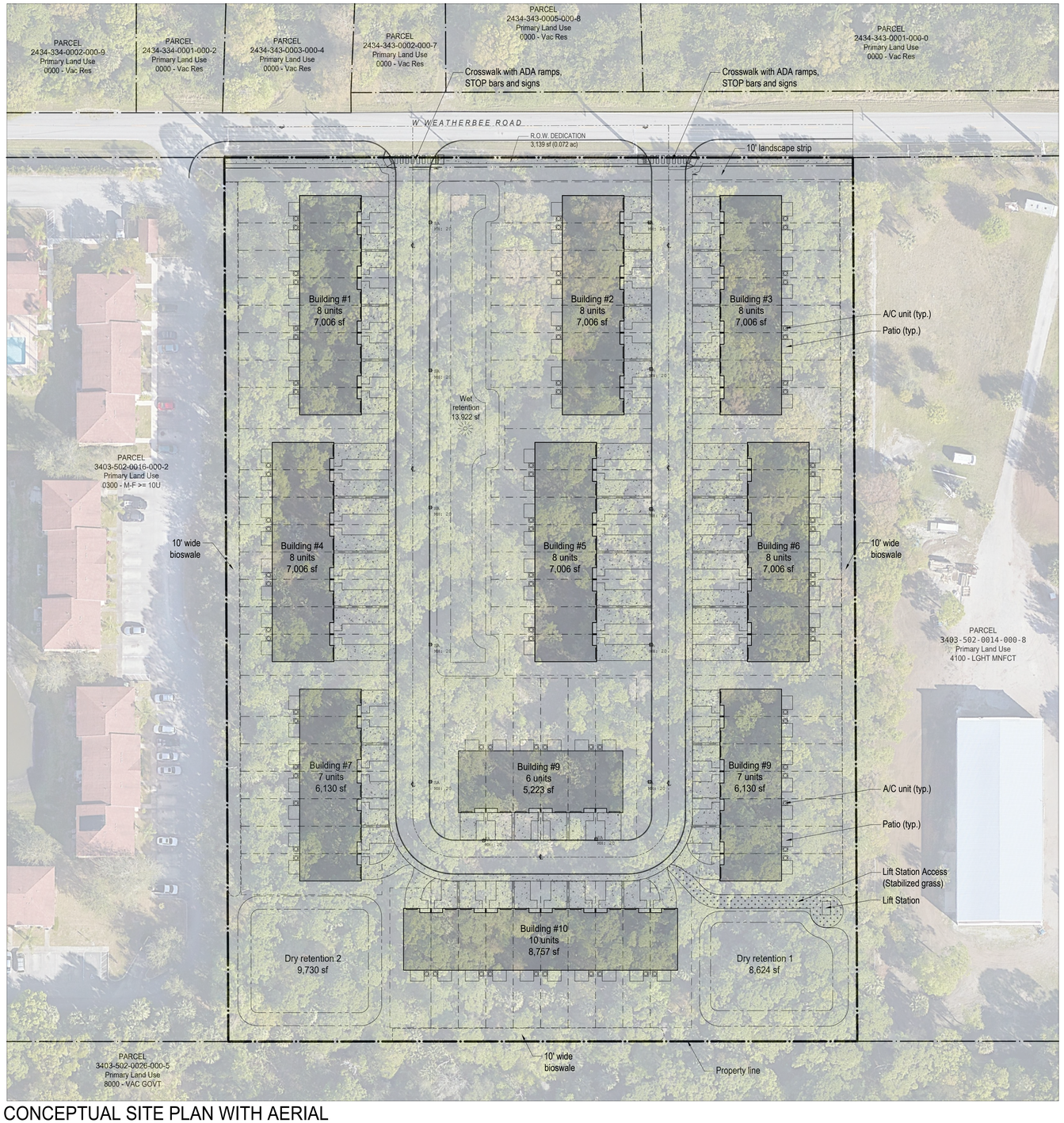
Vlada Peterka
Senior Project Manager
Redtail DG

R-4 ZONING REQUIREMENTS

	PER CODE	PROPOSED
LOTS		
LOT SIZE	min. 1,500 SF	min. 2,144 SF
LOT WIDTH	min. 16 ft	min. 20 ft
LOT DEPTH	min. 90 ft	min. 107 ft
YARDS		
FRONT YARD	min. 10 ft	min. 20 ft
SIDE YARD	min. 10 ft	min. 10 ft
REAR YARD	min. 15 ft	min. 19 ft
OTHER		
LOT COVERAGE	max. 50%	23%
BUILDING HEIGHT	max. 45'	27'-9 1/2"

LEGEND

- Project property line
- Neighboring property lines
- Required R.O.W. dedication
- Proposed property lines
- Required landscape strip
- Existing road centerline
- 10' wide bioswale
- A/C Unit
- Light Pole (Proposed)
- Lake fountain
- Asphalt
- Concrete
- Building - Interior
- Stabilized grass
- Detectable warning (at ADA ramps)
- Traffic sign (STOP)



CONCEPTUAL SITE PLAN WITH AERIAL



LOCATION (NTS)

SITE DATA

Project Name:	Weatherbee Road Townhomes
Parcel ID:	3403-502-0015-000-5
Owner:	Weatherbee RD Ventures LLC
Zoning:	R-4
Future Land Use:	RM

Acreage:

Parent Lot:	295,770 SF (6.790 ac)
R.O.W. Dedication:	0.072 ac
Project Area:	6.718 ac

Structures:

Building #1 (8 3:2 units)	7,006 SF
Building #2 (8 3:2 units)	7,006 SF
Building #3 (8 3:2 units)	7,006 SF
Building #4 (8 3:2 units)	7,006 SF
Building #5 (8 3:2 units)	7,006 SF
Building #6 (8 3:2 units)	7,006 SF
Building #7 (7 3:2 units)	6,130 SF
Building #8 (6 3:2 units)	5,223 SF
Building #9 (7 3:2 units)	6,130 SF
Building #10 (10 3:2 units)	8,757 SF
TOTAL SF:	68,276 SF (23% of the site area)
TOTAL dwelling units:	78 du (11.49 du/ac)

Density:

Per zoning max:	10.0 du/ac
Landscaping exceeding 10% of the requirements:	+1.0 du/ac
Siting (Bioswale, Creative building placement, focal points):	+0.5 du/ac
TOTAL Maximum Density:	11.50 du/ac
Proposed density:	11.49 du/ac

Stormwater

Wet Retention:	13,922 SF
Dry Retention 1:	8,624 SF
Dry Retention 2:	9,730 SF
Bioswales:	11,677 SF
TOTAL STORMWATER:	43,953 SF (15% of the site area)

Impervious area:

Structures:	68,276 SF
Patios and A/C:	7,176 SF
Concrete sidewalk and driveways:	33,129 SF
Asphalt:	27,539 SF
Wet pond:	13,922 SF
TOTAL IMPERVIOUS	163,964 SF (55% of the site area)

0 40' 80'
1" = 40'

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG It's fast. It's free. It's the law. www.callsunshine.com

PLANNER
REDTAIL DESIGN GROUP
C/O TOD MOWERY, AICP
100 S. 2ND STREET, UNIT 209
FORT PIERCE, FLORIDA 34950
772.742.1555

REDTAIL DG
100 S. 2nd Street
Fort Pierce, FL 34950

TM DESIGNED BY | VP DRAWN BY | FILENAME | LAYOUT | 1" = 40' SCALE | 08/12/2024 DATE

REVISION COMMENTS | DATE

WEATHERBEE ROAD
CONCEPTUAL SITE PLAN
78 DR HORTON'S HOMES
FLORIDA
FORT PIERCE

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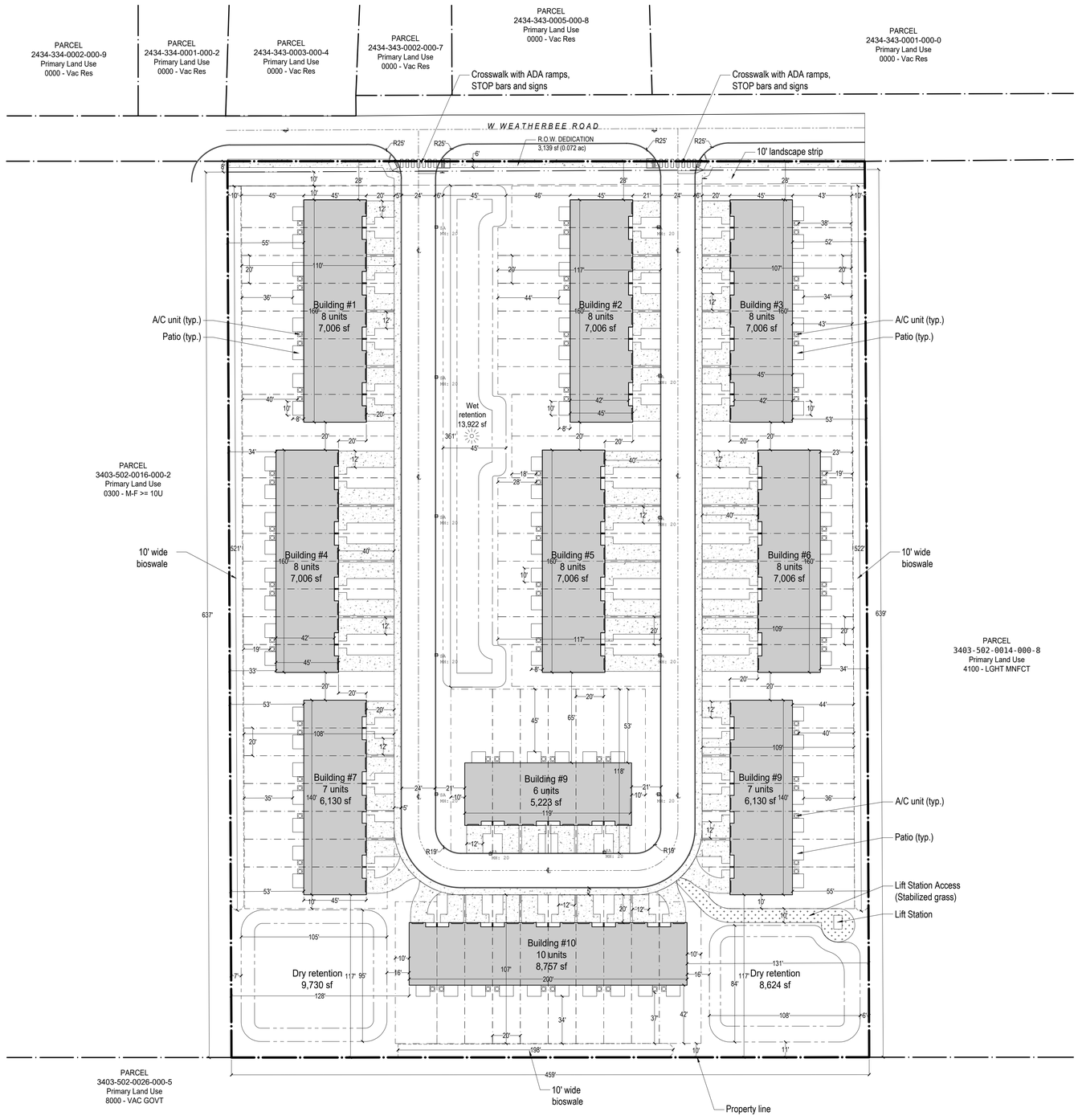

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VP DRAWN BY
FILENAME
LAYOUT
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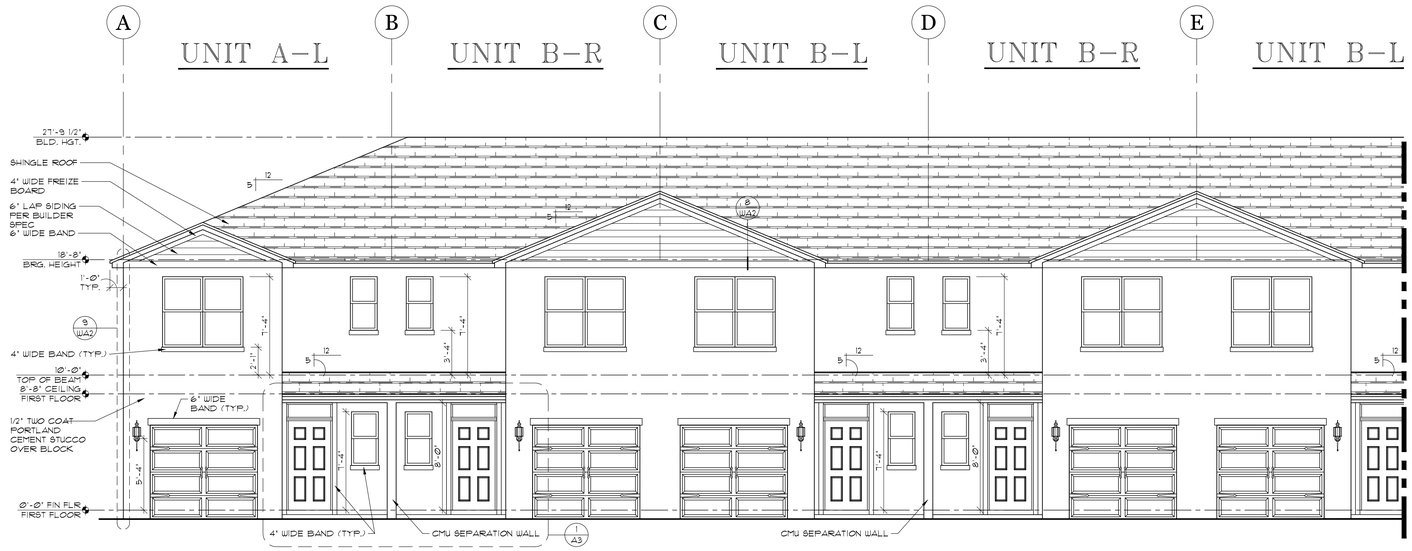
08/12/2024 DATE

REVISION COMMENTS DATE

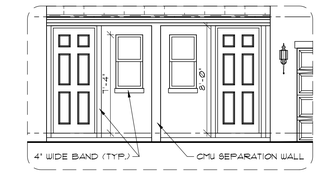
WEATHERBEE ROAD
CONCEPTUAL SITE PLAN
78 DR HORTON'S HOMES
FORT PIERCE FLORIDA

FOR OFF-RIDGE VENT CALCULATIONS
SEE SHEET A5

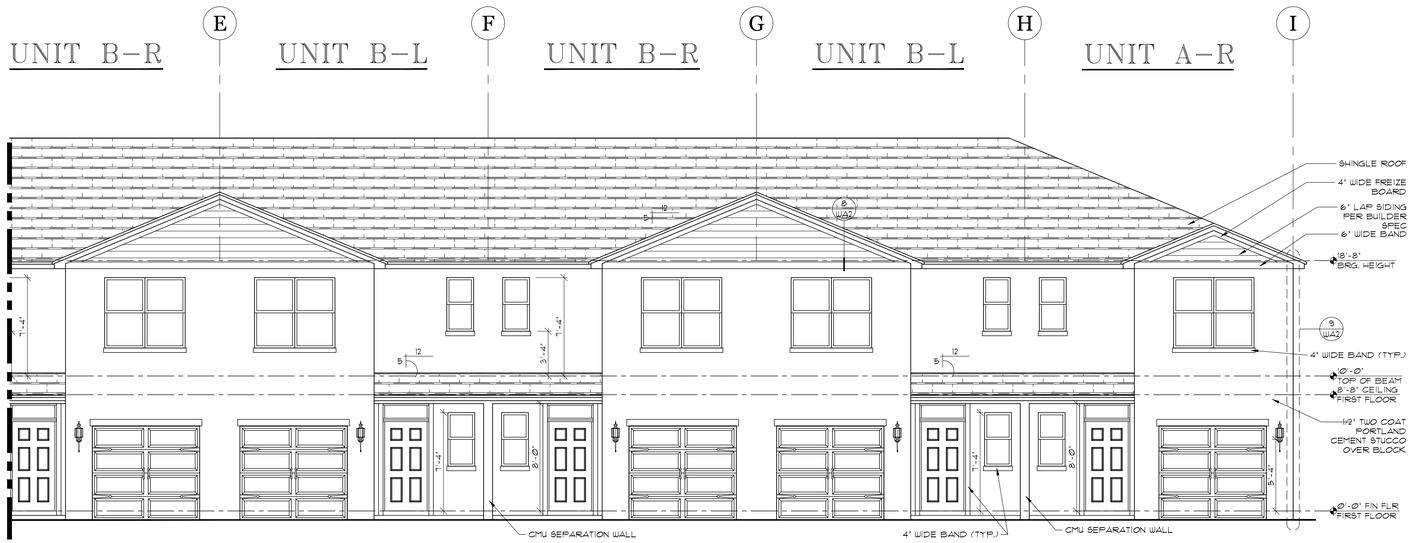


FRONT ELEVATION (LEFT)

SCALE: 3/16" = 1'-0"



1 OPT. 3080 ENTRY DOOR



FRONT ELEVATION (RIGHT)

SCALE: 3/16" = 1'-0"

ARCHITECTS
AB Design Group LLC
2194 HWY A1A, SUITE 301
INDIAN HARBOUR BEACH,
FLORIDA 32937
PH: 321-802-3591
www.abdesigngroup.com
AA #: 0003325

DATE	△ DESCRIPTION
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TITLE SHEET
STAR FARMS
TOWNHOMES
8-UNIT

FRONT ELEVATION

160 MPH EXP. C

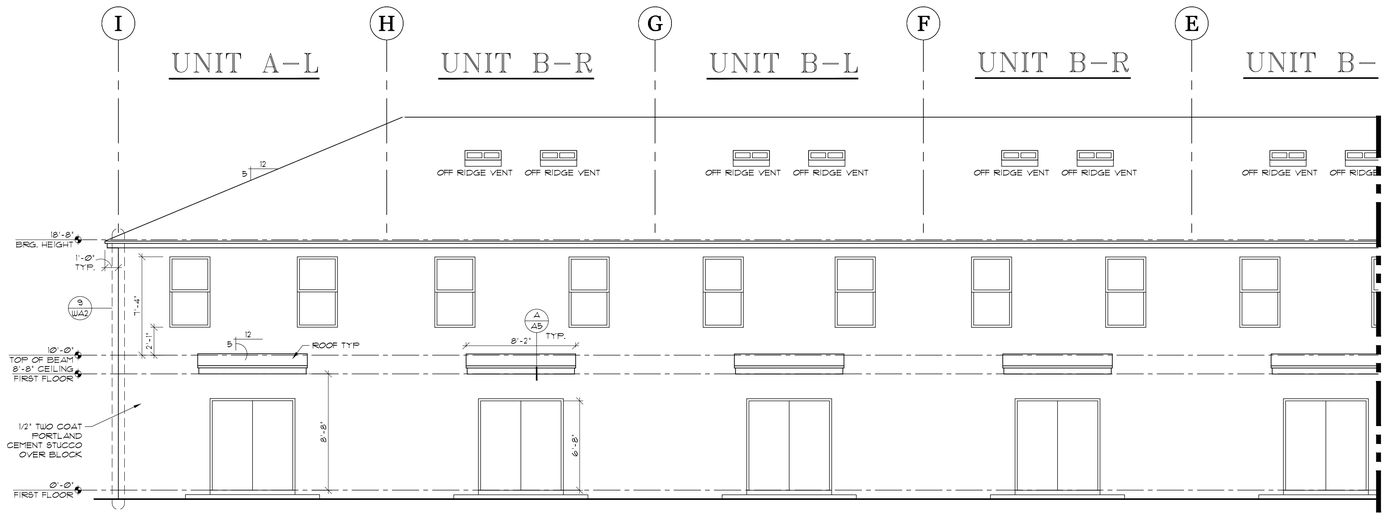
JOB #
03680.099

STATE OF FLORIDA

MICHAEL C. ANDERSON
AR NO 17305

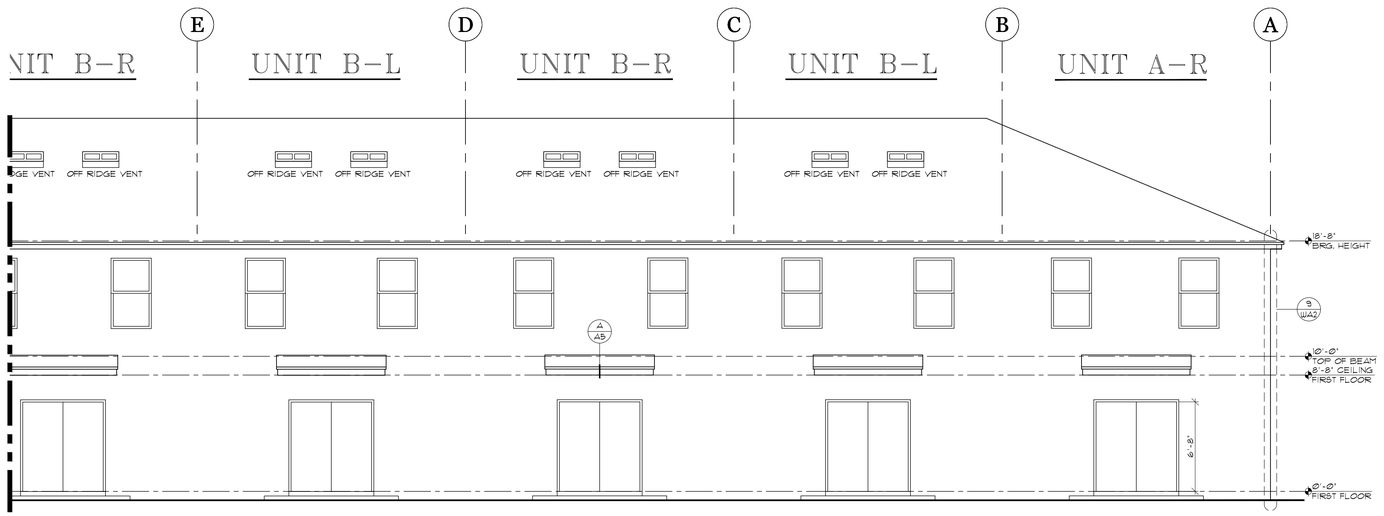
DATE: 01-01-24
SCALE: AS NOTED
SHEET NO:
A3

FOR OFF-RIDGE VENT CALCULATIONS
SEE SHEET A5



REAR ELEVATION (LEFT)

SCALE: 3/16" = 1'-0"



REAR ELEVATION (RIGHT)

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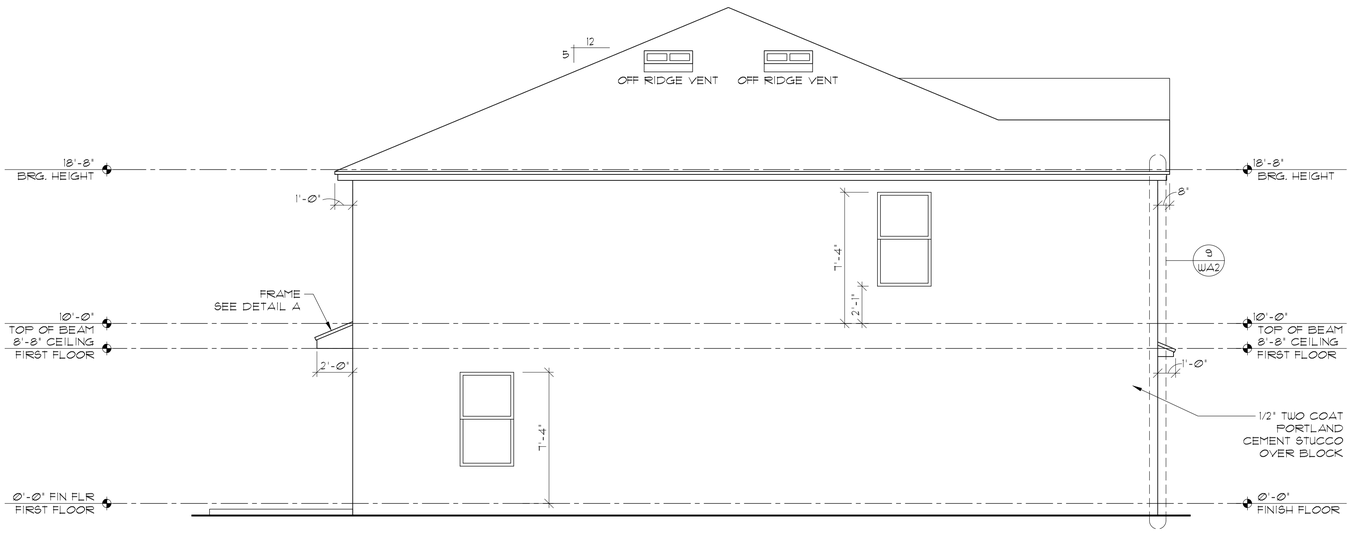
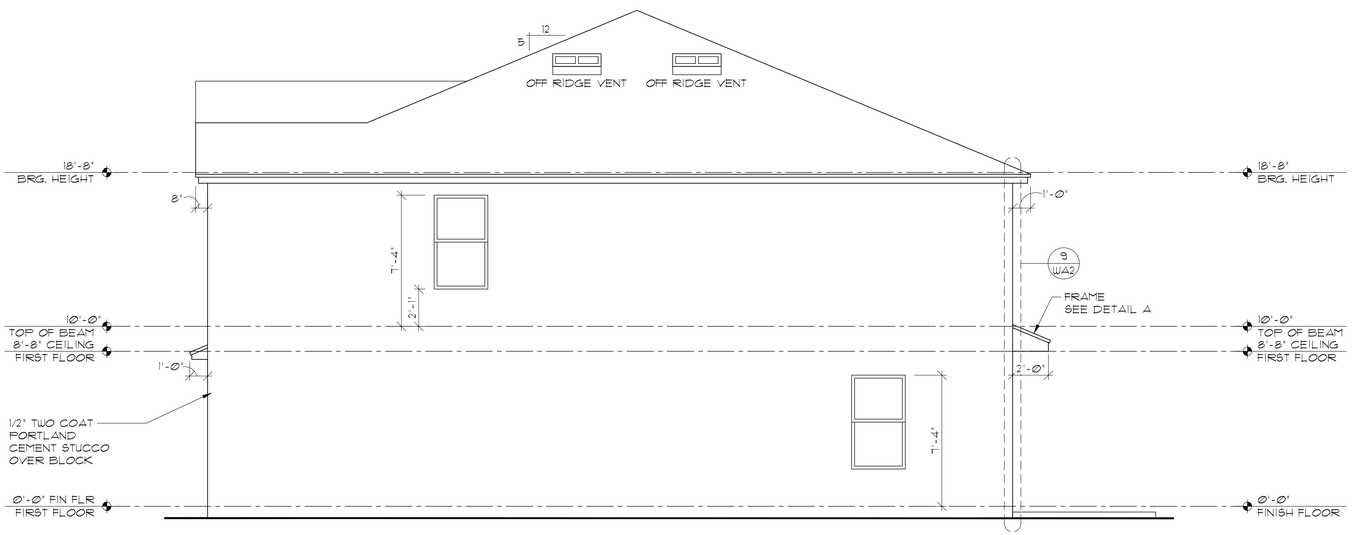


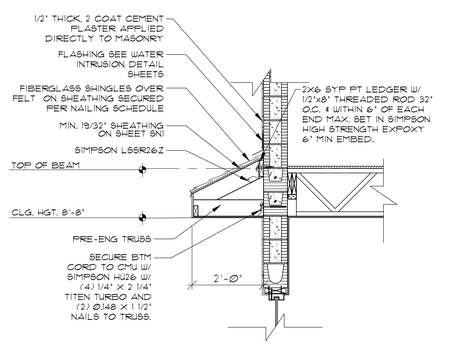
LEFT ELEVATION

SCALE: 1/4 = 1'-Ø"



RIGHT ELEVATION

SCALE: 1/4 = 1'-Ø"



OVERHANG DETAIL @ PATIO DOORS

A

SCALE: 1/2 = 1'-Ø" 8'-8" CLG. HGT.

OFF RIDGE VENT CALCULATION FOR ATTIC AREA ABOVE DRAFT STOP CONFINES OF UNIT "A"	
AREA OF ATTIC*	960 SQ. FT.
REQUIRED VENTILATION AREA AT 1 PER 300	3.20 SQ. FT.
VENTILATION AREA X SQ. INCHES PER FT. (144)	460.80 SQ. IN.
MAX. ALLOWED VENTILATION IN UPPER PORTION OF ATTIC (50% OF TOTAL REQUIRED VENTILATION AREA)	230.4 SQ. IN.
NUMBER OF LOMANCO 770-DFT VENTS REQUIRED AT 140 SQ.IN. PER VE	**2 UNITS**
OFF RIDGE VENT CALCULATION FOR ATTIC AREA ABOVE DRAFT STOP CONFINES OF UNIT "B"	
AREA OF ATTIC*	915 SQ. FT.
REQUIRED VENTILATION AREA AT 1 PER 300	3.05 SQ. FT.
VENTILATION AREA X SQ. INCHES PER FT. (144)	439.20 SQ. IN.
MAX. ALLOWED VENTILATION IN UPPER PORTION OF ATTIC (50% OF TOTAL REQUIRED VENTILATION AREA)	219.6 SQ. IN.
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NUMBER OF LOMANCO 770-DFT VENTS REQUIRED AT 140 SQ.IN. PER VE	**2 UNITS**
*AREA OF ATTIC IS THE PERIMITER OF THE HOUSE, LESS THE OVERHANG (EXTERIOR OF WALL TO EXTERIOR OF WALL, NO OVERHANGS INCLUDED)	
TOTAL NUMBER OF OFF RIDGE VENTS	**16**

ARCHITECTS
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DATE	DESCRIPTION
1 Ø1/Ø1/24	2023 CODE UPDATE
2	
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MASTER

TITLE SHEET

STAR FARMS TOWNHOMES 8-UNIT

LEFT AND RIGHT BUILDING ELEVATIONS

160 MPH EXP. C

JOB # 03680.099

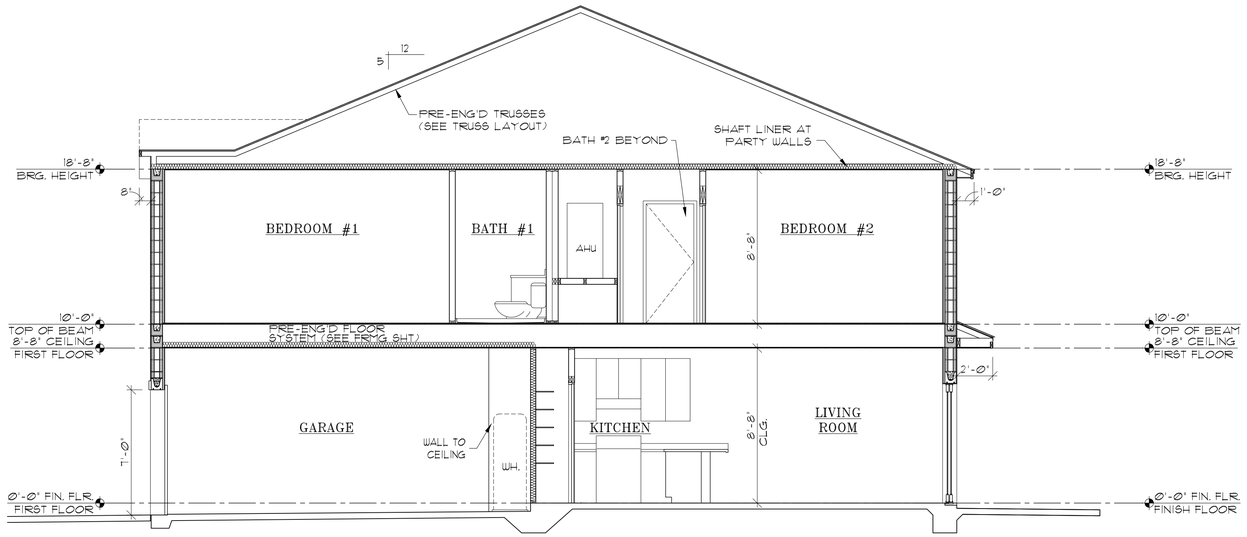
STATE OF FLORIDA

MICHAEL C. ANDERSON AR NO 17305

DATE: 01-01-24

SCALE: AS NOTED

SHEET NO: A5



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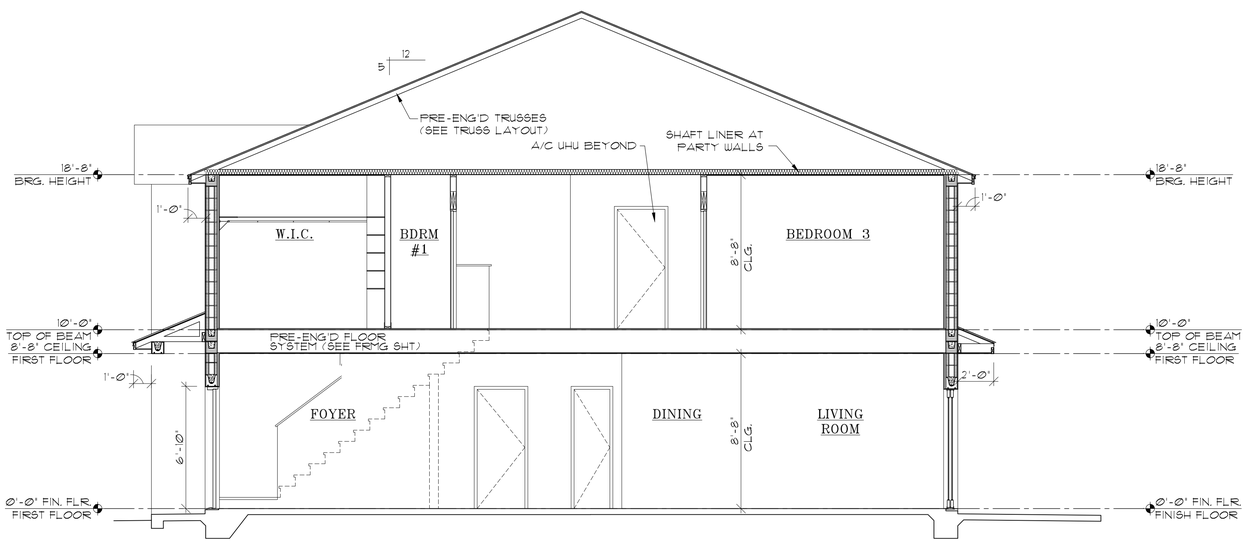

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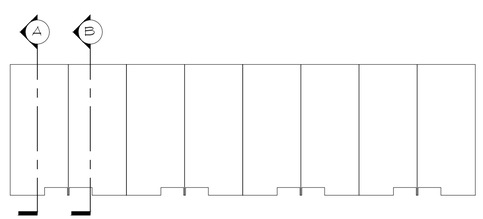
SCALE: 1/4 = 1'-0"



KEY PLAN

ARCHITECTS
AB Design Group LLC.
2194 HWY A1A, SUITE 301
INDIAN HARBOUR BEACH,
FLORIDA 32937
PH: 321-802-3591
www.abdesigngroup.com
AA #: 0003325

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1	01/01/24	2023 CODE UPDATE
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MASTER

TITLE SHEET

STAR FARMS
TOWNHOMES
8-UNIT

BUILDING SECTIONS

160 MPH EXP. C

JOB #
03680.099

STATE OF FLORIDA

MICHAEL C. ANDERSON
AR NO 17305

DATE: 01-01-24

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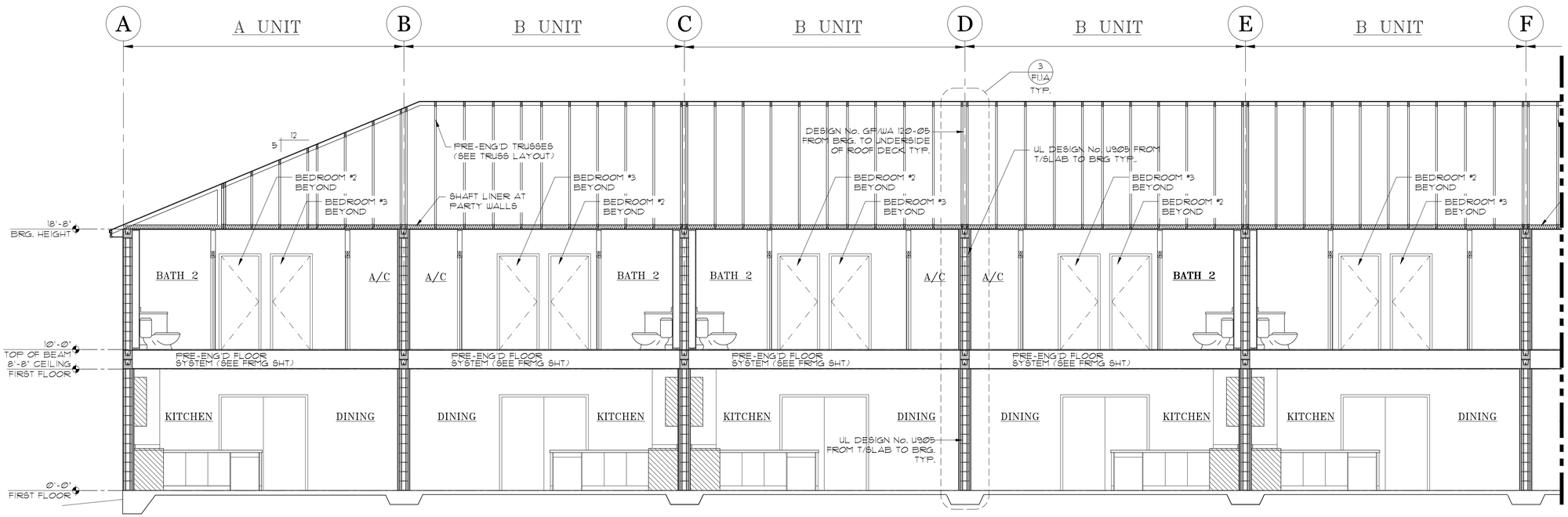
A6



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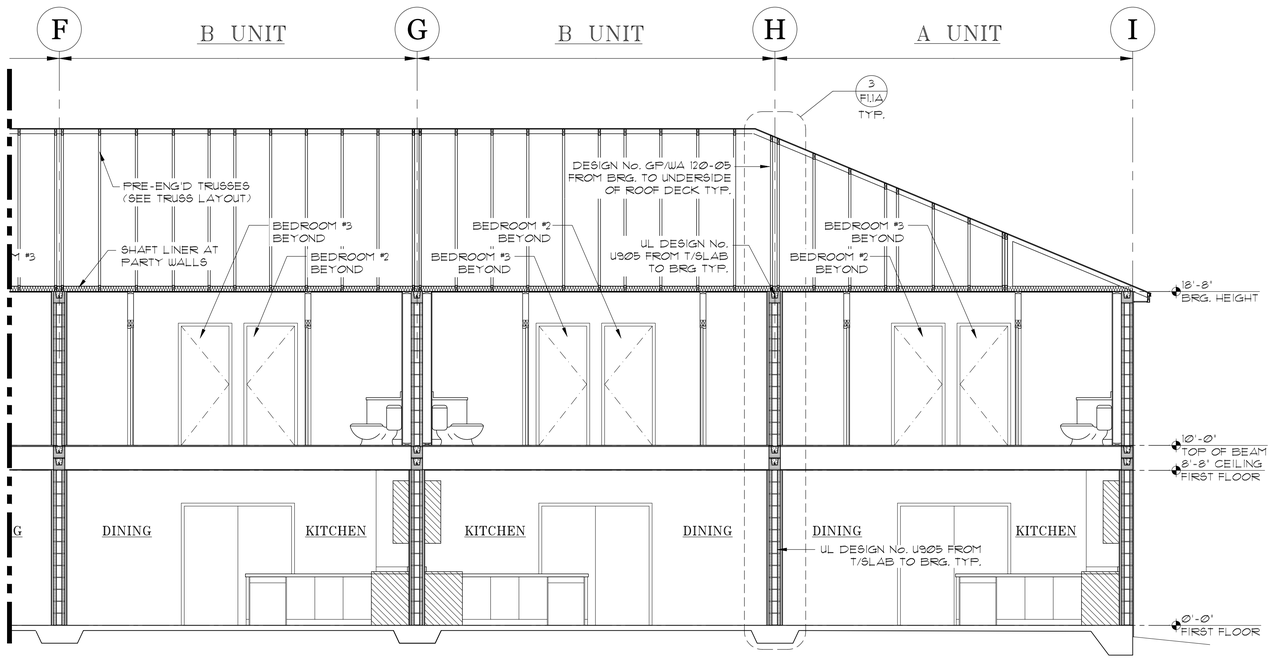

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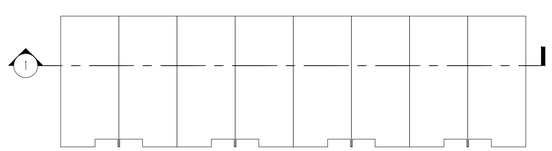

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TITLE SHEET
STAR FARMS
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8-UNIT

BUILDING SECTION

160 MPH EXP. C

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STATE OF FLORIDA

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AR NO 17305

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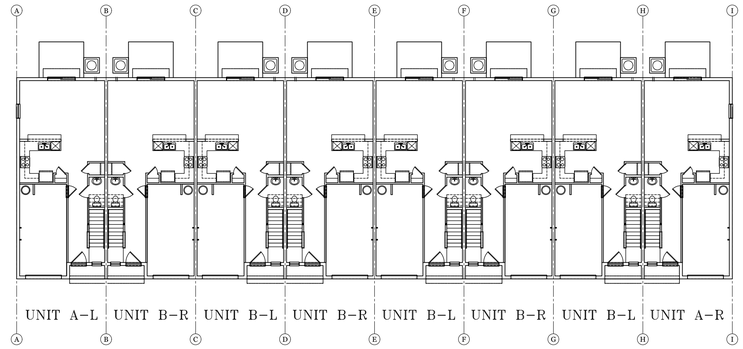
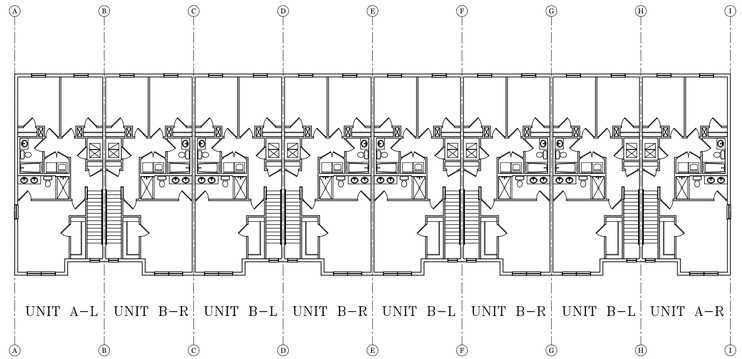
FLOOR PLAN CONFIGURATION



FIRST FLOOR



SECOND FLOOR

ARCHITECTS
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FLORIDA 32937
PH: 321-802-3591
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TEL: (321) 733-7092
FAX: (321) 733-7972

- STATE OF FLORIDA PROFESSIONAL ARCHITECT:

MICHAEL C. ANDERSON
AR No. 17305

A.B. DESIGN GROUP, LLC
2194 HWY A1A, SUITE 301
INDIAN HARBOUR BEACH, FL 32937
Tel: (321) 802-3591

DRAWING / CONTRACT DOCUMENT REVIEW BY BUILDER

THE BUILDER ASSUMES ALL LIABILITY FOR INTERPRETATION OF THE CONTRACT DOCUMENTS.

IF ANY ASPECT OF THE CONSTRUCTION (AS DESCRIBED IN THIS DRAWING SET) ARE UNCLEAR AND IN NEED OF FURTHER DETAILING OR EXPLANATION IN ORDER TO BUILD THIS PROJECT BASED ON THIS DRAWING SET, THE CORRECT PROCEDURE IS FOR THE BUILDER TO SUBMIT A WRITTEN R.F.I. (REQUEST FOR INFORMATION) TO THE ARCHITECT OR ENGINEER FOR CLARIFICATION.

AB DESIGN GROUP WILL RESPOND TO ALL WRITTEN RFI's IN WRITING/DRAWN FORMS IN A TIMELY MANNER. AB DESIGN GROUP TAKES NO RESPONSIBILITY FOR INTERPRETATIONS OF CONSTRUCTION BY THE BUILDER WHEN NO RFI's HAVE BEEN GENERATED FOR UNCLEAR ASPECTS OF THE CONSTRUCTION BASED ON THE DRAWING SET.

DESIGN CRITERIA:

- **FLORIDA BUILDING CODE, RESIDENTIAL, 8TH EDITION (2023)**
- **ALL LOCAL AND STATE CODES**

• OCCUPANCY	– RESIDENTIAL, GROUP R2
• CONSTRUCTION TYPE	– VB
• MIN. INTERIOR FINISH	– CLASS B
• BASIC WIND SPEED	– Vult=160 MPH Vasd=124 MPH
• EXPOSURE	– C
• 1-STORY RESIDENCE	–
• 2-STORY RESIDENCE	– MAX. HEIGHT AS PER LOCAL AND STATE CODES

SQ.FT. CALC.'S

AREA CALCULATIONS FOR UNIT A (1463)

FLR 1 - LIVING	639 SQ. FT.
FLR 2 - LIVING	824 SQ. FT.
TOTAL LIVING	1463 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1724 SQ. FT.
PATIO	80 SQ. FT.

AREA CALCULATIONS FOR UNIT B (1464)

FLR 1 - LIVING	639 SQ. FT.
FLR 2 - LIVING	825 SQ. FT.
TOTAL LIVING	1464 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1725 SQ. FT.
PATIO	80 SQ. FT.

ABBREVIATIONS

ABV.	ABOVE	LAV.	LAVATORY
A/C	AIR CONDITIONING	LUM.	LUMINOUS
ADJ.	ADJUSTABLE	M.C.	MEDICINE CABINET
ALT.	ALTERNATE	MFR.	MANUFACTURER
AMP.	AMPERAGE	MIN.	MINIMUM
BD.	BOARD	M.T.	METAL THRESHOLD
CL.	CENTER LINE	MTD.	MOUNTED
CAB.	CABINET	MTL.	METAL
CLG.	CEILING	N.T.S.	NOT TO SCALE
CLR.	CLEAR	O.C.	ON CENTER
CONC.	CONCRETE	PL	PROPERTY LINE
CPT.	CARPET	P.B.	PUSH BUTTON
C.T.	CERAMIC TILE	PH.	PHONE
D.	DRYER	PLT.	PLATE
DBL.	DOUBLE	PLYWD.	PLYWOOD
D.G.	DUAL GLAZED	PR.	PAIR
DIA.	DIAMETER	P.T.	PRESSURE TREATED
DIM.	DIMENSION	R.	RISER
DISP.	DISPOSAL	RAD.	RADIUS
DP.	DEEP	R.A.G.	RETURN AIR GRILL
DR.	DOOR	REF.	REFRIGERATOR
D.S.	DOWNSPOUT	RM.	ROOM
DTL.	DETAIL	R.O.	ROUGH OPENING
D.W.	DISHWASHER	S.C.	SOLID CORE EXT DR
EA.	EACH	S.D.	SMOKE DETECTOR
ELEV.	ELEVATION	S.H.	SINGLE HUNG
EQ.	EQUAL	SHT.	SHEET
EXH.	EXHAUST	SHTHG.	SHEATHING
EXT.	EXTERIOR	SHWR.	SHOWER
F.G./FX.	FIXED GLASS	SIM.	SIMILAR
F.G.	FUEL GAS	SL.	SLIDING
FIN.	FINISH	SL. GL.	SLIDING GLASS
FLR.	FLOOR	STD.	STANDARD
FLUOR.	FLUORESCENT	SWS	SHEAR WALL
FR. DR.	FRENCH DOOR		SECTION
FTG.	FOOTING	TEMP.	TEMPERED GLASS
GA.	GAUGE	THK.	THICK
GAR. DISP.	GARBAGE DISPOSAL	T.O.C.	TOP OF CURB
G.F.I.	GROUND-FAULT CIRCUIT INTERRUPTER	T.O.P.	TOP OF PLATE
		T.O.S.	TOP OF SLAB
GL.	GLASS	TYP.	TYPICAL
GYP. BD.	GYPSUM BOARD	U.N.O.	UNLESS NOTED OTHERWISE
H.B.	HOSE BIB		
H.C.	HOLLOW CORE	V.P.	VAPOR PROOF
HDR.	HEADER	W.	WASHER
HGT. OR HT	HEIGHT	W/	WITH
INSUL.	INSULATION	WD.	WOOD
INT.	INTERIOR	WDW.	WINDOW
		W/H	WATER HEATER
		W.I.	WROUGHT IRON

BUILDING DESCRIPTION

OF UNITS CONFIGURED:
8 UNIT BUILDING

UNIT CONFIGURATION FROM LEFT TO RIGHT: A–B–B–B–B–B–B–A

REVISIONS

DATE	DESCRIPTION
01/01/24	2023 CODE UPDATE

INDEX OF DRAWINGS

ARCHITECTURAL SHEET #	DESCRIPTION
PG CS	COVER SHEET
PG GN	GENERAL NOTES
PG F1	FIRE PROTECTION PLAN
PG F1.1A	FIRE PROTECTION DETAILS AND ASSEMBLY
PG F1.2A	FIRE SEPARATION SHAFTLINER
PG A1.1	FIRST FLOOR PLAN (LEFT)
PG A1.2	FIRST FLOOR PLAN (RIGHT)
PG A1A	STAIRS
PG A2.1	SECOND FLOOR PLAN (LEFT)
PG A2.2	SECOND FLOOR PLAN (RIGHT)
PG A3	FRONT & REAR BUILDING ELEVATIONS
PG A4	LEFT & RIGHT BUILDING ELEVATIONS
PG A5	BUILDING SECTIONS
PG A6	BUILDING SECTIONS
PG E1.1	FIRST FLOOR ELECTRICAL PLAN (LEFT)
PG E1.2	FIRST FLOOR ELECTRICAL PLAN (RIGHT)
PG E2.1	SECOND FLOOR ELECTRICAL PLAN (LEFT)
PG E2.2	SECOND FLOOR ELECTRICAL PLAN (RIGHT)
PG E3	ELECTRICAL PANEL & RISER DIAGRAM
PG P1	FIRST FLOOR PLUMBING PLAN
PG P2	SECOND FLOOR PLUMBING PLAN
PG P3	PLUMBING RISER DIAGRAMS
PG PA	PRODUCT APPROVALS
PG D1	WALL SECTIONS DETAILS
PG D2	WALL SECTIONS DETAILS
PG D3	DETAILS
PG WA1	WALL ASSEMBLY DETAILS
PG WA2	WALL ASSEMBLY DETAILS

STRUCTURAL SHEET #	DESCRIPTION
PG S1.1	FOUNDATION PLAN (LEFT)
PG S1.2	FOUNDATION PLAN (RIGHT)
PG S1.1A	DETAILS
PG S1.1B	DETAILS
PG S1.1C	DETAILS
PG S1.3	FIRST FLOOR DOWEL PLAN (LEFT)
PG S1.4	FIRST FLOOR DOWEL PLAN (RIGHT)
PG S2.1	FIRST FLOOR LIFT BEAM PLAN (LEFT)
PG S2.2	FIRST FLOOR LIFT BEAM PLAN (RIGHT)
PG S2.1A	DETAILS
PG S2.2A	LINTEL SCHEDULE
PG S3.1	FIRST FLOOR FRAMING PLAN (LEFT)
PG S3.2	FIRST FLOOR FRAMING PLAN (RIGH)
PG S3.1A	DETAILS
PG S3.1B	DETAILS
PG S4.1	SECOND FLOOR DECK PLAN (LEFT)
PG S4.2	SECOND FLOOR DECK PLAN (LEFT)
PG S4.3	SECOND FLOOR DOWEL PLAN (LEFT)
PG S4.4	SECOND FLOOR DOWEL PLAN (RIGHT)
PG S5.1	SECOND FLOOR LIFT BEAM PLAN (LEFT)
PG S5.2	SECOND FLOOR LIFT BEAM PLAN (RIGHT)
PG S6.1	ROOF FRAMING PLAN (LEFT)
PG S6.2	ROOF FRAMING PLAN (RIGHT)
PG SN1	DETAILS
PG SFD1	SOFFIT INFORMATION BY OTHERS
PG SFD2	SOFFIT INFORMATION BY OTHERS

TITLE SHEET: STAR FARMS TOWNHOMES 8-UNIT

COVER SHEET

160 MPH EXP. C

JOB # 03680.099

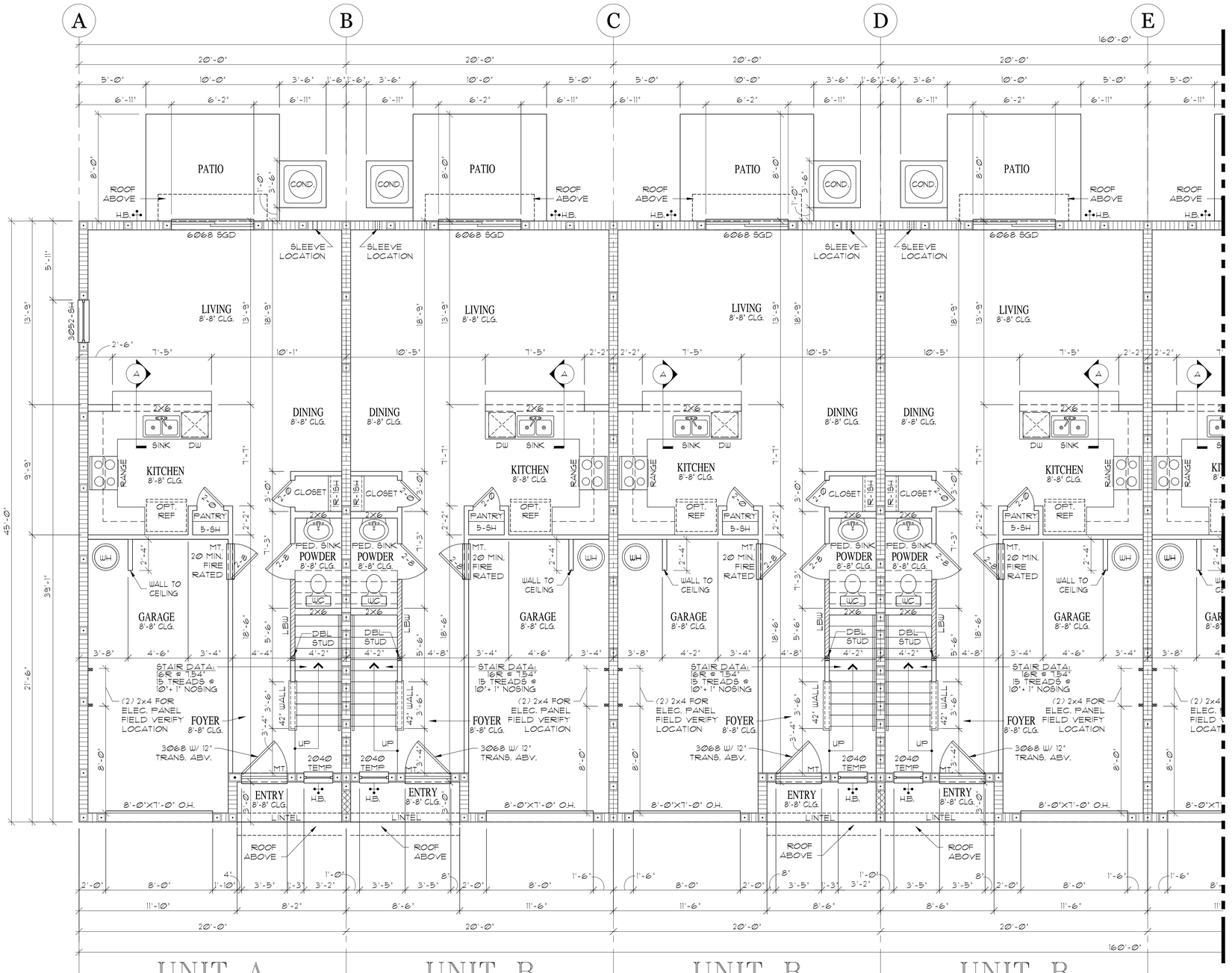
STATE OF FLORIDA

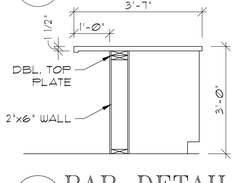
MICHAEL C. ANDERSON
AR NO 17305

DATE: 01-01-24

SCALE: AS NOTED

SHEET NO: CS





A BAR DETAIL
SCALE: 1/2"=1'-0"

FIRST FLOOR PLAN (LEFT)

SCALE: 1/4 = 1'-0"

NOTE:
DOOR RETURN TO BE 4" UNLESS NOTED OTHERWISE.

R311.3.1-FLOOR ELEVATIONS @ REQUIRED EGRESS DOOR SHALL MEET PROVISION OF SECTION R311.3.1 IN FBCR 8TH ED. (2023).

NOTE:
- 2-8 LOUV. DOOR W/ AIR HANDLER ON METAL STAND OR 2-8 SOLID DOOR W/ RETURN PLENUM AND RETURN AIR GRILLE.
- VERIFY CONDENSER PAD LOCATION WITH SITE PLAN.
- OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 1 3/8" (35 MM) IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 1 3/8" (35 MM) THICK, OR 20-MINUTE FIRE-RATED DOORS.
- THE GARAGE SHALL BE SEPARATED FROM THE RESIDENCE & ITS ATTIC AREA BY NOT LESS THAN ½"(12.7mm) GYPSUM BOARD APPLIED TO THE GARAGE SIDE. GARAGES BENEATH HABITABLE ROOMS SHALL BE SEPARATED FROM ALL HABITABLE ROOMS BY NOT LESS THAN ⅝"(15.9mm) TYPE X GYPSUM BOARD OR EQUIVALENT.
- UNDER STAIR PROTECTION:
  ENCLOSED ACCESSIBLE SPACE UNDER STAIRS SHALL HAVE WALLS, UNDER STAIR SURFACE AND ANY SOFFITS PROTECTED ON THE ENCLOSED SIDE WITH 1/2 INCH GYPSUM BOARDS. FBCR 2023 (8TH ED.) 302.7

WALL LEGEND

- CMU WALL BEARING 18'-8"
- CMU WALL BEARING 8'-8"
- INTERIOR LOAD BEARING WALL
- NON BEARING INTERIOR PARTITIONS

AREA CALCULATIONS FOR UNIT A (1463)

FLR 1 - LIVING	639 SQ. FT.
FLR 2 - LIVING	824 SQ. FT.
TOTAL LIVING	1463 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1724 SQ. FT.
PATIO	80 SQ. FT.

AREA CALCULATIONS FOR UNIT B (1464)

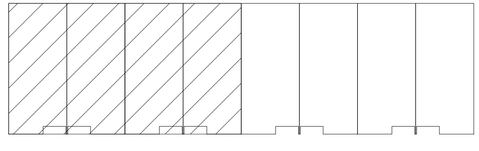
FLR 1 - LIVING	639 SQ. FT.
FLR 2 - LIVING	825 SQ. FT.
TOTAL LIVING	1464 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1725 SQ. FT.
PATIO	80 SQ. FT.

COMPONENT AND CLADDING WIND LOADS
BASIC WIND EXPOSURE FOR 3 SECOND GUSTS

OPENINGS AND TYPE	SQUARE FOOTAGE	ZONE	160 MPH WIND (Vult)	REMARKS
2040 WINDOW	8	5	36.7/-449.2	
3052 WINDOW	15.5	5	35.7/-47.1	
3068 EXTERIOR SWING DOOR	20	5	35.1/-45.8	
6068 S.G.D.	40	5	33.4/-42.5	
8070 O.H.D.	56	5	32.8/-37.1	
12'X12' SOFFIT	1	5	36.7/-449.2	

BASIC WIND SPEED MPH = 160 (Vult)
INTERNAL PRESSURE COEFFICENT = ± 0.18 BLDG. CAT.=II, EXP.=C, MEAN ROOF HT. = 23'-3"

PRESSURES HAVE BEEN MODIFIED PER FBCR 8TH ED. (2023) SECTION R301.2.1 TO MEET TESTED ALLOWABLE OR NOMINAL WIND LOAD VALUES FROM THE PRODUCT MANUFACTURER.
CONTROL DATE: 09/14/23



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TITLE SHEET
STAR FARMS
TOWNHOMES
8-UNIT
FIRST FLOOR PLAN
(LEFT)
160 MPH EXP. C

JOB # 03680.099

STATE OF FLORIDA

MICHAEL C. ANDERSON
AR NO 17305

DATE: 01-01-24
SCALE: AS NOTED
SHEET NO:
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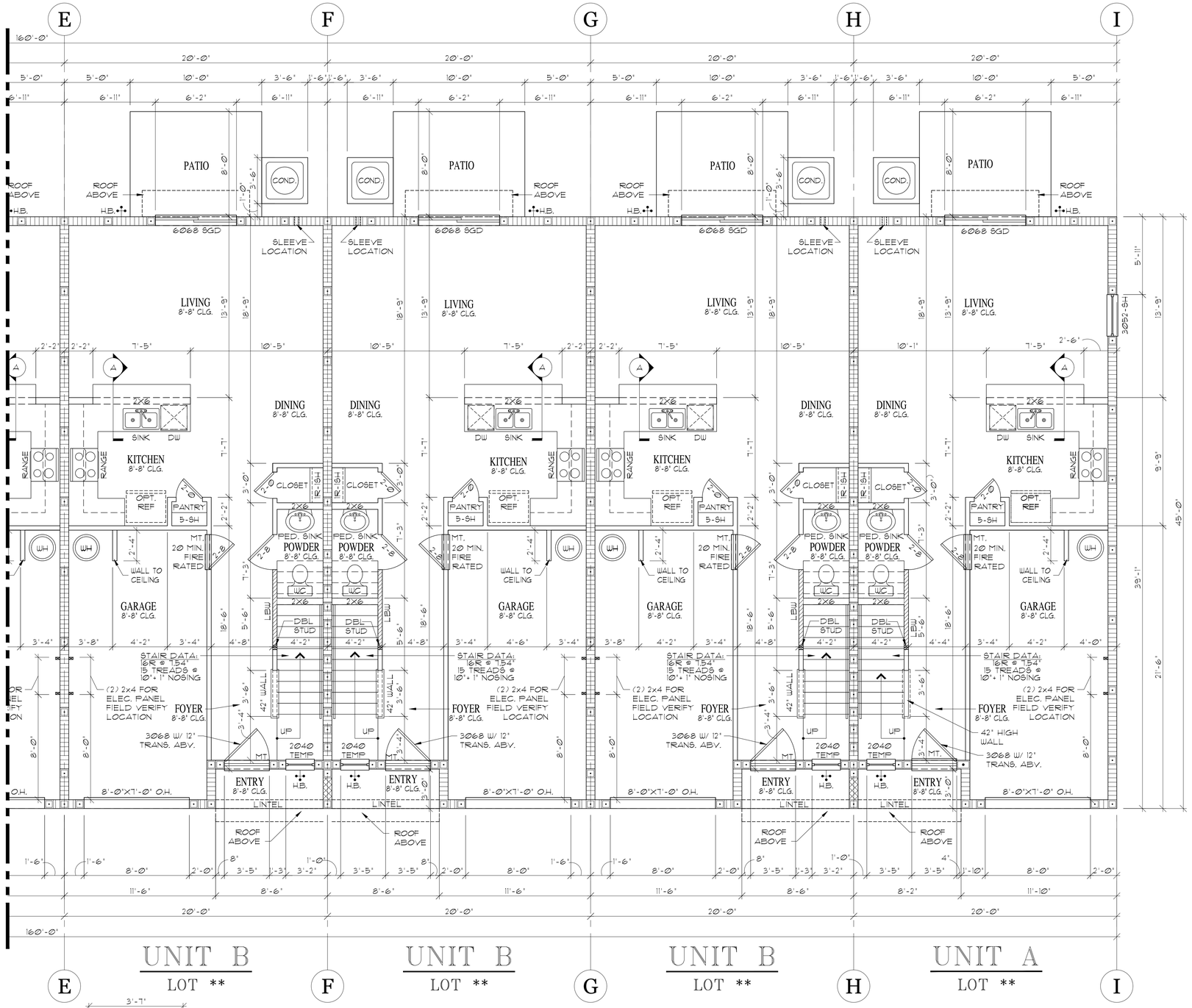


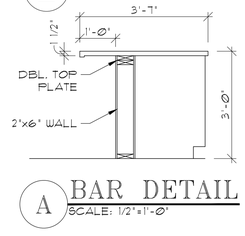
UNIT B
LOT **

UNIT B
LOT **

UNIT B
LOT **

UNIT A
LOT **

E F G H I



A BAR DETAIL
SCALE: 1/2" = 1'-0"

FIRST FLOOR PLAN (RIGHT)
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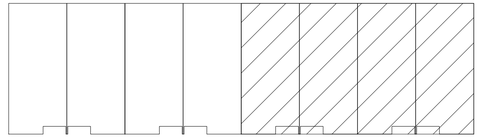

KEY PLAN

WALL LEGEND
CMU WALL BEARING 18'-8"
CMU WALL BEARING 8'-8"
INTERIOR LOAD BEARING WALL
NON BEARING INTERIOR PARTITIONS

AREA CALCULATIONS FOR UNIT A (1463)

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FLR 2 - LIVING	824 SQ. FT.
TOTAL LIVING	1463 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1724 SQ. FT.
PATIO	80 SQ. FT.

AREA CALCULATIONS FOR UNIT B (1464)

FLR 1 - LIVING	639 SQ. FT.
FLR 2 - LIVING	825 SQ. FT.
TOTAL LIVING	1464 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1725 SQ. FT.
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COMPONENT AND CLADDING WIND LOADS
BASIC WIND EXPOSURE FOR 3 SECOND GUSTS

OPENINGS AND TYPE	SQUARE FOOTAGE	ZONE	160 MPH WIND (Vult)	REMARKS
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BASIC WIND SPEED MPH = 160 (Vult)
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CAT.=II, EXP.=C, MEAN ROOF HT. = 23'-3"

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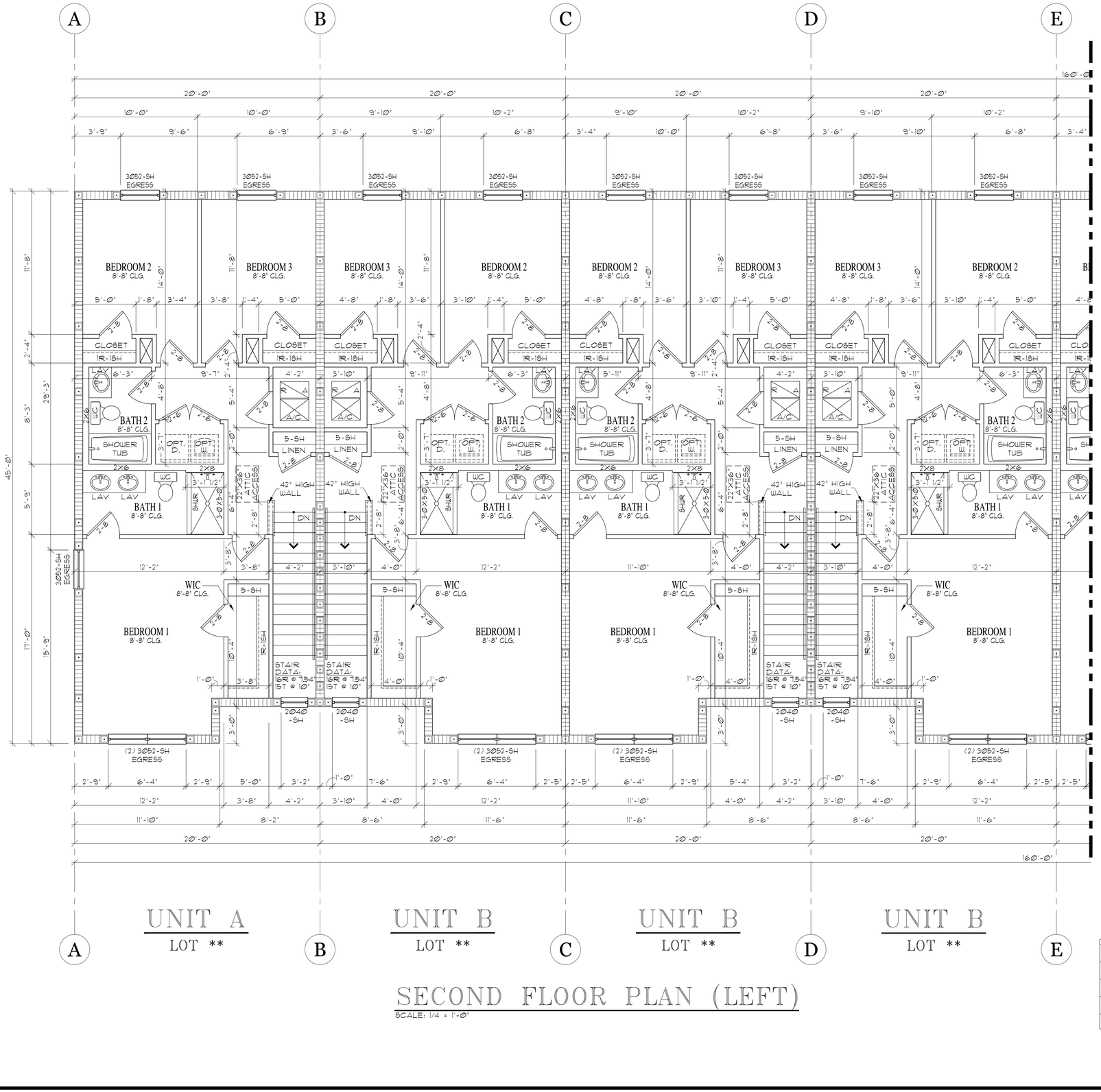
TITLE SHEET
STAR FARMS
TOWNHOMES
8-UNIT
FIRST FLOOR PLAN
(RIGHT)
160 MPH EXP. C

JOB # 03680.099

STATE OF FLORIDA

MICHAEL C. ANDERSON
AR NO 17305

DATE: 01-01-24
SCALE: AS NOTED
SHEET NO:
A1.2



UNIT A
LOT **

UNIT B
LOT **

UNIT B
LOT **

UNIT B
LOT **

SECOND FLOOR PLAN (LEFT)

SCALE: 1/4 = 1'-0"

WALL LEGEND

- CMU WALL BEARING 12'-8"
- CMU WALL BEARING 8'-8"
- INTERIOR LOAD BEARING WALL
- NON BEARING INTERIOR PARTITIONS

AREA CALCULATIONS FOR UNIT A (1463)

FLR 1 - LIVING	639 SQ. FT.
FLR 2 - LIVING	824 SQ. FT.
TOTAL LIVING	1463 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1724 SQ. FT.
PATIO	80 SQ. FT.

AREA CALCULATIONS FOR UNIT B (1464)

FLR 1 - LIVING	639 SQ. FT.
FLR 2 - LIVING	825 SQ. FT.
TOTAL LIVING	1464 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1725 SQ. FT.
PATIO	80 SQ. FT.

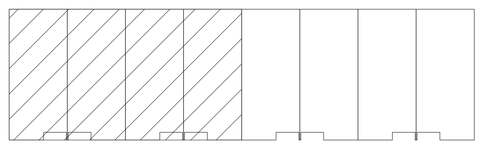
COMPONENT AND CLADDING WIND LOADS
BASIC WIND EXPOSURE FOR 3 SECOND GUSTS

OPENINGS AND TYPE	SQUARE FOOTAGE	ZONE	160 MPH WIND (Vult)	REMARKS
2040 WINDOW	8	5	36.7/-449.2	
3052 WINDOW	15.5	5	35.7/-47.1	
3068 EXTERIOR SWING DOOR	20	5	35.1/-45.8	
6068 S.G.D.	40	5	33.4/-42.5	
8070 O.H.D.	56	5	32.8/-37.1	
12"X12" SOFFIT	1	5	36.7/-449.2	

BASIC WIND SPEED MPH = 160 (Vult)
INTERNAL PRESSURE COEFFICENT = ± 0.18 BLDG.
CAT.=II, EXP.=C, MEAN ROOF HT. = 23'-3"

PRESSURES HAVE BEEN MODIFIED PER FBCR 8TH ED. (2023) SECTION R301.2.1 TO MEET TESTED ALLOWABLE OR NOMINAL WIND LOAD VALUES FROM THE PRODUCT MANUFACTURER.
CONTROL DATE: 09/14/23

NOTE:
IN OCCUPANCIES REQUIRING RESCUE WINDOWS THE WINDOWS SHALL BE DESIGNED SO THAT THE WINDOW IS OPENABLE FROM THE INSIDE WITHOUT THE USE OF TOOLS AND SHALL PROVIDE A CLEAR OPENING OF NOT LESS THAN 20 INCHES IN WIDTH, 24 INCHES IN HEIGHT, AND 5.7 SQUARE FEET IN AREA. THE BOTTOM OF THE OPENING SHALL BE NOT MORE THAN 44 INCHES ABOVE THE FLOOR. THE CLEAR OPENING SHALL ALLOW A RECTANGULAR SOLID WITH A WIDTH AND HEIGHT THAT PROVIDES NOT LESS THAN 20 INCHES TO PASS FULLY THROUGH THE OPENING.



KEY PLAN

ARCHITECTS
AB Design Group LLC.
2194 HWY A1A, SUITE 301
INDIAN HARBOUR BEACH,
FLORIDA 32937
PH: 321-802-3591
www.abdesigngroup.com
AA #: 0003325

DATE	DESCRIPTION
1 01/01/24	2023 CODE UPDATE
2	
3	
4	
5	
6	
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9	

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MASTER

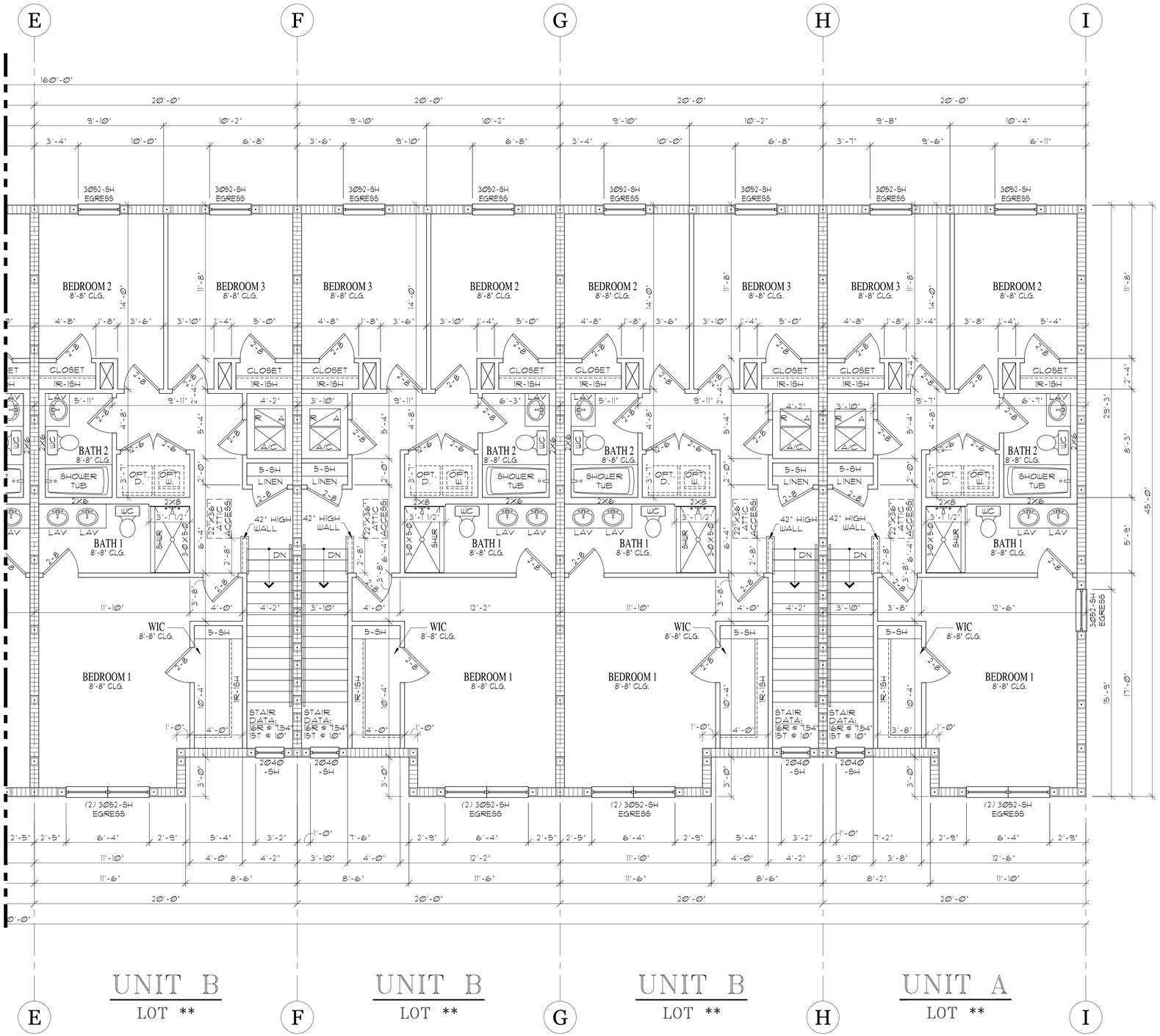
TITLE SHEET
STAR FARMS
TOWNHOMES
8-UNIT
SECOND FLOOR PLAN
(LEFT)
160 MPH EXP. C

JOB # 03680.099

STATE OF FLORIDA

MICHAEL C. ANDERSON
AR NO 17305

DATE: 01-01-24
SCALE: AS NOTED
SHEET NO:
A2.1



SECOND FLOOR PLAN (RIGHT)

SCALE: 1/4 = 1'-0"

WALL LEGEND

- CMU WALL BEARING 18'-8"
- CMU WALL BEARING 8'-8"
- INTERIOR LOAD BEARING WALL
- NON BEARING INTERIOR PARTITIONS

AREA CALCULATIONS FOR UNIT A (1463)

FLR 1 - LIVING	639 SQ. FT.
FLR 2 - LIVING	824 SQ. FT.
TOTAL LIVING	1463 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1724 SQ. FT.
PATIO	80 SQ. FT.

AREA CALCULATIONS FOR UNIT B (1464)

FLR 1 - LIVING	639 SQ. FT.
FLR 2 - LIVING	825 SQ. FT.
TOTAL LIVING	1464 SQ. FT.
ENTRY	27 SQ. FT.
GARAGE	234 SQ. FT.
TOTAL	1725 SQ. FT.
PATIO	80 SQ. FT.

COMPONENT AND CLADDING WIND LOADS
BASIC WIND EXPOSURE FOR 3 SECOND GUSTS

OPENINGS AND TYPE	SQUARE FOOTAGE	ZONE	160 MPH WIND (Vult)	REMARKS
2040 WINDOW	8	5	36.7/-449.2	
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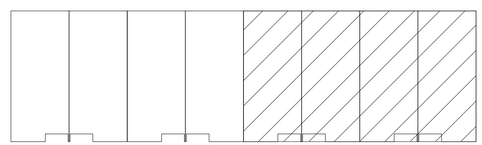

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CBC1327068

MASTER

TITLE SHEET
STAR FARMS TOWNHOMES 8-UNIT
SECOND FLOOR PLAN (RIGHT)
160 MPH EXP. C

JOB # 03680.099

STATE OF FLORIDA

MICHAEL C. ANDERSON
AR NO 17305

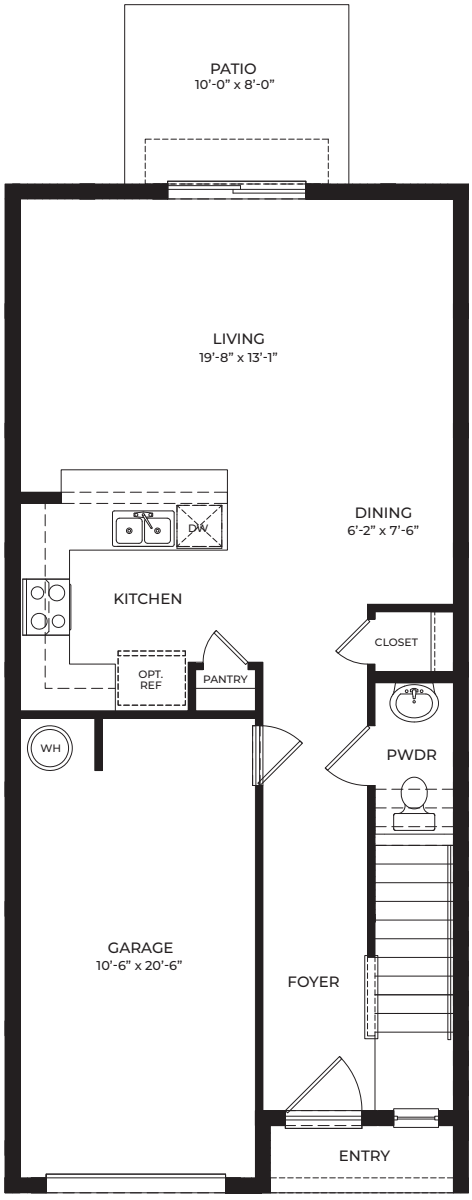
DATE: 01-01-24
SCALE: AS NOTED
SHEET NO:
A2.2

D·R·HORTON
America's Builder

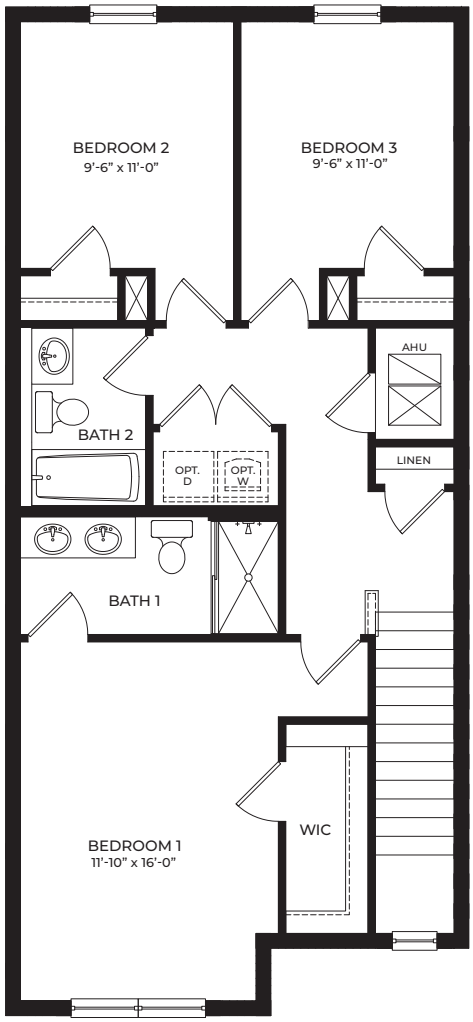
PEARSON/Interior Unit

3 Beds | 2.5 Baths | 1-Car Garage | 1,464 Sq. Ft.





FIRST FLOOR



SECOND FLOOR

D.R. Horton is an equal housing opportunity builder. Floorplans and elevations are artist's renderings for illustration purposes only. Features, sizes and details are approximate and will vary from the homes as built. Square footage dimensions are approximate. Builder reserves the right to change and/or alter materials, specifications, features, dimensions, designs and price without prior notice or obligation. Certified Residential Contractor License Number CRC1327068

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D·R·HORTON
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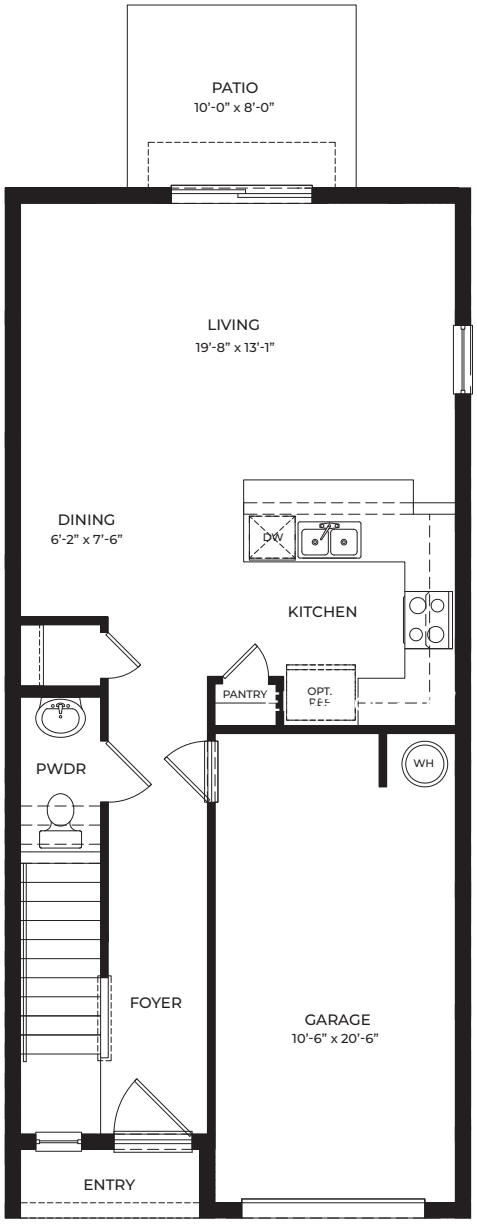
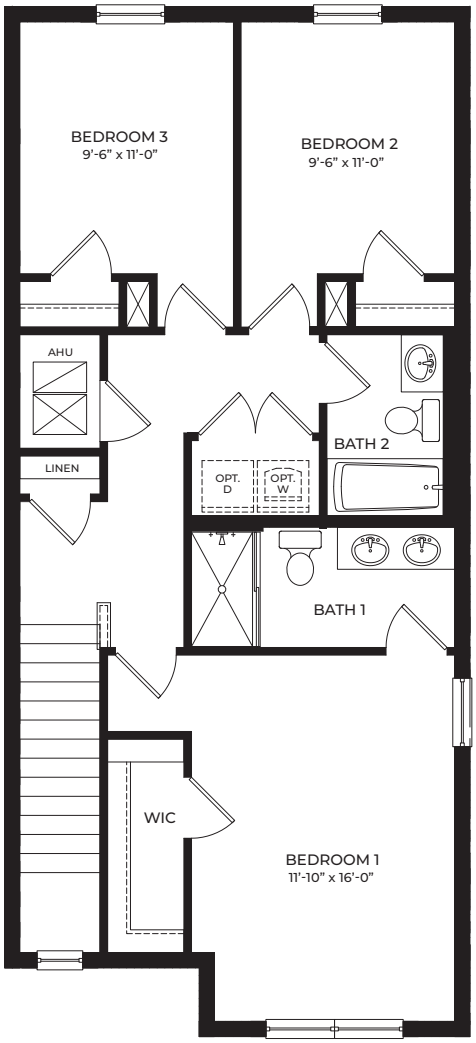
PEARSON/End Unit

3 Beds | 2.5 Baths | 1-Car Garage | 1,463 Sq. Ft.





FIRST FLOOR



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SHERWIN-WILLIAMS®

DRH East - NEW Scheme 1



1. Body	SW 7636	Origami White
2. Accent Body	SW 7636	Origami White
3. Trim	SW 7653	Silverpointe
4. Front Door & Shutters	SW 2739	Charcoal Blue
5. Accent - Optional	SW 9133	Jasper Stone

Actual color may vary from on-screen representation. To confirm your color choices prior to purchase, please view a physical color chip, color card, or painted sample. Sherwin-Williams is not responsible for the content and photos shared by users of their color selection tools. The Cover The Earth logo and the Sherwin-Williams logo are trademarks owned or licensed by The Sherwin-Williams Company. ©2024 The Sherwin-Williams Company.

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
(772) 742 1555
redtaildg.com
todm@redtaildg.com

CONTEXTUAL PHOTOS – NEIGHBORHOOD



Aerial view – Camera Locations



Photo 1 – Multifamily
Parcel ID: 3403-502-0016-000-2



Photo 2 – Single Family
Parcel ID: 3403-502-0011-000-7



Photo 3 - Repair Services
Parcel ID: 3403-502-0010-000-0



Photo 4 – Auto Sales CAR-DB5 LLC
Parcel ID: 2434-344-0004-000-4



0 30' 60'

SCALE: 1" = 30'

NOTES:

1. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO SITE PREPARATION ACTIVITIES.
2. CONTRACTOR TO ENSURE MINIMUM OF 12" OF NON-ORGANIC FREE DRAINING MATERIAL WITHIN BOTTOM OF DRY RETENTION POND. THIS CAN BE ACCOMPLISHED VIA SOIL REPLACEMENT, SOIL MIXING, OR OTHER APPROVED METHOD.

This item has been digitally signed and sealed by Leo D. Giangrande 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.

DATE	BY	REVISIONS

Date: 5/1/2024
Scale: 1"=30'
Design By: JS
Drawn By: DC
Check By: JS

JEREMIAH BARON & CO. DEVELOPMENT
WEATHERBEE
ST. LUCIE COUNTY, FORT PIERCE, FL

CONCEPTUAL DRAINAGE PLAN

GIANGRANDE ENGINEERING AND PLANNING
710 SE OCEAN BLVD.
STUART, FLORIDA 34994
PH. (772) 888-9076
leo@gep.llc
Cert. No. 30901

LEO GIANGRANDE LICENSE No. 66387 STATE OF FLORIDA PROFESSIONAL ENGINEER

PROJECT #: 23-007

DP-1

Drawing Name: S:\Shared Folders\GEP projects\2023\23-007 Weatherbee Rd 7 Acre Site\Design\23-007 Conceptual Drainage Plan.dwg Layout Name: DP-1 Plotted by: Jarrod Date: 8/30/2024 - 8:47 AM Giangrande Engineering & Planning

Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
(772) 742 1555
redtaildg.com
todm@redtaildg.com

CONTEXTUAL PHOTOS – SUBJECT PROPERTY



Aerial view – Camera Locations



Photo 1 – Looking SE from W Weatherbee Road



Photo 2 - Looking SE from W Weatherbee Road



Photo 3 - Looking SW from W Weatherbee Road

August 5, 2024

Jeremiah Baron & Co Development
Attn: Jamison Weeks
49 SW Flagler Ave. Suite 301
Stuart, FL 34994
772-486-9081

VIA Email: jweeks@commercialrealestatellc.com

Reference: **Environmental Impact Report**
Weatherbee Road – 7ac.
City of Fort Pierce, Florida
Parcel ID # 3403-502-0015-000-5

Dear Mr. Weeks,

EDC, Inc. (EDC) has completed this Environmental Assessment (EA) for the above referenced property. 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 land 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 IMPACT REPORT

Parcel ID: 3403-502-0015-000-5
7 acres Weatherbee Road
St. Lucie County, Florida

Date: August 5, 2024
Project # 22-424

Prepared For:
Jeremiah Baron & Co Development
Attn: Jamison Weeks
49 SW Flagler Ave. Suite 301
Stuart, FL 34994
772-486-9081
jweeks@commercialrealestatellc.com

Prepared By:
EDC, Inc.
10250 SW Village Parkway
Port St Lucie, Florida 34987
(772) 223-5200

SITE DESCRIPTION:

The subject property evaluated as part of this Environmental Impact Report consists of one tax parcel (Parcel ID # 3403-502-0015-000-5) comprised of 7.0 acres. The property is classified by the St. Lucie County Property Appraiser as vacant residential property (land use code 0000). The subject property is located on the south side of W Weatherbee Road, east of Oleander Avenue, and west of S US Highway 1 in St. Lucie County, Florida. The subject property has a Future Land Use designation of Residential High (RH) and a zoning designation of RM-11. The subject property is further located within Section 03, Township 36 South and Range 40 East.

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 has visited the property in various capacities since 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 the subject property consists of native upland habitat associations. According to historical aerial photographs provided by LightBox Environmental Data Resources (EDR®), the subject property was completely cleared of all vegetation in the 1950s. Overtime, the vegetation reclaimed the site with a dominant presence of native vegetation. At the time of the site reconnaissance, the subject property consisted of a 100% native canopy with a heavily disturbed understory dominated by the exotic vegetation – strawberry guava. Additionally, the subject property consisted of cleared paths for soil borings throughout the site. With professional exotic removal and maintenance, the subject property has the potential to be considered native upland habitat.

The upland habitat associations were determined via onsite analysis and classified according to the Florida Cooperative Land Cover (CLC) System developed by the Florida Fish and Wildlife Conservation Commission (FWC). The CLC incorporates classifications used by FWC, Florida Natural Areas Inventory (FNAI), and Florida's water management districts. The following CLC code was identified onsite; 182112 – Urban Open Pine. Please refer to the attached Florida CLC map for the approximate location of the habitat(s) delineated onsite.

Common Name	Species Name
Slash Pine	*Pinus elliottii*
Cabbage Palm	*Sabal Palmetto*
Live Oak	*Quercus virginiana*
Laurel Oak	*Quercus laurifolia*
Dwarf Palmetto	*Sabal minor*
Saw Palmetto	*Serenoa repens*
Florida Gallberry	*Ilex glabra*
Darrow's Blurberry	*Vaccinium darrowii*
Little Bluestem	*Schizachyrium scoparium*
Giant Swordfern	*Nephrolepis biserrata*
Strawberry Guava**	*Psidium littoralei*
Shoebutton Ardisia**	*Ardisia elliptica*

***Nuisance Vegetation**
****Exotic/Invasive Vegetation**

Table 1: This table lists a representative sample of 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. None of these components were found during the field reconnaissance on the property. South Florida Water Management (SFWMD) has yet to perform a site visit under an Environmental Resource Permit (ERP) Application.

WILDLIFE EVALUATION:
EDC, Inc. conducted a pedestrian survey throughout the property to investigate for the presence of any plant or animal listed species. No gopher tortoises, their burrows, or signs (tracks, feces, etc.) were observed onsite. However, potential gopher tortoise habitat was observed onsite. Prior to any land clearing and/or development can occur onsite, a 100% gopher tortoise survey conducted by a Florida Fish and Wildlife Conservation Commission (FWC) Authorized Agent must be conducted no more than 90 days before the commencement of activity. Any burrows located within a 25-foot radius of the proposed development must be relocated according to the FWC Gopher Tortoise Permitting Guidelines.

No other state or federally listed plant/animal species or their critical habitat(s) were observed on site.

SOIL COMPOSITION:
Based on a review of the U.S. Department of Agriculture (USDA) Web Soil Survey the site is composed of the following soil series:

Ankona and Farmton sands – The Ankona and Farmton series consist of very deep, very poorly drained, slowly permeable soils. These sands formed in sandy and loamy marine sediments. A water table is within depths of 6 to 18 inches for 1 to 4 months, primarily in the winter and early spring and it is at depths of 18 to 40 inches for 6 months or more during the rest of the year in most years. Ankona and Farmton soils are found in broad flats and depressional areas. Typical vegetation consists of longleaf pine, slash pine, saw palmetto, wax myrtle, gallberry, fetterbush, creeping bluestem, chalky bluestem, lopsided Indian grass, low panicums and pineland threeawn. Depressional areas are dominated by marsh vegetation consisting of maidencane, cutgrass, sand cordgrass, and St. John's wort.

Susanna sands – The Susanna series consists of very deep, poorly drained, very slowly permeable soils on broad flats of central and southern Florida. They formed in sandy and loamy marine sediments. Slopes range from 0 to 2 percent. Some areas of Susanna soils are planted to citrus and improved pasture grasses. Other areas are used for community development. Natural vegetation consists of open forest of longleaf pine and slash pine with ground cover of sawpalmetto, running oak, pineland threeawn, inkberry, and fetterbush.

Wauchula sands – The Wauchula series consists of very deep, very poorly or poorly drained, moderately slow or slowly permeable soils on flatwoods on the lower coastal plains. They formed in sandy and loamy marine sediments. Slopes range from 0 to 5 percent. Many areas of this soil have been cleared and are used for tame pasture or range. Some areas are used for citrus and vegetable crops where water control is adequate. The natural vegetation consists of longleaf pine, slash pine, sawpalmetto, with an understory of inkberry, fetter, southern bayberry, and pineland threeawn.

CITY OF FORT PIERCE:

The following lists the City of Fort Pierce Land Development Codes (LDC) 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.

Trees meeting the minimum protection standards as referenced above were observed onsite. A tree survey will be submitted under separate cover and a tree mitigation plan will be required prior to land clearing approval.

SUMMARY:

The subject property evaluated as part of this Environmental Impact Report consists of one tax parcel (Parcel ID # 3403-502-0015-000-5) comprised of 7.0 acres. The property is classified by the St. Lucie County Property Appraiser as vacant residential property (land use code 0000). The subject property is located on the south side of W Weatherbee Road, east of Oleander Avenue, and west of S US Highway 1 in St. Lucie County, Florida.

It is the professional opinion of EDC that native upland habitat associations are located onsite. All tree impacts are proposed to be mitigated via fee payment. Lastly, potential gopher tortoise habitat was observed onsite and a 100% gopher tortoise survey conducted by an FWC Authorized Agent must be conducted no sooner than 90 days prior to the commencement of any land clearing activities.

ENGINEERS ◔ SURVEYORS ◔ ENVIRONMENTAL

Environmental Impact Report

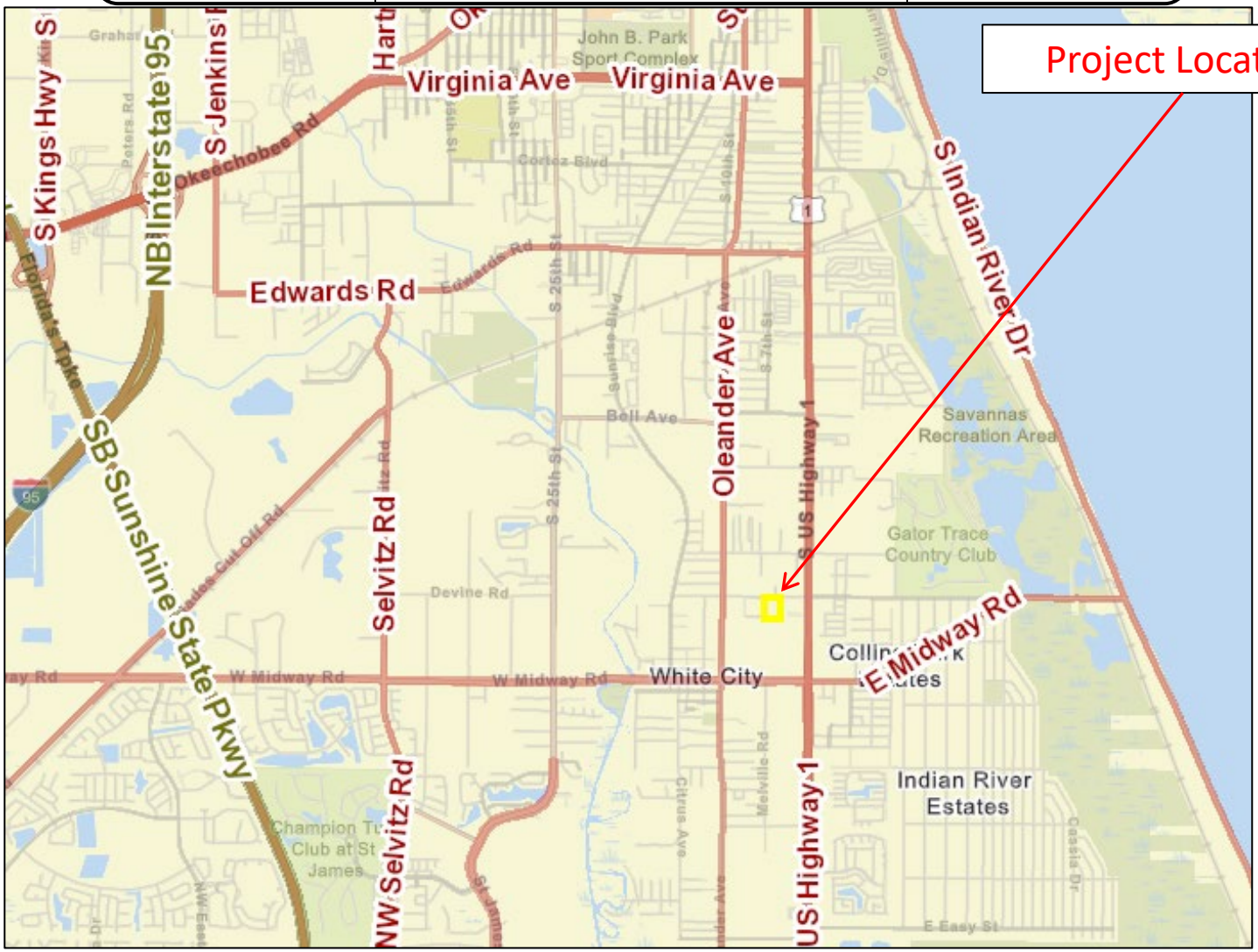
Weatherbee Road

City of Fort Pierce, Florida

Location Map

Project: 22-424	Jeremiah Baron & Co Development	08/01/2024

N



ENGINEERS SURVEYORS ENVIRONMENTAL

Environmental Impact Report

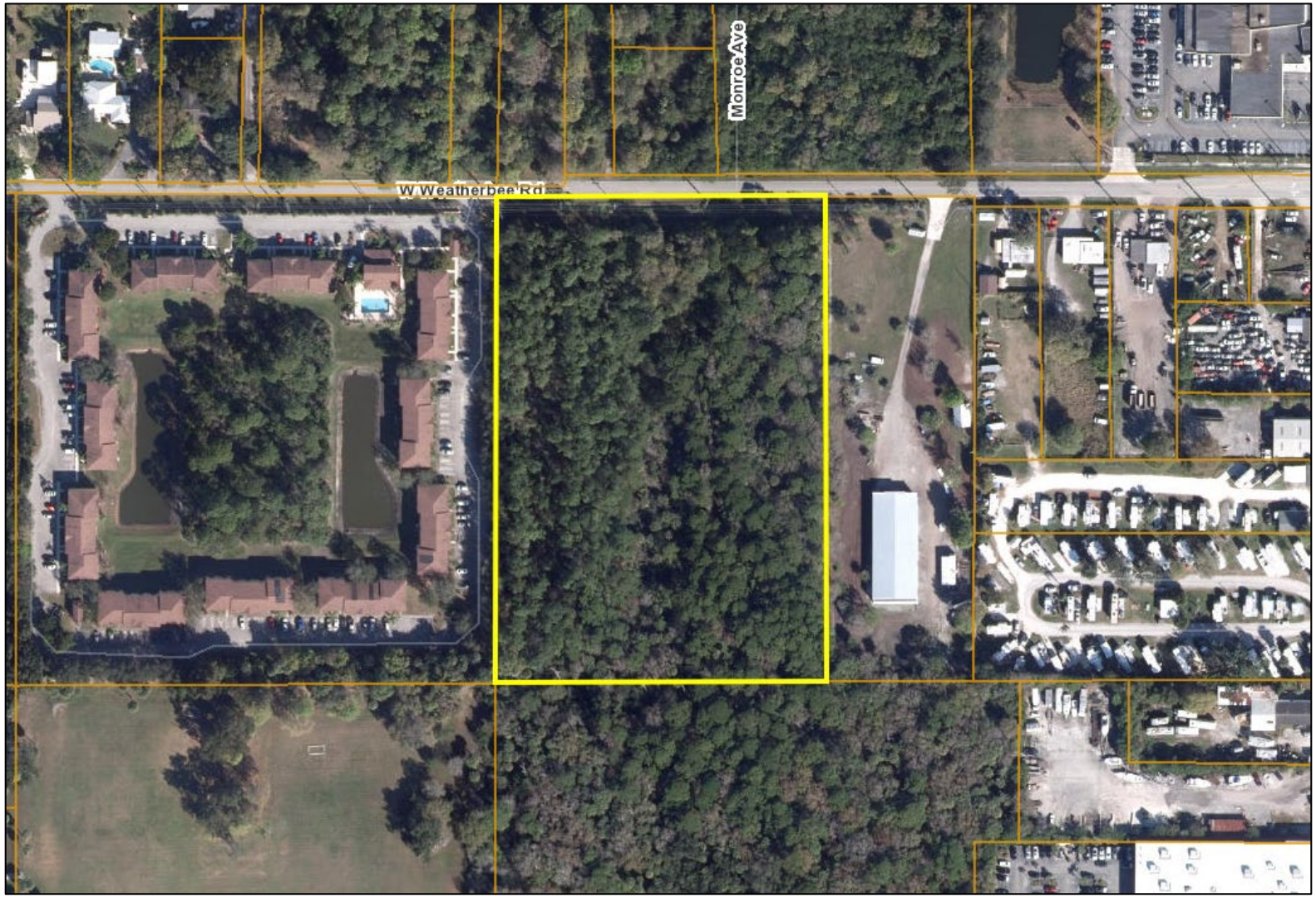
Weatherbee Road

City of Fort Pierce, Florida

Property Appraiser Map

Project: 22-424	Jeremiah Baron & Co Development	08/01/2024

N



ENGINEERS SURVEYORS ENVIRONMENTAL

Environmental Impact Report

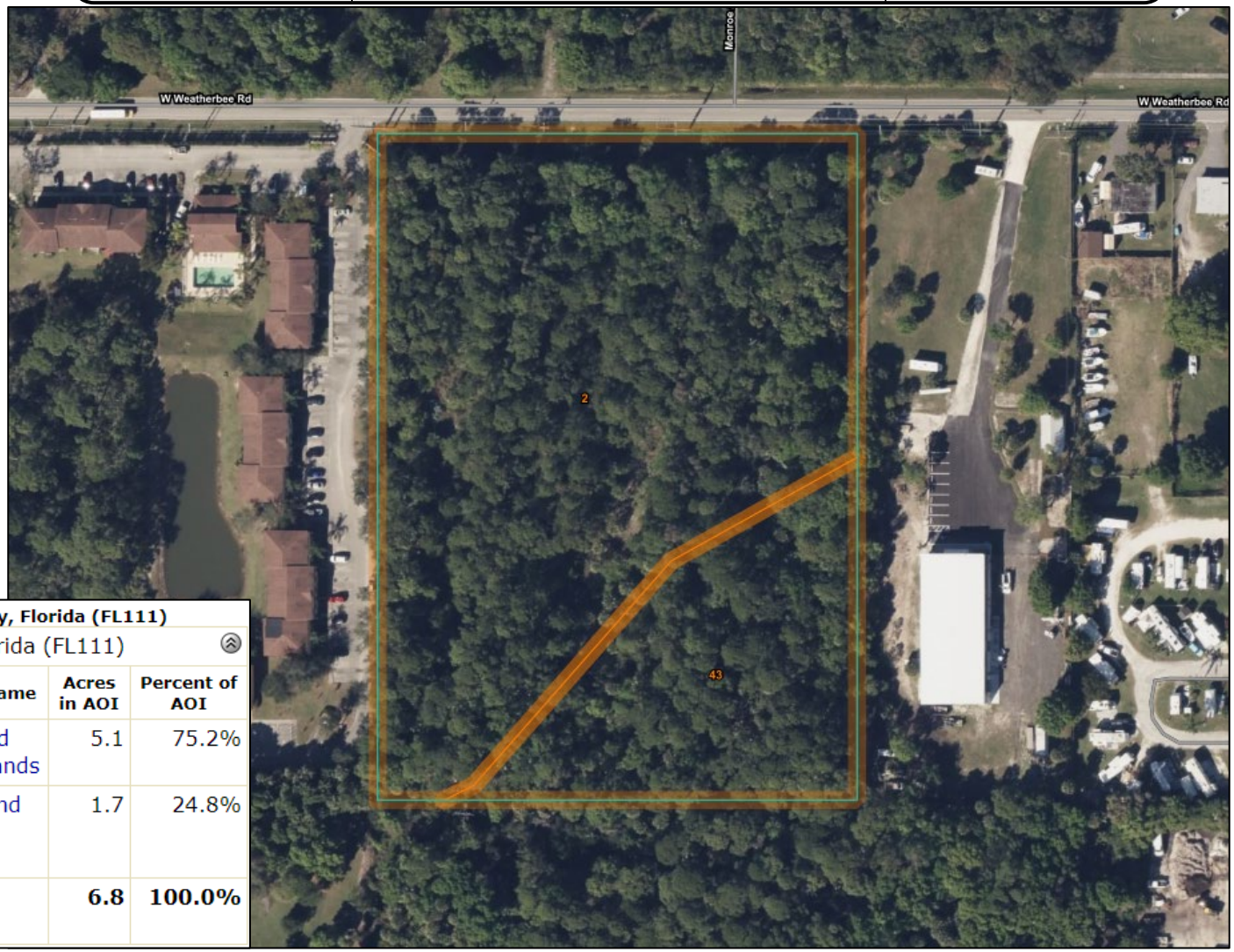
Weatherbee Road

City of Fort Pierce, Florida

USDA Web Soil Survey Map

Project: 22-424	Jeremiah Baron & Co Development	08/01/2024

N



St. Lucie County, Florida (FL111)

St. Lucie County, Florida (FL111)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
2	Ankona and Farmton sands	5.1	75.2%
43	Susanna and Wauchula sands	1.7	24.8%
Totals for Area of Interest		**6.8**	**100.0%**

ENGINEERS SURVEYORS ENVIRONMENTAL

Environmental Impact Report

Weatherbee Road

City of Fort Pierce, Florida

Florida Cooperative Land Cover (CLC) Map

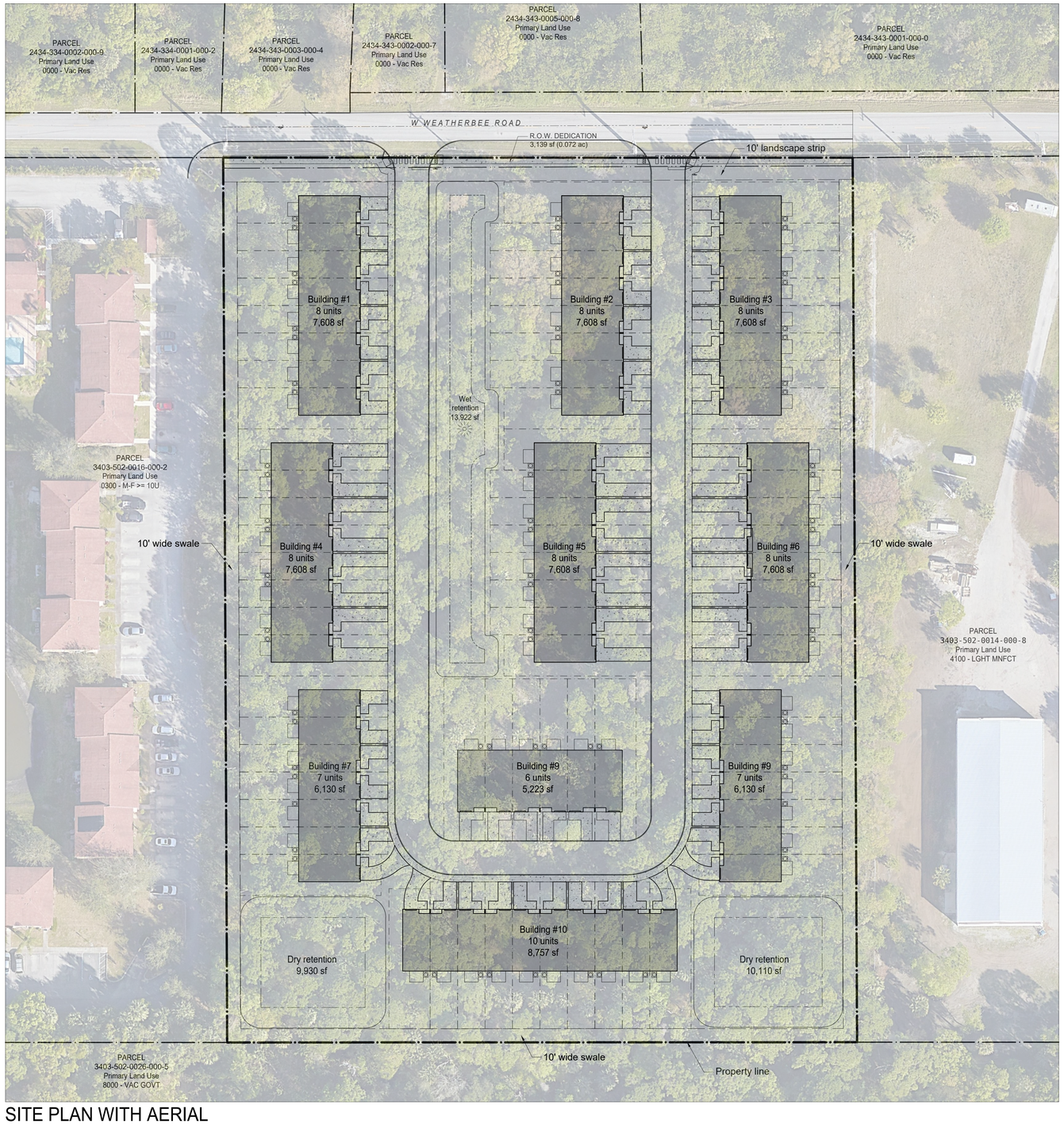
Project: 22-424	Jeremiah Baron & Co Development	08/01/2024

N

Florida CLC Codes	
182112	Urban Open Pine

***This map demonstrates an approximation of habitat boundaries on site.**





SITE PLAN WITH AERIAL

LEGEND

- Project property line
- Neighboring property lines
- Required R.O.W. dedication
- Proposed property lines
- Required landscape strip
- Existing road centerline
- A/C Unit
- Lake fountain
- Asphalt
- Concrete
- Building - Interior



LOCATION (NTS)

SITE DATA

Buildings

Number of 6 unit buildings:	1
Number of 7 unit buildings:	2
Number of 8 unit buildings:	6
Number of 10 unit buildings:	1
TOTAL number of buildings:	10
TOTAL number of dwelling units:	78

Stormwater

Wet retention:	13,922 sf	
Dry retention:	20,040 sf	
TOTAL:	353,962 sf	12.1%

0 40' 80'
1" = 40'

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
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PLANNER
REDTAIL DESIGN GROUP
C/O TOD MOWERY, AICP
100 S. 2ND STREET, UNIT 209
FORT PIERCE, FLORIDA 34950
772.742.1555

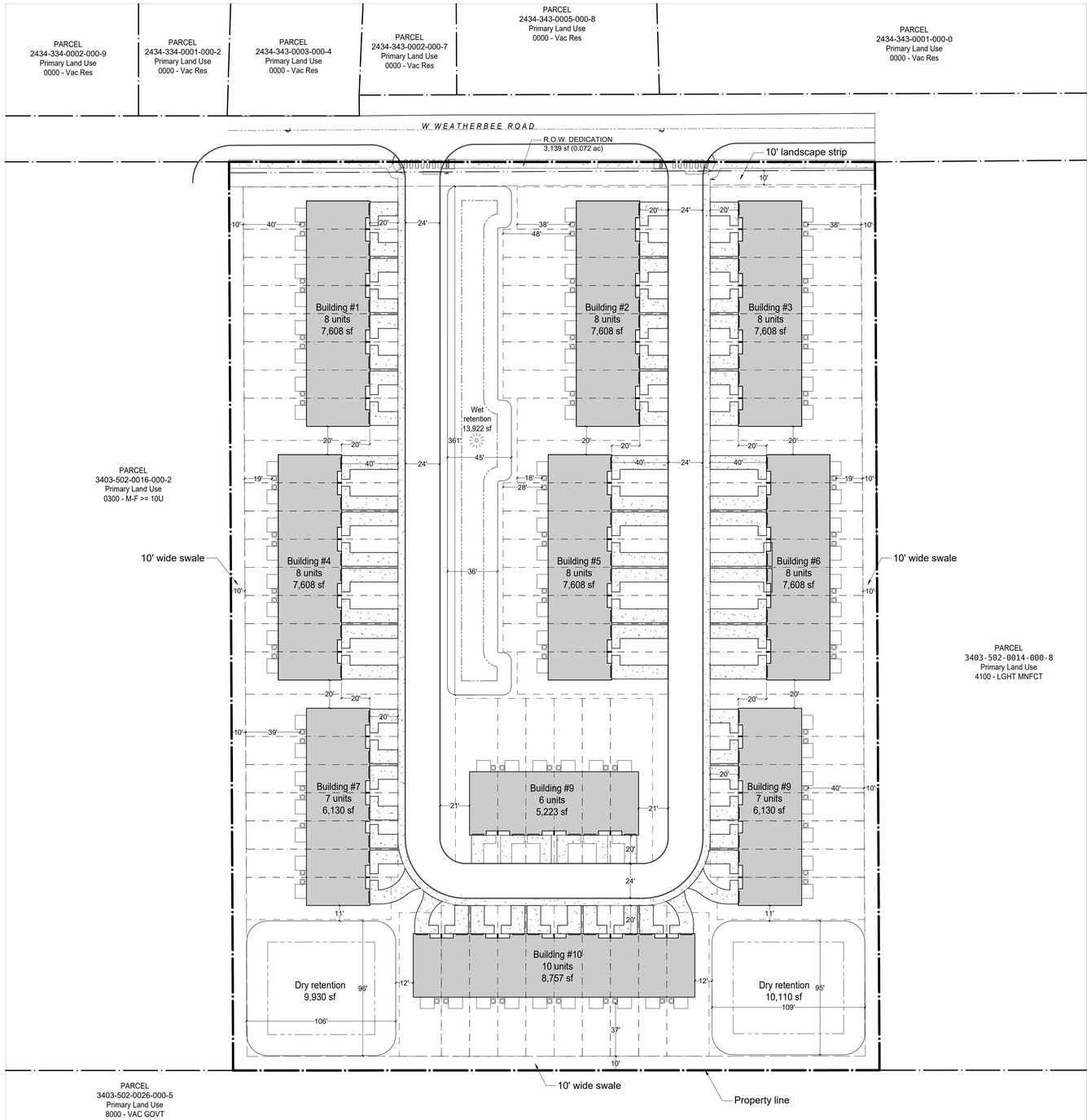
REDTAIL DG
100 S. 2nd Street
Fort Pierce, FL 34950

DESIGNED BY	TM
DRAWN BY	VP
FILENAME	
LAYOUT	
SCALE	1" = 40'
DATE	06/12/2024

REVISION/COMMENTS
DATE

WEATHERBEE ROAD
CONCEPTUAL SITE PLAN
78 DR HORTON'S HOMES
FORT PIERCE FLORIDA

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 ADOPTION BY REDTAIL DG SHALL BE WITHOUT LIABILITY TO REDTAIL DG.



SITE PLAN WITH DIMENSIONS

LEGEND

- Project property line
- Neighboring property lines
- Required R.O.W. dedication
- Proposed property lines
- Required landscape strip
- Existing road centerline
- A/C Unit
- Lake fountain
- Asphalt
- Concrete
- Building - Interior



LOCATION (NTS)

SITE DATA

Buildings

Number of 6 unit buildings:	1
Number of 7 unit buildings:	2
Number of 8 unit buildings:	6
Number of 10 unit buildings:	1
TOTAL number of buildings:	10
TOTAL number of dwelling units:	78

Stormwater

Wet retention:	13,922 sf	
Dry retention:	20,040 sf	
TOTAL:	353,962 sf	12.1%

0 40' 80'
1" = 40'

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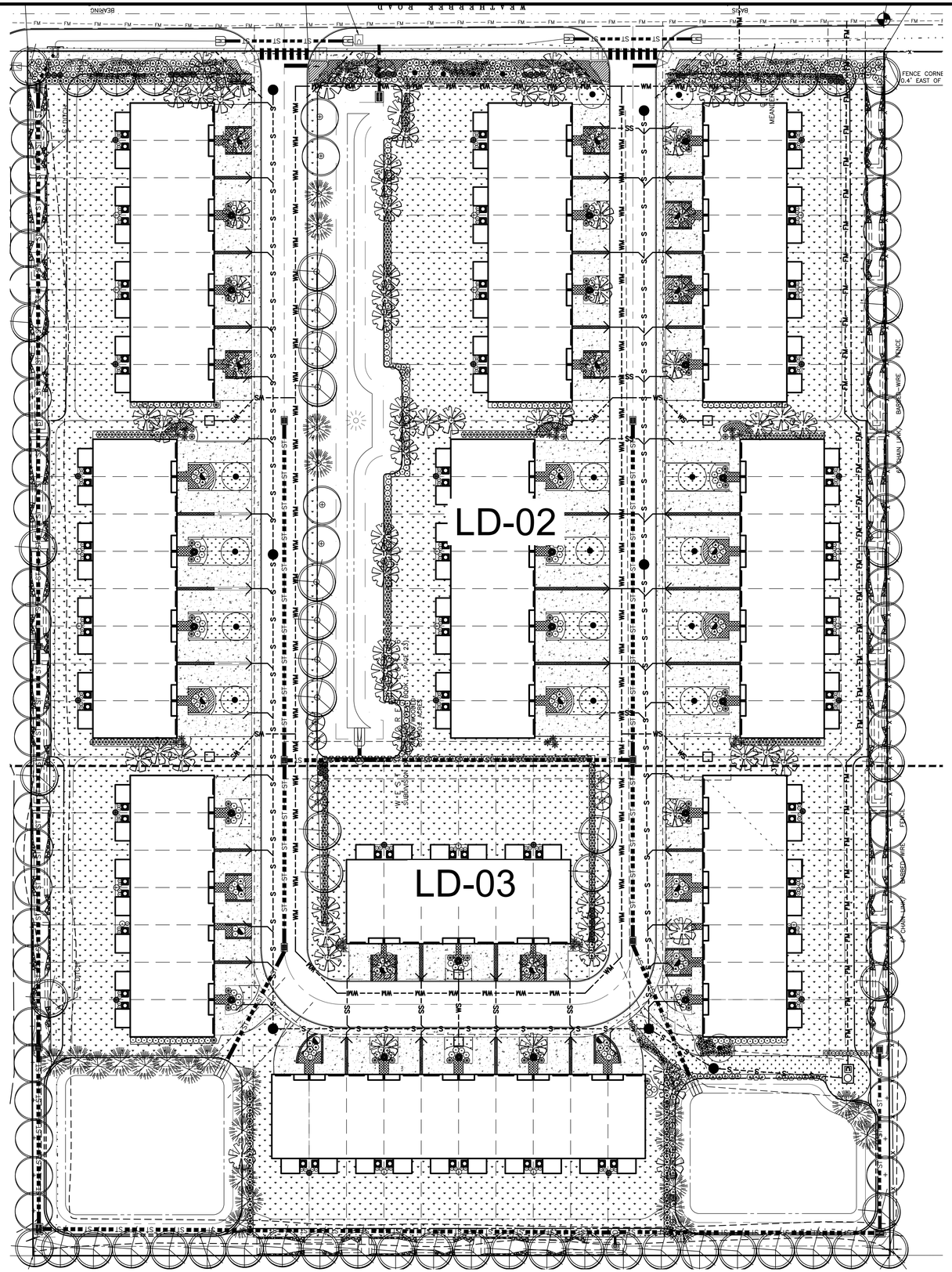

Landscape Data:

Exterior Landscape:

VUA against R/W line:

North: 459'-67' driveway = 392 x10 = 3920 sf/300 — 13 trees

Interior Landscape

Total VUA area:	28,396 sf		
Landscape Area required:	1 sf/15 sf VUA	1,893sf	
Total Interior trees required:	1,893, 1 tree/100 sf		19 trees
Landscape area provided:		9,706 sf	
Total trees required:			32 Trees
Total trees provided:			194 Trees

Landscape Legend:

Symb	Qty	Tag	WU	Name (N) Native (F) Flowering Tree (E) Evergreen
	Trees:			
	57	AR		Red Maple (N)(F) Acer rubrum, FG, 12' Ht, 5' Spr., 2.5" DBH
	19	IC		Dahoon Holly (N)(E) Ilex cassine, FG, 12' ht, 5' Spr., 2.5" DBH
	53	QV		Live Oak (N)(E) Quercus virginiana, FG, 12' Ht, 5' Spr., 2.5" DBH
	80	SP		Cabbage Palm (N) (3:1) relocated from site
	12	TA		Yellow Tabebuia (F) Tabebuia argentea, FG, 12' Ht, 5' Spr., 2.5" DBH
	26	TD		Bald Cypress Taxodium distichum, FG, 12' ht, 5' spr., 2.5" DBH
	Accents:			
	36	CRI		Crinum Lily Crinum asiaticum 'Queen Emma, 7 gal, 36" oc
	20	HIS		Hibiscus Standard, 'Tequila' Hibiscus rosa-sinensis, 7 gal, STD, 36" ht
	20	LEP		New Zealand Tea Tree Leptospermum scoparium, 7 gal, 36" oc
	Shrubs:			
	87	FOR		Florida Privet (N) Foresteria segregata, 3 gal, 24" ht, 36" o.c.
	265	HAM		Dwarf Firebush (N)(F) Hamelis patens 'Compacta', 3 gal, 18" ht, 36" o.c.
	59	HIB		Hibiscus Hibiscus rosa-sinensis, Red, 3 gal, 18" ht,36" oc
	140	MUH		Muhly Grass Muhlenbergia capillaris, 3 gal, 36" oc
	195	MYR		Simpson's Stopper (N) (E) Myrcianthes fragrans, 3 gal, 24"x18", 36" o.c.
	124	SPA		Sand Cordgrass (N) Spartina patens, 3 gal, 36" oc
	165	TRI		Dwarf Fakahatchee Grass (N) Tripsacum floridana, 3 gal, 36" oc
	179	VIB		Dwarf Walters Viburnum (N) Viburnum obovatum 'Mrs Schiller', 3 gal, 24" ht, 24" o.c.
	67	ZAM		Coontie (N)(E) Zamia pumila, 3 gal, 36" oc
	Groundcover:			
	80	LAN		Pineland Lantana (N) Lantana depressa, 1 gal, 6"x12", 36" o.c.
	3,397	LIR		Liriope Liriope muscari 'Emerald Godess', 1 gal, 12" oc
	1,366	PEN		Pentas Pentas lanceolata 'New Look Pink', 1 gal, 6" ht, 12" oc.
	72,918 sf	SOD		Argentine Bahia Sod Paspalum notatum 'Argentine', weed free, laid tight

General Notes:

1. *No landscape materials other than sod grasses may be planted within a 5' radius maintenance area of any underground utility such as water meters, backflow devices, fire hydrants, sanitary sewer cleanouts, and manholes, air release valves, etc.*
2. *No landscaping shall be planted in a manner that would adversely affect utility easements.*
3. *All landscape areas to receive automatic irrigation. Water source to be potable or well and will be determined at time of building permit application.*
4. *Sod around buildings to be St. Augustine 'Bitter Blue' sod. Sod to be weed and disease free and laid tight. All areas within in preservation areas to be seeded with Argentine Bahia grass.*
5. *Not trees to be placed within 6 ' of any hard surface unless root barrier will be installed along the edge of the hard surface. Root barrier to extend at least 5' in either direction from the center of the tree trunk. Refer to Sheet LD-05 for installation details.*
6. *All landscape areas to receive automatic irrigation. Irrigation to provide 100% coverage and 50% overlap. Water source to be a new well and pump.*

N W E S

Graphic Scale

30 15 0 30

Scale: 1" = 30'

Landscape Design Associates
25110 NW 182nd Ave
High Springs, FL 32643
352-210-5765 ph, www.landscapeda.com

Scale: 1" = 40'
Drawn by: SM
Checked by: SM
CADD No.: 23-041 lp.dwg
Date: 8.31.23

Revisions
Date | Comments
9.3.24 | Redesign

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Weatherbee Townhomes

City of Fort Pierce

Overall Landscape Plan

LANDSCAPE ARCHITECT — LA0001733 — STATE OF FLORIDA

9.3.24

LD-01

Weatherbee Road

WEATHERBEE ROAD

Mulch, typ.

Match Line LD-03

Graphic Scale
20 10 0 20
Scale: 1" = 20'

N
W E
S

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Revisions	
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Weatherbee Townhomes

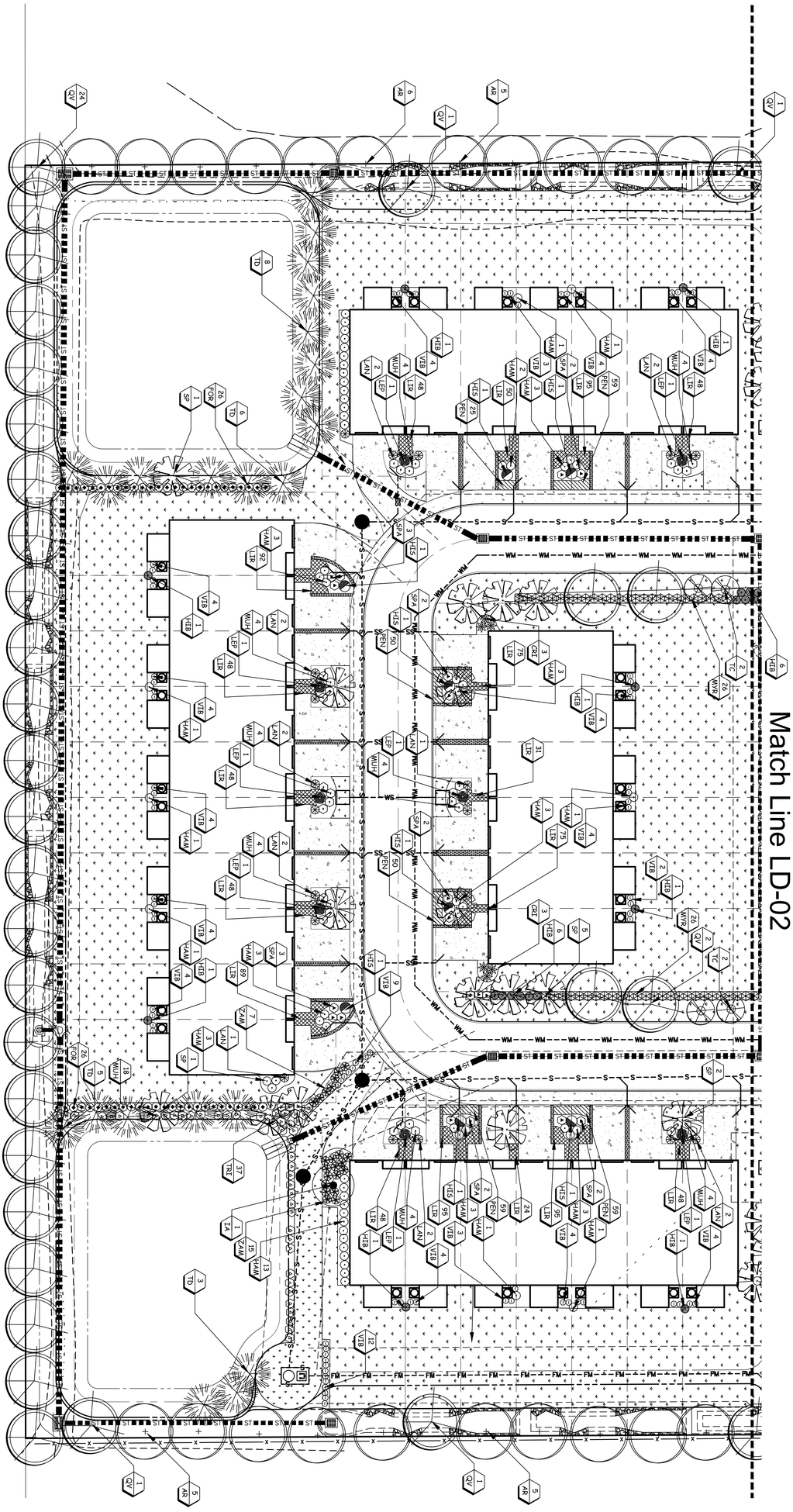
City of Fort Pierce

Landscape Plan

REGISTERED LANDSCAPE ARCHITECT
LA0001733
STATE OF FLORIDA

9.3.24

LD-02



Graphic Scale
Scale: 1" = 20'

Weatherbee Townhomes

City of Fort Pierce

Landscape Plan

LD-03

9.3.24

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PLANTING NOTES:

FERTILIZER

FERTILIZERS SHALL BE SLOW RELEASE, UNIFROM IN COMPOSITION, DRY AND FREE FLOWING. THE FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED BAGS, EACH BEARING THE MANUFACTURERS STATEMENT OF ANALYSIS,AND SHALL MEET THE FOLLOWING REQUIREMENTS: SIX (6) PERCENT NITROGEN,SIX (6) PERCENT PHOSPHOROUS,AND SIX (6) PERCENT POTASSIUM. FERTILIZER SHALL BE APPLIED TO ALL SHRUBS (1/3 LB PER 3 GAL POT, 1/4 LB PER 1 GAL POT) AND GROUNDCOVER. THE SOD STARTER FERTILIZER MIXTURE SHALL BE A 5-10-10 ANALYSIS. A 14-14-14 FERTILIZER ANALYSIS IS REQUIRED ON ALL TREES AND SHRUBS OVER 5' IN HEIGHT (1/2 LB PER 5' OF SPREAD). AGRIFORM TABLETS WITH TWENTY (20) PERCENT NITROGEN, TEN (10) PERCENT PHOSPHOROUS,FIVE (5) PERCENT POTASSIUM IN 21 GRAM SIZES SHALL BE APPLIED ALONG WITH THE FERTILIZER PROCESS (1 WITH 1 GAL PLANTS. 2 WITH 3 GAL PLANTS AND 2 TABLETS PER 1" OF TREE TRUNK CALIPER). MAGNESIUM SULFATE SHALL BE APPLIED TO ALL PALMS AT INSTALLATION AT A RATE OF 1/2 LB PER INCH OF TRUNK CALIPER. MANGANESE SHALL BE APPLIED AT THE SAME RATE.

MULCH

MULCH MATERIAL SHALL BE COLORED 'A' GRADE CERTIFIED RE-CYCLED MULCH AND MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT. MULCH SHALL BE APPLIED TO A MINIMUM OF 3" DEPTH IN PLANTING BEDS. MULCH SHALL NOT BE PLACED WITHIN 6" OF TREE OR PALM TRUNKS.

SOD

THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE PLANT BOARD SPECIFICATIONS,ABSOLUTELY TRUE TO VARIETAL TYPE,AND FREE FROM WEEDS,FUNGUS,INSECTS AND DISEASE OF ANY KIND.

SUBSTITUTIONS

NO SUBSTITUTION OF PLANT MATERIAL TYPES OR SIZES WILL BE ALLOWED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT OF RECORD. CONTAINER GROWN MATERIAL WILL NOT BE ACCEPTED AS A SUBSTITUTE FOR B & B MATERIAL UNLESS PREVIOUSLY APPROVED. INTENDED SUBSTITUTIONS SHALL BE SPELLED OUT IN BID.

MEASUREMENTS

SHADE TREES: HEIGHT SHALL BE MEASURED FROM GROUND TO THE AVERAGE BRANCH HEIGHT OF CANOPY. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINTS OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION.

SHRUBS: HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE POINT WHERE MATURE PLANT GROWTH STOPS. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENT AREA NOT TO INCLUDE ANY TERMINAL GROWTH.

PALMS: CLEAR TRUNK SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE POINT WHERE THE MATURE AGED TRUNK JOINS THE IMMATURE OR GREEN PORTION OF THE TRUNK OR HEAD.

GREY WOOD (G.W.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO TOP OF THE HARDENED TRUNK.

OVERALL HEIGHT (O.A.) - SHALL BE MEASURED FROM THE GROUND AT THE TIME OF INSTALLATION TO THE AVERAGE FROND HEIGHT.

PALMS WITH MARRED OR BURNED TRUNKS WILL NOT BE ACCEPTED.

PLANTING SOIL AND BACKFILL

TOPSOIL SHALL CONSIST OF A STABILIZED MIXTURE OF GROUND YARD TRIMMINGS AND POSSIBLY BIOSOLIDS PROCESSED ACCORDING TO STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GUIDELINES FOR THE PROCESSING AND DISTRIBUTION OF SEWAGE SLUDGE COMPOST. RECYCLED TOPSOIL SHALL ONLY BE OBTAINED FROM A STATE PERMITTED RECYCLING FACILITY WHICH IS ALSO D.O.T. CERTIFIED AND STORES PRODUCT ON A PAD WITH A CURRENT NEMATODE CERTIFICATION FROM FLORIDA DEPARTMENT OF AGRICULTURE. RECYCLED TOPSOIL SHALL HAVE THE FOLLOWING CHARACTERISTICS:

- WEED FREE
- MOISTURE CONTENT 50% BY WEIGHT MAXIMUM
- WATER HOLDING CAPACITY 200% BY WEIGHT MINIMUM
- CARBON TO NITROGEN RATIO LESS THAN 25 TO 1
- ORGANIC MATTER CONTENT 40% BY DRY WEIGHT MINIMUM
- SOLUBLE SALTS LESS THAN 3 MMHOS/CM
- PH RANGE 7.0 - 7.9
- MINIMUM NUTRIENT LEVELS AS FOLLOWS:

MACRO NUTRIENTS: NITROGEN (N) - 1% MINIMUM, WATER INSOLUBLE NITROGEN 90% MINIMUM, PHOSPHORUS (P) - 0.5% MINIMUM, POTASSIUM (K) - 0.2% MINIMUM AND OTHER MACRO AND MICRO NUTRIENTS. THE RECYCLED TOPSOIL SHALL CONTAIN LEVELS OF THOSE MICRO NUTRIENTS NECESSARY FOR PLANT GROWTH. THESE INCLUDE CALCIUM, MAGNESIUM, SULFUR, BORON, COPPER, IRON, MANGANESE AND MOLYBDENUM. TOPSOIL NOT MEETING THESE REQUIREMENTS WILL NOT BE ACCEPTED.

BACKFILL:

ALL NEW AND TRANSPLANTED PLANT MATERIAL (INCLUDING NEW SOD) SHALL BE PLANTED ONLY AFTER PREPARATION OF EXISTING SOIL AS FOLLOWS: SPREAD A LAYER OF 3" DEPTH OF RECYCLED TOPSOIL (AS DEFINED ABOVE) OVER THE ENTIRE PLANTING AREA. THE TOPSOIL SHALL THEN BE UNIFORMLY DISKED, TILLED OR AERIFIED INTO THE EXISTING SOIL TO A DEPTH OF 12" UNDERNEATH SHRUBS AND GROUNDCOVERS, 6" UNDERNEATH SOD AND TO A DEPTH OF 36" FOR THE TREE PITS, WITH THE FOLLOWING EXCEPTION: NO ROTOTILLING OR DISKING SHALL OCCUR CLOSER TO THE TRUNKS OF ESTABLISHED PLANTS THAN ONE HALF (1/2) THE DISTANCE OF THE CANOPY FURTHER OUT FROM THE DRIP LINE OF THE EXISTING PLANT CANOPY. ALL PLANTS, INCLUDING HEDGES AND GROUND COVER SHALL BE PLANTED IN INDIVIDUALLY DUG HOLES AND THE MATERIAL DUG FROM THE HOLES SHALL THEN BE FURTHER MIXED WITH THE PREPARED SITE SOIL PRIOR TO BACKFILLING OF THE PLANTING HOLES AROUND THE ROOT BALLS. NO ADDITIONAL BACKFILL SOIL SHALL BE USED.

AN EXCEPTION ARE PLANTING PITS FOR CABBAGE PALMS, WHICH SHALL BE BACKFILLED WITH CLEAN NATIVE SAND ONLY.

REMOVE EXCESS MATERIAL TO PROVIDE PROPER FINISHED GRADE.

PLANT MATERIALS

TREES, PALMS, SHRUBS,GROUND COVERS:

PLANT SPECIES AND SIZES SHALL CONFORM TO THOSE INDICATED IN THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED 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 NORMAL FOR THE VARIETY AND FLORIDA GRADE NUMBER 1 OR BETTER AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY.

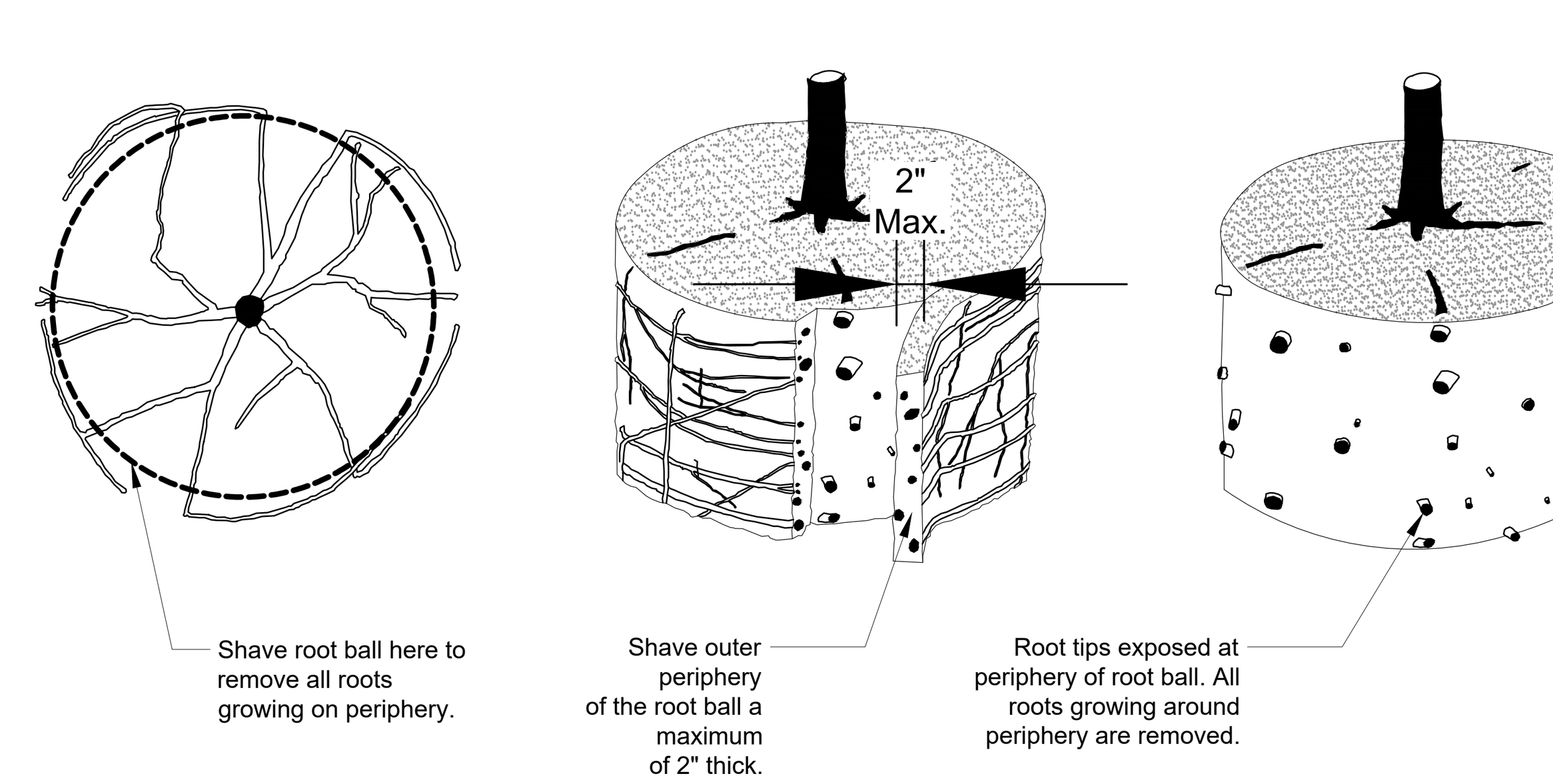
SPECIMEN MEANS AN EXCEPTIONALLY HEAVY, SYMMETRICAL. TIGHTLY KNIT PLANT, SO TRAINED OR FAVORED IN ITS DEVELOPMENT THAT FIRST APPEARANCE IS UNQUESTIONABLE AND IT IS OUTSTANDINGLY SUPERIOR IN FORM, NUMBER OF BRANCHES, COMPACTNESS AND SYMMETRY.

ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL BRANCHED AND FREE OF DISEASE AND INSECT EGGS AND LARVAE AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE LANDSCAPE ARCHITECT, WHERE REQUIREMENTS ARE OMITTED FROM THE PLANT LIST. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE LANDSCAPE ARCHITECT.

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 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.

GENERAL NOTES:

1. THE CONTRACTOR SHALL PERSONALLY ACQUAINT HIM/HER SELF WITH THE EXISTING SITE CONDITIONS AND THE EXTENT AND SCOPE OF WORK REQUIRED.
2. THE PLANT LIST INDICATES THE NAMES, SIZES AND SPACING OF SPECIFIC PLANT MATERIALS. QUANTITIES HAVE BEEN PROVIDED TO THE CONTRACTOR AS A CONVENIENCE, THE CONTRACTOR IS RESPONSIBLE FOR HIS/HER OWN QUANTITY COUNT. IN CASE OF DISCREPANCIES BETWEEN THE DRAWINGS AND PLANT LIST, THE QUANTITIES ON THE PLANT LIST SHALL PREVAIL.
3. NO SUBSTITUTES ON VARIETIES LISTED WILL BE ALLOWED WITHOUT WRITTEN APPROVAL FROM LANDSCAPE ARCHITECT.
4. PLANTS SHALL BE WATERED AS NECESSARY OR WITHIN 24 HOURS AFTER NOTIFICATION BY THE LANDSCAPE ARCHITECT.
5. 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 OF RECORD.
6. ALL PLASTIC FABRIC SHALL BE REMOVED FROM PLANT MATERIAL AT TIME OF INSTALLATION.
7. ALL TREES MUST BE STAKED AS SHOWN ON THE LANDSCAPE DETAIL SHEET WITHIN 24 HRS OF PLANTING. STAKES TO REMAIN FOR A MINIMUM OF 12 MONTH BUT NO LONGER THAN 18 MONTH. CONTRACTOR RESPONSIBLE FOR MAINTENANCE AND REMOVAL OF THE STAKES.
8. ALL TREES MUST BE PRUNED AS PER LANDSCAPE ARCHITECT DIRECTION.
9. ALL SOD EDGES SHALL BE TRIMMED AS PER THE LANDSCAPE ARCHITECTS DIRECTION.
10. ALL SHRUBS, TREES, GROUNDCOVERS, AND SOD AREAS SHALL HAVE IMPROVED SOIL AS PER PLANTING SOIL NOTES. WILDFLOWER AREAS SHALL BE NATIVE TOPSOIL ONLY.
11. DO NOT ALLOW AIR POCKETS TO FROM WHEN BACKFILLING.
12. SOAK PLANTS IMMEDIATELY WITH WATER FOLLOWING PLANTING.
13. MAINTAIN THE ORIGINAL GRADE OF THE TREE BASE.
14. DO NOT BREAK ROOTBALL. SHAVE ROOTBALL OF TREES PER DETAIL BELOW.
15. ALL PLANTS SHALL BE HARDY UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE ON LOCALITY OF THE PROJECT.
16. THE LANDSCAPE CONTRACTOR SHALL WATER, MULCH, WEED, PRUNE,, AND OTHERWISE MAINTAIN ALL PLANTS, INCLUDING SOD, UNTIL COMPLETION OF THE CONTRACT OR ACCEPTANCE BY THE LANDSCAPE ARCHITECT. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE, PLANTING SAUCERS RESTORED, AND DEFECTIVE WORK CORRECTED.
17. THE LANDSCAPE CONTRACTOR SHALL AT ALL TIMES KEEP THE PREMISES FREE FROM ACCUMULATION OF WASTE MATERIALS OR DEBRIS CAUSED BY THE 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.
18. 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 REPRESENTATIVE SHALL BE PROMPTLY CORRECTED BY THE LANDSCAPE CONTRACTOR.
19. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE IN WRITING FROM THE LANDSCAPE ARCHITECT. AT THE TIME OF FINAL ACCEPTANCE THE ONE (1) YEAR PERIOD SHALL COMMENCE. ANY MATERIALS WHICH HAVE DIED DURING THIS PERIOD SHALL BE PROMPTLY REPLACED WITH SPECIMENS THAT MEET THE MINIMUM REQUIREMENTS CALLED FOR IN THE DRAWINGS. THE LANDSCAPE CONTRACTOR SHALL NOT BE HELD RESPONSIBLE FOR THE DEATH OR DAMAGE RESULTING FROM LIGHTNING, VANDALISM, AUTOMOBILES OR FROM NEGLIGENCE BY THE OWNER. CONTRACTOR SHALL BE RESPONSIBLE FOR WATERING AND OTHERWISE MAINTAINING PLANTS DURING THE GUARANTEE PERIOD UNLESS A WRITTEN AGREEMENT WITH THE LANDSCAPE ARCHITECT PROVIDES FOR A DIFFERENT ARRANGEMENT.
20. 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 COST FOR THE REMOVAL OF UNSUITABLE OR EXCESS BACKFILL MATERIAL SHALL BE INCLUDED IN THE CONTRACTORS BID TO PERFORM THE WORK PRESENTED IN THIS PLAN SET.
21. NO LANDSCAPING ADDED UNDER THIS PROJECT SHALL BE LOCATED SUCH THAT SAID LANDSCAPING OBSCURES MOTORIST'S VISIBILITY OF ANY EXISTING SIGN(S).
22. 100% OF REQUIRED SHRUBS ARE DROUGHT TOLERANT.



Notes:
1- Shaving to be conducted using a sharp blade or hand saw eliminating no more than needed to remove all roots on the periphery of root ball.

2- Shaving can be performed just prior to planting or after placing in the hole.

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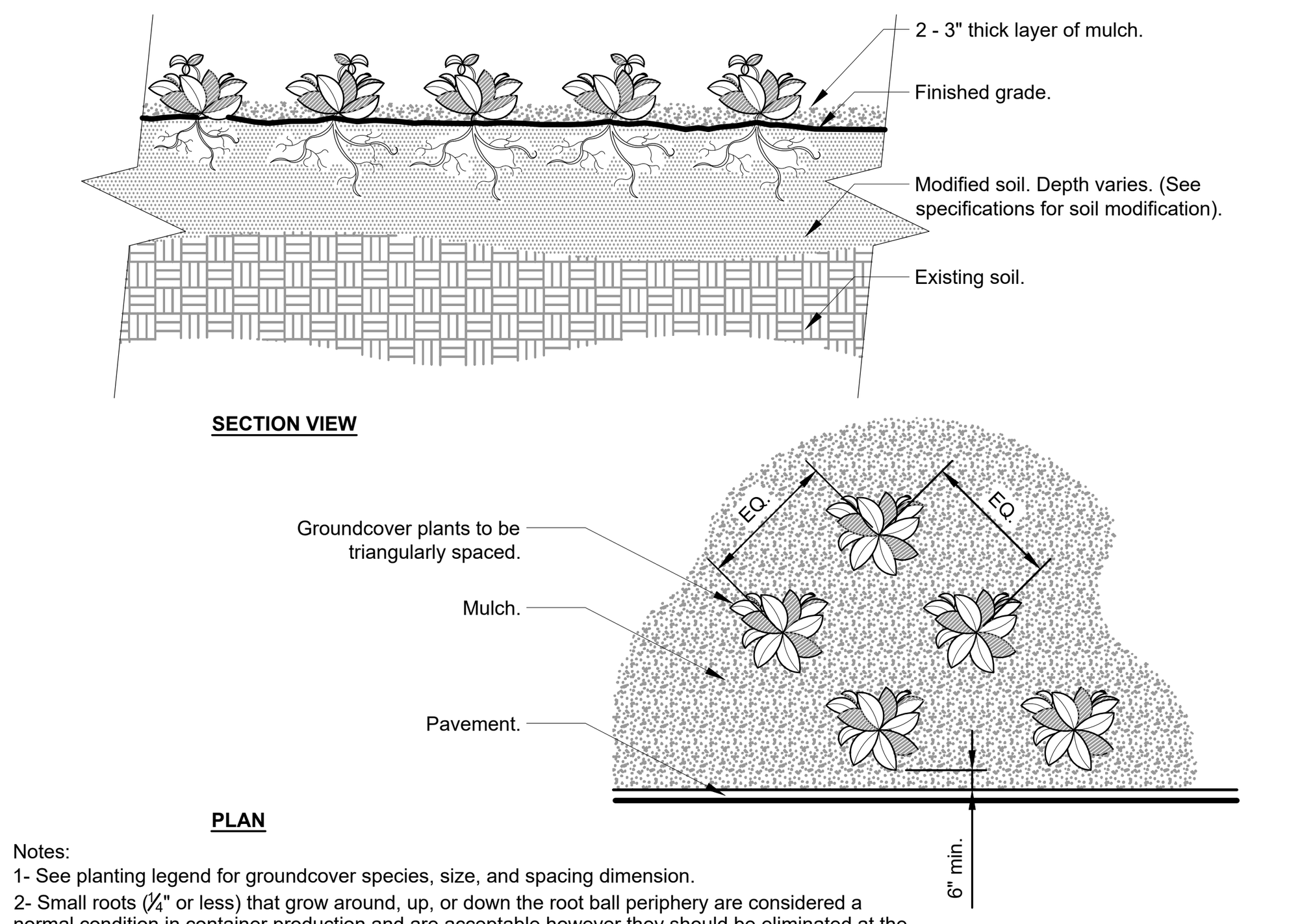
ROOT BALL SHAVING CONTAINER DETAIL



Notes:
1- See planting legend for groundcover species, size, and spacing dimension.
2- Small roots (¼" or less) that grow around, up, or down the root ball periphery are considered a normal condition in container production and are acceptable however they should be eliminated at the time of planting. Roots on the periperhy can be removed at the time of planting. (See root ball shaving container detail).
3- Settle soil around root ball of each groundcover prior to mulching.

GROUNDCOVER

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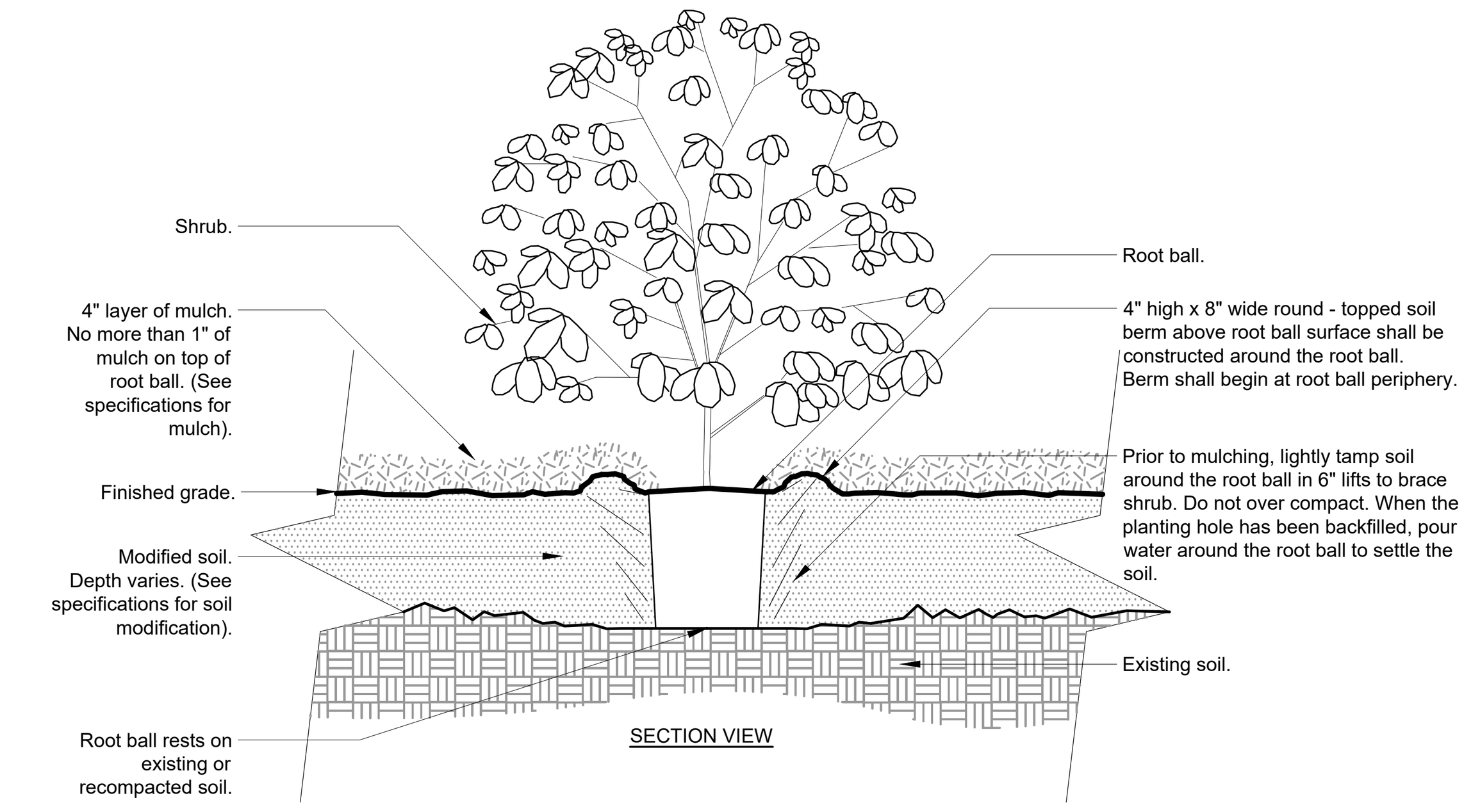

Notes:
1- Shrubs shall be of quality prescribed in the root observations detail and specifications.

2- See specifications for further requirements related to this detail.

SHRUB - MODIFIED SOIL

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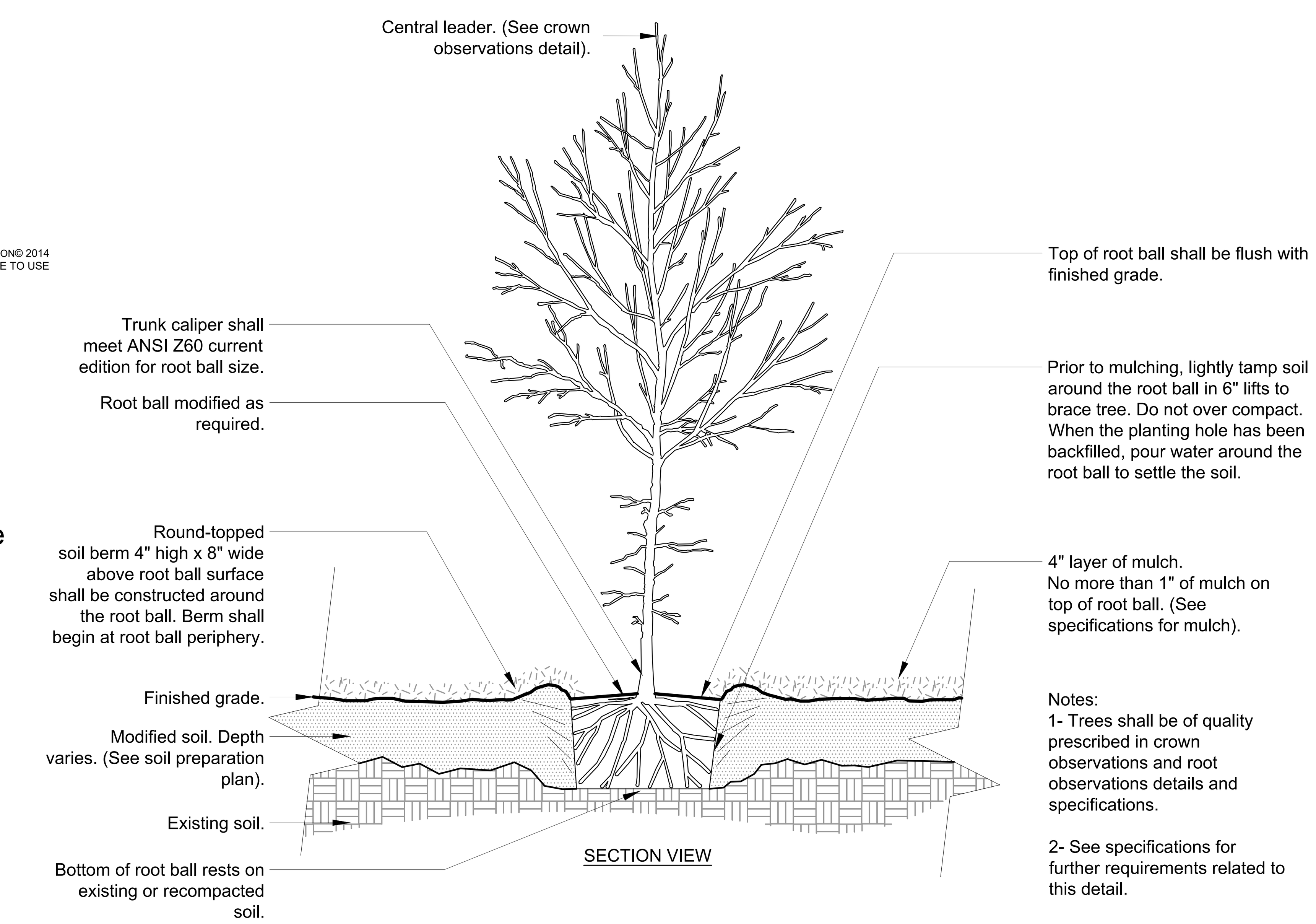

Notes:
1- Trees shall be of quality prescribed in crown observations and root observations details and specifications.

2- See specifications for further requirements related to this detail.

TREE w/ BERM (EXISTING SOIL MODIFIED)

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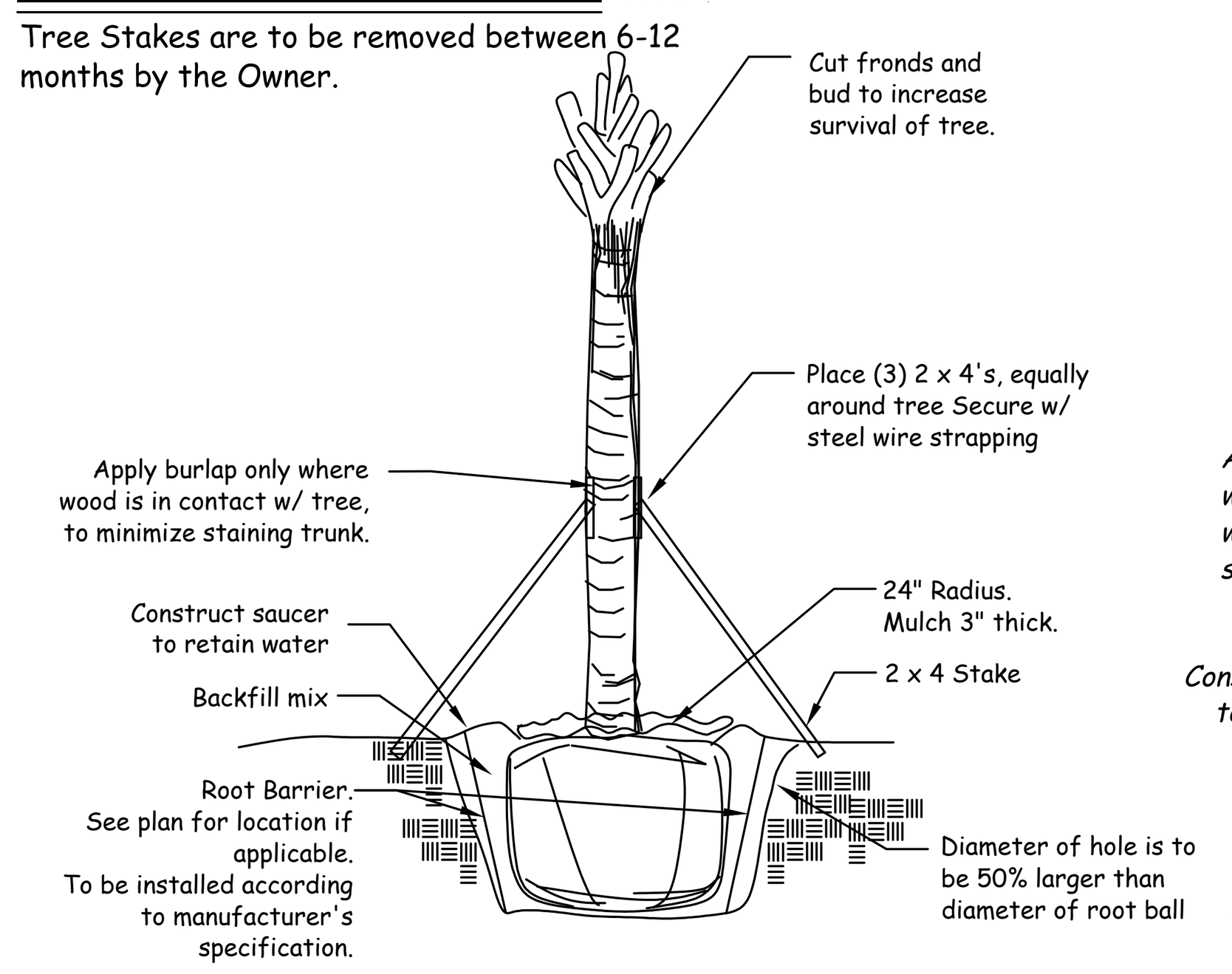
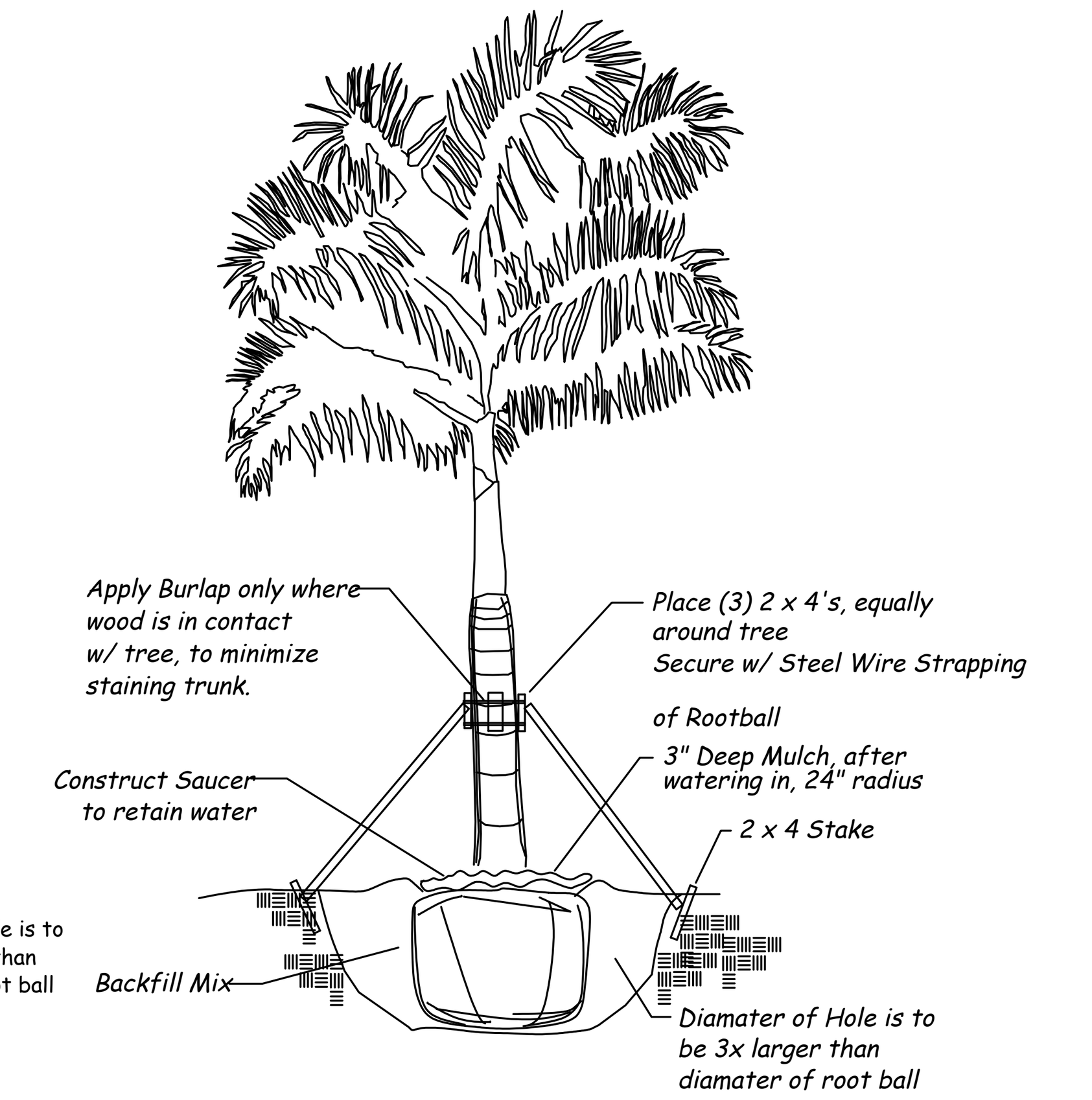
Watering Schedule			
Item	**Water**	**Month**	**No. of Applications**
Palms	20 gal	1	12
Large Trees	30 gal	2	12
Small Trees	20 gal	3	8
Large Shrubs	10 gal	4	8
Small Shrubs	5 gal	5	5
Groundcover	5 gal		
Total Applications			**45**

Palm Planting Detail NTS

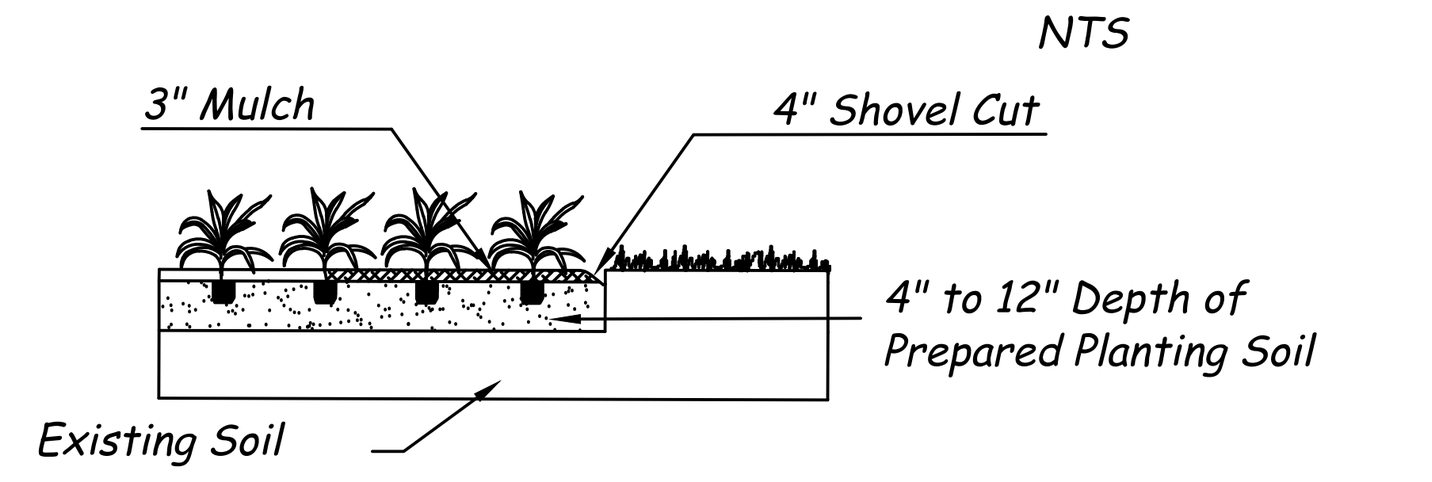
Tree Stakes are to be removed between 6-12 months by the Owner.



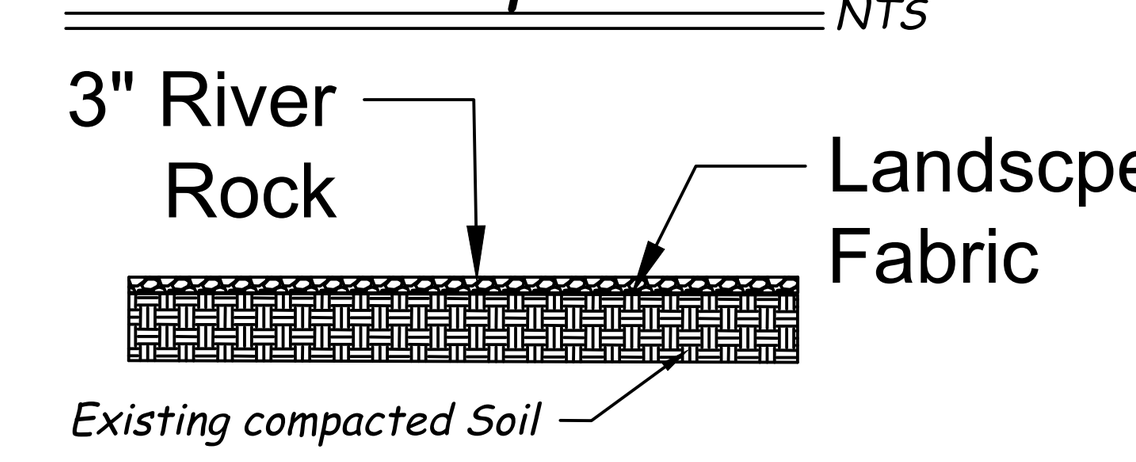


Planting Edge at Sod Detail

NTS



Gravel Strip Detail NTS



ABBREVIATIONS:

C.T.- CLEAR TRUNK
Ht.- HEIGHT
O.C.- ON CENTER
Spr.- SPREAD

Landscape Design Associates
25110 NW 182nd Ave
High Springs, FL 32643
352-210-5765 ph, www.landscapeda.com

Scale:	NTS
Drawn by:	SM
Checked by:	SM
CADD No.:	23-041 lp.dwg
Date:	8.31.23

Revisions	
Date	Comments
9.3.24	Redesign

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Weatherbee Townhomes

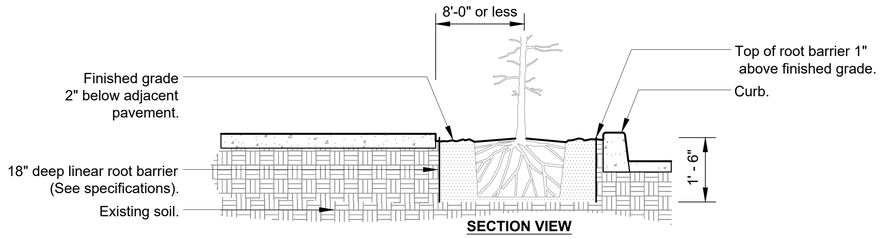
City of Fort Pierce

Landscape Notes & Details

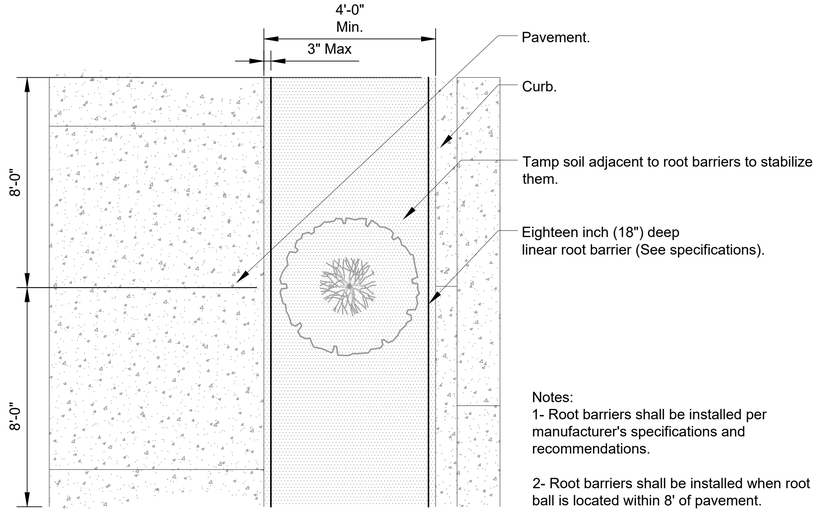
REGISTERED LANDSCAPE ARCHITECT
SABINE LANG-MARCKS
LA0001733
STATE OF FLORIDA

9.3.24

LD-04



SECTION VIEW



PLAN VIEW

Notes:
1- Root barriers shall be installed per manufacturer's specifications and recommendations.

2- Root barriers shall be installed when root ball is located within 8' of pavement.

ROOT BARRIERS

S-X

3/8" = 1'-0"

URBAN TREE FOUNDATION © 2014
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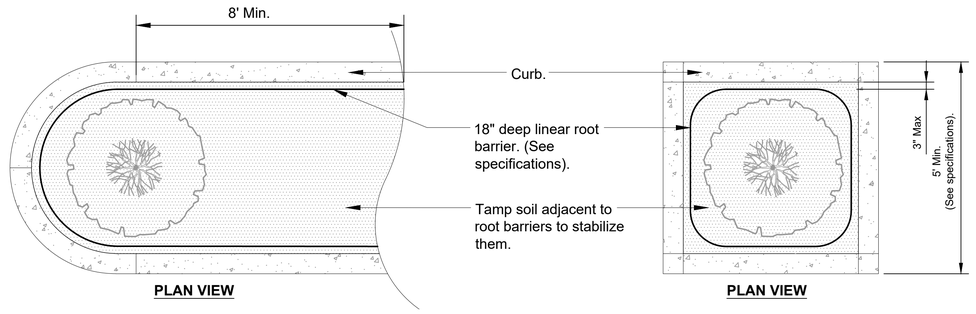
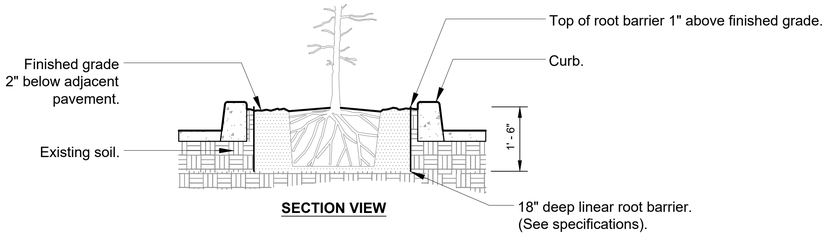
L_site preparation_rootbarriers



PLAN VIEW **PLAN VIEW**



SECTION VIEW

Notes:
1- Root barriers shall be installed per manufacturer's specifications and recommendations.

2- Root barriers shall be installed when root ball is located within 6' of pavement.

ROOT BARRIERS - PARKING LOT ISLANDS

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Landscape Design Associates
25110 NW 182nd Ave
High Springs, FL 32643
352-210-5765 ph, www.landscapeda.com

Scale: NTS
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Revisions
Date | Comments
9.3.24 | Redesign

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Weatherbee Townhomes
City of Fort Pierce
Landscape Notes & Details

REGISTERED LANDSCAPE ARCHITECT
LA0001735
STATE OF FLORIDA

9.3.24

LD-05

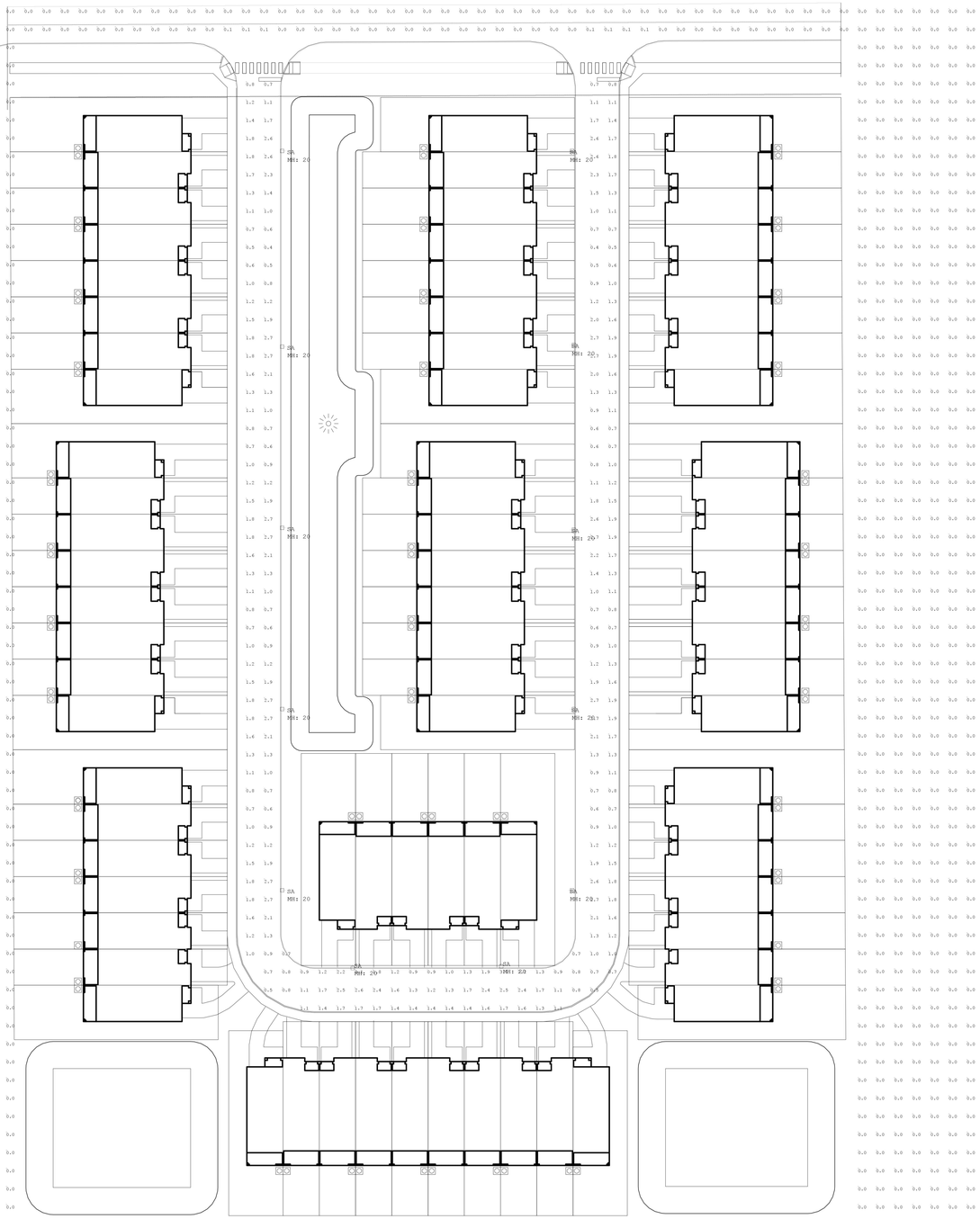
Redtail DG
100 S. 2nd Street
Fort Pierce, Florida 34950
(772) 742 1555
redtaildg.com
todm@redtaildg.com

RENDERING OF SIGNS

No signs have been proposed for the development.

Sincerely,

Vlada Peterka
Senior Project Manager
Redtail DG



Weatherbee Road Townhomes
Lighting Plan

Luminaire Schedule

Symbol	Qty	Label	Arrangement	Description	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	12	SA	Single	Cree Lighting OSQM-C-9L-40K7-3B-XX-NM-XX, Single Head	0.900	5875	55	660

Calculation Summary

Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
Roadway	Illuminance	Fc	1.41	3.1	0.4	3.53	7.75
Spill	Illuminance	Fc	0.00	0.1	0.0	N.A.	N.A.

A Traffic Impact Analysis for:

Weatherbee Road Development

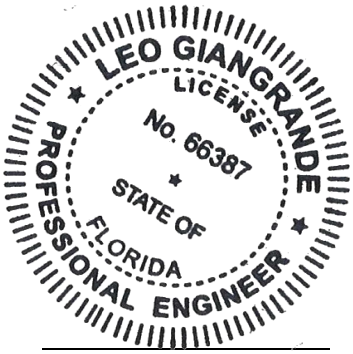
Located in:
City of Fort Pierce, Florida

Prepared for:
City of Fort Pierce Planning Department

Prepared by:

GIANGRANDE
Engineering & Planning
Engineering Business License: 30901
710 SE Ocean Boulevard
Stuart Florida, 34994
(772) 888-9076

August 2024



Leo D. Giangrande, P.E
PE Reg #66387

This item has been digitally signed and sealed by Leo D. Giangrande 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.

TABLE OF CONTENTS

Introduction……1
Trip Generation……2
Trip Distribution……2
Background & Build-out Conditions……4
Concurrency Requirements……6
Project Access……6
Turn Lane Evaluation……6
Conclusion……7

LIST OF FIGURES

Figure 1 – Site Location……1
Figure 2 – Trip Distribution AM Peak Hour……3
Figure 3 – Trip Distribution PM Peak Hour……4
Figure 4 – Driveway Turning Movements……6

LIST OF TABLES

Table 1 – Proposed Trip Generation……2
Table 2 – Build-out Calculation AM Peak Hour……5
Table 3 – Build-out Calculation PM Peak Hour……5

APPENDICES

ITE Trip Generation 11th Edition Reference Sheets
St Lucie County TPO Fall 2023 Roadway Level of Service Inventory Report
Conceptual Site Plan

EXECUTIVE SUMMARY

The purpose of this report is to determine traffic impact of the Weatherbee Road Development new construction project. The 7.0-acre site is located 1,000 feet west of US Highway 1 on the south side of Weatherbee Road in Fort Pierce, Florida. The project location is shown in **Figure 1** in the report. The site will include two driveways, which can be seen on the ***Site Plan*** located in the appendix.

Based on the City Code of Ordinances Section 105-5.f.2.b the small scale impact with 27 peak hour peak direction trips (both AM and PM) analyzed within a 1.5 mile radius is not expected to have adverse impacts to the surrounding roadway network based on build-out conditions.

The distribution of trips produces an impact less than 1.0% of the roadway level of service after the first adjacent roadway.

The background historical growth was analyzed to the 5-year outlook to 2029 as specified in the City Code.

Driveway queueing length is fully provided on-site.

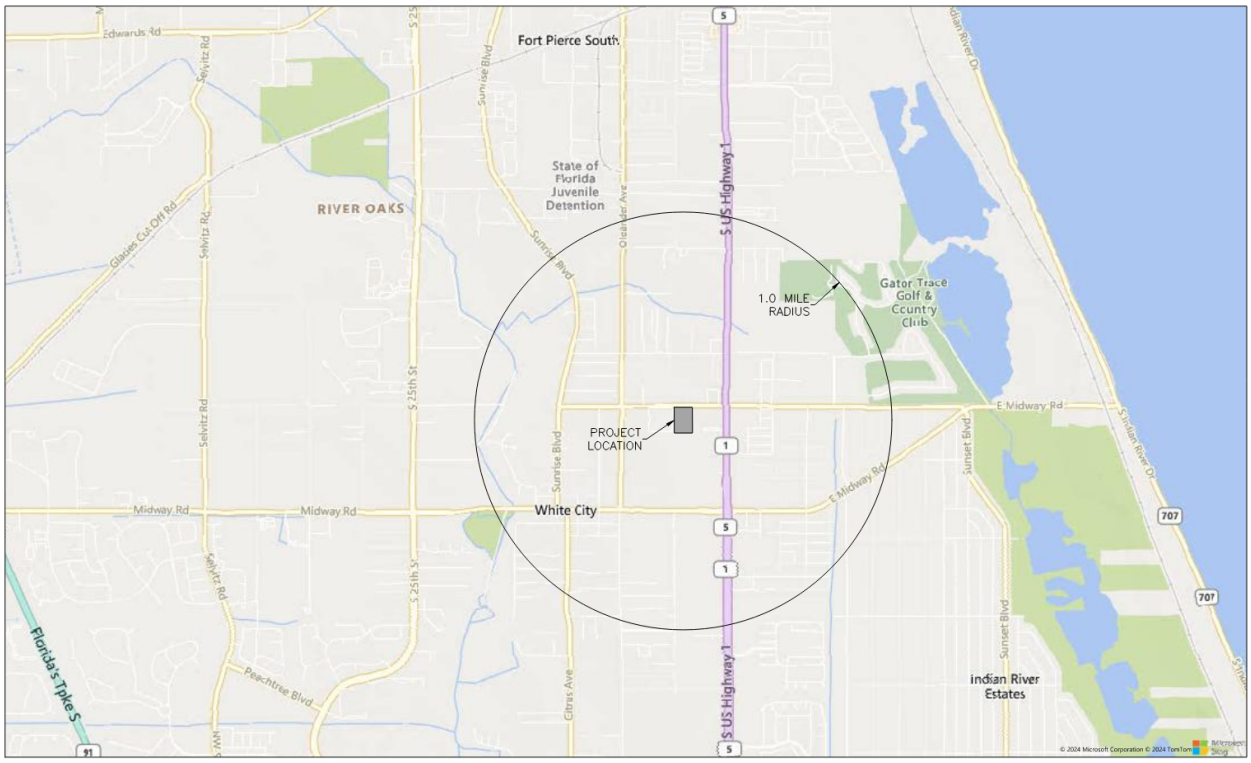
Auxiliary lanes are not warranted for the small impact according to the standards of the latest FDOT access management guidebook.

The projected volumes generated by the anticipated uses indicate that the adjacent roadway links will operate at an acceptable Level of Service with no need for mitigation improvements. The existing roadway network is capable of accommodating the additional new vehicle trips the development is predicted to generate.

INTRODUCTION

Giangrande Engineering and Planning (GEP) has prepared this traffic report as part of the site plan application for the Weatherbee Road Development new construction project. The 7.0-acre site is located 1,000 feet west of US Highway 1 on the south side of Weatherbee Road in Fort Pierce, Florida. The Parcel Identification Number is 3403-502-0015-000-5. **Figure 1** below details the location of the site in relation to the surrounding roadway network.

Figure 1 – Site Location



TRIP GENERATION

The peak hour traffic generation for the site is available from the Institute of Transportation Engineers (ITE) Trip Generation Manual 11th Edition Web-Based App for Multifamily Housing (Low-Rise) (ITE Code 220). Pass-by reduction percentages were not utilized for this type of land use. The calculation of the trip generation is summarized below in **Table 1**.

Table 1 – Proposed Trip Generation

Weatherbee Road Apartments, Fort Pierce, Florida										
ITE Trip Generation Rates 11th Edition - Peak Hour of Adjacent Street- Fitted Curve										
ITE		Ind.		AM			PM			ADT
Code	Land Use	Variables	Units	In	Out	Total	In	Out	Total	Total
220	Multifamily Housing (Low-Rise)	78	DU's	12	36	48	35	20	55	576
		Total		**12**	**36**	**48**	**35**	**20**	**55**	**576**

As determined in the calculation table provided above, the greatest peak hour peak direction impact is for the AM Exiting trips with a total of approximately 36 trips.

Based on the City Code of Ordinances Section 105-5.f.2.b defines this impact as a “minimal scale” project with 9-50 trips with a 1.0 mile radius of impact (as shown in figure 1). The equations and plot charts utilized were derived from the trip generation web-based app and are provided in the appendix of this report for reference.

TRIP DISTRIBUTION

The distribution of trips generally assumes that 77% of the traffic generated will enter/exit from the east via US Highway 1. The remaining 23% will enter/exit from the west via Oleander Avenue.

The development of the trip distributions from the site to the were based on the close proximity to major roadways such as Midway Road, US Highway 1 and Indian River Drive which connect drivers to arterial roads and destinations such as Fort Pierce to the north or Port St Lucie to the south. ***Figure 2 and 3*** (pages 3 and 4) is provided as a graphical representation of the 1.5-mile radius of influence trip distribution percentages to roadway links and intersections within the study area for both the AM and PM peak hour directional distributions.

Figure 2 – AM Peak Hour Trip Distribution

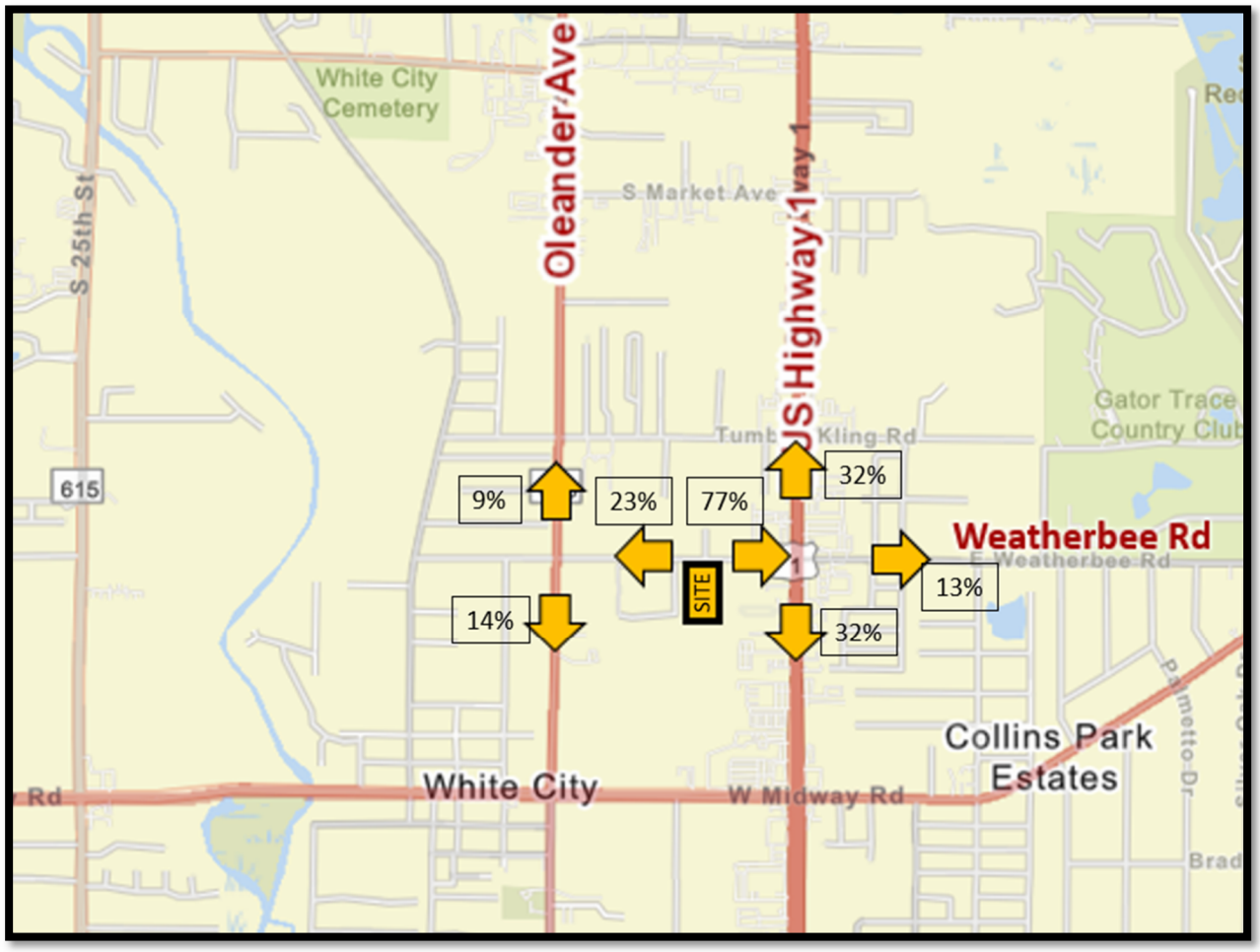
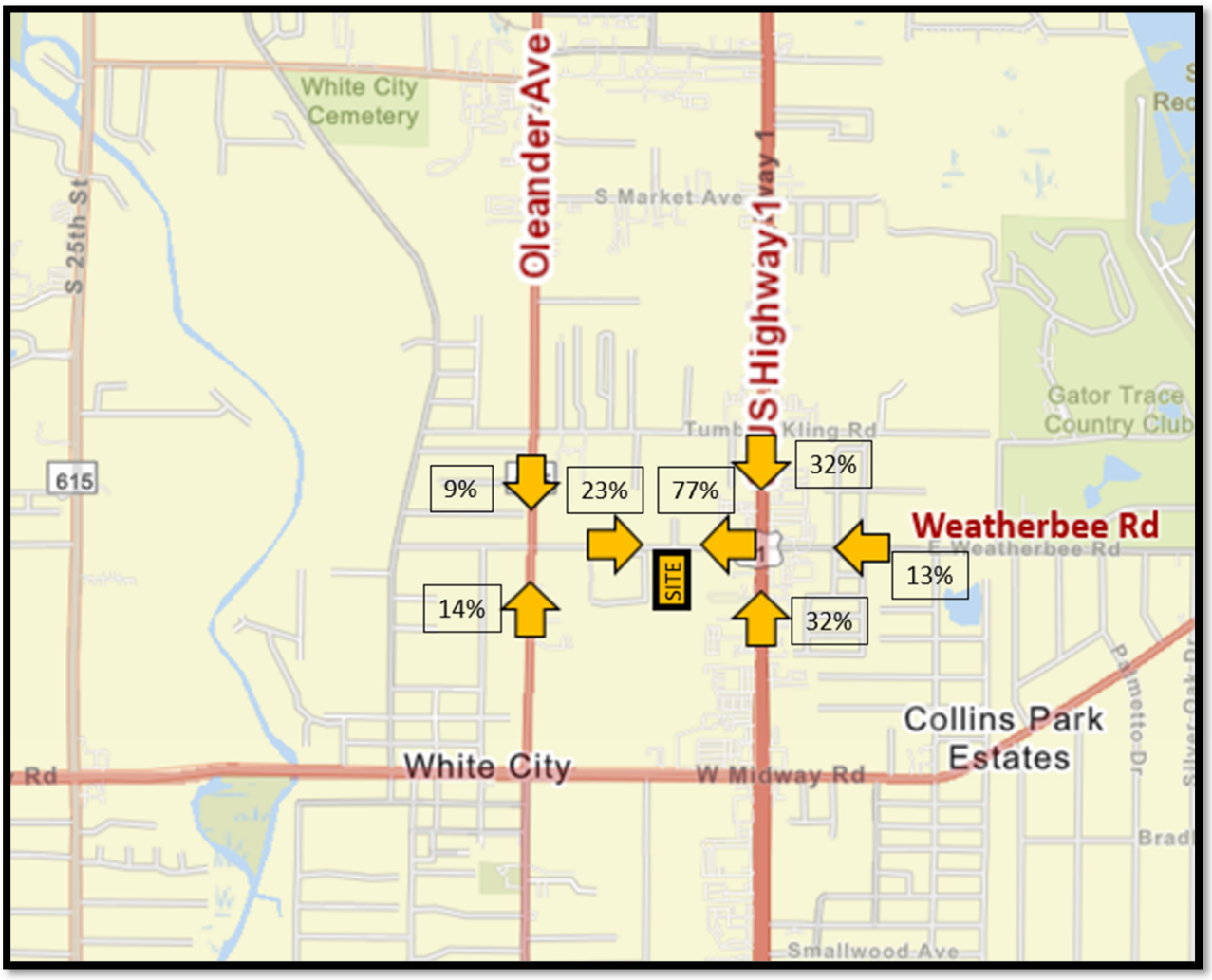


Figure 3 – PM Peak Hour Trip Distribution



BACKGROUND & BUILD-OUT CONDITIONS

Background conditions for the 5-year forecasting to 2029 according to Section 105-5.f.2.b.3. Historical growth was calculated using the annual growth percentages calculated in the Saint Lucie TPO - Traffic Data Management System. And current roadway volumes were determined using the latest Roadway Level of Service (LOS) Inventory Report (Fall 2024) as shown in ***Table 2 and 3*** (page 5). The historical growth plots and applicable pages of the roadway inventory can be found in the appendix for reference.

Table 2 – AM Peak Hour Build-out Calculation

Segment Number	Road Name	From	To	Type	2023 AADT	2024 PH (dir) AM Existing	Annual Growth	2029 PH (dir) Growth	Project Assign.	Project Trips	2029 PH (dir) Build-out	LOS	Service Volume	Project % of Service	2% Test	Concurrency Test
1	Weatherbee (EB)	Site	US-1	2-ln	3,164	198	2.05%	219	77%	28	247	C	750	3.7%	15	OK
2	Weatherbee (WB)	Site	Oleander Ave	2-ln	3,164	198	2.05%	219	23%	8	227	C	750	1.1%	15	OK
3	US-1 (NB)	Weatherbee Rd	Farmer's Market	2-ln	30,959	1,522	1.00%	1,600	32%	12	1,611	C	2,000	0.6%	40	OK
4	US-1 (SB)	Weatherbee Rd	Midway Rd	2-ln	30,959	1,522	1.00%	1,600	32%	12	1,611	C	2100	0.5%	42	OK
5	Weatherbee (EB)	US-1	Midway Rd	2-ln	5,987	379	1.22%	403	13%	5	407	D	750	0.6%	15	OK
6	Oleander (NB)	Weatherbee Rd	Bell Ave	2-ln	6,049	342	1.00%	359	9%	3	363	D	540	0.6%	11	OK
7	Oleander (SB)	Weatherbee Rd	Midway Rd	2-ln	6,049	342	1.00%	359	14%	5	364	C	750	0.7%	15	OK

Table 3 – PM Peak Hour Build-out Calculation

Segment Number	Road Name	From	To	Type	2021 AADT	2024 PH (dir) PM Existing	Annual Growth	2029 PH (dir) Growth	Project Assign.	Project Trips	2029 PH (dir) Build-out	LOS	Service Volume*	Project % of Service	2% Test	Concurrency Test
1	Weatherbee (WB)	Site	US-1	2-ln	3,164	180	2.05%	199	77%	27	226	C	750	3.6%	15	OK
2	Weatherbee (EB)	Site	Oleander Ave	2-ln	3,164	180	2.05%	199	23%	8	207	C	750	1.1%	15	OK
3	US-1 (SB)	Weatherbee Rd	Farmer's Market	2-ln	30,959	1,522	1.00%	1,600	32%	11	1,611	C	2,000	0.6%	40	OK
4	US-1 (NB)	Weatherbee Rd	Midway Rd	2-ln	30,959	1,522	1.00%	1,600	32%	11	1,611	C	2100	0.5%	42	OK
5	Weatherbee (WB)	US-1	Midway Rd	2-ln	5,987	379	1.22%	403	13%	5	407	D	750	0.6%	15	OK
6	Oleander (SB)	Weatherbee Rd	Bell Ave	2-ln	6,049	345	1.00%	363	9%	3	366	D	540	0.6%	11	OK
7	Oleander (NB)	Weatherbee Rd	Midway Rd	2-ln	6,049	345	1.00%	363	14%	5	367	C	750	0.7%	15	OK

CONCURRENCY REQUIREMENTS

City traffic criteria set forth in Section 105-5.f provides the basis for concurrency. Included in the ordinance are specific requirements for determining the extent of the study area and the links impacted by the development. Project trips have been added to the fall 2024 growth trips to determine 5-year build-out trips. ***Table 2*** (above) is provided to show that concurrency has been satisfied as the road segments will be below capacity in the 2029 build-out year with future project trip impacts of less than 1.0% when fully distributed off the adjacent roadway (Weatherbee Road).

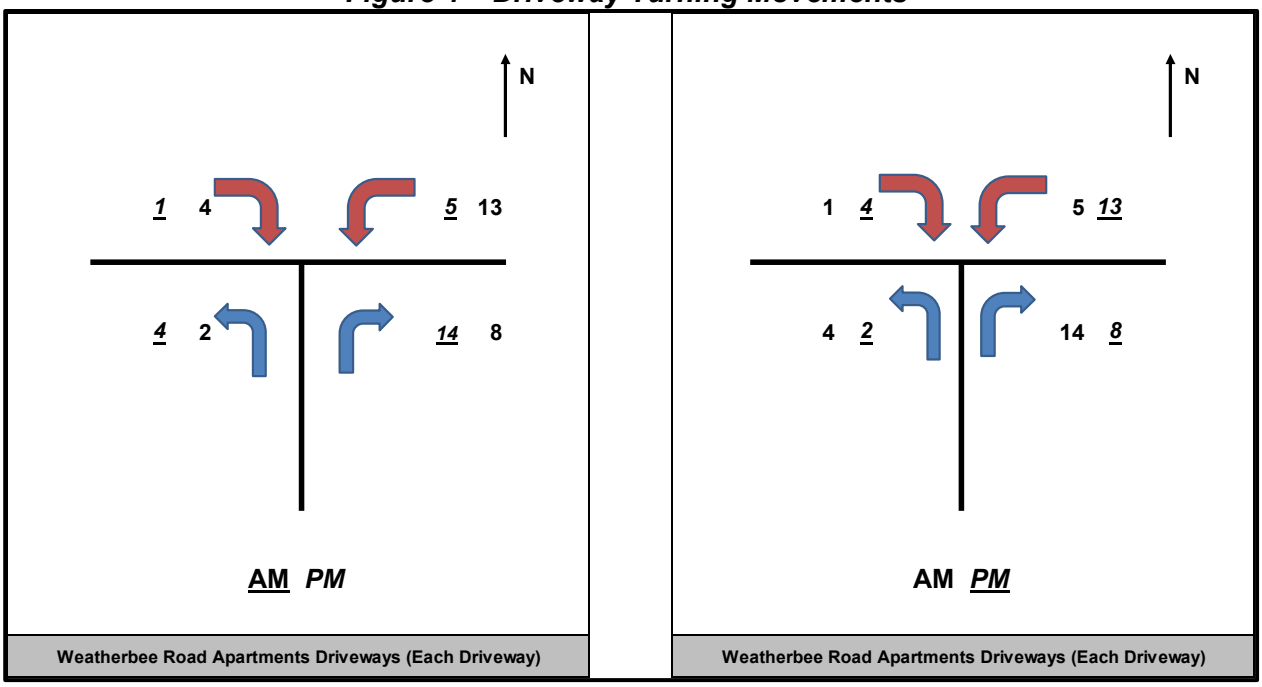
PROJECT ACCESS

The site is located 1,000-feet west of US Highway 1. The site proposes to have two driveways and a looped access road through the development providing ample queuing storage on-site. Both driveways will provide full access to Weatherbee Road. Please see the attached ***Site Plan.*** The value of distributed trips is not expected to impact any traffic operations at the driveways which will be two-way stop-controlled (TWSC) intersections or the downstream intersections (TWSC Weatherbee RD and Oleander Ave and the signalized intersection of Weatherbee and US1). Turning movements equally divided between the two site driveways provided in the ***Figure 4*** represent daily, AM and PM peak hour traffic volumes.

TURN LANE EVALUATION

An evaluation to determine the need for a dedicated left/right turn lanes for the main entrance was performed. Referencing the latest 2019 FDOT Access Management Guidebook and based on the surrounding context of Weatherbee Road, dedicated turn lanes at the site entrances are not found to be warranted or necessary for this project. The current level of service is not anticipated to be impacted and the adjacent road will not benefit from the inclusion of auxiliary lanes.

Figure 4 – Driveway Turning Movements



CONCLUSION

Based on the City Code of Ordinances Section 105-5.f.2.b the minimal scale impact with 27 peak hour peak direction trips (existing AM) analyzed within a 1.0 mile radius is not expected to have adverse impacts to the surrounding roadway network based on build-out conditions.

The distribution of trips produces an impact less than 1.0% of the roadway level of service after the first adjacent roadway.

The background historical growth was analyzed to the 5-year outlook to 2029 as specified in the City Code.

Driveway queueing length is fully provided on-site.

Auxiliary lanes are not warranted for the minimal impact according to the standards of the latest FDOT access management guidebook.

Concurrency is requested since the existing roadway network is capable of accommodating the additional new vehicle trips. The projected volumes generated by the anticipated uses indicate that the adjacent roadway links will operate at an acceptable Level of Service with no need for mitigation improvements.

APPENDIX

Land Use: 220
Multifamily Housing (Low-Rise)

Description

Low-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have two or three floors (levels). Various configurations fit this description, including walkup apartment, mansion apartment, and stacked townhouse.

- A walkup apartment typically is two or three floors in height with dwelling units that are accessed by a single or multiple entrances with stairways and hallways.
- A mansion apartment is a single structure that contains several apartments within what appears to be a single-family dwelling unit.
- A fourplex is a single two-story structure with two matching dwelling units on the ground and second floors. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.
- A stacked townhouse is designed to match the external appearance of a townhouse. But, unlike a townhouse dwelling unit that only shares walls with an adjoining unit, the stacked townhouse units share both floors and walls. Access to the individual units is typically internal to the structure and provided through a central entry and stairway.

Multifamily housing (mid-rise) (Land Use 221), multifamily housing (high-rise) (Land Use 222), affordable housing (Land Use 223), and off-campus student apartment (low-rise) (Land Use 225) are related land uses.

Land Use Subcategory

Data are presented for two subcategories for this land use: (1) not close to rail transit and (2) close to rail transit. A site is considered close to rail transit if the walking distance between the residential site entrance and the closest rail transit station entrance is ½ mile or less.

Additional Data

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

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

The technical appendices provide supporting information on time-of-day distributions for this land use. The appendices can be accessed through either the ITETripGen web app or the trip

generation resource page on the ITE website (https://www.ite.org/technical-resources/topics/trip-and-parking-generation/).

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

It is expected that the number of bedrooms and number of residents are likely correlated to the trips generated by a residential site. To assist in future analysis, trip generation studies of all multifamily housing should attempt to obtain information on occupancy rate and on the mix of residential unit sizes (i.e., number of units by number of bedrooms at the site complex).

The sites were surveyed in the 1980s, the 1990s, the 2000s, the 2010s, and the 2020s in British Columbia (CAN), California, Delaware, Florida, Georgia, Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, New Jersey, Ontario (CAN), Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Texas, Utah, and Washington.

Source Numbers

188, 204, 237, 300, 305, 306, 320, 321, 357, 390, 412, 525, 530, 579, 583, 638, 864, 866, 896, 901, 903, 904, 936, 939, 944, 946, 947, 948, 963, 964, 966, 967, 1012, 1013, 1014, 1036, 1047, 1056, 1071, 1076

Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

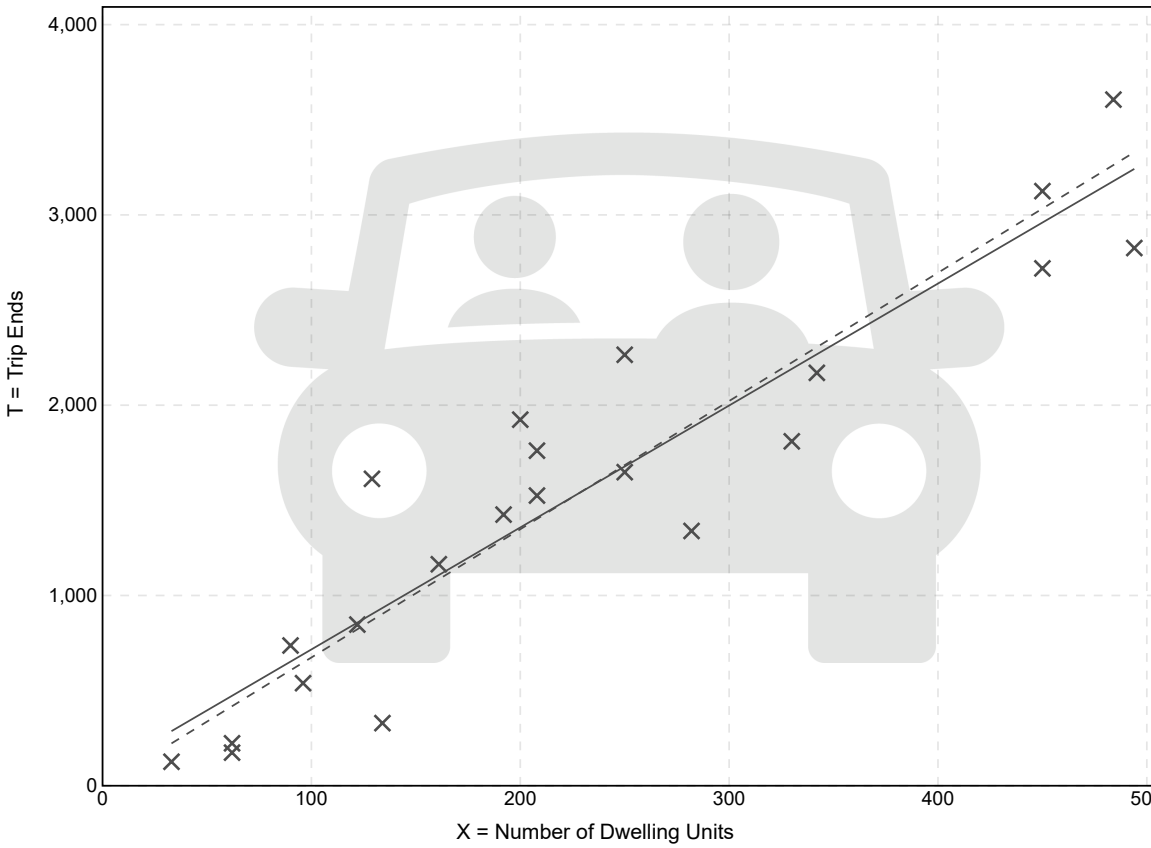
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 22
Avg. Num. of Dwelling Units: 229
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.74	2.46 - 12.50	1.79

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

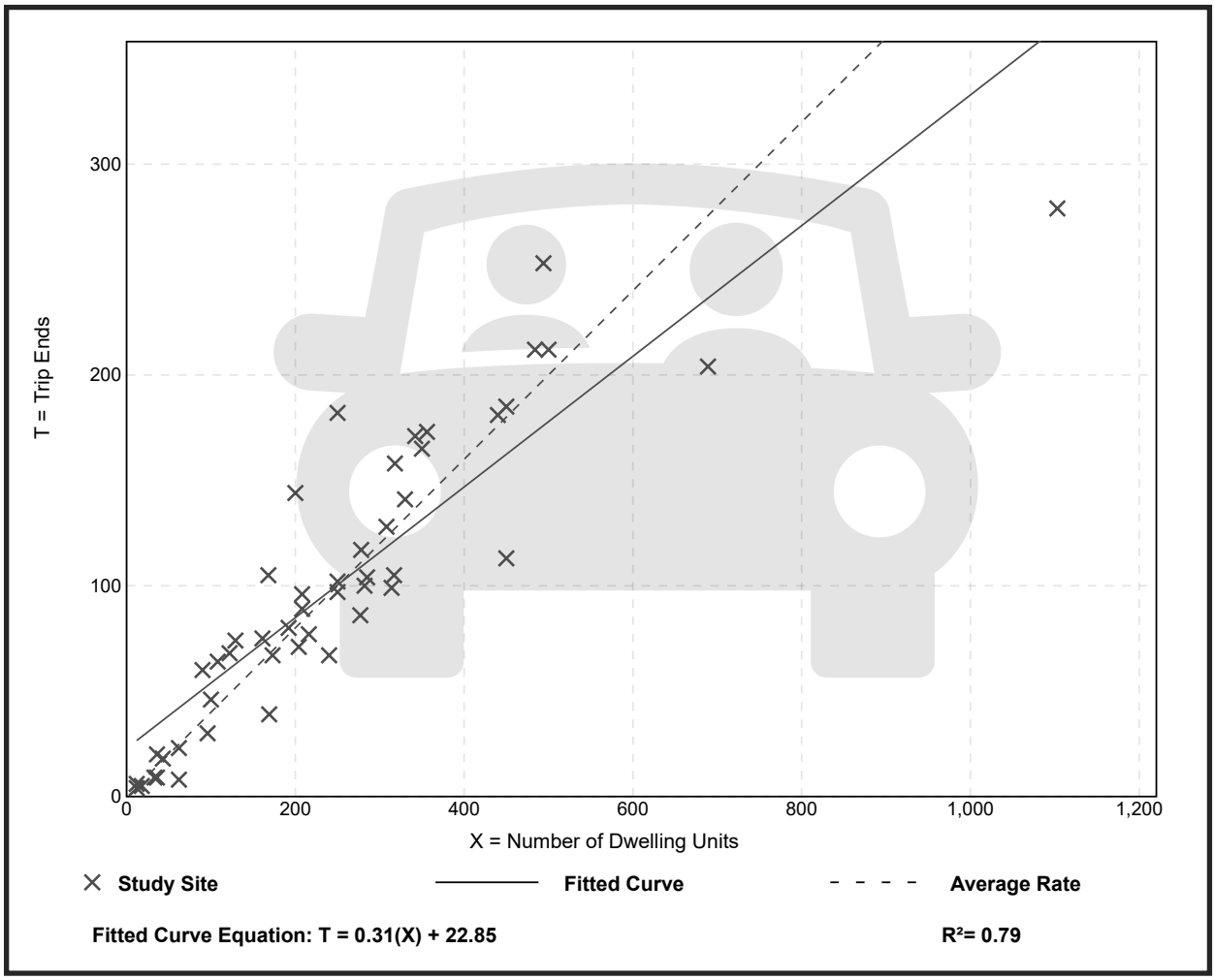
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	49
Avg. Num. of Dwelling Units:	249
Directional Distribution:	24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.40	0.13 - 0.73	0.12

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

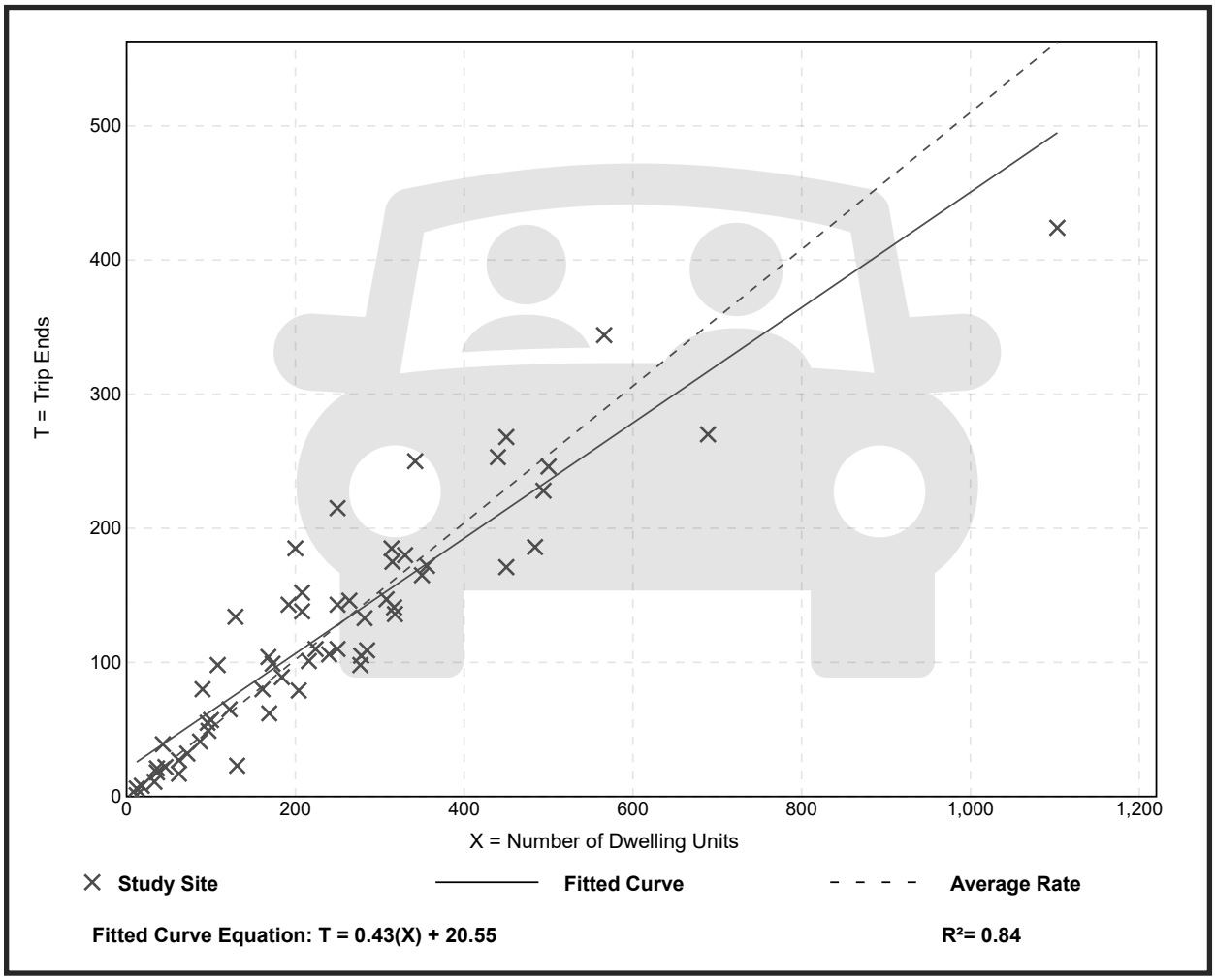
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	59
Avg. Num. of Dwelling Units:	241
Directional Distribution:	63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.51	0.08 - 1.04	0.15

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

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
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
OKEECHOBEE RD	BLUEFIELD RD to CARLTON RD	687	9,900	2024	2,000	536	B	0.27	542	B	0.27
OKEECHOBEE RD	CARLTON RD to SNEED RD	940039	9,696	2023							
OKEECHOBEE RD	IDEAL HOLDING RD to HEADER CANAL RD	940039	9,696	2023							
OKEECHOBEE RD	SNEED RD to IDEAL HOLDING RD	940039	9,696	2023							
OKEECHOBEE RD	HEADER CANAL RD to MIDWAY RD	940039	9,696	2023							
OKEECHOBEE RD	MIDWAY RD to SHINN RD	940039	9,696	2023							
OKEECHOBEE RD	SHINN RD to MCCARTY RD	940195	7,267	2023							
OKEECHOBEE RD	MCCARTY RD to FLORIDA'S TURNPIKE	940025	10,118	2023							
OKEECHOBEE RD	FLORIDA'S TURNPIKE to KINGS HWY	940025	10,118	2023							
OKEECHOBEE RD	KINGS HWY to CROSSROADS PKWY	940748	24,489	2023							
OKEECHOBEE RD	CROSSROADS PKWY to I-95	940106	26,459	2023							
OKEECHOBEE RD	I-95 to JENKINS RD	940029	33,776	2023							
OKEECHOBEE RD	JENKINS RD to MCNEIL RD	940029	33,776	2023							
OKEECHOBEE RD	MCNEIL RD to VIRGINIA AVE	940742	32,311	2023							
OKEECHOBEE RD	VIRGINIA AVE to HARTMAN RD	688	13,178	2023	2,100	681	C	0.32	672	C	0.32
OKEECHOBEE RD	HARTMAN RD to 35TH ST	688	13,178	2023	1,630	681	C	0.42	672	C	0.41
OKEECHOBEE RD	35TH ST to 33RD ST	689	15,615	2023	1,630	813	D	0.50	778	D	0.48
OKEECHOBEE RD	33RD ST to 25TH ST	689	15,615	2023	1,630	813	D	0.50	778	D	0.48
OKEECHOBEE RD	25TH ST to GEORGIA AVE	690	11,736	2023	1,630	680	C	0.42	603	C	0.37
OKEECHOBEE RD	GEORGIA AVE to DELAWARE AVE	690	11,736	2023	1,710	680	C	0.40	603	C	0.35
OLD DIXIE HWY	US 1 to SR A1A NORTH	691	436	2022	790	68	C	0.09	64	C	0.08
OLD DIXIE HWY	SR A1A NORTH to ST LUCIE BLVD	948521	1,820	2023	750	85	C	0.11	85	C	0.11
OLD DIXIE HWY	ST LUCIE BLVD to INDRIO RD	227	1,785	2022	790	145	C	0.18	106	C	0.13
OLD DIXIE HWY	INDRIO RD to INDIAN RIVER C.L.	948523	1,495	2023	870	70	C	0.08	70	C	0.08
OLEANDER AVE	BEACH AVE to KITTERMAN RD	692	2,997	2021	540	173	C	0.32	196	C	0.36
OLEANDER AVE	KITTERMAN RD to MIDWAY RD	141	6,174	2021	750	359	C	0.48	359	C	0.48
OLEANDER AVE	MIDWAY RD to WEATHERBEE RD	139	6,049	2023	750	342	C	0.46	345	C	0.46
OLEANDER AVE	WEATHERBEE RD to BELL AVE	139	6,049	2023	540	342	D	0.63	345	D	0.64
OLEANDER AVE	BELL AVE to FARMER'S MARKET RD	240	9,400	2024	540	465	D	0.86	461	D	0.85
OLEANDER AVE	FARMER'S MARKET RD to EDWARDS RD	240	9,400	2024	750	465	D	0.62	461	D	0.61
OLEANDER AVE	EDWARDS RD to WISTERIA AVE	505	9,200	2024	750	590	D	0.79	518	D	0.69
OLEANDER AVE	WISTERIA AVE to GARDENIA AVE	505	9,200	2024	540	590	F	1.09	518	D	0.96

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772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2024

Roadway Name	Location	STATION ID	2024 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
SUNRISE BLVD	EDWARDS RD to CORTEZ BLVD	511	6,751	2023	600	520	D	0.87	454	D	0.76
SUNRISE BLVD	CORTEZ BLVD to VIRGINIA AVE	511	6,751	2023	750	520	D	0.69	454	D	0.61
SUNRISE BLVD	VIRGINIA AVE to OLEANDER AVE	509	5,522	2023	750	345	C	0.46	343	C	0.46
SUNRISE BLVD	OLEANDER AVE to 7TH ST	708	4,722	2022	1,540	272	C	0.18	333	C	0.22
SUNRISE BLVD	7TH ST to US 1	708	4,722	2022	1,710	272	C	0.16	333	C	0.19
TIFFANY AVE	US 1 to HILLMOOR DR	322	17,081	2022	2,100	967	C	0.46	880	C	0.42
TIFFANY AVE	HILLMOOR DR to VILLAGE GREEN DR	322	17,081	2022	2,100	967	C	0.46	880	C	0.42
TIFFANY AVE	VILLAGE GREEN DR to LENNARD RD	320	4,145	2021	2,100	201	C	0.10	195	C	0.09
TORINO PKWY	CASHMERE BLVD to CALIFORNIA BLVD	709	5,500	2024	630	308	C	0.49	287	C	0.46
TORINO PKWY	CALIFORNIA BLVD to EAST TORINO PKWY	238	5,144	2021	630	339	C	0.54	277	C	0.44
TRADITION PKWY	COMMUNITY BLVD to VILLAGE PKWY	711	7,800	2021	1,710	816	D	0.48	791	D	0.46
TRADITION PKWY	VILLAGE PKWY to W OF I-95	712	43,500	2024	3,170	2,047	C	0.65	2,040	C	0.64
TULIP BLVD	DARWIN BLVD to PORT ST LUCIE BLVD	713	8,851	2022	790	580	D	0.73	524	D	0.66
TULIP BLVD	PORT ST LUCIE BLVD to PAAR DR	714	8,900	2024	790	569	D	0.72	518	D	0.66
TULIP BLVD	PAAR DR to DARWIN BLVD	714	8,900	2024	790	569	D	0.72	518	D	0.66
TURNPIKE FEEDER RD	TURNPIKE FEEDER RD SB RAMP to US 1	940078	4,903	2015							
TURNPIKE FEEDER RD	INDIAN PINES BLVD to TURNPIKE FEEDER RD SB R...	940269	11,658	2023							
TURNPIKE FEEDER RD	INDRIO RD to INDIAN PINES BLVD	940745	13,517	2023							
US 1	MARTIN C.L. to LENNARD RD	945071	48,145	2023							
US 1	LENNARD RD to PORT ST LUCIE BLVD	945071	48,145	2023							
US 1	PORT ST LUCIE BLVD to JENNINGS RD	945070	33,953	2023							
US 1	JENNINGS RD to TIFFANY AVE	945070	33,953	2023							
US 1	TIFFANY AVE to WALTON RD	945070	33,953	2023							
US 1	WALTON RD to VILLAGE GREEN DR	945150	47,030	2023							
US 1	VILLAGE GREEN DR to SPANISH LAKES BLVD	940265	46,803	2023							
US 1	SPANISH LAKES BLVD to PRIMA VISTA BLVD	940265	46,803	2023							
US 1	PRIMA VISTA BLVD to RIO MAR DR	940264	36,400	2023							
US 1	RIO MAR DR to KITTERMAN RD	940266	32,710	2023							
US 1	KITTERMAN RD to S OF SAEGER AVE	940266	32,710	2023							
US 1	S OF SAEGER AVE to EASY ST	940266	32,710	2023							
US 1	EASY ST to MIDWAY RD	945156	30,097	2023							
US 1	MIDWAY RD to WEATHERBEE RD	940012	30,959	2023							

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2024

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						Volume	LOS	V/C	Volume	LOS	V/C
US 1	WEATHERBEE RD to FARMER'S MARKET RD	940012	30,959	2023							
US 1	FARMER'S MARKET RD to EDWARDS RD	940012	30,959	2023							
US 1	EDWARDS RD to SAVANNAH RD	945002	28,117	2023							
US 1	GARDENIA AVE to VIRGINIA AVE	945002	28,117	2023							
US 1	SAVANNAH RD to GARDENIA AVE	945002	28,117	2023							
US 1	VIRGINIA AVE to OHIO AVE	945003	26,002	2023							
US 1	OHIO AVE to GEORGIA AVE	945003	26,002	2023							
US 1	GEORGIA AVE to DELAWARE AVE	945008	27,500	2023							
US 1	DELAWARE AVE to CITRUS AVE	945014	29,114	2023							
US 1	CITRUS AVE to ORANGE AVE	940118	25,392	2023							
US 1	ORANGE AVE to AVENUE A	945014	29,114	2023							
US 1	AVENUE A to AE BACKUS AVE	945014	29,114	2023							
US 1	AE BACKUS AVE to AVENUE D	945014	29,114	2023							
US 1	AVENUE D to SR A1A SOUTH	945014	29,114	2023							
US 1	SR A1A SOUTH to AVENUE H	715	30,660	2023	2,100	1,524	C	0.73	1,521	C	0.72
US 1	AVENUE H to OLD DIXIE HWY	715	30,660	2023	2,000	1,524	C	0.76	1,521	C	0.76
US 1	OLD DIXIE HWY to AVENUE O	940123	28,240	2023							
US 1	AVENUE O to SR A1A NORTH	940123	28,240	2023							
US 1	SR A1A NORTH to JUANITA AVE	940010	20,140	2023							
US 1	JUANITA AVE to ST LUCIE BLVD	940010	20,140	2023							
US 1	ST LUCIE BLVD to 25TH ST	940009	19,911	2023							
US 1	25TH ST to INDRIO RD	940009	19,911	2023							
US 1	INDRIO RD to TURNPIKE FEEDER RD	940107	25,091	2023							
US 1	TURNPIKE FEEDER RD to INDIAN RIVER C.L.	940107	25,091	2023							
VETERANS MEMORIAL PKWY	PORT ST LUCIE BLVD to LYNGATE DR	329	15,671	2022	2,100	763	C	0.36	741	C	0.35
VETERANS MEMORIAL PKWY	LYNGATE DR to US 1	327	8,900	2024	2,100	507	C	0.24	480	C	0.23
VILLAGE GREEN DR	US 1 to WALTON RD	716	17,000	2024	2,100	1,060	C	0.50	1,146	C	0.55
VILLAGE GREEN DR	WALTON RD to TIFFANY AVE	717	4,612	2022	920	302	C	0.33	255	C	0.28
VILLAGE PKWY	DISCOVERY WAY to TRADITION PKWY	718	26,500	2024	2,650	1,226	C	0.46	1,309	D	0.49
VILLAGE PKWY	BECKER RD to DISCOVERY WAY	734	8,800	2024	1,710	590	C	0.35	609	C	0.36
VILLAGE PKWY	TRADITION PKWY to WESTCLIFFE LN	719	27,500	2024	1,710	1,482	D	0.87	1,462	D	0.85
VILLAGE PKWY	WESTCLIFFE LN to CROSSTOWN PKWY	720	17,629	2023	1,710	935	D	0.55	987	D	0.58

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						Volume	LOS	V/C	Volume	LOS	V/C
VIRGINIA AVE	35TH ST to 25TH ST	940032	23,450	2023							
VIRGINIA AVE	OKEECHOBEE RD to HARTMAN RD	940030	22,526	2023							
VIRGINIA AVE	HARTMAN RD to 35TH ST	940030	22,526	2023							
VIRGINIA AVE	25TH ST to 13TH ST	940033	21,782	2023							
VIRGINIA AVE	13TH ST to 11TH ST	940794	23,667	2023							
VIRGINIA AVE	11TH ST to SUNRISE BLVD	940794	23,667	2023							
VIRGINIA AVE	SUNRISE BLVD to OLEANDER AVE	940792	20,380	2023							
VIRGINIA AVE	OLEANDER AVE to COLONIAL RD	940034	18,402	2023							
VIRGINIA AVE	COLONIAL RD to US 1	940034	18,402	2023							
WALTON RD	US 1 to VILLAGE GREEN DR	330	10,000	2024	1,710	581	C	0.34	589	C	0.34
WALTON RD	VILLAGE GREEN DR to LENNARD RD	328	17,500	2024	1,710	957	D	0.56	1,057	D	0.62
WALTON RD	LENNARD RD to GREEN RIVER PKWY	326	12,000	2024	880	747	C	0.85	757	C	0.86
WALTON RD	GREEN RIVER PKWY to INDIAN RIVER DR	324	6,014	2022	630	386	C	0.61	366	C	0.58
WEATHERBEE RD	OLEANDER AVE to US 1	721	3,164	2023	750	198	C	0.26	180	C	0.24
WEATHERBEE RD	US 1 to MIDWAY RD	158	5,987	2023	750	379	D	0.51	379	D	0.51
WESTCLIFFE LN	TREMONTE AVE to VILLAGE PKWY	722	6,219	2023	1,470	457	C	0.31	419	C	0.29
WESTMORELAND BLVD	MORNINGSIDE BLVD to PORT ST LUCIE BLVD	339	14,645	2023	920	784	C	0.85	884	D	0.96
WESTMORELAND BLVD	MARTIN C.L. to MORNINGSIDE BLVD	245	9,076	2022	920	477	C	0.52	522	C	0.57

Countywide Performance

Weighted V/C = **64.29**

% VMT below Standard = **77.98%**

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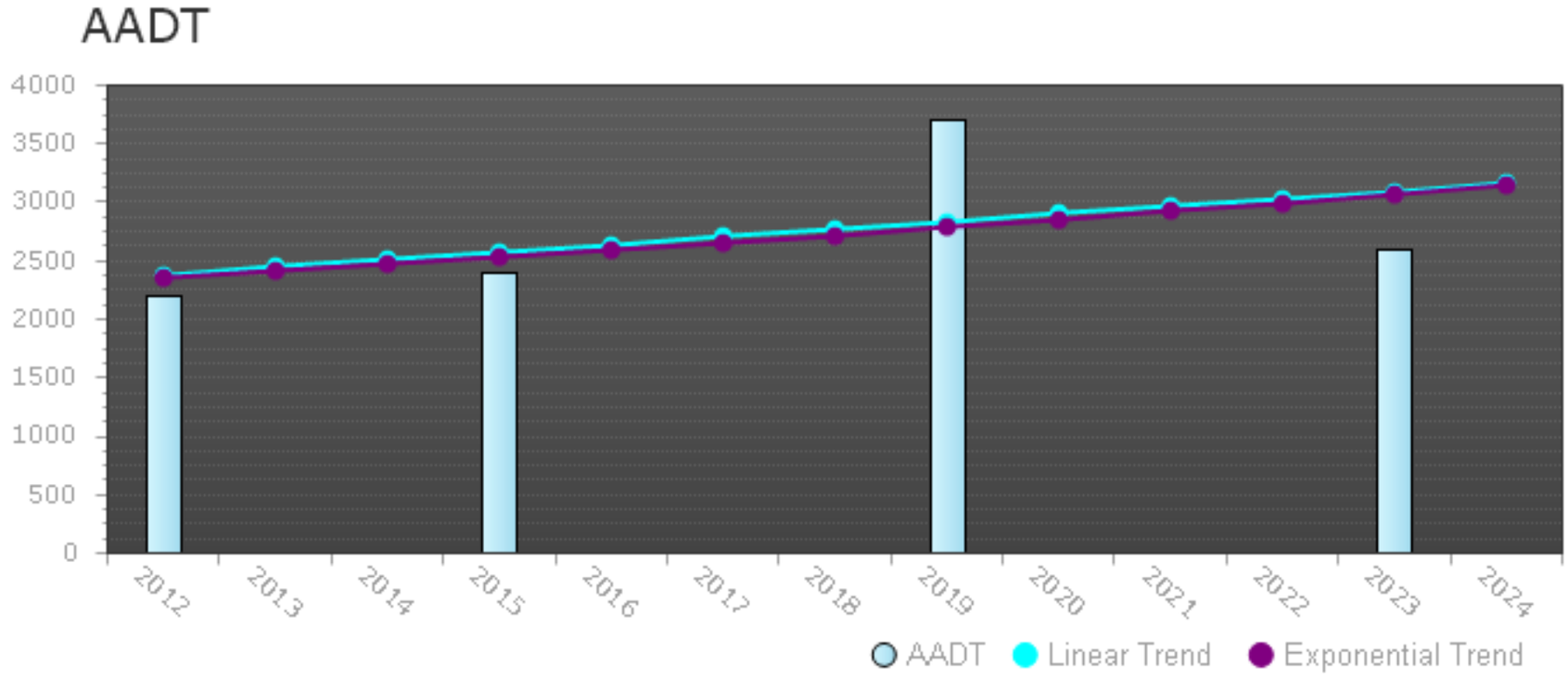
Station 721

WEATHERBEE RD W. OF US-1

Linear Growth = 2.05%
Exponential Growth = 2.42%

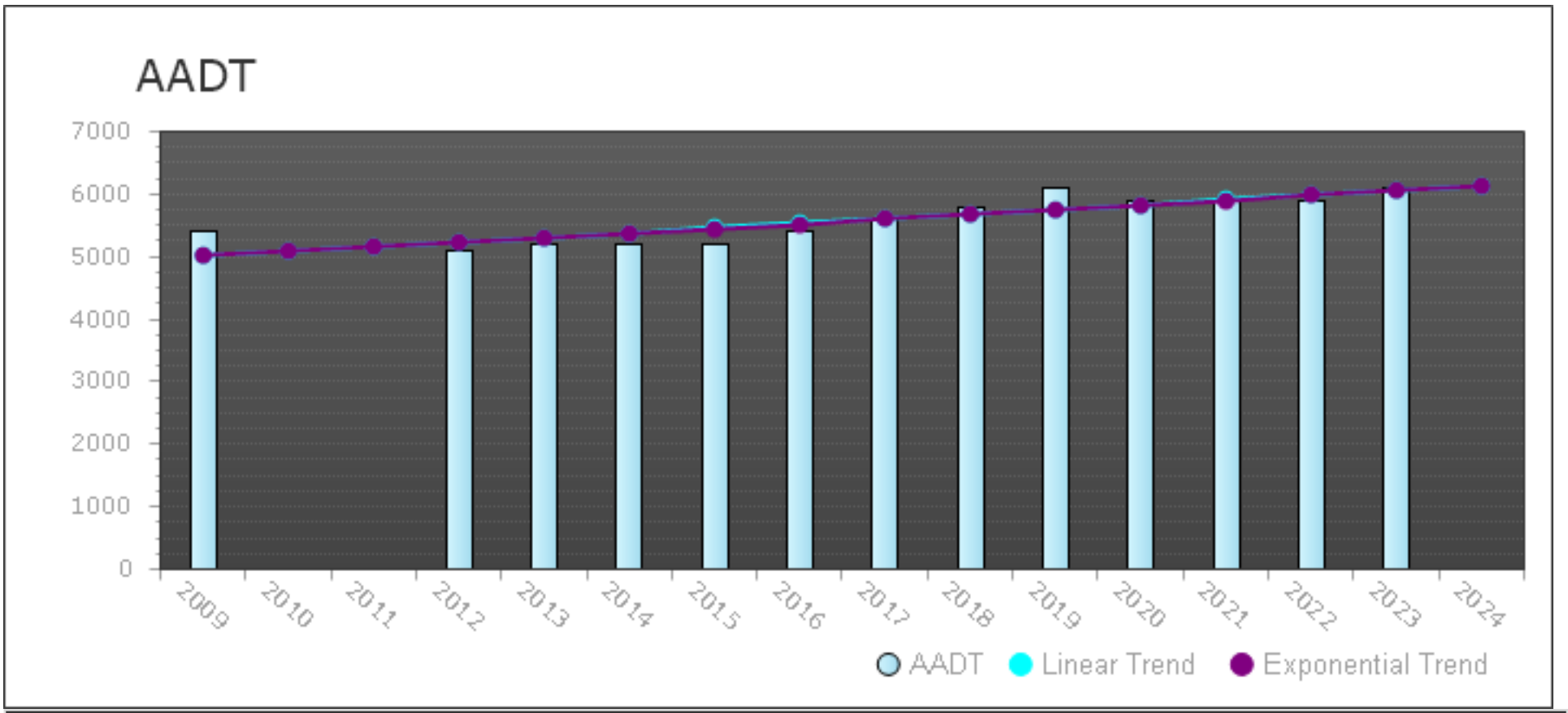


Year	Station	AADT	K100	Avg DFactor	Heavy Vehicle %	AM Peak Vol	PM Peak Vol
2023	721	2600	0.107	0.5345	0	258	253
2019	721	3700	0.122	0.5555	0	396	353
2015	721	2400	0.13	0.52	0	220	284
2012	721	2200	0.113	0.5315	0	224	228

Station 947046

ON WEATHERBEE RD - E. OF US 1 SOUTH (COUNTY 158)

Linear Growth = 1.22%
Exponential Growth = 1.33%

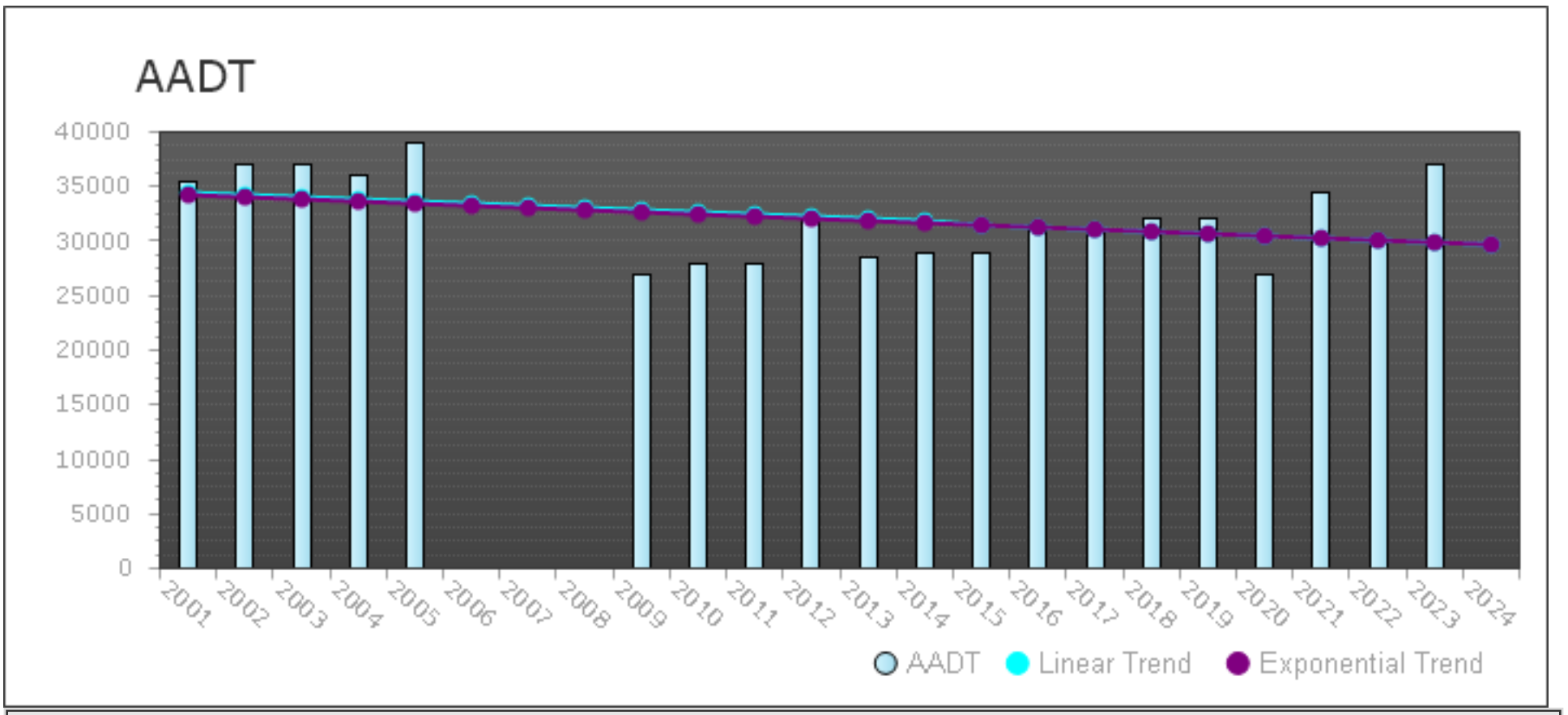


Year	Station	AADT	K100	Avg DFactor	Heavy Vehicle %	AM Peak Vol	PM Peak Vol
2023	947046	6100	0.09	0.523		543	543
2022	947046	5900	0.09	0.523	0	526	526
2021	947046	5900	0.09	0.518	0	526	526
2020	947046	5900		0.525	-1		
2019	947046	6100		52.5			
2018	947046	5800		52.4			
2017	947046	5600		52			
2016	947046	5400		52.3			
2015	947046	5200		52.7			
2014	947046	5200		52.5			
2013	947046	5200		55.9			
2012	947046	5100		55.8			
2009	947046	5400			0	572	534

Station 940020

SR 5 / US 1 - N OF CR 712/MIDWAY RD (COUNTY 20)

Linear Growth = -0.72%
Exponential Growth = -0.63%

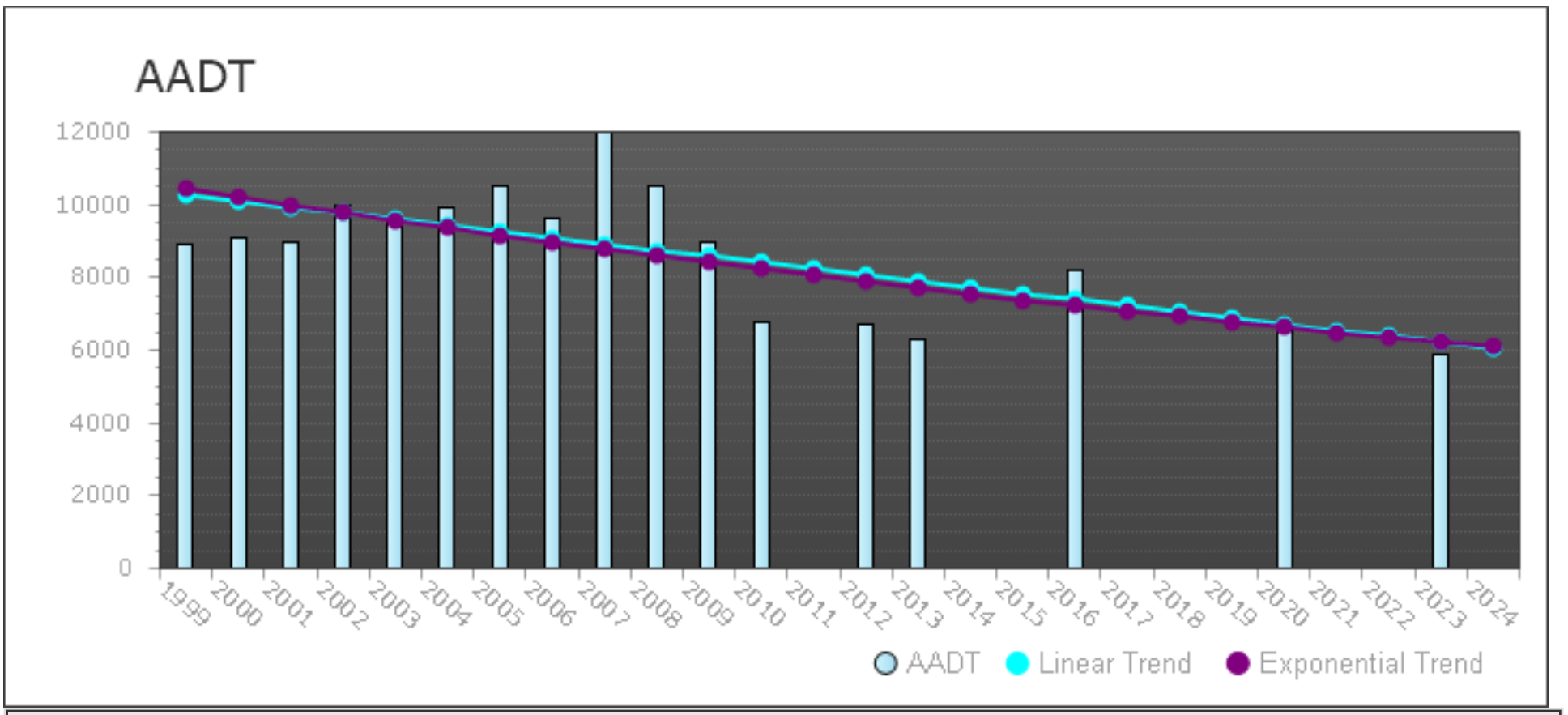


Year	Station	AADT	K100	Avg DFactor	Heavy Vehicle %	AM Peak Vol	PM Peak Vol
2023	940020	37000	0.09	0.523		3854	3854
2022	940020	30000	0.09	0.523	0	3125	3125
2021	940020	34500	0.09	0.518	0	3593	3593
2020	940020	27000		0.525	-1		
2019	940020	32000		52.5			
2018	940020	32000		52.4			
2017	940020	31000		52			
2016	940020	31500		52.3			
2015	940020	29000		52.7	1.03		
2014	940020	29000		52.5	1.5		
2013	940020	28500		55.9			
2012	940020	32000		55.8	1.12		
2011	940020	28000			0		
2010	940020	28000			0	4659	4977
2009	940020	27000			0	2328	2529
2005	940020	39000			0	3459	3556
2004	940020	36000			0	2673	3078
2003	940020	37000			0	2912	3137
2002	940020	37000			0	2794	2982
2001	940020	35500			0	2414	2833

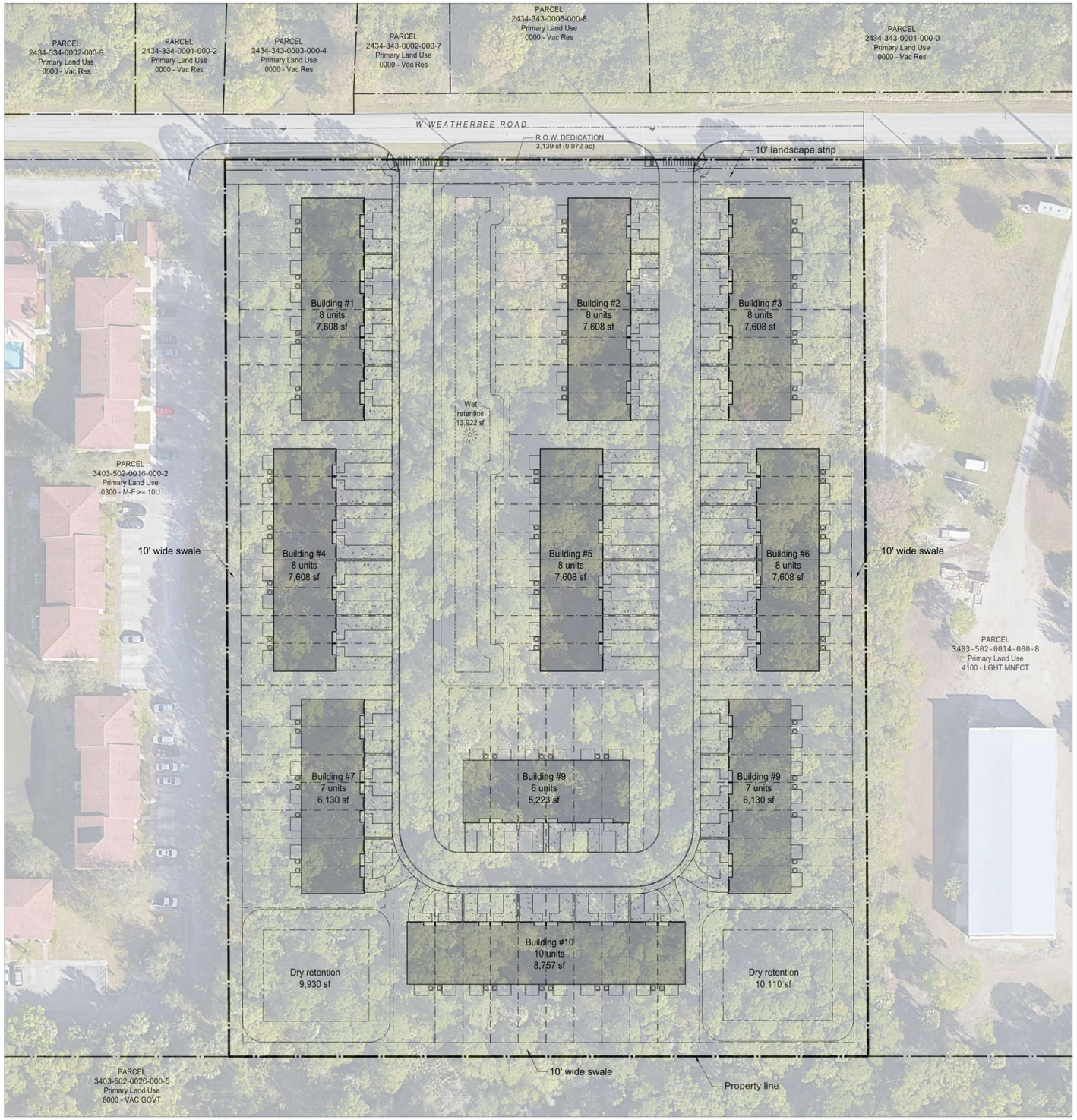
Station 139

OLEANDER AVE 510 FEET NORTH OF MIDWAY RD

Linear Growth = -2.79%
Exponential Growth = -2.18%



Year	Station	AADT	K100	Avg DFactor	Heavy Vehicle %	AM Peak Vol	PM Peak Vol
2023	139	5900	0.108	0.5285	0	541	593
2020	139	6600	0.107	0.5545	0	581	656
2016	139	8200	0.106	0.532	0	715	795
2013	139	6300			0	545	639
2012	139	6700	0.113	0.594	4.45	581	687
2010	139	6800	0.111	0.632	9.26	589	689
2009	139	9000	0.104	0.537		790	857
2008	139	10500	0.105	0.544		967	999
2007	139	12000	0.102	0.51		1130	1117
2006	139	9600	0.11	0.54		977	943
2005	139	10500	0.108	0.547		1018	1045
2004	139	9900	0.11	0.562		914	989
2003	139	9600	0.111	0.519		924	982
2002	139	10000	0.116	0.537		1041	940
2001	139	9000	0.113	0.543		790	887
2000	139	9100	0.108	0.567		839	897
1999	139	8900	0.11	0.569		869	845



SITE PLAN WITH AERIAL

LEGEND

- Project property line
- Neighboring property lines
- Required R.O.W. dedication
- Proposed property lines
- Required landscape strip
- Existing road centerline
- A/C Unit
- Lake fountain
- Asphalt
- Concrete
- Building - Interior



LOCATION (NTS)

SITE DATA

Buildings

Number of 6 unit buildings:	1
Number of 7 unit buildings:	2
Number of 8 unit buildings:	6
Number of 10 unit buildings:	1
TOTAL number of buildings:	10
TOTAL number of dwelling units:	78

Stormwater

Wet retention:	13,922 sf	
Dry retention:	20,040 sf	
TOTAL:	353,962 sf	12.1%

0 40' 80'
1" = 40'

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
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PLANNER
REDTAIL DESIGN GROUP
C/O TOD MOWERY, AICP
100 S. 2ND STREET, UNIT 209
FORT PIERCE, FLORIDA 34950
772.742.1555

REDTAIL DG
100 S. 2nd Street
Fort Pierce, Fl. 34950

TM DESIGNED BY
VP DRAWN BY
FILENAME
LAYOUT
1" = 40' SCALE
09/12/2024 DATE

REVISION COMMENTS DATE

WEATHERBEE ROAD
CONCEPTUAL SITE PLAN
78 DR HORTON'S HOMES
FORT PIERCE FLORIDA

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 ADOPTION BY REDTAIL DG SHALL BE WITHOUT LIABILITY TO REDTAIL DG.

AGENT CONSENT FORM

Project Name: Weatherbee Road Townhomes

Parcel ID: 3403-502-0015-000-5

BEFORE ME THIS DAY PERSONALY APPEARED Jeremiah Baron WHO BEING DULY SWORN, DEPOSES AND SAYS THE FOLLOWING:

I hereby give CONSENT to Redtail DG 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 residential development.

FURTHER AFFIANT SAYETH NOT.

The foregoing instrument was acknowledged before me this 12 day of September 2024 by Jeremiah Baron (Name of Person Acknowledging) who is personally known to me or who has produced _____ (type of identification) as identification and who did (did not) take an oath.

Melissa Suarez

Notary Signature

Melissa Suarez

Printed Name of Notary

MELISSA SUAREZ NOTARY PUBLIC (Notary Seal) MY COMMISSION EXPIRES 2-8-2027 STATE OF FLORIDA COMMISSION NUMBER HH 329364

My commission expires

Owner's Signature

Jeremiah Baron

Owner's Name

2100 SE Ocean Blvd. Suite 100

Street Address

Stuart, FL 34996

City, State, Zip

772-286-5744, jbaron@commercialrealestatellc.com

Telephone / Email

Technical Review Committee **3. e.**

Meeting Date: 10/17/2024

REQUESTED ACTION

Final Plat - Macy Reid - 715 and 625 Tumblin Kling Road and 4209 Garrison Lane

SUMMARY

Project #: PZSUB2024-00003

The subject site is located 715 and 625 Tumblin Kling Road and 4209 Garrison Lane. The site is approximately 2.94 acres and is identified by the parcel numbers 243433100020000, 243434200050005, and 243433100010003. The properties 715 Tumblin Kling Rd and 4209 Garrison Lane are zoned R-4, Medium Density Residential Zone with a Future Land Use of RH, High Density Residential. The property 625 Tumblin Kling Road is zoned R-4, Medium Density Residential Zone with a Future Land Use of RM, Medium Density Residential. The existing uses are Single Family Residential.

The applicant is proposing to reconfigure the lot lines of the three (3) subject parcels.

If you have access to the City of Fort Pierce Tyler EPL system, please add comments to the appropriate project. If not, please send comments to: planning@cityoffortpierce.com

LOCATION

715 & 625 Tumblin Kling Rd, and 4209 Garrison Ln

RESPONSIBLE STAFF

Vennis Gilmore, Assistant Planning Director

RECOMMENDATION

TBD

Attachments

TRC Packet

Form Review

Form Started By: Vennis Gilmore Started On: 10/03/2024 04:39 PM

Final Approval Date: 10/04/2024

Legal
PT 34-35-40

Parcel ID
243433100010003
Appraiser Card
GIS Map
Tax Collector

1 / 2

/mdr

* Doc Assump: $ 0.00
* Doc Tax : $ 0.70
* Int Tax : $ 0.00

QUIT CLAIM DEED

Beverly P. Miller and Willard Harris, as Trustees of the R.M. Pitchford Trust, the Quitclaimors, with the power and authority either to protect, conserve and to sell, or to lease, or to encumber, or otherwise to manage and dispose of the real property described herein, whose mailing address is Post Office Box 2250, Stuart, Florida 34995, in consideration of the sum of One Dollar ($1.00) received from Reid Macy and Rebecca Macy, his wife, whose mailing address is 4211 Garrison Lane, Fort Pierce, Florida 34982, the Quitclaimee, hereby on this 11th day of March, 1994, quitclaims to the Quitclaimee, all of the interest of the Quitclaimors in the real property located in St. Lucie County, Florida described as:

East 66 feet of East half of the Northeast quarter of the Southwest quarter of the Southwest quarter less the North 25 feet and less the South 250 feet, Section 34, Township 35, South of Range 40 East, St. Lucie County, Florida.

SUBJECT to restrictions, reservations and easements of record.

TOGETHER with all tenements, appurtenances and hereditaments.

Property App. Parcel ID # 2434-331-0001-000/3

n, Clerk of the Circuit Court - St. Lucie County
1318092 OR BOOK 0895 PAGE 0020
4-14-94 11:23 A.M.

Legal
PT 34-35-40

Parcel ID
243433100010003
Appraiser Card
GIS Map
Tax Collector

2 / 2

OR BOOK 0895 PAGE 0021

Witnesses:

Jack Britt

Amanda D Poe

Beverly P. Miller (SEAL)
Beverly P. Miller, Trustee
of the R.M. Pitchford Trust

Willard Harris (SEAL)
Willard Harris, Trustee of the
R.M. Pitchford Trust

STATE OF FLORIDA
COUNTY OF MARTIN

I HEREBY CERTIFY that on this day, before me, personally appeared BEVERLY P. MILLER and WILLARD HARRIS, Trustees of the R. M. Pitchford Trust, (✓) who are personally known to me or ( ) have produced _____ as identification, and who ( ) did (✓) did not take an oath, and who executed the foregoing instrument and acknowledged before me that they executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 11th day of March, 1994.

"OFFICIAL SEAL"
Amanda D. Poe
My Commission Expires 3/14/97
Commission #CC 285862

Amanda D Poe
Notary Public

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4689769 OR BOOK 4398 PAGE 1708, Recorded 03/19/2020 02:39:28 PM Doc Tax: $1400.00

After Recording Return to:
Zachary Phillips
Kelk Phillips, P.A.
12773 Forest Hill Blvd.
Suite 105
Wellington, FL 33414

This Instrument Prepared by:
Zachary Phillips
Kelk Phillips, P.A.
12773 Forest Hill Blvd.
Suite 105
Wellington, FL 33414

Property Appraisers Parcel I.D. (Folio) Number(s):
24-34-342-0005-0005
File No.: 20-458

WARRANTY DEED

This Warranty Deed, Made the 17 day of March, 2020, by **Grande Royale, LLC, a Florida limited liability company**, having its place of business at **1128 Royal Plam Beach Blvd., Suite 324, Royal Palm Beach, FL 33411**, hereinafter called the "Grantor", to **Reid Macy and Rebecca Macy, as husband and wife,** whose post office address is: **625 Tumblin Kling Rd., Fort Pierce, FL 34982**, hereinafter called the "Grantee".

WITNESSETH: That said Grantor, for and in consideration of the sum of **Two Hundred Thousand Dollars and No Cents ($200,000.00)** and other valuable considerations, receipt whereof is hereby acknowledged, by these presents grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the Grantee, all that certain land situate in **St Lucie** County, Florida, to wit:

The West 132 feet of the Northwest quarter (NW 1/4) of the Southeast quarter (SE 1/4) of the Southwest Quarter (SW 1/4) of Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida. LESS the North 25 feet thereof.

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, 2019, reservations, restrictions and easements of record, if any.
(Wherever used herein the terms "Grantor" and "Grantee" included all the parties to this instrument and the heirs, legal representatives and assigns of the individuals, and the successors and assigns of the Company)

IN WITNESS WHEREOF, Grantor has caused these presents to be executed in its name, and its corporate seal to be hereunto affixed, by its proper officers thereunto duly authorized, the day and year first above written.

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File No.: 20-458

NotaryCam DocID:5e711bd8149b886b53d35612

OR BOOK 4398 PAGE 1709

SIGNED IN THE PRESENCE OF THE FOLLOWING WITNESSES

Witness Signature: Zachary Phillips
Printed Name: Zachary Phillips

Witness Signature: Ashley Lashelle Odom
Printed Name: Ashley Lashelle Odom

GRANDE ROYALE, LLC, A FLORIDA LIM
LIABILITY COMPANY

Roy O. Lim
Roy O. Lim
Managing Member

State of Virginia
County of Virginia Beach

The foregoing instrument was acknowledged before me by means of ☐ physical presence o notarization, this 17 day of March, 2020 by Roy O. Lim, as managing member of Gran LLC, a Florida limited liability company. He/She/They is/are ☐ Personally Known OR ☒ Driver's License as Identification.

Ashley Lashelle Odom
Notary Public Signature
Printed Name: Ashley Lashelle Odom

My Commission Expires: April 30, 2021
(SEAL)

☒ Online Notary (Check Box if acknowledgment done by Online Notarization)

ASHLEY E

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243433100020000

Appraiser Card

GIS Map

Tax Collector

1 / 1

1138636

Prepared By: CAROL A. WILKIE
CHELSEA TITLE COMPANY
805 Virginia Ave., Ste. 28 Ft. Pierce, FL 34982
Incidental to the issuance of a title insurance policy.
File No.: 0855
Parcel ID # 2433-331-0002-000/0
Grantee(s) SS # [redacted]
RETURN TO : CHELSEA TITLE CO.
COURT HOUSE BOX # 19

1138636
'91 OCT -7 P3:23

RECORDED
DIXON CLERK
COUNTY, FLA

WARRANTY DEED
(INDIVIDUAL)

This WARRANTY DEED, dated September 18, 1991 by
LORENE WALLACE, a single adult

whose post office address is
715 TUMBLIN KLING RD FORT PIERCE, FL 34982
hereinafter called the GRANTOR, to
REID MACY

whose post office address is
4211 GARRISON LANE FORT PIERCE, FL 34982
hereinafter called the GRANTEE:
(Wherever 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.)

WITNESSETH: That the GRANTOR, for and in consideration of the sum of $10.00 and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, aliens, remises, releases, conveys and confirms unto the GRANTEE, all that certain land situate in ST LUCIE County, Florida, viz:

West 60 feet of the East 126 feet of the Northeast 1/4 of the Southwest 1/4 of the Southwest 1/4 less the South 430 feet and less the North 25 feet, in Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida.

Rec Fee : 6.00
Doc Stamp : $102.90
Int Tax : $ .00
Total $ 108.90

SUBJECT TO covenants, conditions, restrictions, reservations, limitations, easements and agreements of record, if any; taxes and assessments for the year 1991 and subsequent years; and to all applicable zoning ordinances and/or restrictions and prohibitions imposed by governmental authorities, if any.

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 except as above noted, 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.

IN WITNESS WHEREOF, GRANTOR has signed and sealed these presents the date set forth above.

Lorene Wallace
LORENE WALLACE

SIGNED IN OUR PRESENCE:

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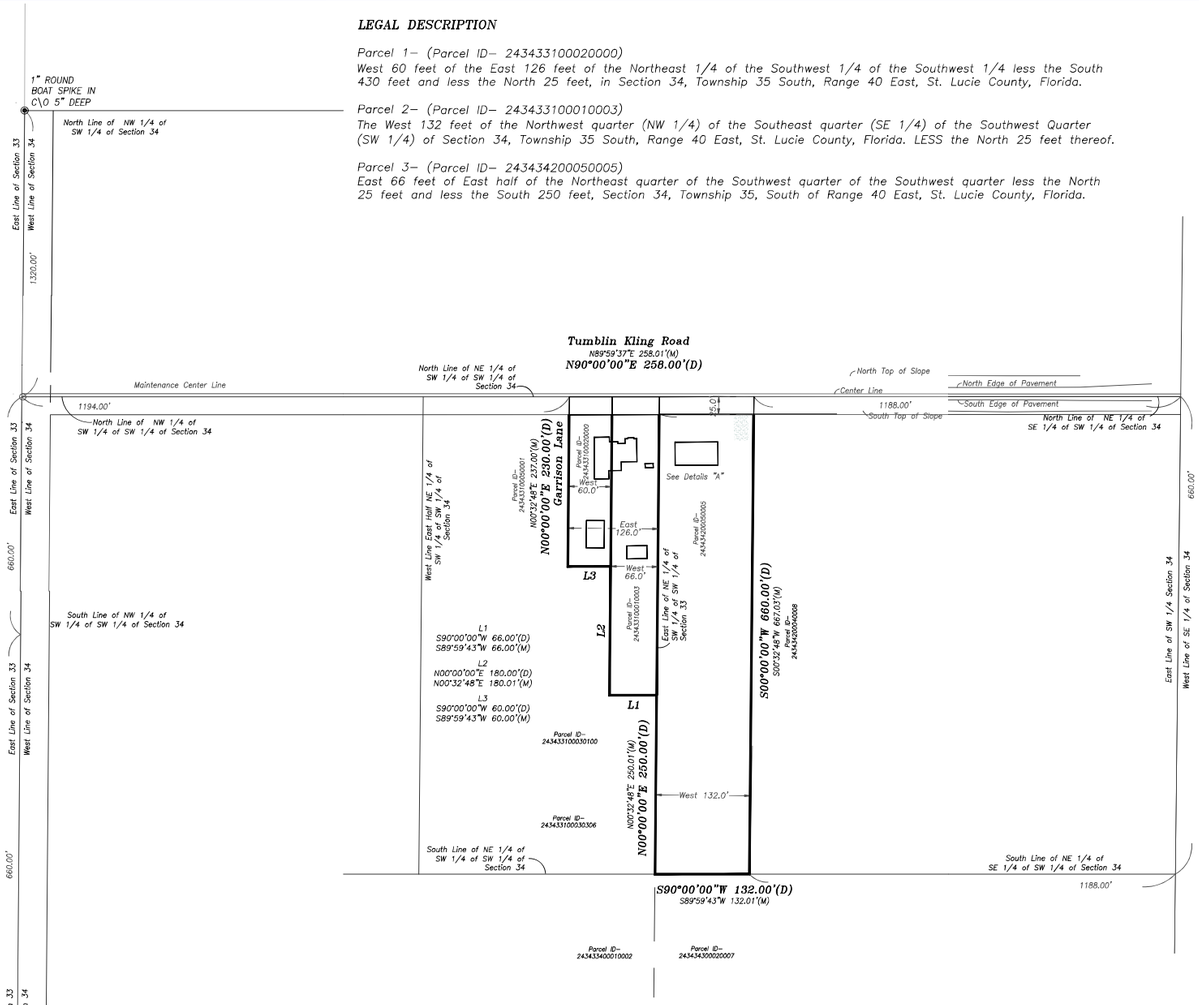
LEGAL DESCRIPTION

Parcel 1– (Parcel ID– 243433100020000)
West 60 feet of the East 126 feet of the Northeast 1/4 of the Southwest 1/4 of the Southwest 1/4 less the South 430 feet and less the North 25 feet, in Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida.

Parcel 2– (Parcel ID– 243433100010003)
The West 132 feet of the Northwest quarter (NW 1/4) of the Southeast quarter (SE 1/4) of the Southwest Quarter (SW 1/4) of Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida. LESS the North 25 feet thereof.

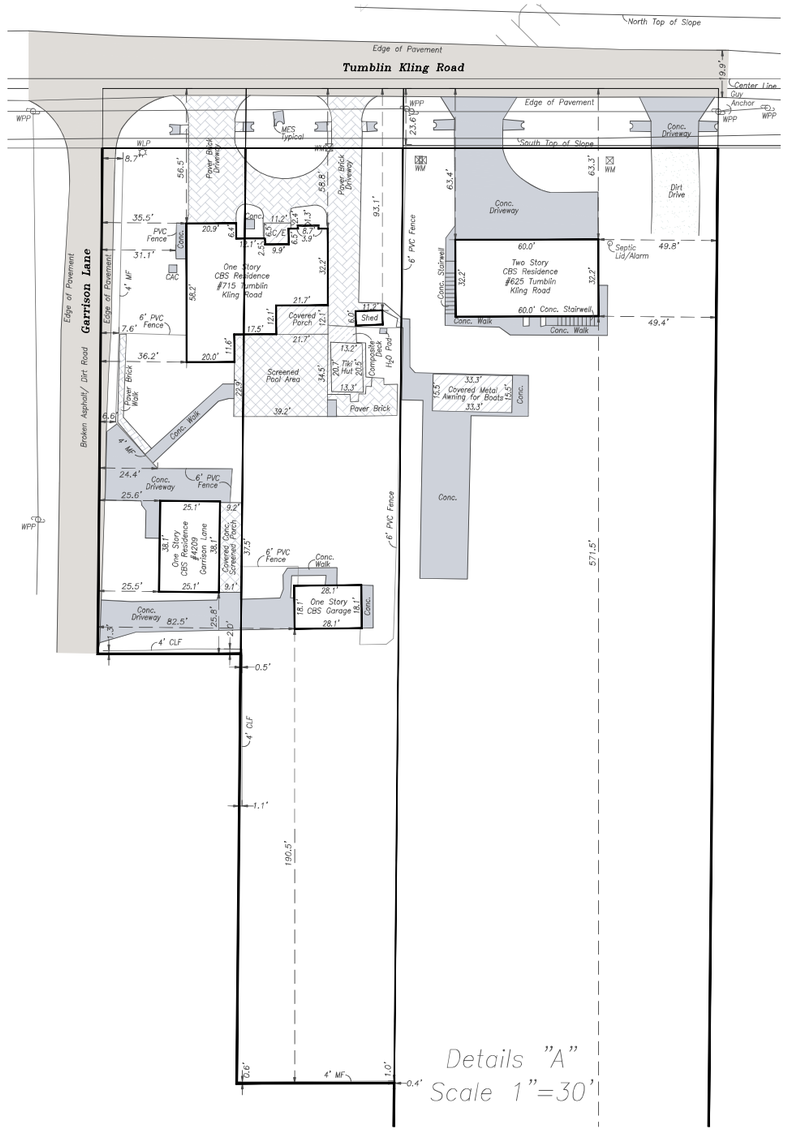
Parcel 3– (Parcel ID– 243434200050005)
East 66 feet of East half of the Northeast quarter of the Southwest quarter of the Southwest quarter less the North 25 feet and less the South 250 feet, Section 34, Township 35, South of Range 40 East, St. Lucie County, Florida.



SURVEYOR'S REPORT

ACCURACY:
1. ALL MEASUREMENTS, DISTANCES, ELEVATIONS AND FEATURES WERE PERFORMED IN STRICT ACCORDANCE WITH THE STANDARDS OF PRACTICE FOR SURVEYING AND MAPPING AS SET FORTH IN RULE CHAPTER 5J–17 F.A.C., PURSUANT TO SECTION 472.027 OF THE FLORIDA STATUTES.
2. METHODS FOR ALL CONTROL MEASUREMENTS WERE MADE WITH A TRANSIT AND STEEL TAPE, OR DEVICES WITH EQUIVALENT OR HIGHER DEGREES OF ACCURACY.
3. THE ACCURACY STANDARD USED FOR THIS SURVEY, AS CLASSIFIED (5J–17 FAC), IS "SUBURBAN". THE MINIMUM RELATIVE DISTANCE ACCURACY FOR THIS TYPE OF SURVEY IS 1 FOOT IN 7,500 FEET. THIS SURVEY IS BASED ON REPETITIVE RTK GPS AND/OR TOTAL STATION OBSERVATIONS ON MULTIPLE PROJECT'S HORIZONTAL AND VERTICAL CONTROL POINTS TO OBTAIN A REDUNDANCY OF MEASUREMENT. HORIZONTAL AND VERTICAL CLOSURE ACHIEVED, EXCEED THE MINIMUM ACCURACY REQUIREMENTS.
4. ALL ELEVATIONS (IF) SHOWN ARE IN FEET AND REFERENCED FROM NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND ARE BASED ON THE FOLLOWING COUNTY BENCH MARK:
5. THE BEARING BASIS OF S00°12'46"E IS ALONG THE WEST LINE OF SECTION 34.
LIMITATIONS:
1. THE SPECIFIC PURPOSE OF THIS SURVEY IS TO CREATE A NEW PARCEL A, B AND C, CONTAINED WITHIN THE EXISTING PARCEL LIMITS WHOS LIMITS ARE PER THE LEGAL DESCRIPTION PROVIDED BY THE CLIENT, AND SHOW THE NEW PARCEL LIMITS RELATIVE TO THE EXISTING IMPROVEMENTS.
2. LAST FIELD DATE OF SURVEY: 02–26–24.
3. UNDERGROUND UTILITIES WERE NOT LOCATED
4. PARCEL LIMITS ESTABLISHED BY USE OF FOUND SURVEY CONTROL ALONG THE CENTER LINE AND/OR RIGHT OF WAY LINE OF TUMBLIN KLING ROAD.
5. DIMENSIONS SHOWN THUSLY (M) ON THE SURVEY SUPERSEDE DIMENSIONS REFLECTED ON EITHER RECORD DEED, PLAT OR RIGHT OF WAY MAP.
6. USE OF THIS SURVEY BY ANYONE OTHER THAN THOSE PREPARED FOR OR CERTIFIED TO, WILL BE THE RE–USERS SOLE RISK WITHOUT LIABILITY TO THE SURVEYOR.
7. THE OWNERSHIP OF FENCE LINES HAS NOT BEEN DETERMINED AS PART OF THIS SURVEY.
8. OFF SET CALLS TO FOUND SURVEY CONTROL ARE RELATIVE TO THE NEAREST PROPERTY CORNER, INTERSECTION OF LINES, POINT OF CURVATURES (PC), POINT OF REVERSE CURVATURES (PRC) OR OTHER IDENTIFIABLE POINT.
9. THIS SURVEY SHALL NOT BE VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF THE FLORIDA SURVEYOR AND MAPPER PREPARING THIS DOCUMENT
10. COMPLIANCE WITH LOCAL ZONING REQUIREMENTS AND OR WITH REQUIREMENTS SET FORTH BY OTHER STATE, PUBLIC, AND/OR PRIVATE ENTITIES HAS NOT BEEN VERIFIED AS PART OF THIS SURVEY.

FEMA Flood Zone data shown here on is based on the visual inspection of the digital Flood Hazardous Maps provided by the Federal Emergency Management Agency (FEMA) and is limited to the accuracy of such maps. Flood Zone: X, Community #: 120286, Panel #: 0189, Suffix: K, Date: 2.19.2020.



LEGEND

FCM – Found 4"x4"Concrete Monument
FIP – Found ¾" Iron Pipe
FIPC – Found ¾" Iron Pipe with Cap
FIR – Found #5 Iron Rod
FIRC – Found #5 Iron Rod with Cap
SIRC – Set #5 Iron Rod with Cap "LB#7357"
FIPC – Found 1/2" Iron Pipe with Cap
FM – Found Mag Nail
FMD – Found Mag Nail with Disk
FN – Found Nail
FNTT – Found Nail with Tin Tab
FPK – Found PK Nail
FPKD – Found PK Nail with Disk
FRRS – Found Rail Road Spike
/CO – In Pavement Cut Out
(M) – Measured
(P) – Plat
CLF – Chain Link Fence
Conc. – Concrete

LEGEND

C/E – Covered Entry
CAC – Concrete Pad with Air Conditioning
CB – Catch Basin
CBS – Concrete Block Structure
CMP – Corrugated Metal Pipe
CPE – Concrete Pad with Pool Equipment
BFP – Back Flow Preventer
FFE – Finished Floor Elevation
UB – Utility Box
HYD – Fire Hydrant
O/L – Overhead Utility Line
WPP – Wood Power Pole
SSMH – Sanitary Sewer Manhole
PUDE – Public Utility & Drainage Easement
EB – Electric Box
WM – Water Meter
UE–RA – Utility Easement–Restricted Area
WLP – Wood Light Pole
WF – Wood Fence
PVC – Poly Vinyl Fence
MF – Metal Fence

SURVEYOR'S CERTIFICATION

THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF REGINA C KARNER, FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.

I HEREBY CERTIFY THAT THE SURVEY SURVEY OF THE PROPERTY SHOWN AND DESCRIBED HEREON WAS COMPLETED UNDER MY DIRECTION AND SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

I FURTHER CERTIFY THAT THIS SURVEY MEETS THE STANDARDS OF THE PRACTICE OF SURVEYING AND MAPPING AS SET FORTH IN FLORIDA ADMINISTRATIVE CODE 5J– 17, PURSUANT TO CHAPTER 472 OF THE FLORIDA STATUTES.

KARNER SURVEYING INC.

REGINA C. KARNER, PSM 4363, DATE
KARNER SURVEYING INC. LB#7357

Prepared For:
Macy Reid
St.Lucie County Florida

KARNER SURVEYING, INC.
Residential & Commercial Surveying Services
2740 SW Martin Downs Blvd.#333, Palm City, Fl.34990
Phone: (772)288 7206 Fax:(772)223 8181
WWW.KARNERSURVEYINGINC.COM karner@comcast.net

Not Valid Unless Sealed With An Embossed Surveyor's Seal

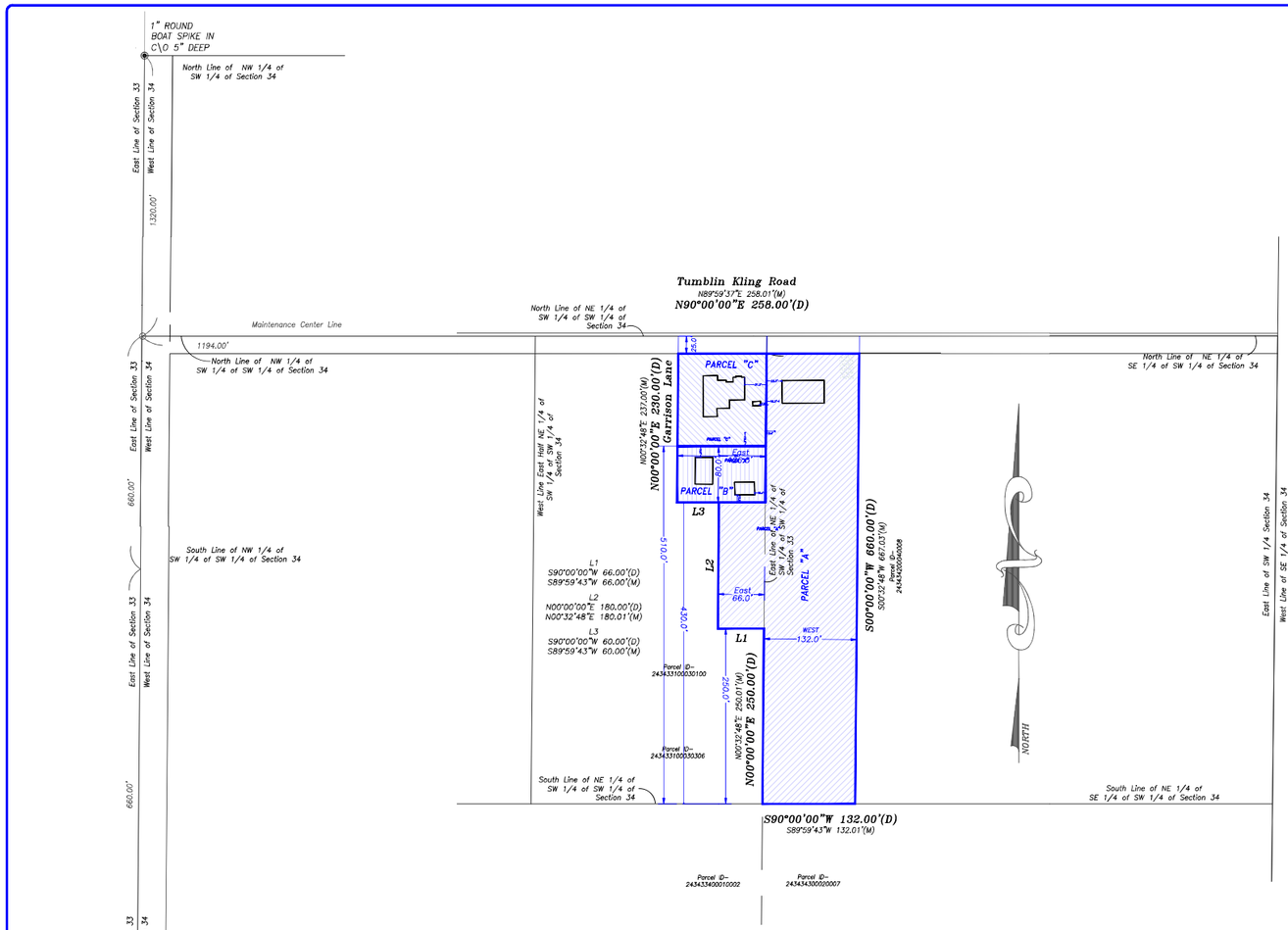
No.	Revision Description

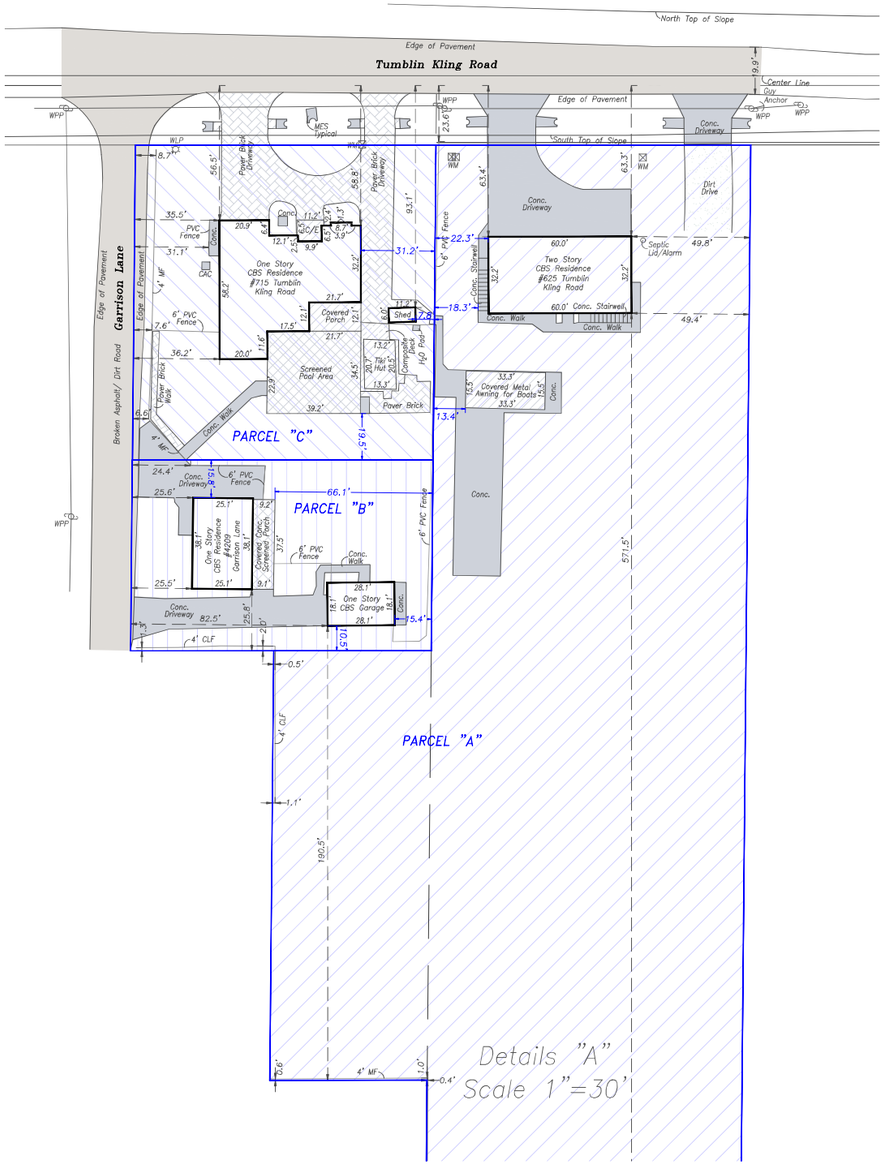
Sheet Title: SPECIFIC PURPOSE SURVEY

Scale: 1"=100' | Date: 04-26-24
Drawn By: | Field Book: 2401-06
Job No: 2462-01 | CADD File:

Sheet No: 1 of 2
File No:

SLC_T35-R40-S34





LEGAL DESCRIPTION

Parcel A– The West 132 feet of the Northwest quarter (NW 1/4) of the Southeast quarter (SE 1/4) of the Southwest Quarter (SW 1/4) of Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida. LESS the North 25 feet thereof ***AND*** *the East 66 feet of the south 430 feet of the East half of the Northeast quarter of the Southwest quarter of the Southwest quarter less the South 250 feet, Section 34, Township 35, South of Range 40 East, St. Lucie County, Florida.*

Parcel B
The North 80.00 feet of the East 126 feet of south 510.00 feet of the Northeast 1/4 of the Southwest 1/4 of the Southwest 1/4 less the South 430 feet in Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida.

Parcel C
The East 126 feet of the Northeast 1/4 of the Southwest 1/4 of the Southwest 1/4 less the South 510 feet and less the North 25.00 feet in Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida.

FEMA Flood Zone data shown here on is based on the visual inspection of the digital Flood Hazardous Maps provided by the Federal Emergency Management Agency (FEMA) and is limited to the accuracy of such maps. Flood Zone: X, Community #: 120286, Panel #: 0189, Suffix: K, Date: 2.19.2020.

LEGEND

FCM – Found 4"x4"Concrete Monument
FIP – Found ¾" Iron Pipe
FIPC – Found ¾" Iron Pipe with Cap
FIR – Found #5 Iron Rod
FIRC – Found #5 Iron Rod with Cap
SIRC – Set #5 Iron Rod with Cap "LB#7357"
FIPC – Found 1/2" Iron Pipe with Cap
FM – Found Mag Nail
FMD – Found Mag Nail with Disk
FN – Found Nail
FNTT – Found Nail with Tin Tab
FPK – Found PK Nail
FPKD – Found PK Nail with Disk
FRRS – Found Rail Road Spike
/CO – In Pavement Cut Out
(M) – Measured
(P) – Plat
CLF – Chain Link Fence
Conc. – Concrete

LEGEND

C/E – Covered Entry
CAC – Concrete Pad with Air Conditioning
CB – Catch Basin
CBS – Concrete Block Structure
CMP – Corrugated Metal Pipe
CPE – Concrete Pad with Pool Equipment
BFP – Back Flow Preventer
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EB – Electric Box
WM – Water Meter
UE-RA – Utility Easement-Restricted Area
WLP – Wood Light Pole
WF – Wood Fence
PVC – Poly Vinyl Fence
MF – Metal Fence

THIS SURVEY IS NOT FULL AND COMPLETE UNLESS PROVIDED IN IT'S ENTIRETY, CONSISTING OF 2 PAGES

Prepared For:

Macy Reid

St.Lucie County *Florida*

KARNER SURVEYING, INC.
Residential & Commercial Surveying Services
2740 SW Martin Downs Blvd.#333, Palm City, Fl.34990
Phone: (772)288 7206 *Fax:(772)223 8181*
WWW.KARNERSURVEYINGINC.COM *karner@comcast.net*

Not Valid Unless Sealed With An Embossed Surveyor's Seal

No.	Revision Description	Date

Sheet Title: **Boundary Survey**

Scale: 1"=100' | Drawn By: | Job No: 2402-01 | Date: 04-26-24 | Field Book: 2401-08 | CADD File:

Sheet No: 1 OF 2

For No:

LEGAL DESCRIPTION

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West 60 feet of the East 126 feet of the Northeast 1/4 of the Southwest 1/4 of the Southwest 1/4 less the South 430 feet and less the North 25 feet, in Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida.

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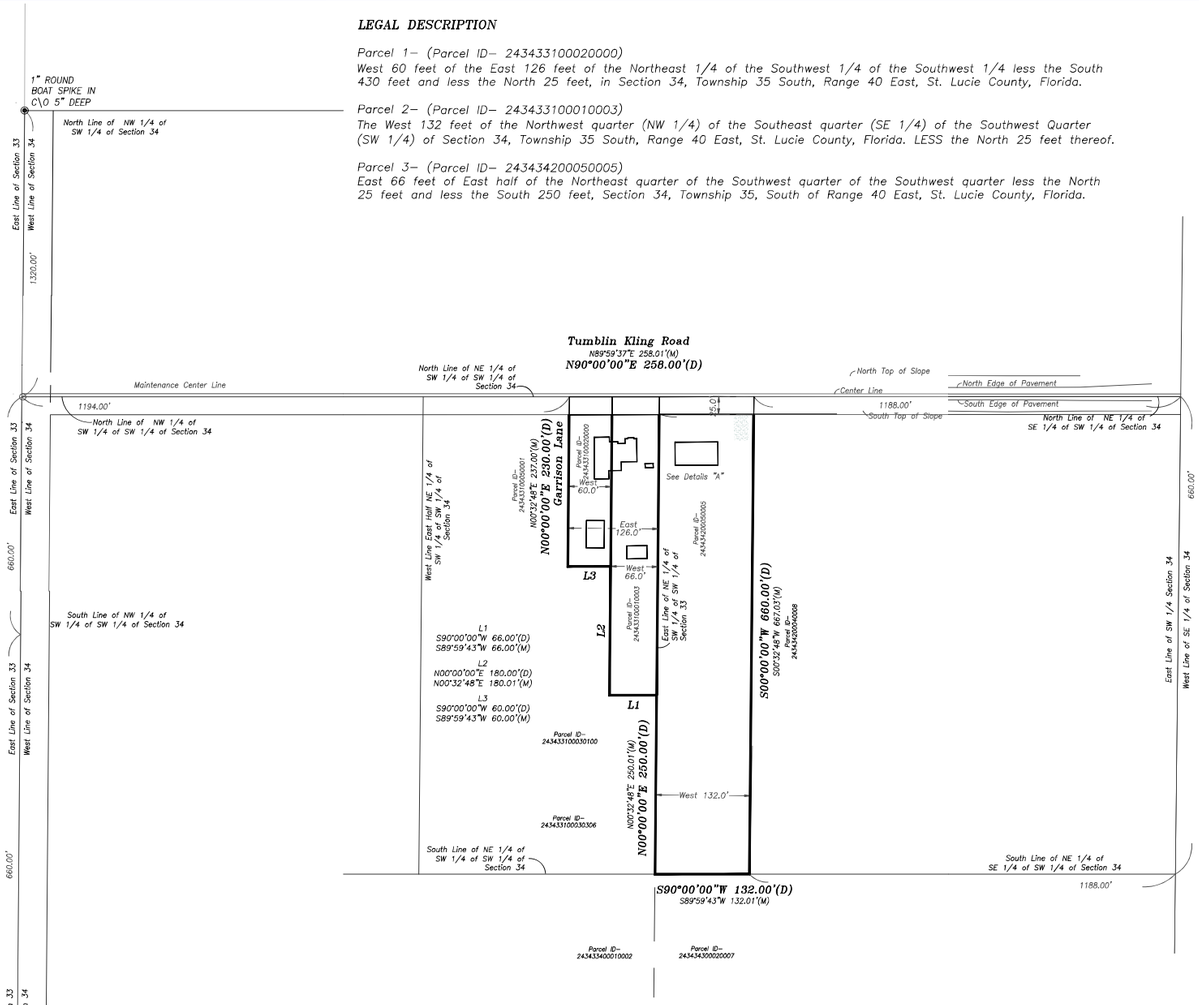
East 66 feet of East half of the Northeast quarter of the Southwest quarter of the Southwest quarter less the North 25 feet and less the South 250 feet, Section 34, Township 35, South of Range 40 East, St. Lucie County, Florida.



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LIMITATIONS:
1. THE SPECIFIC PURPOSE OF THIS SURVEY IS TO CREATE A NEW PARCEL A, B AND C, CONTAINED WITHIN THE EXISTING PARCEL LIMITS WHOS LIMITS ARE PER THE LEGAL DESCRIPTION PROVIDED BY THE CLIENT, AND SHOW THE NEW PARCEL LIMITS RELATIVE TO THE EXISTING IMPROVEMENTS.
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3. UNDERGROUND UTILITIES WERE NOT LOCATED
4. PARCEL LIMITS ESTABLISHED BY USE OF FOUND SURVEY CONTROL ALONG THE CENTER LINE AND/OR RIGHT OF WAY LINE OF TUMBLIN KLING ROAD.
5. DIMENSIONS SHOWN THUSLY (M) ON THE SURVEY SUPERSEDE DIMENSIONS REFLECTED ON EITHER RECORD DEED, PLAT OR RIGHT OF WAY MAP.
6. USE OF THIS SURVEY BY ANYONE OTHER THAN THOSE PREPARED FOR OR CERTIFIED TO, WILL BE THE RE–USERS SOLE RISK WITHOUT LIABILITY TO THE SURVEYOR.
7. THE OWNERSHIP OF FENCE LINES HAS NOT BEEN DETERMINED AS PART OF THIS SURVEY.
8. OFF SET CALLS TO FOUND SURVEY CONTROL ARE RELATIVE TO THE NEAREST PROPERTY CORNER, INTERSECTION OF LINES, POINT OF CURVATURES (PC), POINT OF REVERSE CURVATURES (PRC) OR OTHER IDENTIFIABLE POINT.
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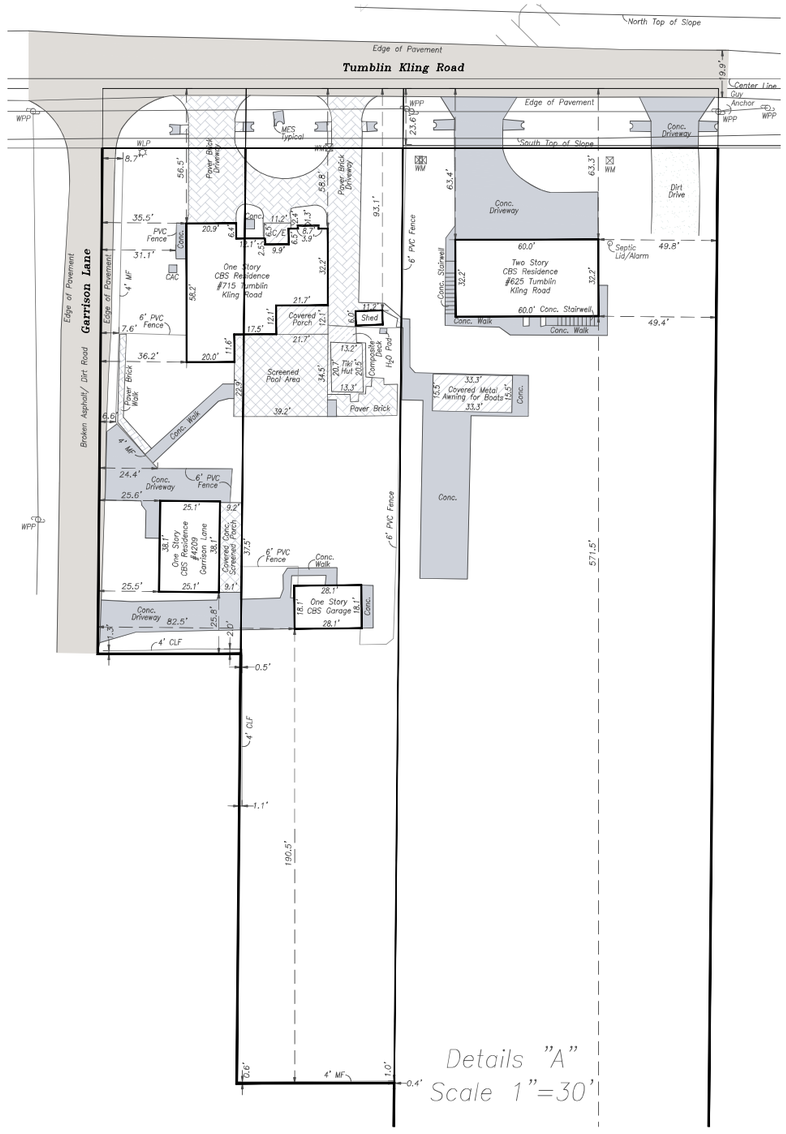

LEGEND

FCM – Found 4"x4"Concrete Monument
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SIRC – Set #5 Iron Rod with Cap "LB#7357"
FIPC – Found 1/2" Iron Pipe with Cap
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FNTT – Found Nail with Tin Tab
FPK – Found PK Nail
FPKD – Found PK Nail with Disk
FRRS – Found Rail Road Spike
/CO – In Pavement Cut Out
(M) – Measured
(P) – Plat
CLF – Chain Link Fence
Conc. – Concrete

LEGEND

C/E – Covered Entry
CAC – Concrete Pad with Air Conditioning
CB – Catch Basin
CBS – Concrete Block Structure
CMP – Corrugated Metal Pipe
CPE – Concrete Pad with Pool Equipment
BFP – Back Flow Preventer
FFE – Finished Floor Elevation
UB – Utility Box
HYD – Fire Hydrant
O/L – Overhead Utility Line
WPP – Wood Power Pole
SSMH – Sanitary Sewer Manhole
PUDE – Public Utility & Drainage Easement
EB – Electric Box
WM – Water Meter
UE–RA – Utility Easement–Restricted Area
WLP – Wood Light Pole
WF – Wood Fence
PVC – Poly Vinyl Fence
MF – Metal Fence

SURVEYOR'S CERTIFICATION

THIS SURVEY IS NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND RAISED EMBOSSED SEAL OF REGINA C KARNER, FLORIDA PROFESSIONAL SURVEYOR AND MAPPER.

I HEREBY CERTIFY THAT THE SURVEY SURVEY OF THE PROPERTY SHOWN AND DESCRIBED HEREON WAS COMPLETED UNDER MY DIRECTION AND SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

I FURTHER CERTIFY THAT THIS SURVEY MEETS THE STANDARDS OF THE PRACTICE OF SURVEYING AND MAPPING AS SET FORTH IN FLORIDA ADMINISTRATIVE CODE 5J– 17, PURSUANT TO CHAPTER 472 OF THE FLORIDA STATUTES.

KARNER SURVEYING INC.

REGINA C. KARNER, PSM 4363, DATE
KARNER SURVEYING INC. LB#7357

Prepared For:
Macy Reid
St.Lucie County Florida

KARNER SURVEYING, INC.
Residential & Commercial Surveying Services
2740 SW Martin Downs Blvd.#333, Palm City, Fl.34990
Phone: (772)288 7206 Fax:(772)223 8181
WWW.KARNERSURVEYINGINC.COM karner@comcast.net

Not Valid Unless Sealed With An Embossed Surveyor's Seal

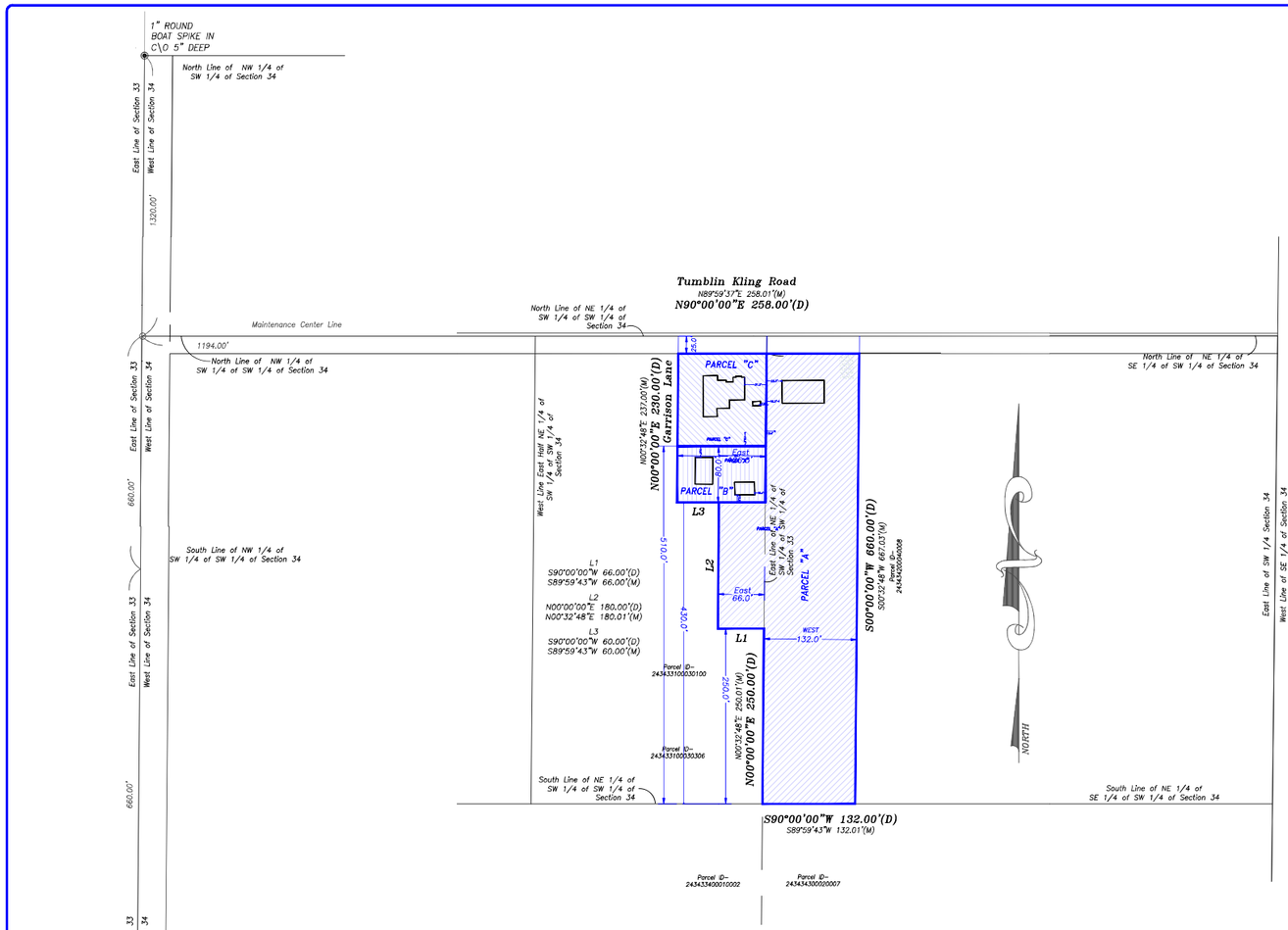
No.	Revision Description

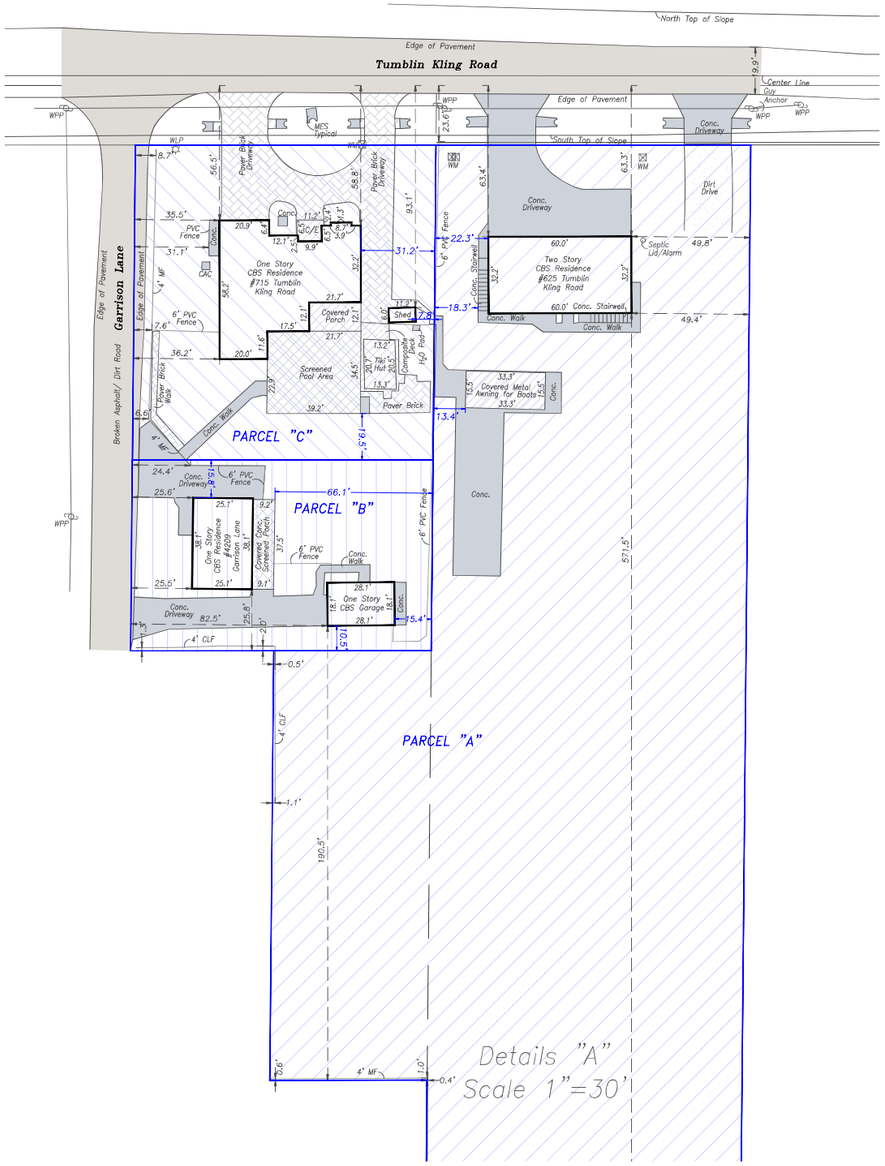
Sheet Title: SPECIFIC PURPOSE SURVEY

Scale: 1"=100' | Date: 04-26-24
Drawn By: | Field Book: 2401-06
Job No: 2462-01 | CADD File:

Sheet No: 1 of 2
File No:

SLC_T35-R40-S34





LEGAL DESCRIPTION

Parcel A– The West 132 feet of the Northwest quarter (NW 1/4) of the Southeast quarter (SE 1/4) of the Southwest Quarter (SW 1/4) of Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida. LESS the North 25 feet thereof ***AND*** *the East 66 feet of the south 430 feet of the East half of the Northeast quarter of the Southwest quarter of the Southwest quarter less the South 250 feet, Section 34, Township 35, South of Range 40 East, St. Lucie County, Florida.*

Parcel B
The North 80.00 feet of the East 126 feet of south 510.00 feet of the Northeast 1/4 of the Southwest 1/4 of the Southwest 1/4 less the South 430 feet in Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida.

Parcel C
The East 126 feet of the Northeast 1/4 of the Southwest 1/4 of the Southwest 1/4 less the South 510 feet and less the North 25.00 feet in Section 34, Township 35 South, Range 40 East, St. Lucie County, Florida.

FEMA Flood Zone data shown here on is based on the visual inspection of the digital Flood Hazardous Maps provided by the Federal Emergency Management Agency (FEMA) and is limited to the accuracy of such maps. Flood Zone: X, Community #: 120286, Panel #: 0189, Suffix: K, Date: 2.19.2020.

LEGEND

FCM – Found 4"x4"Concrete Monument
FIP – Found ¾" Iron Pipe
FIPC – Found ¾" Iron Pipe with Cap
FIR – Found #5 Iron Rod
FIRC – Found #5 Iron Rod with Cap
SIRC – Set #5 Iron Rod with Cap "LB#7357"
FIPC – Found 1/2" Iron Pipe with Cap
FM – Found Mag Nail
FMD – Found Mag Nail with Disk
FN – Found Nail
FNTT – Found Nail with Tin Tab
FPK – Found PK Nail
FPKD – Found PK Nail with Disk
FRRS – Found Rail Road Spike
/CO – In Pavement Cut Out
(M) – Measured
(P) – Plat
CLF – Chain Link Fence
Conc. – Concrete

LEGEND

C/E – Covered Entry
CAC – Concrete Pad with Air Conditioning
CB – Catch Basin
CBS – Concrete Block Structure
CMP – Corrugated Metal Pipe
CPE – Concrete Pad with Pool Equipment
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UB – Utility Box
HYD – Fire Hydrant
O/L – Overhead Utility Line
WPP – Wood Power Pole
SSMH – Sanitary Sewer Manhole
PUDE – Public Utility & Drainage Easement
EB – Electric Box
WM – Water Meter
UE-RA – Utility Easement-Restricted Area
WLP – Wood Light Pole
WF – Wood Fence
PVC – Poly Vinyl Fence
MF – Metal Fence

THIS SURVEY IS NOT FULL AND COMPLETE UNLESS PROVIDED IN IT'S ENTIRETY, CONSISTING OF 2 PAGES

Prepared For:

Macy Reid

St.Lucie County *Florida*

KARNER SURVEYING, INC.
Residential & Commercial Surveying Services
2740 SW Martin Downs Blvd.#333, Palm City, Fl.34990
Phone: (772)288 7206 *Fax:(772)223 8181*
WWW.KARNERSURVEYINGINC.COM *karner@comcast.net*

Not Valid Unless Sealed With An Embossed Surveyor's Seal

No.	Revision Description	Date

Sheet Title: **Boundary Survey**

Scale: 1"=100' | Drawn By: | Job No: 2402-01 | Date: 04-26-24 | Field Book: 2401-08 | CADD File:

Sheet No: 1 OF 2

For No:

Technical Review Committee **3. f.**

Meeting Date: 10/17/2024

REQUESTED ACTION

Minor Replat – Woodspring Suites – 2480 S. Jenkins Road

SUMMARY

Project #: PZSUB2024-00002

The subject site is located at or near 2480 S. Jenkins Road. It is comprised of approximately 4.735 acres and is identified by the parcel number 2419-232-0003-000-6. The subject site is Zoned C-3, General Commercial Zone with a Future Land Use of GC, General Commercial. The applicant intends to subdivide the parcel into two (2) lots for the development of two (2) hotels.

If you have access to the City of Fort Pierce Tyler EPL system, please add comments to the appropriate project. If not, please send comments to: planning@cityoffortpierce.com

LOCATION

2480 S. Jenkins Road

RESPONSIBLE STAFF

Vennis Gilmore, Assistant Planning Director

RECOMMENDATION

TBD

Attachments

TRC Packet

Form Review

Form Started By: Vennis Gilmore Started On: 10/03/2024 03:09 PM

Final Approval Date: 10/04/2024

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 5199485 OR BOOK 4997 PAGE 2817, Recorded 06/01/2023 08:59:53 AM Doc Tax: $8400.00

This instrument prepared by
and when recorded return to:

PAXIN CLOSING AND ESCROW, LLC
OLDE MILTON COMMONS
3540 OLD MILTON PARKWAY
ALPHARETTA, GEORGIA 30005
770-416-1952 2-11150

SPECIAL WARRANTY DEED

THIS INDENTURE is made effective as of the 31st day of May, 2023, by **PEGGY SANCHEZ**, individually, **SANDRA JOY DANIELL**, individually and as Trustee of the Peggy Diane Sanchez Revocable Trust, **AMIR KHOSHBIN**, individually, and **TYL, INC.**, a Florida corporation (collectively, the "Grantor"), and is delivered to **PHMI WS FORT PIERCE LLC**, a Delaware limited liability company ("Grantee"), whose address is 60 Service Lane, Ringgold, Georgia 30736.

WITNESSETH: That Grantor, for and in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration, in hand paid at and before the sealing and delivery of these presents, the receipt and sufficiency of which are hereby acknowledged, has granted, bargained, sold, aliened, conveyed and confirmed and by these presents does grant, bargain, sell, alien, convey and confirm unto Grantee all that tract or parcel of land described on Exhibit A, attached hereto and made a part hereof (the "Property").

TO HAVE AND TO HOLD the Property, together with all and singular tenements, hereditaments and appurtenances of Grantor thereto belonging or in anywise appertaining, the rights, members and appurtenances thereof that Grantor may have, subject to the Permitted Exceptions (as hereinafter defined), forever, IN FEE SIMPLE.

This Deed and the warranty of title contained herein are made expressly subject to the items set forth on Exhibit B attached hereto and made a part hereof (the "Permitted Exceptions") but this reference shall not reimpose same.

Grantor will warrant and forever defend the right and title to the Property unto Grantee against the lawful claims of all persons owning, holding or claiming by, through or under Grantor, but not otherwise.

Grantor hereby represents and warrants to Grantee that the Property is not the homestead of Grantor or any other person.

(The words "Grantor" and "Grantee" include all genders, plural and singular, and their respective heirs, successors and assigns where the context requires or permits.)

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, Grantor has signed and sealed this deed, the day and year first above written.

Signed, sealed, and delivered
in the presence of:

Signature of Witness 1

Print Name of Witness 1

Signature of Witness 2

Print Name of Witness 2

GRANTOR:

(SEAL)
Peggy Sanchez, by Sandra Joy Daniell, as
Attorney-in-Fact

STATE OF Florida)
COUNTY OF Hillsborough)

THE FOREGOING INSTRUMENT was acknowledged before me by means of [✓] physical presence or [ ] online notarization, this 24th day of May, 2023, by Sandra Joy Daniell, as Attorney-in-Fact for Peggy Sanchez, on behalf of thereof, who is personally known to me or has produced FLDL as identification.

[AFFIX NOTARY SEAL]

EMILY FAUDOA
Notary Public State of Florida
Commission # HH 283135
My Comm. Expires Jun 30, 2026
Bonded through National Notary Assn.

Print name: Emily Faudoa
Notary Public, State of Florida at Large
My Commission expires: Jun 30, 2026

Signed, sealed, and delivered
in the presence of:

Harley Jean Scott
Signature of Witness 1

Harley Jean Scott
Print Name of Witness 1

Stephanie Figueroa
Signature of Witness 2

Jasmin Garcia
Print Name of Witness 2

GRANTOR:

Sandra Joy Daniell (SEAL)
Sandra Joy Daniell, individually and as Trustee
of the Peggy Diane Sanchez Revocable Trust

STATE OF Florida)
COUNTY OF Hillsborough)

THE FOREGOING INSTRUMENT was acknowledged before me by means of [ ] physical presence or [ ] online notarization, this 24th day of May, 2023, by Sandra Joy Daniell, individually and as Trustee of the Peggy Diane Sanchez Revocable Trust, on behalf of thereof, who are personally known to me or have produced FLDL as identification.

Emily Faudoa
Print Name: Emily Faudoa
Notary Public, State of Florida at Large
My Commission expires: Jun 30, 2026

[AFFIX NOTARY SEAL]

EMILY FAUDOA
Notary Public - State of Florida
Commission # HH 283135
My Comm. Expires Jun 30, 2026
Bonded through National Notary Assn.

Signed, sealed, and delivered
in the presence of:

Signature of Witness 1

Jovanco Samson

Print Name of Witness 1

Signature of Witness 2

Emmanuel Auguste

Print Name of Witness 2

GRANTOR:

(SEAL)

Amir Khoshbin

STATE OF Florida)
COUNTY OF Palm Beach)

THE FOREGOING INSTRUMENT was acknowledged before me by means of [ ] physical presence or [ ] online notarization, this 24 day of May, 2023, by Amir Khoshbin on behalf of thereof, who are personally known to me or have produced Drivers License as identification.

[AFFIX NOTARY SEAL]

Print name: Charles Stewart
Notary Public, State of FL at Large
My Commission expires: 04/18/2025

CHARLES STEWART
Notary Public - State of Florida
Commission # HH 118280
My Comm. Expires Apr 18, 2025
Bonded through National Notary Assn.

Signed, sealed, and delivered
in the presence of:

Signature of Witness 1

Thomas Caughran
Print Name of Witness 1

Signature of Witness 2

Luke Wooldridge
Print Name of Witness 2

GRANTOR:

TYL, Inc.,
a Florida corporation

By: _____
Name: Adrian Fairclough
Title: President

STATE OF Florida)
COUNTY OF Palm Beach)

THE FOREGOING INSTRUMENT was acknowledged before me by means of [✓] physical presence or [ ] online notarization, this 24th day of May, 2023, by Adrian Fairclough, as President of TYL, Inc., a Florida corporation, on behalf of thereof, who are personally known to me or have produced FLDL as identification.

[AFFIX NOTARY SEAL]

Print name: S Almeida
Notary Public, State of Florida at Large
My Commission expires: Nov 13, 2026

Notary Public State of Florida
Starr Marie Almeida
My Commission HH 317061
Expires 11/13/2026

EXHIBIT A

LEGAL DESCRIPTION

The South 1/2 of the Northwest 1/4 of the Southwest 1/4 of the Northwest 1/4 of Section 19, Township 35 South, Range 40 East, lying and being in St. Lucie County, Florida, less the West 40 feet thereof for Jenkins Road right-of-way.

EXHIBIT B

PERMITTED EXCEPTIONS

1. Taxes and assessments for the year 2023 and subsequent years, which are not yet due and payable.

2. Resolution No. 99-99 of the Board of County Commissioners of St. Lucie County, Florida, including terms and conditions thereof, as recorded in Official Records Book 1230, Page 742, and re-recorded in Official Records Book 1238, Page 2067, of the Public Records of St. Lucie County, Florida.

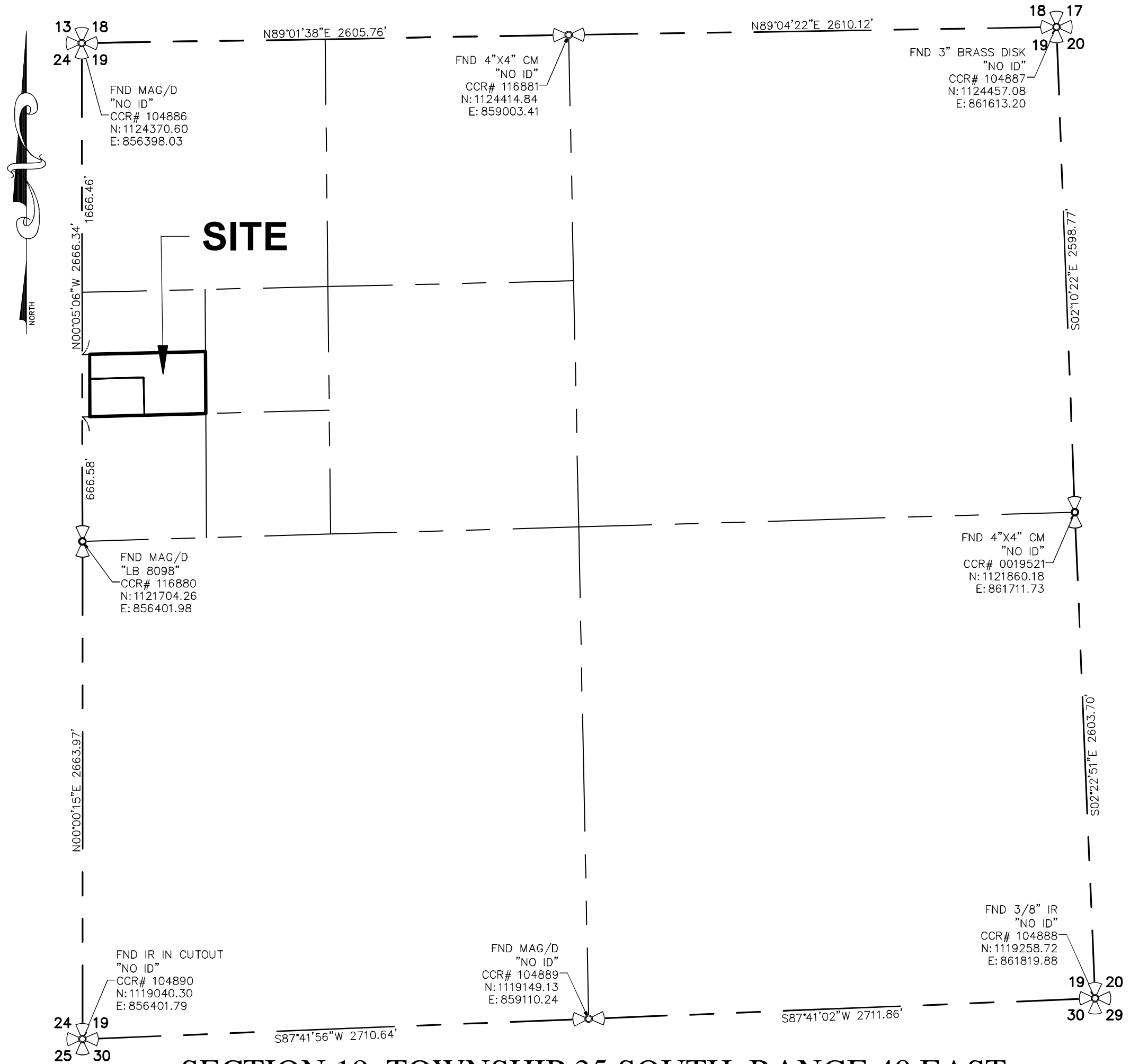
3. Ordinance No. K-351 of the City of Fort Pierce, Florida, including terms and conditions thereof, as recorded in Official Records Book 2297, Page 2161, of the Public Records of St. Lucie County, Florida.

4. Easement granted to City of Fort Pierce and Fort Pierce Utilities Authority, as more fully set forth in the document recorded in Official Records Book 2853, Page 2427, of the Public Records of St. Lucie County, Florida.

5. Perpetual Easement to State of Florida Department of Transportation, as more fully set forth in the document recorded in Official Records Book 3643, Page 1178, of the Public Records of St. Lucie County, Florida.

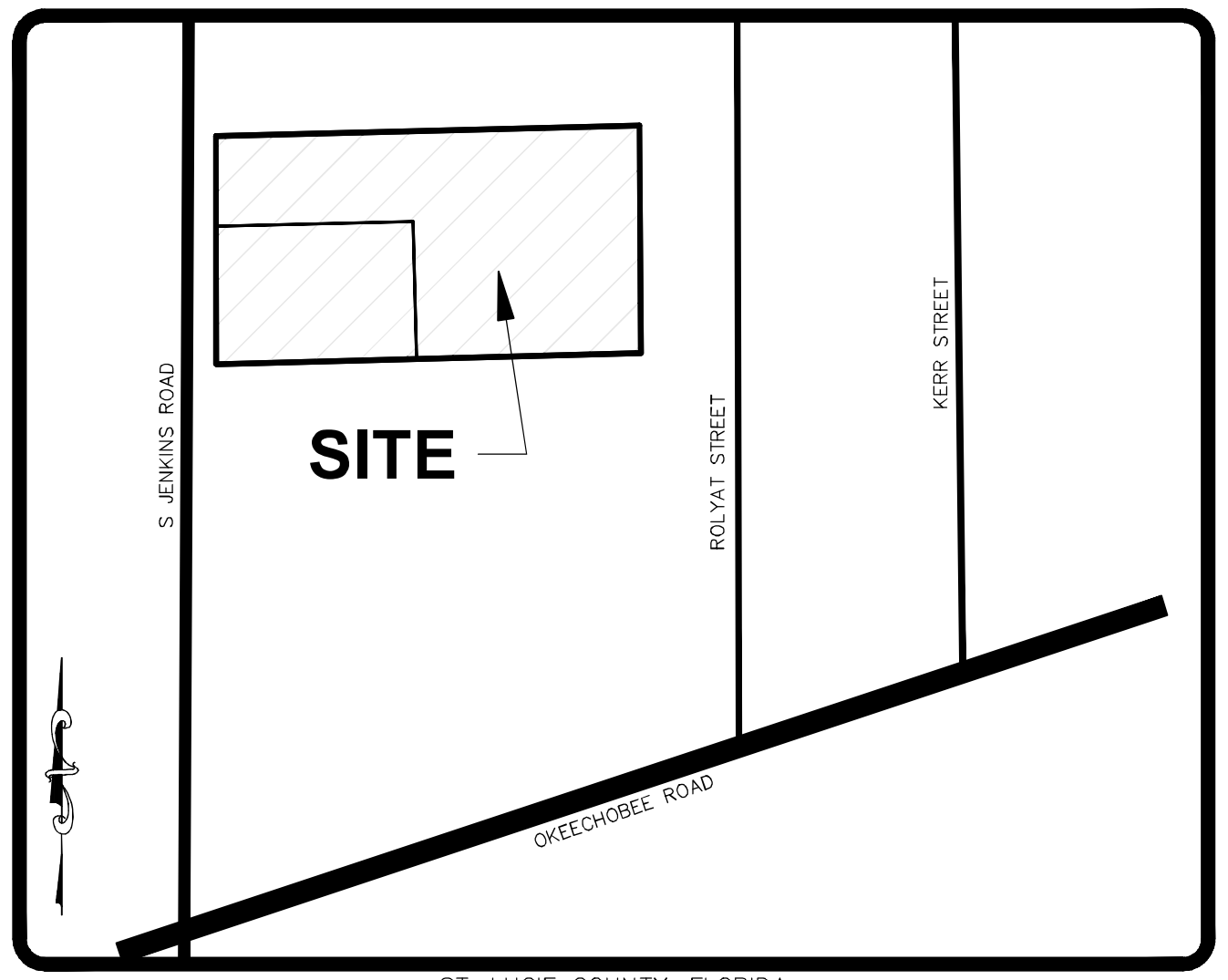
BOUNDARY SURVEY

MINOR REPLAT FOR: PHMI WS FORT PIERCE LLC



SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST

1"=500'



ST. LUCIE COUNTY, FLORIDA

VICINITY MAP

NO SCALE

SCHEDULE B-II ITEMS (PARENT PARCEL)

TITLE COMMITMENT PREPARED BY
STEWART TITLE GUARANTEE COMPANY
COMMITMENT # 2-11174

COMMITMENT DATE: MARCH 23, 2024, AT 8:00 AM

1. TAXES AND ASSESSMENTS FOR THE YEAR 2023 AND SUBSEQUENT YEARS, WHICH ARE NOT YET DUE AND PAYABLE.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
2. ANY LIEN ARISING UNDER CHAPTER 159, FLORIDA STATUTES, IN FAVOR OF ANY CITY, TOWN, VILLAGE OR PORT AUTHORITY FOR UNPAID SERVICE CHARGES FOR SERVICE BY ANY WATER SYSTEM, SEWER SYSTEM OR GAS SYSTEM SERVICING THE LANDS DESCRIBED HEREIN.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
3. RESOLUTION NO. 99-99 OF THE BOARD OF COUNTY COMMISSIONERS OF ST. LUCIE COUNTY, FLORIDA, INCLUDING TERMS AND CONDITIONS THEREOF, AS RECORDED IN OFFICIAL RECORDS BOOK 1230, PAGE 742, AND RE-RECORDED IN OFFICIAL RECORDS BOOK 1238, PAGE 2067, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
   DOES NOT AFFECT SUBJECT PROPERTY; NOT SHOWN HEREON.
4. ORDINANCE NO. K-351 OF THE CITY OF FORT PIERCE, FLORIDA, INCLUDING TERMS AND CONDITIONS THEREOF, AS RECORDED IN OFFICIAL RECORDS BOOK 2297, PAGE 2161, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
5. EASEMENT GRANTED TO CITY OF FORT PIERCE AND FORT PIERCE UTILITIES AUTHORITY, AS MORE FULLY SET FORTH IN THE DOCUMENT RECORDED IN OFFICIAL RECORDS BOOK 2853, PAGE 2427, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
   AFFECTS SUBJECT PROPERTY; SHOWN HEREON.
6. PERPETUAL EASEMENT TO STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, AS MORE FULLY SET FORTH IN THE DOCUMENT RECORDED IN OFFICIAL RECORDS BOOK 3643, PAGE 1178, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
   AFFECTS SUBJECT PROPERTY; SHOWN HEREON.
7. PENDING SUCH TIME AS THE IMPROVEMENTS UNDER CONSTRUCTION ON INSURED PREMISES SHALL BE COMPLETED, LIABILITY UNDER THIS POLICY IS LIMITED TO THE PURCHASE PRICE PAID FOR THE LAND PLUS THE COST OF EXISTING IMPROVEMENTS, LIABILITY HEREUNDER INCREASING AS THE IMPROVEMENTS PROGRESS, IN THE AMOUNT OF THE COST THEREOF, UP TO THE FACE AMOUNT OF THIS POLICY. THE EFFECTIVE DATE OF THIS POLICY WILL NOT CHANCE AND WILL BE STATED ON SCHEDULE "A" HEREOF.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
8. RIGHTS OF TENANTS UNDER ANY UNRECORDED LEASES.
   AFFECTS SUBJECT PROPERTY; NOT A SURVEY MATTER.
9. THOSE MATTERS AS SHOWN ON THAT CERTAIN PRELIMINARY ALTA/NSPS LAND TITLE SURVEY, PREPARED FOR PHMI GROUP, PREPARED BY EDC ENGINEERS & SURVEYORS, DATED OCTOBER 6, 2022, LAST REVISED JUNE 24, 2024, AS FOLLOWS:

A. GAS VALVE AND GAS LINE LOCATED IN WEST PORTION OF SUBJECT PROPERTY.
   AFFECTS SUBJECT PROPERTY; GAS VALVE SHOWN HEREON;
   UNDERGROUND UTILITIES WERE NOT LOCATED AS A PART OF THIS SURVEY.
B. SWALE, WITH TOP OF BANK OR BERM LOCATED IN WEST PORTION OF SUBJECT PROPERTY.
   AFFECTS SUBJECT PROPERTY; SHOWN HEREON.
C. DRAINAGE MANHOLE LOCATED IN WEST PORTION OF SUBJECT PROPERTY.
   AFFECTS SUBJECT PROPERTY; SHOWN HEREON.

SYMBOL & ABBREVIATION LEGEND:

ASPH	ASPHALT
BFP	BACK FLOW PREVENTER
	CATCH BASIN
℄	CENTERLINE
CCR	CERTIFIED CORNER RECORD
CLF	CHAIN LINK FENCE
CONC	CONCRETE
C.B.S.	CONCRETE BLOCK STRUCTURE
CM	CONCRETE MONUMENT
DDCV	DOUBLE DETECTOR CHECK VALVE
Ⓓ	DRAINAGE MANHOLE
EOP	EDGE OF PAVEMENT
	FIRE DEPARTMENT CONNECTION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FND	FOUND
GAS	GAS VALVE
	GUY WIRE ANCHOR
HYD	HYDRANT
IR	IRON ROD
IR/C	IRON ROD AND CAP
	IRRIGATION CONTROL VALVE
MAG/D	MAG NAIL MAG BRAND NAIL
Ⓜ	MAILBOX
	METAL LIGHT POST
O.R.B.	OFFICIAL RECORDS BOOK
OHW	OVER HEAD WIRES
PG	PAGE
P.B.	PLAT BOOK
P.O.B.	POINT OF BEGINNING
P.O.C.	POINT OF COMMENCEMENT
R/W	RIGHT-OF-WAY
Ⓢ	SANITARY MANHOLE
SEC	SECTION
	SIGN
TOB	TOP OF BANK/BERM
TWNSHP	TOWNSHIP
DRN	UNDERGROUND STORM PIPE
UNK HH	UNKNOWN HANDHOLD
WV	WATER VALVE (WV)
WF	WOOD FENCE
	WOOD POWER POLE

LEGAL DESCRIPTION (PARENT PARCEL):

THE SOUTH 1/2 OF THE NW 1/4 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, LESS THE WEST 40 FEET THEREOF FOR JENKINS ROAD RIGHT-OF-WAY.

CONTAINING 206,264.87 SQ.FT. (4.735 ACRES), MORE OR LESS.

LEGAL DESCRIPTION (PARCEL 1):

THE SOUTH 1/2 OF THE NW 1/4 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, LESS THE WEST 40 FEET THEREOF FOR JENKINS ROAD RIGHT-OF-WAY. LESS AND EXCEPT THE FOLLOWING DESCRIBED PARCEL:

A PARCEL OF LAND BEING A PORTION OF THE SOUTH 1/2 OF THE NW 1/4 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE SOUTH HALF (1/2) OF THE NORTHWEST QUARTER (1/4) OF THE SOUTHWEST QUARTER (1/4) OF THE NORTHWEST QUARTER (1/4) OF SAID SECTION 19; THENCE NORTH 88°29'34" EAST, ALONG THE SOUTH LINE OF SAID SOUTH HALF (1/2) OF THE NORTHWEST QUARTER (1/4) OF THE SOUTHWEST QUARTER (1/4) OF THE NORTHWEST QUARTER (1/4) OF SAID SECTION 19, A DISTANCE OF 40.01 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF S JENKINS ROAD (80-FOOT-WIDE RIGHT-OF-WAY) AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP SECTION 94631-2604 AND THE POINT OF BEGINNING;

THENCE CONTINUE NORTH 88°29'34" EAST, ALONG SAID SOUTH LINE, A DISTANCE OF 292.68 FEET; THENCE NORTH 01°25'09" WEST, LEAVING SAID SOUTH LINE, A DISTANCE OF 201.03 FEET; THENCE SOUTH 88°34'51" WEST, A DISTANCE OF 287.99 FEET TO A POINT ON SAID EASTERLY RIGHT-OF-WAY LINE OF S JENKINS ROAD; THENCE SOUTH 00°25'06" EAST, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 201.54 FEET TO THE POINT OF BEGINNING.

CONTAINING 147,833.78 SQ.FT. (3.394 ACRES), MORE OR LESS.

LEGAL DESCRIPTION (PARCEL 2):

A PARCEL OF LAND BEING A PORTION OF THE SOUTH 1/2 OF THE NW 1/4 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 19, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE SOUTH HALF (1/2) OF THE NORTHWEST QUARTER (1/4) OF THE SOUTHWEST QUARTER (1/4) OF THE NORTHWEST QUARTER (1/4) OF SAID SECTION 19; THENCE NORTH 88°29'34" EAST, ALONG THE SOUTH LINE OF SAID SOUTH HALF (1/2) OF THE NORTHWEST QUARTER (1/4) OF THE SOUTHWEST QUARTER (1/4) OF THE NORTHWEST QUARTER (1/4) OF SAID SECTION 19, A DISTANCE OF 40.01 FEET TO A POINT ON THE EASTERLY RIGHT-OF-WAY LINE OF S JENKINS ROAD (80-FOOT-WIDE RIGHT-OF-WAY) AS SHOWN ON THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY MAP SECTION 94631-2604 AND THE POINT OF BEGINNING;

THENCE CONTINUE NORTH 88°29'34" EAST, ALONG SAID SOUTH LINE, A DISTANCE OF 292.68 FEET; THENCE NORTH 01°25'09" WEST, LEAVING SAID SOUTH LINE, A DISTANCE OF 201.03 FEET; THENCE SOUTH 88°34'51" WEST, A DISTANCE OF 287.99 FEET TO A POINT ON SAID EASTERLY RIGHT-OF-WAY LINE OF S JENKINS ROAD; THENCE SOUTH 00°25'06" EAST, ALONG SAID RIGHT-OF-WAY LINE, A DISTANCE OF 201.54 FEET TO THE POINT OF BEGINNING.

CONTAINING 58,431.05 SQ.FT. (1.341 ACRES), MORE OR LESS.

SURVEYORS NOTES AND REPORT:

1. THIS BOUNDARY SURVEY WAS PERFORMED FOR THE PURPOSE OF MAPPING EXISTING FEATURES AND CONDITIONS, AS SHOWN AND DEPICTED HEREON. I HEREBY CERTIFY TO THE BEST OF MY KNOWLEDGE AND BELIEF THAT THIS IS A TRUE AND ACCURATE DEPICTION OF A FIELD SURVEY PERFORMED UNDER MY DIRECTION AND COMPLETED ON AUGUST 16, 2024. I FURTHER CERTIFY THAT SAID DRAWING IS IN COMPLIANCE WITH THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.
2. THIS SURVEY MAP AND REPRODUCTIONS THEREOF ARE NOT VALID WITHOUT THE ORIGINAL SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER OR ORIGINAL ELECTRONIC SIGNATURE. 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.
3. THE LAST DATE OF FIELD WORK (AND DATA ACQUISITION) WAS AUGUST 27, 2024.
4. PARENT LEGAL DESCRIPTION HEREON SHOWN IN REFERENCE TO THE LATEST INSTRUMENT OF RECORD AVAILABLE ON THE MUNICIPAL PROPERTY APPRAISER GEOGRAPHIC INFORMATION SYSTEM (GIS), SAID INSTRUMENT BEING OFFICIAL RECORDS BOOK 4997, PAGE 2817, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. PARCEL 1 & 2 LEGAL DESCRIPTIONS WERE PREPARED BY THIS OFFICE. A TITLE SEARCH FOR THE PARENT PROPERTY HAS BEEN ABSTRACTED TO SHOW MATTERS OF RECORD SUCH AS EASEMENTS OR OTHER ENCUMBRANCES OR RESTRICTIONS.
5. PARCELS CONTAIN A TOTAL OF 4.735 ACRES, MORE OR LESS.
6. THIS BOUNDARY SURVEY HAS BEEN REFERENCED TO THE FLORIDA STATE PLANE COORDINATE SYSTEM-EAST ZONE, NAD 83 (1990).
7. UNDERGROUND UTILITIES, UTILITY SERVICES, FOUNDATIONS AND IMPROVEMENTS WERE NOT LOCATED AS A PART OF THIS SURVEY, UNLESS FEATURES WERE VISIBLE AT THE SURFACE LEVEL.
8. REVISIONS SHOWN HEREON DO NOT REPRESENT A "FIELD SURVEY UPDATE" UNLESS OTHERWISE NOTED.
9. BEARINGS SHOWN HEREON ARE BASED UPON GRID NORTH AND REFERENCE TO THE LINE LABELED HEREON AS (BEARING BASIS) AND ALL OTHER BEARINGS ARE RELATIVE THERETO. DISTANCES ARE IN U.S. SURVEY FEET AND DECIMAL PARTS THEREOF.
10. THIS SITE WAS SURVEYED UTILIZING TRIMBLE/SPECTRA 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.
11. 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.
12. 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.
13. 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.
14. THE PROPERTY WHICH IS THE SUBJECT OF THIS SURVEY APPEARS TO BE SITUATE IN BOTH AN AREA OF MINIMAL FLOOD HAZARD (ZONE X) AND AN AREA OF 0.2% ANNUAL CHANCE FLOOD HAZARD (ZONE X) AT THIS TIME PURSUANT TO F.E.M.A. FIRM NUMBER 12111C0167J, HAVING AN EFFECTIVE DATE OF FEBRUARY 16, 2012. FOR APPROXIMATE DELINEATION OF THE FLOOD ZONE LIMITS, REFER TO AFOREMENTIONED FIRM PANELS.

MICHAEL T. OWEN PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA REGISTRATION #5556

SIGNATURE DATE:

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	RJB
CHECKED BY	MTO
FIELD CREW	JR/GH
FILENAME	22-378 MINOR REPLAT.dwg
SCALE	AS SHOWN
DATE	August 27, 2024

DATE	REVISION COMMENTS

BOUNDARY SURVEY

MINOR REPLAT FOR: PHMI WS FORT PIERCE LLC

LAND LYING IN SEC. 19, TWNSHP. 35 SOUTH, RGE. 40 EAST
ST. LUCIE COUNTY, FLORIDA

10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
☏ 772-462-2455

22-378

Z:\EDC-2022\22-378 - PHMI - S. Jenkins Road Hotel\SURVEY\Dwg - PDF\Survey\22-378 MINOR REPLAT.dwg, 8/27/2024 10:48 AM
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BOUNDARY SURVEY

MINOR REPLAT FOR: PHMI WS FORT PIERCE LLC

GRAPHIC SCALE
30 0 15 30 60 120
(IN FEET)
1 inch = 30 ft.

NORTH

S88°34'51"W 619.26'
NORTH LINE OF THE SOUTH 1/2 OF THE NW 1/4 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 19/35/40

FND 5/8" IR/C
WITNESS CORNER
6.76' WEST ALONG
NORTH PROPERTY LINE
"EDC LB 8098"

EAST LINE OF SECTION 24/35/39
WEST LINE OF SECTION 19/35/40

S JENKINS RD
80' WIDE PUBLIC R/W
FDOT R/W MAP
SECTION 94631-2604

ASPHALT ROADWAY

ASPH. DRIVE

EOF-NO CURB

SWALE

GATE

1-STORY C.B.S.

PAVER WALK

FERNANDO VELASCO
2440 S JENKINS RD
PARCEL ID: 2419-232-0002-000-9
O.R.B. 3289, PG. 1502

FND 5/8" IR/C
"EDC LB 8098"
40.00'
40.00'
LESS WEST 40 FEET

CONC. DRIVE

R/W LINE

(PROPOSED)
CROSS ACCESS
EASEMENT
41.00'
O.R.B. ____, PG. ____

(PARENT PARCEL)
4.735 ACRES
(VACANT)
PHMI WS FORT PIERCE LLC
2480 S JENKINS RD
PARCEL ID: 2419-232-0003-000-6
O.R.B. 4997, PG. 2817

(PARCEL 1)
3.394 ACRES

S00°05'06"E 151.69'

SET 5/8" IR/C
"EDC LB 8098"

S88°34'51"W 287.99'

SET 5/8" IR/C
"EDC LB 8098"

VARYING WIDTH PERPETUAL EASEMENT FOR
CLEARING, EXCAVATING, CONSTRUCTING AND
MAINTAINING DRAINAGE DITCHES, SWALES AND DRAINS
O.R.B. 3643, PG. 1178

(PROPOSED)
30.00' R/W DEDICATION
O.R.B. ____, PG. ____

(BEARING BASIS)
S00°05'06"E 333.23'
S00°05'06"E 201.94'

(PARCEL 2)
1.341 ACRES

N01°25'09"W 201.03'

EAST 20' OF THE WEST 60' OF THE S 1/4
OF THE NW 1/4 OF SECTION 19.

20.00'
20' WIDE FORT PIERCE
UTILITIES AUTHORITY EASEMENT
O.R.B. 2853, PG. 2427

P.O.B.
FND 5/8" IR/C
"EDC LB 8098"

N88°29'34"E 40.01'

P.O.C.
SW CORNER OF S1/2 OF
NE 1/4 OF SW 1/4 OF
NW 1/4 OF SEC. 19/35/40

30.00' R/W DEDICATION
O.R.B. 3043, PG. 2257)

6' CONC. WALK

ELECTRIC SERVICE

AUTO SPRINKLER

SET 5/8" IR/C
"EDC LB 8098"

SOUTH LINE OF SOUTH 1/2 OF THE NW 1/4 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 19/35/40

N88°29'34"E 292.68'

N88°29'34"E 620.84'

N88°29'34"E 328.16'

8' METAL FENCE

METAL STORAGE UNITS

TRACT 3

JENKINS SS ASSOCIATES LLC
2500 S JENKINS RD
PARCEL ID: 2419-603-0003-000-4
PARCEL 1
O.R.B. 4801, PG. 2500

OKEECHOBEE CROSSINGS
P.B. 62, PG. 23

JENKINS SS ASSOCIATES LLC
2502 S JENKINS RD
PARCEL ID: 2419-603-0004-000-1
PARCEL 2
O.R.B. 4801, PG. 2500

TRACT 4

FND 4"X4" CM
"NO ID"
0.16'S, 0.38'W

EAST LINE OF THE SOUTH 1/2 OF THE NW 1/4 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 19/35/40

N00°21'06"W 332.24'

IGNACIO GARCIA
2507 ROLYAT ST
PARCEL ID:
2419-601-0049-000-2
O.R.B. 1298, PG. 1384

ELBER E SKAGGS
2509 ROLYAT ST
PARCEL ID:
2419-601-0048-000-5
O.R.B. 919, PG. 963

SEMINOLE PARK SUBDIVISION
BLOCK 3
P.B. 10, PG. 11

MICHAEL C KOENIG
2511 ROLYAT ST
PARCEL ID:
2419-601-0047-000-8
O.R.B. 4233, PG. 1700

RAFAEL SALGADO
2513 ROLYAT ST
PARCEL ID:
2419-601-0046-000-1
O.R.B. 4053, PG. 2612

FND 3/8" IR
"NO ID"

JORY JOSEPH KRIER
2515 ROLYAT ST
PARCEL ID:
2419-601-0045-000-4
O.R.B. 4627, PG. 2883

KENNETH M MOORE
2601 ROLYAT ST
PARCEL ID:
2419-601-0044-000-7
O.R.B. 2263, PG. 2359

LOT 11
LOT 10
LOT 9
LOT 8
LOT 7
LOT 6

1-STORY C.B.S.

4' CLF

ENGINEERS ✪ SURVEYORS
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F.B.P.E. CERTIFICATE OF AUTHORIZATION 9935
L.B. CERTIFICATE OF AUTHORIZATION 8098

R.B. DRAWN BY
MTO CHECKED BY
JRGH FIELD CREW
22-378 MINOR REPLAT.dwg FILENAME
AS SHOWN SCALE
August 27, 2024 DATE

REVISION COMMENTS DATE

BOUNDARY SURVEY

MINOR REPLAT FOR:
PHMI WS FORT PIERCE LLC

LAND LYING IN
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ST. LUCIE COUNTY, FLORIDA

10250 VILLAGE PARKWAY
UNIT 201
PORT ST. LUCIE, FL 34987
772-462-2455

22-378

2 OF 2

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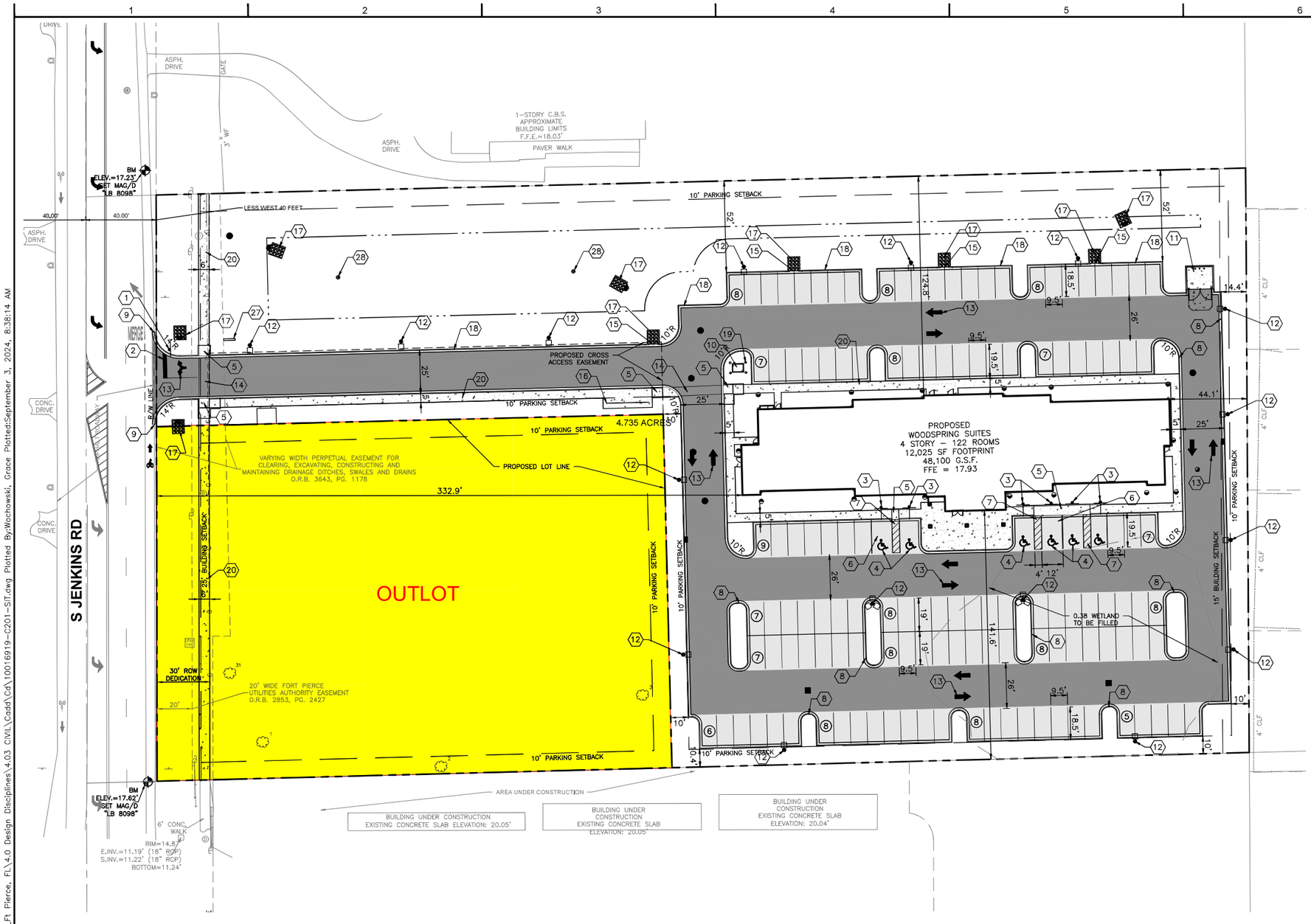

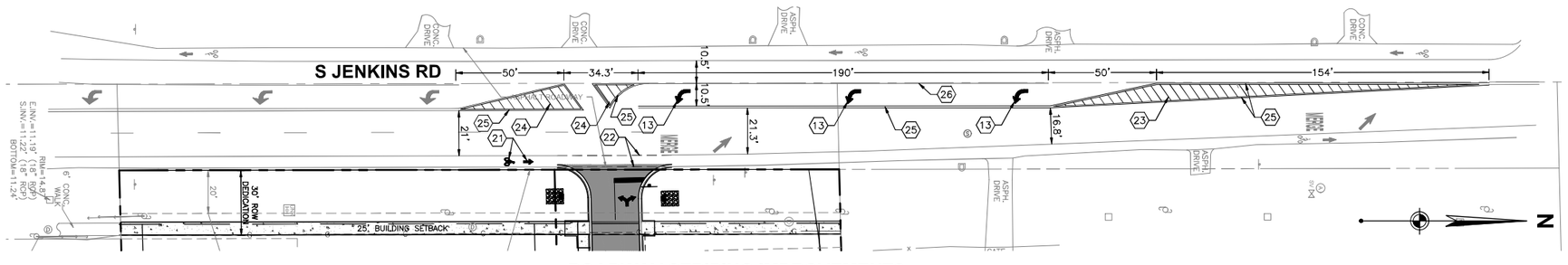

ROADWAY STRIPING IMPROVEMENTS

LEGEND

- SIGN
- PARKING SPACE COUNT
- CONCRETE SIDEWALK
- HEAVY DUTY CONCRETE
- STANDARD DUTY ASPHALT
- HEAVY DUTY ASPHALT
- LIGHTPOLES
- PROPERTY BOUNDARY

SITE DATA

ZONE	C-3	
TOTAL SITE AREA	4.735 ACRES	
PROPOSED USE	HOTEL	
PARKING SPACE SIZE REQUIRED		9.5' X 19'
1' OVERHANG ALLOWED		9.5' X 18'
PARKING SPACE SIZE PROVIDED		9.5' X 19'
WITH OVERHANG		9.5' X 18'
TYPICAL PARKING AISLE (TWO WAY)		26' WIDE (F/F)
TYPICAL ACCESS AISLE (TWO WAY)		24' WIDE (F/F)
PARKING SPACES REQUIRED		
1.1 SPACES PER UNIT <500 S.F.		
1.6 SPACES PER UNIT >500 S.F.		
122 ROOMS X 1.1 = 134.2 SPACES		
TOTAL SPACES REQUIRED =		135 SPACES
PARKING SPACES PROVIDED		135 SPACES
ADA SPACES PROVIDED		
STANDARD ADA SPACES		6 SPACES
VAN ADA SPACES		6 SPACES

NOTES

1. SEE SHEET C-002 FOR GENERAL NOTES.
2. EXISTING SITE INFORMATION/TOPOGRAPHIC SURVEY WAS PREPARED BY ENGINEERING DESIGN & CONSTRUCTION, INC., DATED OCTOBER 19, 2023.
3. CONTRACTOR SHALL REFER TO OTHER PLANS WITHIN THIS CONSTRUCTION SET FOR OTHER PERTINENT INFORMATION. IT IS NOT THE ENGINEER'S INTENT THAT ANY SINGLE PLAN SHEET WITHIN THIS SET OF DOCUMENTS FULLY DEPICT ALL WORK ASSOCIATED WITH THE PROJECT.
4. TRANSITION PROPOSED BARRIER CURB OR CONCRETE CURB AND GUTTER TO EXISTING CURB AND GUTTER IN 2'.
5. ALL CURB RADII SHALL BE 4' UNLESS NOTED OTHERWISE.
6. ALL PAVEMENT MARKING SHALL BE YELLOW IN COLOR UNLESS INDICATED OTHERWISE.
7. ADA DETECTABLE WARNINGS/TRUNCATED DOMES TO BE PROVIDED AT SIDEWALKS ON EITHER SIDE OF EACH DRIVEWAY CROSSING.
8. SEE ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS.
9. REMOVE ALL EXISTING ROADWAY MARKINGS WITHIN LIMITS OF ROADWAY MARKING IMPROVEMENTS.

KEYNOTES (X)

1. "STOP" SIGN, R1-1
2. 24" WIDE STOP BAR, TRAFFIC WHITE PAINT
3. ACCESSIBLE SIGNAGE, SEE DETAIL SHEETS.
4. ACCESSIBLE PARKING SYMBOL
5. ACCESSIBLE RAMP WITH DETECTABLE WARNING
6. ACCESSIBLE PARKING SPACES & THEIR ACCESS AISLES SHALL BE 2% MAX. SLOPE IN ALL DIRECTIONS
7. PAINT 4" WIDE STRIPES @ 2'-0" O.C. @ 45° ANGLE, TRAFFIC YELLOW PAINT
8. CURB AND GUTTER
9. BEGIN/END PROPOSED CURB AND GUTTER. SAWCUT EXISTING CURB TO PROVIDE CLEAN CONSTRUCTION JOINT.
10. CONCRETE TRANSFORMER PAD
11. DUMPSTER ENCLOSURE (SEE ARCHITECTURAL PLANS)
12. LIGHT POLE LOCATION
13. DIRECTIONAL ARROW, TRAFFIC WHITE PAINT
14. CROSSWALK, PAINT 4" WIDE STRIPES EITHER SIDE OF CROSSING, 5' O.C. ALONG CROSSING.
15. CURB CUT
16. BIKE RACK
17. RIP RAP
18. 6" CURB AND GUTTER WITH 6" OF CURB REVEALED AT BACK OF CURB. SEE GRADING PLAN.
19. CONCRETE BOLLARDS
20. CONCRETE WALK
21. BIKE LANE SYMBOL, TRAFFIC YELLOW PAINT
22. SKIP-DASH 2' LINE WITH 6' SPACE, TRAFFIC WHITE PAINT
23. PAINT 11" WIDE STRIPES @ 30' O.C. @ 45° ANGLE, TRAFFIC YELLOW PAINT
24. PAINT 11" WIDE STRIPES @ 6' O.C. @ 45° ANGLE, TRAFFIC YELLOW PAINT
25. 2X 4" WIDE CENTERLINE @ 11" O.C., TRAFFIC YELLOW PAINT
26. 4" WIDE STRIPE, TRAFFIC WHITE PAINT
27. MONUMENT SIGN
28. 8' HT GEYSER JET FOUNTAIN

Sunshine811

0 30 60 90
GRAPHIC SCALE IN FEET

WOOLPERT
ARCHITECTURE | ENGINEERING | GEOSPATIAL
3333 Warrenville Road, Suite 200
Lisle, IL 60532
800.414.1045

ISSUED FOR PERMITS

NUMBER	DATE	ISSUANCE SCHEDULE DESCRIPTION

PHMI GROUP
WOODSPRING SUITES - FT. PIERCE
2480 S. JENKINS RD.
FT. PIERCE, FL 34947

PROJECT NO:	10016919
DATE ISSUED:	11/17/2023
DESIGNED BY:	NP
DRAWN BY:	NP
CHECKED BY:	GM

SHEET NAME:
SITE PLAN

SHEET NO:
C-201

Layout Tab Name: Layout1
Last Saved By:nik, 8/26/2024 2:34:20 PM
W:\Orvin\BL_Doyon\10016919.00_WS2 PHMI Group\10016919.04&.06_Ft Pierce, FL\4.0 Design Disciplines\4.03 CIVIL\Cadd\Cad\10016919-C201-SIT.dwg Plotted ByWochowski, Grace Plotted:September 3, 2024, 8:38:14 AM