THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

DEVELOPMENT REVIEW

Property Information

Property address or Location: 4101 Oleander Avenue

Parcel ID #(s): 2433-414-0001-000-4

Project description: This project proposes a 32 unit apartment complex on Oleander Avenue with required parking, a garbage enclosure, public utilities and stormwater facilities to attenuate and treat stormwater.

Application Type

[X] Site Plan [ ] Conditional Use w/New Construction [ ] Conceptual Development Plan

[ ] Minor Amendment [ ] Major Amendment

Site Information

Non-Residential: Proposed Sq. Ft.:_____ Site Acreage:_____

Residential: Proposed Units: _____ Proposed Sq. Ft.: 110,747 Site Acreage: 2.54

4101 Oleander Group LLC	Mr.Geza Szini-Sebo/ Jozsef Norbert Rau
Property Owner(s)	**Applicant/Representative, Title, Company**
17555 Collins Avenue, Apt 802	45 Osceola Avenue
Street Address	Street Address
Sunny Isles Beach, FL 33160	New York NY 11729
City State Zip	City State Zip
305-337-0183	631-374-7501
Phone Number	Phone Number
gmszini@gmail.com	jozsef_rau@yahoo.com
Email Address	Email Address

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

Property Owner(s) Signature(s)

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

General Information

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

Site Plan submittal requirements:

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

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

Project Narrative

This project proposes a 32 unit multi-family residential building. The architect has provided a design intent narrative in the application package – but you can see from the attached rendering this building features lap siding in a vernacular style, complete with gables for roofline articulation as well as providing for balconies and projections, to avoid blank, flat facades.

The site is designed to preserve trees wherever possible, in the design with stormwater retention and parking. The landscaping plan has been provided and designed to meet City requirements.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

DESIGN REVIEW

Property Information

Property address or Location 4101 Oleander Avenue

Parcel ID #(s) 2433-414-0001-000-4

Project description This project proposes a 32 unit apartment complex on Oleander Avenue with required parking,a garbage enclosure, public utilities and stormwater facilities to attenuate and treat stormwater.

4101 Oleander Group LLC	Mr. Geza Szini-Sebo/ Jozsef Norbert Rau
Property Owner(s)	**Applicant/Representative, Title, Company**
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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.*

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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	Under Development-Oleander Oaks	RM	R-4
South	Residential	RM	R-4
East	Multi-Family Residential	RH	R4/C2
West	Single Family Residential	RU (County)	RS3 (County)

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	RM	R4	6.5-12 du/ac	2.54	X
****Proposed**	RM	R4	6.5-12 du/ac	2.54	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 8320
**Proposed Zoning/FLU	Total gallons per day 8320
**Change in Demand	Total gallons per day 0

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 8320
**Proposed Zoning/FLU	Total gallons per day 8320
**Change in Demand	Total gallons per day 0

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	44.2	44.31	0.11
Urban District	5 acres per 1,000 people	44.2	44.31	0.11
Community	2.5 acres per 1,000 people	44.2	44.31	0.11
Neighborhood	1.36 acres per 1,000 people	44.2	44.31	0.11

D. Public Schools (Residential Classifications Only): 34982
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	Weatherbee	FP Central
City	Fort Pierce	Fort Pierce
Distance	2 Miles	2 Miles
Current Zoning/FLU Enrollment Demand	>0	>0
****Proposed Zoning/FLU Enrollment Demand**	5	2
****Change in Demand**	+5	+2

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	2yards
****Proposed Zoning/FLU**	4 yards
***Change in Demand**	2 yards

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

Impact	Stormwater calculations will be provided to show compliance with local and state improvements.

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	10	2
****Proposed Zoning/FLU**	146	23
***Change in Demand**	Trips	Trips
Impact to Capacity	136	

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	1	32	2.54	January 2025	December 2025
Other (specify)					

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**
N/A					

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? 1800 SF

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

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

Staffan H. Lundberg Architect, LLC.

1341 Sea Hawk Lane, Vero beach, Florida 32963

Phone 772-538-5130

E-mail: staffanarchitect@gmail.com

11-06-2023

TO: City of Ft. Pierce
100 N. US Highway 1
Fort Pierce, FL 34950

RE: Project Name: Margaritavillas
Location: 4101 Oleander Avenue, Ft. Pirce

This letter represents our design intent for this project.

The project is surrounded by residential Development. The property to the north is a single family development under construction. To the south, east and west are existing single family homes.

The site has many old oak trees that the design has made every possible effort to preserve. To meet that challenge, the four story building became the best option.
The design is a coastal Florida vernacular with soft white stucco on the first two floors, Hardie Board siding at the top two floors with a soft blue or green color, window shutters in a darker blue or green color. Hip roofs with accent gable roofs over balconies. Roof coverings standing seam metal roof. These roofs are only at the perimeter of the roof as there are discussions of installing solar panels on the "flat" roof sections. Another Energy saving factor is to use ICF (concrete insulated panels) in the walls.

Sincerely,

Staffan H. Lundberg
Architect, LLC
FL. License NO AR 0008984


MARGARITAVILLAS

Property Identification

Site Address: 4101 OLEANDER AVE
Sec/Town/Range: 33/35S/40E
Parcel ID: 2433-414-0001-000-4
Jurisdiction: Fort Pierce

Use Type: 0100
Account #: 33081
Map ID: 24/33S
Zoning: Medium Den

Ownership

4101 OLEANDER GROUP LLC

17555 Collins AVE Apt 2006
Sunny Isles Beach, FL 33160

Legal Description

33 35 40 N 198 FT OF S 630 FT OFE 1/2 OF NE 1/4 OF SE 1/4-LESS CANAL AND RD R/W- (2.59 AC)

Current Values

Just/Market Value:	$352,700
Assessed Value:	$97,140
Exemptions:	$50,000
Taxable Value:	$47,140

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):	1,860
Gross Sketched Area (SF):	2,995
Land Size (acres):	2.58
Land Size (SF):	112,464

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	160	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Apr 26, 2023	4983 / 0480	0001	WD	Nix Veronica	$650,000
Feb 20, 2009	3065 / 2702	0001	SPWD	Z2 Real Estate LLC	$99,000
Jun 9, 2006	2593 / 1023	XX00	SPWD	Solomon William A	$520,000
Aug 17, 2004	2052 / 0976	XX00	WD	Pipes (TR) (EST) Gilbert	$325,000
Jan 16, 1996	0995 / 1457	XX01	QC	Pipes Gilbert	$100

Building Information (1 of 2)

Finished Area: 1,860 SF

Gross Sketched Area: 2,218 SF

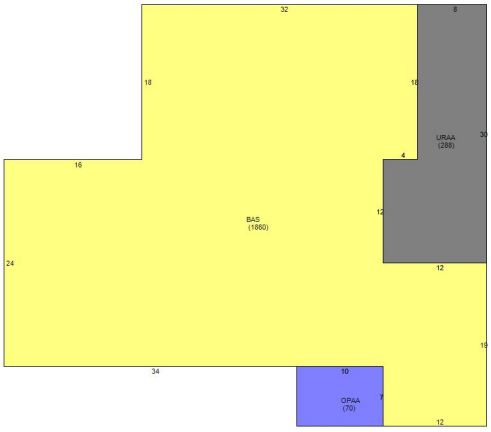
Exterior Data

View:	Roof Cover: Metal	Roof Structure: Flat/Shed
Building Type: SFAV	Year Built: 1956	Frame:
Grade: SFAV-Avg	Effective Year: 1965	Primary Wall: Conc Block

Story Height: 1 Story | No. Units: 1 | Secondary Wall:

Interior Data

Bedrooms: 3 | Electric: AVERAGE | Primary Int Wall:
Full Baths: 1 | Heat Type: FrcdHotAir | Avg Hgt/Floor: 0
Half Baths: 1 | Heat Fuel: ELEC | Primary Floors: Hardwood
A/C %: 100% | Heated %: 100% | Sprinkled %: 0%



Sketch Area Legend

Sub Area	Description	Area	Fin. Area	Perimeter
BAS	BASE AREA	1860	1860	218
OPAA	Open Porch Attached Average	70	0	34
URAA	Utility Room Attached Average	288	0	84

Building Information (2 of 2)

Finished Area: 0 SF

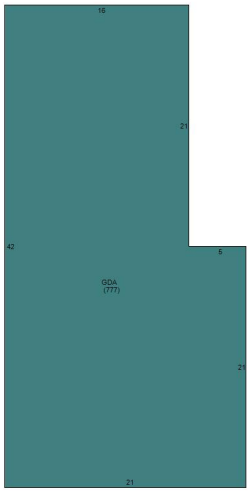
Gross Sketched Area: 777 SF

Exterior Data

View: | Roof Cover: Sheet Metal | Roof Structure: Gable
Building Type: DGAR | Year Built: 1990 | Frame:
Grade: DG | Effective Year: 1990 | Primary Wall: Wood/Sheath
Story Height: 1 Story | 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 %: % | Heated %: % | Sprinkled %: %



Sketch Area Legend

Sub Area	Description	Area	Fin. Area	Perimeter
GDA	Garage Detached Average	777	0	126

Special Features and Yard Items

Type	Qty	Units	Year Blt

Current Year Values

Current Values Breakdown

Building:	$100,800
Land:	$251,900
Just/Market:	$352,700
Ag Credit:	$0
Save Our Homes or 10% Cap:	$255,560
Assessed:	$97,140
Exemption(s):	$50,000
Taxable:	$47,140

Current Year Exemption Value Breakdown

Tax Year	Grant Year	Code	Description	Amount
2023	2010	0500	Homestead Exemption	$25,000

Tax Year	Grant Year	Code	Description	Amount
2023	2010	0550	Homestead Exemption over $ 50,000	$25,000

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2006	0041	1	Fort Pierce Stormwater Charge	$69.00
2013	0054	2.58182	North St. Lucie Water Management District	$59.38

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	$352,700	$97,140	$50,000	$47,140

2022	$261,800	$94,311	$50,000	$44,311
2021	$145,700	$91,565	$50,000	$41,565
2020	$122,200	$90,301	$50,000	$40,301

Permits

Number	Issue Date	Description	Amount	Fee
RF2002-141	Dec 11, 2002	Roof	$5,030	$175
BP09-349	Mar 16, 2009	Alterations/Remodeling	$1,500	$105
bp21-4594	Sep 9, 2021	Roof	$5,500	$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

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 5186142 OR BOOK 4983 PAGE 480, Recorded 05/01/2023 08:49:07 AM Doc Tax: $4550.00

Prepared by and return to:
David Djebelli, Esq.
Law Offices of David Djebelli, P.A. d/b/a The Closing Law Firm
2100 Coral Way, Suite PH 701
Miami, FL 33145
(305) 661-3908
File Number: **22-154**

[Space Above This Line For Recording Data]

Warranty Deed

This Warranty Deed made this **27th day of April, 2023** between **Veronica Nix A/K/A Mary Veronica Nix, a single woman** whose post office address is **1150 Bell Avenue, Fort Pierce, FL 34982**, grantor, and **4101 Oleander Group LLC, a Florida Limited Liability Company** whose post office address is **17555 Collins Ave Apt 2006, Sunny Isles Beach, FL 33160**, grantee:

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

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

The North 193 feet of the South 630 feet of the East 1/2 of the Northeast 1/4 of the Southeast 1/4, in Section 33, Township 35 South, Range 40 East, lying and being in St. Lucie County, Florida; LESS canal and road rights of ways.

Parcel Identification Number: 2433-414-0001-000-4

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 **12/31/2022**.

****GRANTOR SIGNATURE ON PAGE TO FOLLOW****

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

Signed, sealed and delivered in our presence:

Witness
Printed Name: Shequita Jordan

Witness
Printed Name: Karen McCullough

Veronica Nix A/K/A Mary Veronica Nix

State of Florida

County of St. Lucie

The foregoing instrument was acknowledged before me by means of [✓] physical presence or [ ] online notarization, this 26 day of April, 2023 by Veronica Nix A/K/A Mary Veronica Nix who [ ] is personally known or [✓] has produced a driver's license as identification.

[Seal]

Notary Public
Print Name: Shequita Jordan
My Commission Expires: 11-16-2024

SHEQUITA JORDAN
Notary Public - State of Florida
Commission # HH 261322
My Comm. Expires Nov 16, 2024
Bonded through National Notary Assn.

Florida Environmental Consulting, Inc.

Environmental Impact Report

For:

Margareta Apartments

Prepared for:

4101 Oleander Group, LLC
17555 Collins Avenue
Sunny Isles, FL 33160

TIMOTHY E. MASLIN · Environmental Assessment Associate · #77283 · Certified Environmental Specialist

7/31/2023

Timothy E. Maslin, C.E.S. / C.E.C.
Certification #77283

FEC Job #23-173

1835 20th Street • Vero Beach, Florida 32960
Phone: 772-299-4791 • Fax: 772-778-3617 • E-mail: TimM@FL-Env.com

Table of Contents

1.0 Executive Summary

The **Margareta Apartments** property:

- is one parcel along Oleander Avenue in Fort Pierce, Florida.
- consists of 2.58 acres of disturbed, partially improved land.
- is zoned for general medium density residential units.
- was historically a citrus grove but has been subsequently cleared with a single-family residence constructed.
- is currently proposed for multi-family residential land development improvements.
- contains poorly drained sandy soils.
- is at an elevation of approximately 10 ft.
- is not in the flood plain.
- supports native live oaks, laurel oaks, and cabbage palms.
- does support the gopher tortoise.
- does contain jurisdictional wetlands, but not Waters of the United States.
- land development improvements may cause adverse environmental impacts to native oaks, cabbage palms, protected species, and wetlands.
    - Tree preservation is recommended.
    - Formal wetland delineation and wetland impact permitting is recommended.

Environmental Impact Report

1.1 Objective

In July of 2023 Environmental Specialists from ***Florida Environmental Consulting Inc***. performed an environmental impact study of the **Margareta Apartments** property. The objective of this study was to assess and report on the baseline environmental condition of the subject site as well as to discuss how developing this site may impact the environment.

1.2 Introduction

The subject property is Parcel ID **2433-414-0001-000-4** and is in section 33 of township 35, range 40e of **Saint Lucie County, Florida**. More specifically, the parcel is on the West side of Oleander Avenue, North of Tumblin Kling Road in the City of Fort Pierce. The property sums 2.58 acres of disturbed, partially improved land zoned for medium density residential purposes at 27°23'12.0"N 80°20'05.9"W. This property was historically in use as a citrus grove, but was subsequently cleared, and a single-family residence constructed. The parcels are currently proposed for multifamily residential land development improvements by ***4101 Oleander Group, LLC***. Please see the maps and other reference materials in the appendix of this report.

1.3 Materials and Methods

The site assessment included preliminary research of the site and surrounding area to determine what type of ecological community to expect as well as what types of individual flora and fauna may be found on site. This preliminary research included; Geographic Information Systems (GIS) Mapping, aerial interpretation, Florida Department of Environmental Protection (FDEP) Environmental Resource Analysis, and assessing the potential for species and habitats listed by the City, County, South Florida Water Management District (SFWMD), Florida Natural Areas Inventory (FNAI), Florida Fish and Wildlife Conservation Commission (FWC), and the U.S. Fish and Wildlife Service (FWS).

The site assessment also included traversing and observing communities adjacent to and within the site. During the site assessment community types, vegetation, wildlife, and other pertinent observations were noted.

1.4 Soils

According to the U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) the property contains 1 major soil type more specifically described as:

Soil 2, *Ankona and Farmton sands*, characterized as poorly drained sand with a water table typically 6-18 inches below the surface with no typical frequency of ponding or flooding, totaling 2.58 acres.

As mentioned above, the property was historically in use as a citrus grove but was subsequently cleared and a single-family residence constructed. As such it should be noted that these soils are disturbed. Please see the soils map in the appendix of this report for the general location of these soils.

1.5 Hydrology

This property is in hydrologic basin 17, the *Saint Lucie* basin, and the United States Geological Survey (USGS) Topographic Map in the Appendix shows the area as generally flat, with stormwater runoff sheet flowing down the remanent furrows to an onsite depressional area. Using the North American Vertical Datum of 1983 (NAD83) the natural ground grade is at an elevation of approximately 10 feet and according to the Flood Hazard Map in the Appendix, this area is not in the flood plain and as such is considered to be in Flood Zone X, an area of minimal flood hazard.

Based on the lack of offsite hydrologic connections, Waters of the United States are not present onsite.

1.6 Flora

As noted in the introduction the parcels total approximately 2.58 acres of disturbed, partially developed land. The land use in this case is a limiting factor in vegetative diversity, however there was some remnant native vegetation observed. As such the Land Use Land Cover classification for the property is considered 1110, *Low Density Fixed Single Family Units*. While this is an accurate description of the land use, the habitats present onsite could be more specifically described as 2.54 acres of 3100 and 4200, *Herbaceous (Dry Prairie*) with *Upland Hardwood Forrest* areas along with a depressional area of 0.04 acres considered 6410, *Freshwater Marsh*. Please see the Aerial LULC Map and Site Photos in the Appendix.

The majority of the property was cleared and filled in the early 1940's for citrus production and has since been routinely maintained and supports mostly miscellaneous grasses and forbs.

However, regenerated forested areas now support some live oaks (*Quercus virginiana*), laurel oaks (*Quercus laurifolia*), cabbage palms (*Sabal palmetto*), muscadine grape (*Vitis rotundifolia*), and Brazilian pepper (*Schinus terebinthifolius*), as well as some landscaping trees and shrubs.

The flora of the freshwater marsh depressional area consisted of coastal plain willow (*Salix caroliniana*), rushes (*Juncus spp.*), and various other wetland grasses and forbs.

No species of flora was observed on site listed by the County, Florida Natural Areas Inventory, Florida Fish and Wildlife Conservation Commission, or U.S. Fish and Wildlife Service, as Endangered, Threatened, or a Species of Special Concern.

Please see the Land Use Land Cover Map and Site Photos in the appendix of this report.

1.7 Fauna

Similarly, to the flora, the fauna was found severely limited by disturbance but included squirrels (*Sciurus carolinensis*), African agamas (*Agama agama*), ants (*Formicidae spp.*), spiders (*Arachnida spp.*), and bees (*Apidae spp.*), as well as exotic brown anoles (*Anolis sagrei*).

Additionally, there were multiple potentially occupied gopher tortoise (*Gopherus polyphemus*) burrows observed along the northern property line. The gopher tortoise is a species listed by the FWC and is protected along with their burrows.

No other species of fauna listed by the County, Florida Natural Areas Inventory, Florida Fish and Wildlife Conservation Commission, or U.S. Fish and Wildlife Service, as Endangered, Threatened, or a Species of Special Concern, was observed or suspected on site.

Please see the Site Photos in the Appendix of this report.

1.8 Wetlands

Based on topography and aerial interpolation, wetlands were suspected and this was confirmed in the field. Given the topographic features, further study was conducted in the depressional area. This feature was at a significantly lower elevation than the remainder of the property, and it was found to have indicators of hydrology, and a vegetative community of wetland obligate and facultative-wet vegetation. As such, this area was determined to support approximately 0.04-acres wetlands.

Based on the isolated nature of the onsite depressional marsh wetland, Waters of the United States are not present onsite. Please see the National Wetland Inventory Map in the Appendix of this report.

1.9 Summary and Discussion

In summary, the **Margareta Apartments** property is one parcel along Oleander Avenue in the City of Fort Pierce, Florida consisting of 2.58 acres of disturbed partially improved land. The property is zoned for general medium density residential units, was historically a citrus grove but has been subsequently cleared with a single-family residence constructed, and is currently proposed for multi-family residential land development improvements. The

property contains poorly drained sandy soils, is at an elevation of approximately 10 feet, is not in the flood plain, and does not support Waters of the United States. The property supports some regenerated native live oaks, laurel oaks, and cabbage palms and does support the gopher tortoise, as well as a small isolated jurisdictional wetland.

For discussion, as stated above the property does contain some native live oaks, laurel oaks and cabbage palms, and though these trees may be cleared with a permit, the City will request that micro-site-planning be looked into in an effort to save native trees as best practical. Mitigation may be provided for the removal of protected trees 14 inches and greater in diameter at breast height as well as cabbage palms 10' and greater in trunk height, either through a fee-in-lieu, supplemental plantings, or via transplanting.

Also, this property does support the gopher tortoise. Any proposed impacts within 25' of a gopher tortoise burrow will require special permitting from the FWC, as well as the relocation of any tortoise found along with associated mitigation fees. If suitable habitat is left undisturbed after site planning, some tortoises may remain on site. Gopher tortoises may be surveyed any time, however, gopher tortoise permitting, mitigation, and relocation should be initiated 90 days prior to any site work activity including bush-hogging and geotechnical work requiring clearing.

Finally, the property does support an isolated wetland, which appears to be less than the ½-acre mitigation threshold. As such any unavoidable impacts of the wetlands will not require compensatory mitigation but will require wetland delineation, jurisdictional review, and permitting.

1.10 Conclusion and Recommendations

In conclusion, land development improvements to the **Margareta Apartments** property, unless properly permitted, may cause adverse environmental impacts to native trees, protected species, and wetlands.

Onsite tree preservation is recommended, or mitigation may be required. Also, a formal gopher tortoise survey and relocation permitting is recommended. Finally, formal wetland delineation, jurisdictional review, and permitting are recommended during the site planning process.

Please contact Florida Environmental Consulting, Inc. with any questions or comments regarding this report or for any additional specific consulting.

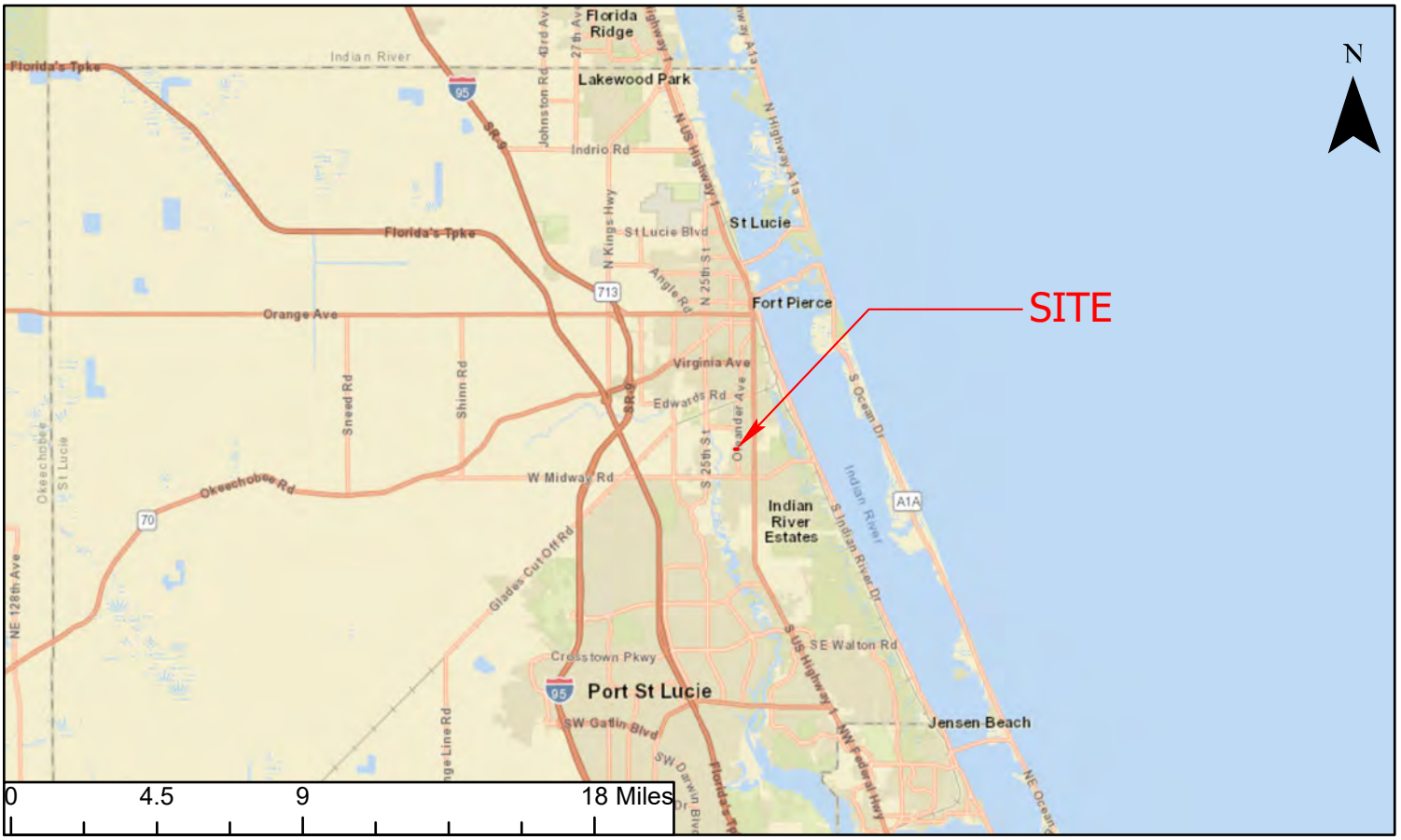
1.11 Qualifications of Individual Preparing Report

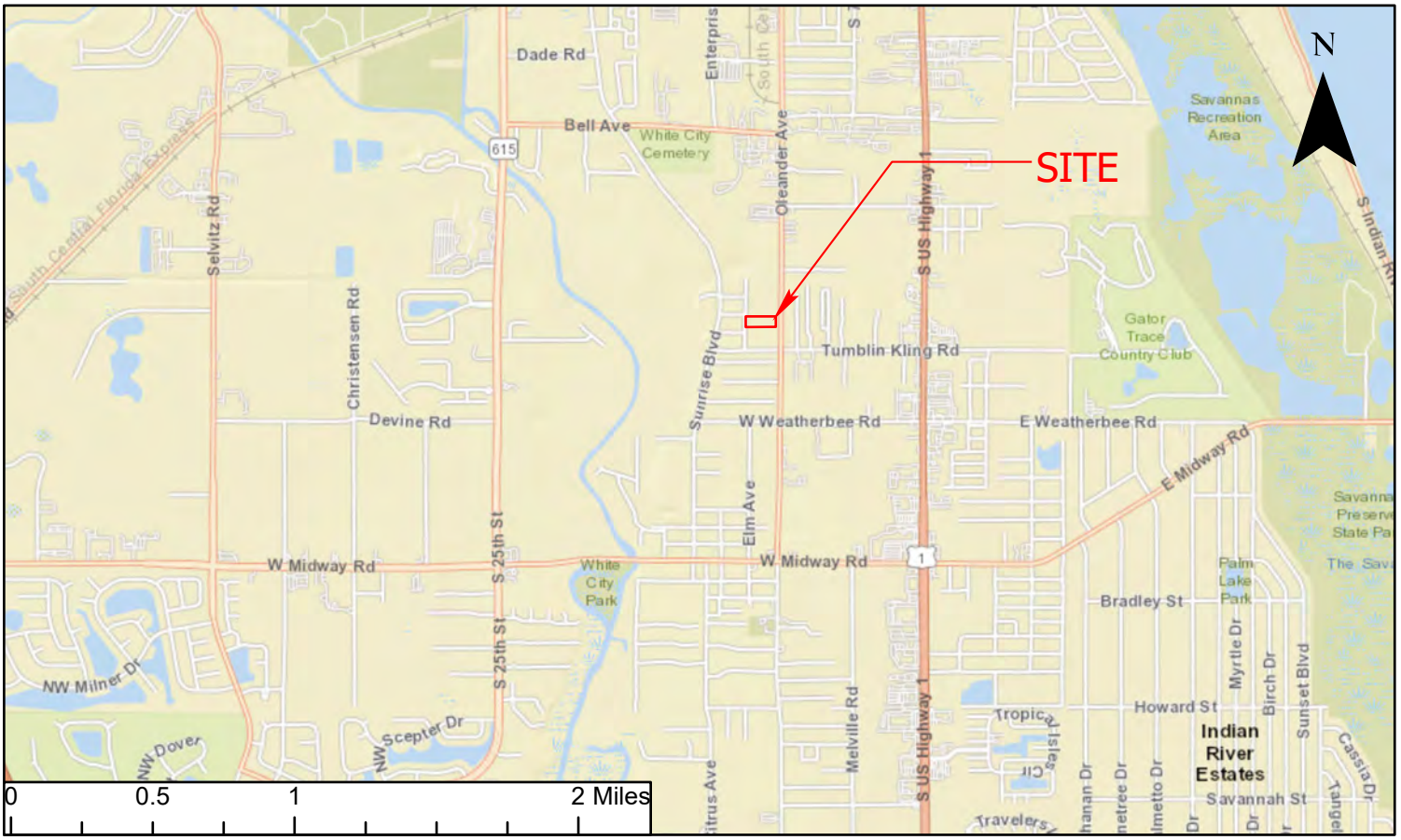
Florida Environmental Consulting is a Florida registered environmental consulting firm, the person who prepared this report is the president of the company, and his signature and seal on the cover of this document demonstrate that he is in responsible charge of the information provided. He is a Certified Environmental Consultant and Environmental Specialist.

Additionally, he has a Bachelor of Science in Environmental Science from the University of Florida with a minor in Natural Resource Management, along with 22 years of experience. Finally, he is a member of the National Association of Environmental Professionals, and the Environmental Assessment Association where a code of ethics and personal commitment to quality work is upheld.

3.0 Appendix

3.1 Location Map
3.2 Soils Map
3.3 Topographic Map
3.4 Flood Map
3.5 LULC Map
3.6 National Wetland Inventory Map
3.7 LIDAR
3.8 Historic Aerials
3.9 Site Photos





LOCATION	MARGARETA APTS EIR	Florida Environmental Consulting Inc.	JOB NO. FEC-23-173	Revisions	Date
		1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	DESIGNED		
			DRAWN		
			CHECKED		
			DATE		
			SCALE		

Legend

Subject Parcel 2.58 Acres

Florida Soils

Ankona and Farmton sands

Nettles and Oldsmar sands

SOILS	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

Legend

Subject Parcel 2.58 Acres

TOPO	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

Legend

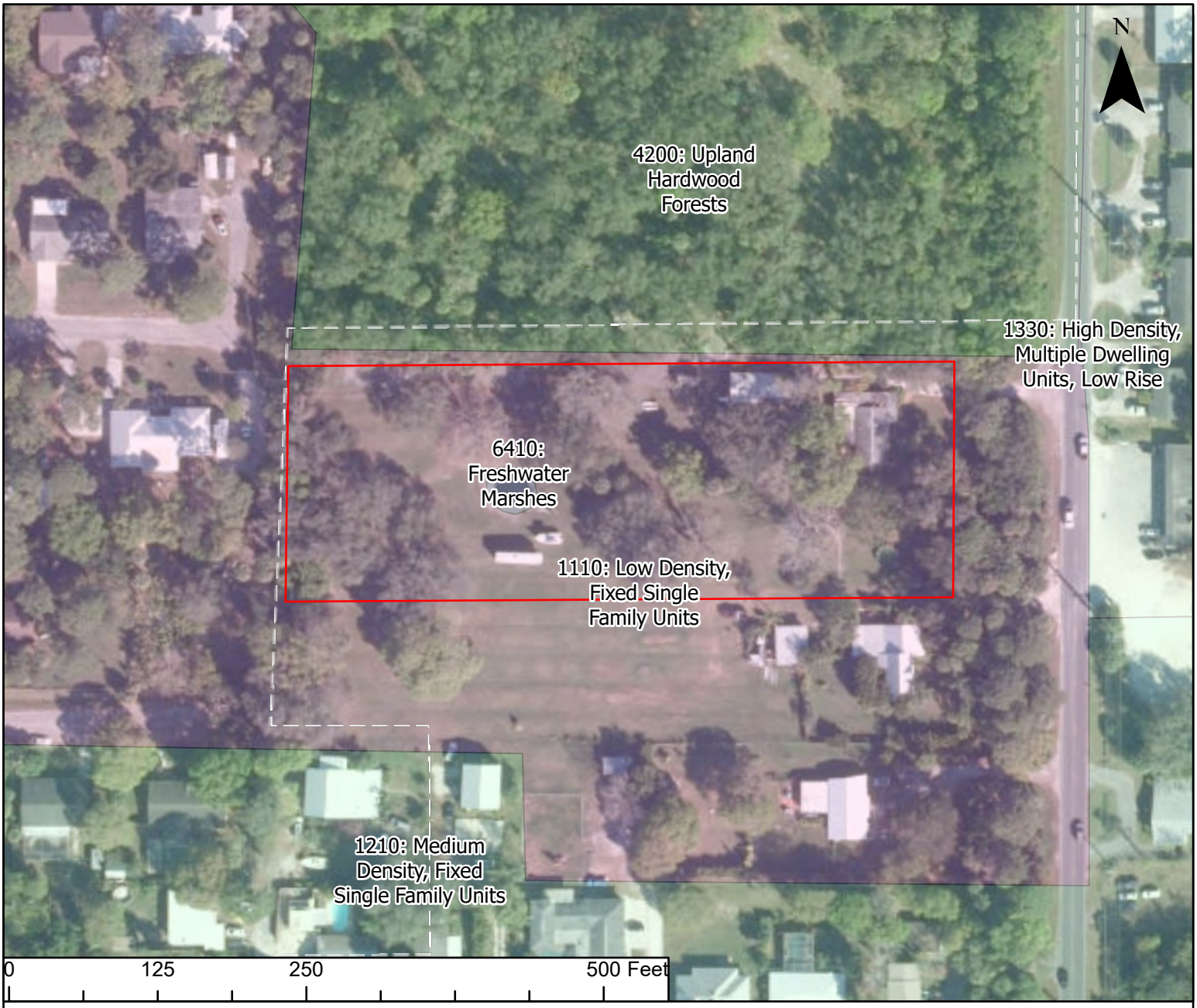
Subject Parcel 2.58 Acres

USA Flood Hazard

0.2% Annual Chance Flood Hazard

1% Annual Chance Flood Hazard

FLOOD HAZARD	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date



Legend

Subject Parcel 2.58 Acres

Statewide Land Use Land Cover

- 1110: Low Density, Fixed Single Family Units,1110: Low Density, Fixed Single Family Units 2.54 Acres
- 1210: Medium Density, Fixed Single Family Units,1210: Medium Density, Fixed Single Family Units
- 1330: High Density, Multiple Dwelling Units, Low Rise
- 4200: Upland Hardwood Forests,4200: Upland Hardwood Forests
- 6410: Freshwater Marshes,6410: Freshwater Marshes 0.04 Acres

FIELD ADJUSTED LULC	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

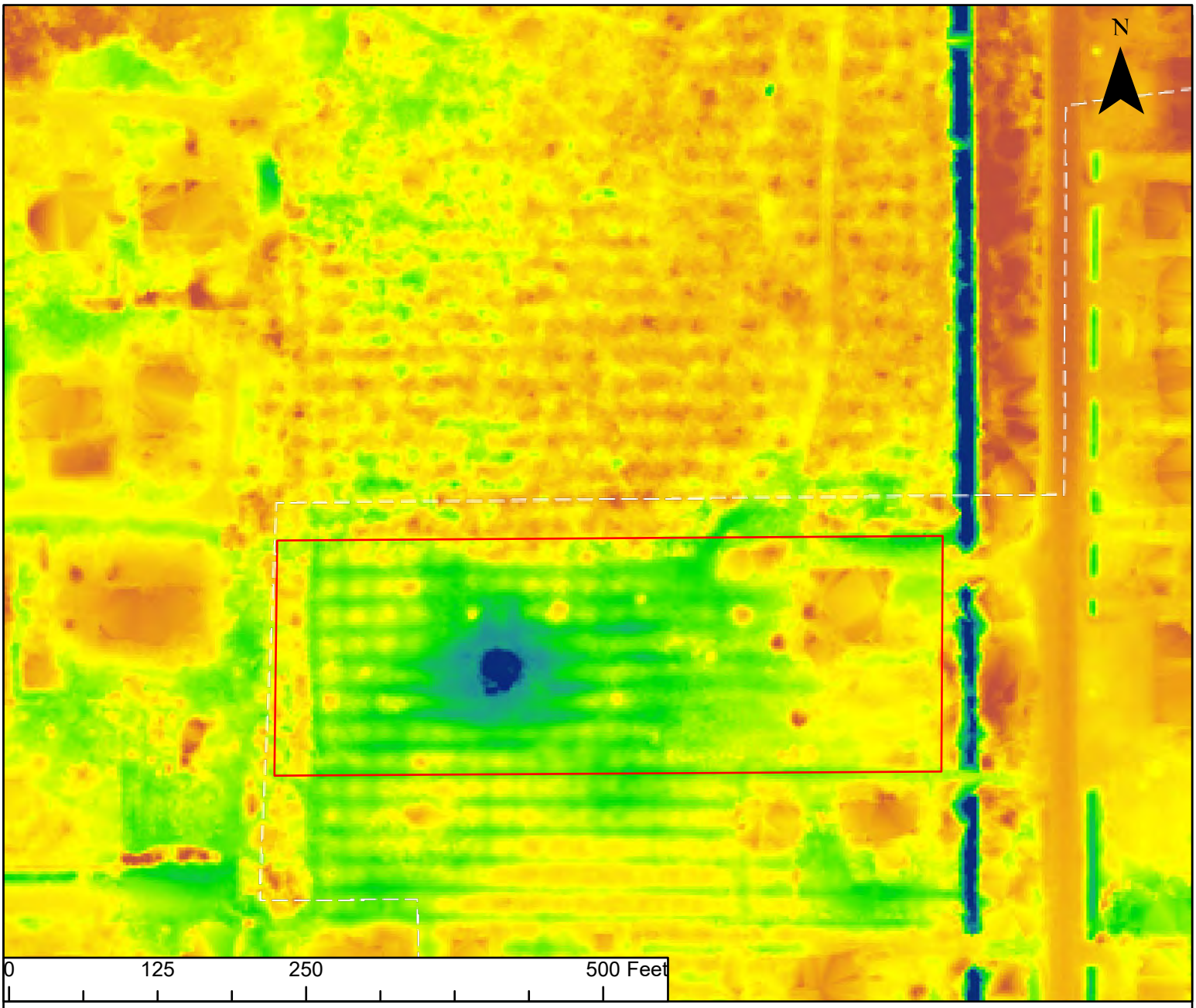
Legend

Subject Parcel 2.58 Acres

FL Wetlands

Freshwater Emergent Wetland

FIELD ADJUSTED NWI	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions	Date



Legend

Subject Parcel 2.58 Acres

2018 LIDAR	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions	Date

Legend

Subject Parcel 2.58 Acres

1944 AERIAL	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

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Subject Parcel 2.58 Acres

1970 AERIAL	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: tinm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

Legend

Subject Parcel 2.58 Acres

1980 AERIAL	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

Legend

Subject Parcel 2.58 Acres

1992 AERIAL	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

Legend

Subject Parcel 2.58 Acres

2012 AERIAL	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: tinm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date

Legend

Subject Parcel 2.58 Acres

2023 AERIAL	MARGARETA APTS EIR	Florida Environmental Consulting Inc. 1835 20th Street• Vero Beach, Florida 32960 Phone: 772-299-4791 • E-mail: timm@fl-env.com	JOB NO. FEC-23-173 DESIGNED DRAWN CHECKED DATE SCALE	Revisions / Date























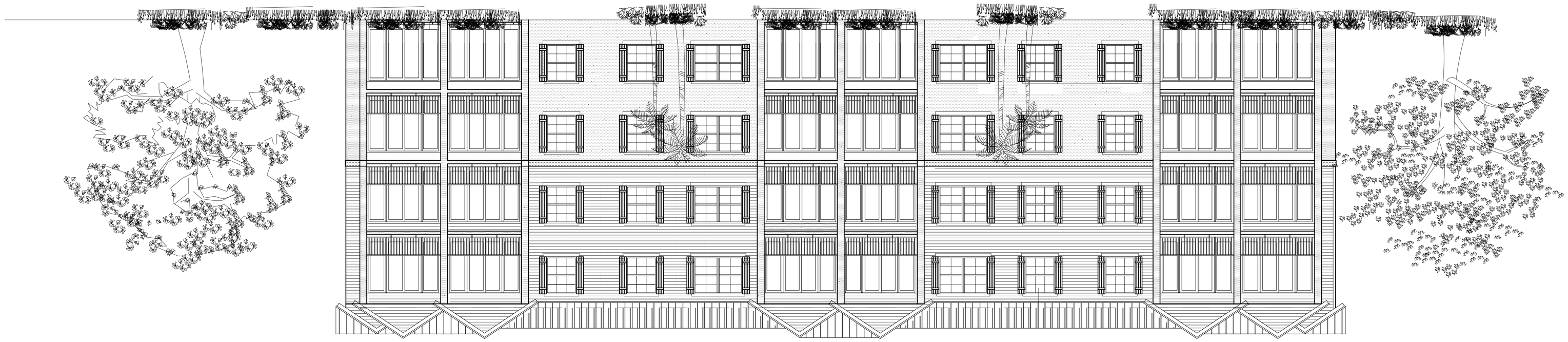


FRONT (EAST)ELEVATION

SCALE: 1/8" = 1'-0"

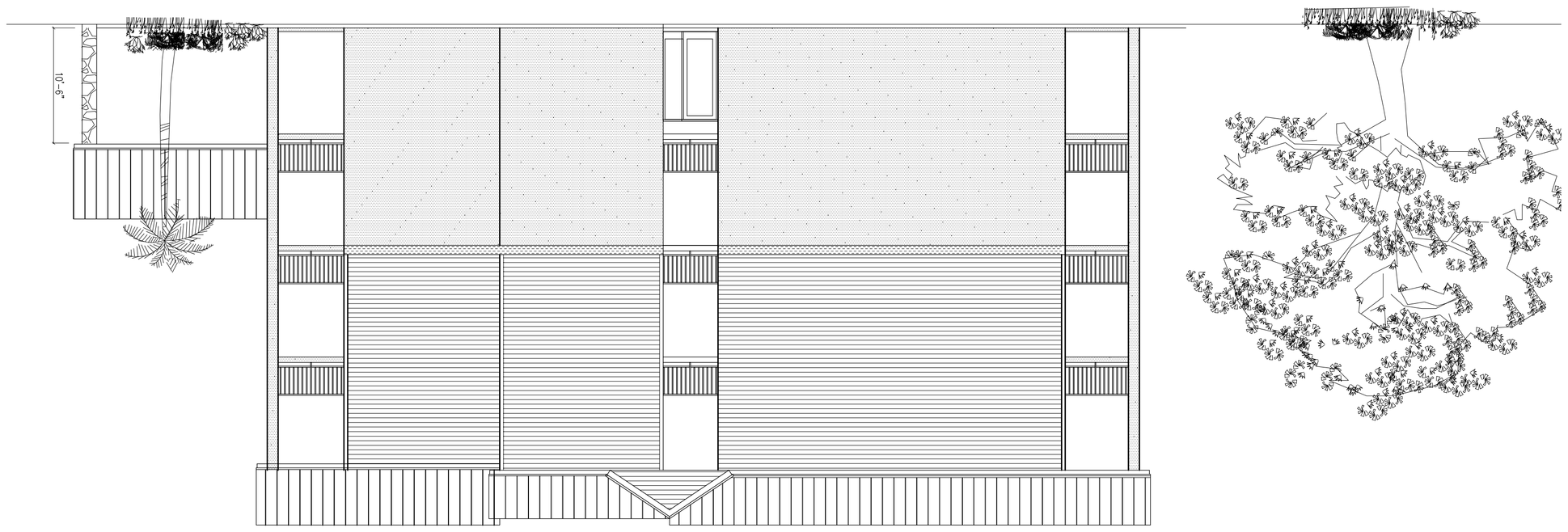
REAR ELEVATION (WEST)

SCALE: 1/8" = 1'-0"



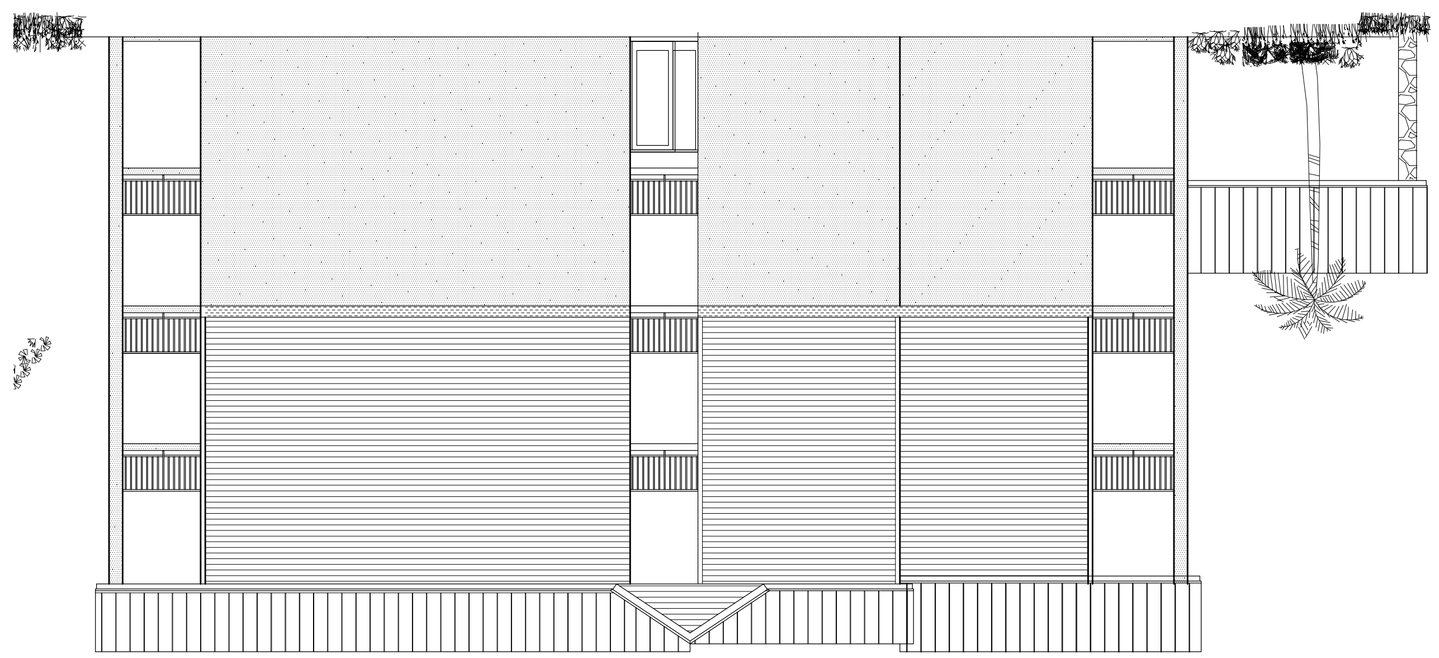
SOUTH ELEVATION

SCALE: 1/8" = 1'-0"



NORTH ELEVATION

SCALE: 1/8" = 1'-0"



MARGARITTAVILLAS

A3

DRAWING NO.

FRONT ELEVATION

TITLE :

PROJ. NO.:	2023-02
DATE:	11-01-2023
APPROVED:	SHL
CHECKED:	SHL
DRAWN:	GSM
SCALE:	1/8"=1'-0"

FLOOR PLANS
for
MARGARITTAVILLAS
4101 OLEANDER Avenue
FT. PIERCE, FLORIDA

STAFFAN H. LUNDBERG
ARCHITECT LLC
AR-0008984
1341 SEA HAWK LANE
VERO BEACH, FLORIDA 32963
(772) 538-5130
Staffanarchitect@gmail.com

NO.	REVISIONS	DATE

ENERGYLITE

GridLite™ GL3

SITE + AREA LED LUMINAIRE

PROJECT _____ SPECIFIER _____

SPECIFICATION _____ TYPE _____

CONSTRUCTION
- Die-cast, low-copper aluminum alloy housing for optimal thermal performance and exceptional corrosion resistance
- 100% recycled aluminum

FINISH
- TGIC polyester super-durable powder coating with superior gloss, color retention and weather resistance
- Standard finishes provided at 3 mil nominal thickness, salt-spray-tested to 3,000 hours as per ASTM B117
- For marine-grade finish, consult factory. Provided at 5 mil nominal thickness, salt-spray-tested to 4,000 hours as per ASTM B117

ELECTRICAL
- 120-277 V Standard; 277-480V option available
- PF>0.9, THD<20%
- Parallel surge protection: enhanced 10kV standard, extreme 20kV optional (ANSI C136.2-2015)
- For series surge protection, consult factory
- Rated for operation -40°C to 40°C
- For 50°C option, consult factory

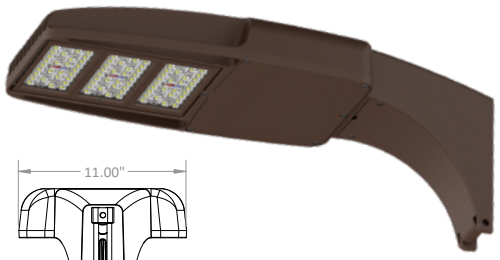
OPTICS + PERFORMANCE
- Up to 165 lumens per watt
- 12,000- to 40,000-lumen packages (82-325W)
- 5 customized distributions available
  - Type II Roadway Medium (Coefficient of Utilization: 0.793)
  - Type III Roadway Medium (Coefficient of Utilization: 0.852)
  - Type IV Wide Short (Coefficient of Utilization: 0.840)
  - Type V Square Short
  - Type V Square Medium
- Multiple shielding options available

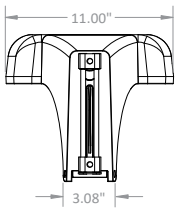
CONTROLS
- 0-10V dimming standard; DALI-2 option available
- Receptacle options:
  - ANSI C136.41 3-pin
  - ANSI C136.41 7-pin (for DALI-2 or 0-10V dimming)
  - Zhaga Book 18 (for next generation ambient light/motion sensing)
- Motion sensor option available – bi-level setting standard with low point of 50% and a 15-minute delay

MOUNTING
- Extended site arm offers universal mounting, allowing for retrofit without drilling into existing poles
- All mounting options allow for multiple fixture installations at 90°
- Wall-mount and round pole adapters available for extended site arm

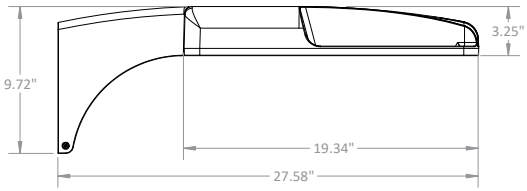
LISTINGS
- IDA Dark Sky Friendly ≤3000K, extended site arm or horizontal tenon
- IP66-rated optical and electrical chambers
- 3G Vibration-rated (ANSI C136.31)
- cULus Listed for wet locations (E487976)
- DLC + DLC Premium listings (Family code: JJJOYL)
- Zhaga D4i listed
- ANSI C136.15 labeling available
- BAA Compliance available; †*Consult factory to confirm specific fixture code is compliant if this is a requirement*
- **Designed and assembled in U.S.A.**

WARRANTY
- 10-year warranty





Extended Site Arm
EPA: 0.69 sq. ft.
WEIGHT: 22.28 lbs.



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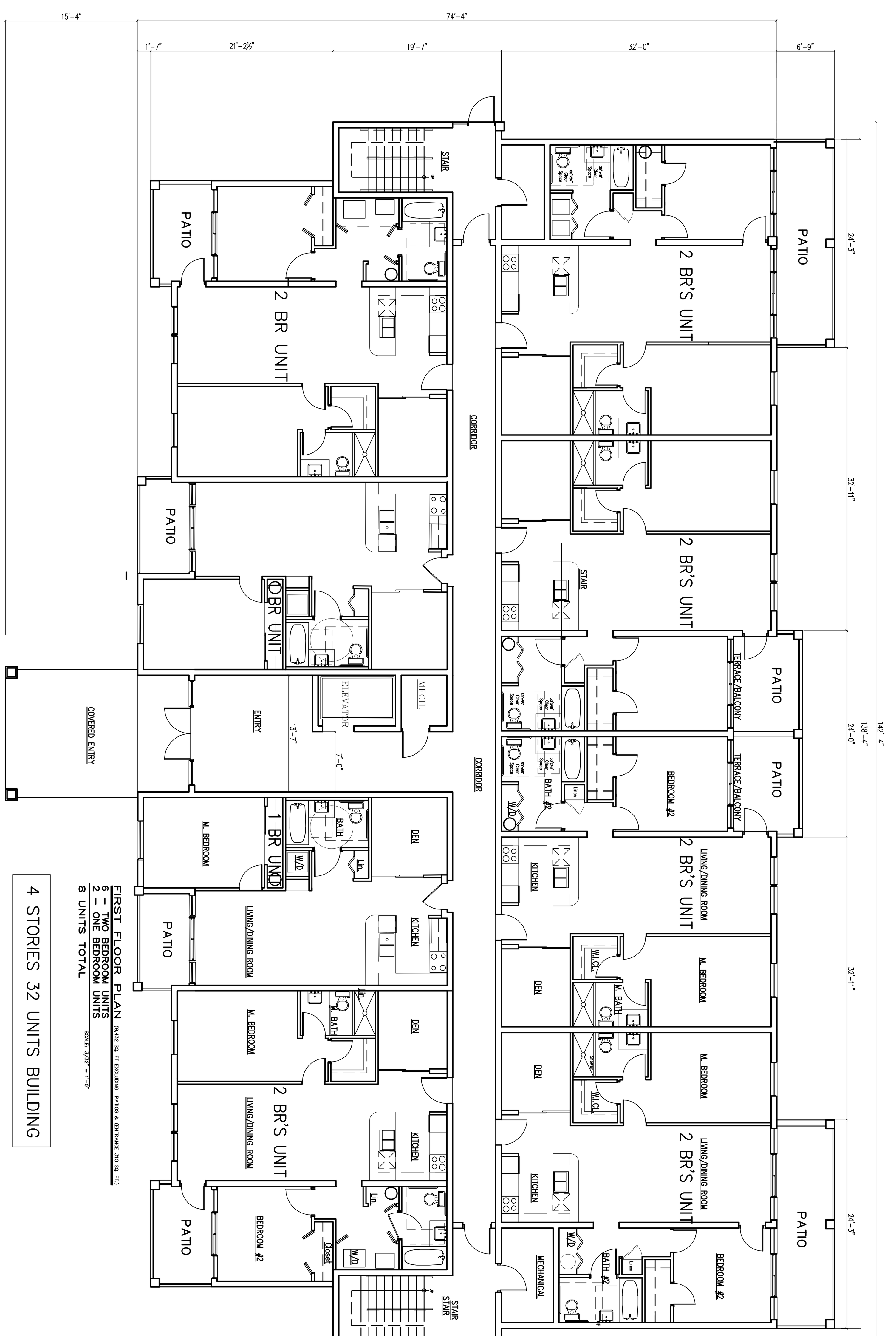
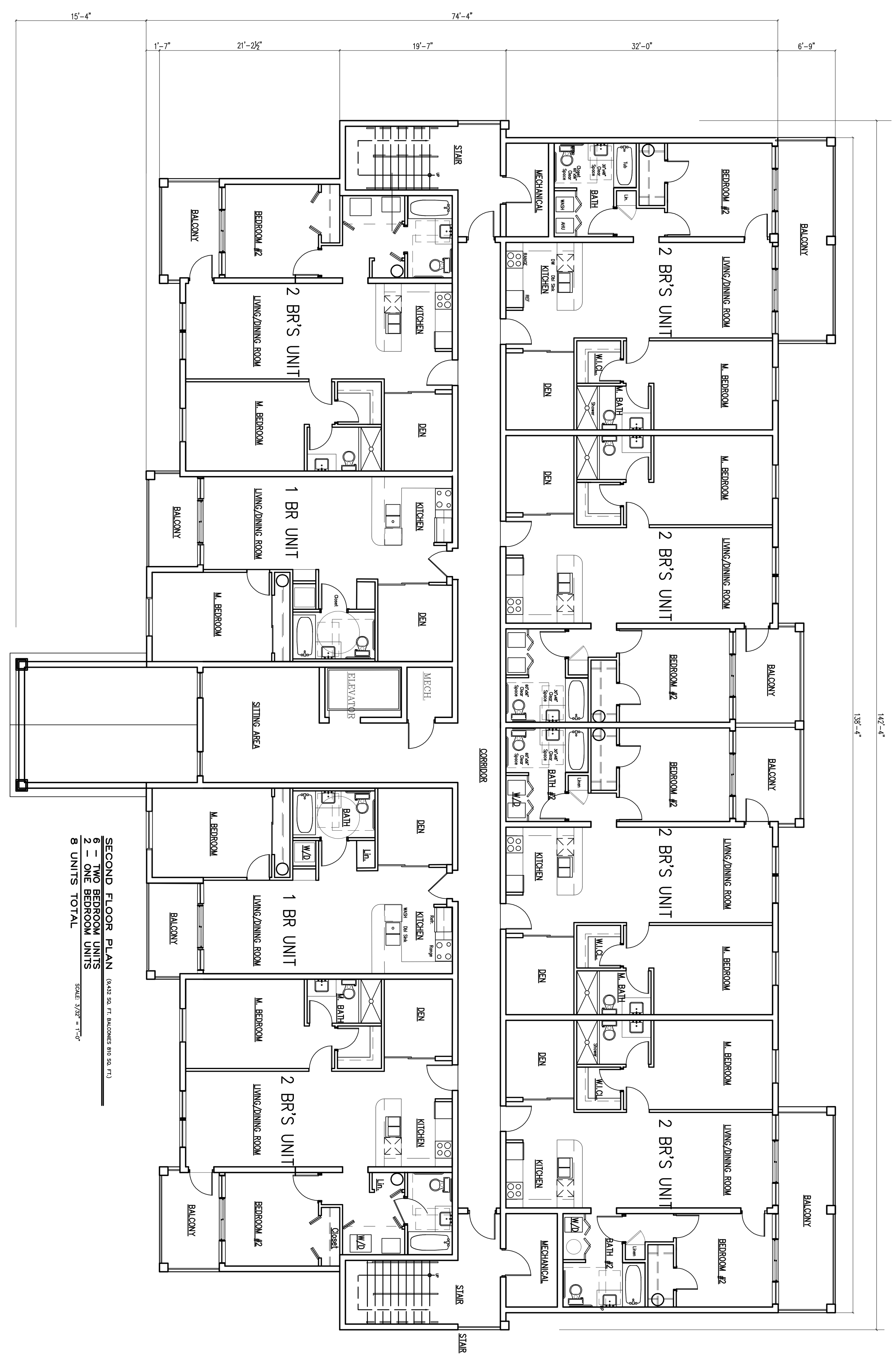
FIXTURE	LUMENS	BEAM SPREAD	CRI	CCT	VOLTAGE	CONTROLS	SURGE	PHOTOCELL	FINISH	MOUNTING	OPTIONS
GL3	12L : 12,000 lm; 82W	2RM : Type II Roadway Medium	7 : 70 CRI	30 : 3000K	STD : 120-277V	10 : 0-10V	1PS : 10kV 5kA, 120-277V	70 : 7-pin	SBZ : Bronze (RAL8019)	ES : Extended Site Arm	*Field-Installed*
	15L : 15,000 lm; 108W	3RM : Type III Roadway Medium		40 : 4000K	HVL : 277-480V	DA : DALI-2	2PS : *20kV 10kA, 120-277V	0Z : Z receptacle	SGY : Grey (RAL7038)	HT : Horizontal Tenon	HSS : House-side Shield
	17L : 17,000 lm; 127W	4WS : Type IV Wide Short		50 : 5000K			2PH : *20kV 10kA, 277-480V	3Z : 3-pin + Z	SBK : Black (RAL9017)	TM : Trunnion Mount	FSS : Front-side Shield
	18H : 18.000 lm; 114W	T5Q : Type V Square Medium						7Z : 7-pin + Z	SWH : White (RAL9003)	KM : 3" Knuckle	CSS : Cul-de-Sac Shield
	20H : 20,000 lm; 126W	5QS : Type V Square Short						00 : none	MBZ : Marine Bronze (RAL8019)	KMS : 3" Knuckle at 45°; side wiring	SC : Shorting Cap
	23H : 23,000 lm; 151W								MGY : Marine Grey (RAL7038)	*Adapters*	*Factory-Installed*
	26H : 26,000 lm; 173W								MBK : Marine Black (RAL9017)	ES-WM : Extended Site Arm + Wall Mount Adapter	ZT1 : 0-10V Z Ambient Light Control
	29H : 29,000 lm; 188W								MWH : Marine White (RAL9003)	ES-RP : Extended Site Arm + Round Pole Adapter	ZT3 : 0-10V Z IR + ALC
	30H : 30,000 lm; 194W										ZT4 : 0-10V Z Occupancy, IR + ALC
	33H : 33,000 lm; 239W										ZT5 : 0-10V Zhaga Casambi BLE + ALC
	35H : 35,000 lm; 261W										
	37H : 37,000 lm; 278W										
	40H : 40,000 lm; 325W										

Notes: †Consult factory to verify BAA compliant products.
80 or 90 CRI, + additional CCTs available upon request
HVL + DALI-2 combination only available with 12L-17L and 18H-23H performance packages.

*Consult factory for lead time and availability.
HVL unavailable with ZT1, ZT3, ZT4 and ZT5 photocell receptacles.
HSS not compatible with 4WS optics, instead use SS.

SOLAIS LIGHTING GROUP
8655 Corporate Drive
Frisco, TX 75033
469.294.1516
solais.com





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SCALE:	AS SHOWN
DRAWN:	GSM
CHECKED:	SHL
APPROVED:	SHL
DATE:	11-01-2023
PROJ. NO.:	2023-02

TITLE :

PRELIMINARY
FLOOR PLANS
1st & 2nd FLOOR

DRAWING NO.

A1

MARGARITTAVILLAS

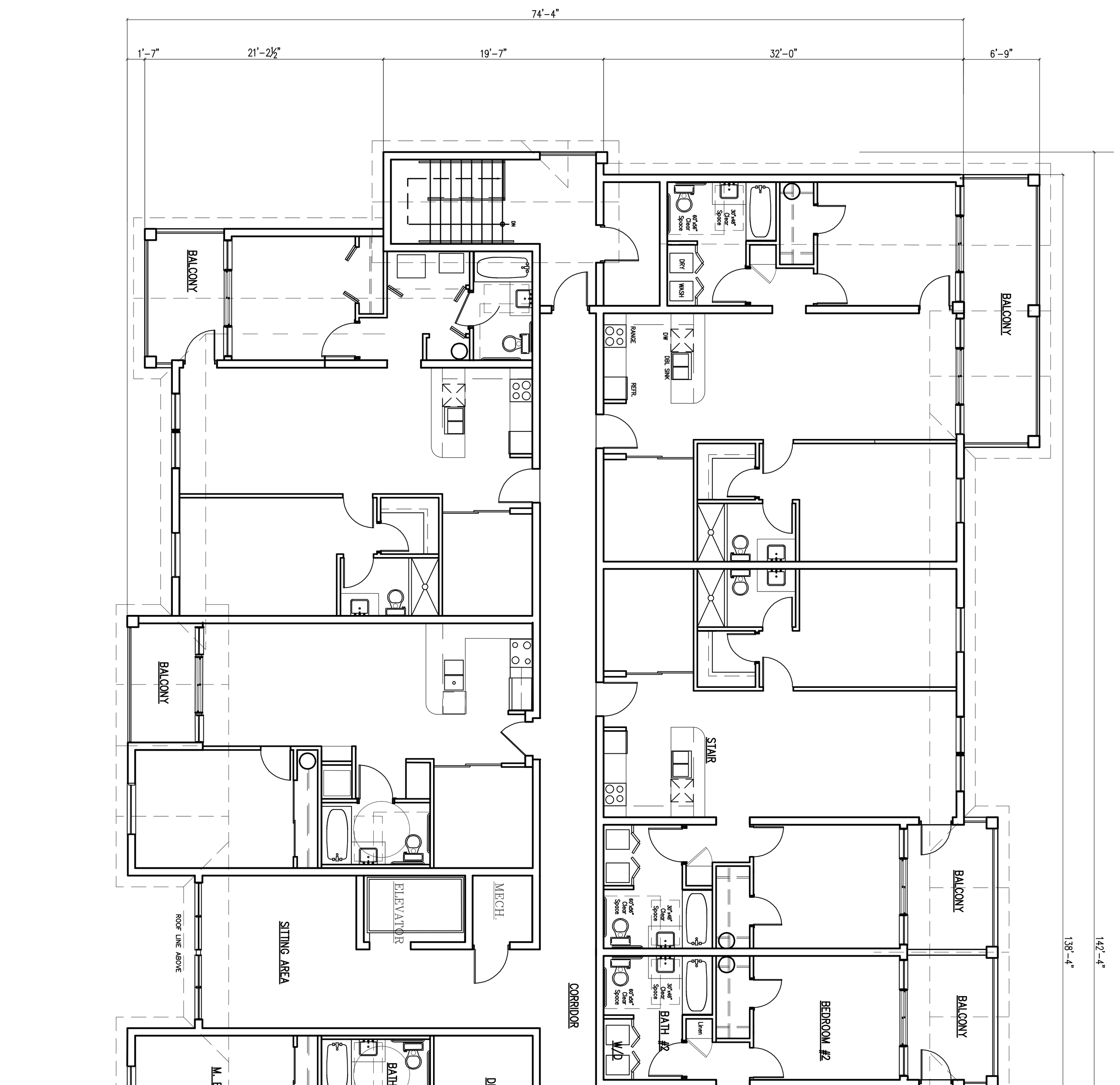
FLOOR PLANS
for

MARGARITTAVILLAS

4101 OLEANDER Avenue
FT. PIERCE, FLORIDA

STAFFAN H. LUNDBERG
ARCHITECT LLC
AR-0008984
1341 SEA HAWK LANE
VERO BEACH, FLORIDA 32963
(772) 538-5130
Staffanarchitect@gmail.com

NO.	REVISIONS	DATE



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DRAWN:	GSM
CHECKED:	SHL
APPROVED:	SHL
DATE:	11-01-2023
PROJ. NO.:	2023-02

TITLE :
PRELIMINARY
FLOOR PLANS
3rd & 4th FL

DRAWING NO.
A2

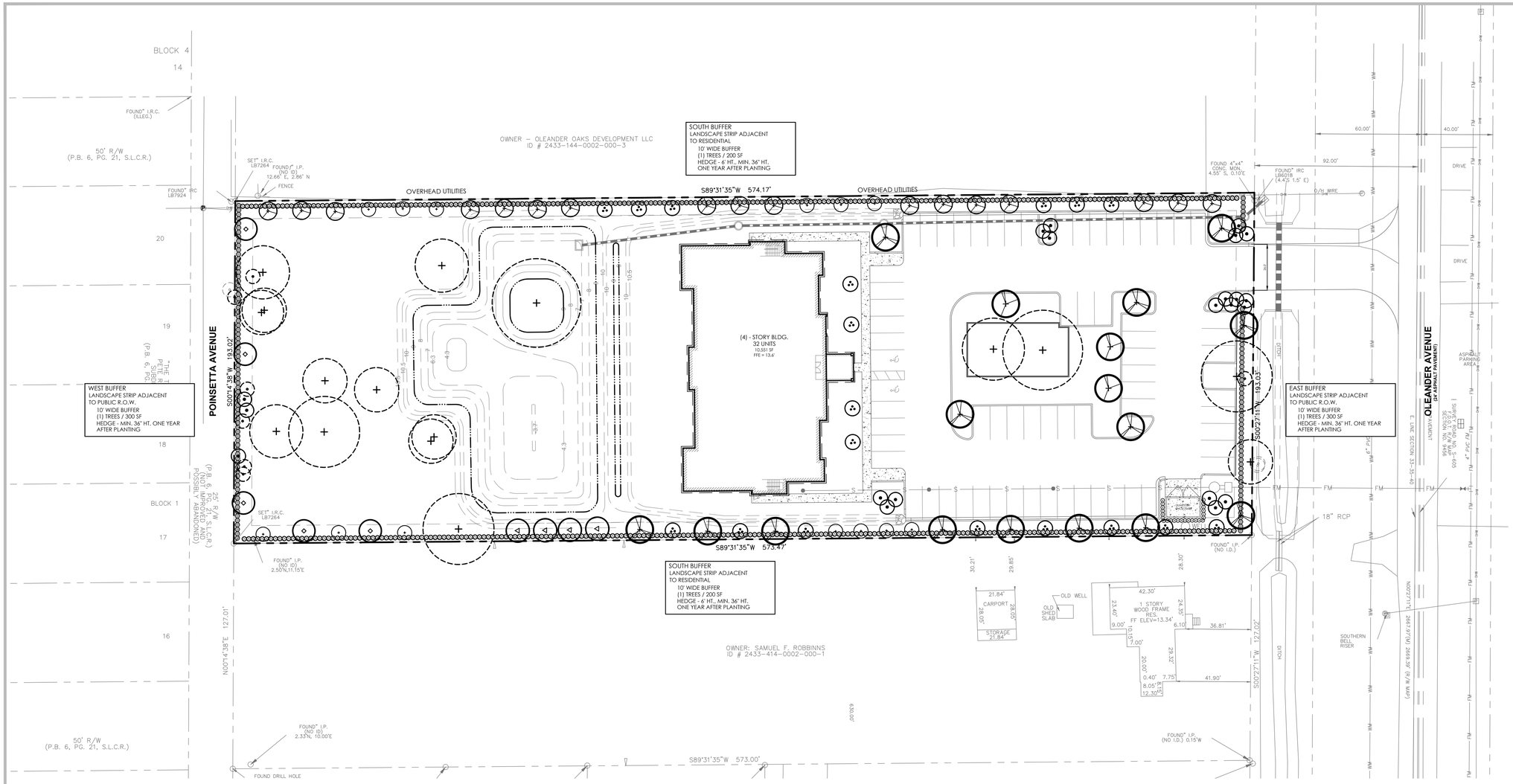
MARGARITTAVILLAS

FLOOR PLANS
for
MARGARITTAVILLAS

4101 OLEANDER Avenue
FT. PIERCE, FLORIDA

STAFFAN H. LUNDBERG
ARCHITECT LLC
AR-0008984
1341 SEA HAWK LANE
VERO BEACH, FLORIDA 32963
(772) 538-5130
Staffanarchitect@gmail.com

NO.	REVISIONS	DATE



Landscape Calculations

	REQUIRED/ PERMITTED	PROVIDED
LANDSCAPE STRIPS ADJACENT TO PUBLIC R.O.W.		
EAST - OLEANDER AVENUE - 166 LF (193' LESS 27' DRIVEWAYS)		
10' WIDE LANDSCAPE STRIP (166 x 10 = 1,660 sf.)		
TREES: 1 / 300 SF	6 TREES	6 TREES
INCLUDES (2) EXISTING TREES		
(1) EXISTING PALMS		
(2) PROPOSED TREES		
(6) PROPOSED PALM		
plus 24" ht. hedge, 36" after one year		
WEST - POINSETTA AVENUE - 193 LF		
10' WIDE LANDSCAPE STRIP (193 x 10 = 1,930 sf.)		
TREES: 1 / 300 SF	7 TREES	7 TREES
INCLUDES (2) EXSTING TREES		
(6) EXISTING PALMS		
(3) PROPOSED TREES		
(2) PROPOSED PALMS		
plus 24" ht. hedge, 36" after one year		
LANDSCAPE STRIPS ADJACENT TO RESIDENTIAL		
NORTH - 575 LF		
10' WIDE LANDSCAPE STRIP (575 x 10 = 5,750 sf.)		
TREES: 1 / 200 SF	29 TREES	29 TREES
INCLUDES (29) PROPOSED TREES		
SOUTH - 574 LF		
10' WIDE LANDSCAPE STRIP (574 x 10 = 5,740 sf.)		
TREES: 1 / 200 SF	29 TREES	29 TREES
INCLUDES (1) EXISTING TREE		
(28) PROPOSED TREES		
INTERIOR VEHICULAR USE LANDSCAPE AREA		
VEHICULAR USE AREA: 26,182 SF (27,182 SF LESS 2X 500 SF EX TREES)		
1 SF / 15 SF OF VUA = 1,745 SF	1,745 SF	8,296 SF
(1) CANOPY TREE / 100 SF =	18 TREES	18 TREES
INCLUDES (2) EXSTING TREES		
(12) PROPOSED PALMS = 4 TREES		
(12)PROPOSED TREES		

Plant List

	SYM	KEY	BOTANICAL NAME/ COMMON NAME	HEIGHT/ SPREAD	SPECIFICATION	NATIVE	DROUGHT TOLERANT	TOTAL
TREES		CES	CONOCARPUS ERECTUS 'SERICEUS' SILVER BUTTONWOOD	12' HT. 5' SPR.	45 GAL. MIN. 2.5 CAL. TREE FORM, 5' CT. MIN.	Y	M	13
		IA	ILEX X 'ATTENUATA' EAST PALATKA HOLLY	12' HT. 5' SPR.	45 GAL. MIN. 2.5 CAL. TREE FORM, 5' CT. MIN.	Y	M	17
		MG	MAGNOLIA GRANDIFLORA SOUTHERN MAGNOLIA	14' HT. 5' SPR.	FIELD GROWN B&B 3" CAL., 5' C.T. MIN.	Y	H	5
		LI	LAGERSTROEMIA INDICA CRAPE MYRTLE	12' HT. 5' SPR.	FIELD GROWN B&B 2.5" CAL., 5' C.T. MIN.	N	M	18
		QV	QUERCUS VIRGINIANA LIVE OAK	14' HT. 5' SPR.	FIELD GROWN, B&B 3" CAL. 5' CT. MIN.	Y	H	14
		SP	SABAL PALMETTO SABAL PALMETTO	10 - 14' CT.	AS SHOWN, SLICKS STAGGER HEIGHTS	Y	H	19
	▽	SPM	SABAL PALMETTO SABAL PALMETTO	10 - 14' CT.	AS SHOWN, SLICKS STAGGER HEIGHTS	Y	H	19
		TD	TAXODIUM DISTICHUM BALD CYPRESS	12' HT. 5' SPR.	45 GAL. MIN. 2.5 CAL. TREE FORM, 5' CT. MIN.	Y	M	4
		UA	ULMUS ALATA WINDGED ELM	14' HT. 6' SPR.	FIELD GROWN B&b, 3" CAL. 5' CT, MIN.	Y	M	3
SHRUBS		CHR	CHRYSOBALANUS ICACO COCOPLUM	24" X 16"	3 GAL., 24" O.C.	Y	H	138
		VIB	VIBURNUM OBOVATUM WALTERS VIBURNUM	24" X 16"	3 GAL., 24" O.C.	Y	H	450
		SOD	STENOTAPHRUM SECUNDATUM ST. AUGUSTINE SOD		DISEASE FREE, LAID TIGHTLY, EVEN UNIFORM	N	M	T.B.D.
			EXISTING TREES TYP					
			EXISTING PALMS TYP					

▽ DENOTES PALMS COUNTING TOWARDS MITIGATION REQUIREMENTS.

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SUNSHINE811.COM
NOTIFICATION CENTER

plot date:
file name:

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

CONCEPTUAL LANDSCAPE PLAN

MARGARETA
4101 OLEANDER AVENUE
FT. PIERCE, FLORIDA

5		
4		
3		
2		
1	SUBMITTAL	12.08.2023

SCALE: 1"=30'-0"

PATRICK D. CUNNINGHAM
FL REG #: LA0001669

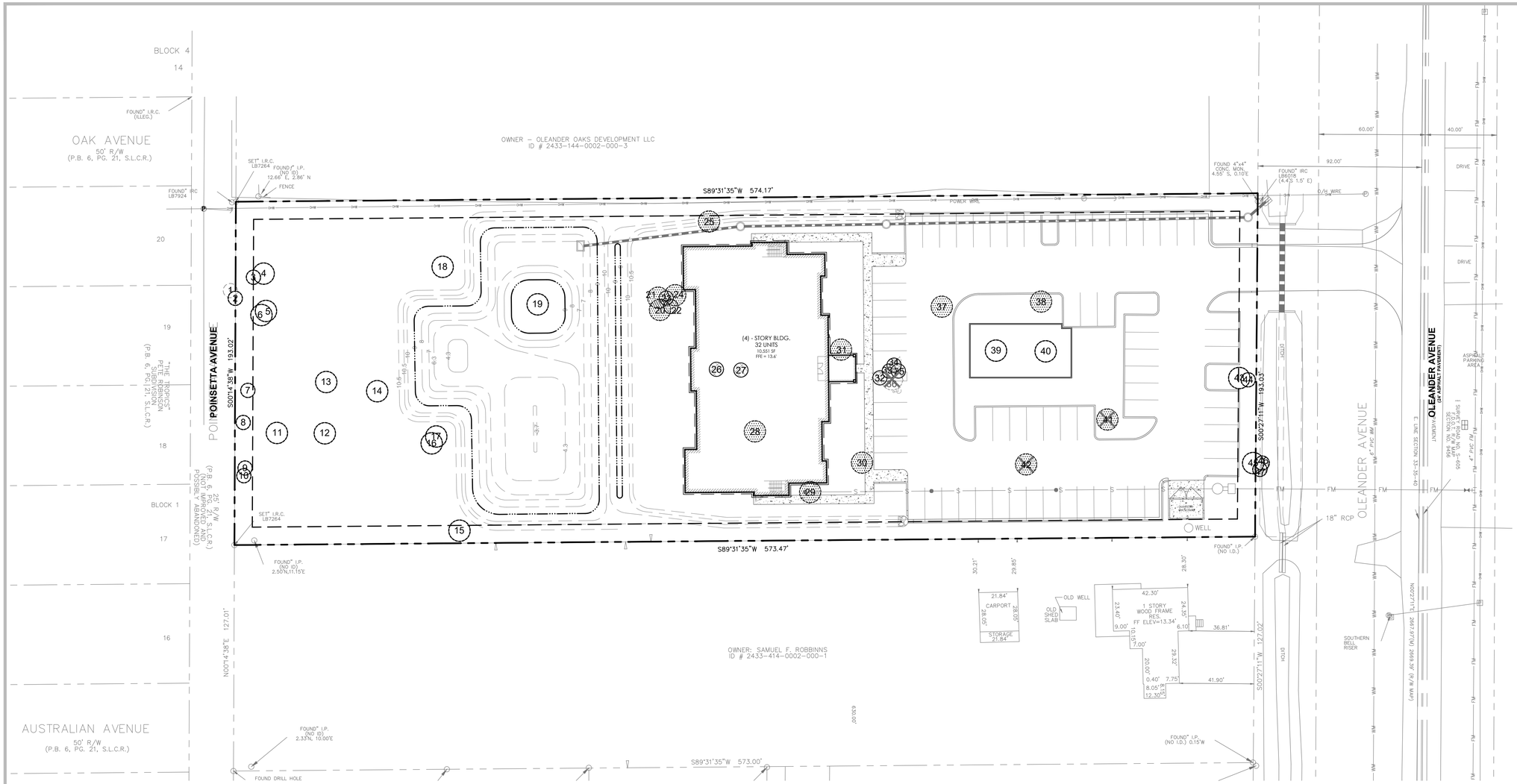
SEAL

0 30 60

NORTH

SHEET

L-1



Existing Tree Inventory List

TREE#	SPECIES	SIZE "	STATUS	ACTION	CREDTS
1	Palm Spp.	16 "	Specimen	REMAIN	Off Site
2	Palm Spp.	12 "	Specimen	REMAIN	+ 1 Palm
3	Palm Spp.	14 "	Specimen	REMAIN	+ 1 Palm
4	Oak Spp.	30 "	Protected	REMAIN	+ 27.5"
5	Oak Spp.	24 "	Protected	REMAIN	+ 21.5"
6	Oak Spp.	24 "	Protected	REMAIN	+ 21.5"
7	Palm Spp.	20 "	Specimen	REMAIN	+ 1 Palm
8	Palm Spp.	16 "	Specimen	REMAIN	+ 1 Palm
9	Palm Spp.	14 "	Specimen	REMAIN	+ 1 Palm
10	Palm Spp.	18 "	Specimen	REMAIN	+ 1 Palm
11	Oak Spp.	26 "	Protected	REMAIN	+ 26"
12	Oak Spp.	48 "	Protected	REMAIN	+ 48"
13	Oak Spp.	24 "	Protected	REMAIN	+ 24"
14	Oak Spp.	24 "	Protected	REMAIN	+ 24"
15	Oak Spp.	46 "	Protected	REMAIN	+ 43.5"
16	Oak Spp.	20 "	Protected	REMAIN	+ 20"
17	Oak Spp.	20 "	Protected	REMAIN	+ 20"
18	Oak Spp.	26 "	Protected	REMAIN	+ 26"
19	Oak Spp.	56 "	Protected	REMAIN	+ 56"
20	Oak Spp.	42 "	Protected	Remove	- 42"

TREE#	SPECIES	SIZE "	STATUS	ACTION	CREDTS
21	Oak Spp.	24"	Protected	Remove	- 24"
22	Palm Spp.	8 "	Specimen	Remove	- 1 Palm
23	Palm Spp.	8 "	Specimen	Remove	- 1 Palm
24	Oak Spp.	36"	Protected	Remove	- 36"
25	Oak Spp.	36"	Protected	Remove	- 36"
26	Palm Spp.	18 "	Specimen	Remove	- 1 Palm
27	Palm Spp.	18 "	Specimen	Remove	- 1 Palm
28	Oak Spp.	54"	Protected	Remove	- 54"
29	Oak Spp.	44"	Protected	Remove	- 44"
30	Oak Spp.	42"	Protected	Remove	- 42"
31	Oak Spp.	30"	Protected	Remove	- 30"
32	Palm Spp.	18"	Specimen	Remove	- 1 Palm
33	Palm Spp.	16"	Specimen	Remove	- 1 Palm
34	Palm Spp.	20"	Specimen	Remove	- 1 Palm
35	Palm Spp.	16"	Specimen	Remove	- 1 Palm
36	Oak Spp.	8"	Protected	Remove	- -
37	Oak Spp.	42"	Protected	Remove	- 42"
38	Oak Spp.	46"	Protected	Remove	- 46"
39	Oak Spp.	36 "	Protected	REMAIN	+ 33.5"
40	Oak Spp.	56 "	Protected	REMAIN	+ 53.5"

TREE#	SPECIES	SIZE "	STATUS	ACTION	CREDTS
41	Royal Poinciana	30 "	Non-Native	Remove	- -
42	Royal Poinciana	64 "	Non-Native	Remove	- -
43	Oak Spp.	48 "	Protected	REMAIN	+ 45.5"
44	Palm Spp.	20 "	Specimen	REMAIN	+ 1 Palm
45	Oak Spp.	20 "	Protected	REMAIN	+ 17.5"
46	Palm Spp.	18"	Specimen	REMAIN	Off Site
47	Palm Spp.	18"	Specimen	REMAIN	Off Site

EXISTING NATIVE TREES
PROTECTED TREES TO BE REMOVED
(8-IN. DBH TO LESS THAN 14-IN. DBH - NO MITIGATION REQUIRED)

● SPECIMEN TREES TO BE REMOVED
(14-IN. DBH OR GREATER - MITIGATION REQUIRED @ 1-IN. : 1-IN.)

▽ SPECIMEN CABBAGE PALMS TO BE REMOVED
(10-FT. C.T MIN. - MITIGATION REQUIRED @ 1 PALM. : 1 PALM

TREE CREDITS ARE CALCULATED AT (DBH PRESERVED - 2.5-IN. MIN. TREE CAL.) PER TREE SAVED. PALM CREDITS ARE CALCULATED AT (1) PALM SAVED = (1) PALM REMOVED.

Key

- EXISTING TREES - TO BE REMOVED LESS THAN 14-IN. DBH, THEREFORE DO NOT REQUIRE MITIGATION. — TO BE REMOVED
- EXISTING TREES - TO BE REMOVED NON-NATIVE TREE, THEREFORE DO NOT REQUIRE MITIGATION. — TO BE REMOVED
- (76) EXISTING TREES - TO BE REMOVED GREATER THAN 14-IN. DBH AND REQUIRE MITIGATION. — TO BE MITIGATED
- (70) EXISTING PALMS - TO BE REMOVED REQUIRE MITIGATION — TO REMAIN
- (10) (11) EXISTING TREES AND PALMS - TO REMAIN USED FOR TREE CREDITS TOWARDS REQUIRED LANDSCAPING.

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Tree Mitigation Calculations

	QUANTITY	DBH (INCHES)	MITIGATION REQ.
TO BE REMOVED			
PROTECTED			
LIVE OAKS (LESS THAN 14" DBH)	1 TREE	8 "	0"
NON-NATIVE			
ROYAL POINCIANA	2 TREES	94 "	0"
SPECIMEN			
LIVE OAKS (GREATER THAN 14" DBH)	10 TREES	396 "	- 396 "
SABAL PALMS	8 PALMS	N/A	- 8 PALMS

MITIGATION (REPLACEMENT)	REQUIRED	PROVIDED
TOTAL TREE MITIGATION REQUIRED INCL. *(16) EXISTING NATIVE OAK*	396 "	508 " *(00" SHORTFALL)* *508"*
TOTAL PALM MITIGATION REQUIRED INCL. *(10) EXISTING SABAL PALMS @ 10' ct min.* *(1) SABAL PALM @ 10' ct min.*	8 PALMS	8 PALMS *7 PALMS* *1 PALMS*

General Notes:

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

Additional Notes:

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

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EXISTING TREE INVENTORY PLAN

MARGARETA
4101 OLEANDER AVENUE
FT. PIERCE, FLORIDA

5		
4		
3		
2		
1	SUBMITTAL	12.08.2023

SCALE: 1"=30'-0"

PATRICK D. CUNNINGHAM FL REG #: LA0001669

SEAL

0 30 60 NORTH

SHEET L-2

plot date:
file name:

Additional Notes

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

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

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

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

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

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

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

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

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

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

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

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

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

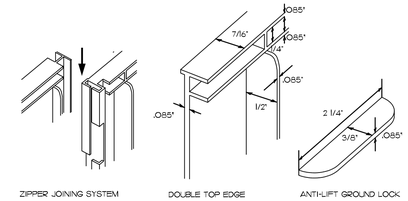
B. ALL NUISANCE EXOTIC VEGETATION EXISTING ON SITE SHALL BE REMOVED IN CONJUNCTION WITH ANY SITE DEVELOPMENT.

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

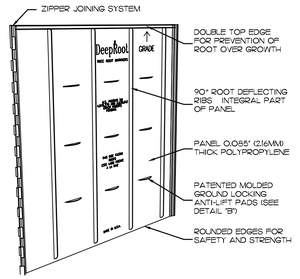
NOTES:
SPECIFIED TREE ROOT BARRIERS ARE A MECHANICAL BARRIER AND ROOT DEFLECTOR TO PREVENT TREE ROOTS FROM DAMAGING HARDSCAPES AND LANDSCAPES. ASSEMBLED IN 2' LONG MODULES TO CREATE VARYING SIZES OF CYLINDERS FOR SURROUNDING ROOT BALLS (SURROUND PLANTING STYLE) OR FOR LINEAR APPLICATIONS DIRECTLY BESIDE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

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

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



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



24" DEEPROOT TREE ROOT BARRIERS
NOT TO SCALE

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

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

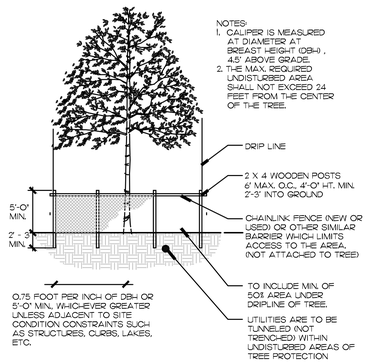
TREE PROTECTION SHALL COMPLY WITH THE JURISDICTIONS REGULATIONS.

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

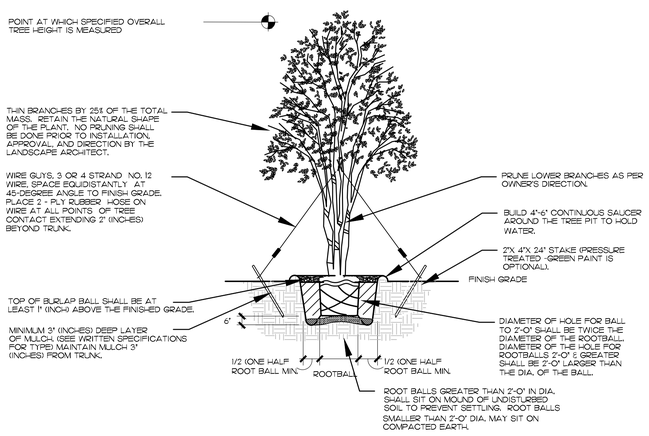
NO ATTACHMENT, WIRES (OTHER THAN PROTECTIVE GUY WIRES), SIGNS OR PERMITS SHALL BE ATTACHED TO A PROTECTED TREE.

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

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



TYPICAL TREE PROTECTION DETAIL
NOT TO SCALE



TYPICAL IRRIGULAR/MULTI-TRUNK TREE PLANTING DETAIL
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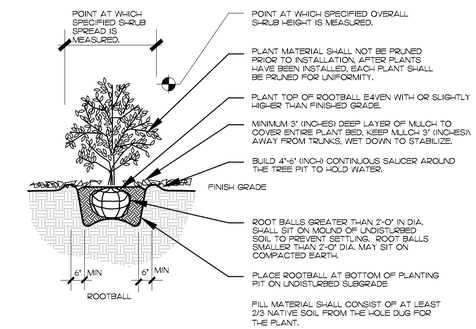
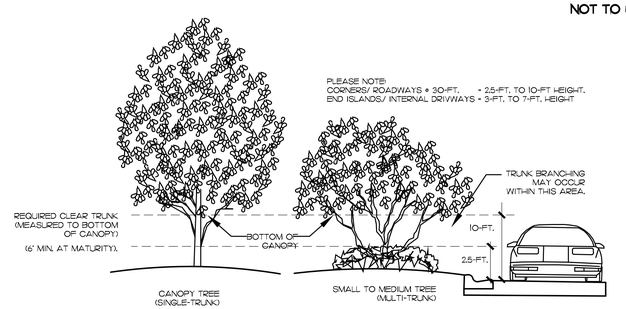
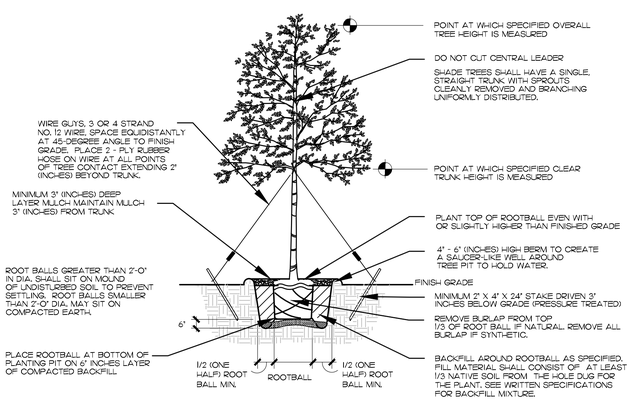


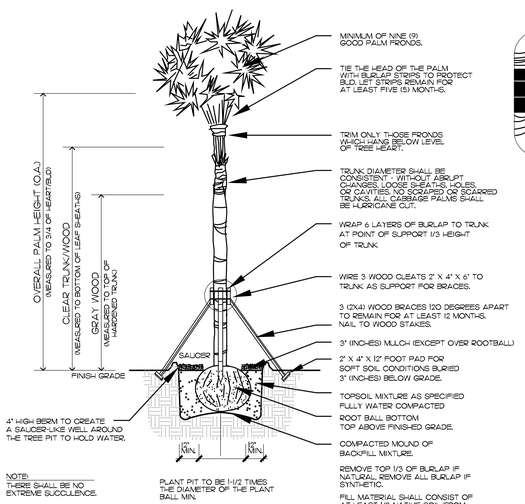
TYPICAL SHRUB/ GROUNDCOVER PLANTING DETAIL
NOT TO SCALE



CLEAR TRUNK WITHIN SIGHT TRIANGLE DETAIL
NOT TO SCALE

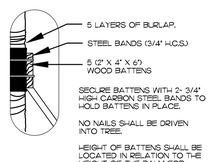


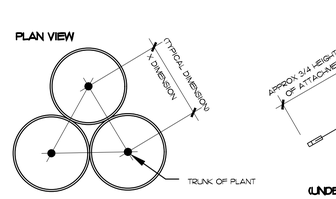
TYPICAL TREE PLANTING DETAIL
NOT TO SCALE



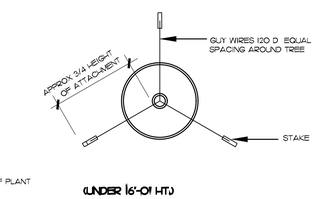
NOTE:
THERE SHALL BE NO EXTREME SUCCULENCE.

TYPICAL PALM PLANTING DETAIL
NOT TO SCALE





TYPICAL PLANT SPACING DETAIL
NOT TO SCALE



(UNDER 16'-0" HT.)

TYPICAL TREE GUYING DETAIL
NOT TO SCALE

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

plot date:
file name:

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

LANDSCAPE DETAILS

MARGARETA
4101 OLEANDER AVENUE
FT. PIERCE, FLORIDA

5		
4		
3		
2		
1	SUBMITAL	12.08.2023

SCALE: N.T.S.

PATRICK D. CUNNINGHAM
FL REG #: LA0001669

SEAL

NORTH

SHEET
L-3

Luminaire Schedule						
Symbol	Qty	Label	Arrangement	Lumens	LLF	Description
	3	A	SINGLE	20430.57	1.000	GL3-20H-3RM-750 @ 25' MTG. HT.
	3	B	SINGLE	20617.21	1.000	GL3-20H-5QS-750 @ 25' MTG. HT.
LIGHTING TO BE SUPPLIED BY WAMPLER LIGHTING GROUP, CONTACT BRAD WAMPLER @ 256.996.2560 OR BRAD@WAMPLERLIGHTINGGROUP.COM						

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CalcPts	Illuminance	Fc	2.60	11.3	0.1	26.00	113.00
Entrance	Illuminance	Fc	1.60	3.2	0.1	16.00	32.00

PROJECT:
Margareta Villas
Fort Pierce, FL

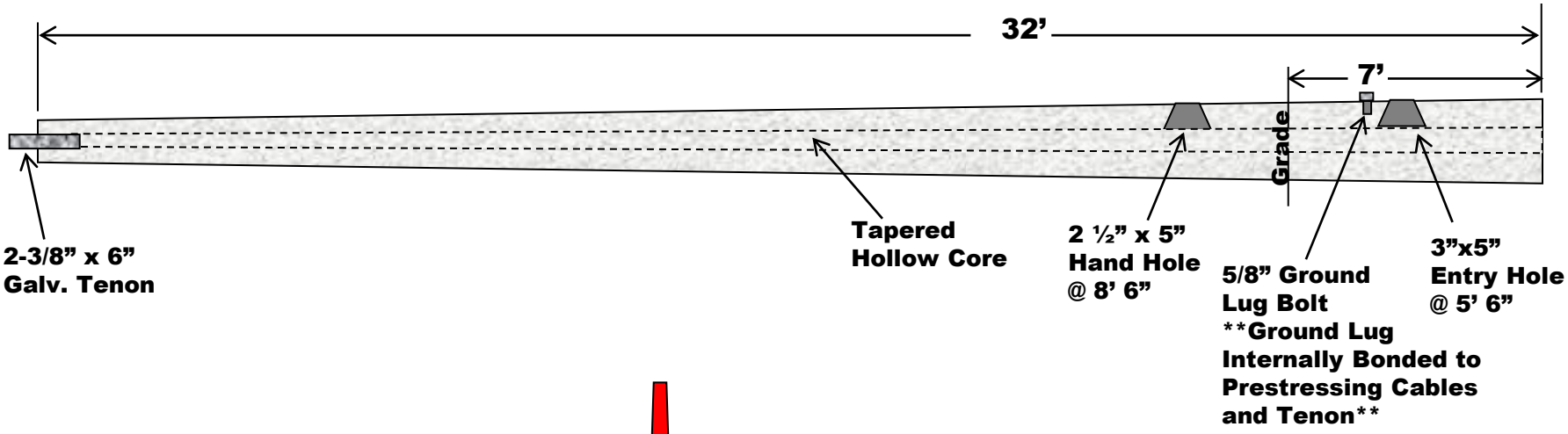
Wampler Lighting Group
83 High Avenue
Valley Head, Alabama 35989
Contact Brad @ 256.996.2560

PLAN DATE

DATE	DESCRIPTION	DRAWN BY
020524		JRC

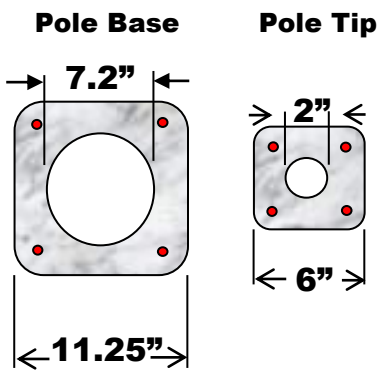
JOB #: 020524MV

Drawing Not to Scale

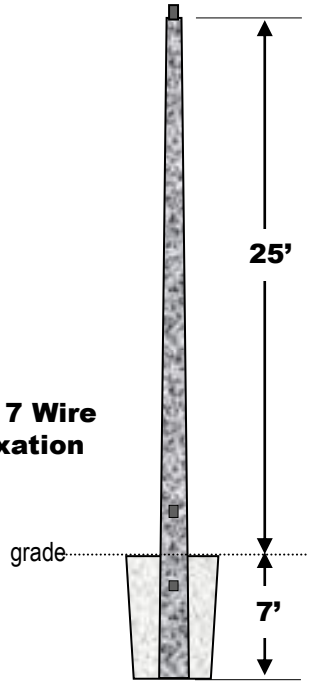


Seminole Pole incorporated

www.SeminolePole.com Email: SeminolePole@gmail.com
Phone: 866-246-5545 Fax: 229-524-2866



• =0.5" Diameter 7 Wire 270k Low Relaxation Cable

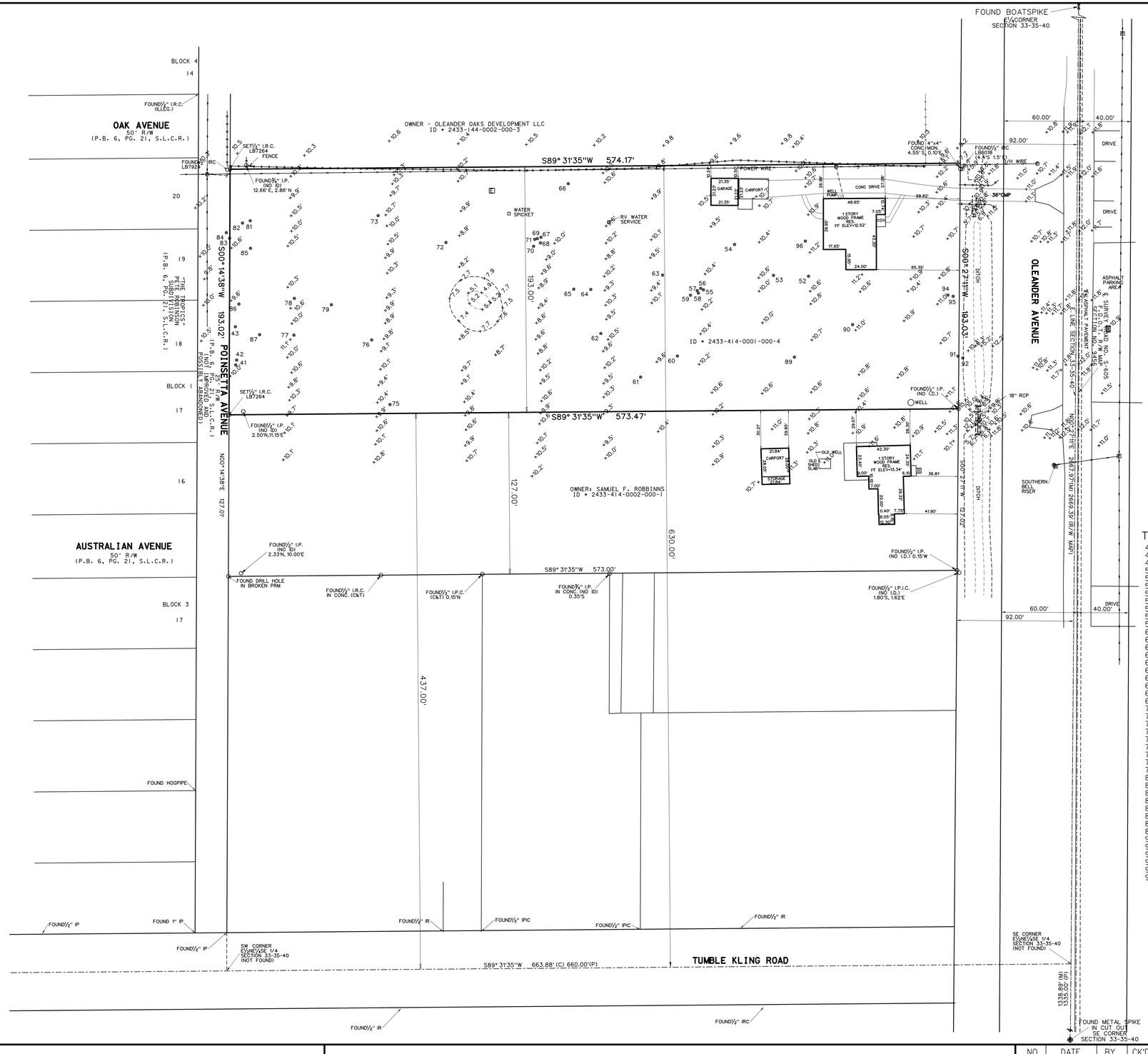


Part#: SP3225TII

Project:

Pole O.A.	Burial Depth	Wind Speed	Gust	EPA Capacity
32'	7'	140mph	3 sec.	9.0

Min. Brk. Strength	Strand Info	Concrete	Pole Weight (lb)
3,500#	0.5" Diameter 270 ksi	6,500psi	1,900



LEGAL DESCRIPTION

THE NORTH 193 FEET OF THE SOUTH 630 FEET OF THE EAST ONE-HALF OF THE NORTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER IN SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, LESS CANAL AND ROAD RIGHTS OF WAY.

SAID LANDS SITUATE IN THE CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA AND CONTAIN 2.542 ACRES, MORE OR LESS.

NOTES

1. REPRODUCTIONS OF THIS SKETCH ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
2. EASEMENTS AND RIGHTS-OF-WAY SHOWN ARE TAKEN FROM TITLE COMMITMENT NUMBER 24394655CA, AS PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY. EFFECTIVE DATE: JANUARY 18, 2006 AT 8:00 A.M. PROPERTY IS SUBJECT TO THE AGREEMENT WITH FT. PIERCE UTILITIES AUTHORITY, AS RECORDED IN OFFICIAL RECORDS BOOK 424, AT PAGE 8776 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
3. NO UNDERGROUND IMPROVEMENTS ARE SHOWN HEREON.
4. ELEVATIONS SHOWN HEREON ARE RELATIVE TO NAVD 1988, BASED ON ST. LUCIE COUNTY BENCHMARK "FRENCH" - ST. LUCIE COUNTY DISK IN CONC. 214' S OF FRENCH CREEK LANE, 29' W OF W.E.O.P. OLEANDER BLVD. ELEVATION = 11.32' NAVD 1988.
5. BEARINGS SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR FLORIDA EAST ZONE, WITH THE EAST LINE OF THE SOUTHEAST ONE-QUARTER OF SECTION 33-35-40 HAVING A BEARING OF NORTH 00°27'11" EAST. N.G.S. CONTROL MONUMENTS Y403, STL4 AND GCY WERE USED TO DETERMINE THIS BEARING.
6. TREE TYPES LISTED TO THE BEST OF OUR ABILITY. FOR A MORE EXACT SPECIES DETERMINATION, A BOTANIST OR SIMILAR PROFESSIONAL SHOULD BE CONSULTED.
7. THIS SURVEY IS CERTIFIED TO:
   A. 4101 OLEANDER GROUP LLC
   B. LAW OFFICES OF DAVID DUEBELLI, P.A.
   C. OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY
   D. AVJ DEVELOPMENT LLC, ISAOA/ATIMA

LEGEND

- GUY ANCHOR WIRE
- WOOD UTILITY POLE
- CABLE TV BOX
- FENCE
- OVERHEAD POWER LINES
- SIGN
- TREE
- ELECTRIC SERVICE

TREE LIST

41	18"	CABBAGE PALM
42	14"	CABBAGE PALM
43	16"	CABBAGE PALM
52	56"	LIVE OAK
53	36"	LIVE OAK
54	42"	LIVE OAK
55	16"	CABBAGE PALM
56	20"	CABBAGE PALM
57	16"	CABBAGE PALM
58	8"	LIVE OAK
59	18"	CABBAGE PALM
60	42"	LIVE OAK
61	44"	LIVE OAK
62	54"	LIVE OAK
63	30"	LAUREL OAK
64	18"	CABBAGE PALM
65	18"	CABBAGE PALM
66	36"	LIVE OAK
67	36"	LIVE OAK
68	8"	QUEEN PALM
69	8"	QUEEN PALM
70	42"	LIVE OAK
71	24"	LIVE OAK
72	56"	LIVE OAK
73	26"	LIVE OAK
75	46"	LIVE OAK
76	(2)20"	LIVE OAK
77	48"	LIVE OAK
78	24"	LIVE OAK
79	24"	LIVE OAK
81	30"	LIVE OAK
82	16"	CABBAGE PALM
83	16"	CABBAGE PALM
84	16"	CABBAGE PALM
85	(2)24"	LIVE OAK
86	20"	CABBAGE PALM
87	26"	LIVE OAK
89	64"	ROYAL POINCIANA
90	30"	ROYAL POINCIANA
91	20"	LIVE OAK
92	(2)18"	CABBAGE PALM
94	48"	LIVE OAK
95	20"	CABBAGE PALM
96	46"	LIVE OAK

FLOOD INFORMATION

COMMUNITY NUMBER	:	120286
PANEL NUMBER	:	12111C0189K
DATE OF FIRM	:	FEBRUARY 19, 2020
ZONE	:	X

ABBREVIATIONS

L	-	ARC
ASPH	-	ASPHALT
C	-	CALCULATED
C&G	-	CURB & GUTTER
C.L.F.	-	CHAIN LINK FENCE
CONC.	-	CONCRETE
COR.	-	CORNER
C.U.P.	-	CONCRETE UTILITY POLE
D	-	DELTA (CENTRAL ANGLE)
D.E.	-	DRAINAGE EASEMENT
I.R.	-	IRON ROD
I.R.C.	-	IRON ROD AND CAP
L.B.	-	LICENSED BUSINESS
L.S.	-	LICENSED SURVEYOR
L.W.D.D.	-	LAKE WORTH DRAINAGE DISTRICT
MON.	-	MONUMENT
O.R.B.	-	OFFICIAL RECORDS BOOK
P.B.	-	PLAT BOOK
S.L.C.R.	-	ST. LUCIE COUNTY RECORDS
PG.	-	PAGE
P.S.M.	-	PROFESSIONAL SURVEYOR & MAPPER
U.E.	-	UTILITY EASEMENT
W.F.	-	WOOD FENCE
W.U.P.	-	WOOD UTILITY POLE
IP	-	IRON PIPE
RES	-	RESIDENCE
(C)	-	CALCULATED
(P)	-	PLAT
(M)	-	MEASURED
R/W	-	RIGHT-OF-WAY

SURVEYOR'S CERTIFICATION

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON COMPLIES WITH STANDARDS OF PRACTICE FOR SURVEYS AS CONTAINED IN CHAPTER 61G17-6, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES, AND THAT SAID SURVEY IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AS SURVEYED UNDER MY DIRECTION.

_____
JEFF S. HODAPP
SURVEYOR AND MAPPER
FLORIDA LICENCE NO. LS5111

LAST DATE OF FIELD WORK : FEBRUARY 28, 2023

PERIMETER
SURVEYING & MAPPING
947 Clint Moore Road
Boca Raton, Florida
33487
Certificate of Authorization No. LB7264
Tel: (561) 241-9988
Fax: (561) 241-5182

4101 OLEANDER AVENUE
FT. PIERCE, FL

BOUNDARY, TOPOGRAPHIC AND TREE SURVEY

NO.	DATE	BY	CK'D	REVISIONS:	FB/PG
1	4/25/06	JSH		BOUNDARY, TREE & TOPOGRAPHIC SURVEY	
2	6/5/06	JSH		RECERTIFY	
3	6/5/06	JSH		RECERTIFY	
4	2/28/23	JSH	AJR	UPDATE BOUNDARY, TREE & TOPOGRAPHIC SURVEY	
5					
6					

SEAL

JOB NO. 06122
SCALE 1"=40'
FB/PG AT/1
DRAWN JSH
CHECKED JS

SHEET 1 OF 1

SIMMONS & WHITE
2581 Metrocentre Blvd West, Suite 3, West Palm Beach, Florida 33407
O 561.478.7848 | F 561.478.3738 www.simmonsandwhite.com
Certificate of Authorization Number 3452

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ENGINEERING | PLANNING | CONSULTING | SINCE 1982

TRAFFIC IMPACT STATEMENT

4101 OLEANDER AVENUE MULTIFAMILY
FORT PIERCE, FLORIDA

Prepared for:

4101 Oleander Group
17555 Collins Avenue
Apt. 2006
Sunny Isles, FL 33160

Job No. 23-103

Date: August 10, 2023

Bryan G. Kelley, P.E.
FL Reg. No. 74006

Bryan G. Kelley, P.E., State of Florida, Professional Engineer, License No. 74006

This item has been digitally signed and sealed by Bryan G. Kelley, P.E. on 08/10/2023 .

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

TABLE OF CONTENTS

1.0 SITE DATA

The subject parcel is located on the west side of Oleander Avenue north of Midway Road and contains approximately 2.58 acres. The proposed plan of development includes 32 multifamily dwelling units with an estimated build out year of 2028. The purpose of this traffic impact statement is to address the traffic impacts of the proposed development plan. Access to the site is proposed via a full driveway connection to Oleander Avenue. A site location map depicting the location of the project is attached to the report. For more information concerning site layout and geometry, please refer to the Site Plan prepared by MBV Engineering, Inc.

2.0 TRAFFIC GENERATION

The traffic to be generated by the proposed development is calculated in accordance with the rates provided in the ITE Trip Generation Manual, 10th Edition as shown on Table 1, Table 2, and Table 3 attached with this report. Table 1 shows the daily traffic generation associated with the proposed use. Tables 2 and 3 show the A.M. and P.M. peak hour traffic generation, respectively. The traffic generation associated with the proposed 32 multifamily dwelling units may be summarized as follows:

Proposed Development

Daily Traffic Generation	=	145 tpd
A.M. Peak Hour Traffic Generation	=	12 pht (3 In/9 Out)
P.M. Peak Hour Traffic Generation	=	12 pht (7 In/5 Out)

3.0 TRAFFIC ANALYSIS

Roadway Link Analysis

Figure 2 attached to the report depicts the estimated trip distribution for the proposed development. Based on City Code Section 105-5 and the trip generation of 12 peak hour trips, the radius of development shall be 1 mile.

Tables 4 and 5 calculate the project's significance for each of the roadway segments within the radius of influence for the A.M. and P.M. peak hours, respectively. The project was considered to have an insignificant impact if the project trips represented less than 1.0% of the LOS D volume threshold for each roadway segment. As shown in Tables 4 and 5, the impact to all roadway segments was considered insignificant and therefore no further traffic analysis is required.

Driveway Volumes

The AM and PM peak hour volumes at the project entrances for the overall development with no reduction for pass by credits are shown in Tables 2 and 3 and may be summarized as follows:

DIRECTIONAL DISTRIBUTION (TRIPS IN/OUT)

AM =	3 / 9
PM =	7 / 5

As previously mentioned, site access is proposed via a full access driveway connection to Oleander Avenue. Due to the minimal traffic volumes as shown in Figure 3, no turn lanes are warranted or recommended.

4.0 CONCLUSION

The proposed plan of development will result in an increase of 145 trips per day, 12 AM peak hour trips, and 12 PM peak hour trips at project build out in 2028. A review of the traffic data revealed the project will have an insignificant impact to the surrounding roadway network and meets the requirements outlined in City Code Section 105-5 (Management and monitoring program).

Figure 1 – Site Location Map
4101 Oleander Avenue
Project # 23-103

SIMMONS & WHITE

4101 OLEANDER AVENUE

08/08/2023

PROPOSED DEVELOPMENT

TABLE 1 - Daily Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split In	Dir Split Out	Gross Trips	Internalization %	Internalization Total	External Trips	Pass-by %	Pass-by Trips	Net Trips
Multifamily Mid-Rise Housing 4-10 stories (Apartment/Condo/TH)	221	32	Dwelling Units	4.54			145	0.0%	0	145	0%	0	145
			Grand Totals:				**145**	**0.0%**	**0**	**145**	**0%**	**0**	**145**

TABLE 2 - AM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split In	Dir Split Out	Gross Trips In	Gross Trips Out	Gross Trips Total	Internalization %	Internalization In	Internalization Out	Internalization Total	External Trips In	External Trips Out	External Trips Total	Pass-by %	Pass-by Trips	Net Trips In	Net Trips Out	Net Trips Total
Multifamily Mid-Rise Housing 4-10 stories (Apartment/Condo/TH)	221	32	Dwelling Units	0.37	0.23	0.77	3	9	12	0.0%	0	0	0	3	9	12	0%	0	3	9	12
			Grand Totals:				**3**	**9**	**12**	**0.0%**	**0**	**0**	**0**	**3**	**9**	**12**	**0%**	**0**	**3**	**9**	**12**

TABLE 3 - PM Peak Hour Traffic Generation

Landuse	ITE Code	Intensity		Rate/Equation	Dir Split In	Dir Split Out	Gross Trips In	Gross Trips Out	Gross Trips Total	Internalization %	Internalization In	Internalization Out	Internalization Total	External Trips In	External Trips Out	External Trips Total	Pass-by %	Pass-by Trips	Net Trips In	Net Trips Out	Net Trips Total
Multifamily Mid-Rise Housing 4-10 stories (Apartment/Condo/TH)	221	32	Dwelling Units	0.39	0.61	0.39	7	5	12	0.0%	0	0	0	7	5	12	0%	0	7	5	12
			Grand Totals:				**7**	**5**	**12**	**0.0%**	**0**	**0**	**0**	**7**	**5**	**12**	**0%**	**0**	**7**	**5**	**12**

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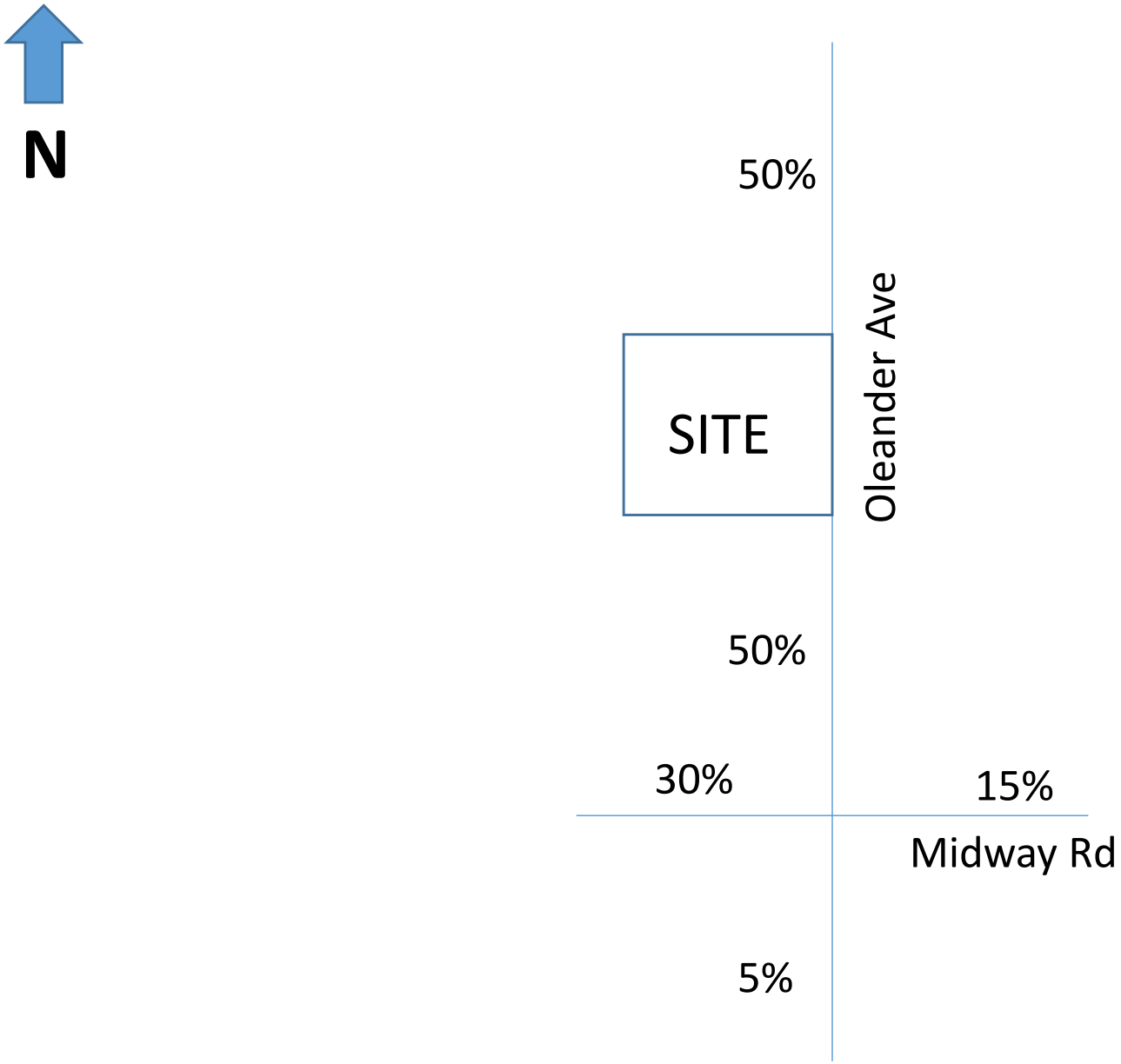

Figure 2 – Trip Distribution
4101 Oleander Avenue
Project # 23-103

SIMMONS & WHITE

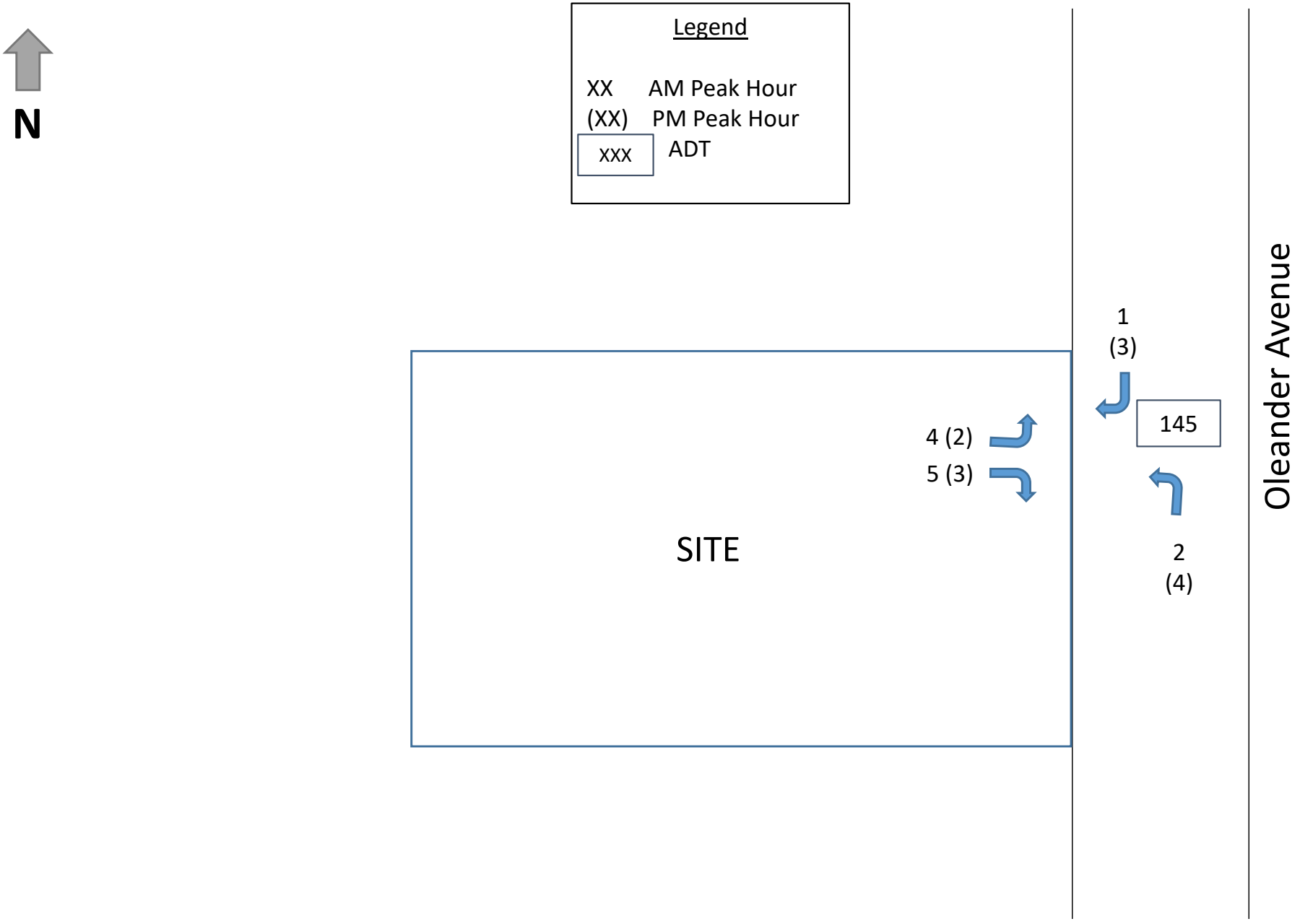

Figure 3 – Driveway Volumes
4101 Oleander Avenue
Project # 23-103

SIMMONS & WHITE

TABLE 4

PROJECT SIGNIFICANCE CALCULATION
AM PEAK HOUR

2028 BUILD OUT
TOTAL AM PEAK HOUR PROJECT TRIPS (ENTERI3
TOTAL AM PEAK HOUR PROJECT TRIPS (EXITIN(9

ROADWAY	FROM	TO	PROJECT DISTRIBUTION	AM PEAK HOUR DIRECTIONAL PROJECT TRIPS	EXISTING LANES	LOS D STANDARD	TOTAL PROJECT IMPACT	PROJECT SIGNIFICANT
OLEANDER AVENUE	BEACH AVENUE	KITTERMAN ROAD	5%	0	2	540	0.00%	NO
OLEANDER AVENUE	KITTERMAN ROAD	MIDWAY ROAD	5%	0	2	750	0.00%	NO
OLEANDER AVENUE	MIDWAY ROAD	WEATHERBEE ROAD	50%	5	2	750	0.67%	NO
OLEANDER AVENUE	WEATHERBEE ROAD	SITE	50%	5	2	540	0.93%	NO
OLEANDER AVENUE	SITE	BELL AVENUE	50%	5	2	540	0.93%	NO
OLEANDER AVENUE	BELL AVENUE	FARMERS MARKET ROAD	50%	5	2	540	0.93%	NO
OLEANDER AVENUE	FARMERS MARKET ROAD	EDWARDS ROAD	50%	5	2	750	0.67%	NO
MIDWAY ROAD	SUNRISE BOULEVARD	OLEANDER AVENUE	30%	3	4D	2100	0.14%	NO
MIDWAY ROAD	OLEANDER AVENUE	US-1	15%	1	4D	2100	0.05%	NO

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TABLE 5
PROJECT SIGNIFICANCE CALCULATION
AM PEAK HOUR

2028 BUILD OUT
TOTAL PM PEAK HOUR PROJECT TRIPS (ENTERIN 7
TOTAL PM PEAK HOUR PROJECT TRIPS (EXITING) 5

ROADWAY	FROM	TO	PROJECT DISTRIBUTION	PM PEAK HOUR DIRECTIONAL PROJECT TRIPS	EXISTING LANES	LOS D STANDARD	TOTAL PROJECT IMPACT	PROJECT SIGNIFICANT
OLEANDER AVENUE	BEACH AVENUE	KITTERMAN ROAD	5%	0	2	540	0.00%	NO
OLEANDER AVENUE	KITTERMAN ROAD	MIDWAY ROAD	5%	0	2	750	0.00%	NO
OLEANDER AVENUE	MIDWAY ROAD	WEATHERBEE ROAD	50%	4	2	750	0.53%	NO
OLEANDER AVENUE	WEATHERBEE ROAD	SITE	50%	4	2	540	0.74%	NO
OLEANDER AVENUE	SITE	BELL AVENUE	50%	4	2	540	0.74%	NO
OLEANDER AVENUE	BELL AVENUE	FARMERS MARKET ROAD	50%	4	2	540	0.74%	NO
OLEANDER AVENUE	FARMERS MARKET ROAD	EDWARDS ROAD	50%	4	2	750	0.53%	NO
MIDWAY ROAD	SUNRISE BOULEVARD	OLEANDER AVENUE	30%	2	4D	2100	0.10%	NO
MIDWAY ROAD	OLEANDER AVENUE	US-1	15%	1	4D	2100	0.05%	NO

SIMMONS & WHITE

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
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	26,375	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

* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
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772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

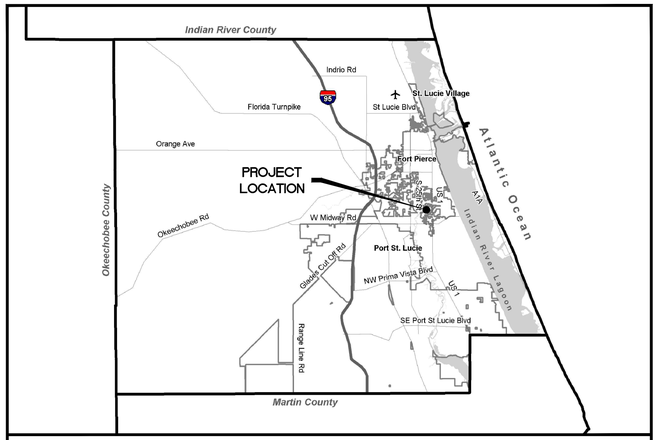
Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
MIDWAY RD	OKEECHOBEE RD to SHINN RD	6,581	760	331	C	0.44	331	C	0.44
MIDWAY RD	SHINN RD to MCCARTY RD	6,581	630	331	C	0.53	331	C	0.53
MIDWAY RD	MCCARTY RD to I-95	6,581	700	331	C	0.47	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

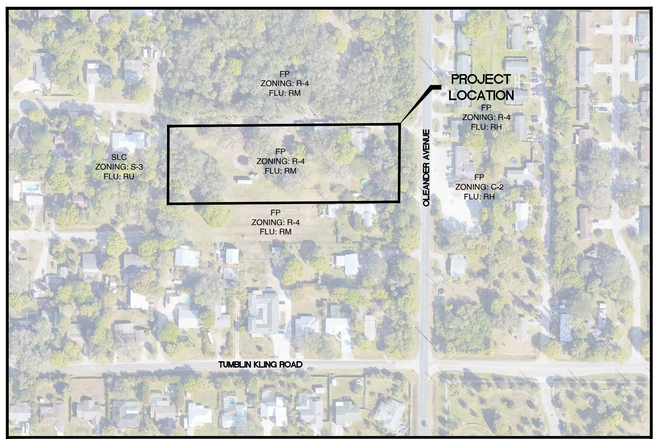
MARGARETA VILLAS
MULTI-FAMILY

SECTION 33, TOWNSHIP 35S, RANGE 40E
CITY OF FORT PIERCE, FLORIDA

SEPTEMBER 2023



LOCATION MAP



VICINITY MAP

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17555 COLLINS AVENUE, APT. 2006
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PH: (772) 538-5130

INDEX OF DRAWINGS

LEGAL DESCRIPTION

THE NORTH 193 FEET OF THE SOUTH 630 FEET OF THE EAST ONE-HALF OF THE NORTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER IN SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, LESS CANAL AND ROAD RIGHTS OF WAY. SAID LANDS SITUATE IN THE CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA AND CONTAIN 2.542 ACRES, MORE OR LESS.

72 HOURS BEFORE DIGGING
CALL TOLL FREE
811
Know what's **below.**
Call before you dig.

AARON J. BOWLES
LICENSE
No. 55313
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL. P.E. #55313

DATE: 1/31/24

PROJECT: 23-0060

SHEET
C1

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

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

C:\CIVIL ON HARD DRIVE\2023\23-0060 4101 Oleander multi family\DWG\23-0060 COVER - DETAILS.dwg 1/31/2024 10:15 AM
GREGG REED

PRE-CONSTRUCTION REQUIREMENTS:

1. THE CONTRACTOR IS REQUIRED TO PERFORM HIS WORK IN ACCORDANCE WITH THE REQUIREMENTS OF THE VARIOUS PERMITS WHICH WILL BE OBTAINED PRIOR TO BEGINNING CONSTRUCTION.
2. THE CONTRACTOR SHALL SUBMIT A CONSTRUCTION SCHEDULE (SEQUENCE OF OPERATIONS) PRIOR TO THE PRE-CONSTRUCTION MEETING.
3. CONTRACTOR WILL ATTEND A PRE-CONSTRUCTION MEETING WITH THE DESIGN ENGINEER, MUNICIPALITY AND/ OR OWNER PRIOR TO LAND DISTURBANCE.
4. SHOP DRAWINGS SHALL BE SUBMITTED BEFORE ORDERING MATERIAL FOR PLANNED PROJECT. CORRESPONDING SHALL BE BETWEEN THE DESIGN ENGINEER AND THE LOCAL GOVERNING AGENCY AND IS THE RESPONSIBILITY OF THE CONTRACTOR.

CONSTRUCTION NOTES:

1. THE CONTRACTOR IS ADVISED TO THOROUGHLY REVIEW THIS PLAN PACKAGE SO AS TO BE TOTALLY PREPARED TO PRESENT HIS BID PRICES IN THE CONTRACT DOCUMENTS. THE PLAN PACKAGE SUFFICIENTLY DELINEATES THE SCOPE AND INTENT OF THE ROADWAY WORK TO BE ACCOMPLISHED. IT WILL, THEREFORE, BE INCUMBENT ON THE CONTRACTOR TO ADJUST HIS FEE DOLLARS TO REFLECT ANY AND ALL ITEMS WHICH MAY NOT BE CLEARLY OUTLINED OR THOSE ITEMS WHICH MAY NOT BE INDICATED BUT WHICH ARE NECESSARY FOR THE SUCCESSFUL COMPLETION OF THIS PROJECT WITHOUT ADDITIONAL COSTS TO THE OWNER.
2. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH CITY OF FORT PIERCE AND FDOT STANDARDS AND SPECIFICATIONS.
3. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND IS NOT GUARANTEED TO BE ACCURATE OR ALL INCLUSIVE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND IS RESPONSIBLE FOR THE COORDINATION OF UTILITY RELOCATION.
4. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES IN THE FIELD WITH UTILITY OWNER'S REPRESENTATIVE PRIOR TO CONSTRUCTION.
5. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO NOTIFY ALL UTILITY COMPANIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATION, AS REQUIRED BY THE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT. NOTIFY SUNSHINE AT 811.
6. CONTRACTOR SHALL TAKE EXTREME CAUTION WHEN EXCAVATING NEARBY EXISTING UTILITIES.
7. CONTRACTOR SHALL INFORM ENGINEER OF ANY CONFLICT BEFORE ANY FURTHER WORK IS COMPLETED.
8. UTILITIES ARE TO BE ADJUSTED BY UTILITY OWNER OR AS DIRECTED BY THE ENGINEER.
9. SURFACE INFORMATION SHOWN ON THESE DRAWINGS WAS OBTAINED FOR USE IN ESTABLISHING DESIGN CRITERIA FOR THE PROJECT. THE ACCURACY OF THIS INFORMATION IS NOT GUARANTEED AND IS NOT TO BE CONSTRUED AS PART OF THE PLANS GOVERNING CONSTRUCTION OF THE PROJECT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INQUIRE OF THE ENGINEER IF ADDITIONAL INFORMATION IS AVAILABLE, TO MAKE ARRANGEMENTS TO REVIEW SAME PRIOR TO BIDDING, AND IS TO MAKE HIS OWN DETERMINATION AS TO ALL SUBSURFACE CONDITIONS.
10. CONTRACTOR SHALL NOTIFY THE ENGINEER IF SOIL OR SUBSURFACE CONDITIONS UNSUITABLE FOR CONSTRUCTION ARE ENCOUNTERED.
11. ALL EXCAVATED SOILS DEEMED SUITABLE AS FILL MATERIAL AS DETERMINED BY THE ENGINEER SHALL BE UTILIZED ON SITE BY THE CONTRACTOR AT HIS OWN EXPENSE. THE EXACT LOCATION OF DELIVERY ON SITE SHALL BE DETERMINED BY THE ENGINEER. ALL EXCAVATED SOILS DEEMED UNSUITABLE SHALL BE DISPOSED OF BY THE CONTRACTOR AT HIS OWN EXPENSE.
12. ITEM IN CONFLICT WITH DESIGN SUCH AS EXISTING CURBS AND GUTTERS, SIDEWALKS, DRAINAGE STRUCTURES, PAVEMENT AND EXCESS EXCAVATIONS ARE TO BE REMOVED BY THE CONTRACTOR AND DISPOSED OF IN A LEGAL AND PROPER MANNER AWAY FROM THE JOB SITE AT HIS OWN EXPENSE.
13. CONTRACTOR SHALL COMPLY WITH ALL OSHA REQUIREMENTS FOR CONSTRUCTION.
14. IT SHOULD BE NOTED THAT THE OCCUPATIONAL SAFETY AND HEALTH ACT PROHIBITS THE OPERATING OF EQUIPMENT OR MACHINES CLOSER THAN TEN (10) FEET TO ENERGIZED ELECTRIC LINES RATES AT FIFTY KILOVOLTS OR BELOW. ALSO, NO EXCAVATION IS PERMITTED WITHIN FIVE (5) FEET OF POWER POLE FACILITIES.
15. ALL IRONS AND MONUMENTS (P.R.M.'S) SHOWN ON PLANS, OR FOUND, SHALL BE PRESERVED. THOSE SHOWN IN PROPOSED PAVEMENT SHALL BE PROTECTED WITH A CAST IRON VALVE BOX.
16. ANY PUBLIC LAND CORNERS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED. IF A CORNER MONUMENT IS IN DANGER OF BEING DESTROYED OR DISTURBED, THE CONTRACTOR WILL NOTIFY THE ENGINEER.
17. ALL EXISTING TREES WITHIN THE RIGHT OF WAY ARE TO BE REMOVED AS CLEARING AND GRUBBING UNLESS OTHERWISE NOTED.
18. WHEN REFERENCED TO, FDOT REFERS TO FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS,CURRENT EDITION.
19. THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED BY CONSTRUCTION TO A CONDITION EQUAL TO, OR BETTER THAN THAT WHICH IS NOW EXISTING.
20. BACKFILL, GRADE AND SOD AS REQUIRED AROUND ALL NEW CONSTRUCTION AND ALL DEVELOPED LOTS TO PREVENT EROSION. SEED AND MULCH WILL ONLY BE ALLOWED TO RESTORE UNDEVELOPED LOTS AFFECTED BY CONSTRUCTION OR AS DIRECTED BY THE ENGINEER.
21. SODDING TO BE USED AT LOCATIONS AS DIRECTED BY THE ENGINEER. SOD ALL DISTURBED AREAS UPON COMPLETION.
22. ALL EXCESS CONSTRUCTION MATERIAL AND WASTE TO BE HAULED OFF-SITE AND DISPOSED OF PROPERLY AT CONTRACTOR'S EXPENSE.
23. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH FDOT STANDARDS FOR TRAFFIC CONTROL THROUGH WORK ZONES AND MUTCD (PART VI).
24. PROPERTY OWNERS AND BUSINESSES WITHIN THE AREA OF CONSTRUCTION SHALL BE GIVEN ACCESS TO THEIR PROPERTY AT ALL TIMES DURING THE PERIOD OF CONSTRUCTION.
25. ALL MAILBOXES SHALL BE RELOCATED BY THE CONTRACTOR AS DIRECTED BY THE U.S. POSTAL MAIL CARRIER.
26. THE CONTRACTOR SHALL REMOVE, COVER OR OBLITERATE EXISTING ROADWAY SIGN AND PAVEMENT MARKINGS THAT CONFLICT WITH THE CONSTRUCTION TRAFFIC CONTROL PLANS.
27. CONTRACTOR TO PROTECT ALL SPRINKLER HEADS NOT IN CONFLICT WITH DESIGN AND RELOCATE ALL THOSE WHICH ARE IN CONFLICT TO A LOCATION DETERMINED IN FIELD.
28. SOD TWO (2) FEET MINIMUM ALONG SIDE PROPOSED EDGE OF PAVEMENT.
29. THE CONTRACTOR SHALL PROVIDE ANY TEMPORARY DRAINAGE MEASURES AS REQUIRED TO ADEQUATELY DRAIN THE PROJECT AND ANY TEMPORARILY TRAVELED ROADWAYS. TEMPORARY DRAINAGE DESIGN, CONSTRUCTION AND MAINTENANCE IS THE CONTRACTOR'S RESPONSIBILITY; HOWEVER, ALL SUCH MEASURES MUST BE APPROVED BY THE ENGINEER.
30. THE EXISTING SIDEWALK SHALL NOT BE DISTURBED UNLESS OTHERWISE NOTED.
31. GRADES SHOWN ARE FINISHED GRADES.
32. SAWCUT CONCRETE OR ASPHALT DRIVEWAYS AS REQUIRED FOR REPLACEMENT.
33. ALL ABANDONED UTILITIES (INCLUDING PIPES, CABLES AND STRUCTURES) FOUND IN THE RIGHT OF WAY AND NOT SHOWN ON THE PLANS, ARE TO BE REMOVED AND PROPERLY DISPOSED OF AT THE EXPENSE OF THE CONTRACTOR. THIS INCLUDES ALL EXOTIC PIPES LIKE ASBESTOS-CEMENT PIPE. COST TO BE INCLUDED IN CLEARING AND GRUBBING ITEM.
34. DRIVEWAY LOCATIONS AND WIDTHS ARE APPROXIMATE AND ARE TO BE ADJUSTED AS NECESSARY OR AS DIRECTED BY THE ENGINEER.
35. BENCHMARK DATUM IN NAVD 88.
36. BACKFILL AND SOD AS REQUIRED BEYOND RIGHT OF WAY LINES ON INDIVIDUAL LOTS TO MAINTAIN POSITIVE DRAINAGE FLOW INTO CURB AND GUTTER.
37. GRADE AND SOD SWALES TEN (10) FEET FROM PROPOSED DITCH BOTTOM INLETS AND MITERED END SECTIONS ON SIDE STREETS AS REQUIRED.
38. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN ℄ (BASELINE) AND ℄ (CENTERLINE) CONSTRUCTION THROUGHOUT THE PROJECT.
39. THE CONTRACTOR SHALL REMOVE DRIVEWAY APRONS AND DRIVEWAY CULVERTS AND SHALL MAINTAIN ROUGH GRADE FOR UTILITY MODIFICATIONS.
40. ALL EXISTING SWALES SHALL BE PROTECTED BY THE CONTRACTOR. ANY DAMAGE TO THE SWALE LINE SHALL BE CORRECTED BY THE CONTRACTOR AT HIS OWN EXPENSE.
41. PAYMENT FOR INCIDENTAL ITEMS NOT SPECIFICALLY COVERED IN THE INDIVIDUAL BID ITEMS SHALL BE INCLUDED IN THE CONTRACT PRICES FOR BID ITEMS.
42. MAINTAIN A MINIMUM OF ONE (1) FOOT CLEARANCE BETWEEN POWER POLE AND EDGE OF SIDEWALK.
43. WHEN ALL OTHER PERMANENT CONSTRUCTION IS COMPLETE, THE FINAL SURFACE COURSE SHALL BE PLACED.
44. CONSTRUCTION OPERATIONS FOR PLACEMENT OF THE FINAL SURFACE COURSE SHALL BE LIMITED TO A DISTANCE, AS DIRECTED BY THE ENGINEER, THE CONTRACTOR CAN COMPLETE IN ONE (1) DAY.
45. THE CONTRACTOR SHALL IMPLEMENT TEMPORARY PAVEMENT MARKINGS UNTIL THE FINAL SURFACE COURSE HAS CURED (MINIMUM THIRTY (30) DAYS AFTER FINAL SURFACE COURSE PLACEMENT). ANY TEMPORARY PAINTED MARKINGS PLACED ON THE FINAL.
46. PAVEMENT TRANSITION SHALL BE MADE IN ACCORDANCE WITH PAVEMENT TRANSITION DETAIL.
47. ALL APPROVED PERMIT CONDITIONS, INCLUDING BUT NOT LIMITED TO FDOT, FDEP AND CITY OF FORT PIERCE, SHALL BE MET BY CONTRACTOR PRIOR TO CERTIFICATION OF COMPLETION BY ENGINEER.

ROADWAY SPECIFICATIONS

GENERAL

IT IS INTENDED THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" MOST CURRENT EDITION BE USED WHERE APPLICABLE FOR VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THAT WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY, THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT.

IF WITHIN THAT PARTICULAR SECTION ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE A PART OF THE STANDARD SPECIFICATIONS ALSO.

THE CONTRACTOR SHALL GIVE THE ENGINEER 48 HOURS NOTICE PRIOR TO REQUESTING INSPECTIONS AND SHALL SUPPLY ALL EQUIPMENT NECESSARY TO PROPERLY TEST AND INSPECT THE COMPLETED WORK.

THE CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF TWO YEARS FROM THE DATE OF PROJECT ACCEPTANCE, DURING WHICH ALL FAULTY CONSTRUCTION AND/OR MATERIALS SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.

GRADING

THE CONTRACTOR SHALL PERFORM ALL GRADING NECESSARY TO ACHIEVE THE PROPOSED PLAN GRADES INCLUDING TYPICAL SECTIONS.

ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS.

STAKING

CONSTRUCTION STAKING WILL BE PERFORMED BY THE CONTRACTOR.

STABILIZING

STABILIZED SUBGRADE SHALL BE CONSTRUCTED TO THE FLORIDA BEARING VALUE AS PER PLAN FOR THE DEPTH AND LIMITS SHOWN ON THE PLAN, AND IN ACCORDANCE WITH SECTION 160 OF THE STANDARD SPECIFICATIONS.

(TYPE C STABILIZATION). ALL STABILIZED AREAS SHALL BE COMPACTED TO AT LEAST 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.

BASE COURSE

THE BASE SHALL BE CONSTRUCTED OF EITHER LIMEROCK MATERIAL IN ACCORDANCE WITH SECTION 911 OR CEMENTED COQUINA SHELL MATERIAL IN ACCORDANCE WITH SECTION 915 OF THE STANDARD SPECIFICATIONS.

LIMEROCK BASE AND CEMENTED COQUINA SHELL BASE SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS. THE CONTRACTOR SHALL PROVIDE ROCK PIT CERTIFICATION FOR CEMENTED COQUINA SHELL MATERIAL. BASE SHALL BE COMPACTED BY AT LEAST 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180. BASE SHALL BE APPROVED PRIOR TO PRIME COAT.

PRIME AND TACK COAT

PRIME AND TACK COAT FOR THE BASE SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.

ASPHALTIC CONCRETE SURFACE COURSE (A.C.S.C.)

TYPE S-III ACSC SHALL BE CONSTRUCTED FOR THE DEPTH AND LIMITS SHOWN ON THE PLAN, IN ACCORDANCE WITH SECTIONS 320, AND 330 OF THE STANDARD SPECIFICATIONS.

TESTING

THE CONTRACTOR SHALL RETAIN THE SERVICES OF AN APPROVED INDEPENDENT TESTING LABORATORY TO CONDUCT ALL REQUIRED TESTS ON SUBGRADE, BASE AND SURFACE COURSE MATERIALS. TEST RESULTS MUST BE SUBMITTED PRIOR TO ANY REQUEST FOR PAYMENT ON THE ABOVE ITEMS.

THE SCHEDULE FOR TESTING OF THE ROAD CONSTRUCTION SHALL BE AS FOLLOWS:

A. SUBGRADE:
1. FLORIDA BEARING VALUE TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 200 FEET, OR CLOSER AS MIGHT BE NECESSARY IN THE EVENT OF VARIATIONS IN SUBSOIL CONDITIONS.
2. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 200 FEET OR CLOSER AS MIGHT BE NECESSARY.

B. BASE:
1. DENSITY TESTS SHALL BE TAKEN AT INTERVALS OF NOT MORE THAN 500 FEET OR CLOSER AS MIGHT BE NECESSARY.

ALL TESTING SHALL BE TAKEN IN A STAGGERED SAMPLING PATTERN FROM A POINT 1 1/2 INCHES INSIDE THE LEFT EDGE, TO THE CENTER, TO A POINT 12 INCHES INSIDE THE RIGHT EDGE OF THE ITEM TESTED.

IF ANY TEST INDICATES THAT THE WORK DOES NOT MEET THE SPECIFICATIONS, THE SUBSTANDARD AREA SHALL BE REWORKED OR CORRECTED AND RETESTED, AT THE CONTRACTOR'S EXPENSE, UNTIL THE PROVISIONS OF THESE SPECIFICATIONS ARE MET.

ALL PASSING TESTS SHALL BE PAID FOR BY THE OWNER. ALL FAILING TESTS SHALL BE PAID FOR BY THE CONTRACTOR.

CLEAN-UP

THE CONTRACTOR MUST PROVIDE CLEAN-UP OF EXCESS CONSTRUCTION MATERIAL UPON COMPLETION OF THE PROJECT. THE SITE MUST BE LEFT IN A NEAT, CLEAN, GRADED CONDITION.

CONSTRUCTION IN STREETS AND ROAD RIGHT-OF-WAYS

1. OPEN ROAD CUTS REQUIRES PRIOR APPROVAL OF THE CITY, COUNTY, STATE OR ANY OTHER AGENCY WHICH MAY HAVE JURISDICTION.
2. ALL CONSTRUCTION, MATERIALS AND WORKMANSHIP ARE TO BE IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS AND STANDARDS.
3. ALL AREAS IN EXISTING RIGHT-OF-WAYS DISTURBED BY CONSTRUCTION SHALL RECEIVE SOLID SOD.
4. STREET RESTORATION TO BE DONE AS PER CITY OF FORT PIERCE STANDARDS.
5. THE CONTRACTOR SHALL COMPLY WITH ALL RULES AND REGULATIONS OF THE STATE, COUNTY AND CITY AUTHORITIES REGARDING CLOSING OR RESTRICTING THE USE OF PUBLIC STREETS OR HIGHWAYS.
6. TRAFFIC CONTROL ON ALL COUNTY AND STATE HIGHWAY RIGHT-OF-WAYS 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.

DRAINAGE SPECIFICATIONS

STORM INLETS AND MANHOLES SHALL BE CONSTRUCTED IN GENERAL ACCORDANCE WITH SECTION 425 OF THE STANDARD SPECIFICATIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION.

CONCRETE SHALL HAVE A MINIMUM 28-DAY STRENGTH OF 3000 PSI.

ALL REINFORCING STEEL TO BE ASTM A 615-72 GRADE 40, FYP = 40,000 PSI, AND SHALL BE HANDLED AND PLACED IN ACCORDANCE WITH ACI 318-71.

PRECAST CONCRETE MANHOLES AND STORM INLETS MAY BE USED UPON THE ENGINEER'S APPROVAL OF THE MANUFACTURER'S SHOP DRAWINGS.

STORM SEWER CONSTRUCTION SHALL BE IN ACCORDANCE WITH SECTION 430 AND RELATED SECTIONS OF THE STANDARD SPECIFICATIONS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION.

CONCRETE

UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI. ALL WORK SHALL COMPLY WITH THE CURRENT EDITION OF THE AMERICAN CONCRETE INSTITUTE (ACI) BUILDING CODE AND THE APPLICABLE BUILDING CODES HAVING JURISDICTION IN THE AREA.

CULVERT PIPES

REINFORCED CONCRETE PIPE (R.C.P.) SHALL BE IN ACCORDANCE WITH SECTION 449 OF THE STANDARD SPECIFICATIONS.

PRECAST CONCRETE DRAINAGE PRODUCTS

ALL PRECAST CONCRETE DRAINAGE PRODUCTS (INCLUDING BUT NOT LIMITED TO ROUND CONC. PIPE. ELLIPTICAL CONC. PIPE, UNDERDRAINS, MANHOLES, INLETS, ENDWALLS, JUNCTION BOXES, THREE SIDED CONC. CULVERTS, AND CONC. BOX CULVERTS) SHALL BE IN ACCORDANCE WITH SECTION 449 OF THE STANDARD SPECIFICATIONS.

GROUNDWATER

GROUNDWATER MAY BE ENCOUNTERED ON THIS SITE. THE CONTRACTOR IS TO PLAN ACCORDINGLY.

RECORD DRAWINGS

CONTRACTOR SHALL KEEP AND MAINTAIN RECORD DRAWINGS ON THE PROJECT SITE AT ALL TIMES WHICH SHALL BE ANNOTATED BY THE CONTRACTOR DEPICTING ANY CHANGES MADE IN THE FIELD WHICH DIFFER FROM THE CONTRACT DRAWINGS. RECORD DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, INVERT AND TOP ELEVATIONS OF CULVERTS AND INLET STRUCTURES. CONTRACTOR SHALL SUBMIT COMPLETE AND FINAL RECORD DRAWINGS TO ENGINEER UPON COMPLETION OF PROJECT AND PRIOR TO FINAL INSPECTION AND FINAL PAYMENT.

INSPECTION

MINIMUM CONSTRUCTION INSPECTION CHECKPOINTS

THE ENGINEER SHALL BE NOTIFIED:
1. PRIOR TO ANY MAJOR DEVIATION FROM THE APPROVED PLANS.
2. PRIOR TO BACKFILLING ANY PIPE TRENCHES.
3. UPON COMPLETION OF SUBGRADE GRADING AND COMPACTION.
4. UPON BEGINNING OF SPREADING OF ROCK BASE MATERIAL.
5. UPON COMPLETION OF GRADING AND COMPACTION OF THE BASE MATERIAL AND PRIOR TO PRIMING.
6. IMMEDIATELY PRIOR TO AND UPON APPLICATION OF A.C.S.C.
7. UPON COMPLETION OF CONSTRUCTION.

FDEP SEPARATION CRITERIA:

(1) HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER, FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C.
(B)NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
(C) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610,F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.
(D) NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2),F.S., AND RULE 64E-6.002, F.A.C.

(2) VERTICAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, AND RECLAIMED WATER PIPELINES.

(A) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY OR VACUUME-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
(B) NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
(C) AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSINGS, THE PIPES SHALL BE ARRANGED SO THAT ALL THE WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORM WATER 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.

(3) SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES

(A) NO WATER MAIN SHALL PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A SANITARY SEWER MANHOLE.
(B)EFFECTIVE AUGUST 28, 2003, WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH, ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE.

(4) SEPARATION BETWEEN FIRE HYDRANT DRAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORM WATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

NEW OR RELOCATED FIRE HYDRANTS WITH UNDERGROUND DRAINS SHALL BE LOCATED SO THAT THE DRAINS ARE AT LEAST THREE FEET FROM ANY EXISTING OR PROPOSED STORM SEWER, STORM WATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C; AT LEAST THREE FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER; AT LEAST SIX FEET, AND PREFERABLY TEN FEET, FROM ANY EXISTING OR PROPOSED GRAVITY-OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND AT LEAST TEN FEET FROM ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.

GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR CHECKING ACTUAL SITE CONDITIONS BEFORE STARTING CONSTRUCTION.
2. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE COMMENCING WORK.
3. ALL WORK SHALL BE IN WORKMANLIKE MANNER AND SHALL CONFORM WITH ALL APPLICABLE CITY, COUNTY, STATE AND FEDERAL REGULATIONS AND/OR CODES. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR OBTAINING ALL PERMITS AND LICENSES REQUIRED TO BEGIN WORK.
4. ALL MATERIALS AND LABOR UNDER THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH REQUIREMENTS OF THE CITY OF FORT PIERCE, WATER MANAGEMENT DISTRICT, FDEP AND THESE PLANS AND SPECIFICATIONS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATION OF ALL EXISTING UTILITIES. THE CONTRACTOR SHALL CONTACT ALL CONCERNED UTILITIES AT LEAST 48 HOURS IN ADVANCE FOR CONSTRUCTION OPERATIONS.
6. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN TO BE MADE WITHOUT PRIOR APPROVAL OF THE ENGINEER.
7. CONTRACTOR SHALL SUPPLY DENSITY TESTS TO ENGINEER ON ALL SUB-GRADE AND BASE. TESTS SHALL BE PREPARED PER AASHTO T-180 METHOD.
8. SLOPE GRADES FROM ELEVATIONS SHOWN TO EXISTING GRADE AT PROPERTY LINE. MAXIMUM SLOPE 4:1.
9. ENGINEER SHALL BE NOTIFIED AT LEAST 48 HOURS IN ADVANCE FOR ANY INSPECTION.
10. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH M.U.T.C.D. STANDARDS, CITY OF FORT PIERCE AND F.D.O.T.
11. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
12. THE PRESENCE OF GROUNDWATER SHOULD BE ANTICIPATED ON THIS PROJECT. CONTRACTORS BID SHALL INCLUDE CONSIDERATION FOR ADDRESSING THIS ISSUE. WHEN GROUNDWATER IS ENCOUNTERED THE CONTRACTOR SHALL PLAN ACCORDINGLY.
13. ALL INLETS SHALL HAVE A 6" MIN. SUMP BELOW LOWEST INVERT.
14. EROSION CONTROL FENCING MUST BE IN PLACE PRIOR TO GRADING.
15. PIPE LENGTHS AND SLOPES SHOWN ARE APPROXIMATE.
16. 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.
17. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
18. CONTRACTOR SHALL ADJUST INLET/STRUCTURE OR CONNECTION LOCATION AS REQUIRED TO ENSURE PROPOSED STRUCTURES AND PIPES ARE IN PROPER ALIGNMENT AND MATCH SLOPE OF EXISTING PIPES OR CONNECTIONS.
19. THIS PLAN CONTEMPLATES ACCESS CONNECTIONS TO ADJACENT ROADS AS SHOWN.
20. FILL MATERIAL MAY NOT BE STOCKPILED HIGHER THAN SIX (6) VERTICAL FEET ONSITE PER CITY OF FORT PIERCE CODE.
21. DIMENSIONS SHOWN ARE TO EDGE OF GUTTER OR PAVEMENT. RADII SHOWN ARE TO FACE OF CURB.
22. ALL SIGNS SHALL BE PER M.U.T.C.D. STANDARDS.
23. ALL PAVEMENT MARKINGS, EXCEPT PARKING STALL STRIPING, SHALL BE THERMOPLASTIC PER CITY OF FORT PIERCE REQUIREMENTS.
24. THE USES PROPOSED AS PART OF THIS PLAN DO NOT REQUIRE A SUBMITTAL OF A RISK MANAGEMENT PLAN PURSUANT TO U.S. ENVIRONMENTAL PROTECTION AGENCY (EPA) REGULATIONS AND SHALL NOT EXCEED THE EPA'S RMP THRESHOLD QUANTITIES OF LISTED SUBSTANCES.
25. WATER FOR FIRE FIGHTING PURPOSES SHALL BE INDICATED WITH A BLUE ROADWAY REFLECTOR, PLACE ONE FOOT OFF OF THE CENTERLINE OF THE ROAD FACING THE FIRE HYDRANT. THIS INCLUDES NEW AND EXISTING SOURCES.
26. REGARDLESS OF PRIVATE OR PUBLIC DEDICATIONS, THERE SHALL BE NO UTILITY CONNECTIONS, METER BOXES OR VALVE BOXES IN EXISTING OR PROPOSED SIDEWALK OR DRIVEWAY AREAS.
27. CONTRACTOR SHALL ADJUST INLET/STRUCTURE OR CONNECTION LOCATION AS REQUIRED TO ENSURE PROPOSED STRUCTURES AND PIPES ARE IN PROPER ALIGNMENT AND MATCH SLOPE OF EXISTING PIPES OR CONNECTIONS.
28. ANY STATE AND FEDERAL PERMITS THAT MAY BE REQUIRED AS A RESULT OF LAND CLEARING AND LANDSCAPING ACTIVITIES ARE THE RESPONSIBILITY OF THE CONTRACTOR.
29. CONTRACTOR IS RESPONSIBLE TO PROTECT AND/OR REPLACE ALL SURVEY MONUMENTATION BY A LICENSED SURVEYOR IN THE STATE OF FLORIDA.
30. ALL PARKING SPACES WITH EXCEPTION OF THE HANDICAPPED PARKING SPACES SHALL BE STRIPED IN WHITE, TRAFFIC PAINT AND BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS FOR FOR ROAD & BRIDGE CONSTRUCTION, SECTION 710, LATEST EDITION.
31. ALL HANDICAPPED PARKING SPACES SHALL BE PROPERLY SIGNED AND STRIPED IN ACCORDANCE WITH FDOT STANDARD INDEX 711-001, LATEST EDITION.
32. COMMERCIAL/MULTI-FAMILY BUILDINGS SHALL POST A MINIMUM 6 INCH NUMERICAL ADDRESS.
33. THERMOPLASTIC PAVEMENT MARKINGS SHALL BE REQUIRED ON EXISTING / PROPOSED DRIVEWAYS THAT CONNECT TO THE COUNTY RIGHT-OF-WAY (ROW) AND PROPOSED PAVEMENT MARKINGS WITHIN 25' OF EDGE OF PAVEMENT.
34. ALL SUBDIVISION CONSTRUCTION SHALL BE COMPLETED IN ACCORDANCE WITH THE APPLICABLE CITY OF FORT PIERCE ORDINANCES.
35. ALL NUISANCE EXOTIC VEGETATION EXISTING WITHIN DEVELOPMENT PROJECT SITE PROPERTY MUST BE REMOVED IN CONJUNCTION WITH SITE DEVELOPMENT.

PRIMARY BENCHMARK:
ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 REFERENCING ST. LUCIE COUNTY BENCHMARK "FRENCH" - ST. LUCIE COUNTY DISK IN CONC. 214' SOUTH OF FRENCH CREEK LANE, 29' WEST OF WEST E.O.P. OLEANDER BLVD. AT AN ELEVATION OF 11.32 FEET (NAVD 88).

REVISIONS	DATE
8	-
7	-
6	-
5	-
4	-
3	-
2	-
1	-

JOB NO.	23-0060
DESIGNED	GWR
DRAWN	GWR
DATE	JANUARY 2024
CHECKED	AJB
DATE ISSUED	1/31/2024

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

GENERAL NOTES

MARGARETA VILLAS
MULTI-FAMILY

CITY OF FORT PIERCE FLORIDA

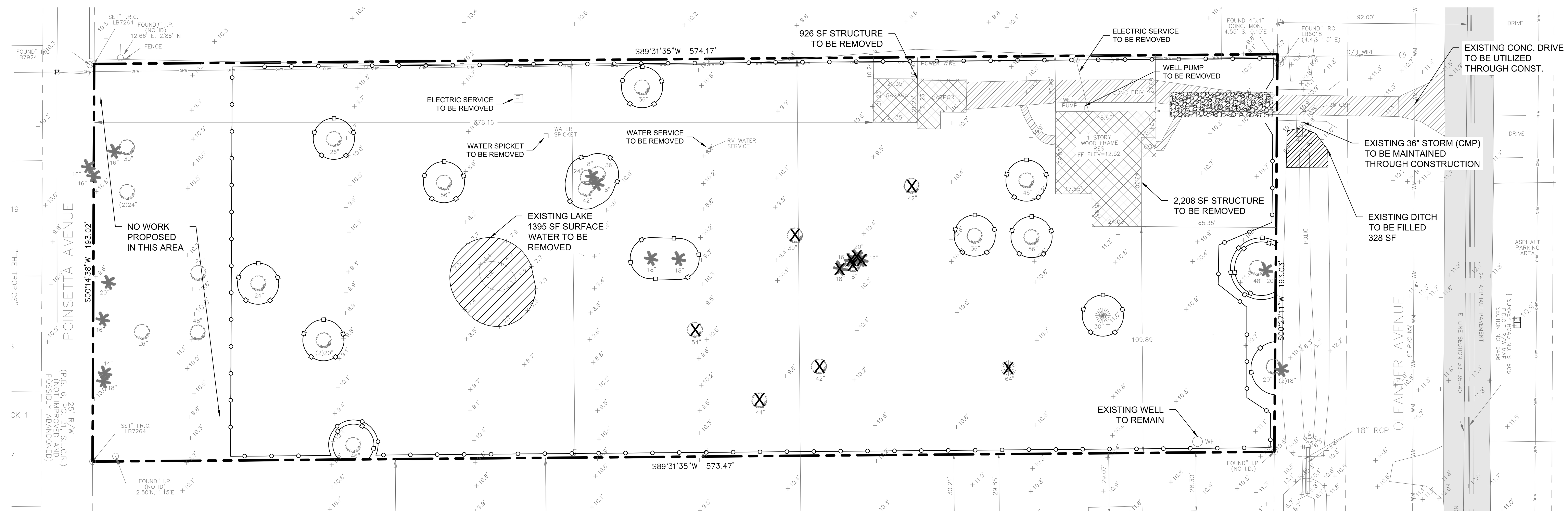
AARON J. BOWLES
LICENSE
No. 55313
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL. P.E. #55313 1/31/24

SHEET
C2

23-0060

C:\CIVIL ON HARD DRIVE\2023\23-0060 4101 Oleander multi family\DWG\23-0060 COVER - DETAILS.dwg 1/31/2024 10:15 AM



EXISTING CONDITIONS, DEMOLITION AND EROSION CONTROL PLAN

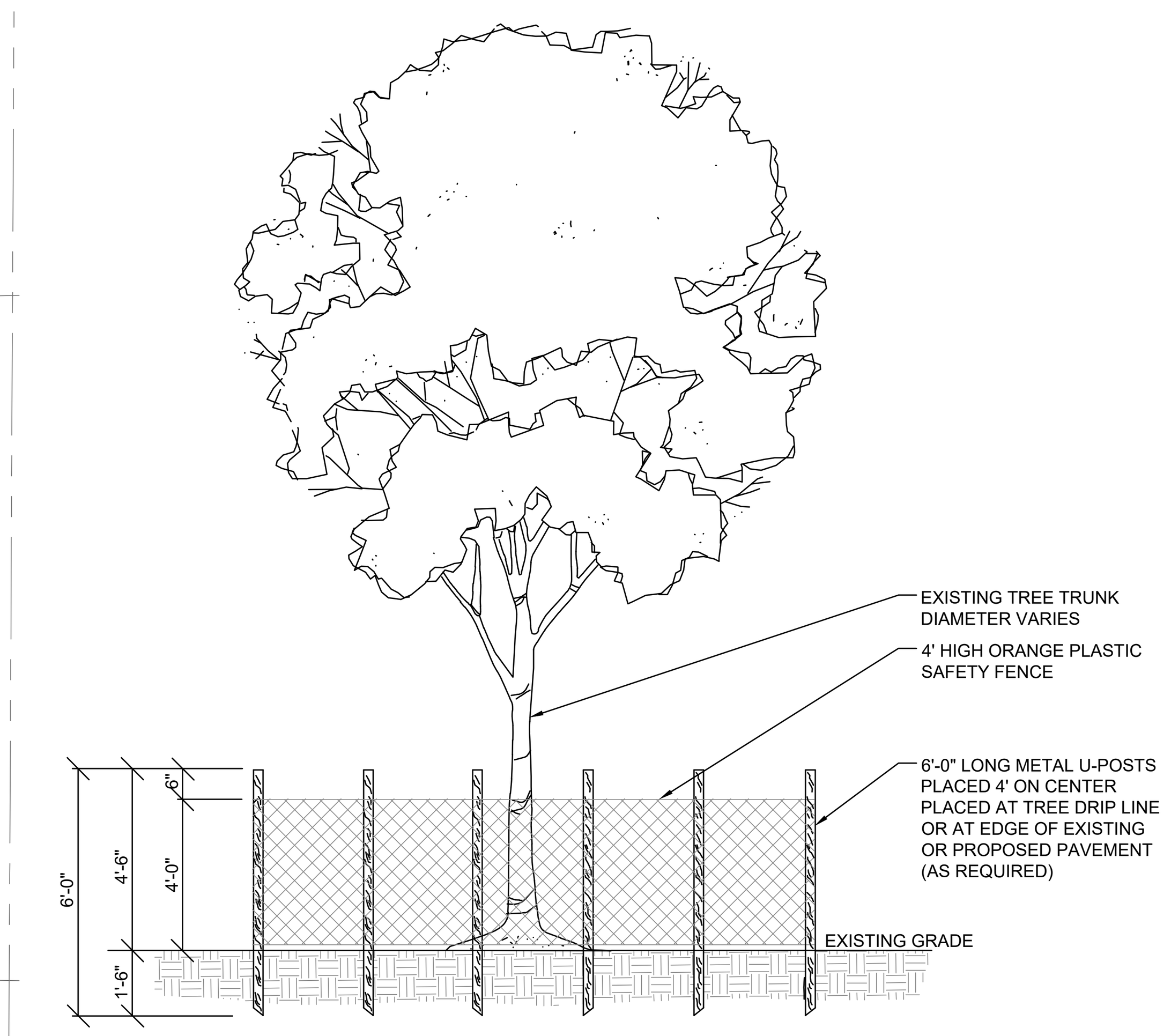
SCALE: 1" = 30'

GRAPHIC SCALE
0 30 60
(IN FEET)
1 inch = 30 ft.

LEGEND

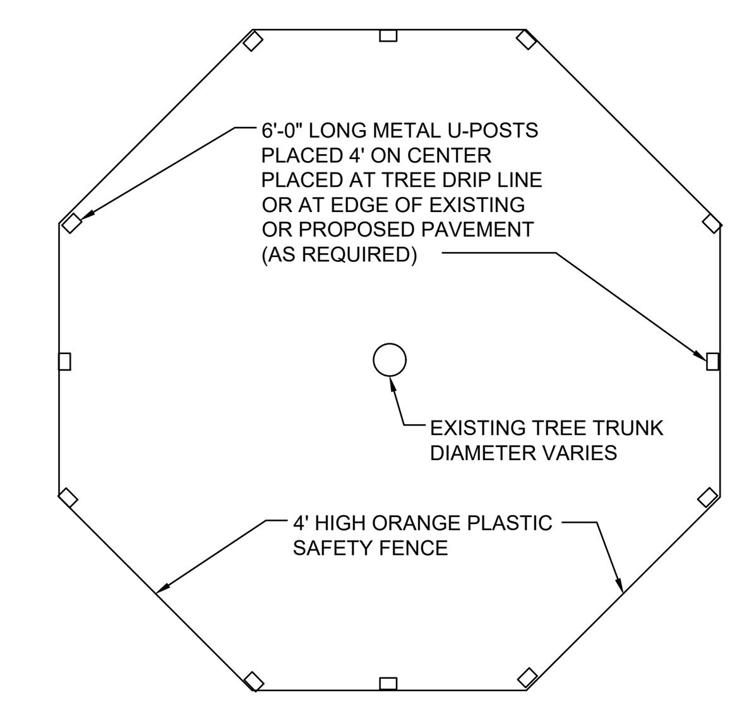
- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED TEMPORARY GRAVEL CONSTRUCTION ENTRANCE
- EXISTING BUILDING DEMO
- EXISTING CONCRETE DEMO
- SILT FENCE
- TREE PROTECTION FENCE
- EXISTING TREE TO BE REMOVED

TREE LEGEND
- OAK
- PALM
- ROYAL POINCIANA



ELEVATION

TREE PROTECTION NOTES:
1. ALL TREES RETAINED ON A SITE SHALL BE PROTECTIVELY BARRICADED BEFORE AND DURING CONSTRUCTION ACTIVITIES.
2. UNDERGROUND UTILITY LINES SHALL BE ROUTED AROUND EXISTING TREES TO THE OUTSIDE OF THE DRIPLINE WHERE ABLE.
3. INSTALLATION OF FENCES AND WALLS SHALL TAKE INTO CONSIDERATION THE ROOT SYSTEMS OF EXISTING TREES.
4. FENCES/ BARRICADE SHALL BE INSTALLED AT PERIMETER OF ALL TREES OR GROUP OF TREES TO BE PRESERVED. FENCE SHALL BE MAINTAINED DURING CONSTRUCTION.



PLAN VIEW

TREE PROTECTION BARRIER DETAIL

NTS

LEGAL DESCRIPTION

THE NORTH 193 FEET OF THE SOUTH 630 FEET OF THE EAST ONE–HALF OF THE NORTHEAST ONE–QUARTER OF THE SOUTHEAST ONE–QUARTER IN SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, LESS CANAL AND ROAD RIGHTS OF WAY.

SAID LANDS SITUATE IN THE CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA AND CONTAIN 2.542 ACRES, MORE OR LESS.

NOTES

1. REPRODUCTIONS OF THIS SKETCH ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
2. EASEMENTS AND RIGHTS–OF–WAY SHOWN ARE TAKEN FROM TITLE COMMITMENT NUMBER 24394655CA, AS PREPARED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY, EFFECTIVE DATE: JANUARY 18, 2006 AT 8:00 A.M. PROPERTY IS SUBJECT TO THE AGREEMENT WITH FT. PIERCE UTILITIES AUTHORITY, AS RECORDED IN OFFICIAL RECORDS BOOK 424, AT PAGE 8776 OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
3. NO UNDERGROUND IMPROVEMENTS ARE SHOWN HEREON.
4. ELEVATIONS SHOWN HEREON ARE RELATIVE TO NAVD 1988, BASED ON ST. LUCIE COUNTY BENCHMARK "FRENCH" – ST. LUCIE COUNTY DISK IN CONC. 214' S OF FRENCH CREEK LANE, 29' W OF W E.O.P. OLEANDER BLVD. ELEVATION = 11.32' NAVD 1988.
5. BEARINGS SHOWN HEREON ARE BASED ON THE STATE PLANE COORDINATE SYSTEM, TRANSVERSE MERCATOR FLORIDA EAST ZONE, WITH THE EAST LINE OF THE SOUTHEAST ONE–QUARTER OF SECTION 33–35–40 HAVING A BEARING OF NORTH 00^27'11" EAST. N.G.S. CONTROL MONUMENTS Y403, STL4 AND GCY WERE USED TO DETERMINE THIS BEARING.
6. TREE TYPES LISTED TO THE BEST OF OUR ABILITY. FOR A MORE EXACT SPECIES DETERMINATION, A BOTANIST OR SIMILAR PROFESSIONAL SHOULD BE CONSULTED.
7. THIS SURVEY IS CERTIFIED TO:

FLOOD INFORMATION

COMMUNITY NUMBER : 120286
PANEL NUMBER : 12111C0189K
DATE OF FIRM : FEBRUARY 19, 2020
ZONE : X

ABBREVIATIONS

L	=	ARC
ASPH	=	ASPHALT
C	=	CALCULATED
C&G	=	CURB & GUTTER
C.L.F.	=	CHAIN LINK FENCE
CONC.	=	CONCRETE
COR.	=	CORNER
C.U.P.	=	CONCRETE UTILITY POLE
D	=	DELTA (CENTRAL ANGLE)
D.E.	=	DRAINAGE EASEMENT
I.R.	=	IRON ROD
I.R.C.	=	IRON ROD AND CAP
L.B.	=	LICENSED BUSINESS
L.S.	=	LICENSED SURVEYOR
L.W.D.D.	=	LAKE WORTH DRAINAGE DISTRICT
MON.	=	MONUMENT
O.R.B.	=	OFFICIAL RECORDS BOOK
P.B.	=	PLAT BOOK
S.L.C.R.	=	ST. LUCIE COUNTY RECORDS
PG.	=	PAGE
P.S.M.	=	PROFESSIONAL SURVEYOR & MAPPER
U.E.	=	UTILITY EASEMENT
W.F.	=	WOOD FENCE
W.U.P.	=	WOOD UTILITY POLE
IP	=	IRON PIPE
RES	=	RESIDENCE
(C)	=	CALCULATED
(P)	=	PLAT
(M)	=	MEASURED
R/W	=	RIGHT–OF–WAY

LEGEND

- GUY ANCHOR WIRE
- WOOD UTILITY POLE
- CABLE TV BOX
- FENCE
- OVERHEAD POWER LINES
- SIGN
- TREE
- ELECTRIC SERVICE

DEMOLITION NOTES

1. ALL EXOTIC AND INVASIVE SPECIES TO BE REMOVED CONGRUENT WITH DEVELOPMENT.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR THE ATTAINMENT OF ALL DEMOLITION PERMITS NECESSARY FOR PROPOSED CONSTRUCTION.
3. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ANY / ALL NECESSARY EROSION CONTROL MEASURES AS PRESENTED ON THIS SHEET AND INCLUDED IN THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP).
4. ALL BARRIERS AND PROTECTION MEASURES FOR TREES BEING SAVED SHALL BE PLACED BEFORE ANY DEMOLITION ACTIVITY BEGINS. LARGE TREES ON ADJACENT PROPERTIES, NEAR THE PROPERTY LINE, SHOULD ALSO BE PROTECTED.
5. ALL IMPACTS TO THE IRC R/W SHALL BE SODDED WITHIN (3) DAYS OF FINAL GRADING.
6. "TRUCKS ENTERING ROADWAY" SIGNS SHALL BE INSTALLED IN ADVANCE BOTH DIRECTIONS OF CONSTRUCTION ENTRANCE PER MUTCD STANDARDS.

72 HOURS BEFORE DIGGING
CALL TOLL FREE
811
Know what's below.
Call before you dig.

REVISIONS	DATE
8	–
7	–
6	–
5	–
4	–
3	–
2	–
1	–

JOB NO.	23-0060
DESIGNED	GWR
DRAWN	GWR
DATE	JANUARY 2024
CHECKED	AJB
DATE ISSUED	1/31/2024

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EXISTING CONDITIONS, DEMOLITION AND EROSION CONTROL PLAN

MARGARETA VILLAS MULTI-FAMILY

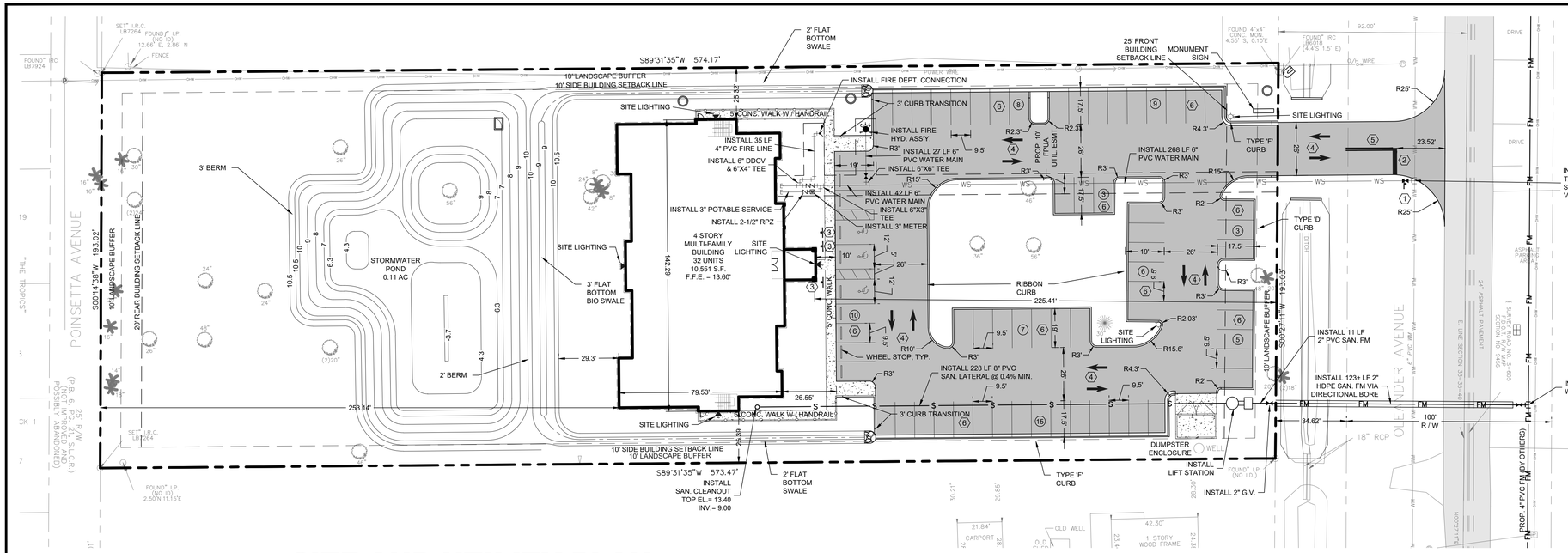
CITY OF FORT PIERCE FLORIDA

AARON J. BOWLES
LICENSE
No. 55313
STATE OF FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL. P.E. #55313 1/31/24

SHEET
C3

23-0060



SITE AND UTILITY PLAN

SCALE: 1" = 30'

GRAPHIC SCALE

0 30 60

(IN FEET)

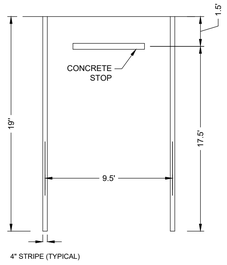
1 inch = 30 ft.

LEGEND

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

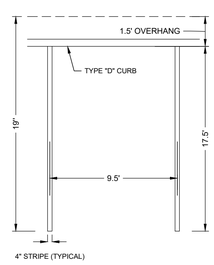
SITE, SIGNAGE & PAVEMENT MARKING SCHEDULE

SIGN ID NUMBER	SIZE	DESIGNATION / NOTES
①	30"	R1-1 "STOP" SIGN
②	24"	SOLID WHITE STOP BAR- THERMOPLASTIC
③	12"	FTP-20-06 HC PARKING SIGN
④		PAINTED PAVEMENT MARKINGS PER FDOT INDEX #711-001
⑤	6"	DOUBLE YELLOW STRIPE - THERMOPLASTIC
⑥	4"	PAINTED WHITE STRIPE



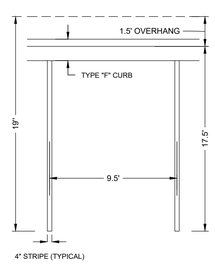
TYPICAL PARKING SPACE DETAIL

N.T.S.



PARKING SPACE DETAIL WITH "D" CURB AND OVERHANG

N.T.S.



PARKING SPACE DETAIL WITH "F" CURB AND OVERHANG

N.T.S.

72 HOURS BEFORE DIGGING CALL TOLL FREE 811 Know what's below. Call before you dig.

PROJECT INFORMATION

SITE ADDRESS
4101 OLEANDER AVENUE
FORT PIERCE, FL 34982

OWNER
4101 OLEANDER GROUP, LLC
17555 COLLINS AVENUE, APT. 2006
SUNNY ISLES, FLORIDA 33160
PHONE (305) 337-0183

APPLICANT
MR. GEZA SZINI-SEBO
ABANDEL GROUP, LTD.
51 WIGTON PLACE
THORNHILL, ON, CANADA L4J8C6
PHONE (305) 337-0183

ARCHITECT
STAFFAN H. LUNDBERG
1341 SEA HAWK LANE
VERO BEACH, FLORIDA
PHONE (772) 538-5130

ENGINEER
MBV ENGINEERING, INC.
1835 20TH STREET
VERO BEACH, FLORIDA 32960
PHONE (772) 569-0035

SURVEYOR
PERIMETER SURVEYING & MAPPING
947 CLINT MOORE ROAD
BOCA RATON, FLORIDA
PHONE (561) 241-9988

TAX PARCEL I.D NUMBER(S)
2433-414-0001-000-4

ZONING
R-4

LAND USE
RM

LATITUDE
27°23'12.02" N

LONGITUDE
80°20'05.75" W

PROJECT DESCRIPTION
THIS PROJECT PROPOSES A 32 UNIT MULTI FAMILY RESIDENTIAL BUILDING WITH RELATED STORMWATER IMPROVEMENTS, PARKING AND LANDSCAPING. THE SITE SEEKS TO PRESERVE TREES WHERE POSSIBLE AND HAS CONFIGURED THE PARKING AND STORMWATER TO TRY TO PRESERVE THE TREE CANOPY.

SITE DATA

EXISTING SITE DATA

	SF	AC	%
SITE AREA	110,747 SF	2.54 AC	100%
AREA OF DEVELOPMENT	110,747 SF	2.54 AC	100.00%
IMPERVIOUS AREA	4,954 SF	0.11 AC	4.47%
EXISTING BUILDING	3,136 SF	0.07 AC	2.83%
EXISTING CONCRETE	1,818 SF	0.04 AC	1.64%
EXISTING PAVEMENT	0 SF	0.00 AC	0.00%
PERVIOUS AREA	105,793 SF	2.43 AC	95.53%

PROPOSED SITE DATA

SITE AREA	110,747 SF	2.54 AC	100%
IMPERVIOUS AREA	44,149 SF	1.01 AC	39.86%
PROPOSED BUILDING	10,551 SF	0.24 AC	9.53%
PROPOSED CONCRETE	2,998 SF	0.07 AC	2.71%
PROPOSED ASPHALT	25,702 SF	0.59 AC	23.21%
WET POND AREA	4,898 SF	0.11 AC	4.42%
PERVIOUS AREA	66,598 SF	1.53 AC	60.14%
OPEN SPACE	66,598 SF	1.53 AC	60.14%
NET NEW IMPERVIOUS	+ 39,195 SF	0.90 AC	

ZONING DATA

	R-4 ZONING	EXISTING	PROPOSED
LOT SIZE	20,000 SF	110,747 SF	110,747 SF
MIN. LOT WIDTH	75-FT	193-FT	193-FT
BUILDING SETBACKS			
FRONT	25-FT	59-FT	225-FT
SIDE	10-FT	110-FT	25-FT
CORNER SIDE	15-FT	10-FT	25-FT
REAR	20-FT	378-FT	253-FT
BUILDING COVERAGE	50%	2.83%	9.53%
OPEN SPACE	10%	95.53%	60.14%
BUILDING HEIGHT	45-FT	--	45-FT

PARKING DATA
MULTIFAMILY HOUSING DEVELOPMENTS

2 SP/	1 UNIT	32 UNITS	=	64	SPACES REQUIRED
				66	SPACES PROVIDED
				3	ADA SPACES
				63	STANDARD SPACES

TRAFFIC STATEMENT
PER ITE, 11TH EDITION:
USE 1: (MULTIFAMILY HOUSING (MID-RISE)) = 2.93 ADT PER DWELLING UNIT
2.93 X 32.0 DU = 94 ADDT

DRAINAGE STATEMENT
STORMWATER IS TO BE COLLECTED IN THE WET POND AND BIO SWALE LOCATED TO THE REAR OF THE PROPERTY. THE SITE INCORPORATES LOW IMPACT DESIGN (L / D) BY UTILIZING A BIO SWALE OFFERING AN AESTHETIC AMENITY, IN ADDITION TO THE WET POND'S RETENTION AND ATTENUATION FOR NUTRIENT REDUCTION.

PERMITS REQUIRED
CoFP DEVELOPMENT REVIEW APPLICATION
CoFP DESIGN REVIEW APPLICATION
CoFP CONCURRENCY CAPACITY ANALYSIS FORM
CoFP DPCR
SLC FIRE REVIEW
FORT PIERCE UTILITIES AUTHORITY (FPUA)
NSLWCD CONNECTION PERMIT
SFWMD/FDEP 10-2 CERTIFICATION
FDEP WATER DISTRIBUTION PERMIT
FDEP WASTEWATER COLLECTION PERMIT
FDEP NPDES NOI PERMIT

FLOOD ZONE
THE SUBJECT PROPERTY IS LOCATED IN FLOOD ZONE X PER FLOOD INSURANCE RATE MAP #12111C0189K, DATED FEB 19, 2020.

LEGAL DESCRIPTION
THE NORTH 193 FEET OF THE SOUTH 630 FEET OF THE EAST ONE-HALF OF THE NORTHEAST ONE-QUARTER OF THE SOUTHEAST ONE-QUARTER IN SECTION 33, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA, LESS CANAL AND ROAD RIGHTS OF WAY. SAID LANDS SITUATE IN THE CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA AND CONTAIN 2.542 ACRES, MORE OR LESS.

WASTEWATER SOURCE
FPUA

POTABLE WATER SOURCE
FPUA

CONSTRUCTON SCHEDULE
START: JANUARY 2025
FINISH: DECEMBER 2026

NO.	DATE	REVISIONS
8	-	-
7	-	-
6	-	-
5	-	-
4	-	-
3	-	-
2	-	-
1	-	-

JOB NO.	23-0060
DESIGNED	GWR
DRAWN	GWR
DATE	JANUARY 2024
CHECKED	AJB
DATE ISSUED	1/31/2024

MBV ENGINEERING, INC.
MOJA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA-#3728
1835 20TH STREET
VERO BEACH, FL 32960
TEL. (772) 569-0035
FAX. (772) 778-7617
MELBOURNE FL. PH (321) 253-4100
FT.PIERCE FL. PH (772) 468-9055

SITE AND UTILITY PLAN

MARGARETA VILLAS
MULTI-FAMILY

CITY OF FORT PIERCE FLORIDA

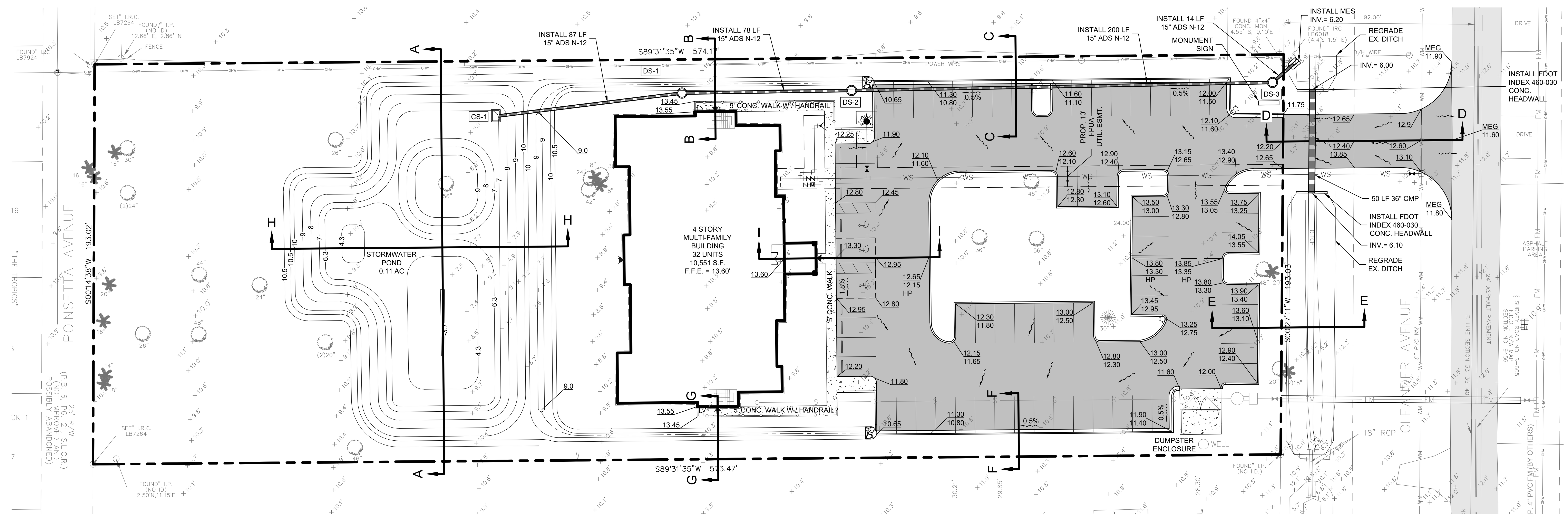
AARON J. BOWLES LICENSE No. 55313 STATE OF FLORIDA PROFESSIONAL ENGINEER

AARON J. BOWLES
FL. P.E. #55313 1/31/24

SHEET

C4

23-0060



PAVING, GRADING AND DRAINAGE PLAN

SCALE: 1" = 30'

GRAPHIC SCALE
0 30 60
(IN FEET)
1 inch = 30 ft.

LEGEND

- EXISTING CONCRETE
- EXISTING ASPHALT
- PROPOSED ASPHALT
- PROPOSED CONCRETE
- 15.4 EXISTING ELEVATION
- 18.70 PROPOSED ELEVATION
- PROPOSED DIRECTIONAL FLOW

DRAINAGE STRUCTURE SCHEDULE

		STRUCTURE NUMBER	CS-1	DS-1	DS-2	DS-3	STRUCTURE NUMBER	
		FDOT INDEX #	# 425-052	# 425-001	# 425-001	# 425-001	FDOT INDEX #	
		DESCRIPTION	MODIFIED TYPE "C" CONTROL STRUCTURE	STORM MH (4' DIA.)	STORM MH (4' DIA.)	STORM MH (4' DIA.)	DESCRIPTION	
		RIM ELEV.	10.00	10.70	10.50	10.20	RIM ELEV.	
		PIPE DIA.	15.00 "	15.00 "	15.00 "	15.00 "	PIPE DIA.	
		COVER	1.35 '	2.40 '	2.50 '	3.00 '	COVER	
	INVERT ELEVATION	N	-	-	-	-	N	INVERT ELEVATION
		S	-	-	-	-	S	
		E	7.40 E	7.05 E	6.75 E	5.20 E	E	
		W		7.05 W	6.75 W	6.20 W	W	
		BOTTOM ELEV.	6.90	6.55	6.25	5.45	BOTTOM ELEV.	

DRAINAGE STRUCTURE SCHEDULE

REVISIONS	DATE
8	
7	
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2	
1	

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MOIA BOWLES VILLAMIZAR & ASSOCIATES
CONSULTING ENGINEERING CA #3728

PAVING, GRADING AND DRAINAGE PLAN

MARGARETA VILLAS
MULTI-FAMILY

CITY OF FORT PIERCE FLORIDA

AARON J. BOWLES
LICENSE
No. 55313
STATE OF
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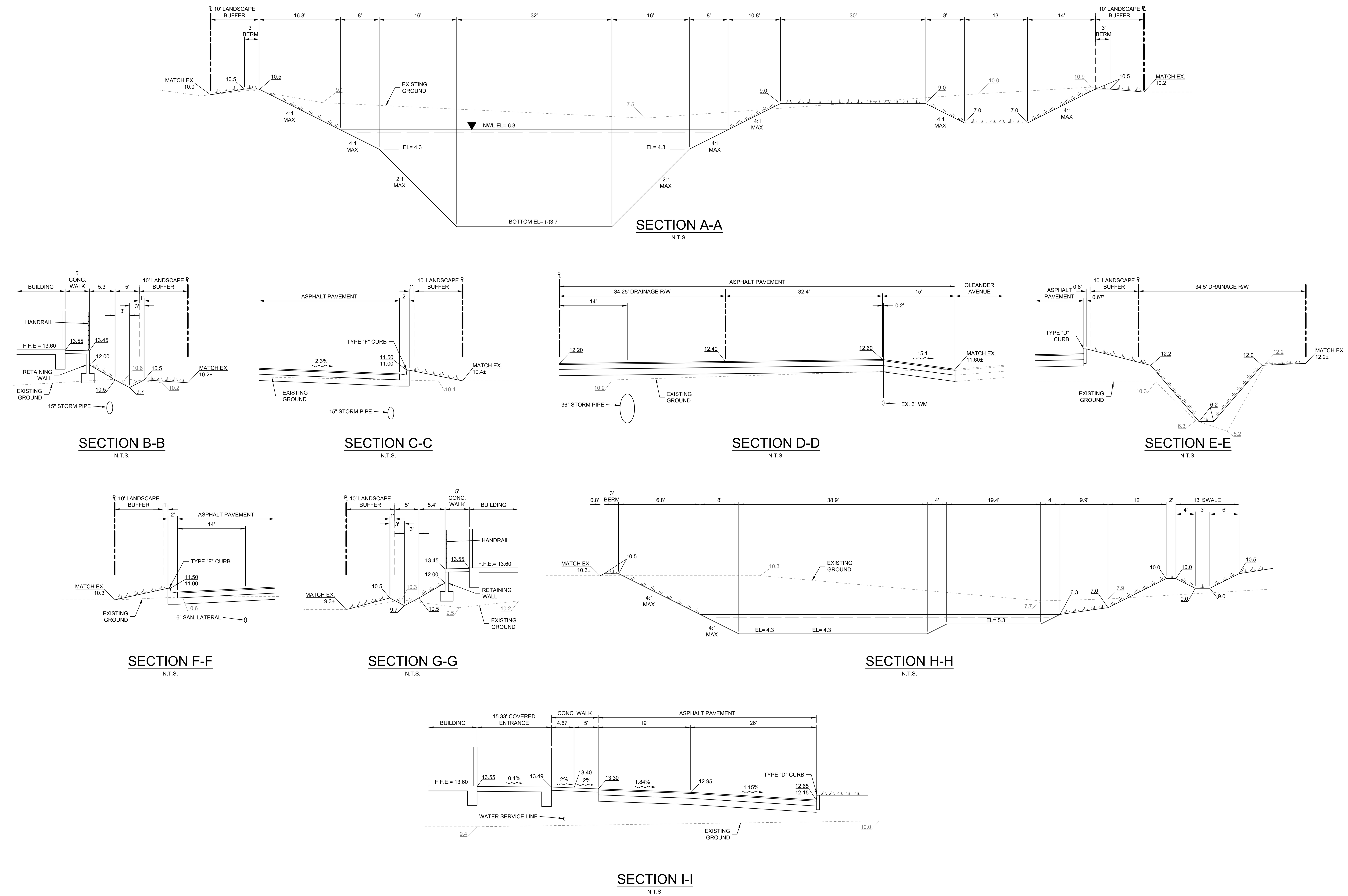
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL. P.E. #55313 1/31/24

SHEET
C5

23-0060



72 HOURS BEFORE DIGGING
CALL TOLL FREE
811
Know what's below.
Call before you dig.

REVISIONS | DATE

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

CROSS SECTIONS

MARGARETA VILLAS
MULTI-FAMILY

CITY OF FORT PIERCE FLORIDA

AARON J. BOWLES
LICENSE No. 55313
STATE OF FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
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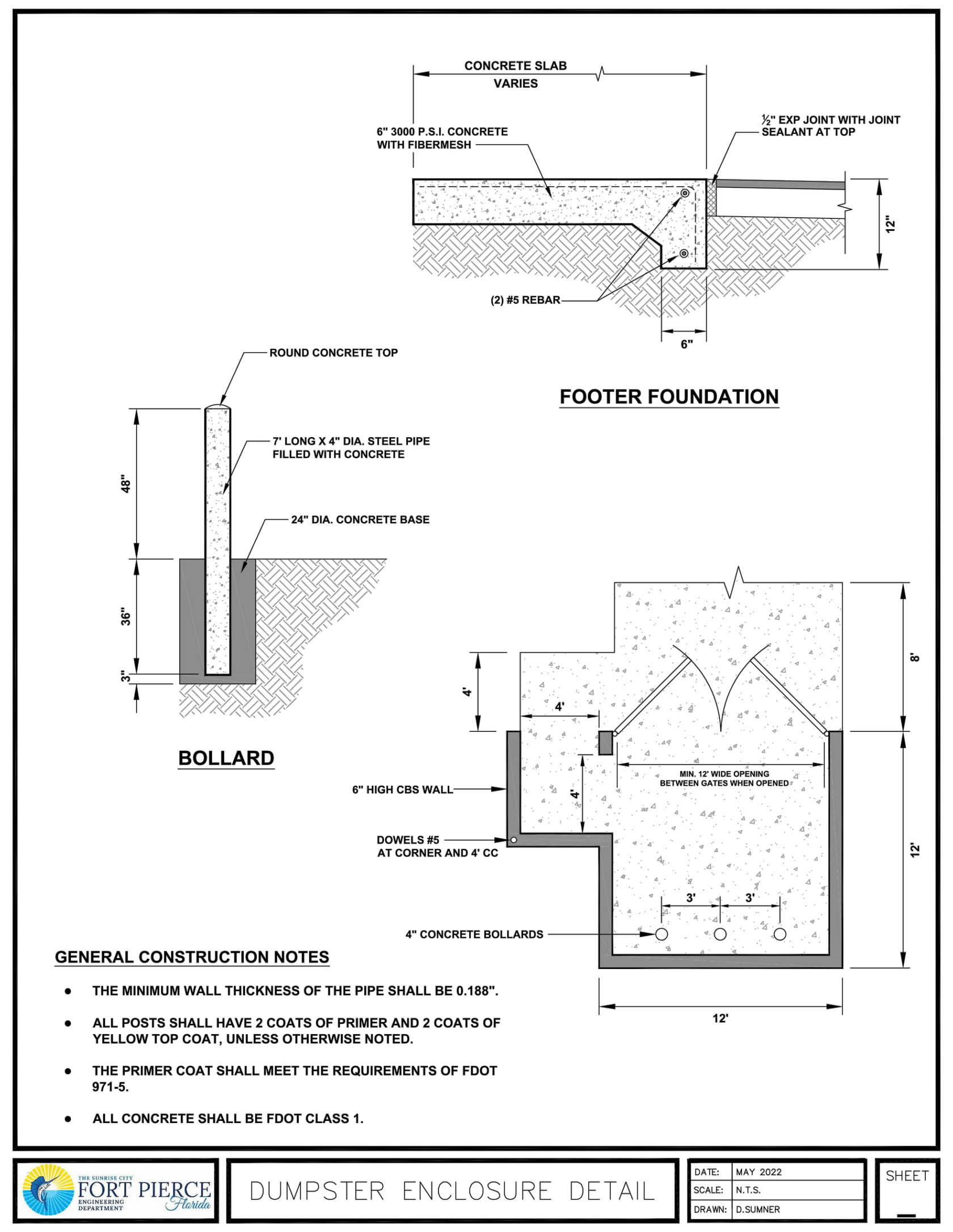
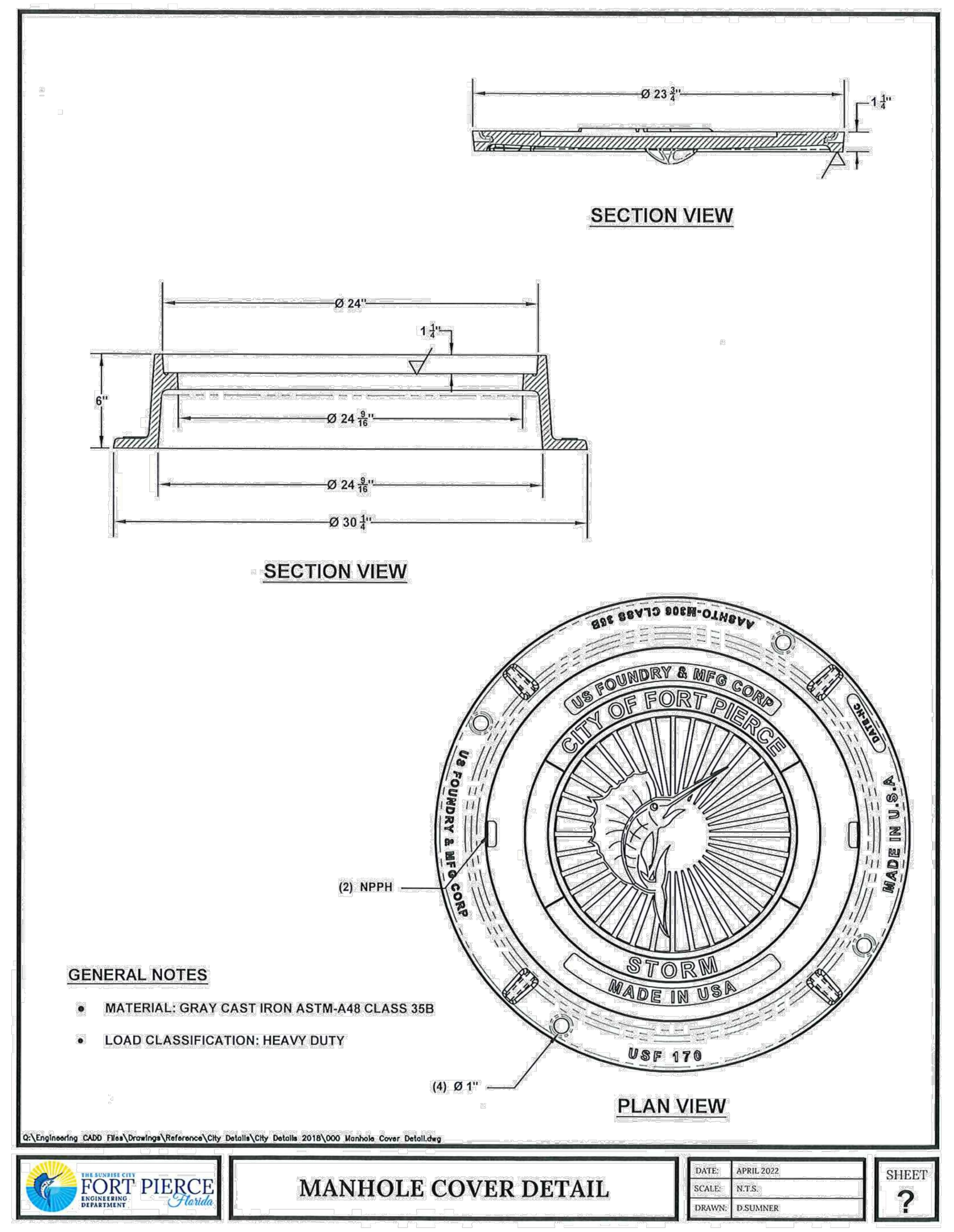
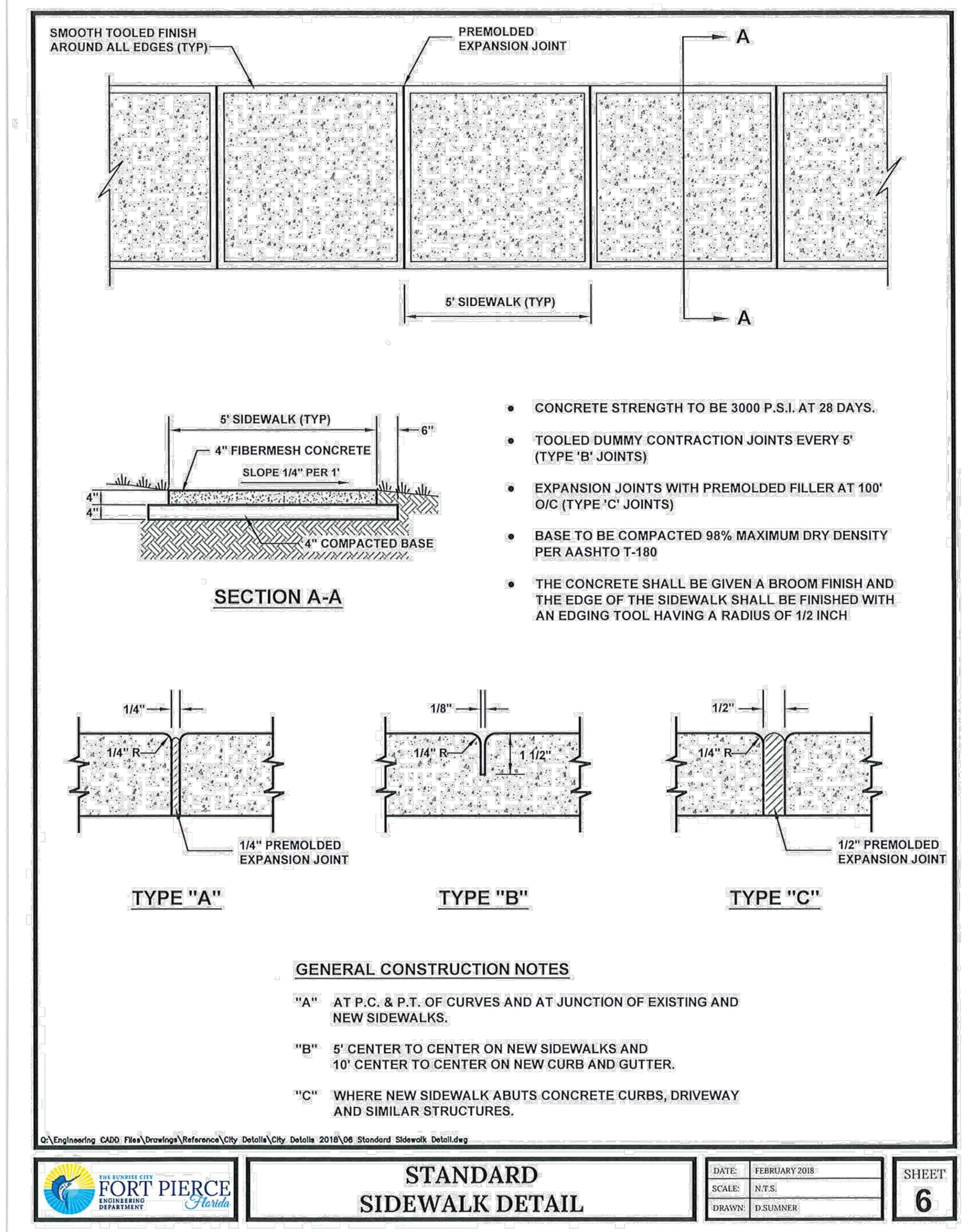
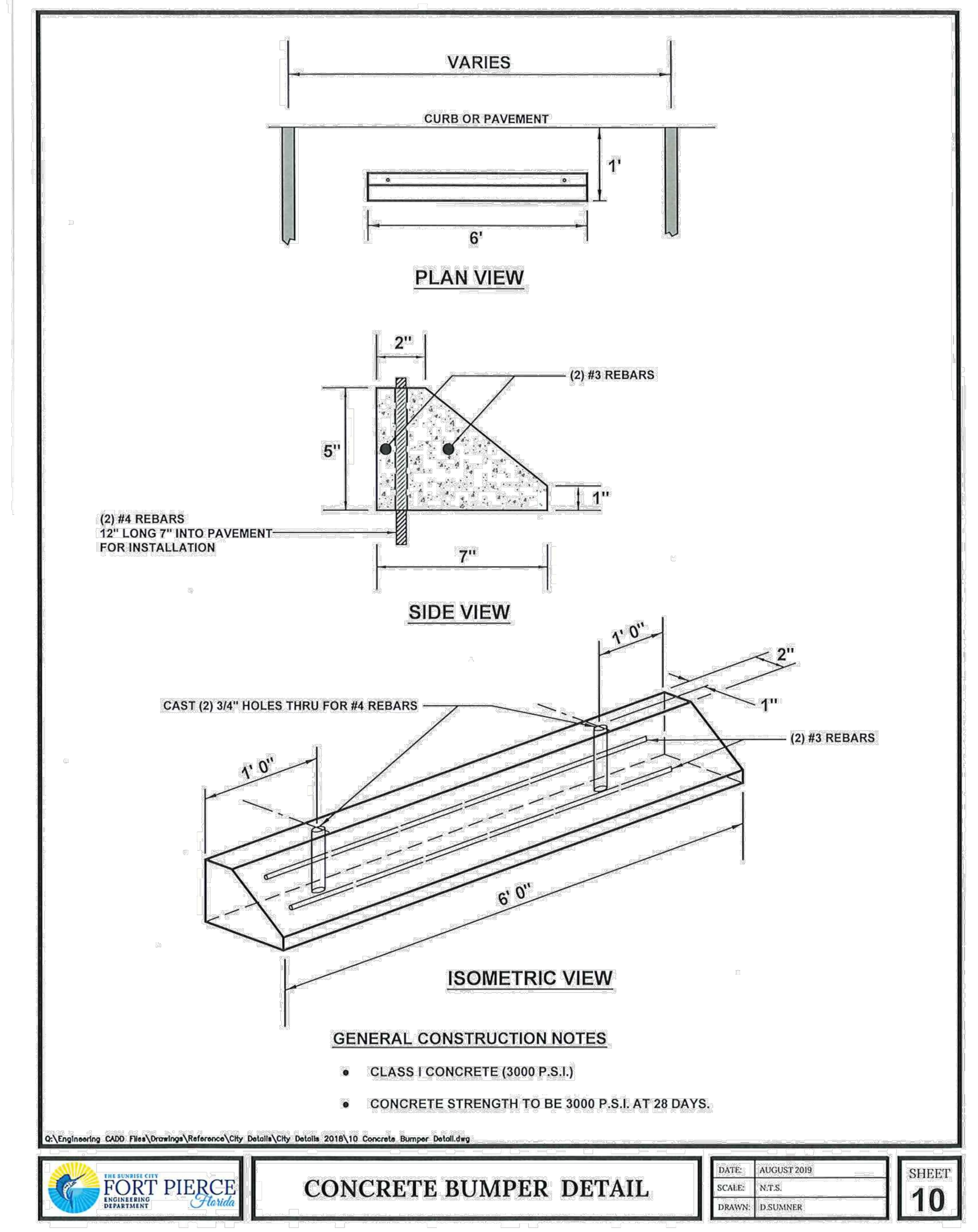
SHEET
C6

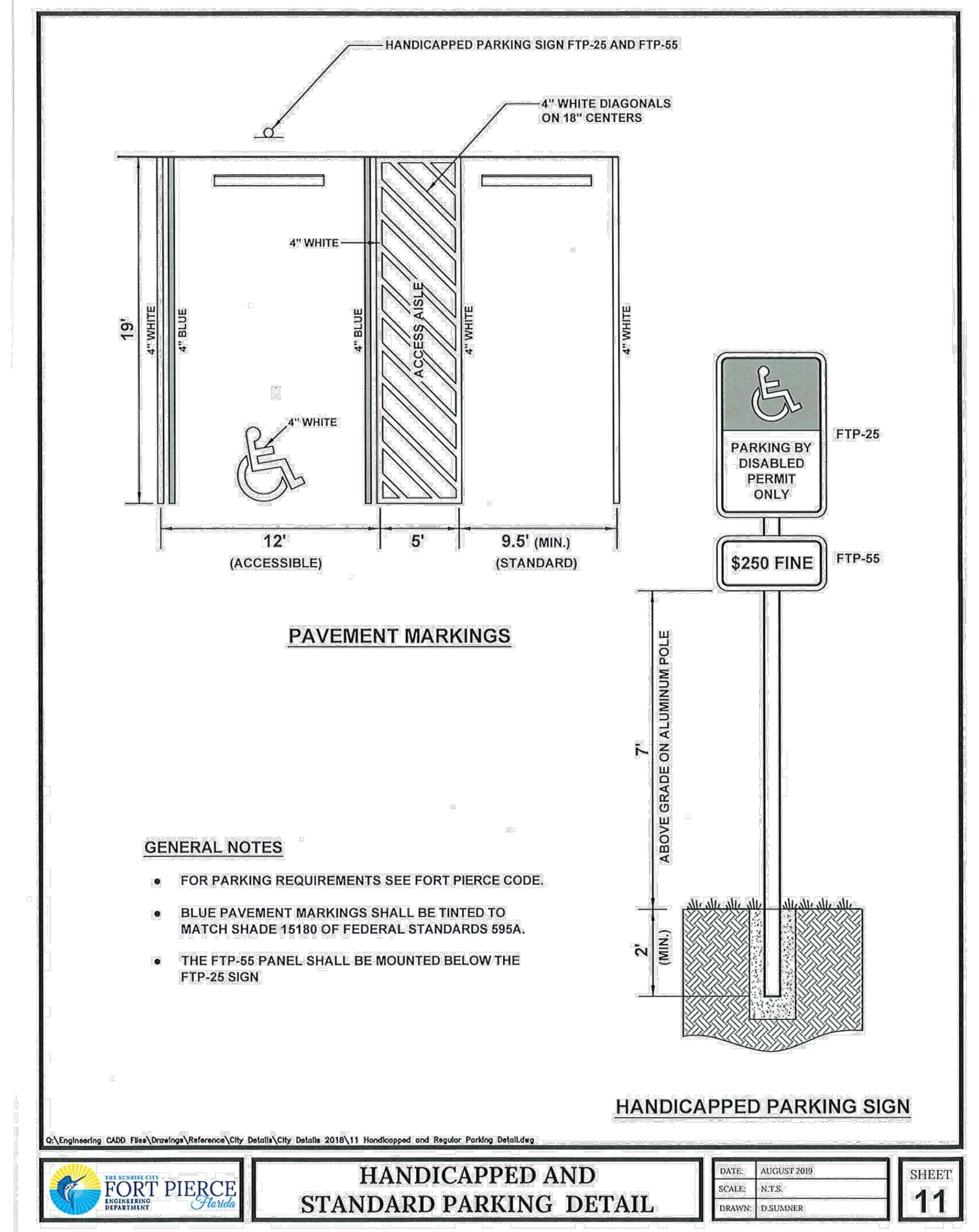
23-0060

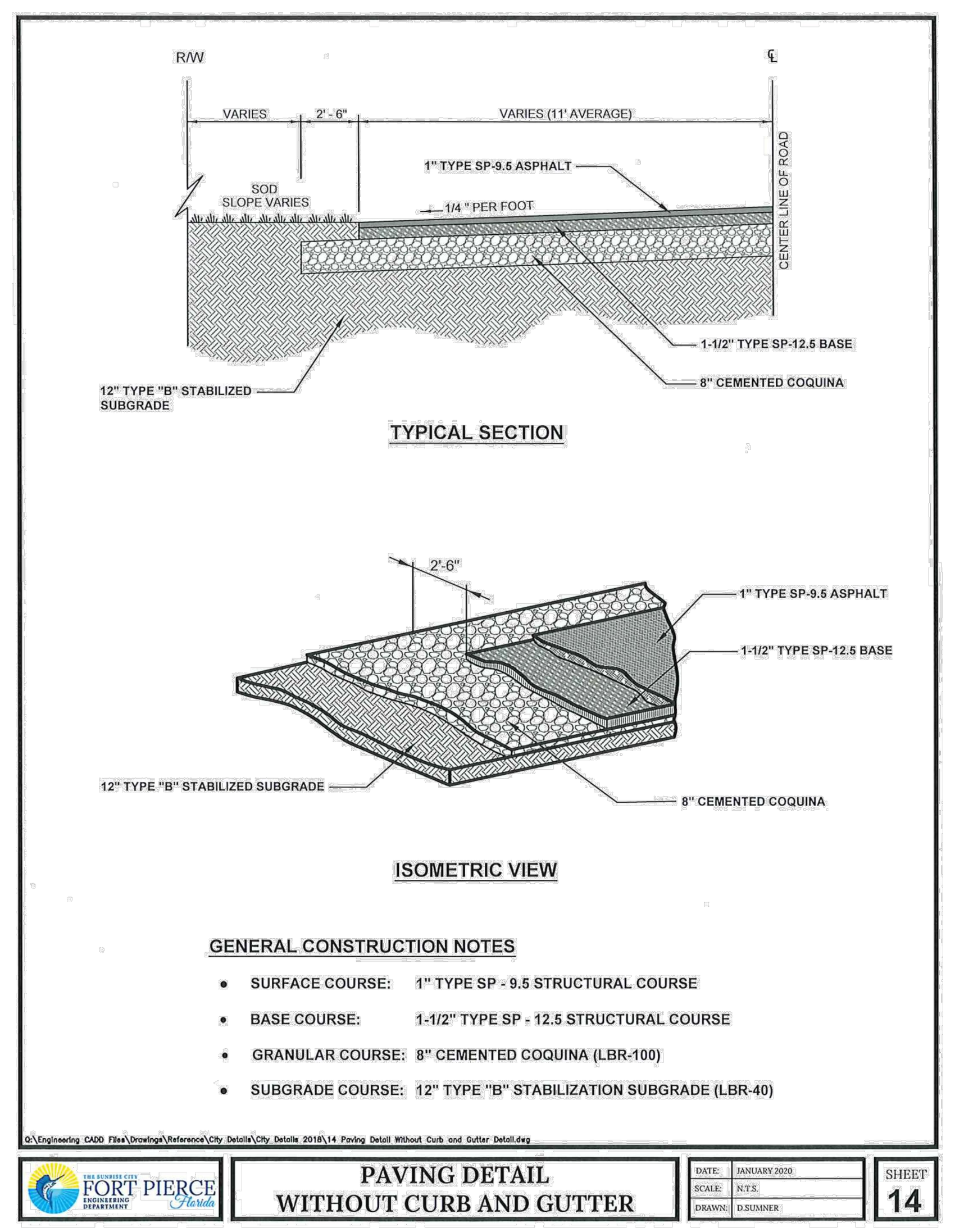

FOOTER FOUNDATION
BOLLARD
GENERAL CONSTRUCTION NOTES
THE MINIMUM WALL THICKNESS OF THE PIPE SHALL BE 0.188".
ALL POSTS SHALL HAVE 2 COATS OF PRIMER AND 2 COATS OF YELLOW TOP COAT, UNLESS OTHERWISE NOTED.
THE PRIMER COAT SHALL MEET THE REQUIREMENTS OF FDOT 971-5.
ALL CONCRETE SHALL BE FDOT CLASS 1.
FORT PIERCE
DUMPSTER ENCLOSURE DETAIL

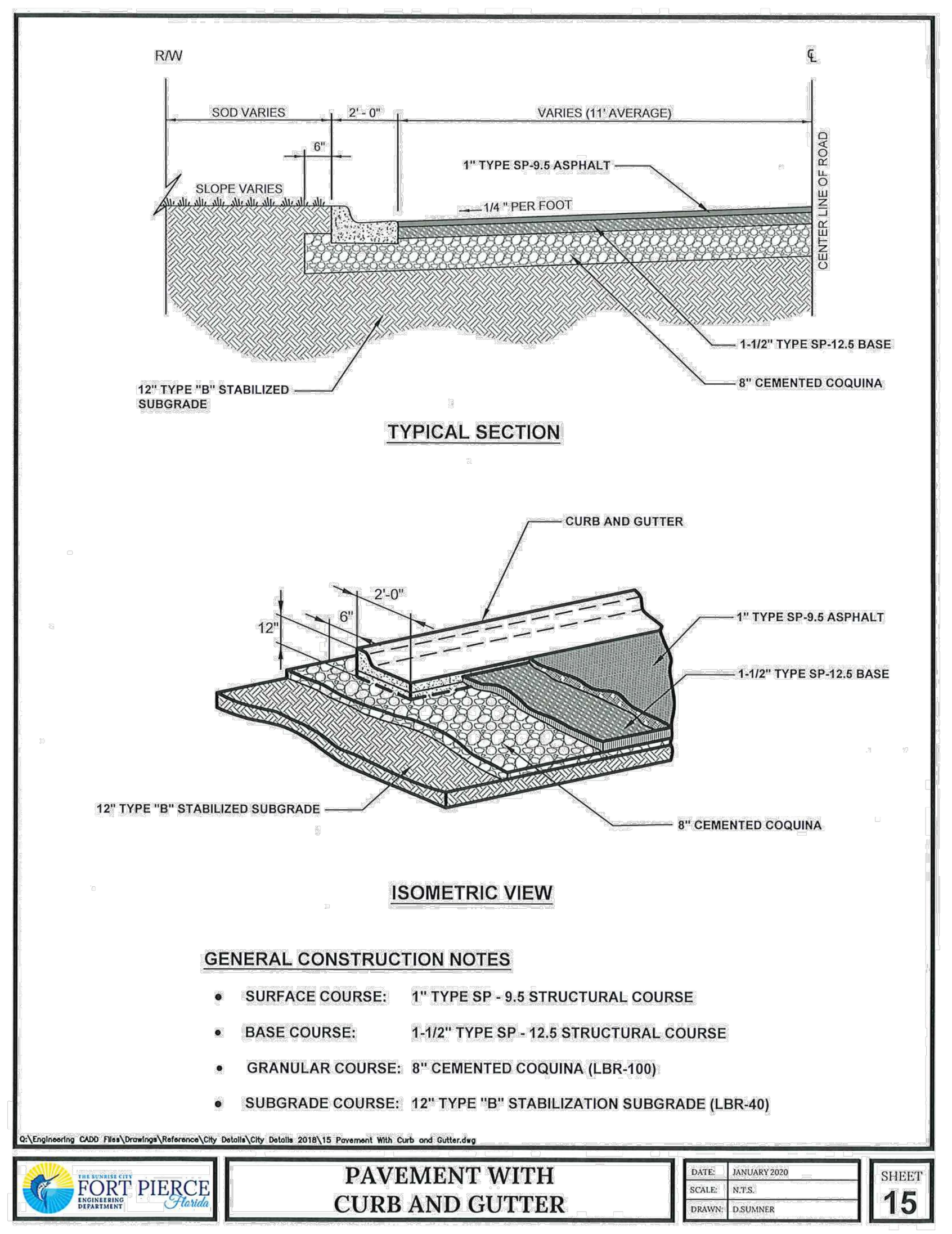









TYPICAL SECTION
ISOMETRIC VIEW
GENERAL CONSTRUCTION NOTES
SURFACE COURSE: 1" TYPE SP - 9.5 STRUCTURAL COURSE
BASE COURSE: 1-1/2" TYPE SP - 12.5 STRUCTURAL COURSE
GRANULAR COURSE: 8" CEMENTED COQUINA (LBR-100)
SUBGRADE COURSE: 12" TYPE "B" STABILIZATION SUBGRADE (LBR-40)
FORT PIERCE
PAVING DETAIL WITHOUT CURB AND GUTTER
14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ISOMETRIC VIEW
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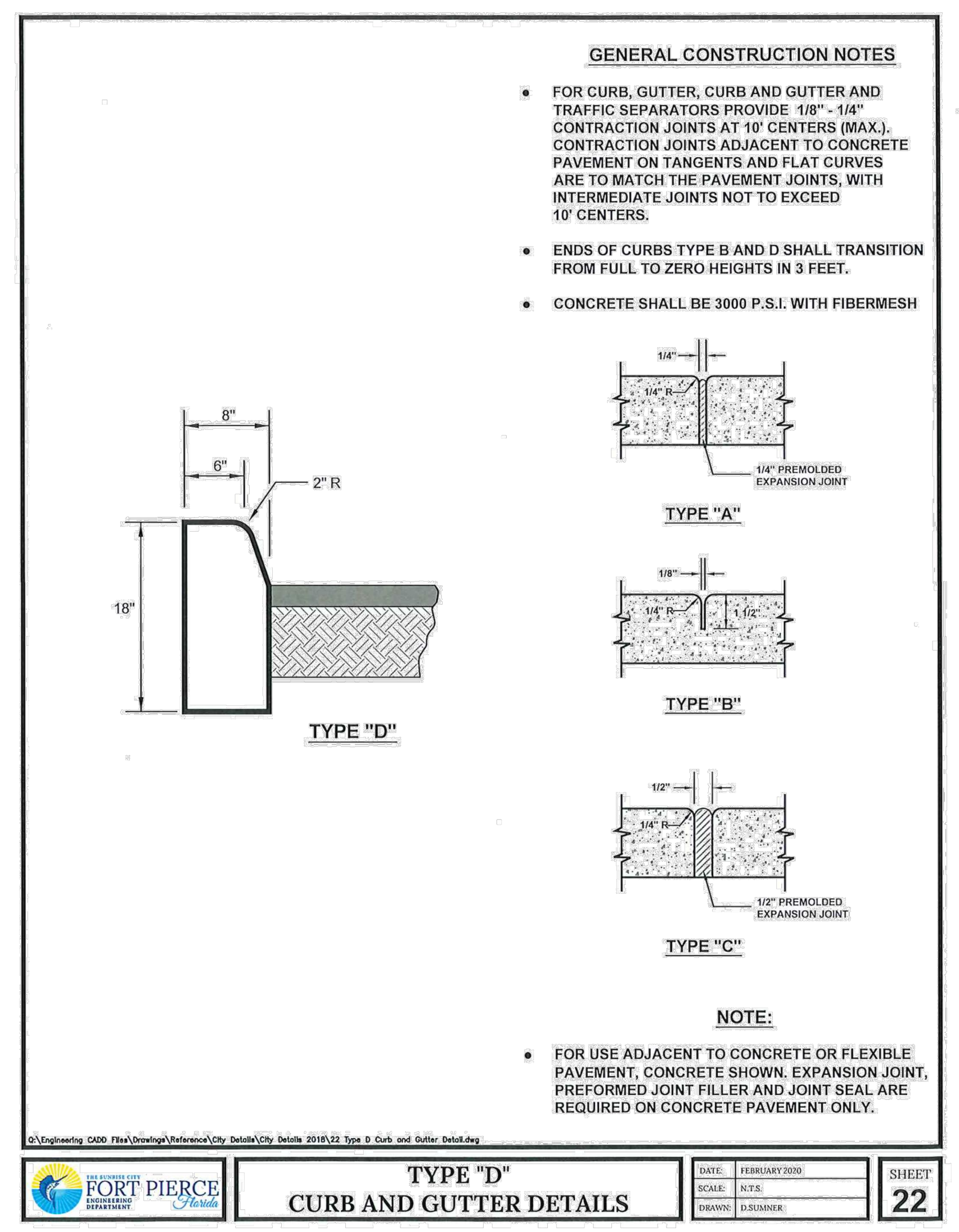
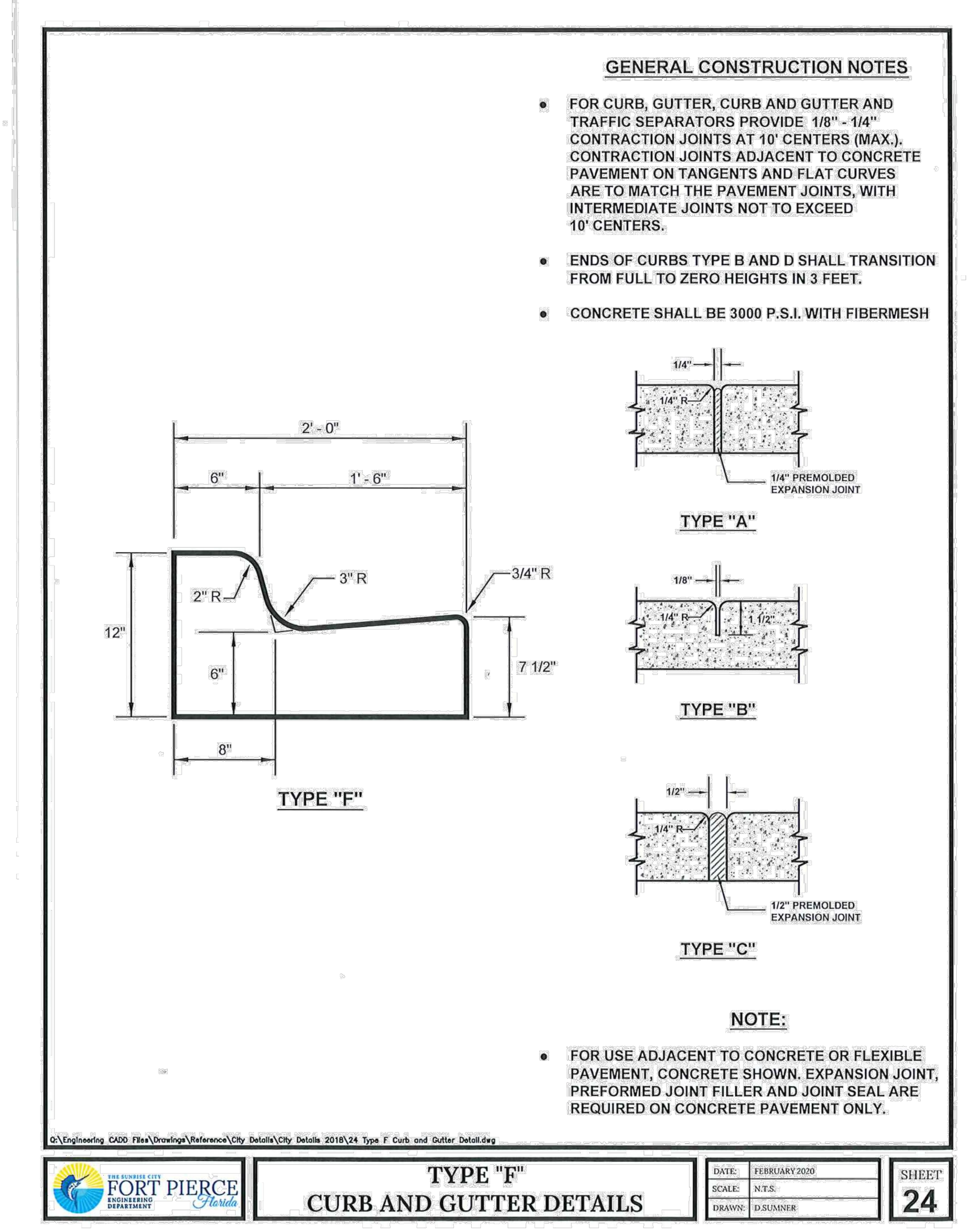
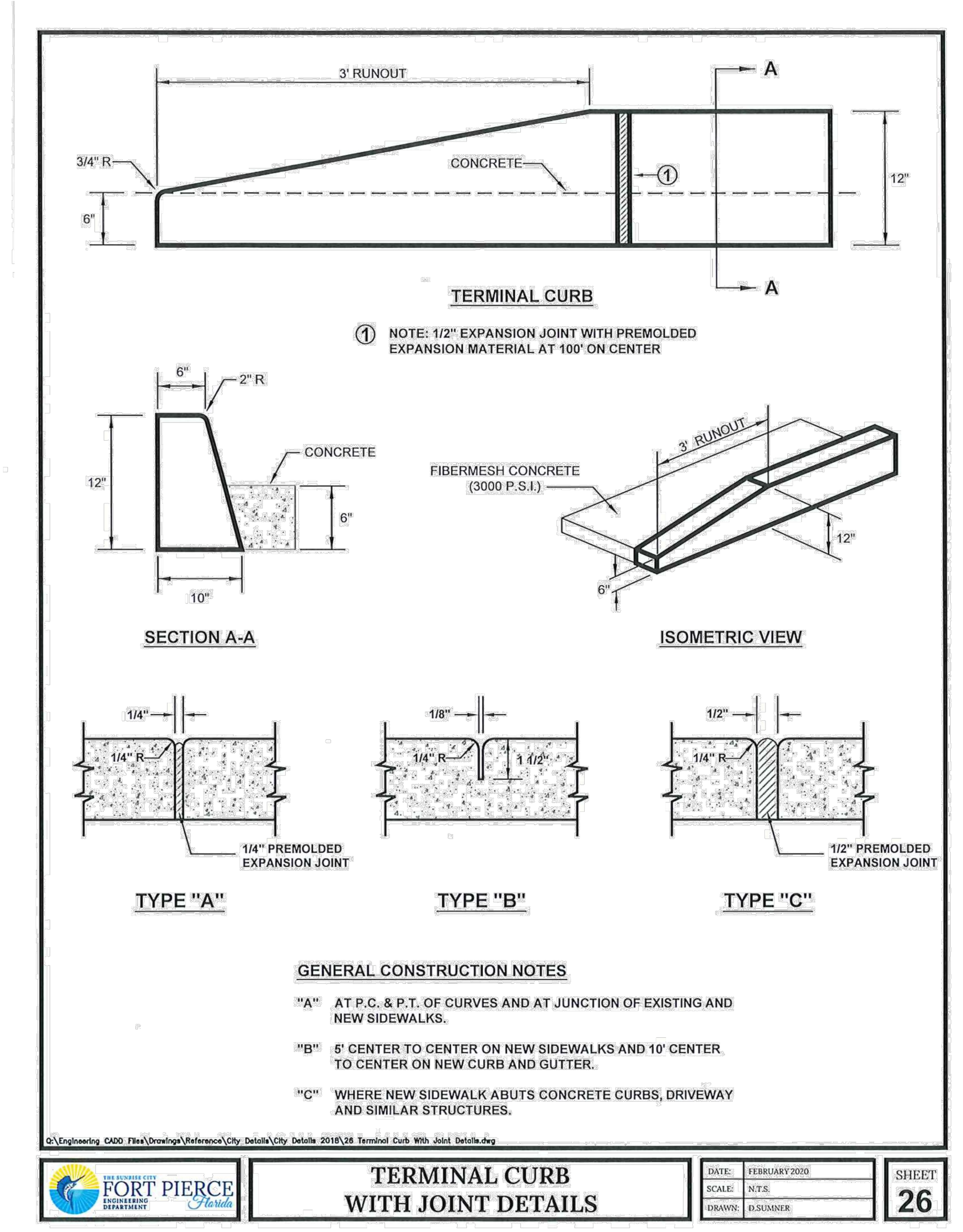
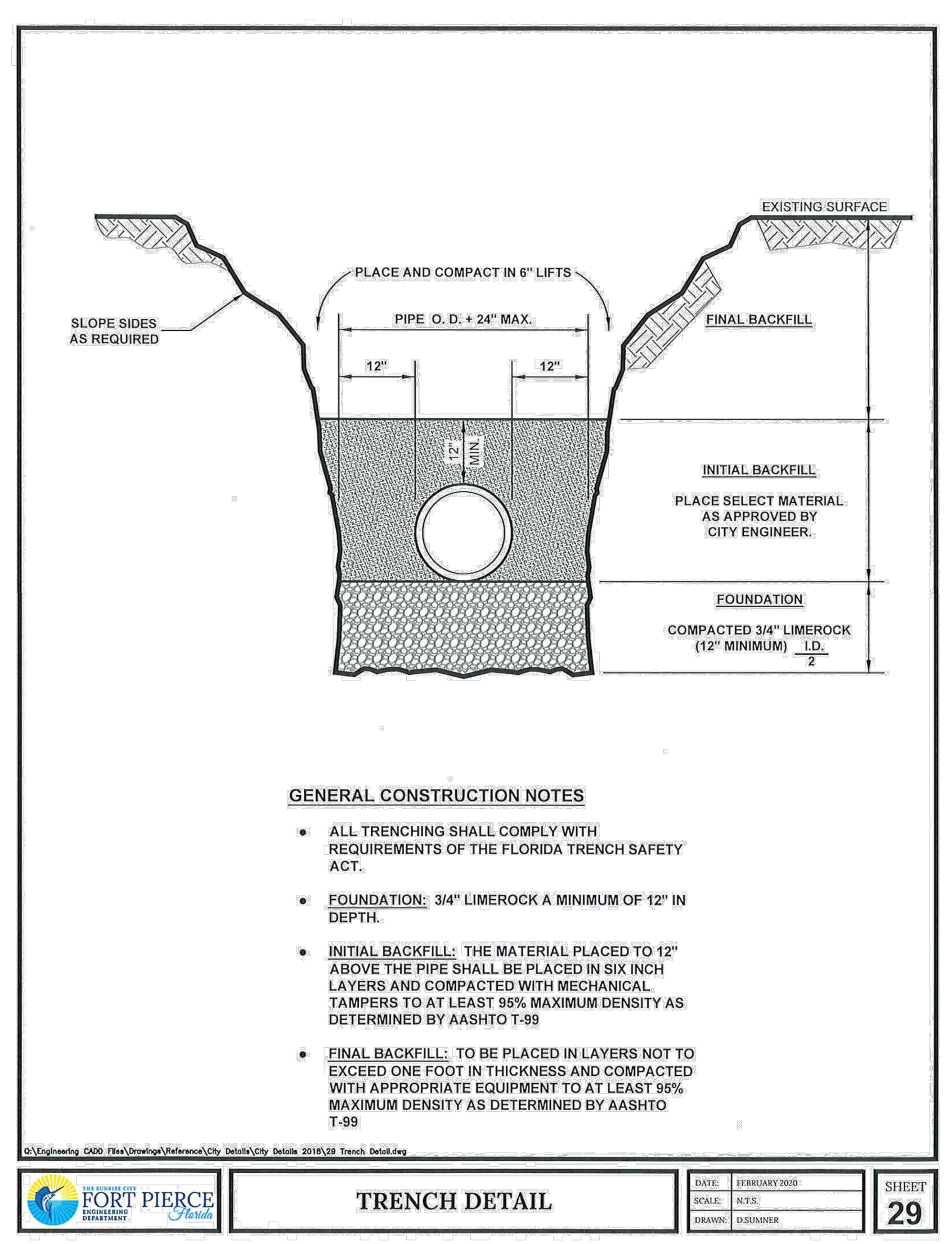
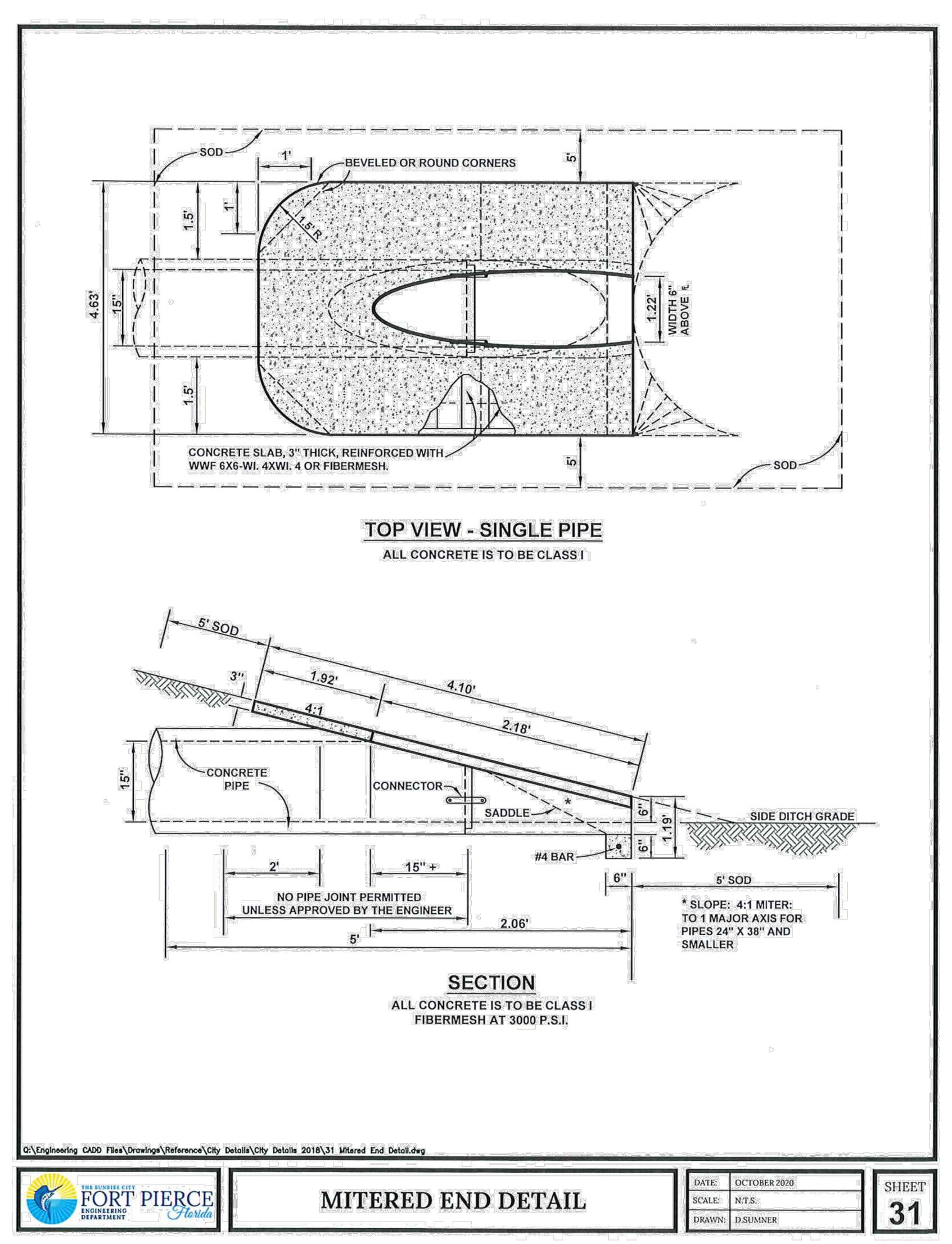
SUBGRADE COURSE: 12" TYPE "B" STABILIZATION SUBGRADE (LBR-40)
FORT PIERCE
PAVEMENT WITH CURB AND GUTTER
15











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

GENERAL DETAILS

MARGARETA VILLAS MULTI-FAMILY

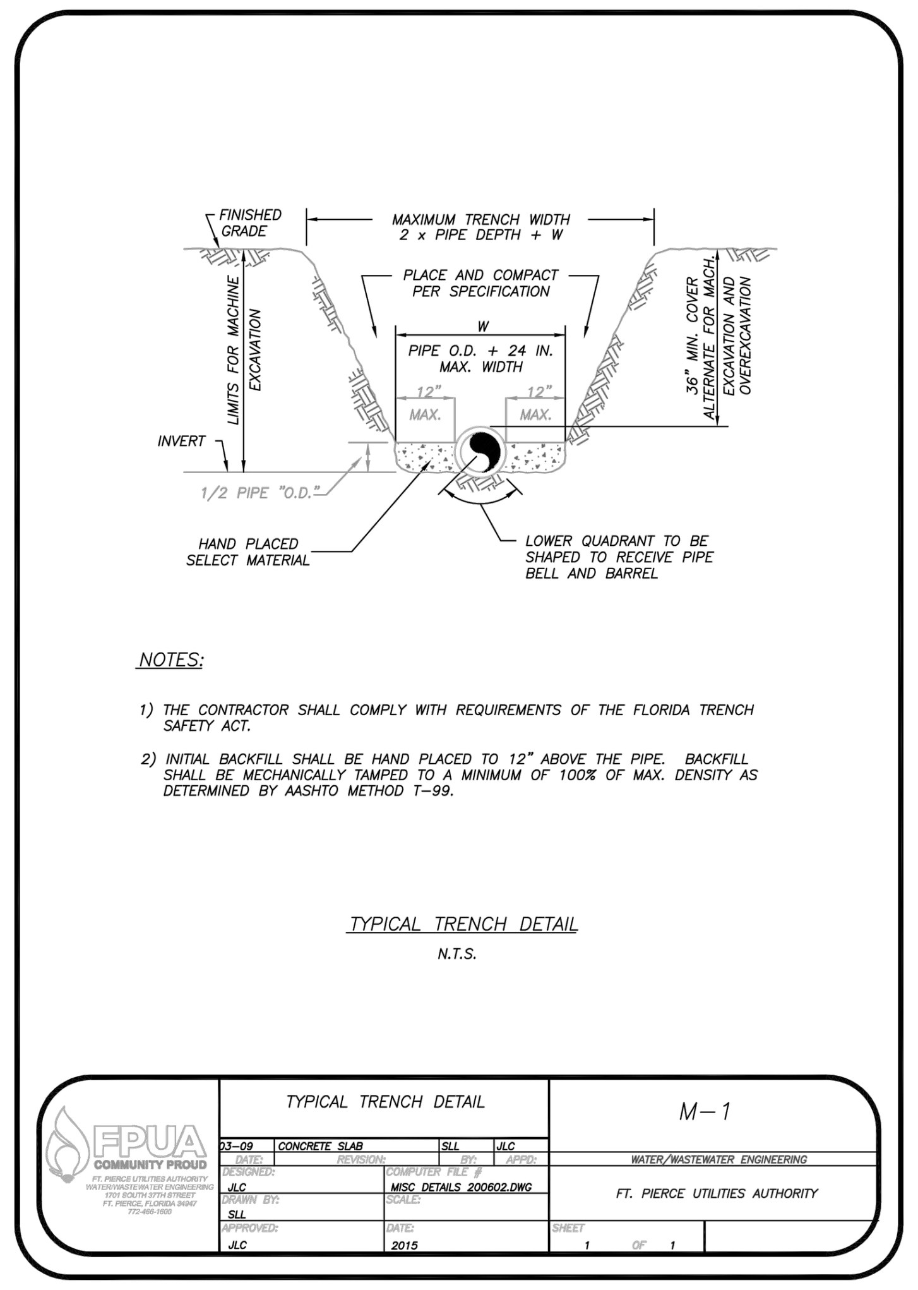
CITY OF FORT PIERCE FLORIDA

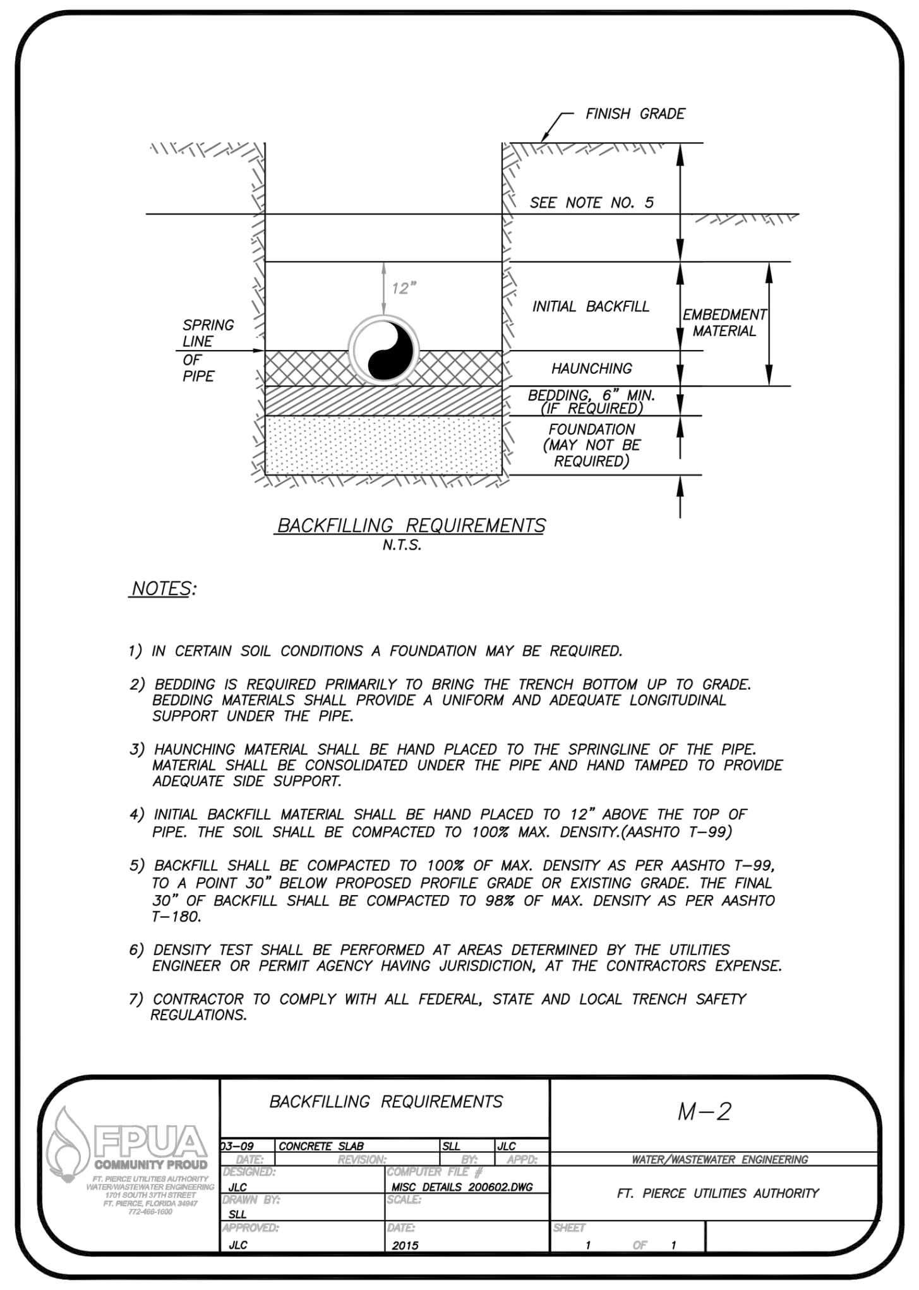
AARON J. BOWLES LICENSE No. 55313 STATE OF FLORIDA PROFESSIONAL ENGINEER

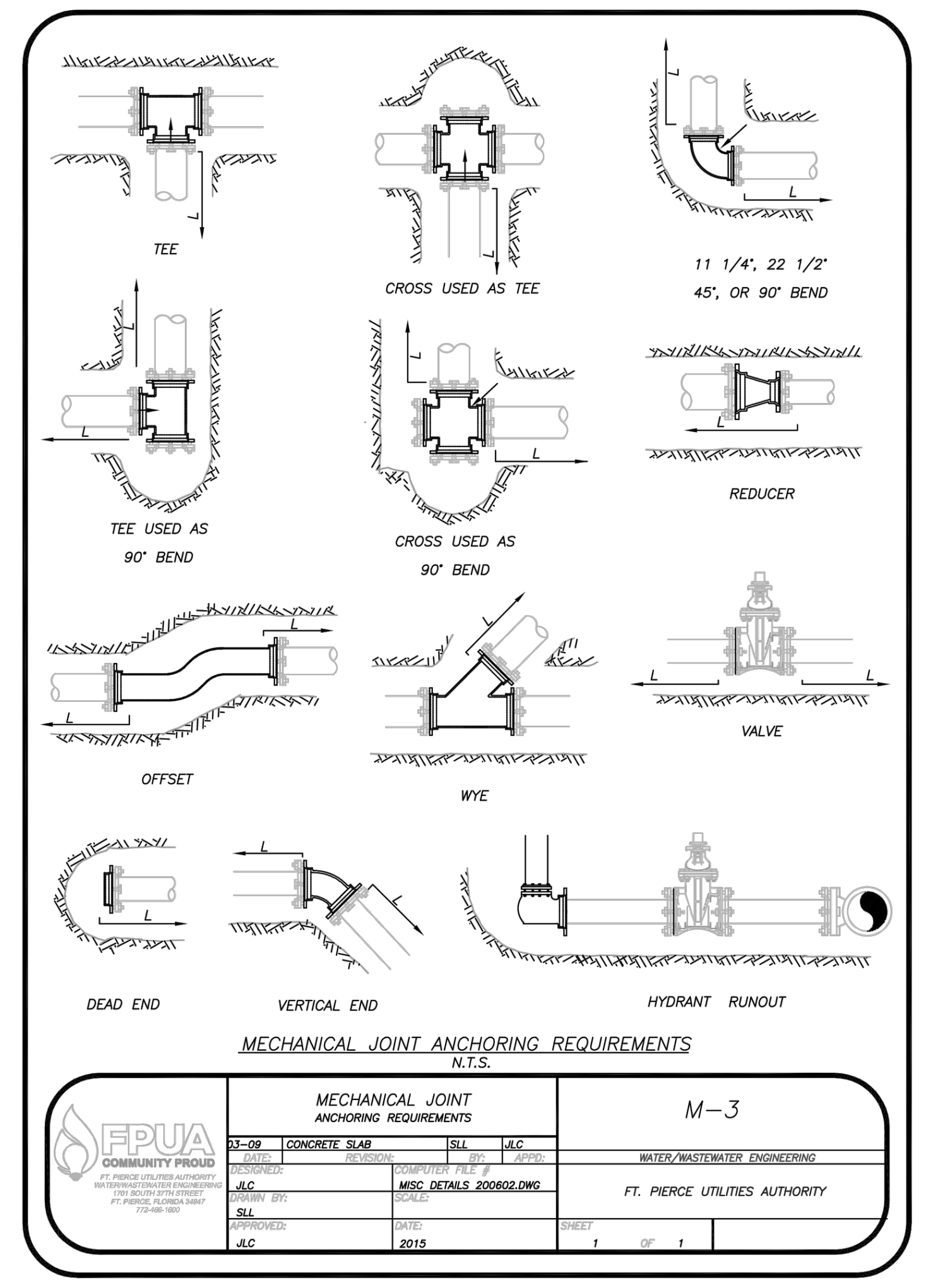
AARON J. BOWLES
FL P.E. #55313 1/31/24

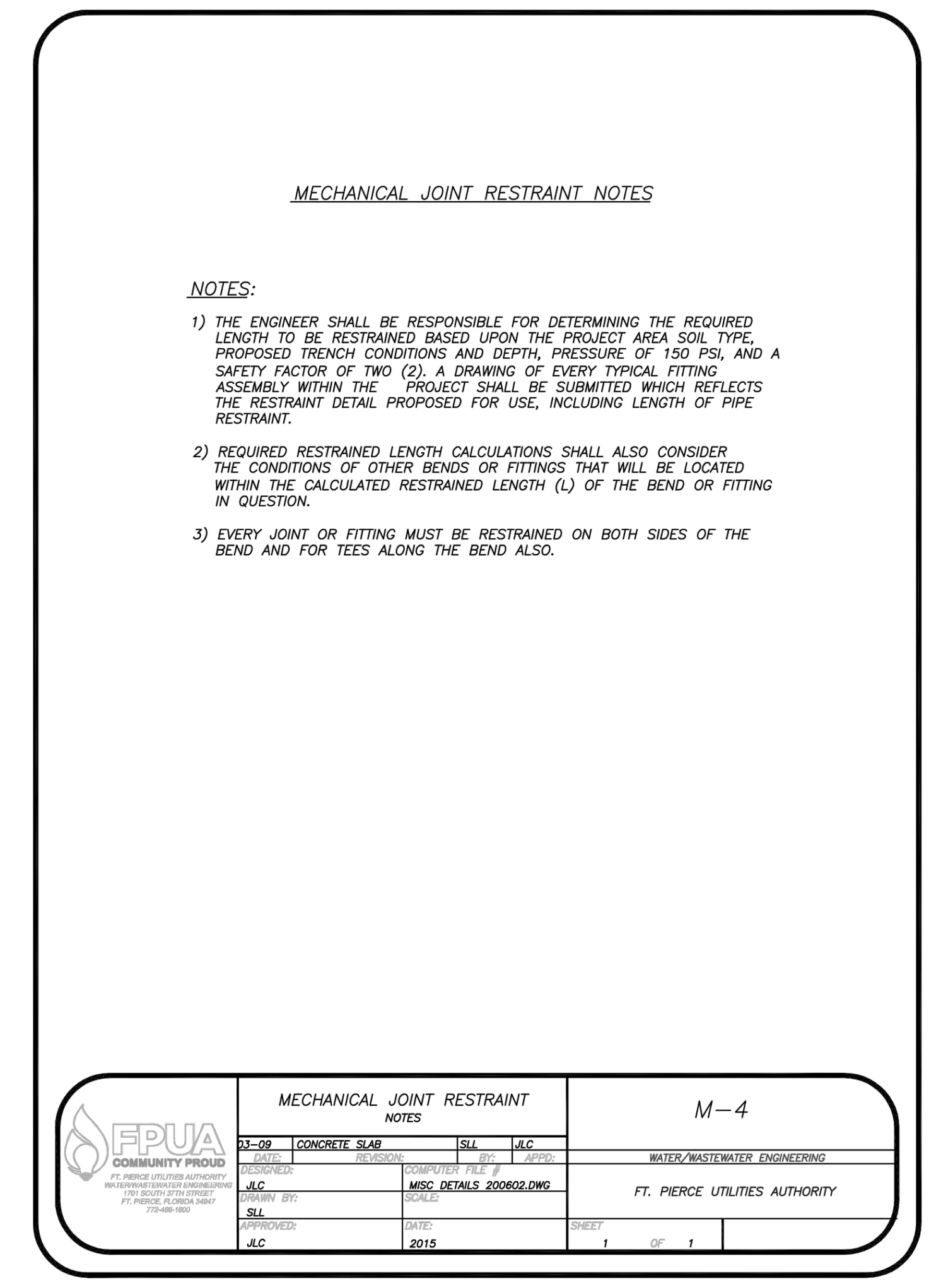
SHEET
C7

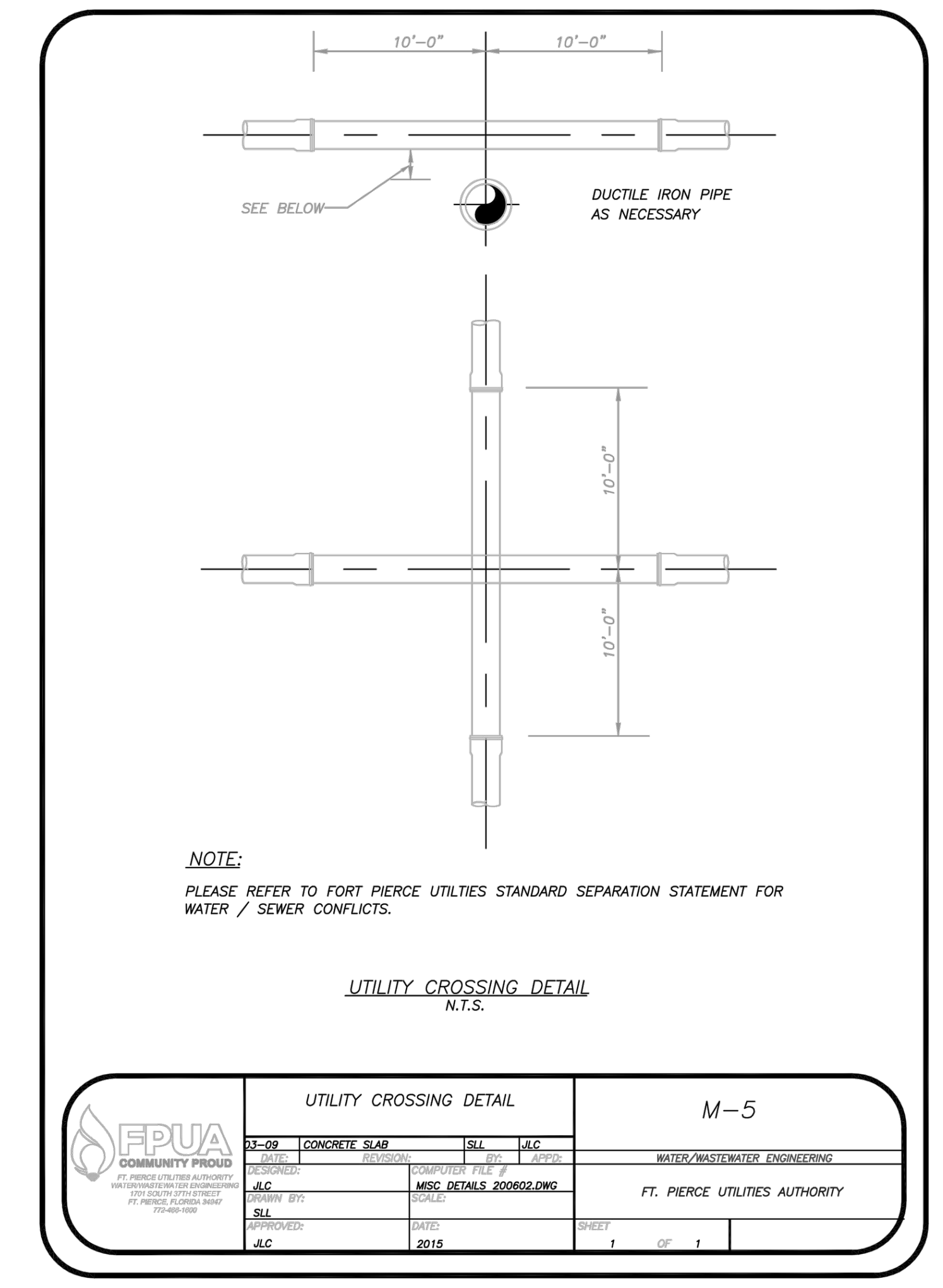
23-0060

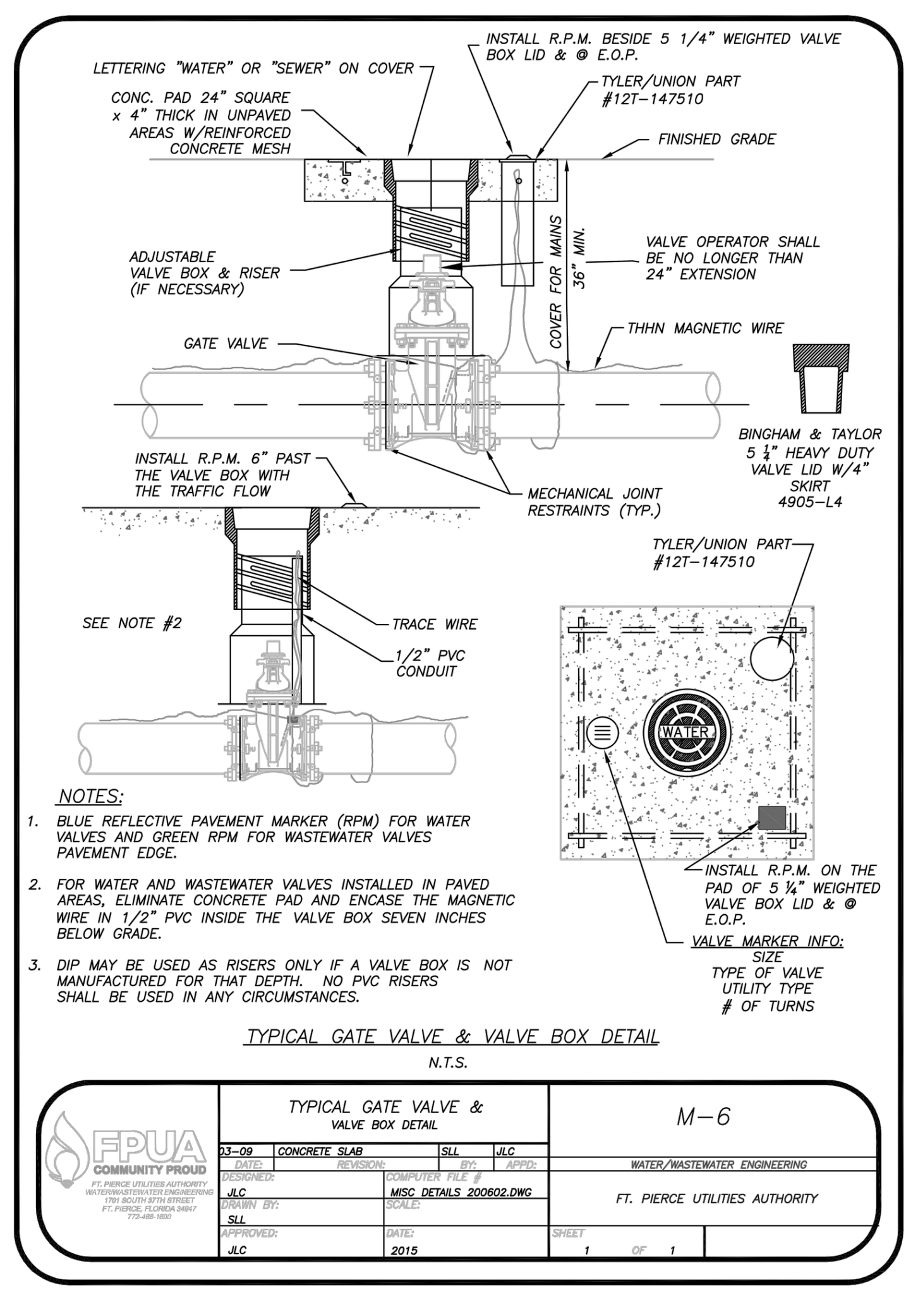


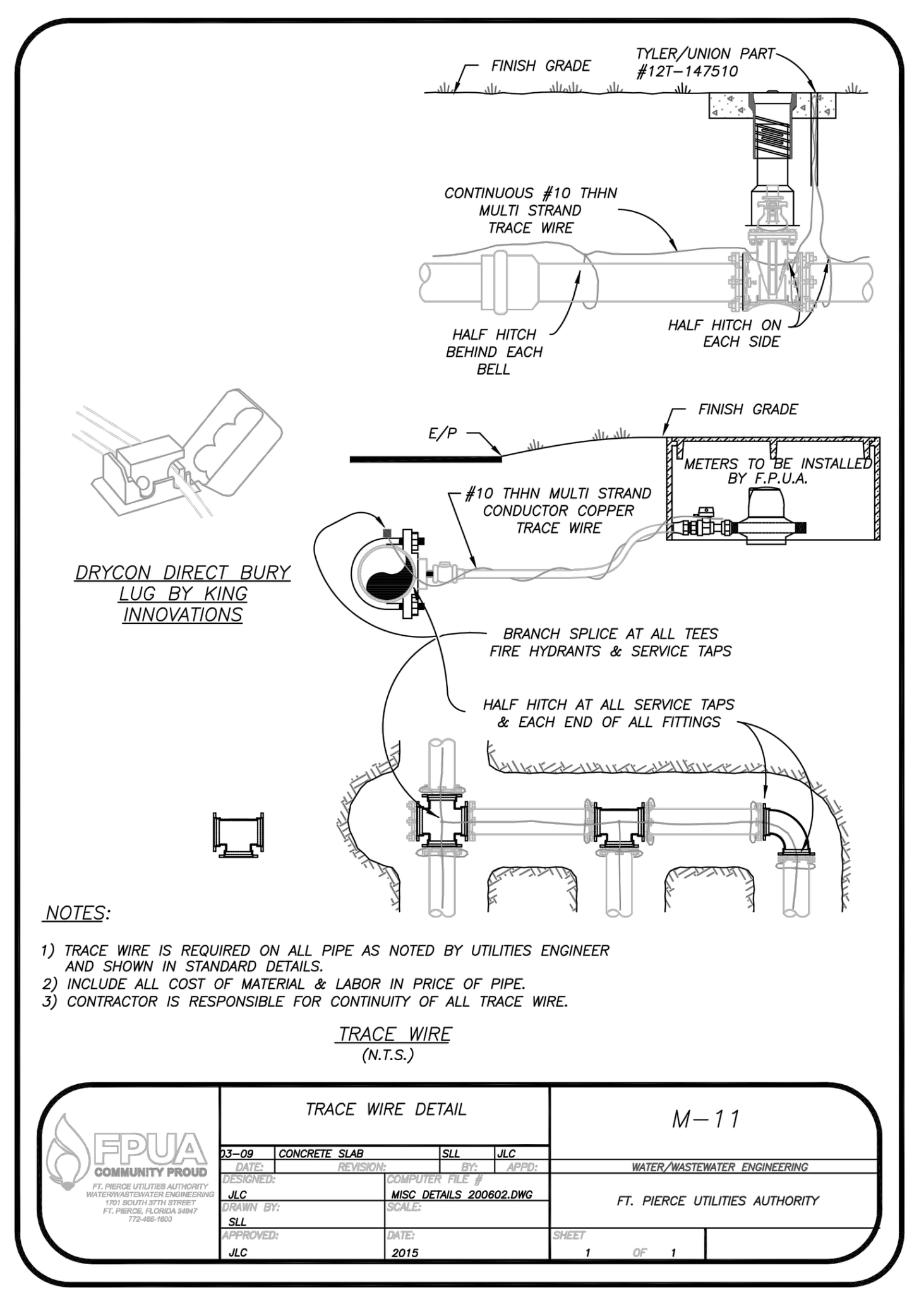


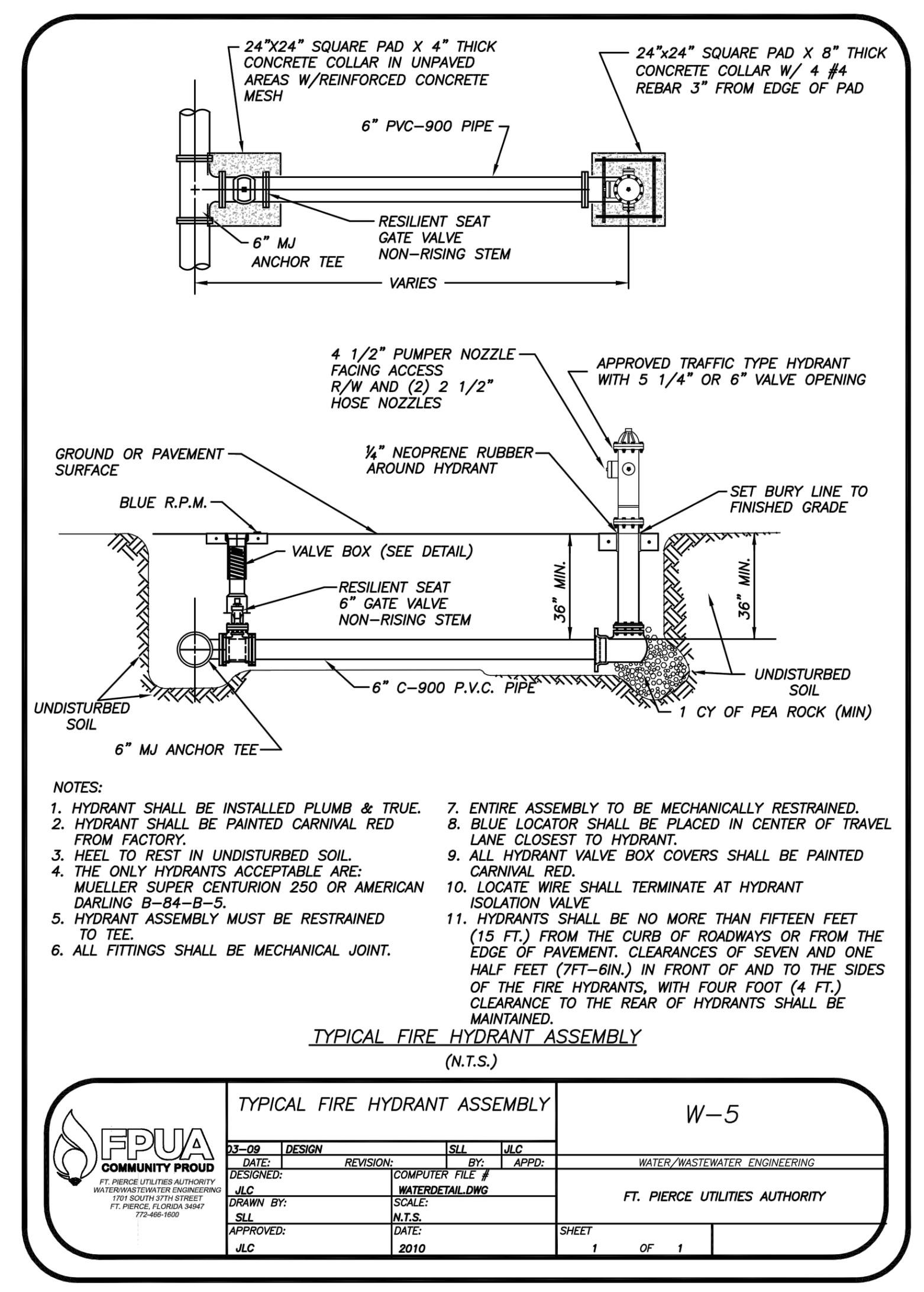


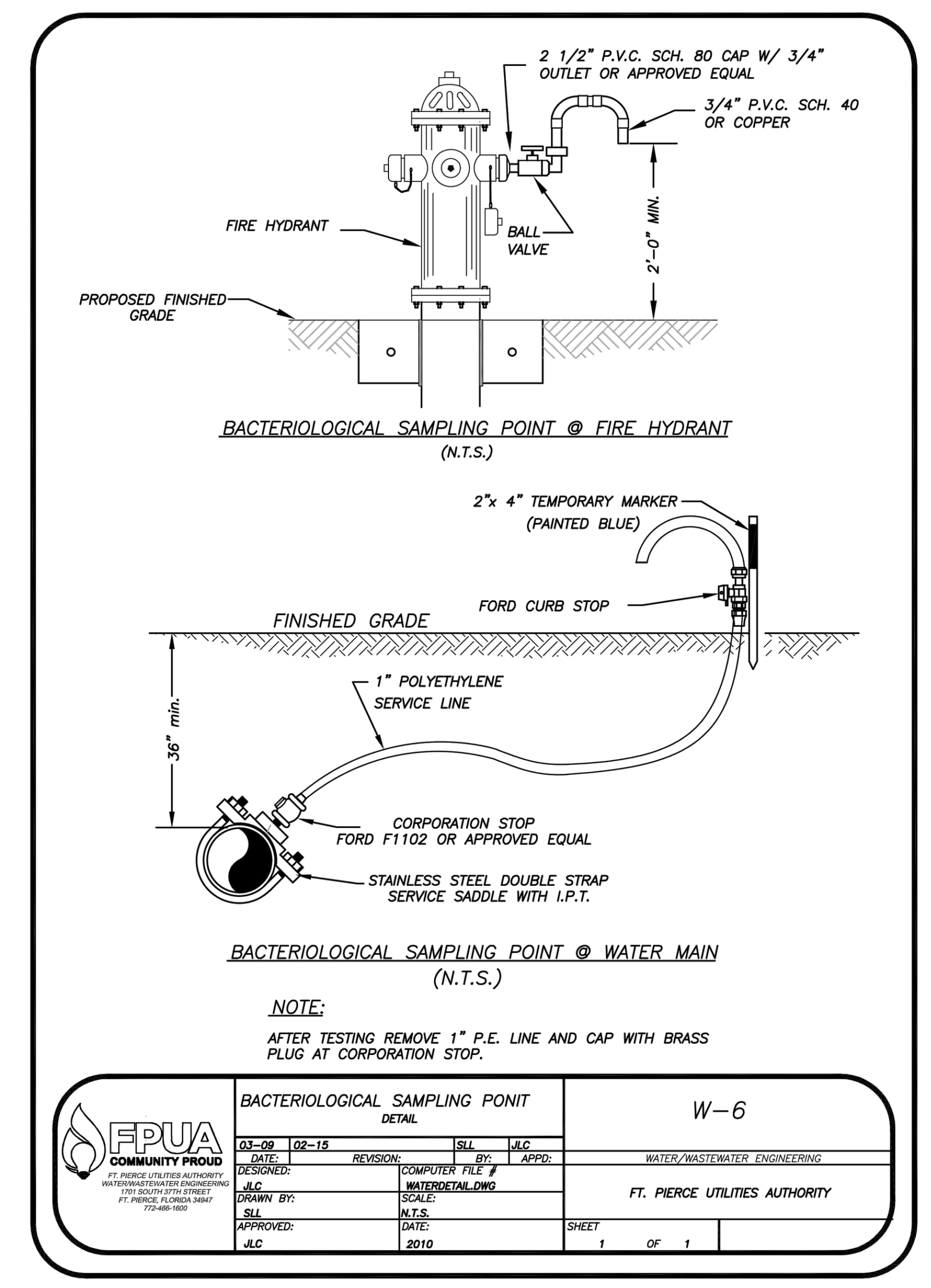


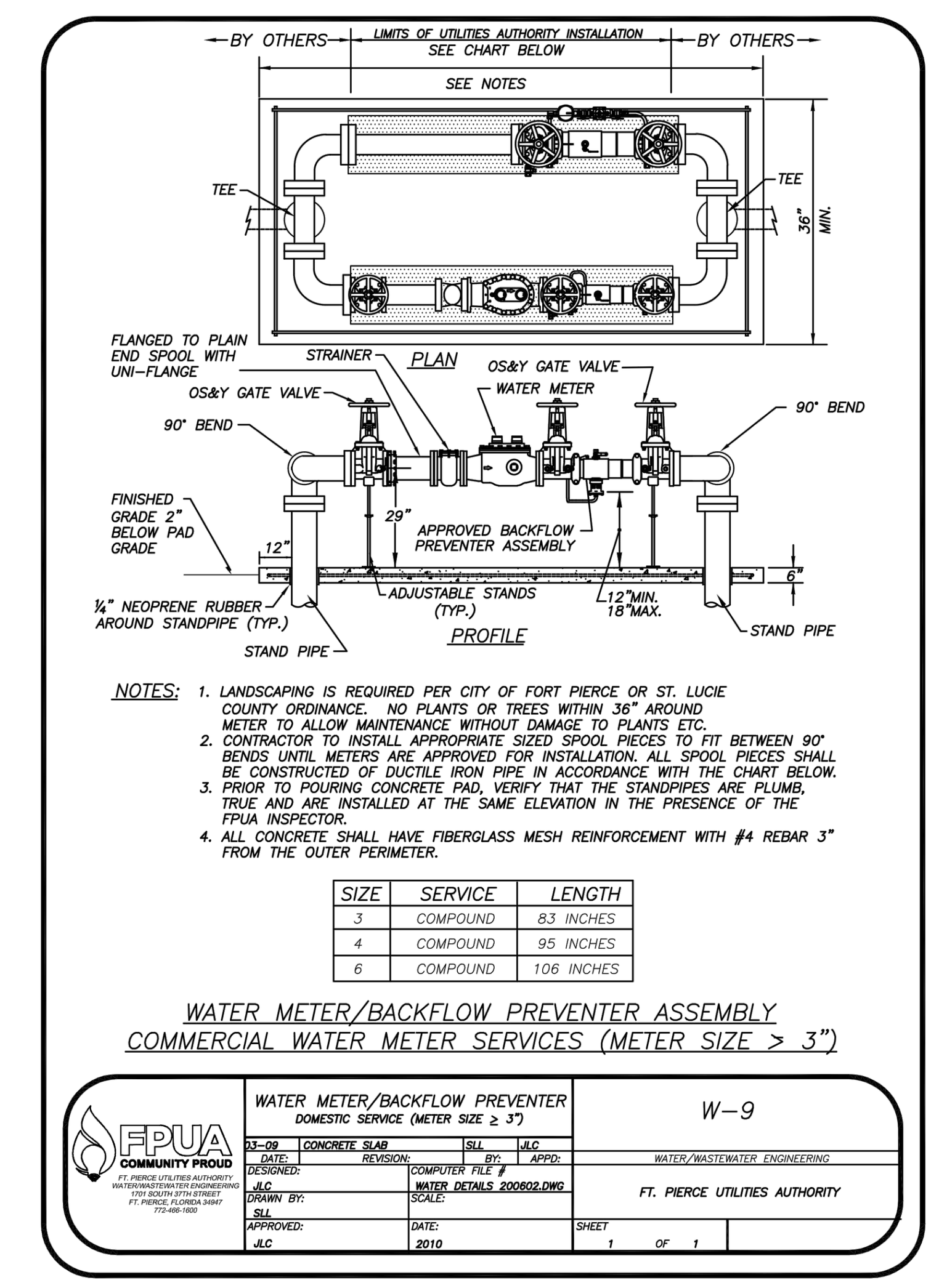


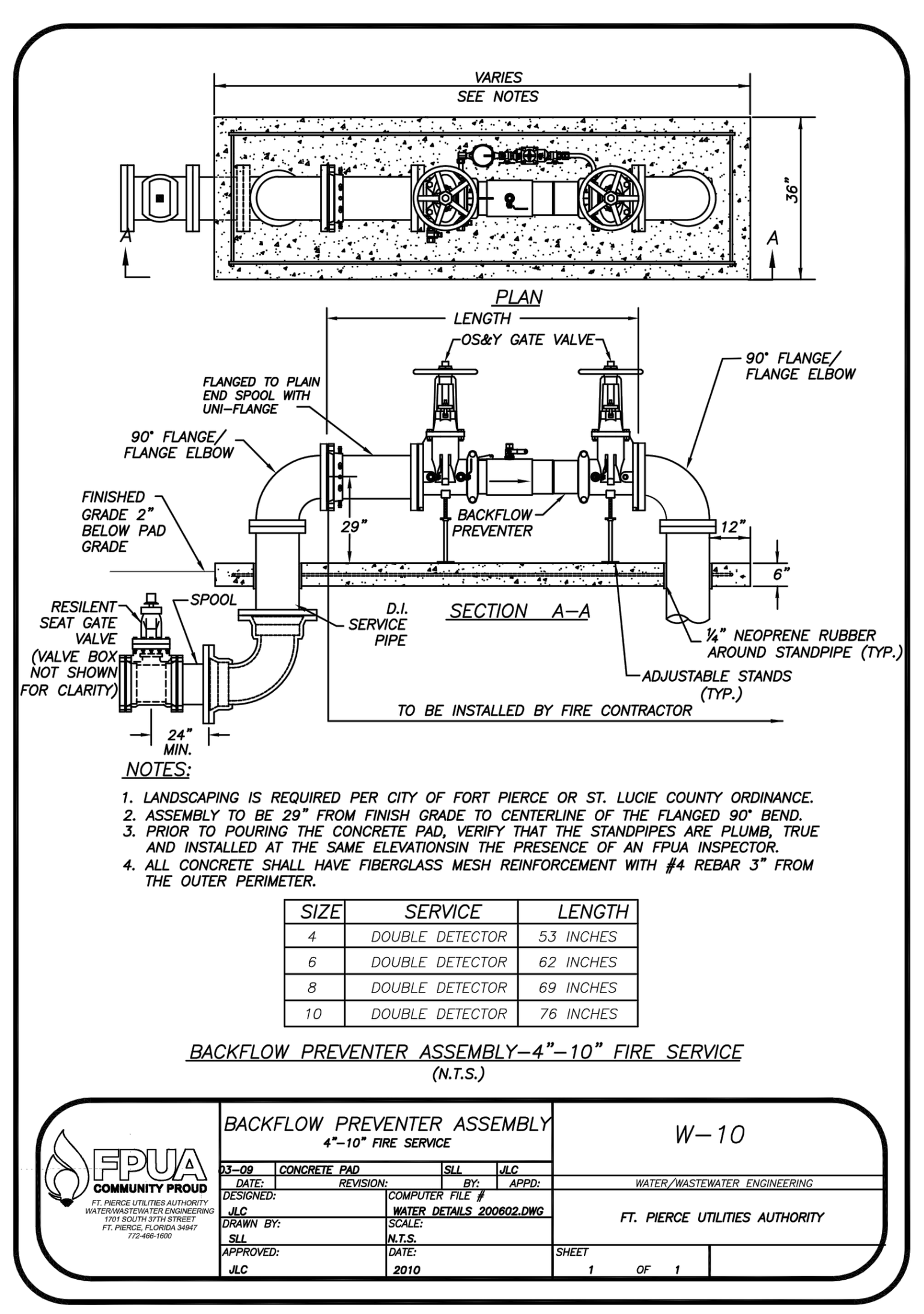


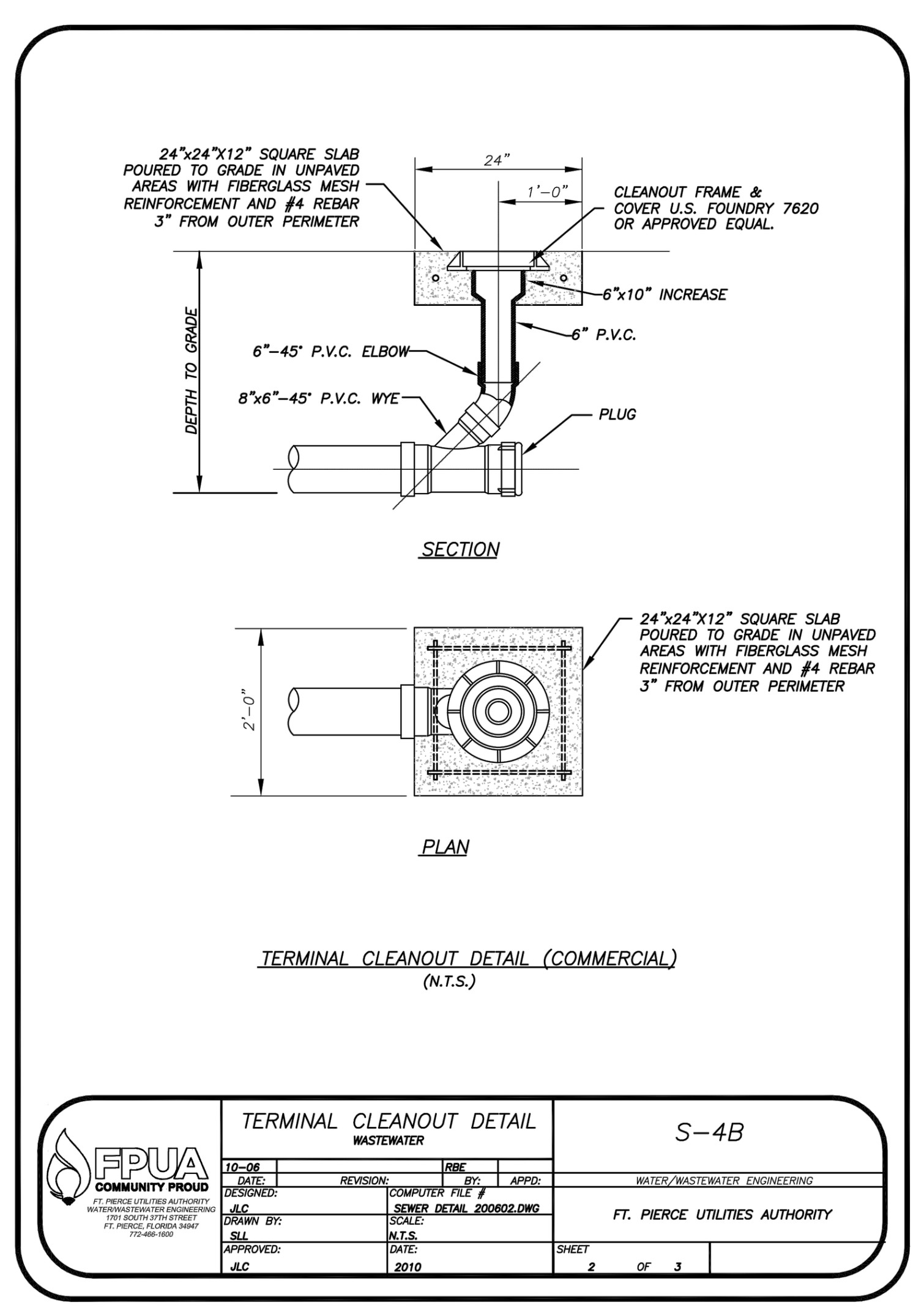


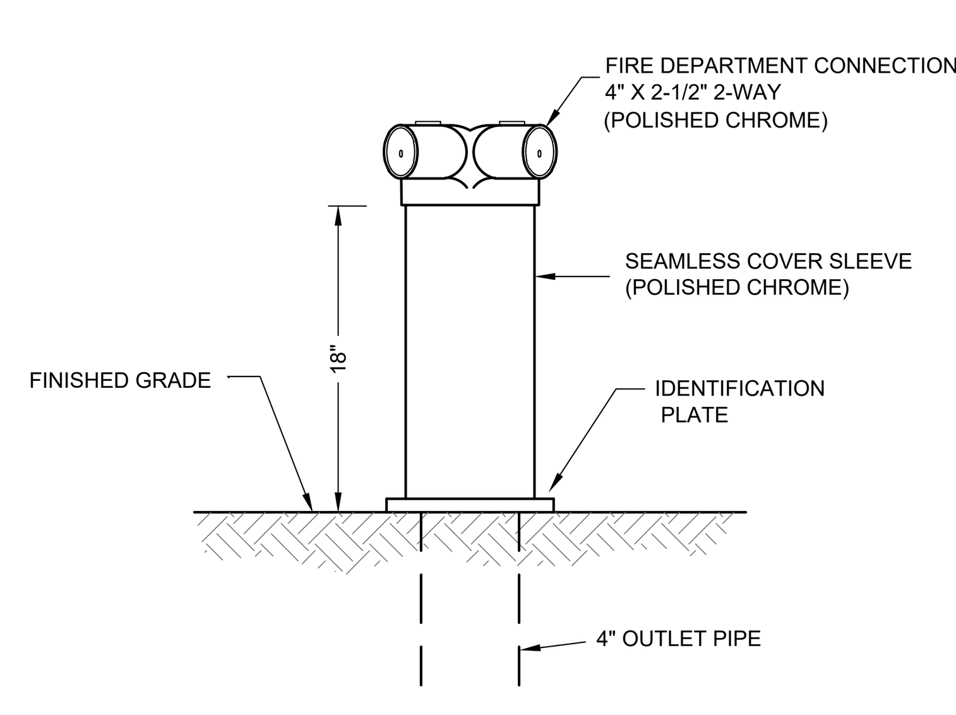












FDC (FIRE DEPT. CONNECTION) DETAIL
N.T.S.

8	
7	
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REVISIONS	DATE

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PH. (772) 569-0035
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MELBOURNE, FL - PH (321) 253-1510
FT. PIERCE, FL - PH (772) 468-9055

WATER AND SEWER DETAILS

MARGARETA VILLAS
MULTI-FAMILY

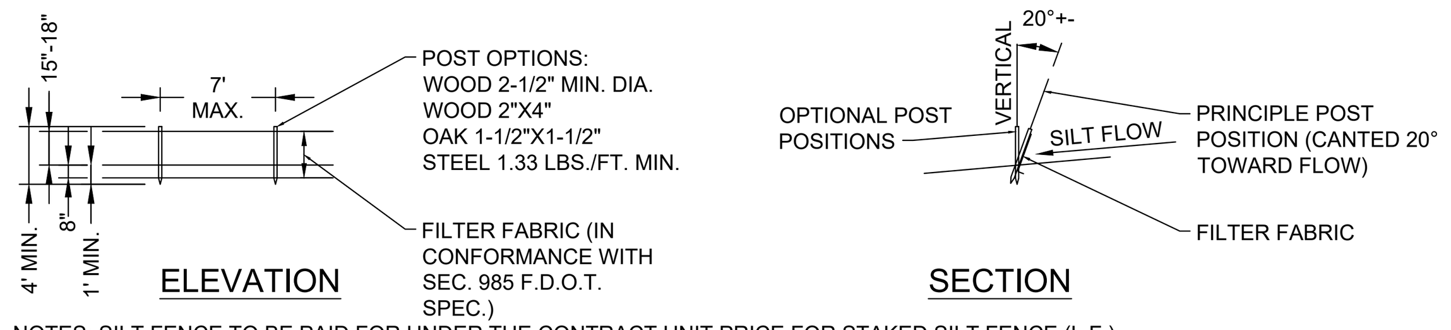
CITY OF FORT PIERCE
FLORIDA

AARON J. BOWLES
LICENSE
No. 55313
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

AARON J. BOWLES
FL. P.E. #55313 1/31/24

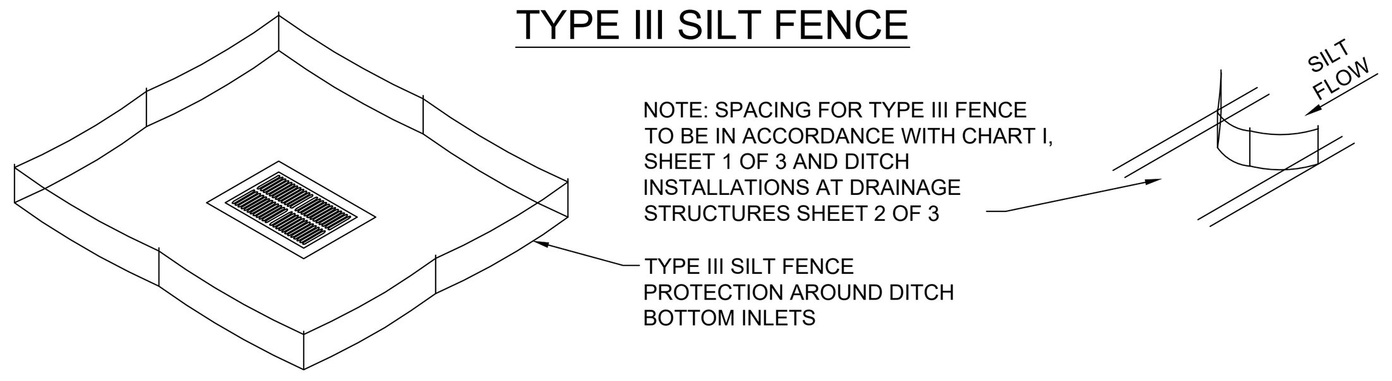
SHEET
C8

23-0060


15"-18"
7' MAX.
POST OPTIONS:
WOOD 2-1/2" MIN. DIA.
WOOD 2"X4"
OAK 1-1/2"X1-1/2"
STEEL 1.33 LBS./FT. MIN.
FILTER FABRIC (IN CONFORMANCE WITH SEC. 985 F.D.O.T. SPEC.)
4' MIN.
8"
1' MIN.
ELEVATION
20°+-
VERTICAL
OPTIONAL POST POSITIONS
SILT FLOW
PRINCIPLE POST POSITION (CANTED 20° TOWARD FLOW)
FILTER FABRIC
SECTION

NOTES: SILT FENCE TO BE PAID FOR UNDER THE CONTRACT UNIT PRICE FOR STAKED SILT FENCE (L.F.)

TYPE III SILT FENCE

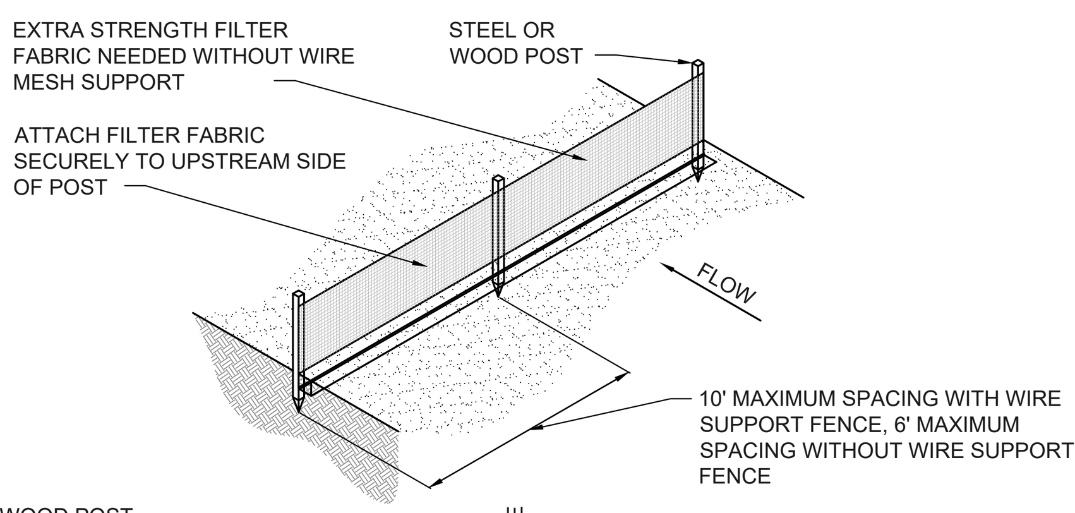


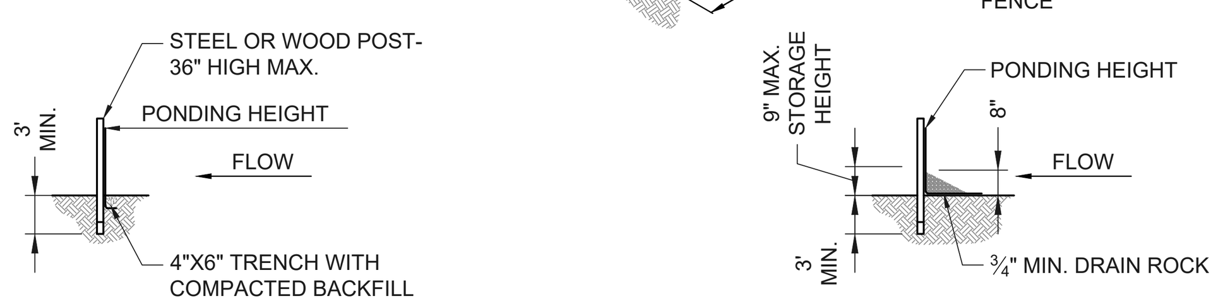
DO NOT DEPLOY IN A MANNER THAT SILT FENCES WILL ACT AS A DAM ACROSS PERMANENT FLOWING WATERCOURSES. SILT FENCES ARE TO BE USED AT UPLAND LOCATIONS AND TURBIDITY BARRIERS USED AT PERMANENT BODIES OF WATER.

SILT FENCE APPLICATIONS

N.T.S.

NOTES:
1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY.
2. INSPECT AND REPAIR FENCE AFTER EACH STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" MAXIMUM RECOMMENDED STORAGE HEIGHT.
3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.



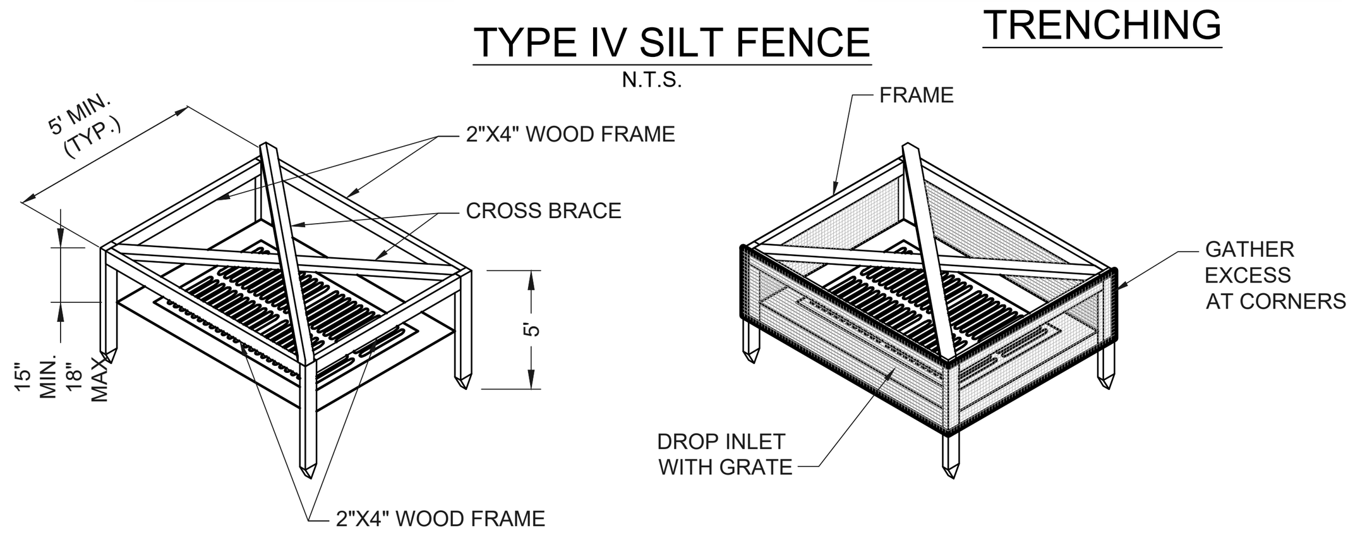


TRENCH DETAIL

INSTALLATION WITHOUT TRENCHING

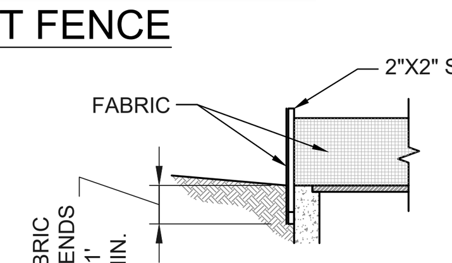
TYPE IV SILT FENCE

N.T.S.



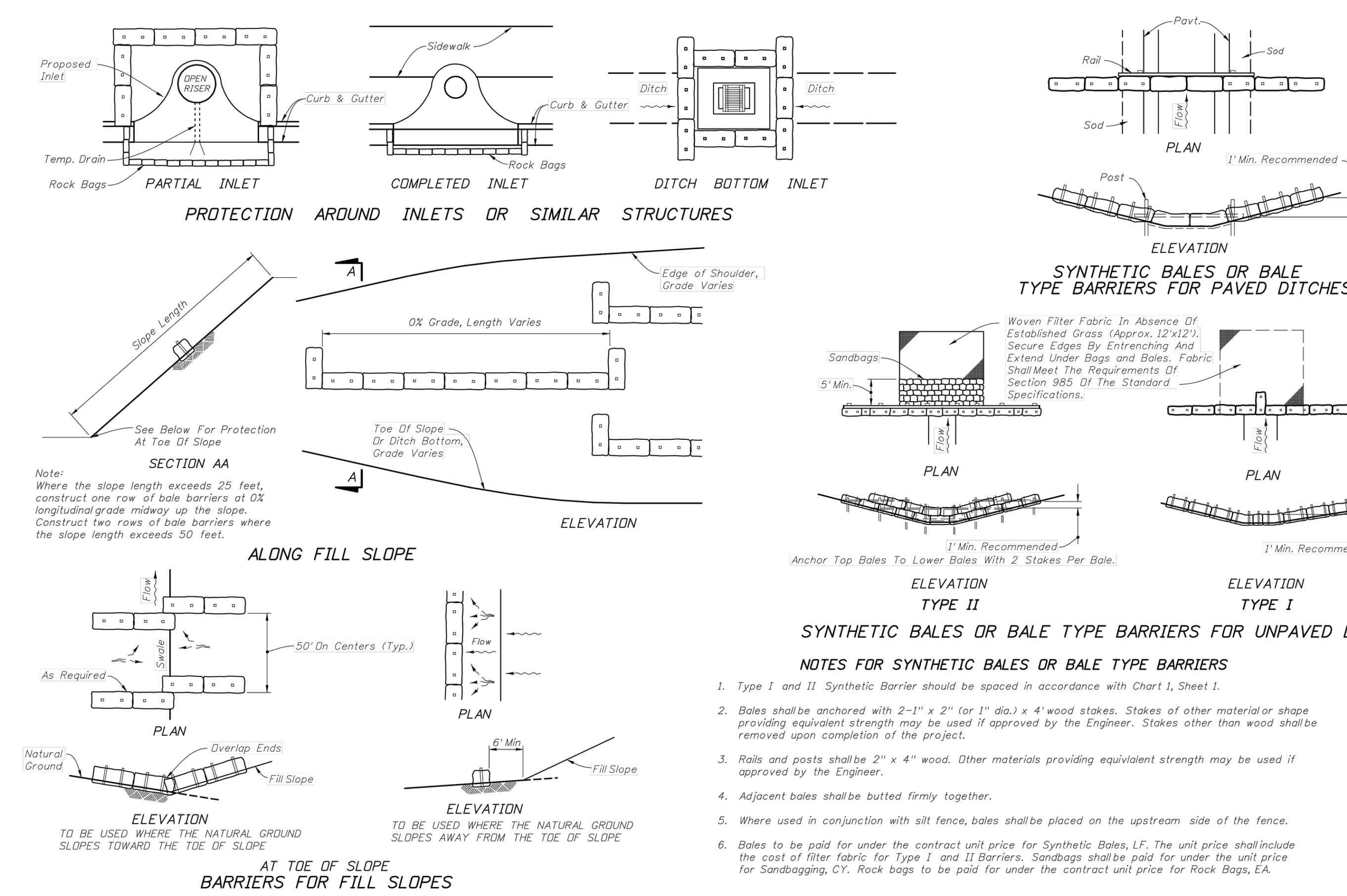
VIEW OF FRAME WITHOUT SILT FENCE

VIEW OF FRAME WITH SILT FENCE



SILT FENCE INLET PROTECTION

N.T.S.

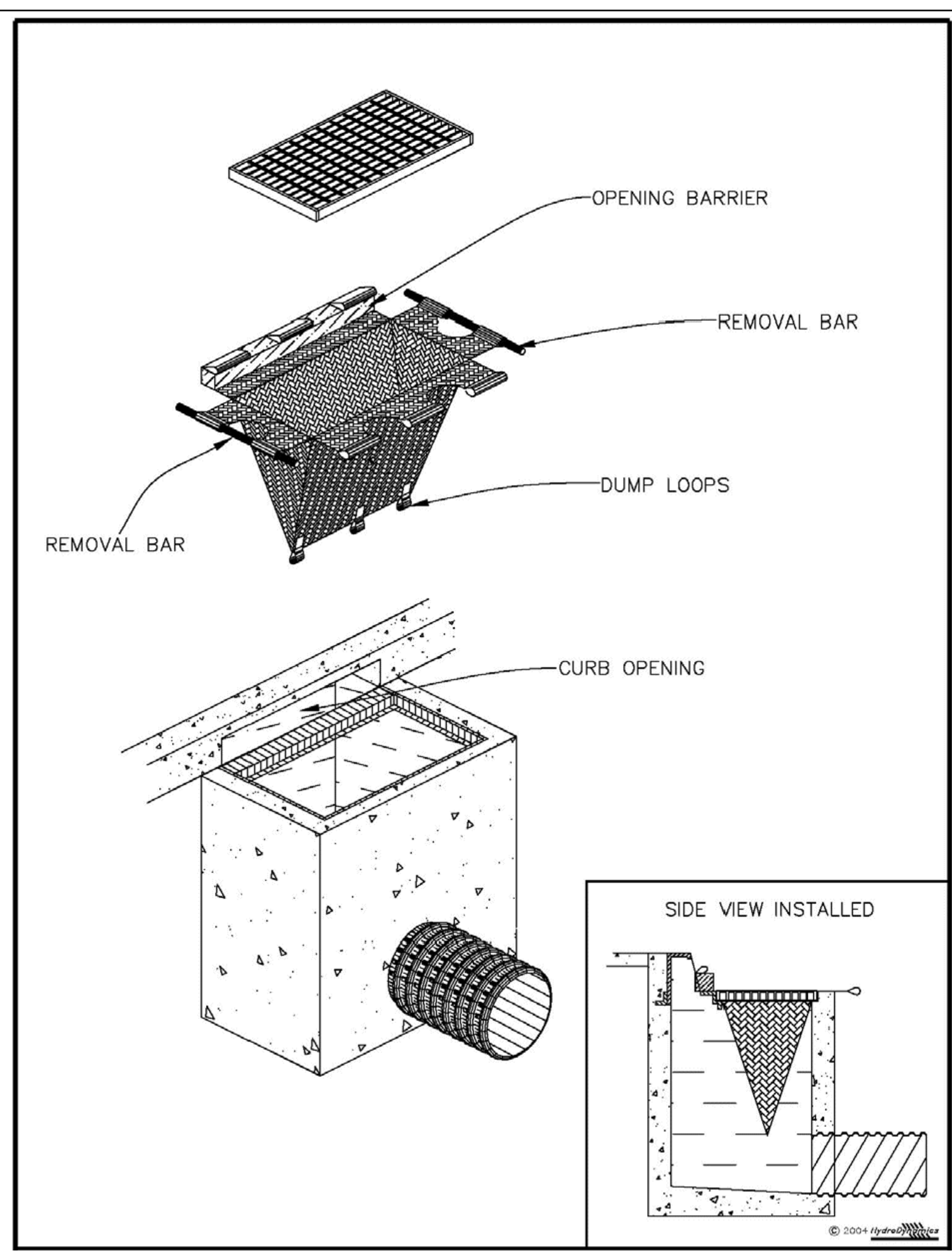

PROTECTION AROUND INLETS OR SIMILAR STRUCTURES
PARTIAL INLET
COMPLETED INLET
DITCH BOTTOM INLET
ALONG FILL SLOPE
SECTION AA
ELEVATION
PLAN
AT TOE OF SLOPE BARRIERS FOR FILL SLOPES
SYNTHETIC BALES OR BALE TYPE BARRIERS FOR PAVED DITCHES
ELEVATION TYPE II
ELEVATION TYPE I
SYNTHETIC BALES OR BALE TYPE BARRIERS FOR UNPAVED DITCHES
NOTES FOR SYNTHETIC BALES OR BALE TYPE BARRIERS

EROSION AND SEDIMENTATION CONTROL NOTES

CONSTRUCTION ACTIVITIES CAN RESULT IN THE GENERATION OF SIGNIFICANT AMOUNTS OF POLLUTANTS WHICH MAY REACH SURFACE OR GROUND WATERS. ONE OF THE PRIMARY POLLUTANTS OF SURFACE WATERS IS SEDIMENT DUE TO EROSION. EXCESSIVE QUANTITIES OF SEDIMENT WHICH REACH WATER BODIES OF FLOOD PLAINS HAVE BEEN SHOWN TO ADVERSELY AFFECT THEIR PHYSICAL, BIOLOGICAL AND CHEMICAL PROPERTIES. TRANSPORTED SEDIMENT CAN OBSTRUCT STREAM CHANNELS, REDUCE HYDRAULIC CAPACITY OF WATER BODIES OF FLOOD PLAINS, REDUCE THE DESIGN CAPACITY OF CULVERTS AND OTHER WORKS, AND ELIMINATE BENTHIC INVERTEBRATES AND FISH SPAWNING SUBSTRATES BY SILTATION. EXCESSIVE SUSPENDED SEDIMENTS REDUCE LIGHT PENETRATION AND THEREFORE, REDUCE PRIMARY PRODUCTIVITY.

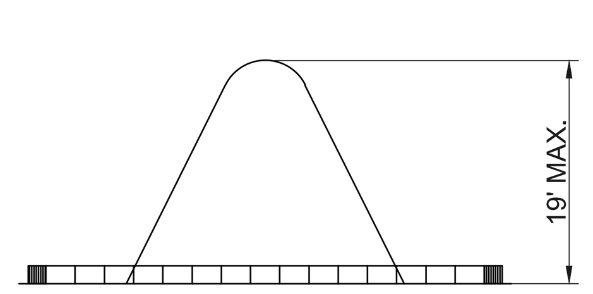
MINIMUM STANDARDS

1. SEDIMENT BASIN AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UNSLOPE LAND DISTURBANCE TAKES PLACE.
2. ALL SEDIMENT CONTROL MEASURES ARE TO BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND BE CONSTRUCTED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON BALANCE OF SITE. PERIMETER SEDIMENT BARRIERS SHALL BE CONSTRUCTED TO PREVENT SEDIMENT OR TRASH FROM FLOWING OR FLOATING ON TO ADJACENT PROPERTIES.
3. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN UNDISTURBED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT UNDISTURBED FOR MORE THAN ONE YEAR.
4. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
5. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IN THE OPINION OF THE REVIEWER, IS UNIFORM, MATURE ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
6. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
7. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE SEDIMENT BASIN SHALL BE DESIGNED AND CONSTRUCTED TO ACCOMMODATE THE ANTICIPATED SEDIMENT LOADING FROM THE LAND-DISTURBING ACTIVITY. THE OUTFALL DEVICE OR SYSTEM DESIGN SHALL TAKE INTO ACCOUNT THE TOTAL DRAINAGE AREA FLOWING THROUGH THE DISTURBED AREA TO BE SERVED BY THE BASIN.
8. AFTER ANY SIGNIFICANT RAINFALL, SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED FOR INTEGRITY. ANY DAMAGED DEVICES SHALL BE CORRECTED IMMEDIATELY.
9. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
10. WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
11. SEDIMENT WILL BE PREVENTED FROM ENTERING ANY STORM DRAIN SYSTEM, DITCH OR CHANNEL. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
12. BEFORE TEMPORARY OR NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND RECEIVING CHANNEL.
13. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
14. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES, A TEMPORARY STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSE IS COMPLETED.
16. PERIODIC INSPECTION AND MAINTENANCE OF ALL SEDIMENT CONTROL STRUCTURES MUST BE PROVIDED TO ENSURE INTENDED PURPOSE IS ACCOMPLISHED. THE DEVELOPER, OWNER AND/OR CONTRACTOR SHALL BE CONTINUALLY RESPONSIBLE FOR ALL SEDIMENT LEAVING THE PROPERTY. SEDIMENT CONTROL MEASURES SHALL BE IN WORKING CONDITION AT THE END OF EACH WORKING DAY.
17. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
    A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
    B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
    C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
    D. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
18. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY TRACKING ONTO THE PAVED SURFACE, WHERE SEDIMENT IS TRANSPORTED ONTO A PUBLIC ROAD SURFACE WITH CURBS AND GUTTERS, THE ROAD SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL SUBDIVISION LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
19. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, IN THE OPINION OF THE REVIEWER. DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
20. PROPERTIES AND WATERWAYS DOWNSTREAM FROM CONSTRUCTION SITE SHALL BE PROTECTED FROM SEDIMENT DISPOSITION AND EROSION.
21. PHASED PROJECTS SHOULD BE CLEARED IN CONJUNCTION WITH CONSTRUCTION OF EACH PHASE.
22. EROSION CONTROL DESIGN AND CONSTRUCTION SHALL FOLLOW THE REQUIREMENTS IN INDEX NOS. 104 AND 105 OF FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS.
23. THE REVIEWER MAY APPROVE MODIFICATIONS OR ALTER PLANS TO THESE EROSION CONTROL CRITERIA DUE TO SITE SPECIFIC CONDITIONS.



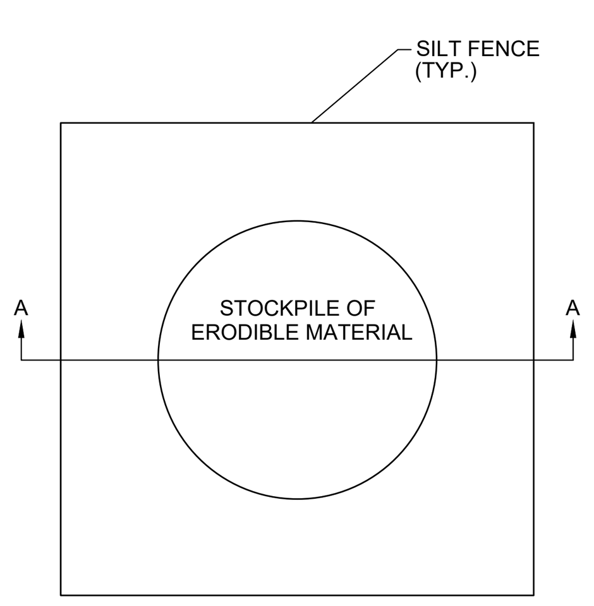
INLET INSERT SEDIMENT CONTAINMENT SYSTEM

N.T.S.



NOTE:
ALL STOCKPILES SHALL BE A MAXIMUM OF 25' HIGH.

SECTION A-A



NOTE:
FOR STOCKPILING ERODIBLE MATERIAL FOR EXTENDED PERIODS, THE AREA SHALL BE SEEDED AND MULCHED.

SEDIMENT CONTROL DETAIL FOR STOCKPILING OF ERODIBLE MATERIAL

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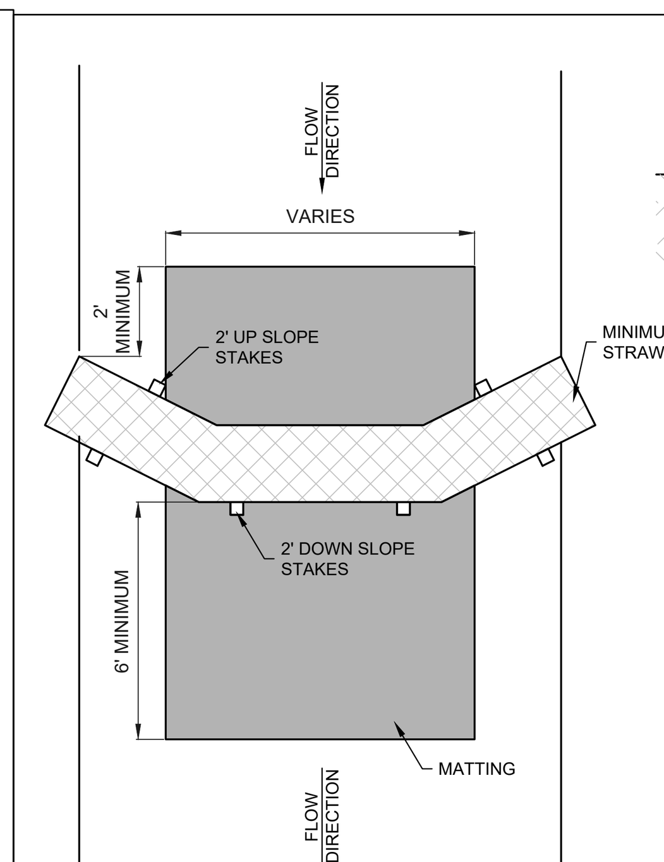
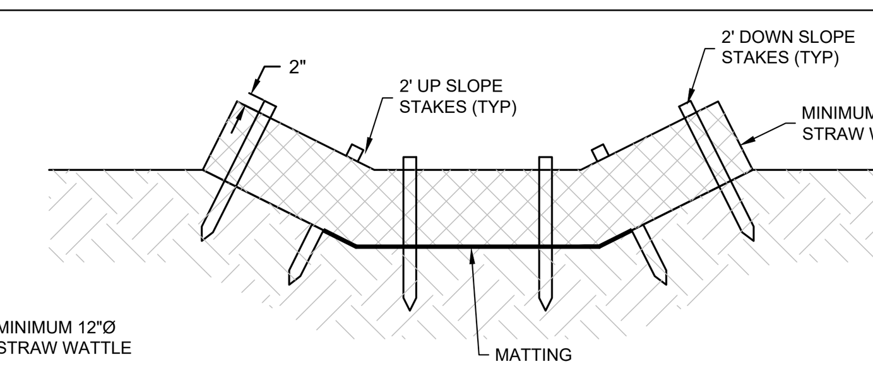


WATTLE TOP VIEW

N.T.S.



WATTLE CROSS SECTION

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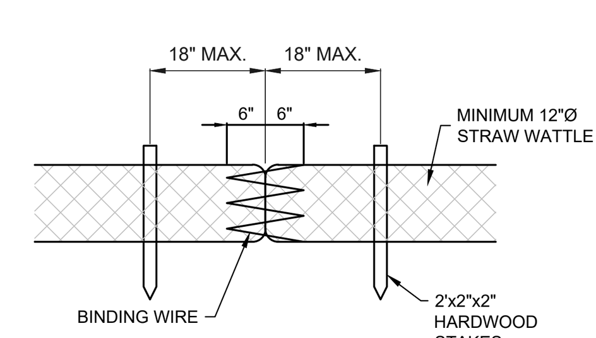

WATTLE JOINING DETAIL

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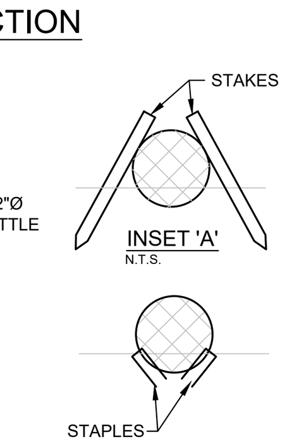

NOTES:
1. BEGIN AT THE LOCATION WHERE THE WATTLE IS TO BE INSTALLED BY EXCAVATING A 2"-3" DEEP x 9" WIDE TRENCH ALONG THE CONTOUR OF THE SLOPE. EXCAVATED SOIL SHOULD BE PLACED UP-SLOPE FROM THE ANCHOR TRENCH.
2. PLACE THE WATTLE IN THE TRENCH SO THAT IT CONTOURS TO THE SOIL SURFACE. COMPACT SOIL FROM THE EXCAVATED TRENCH AGAINST THE WATTLE ON THE UPHILL SIDE. ADJACENT WATTLES SHOULD OVERLAP 24" - SHINGLE IN DIRECTION OF FLOW.
3. SECURE THE WATTLE WITH 18"-24" STAKES EVERY 3'-4' AND WITH A STAKE ON EACH END. STAKES SHOULD BE DRIVEN THROUGH THE MIDDLE OF THE WATTLE LEAVING AT LEAST 2"-3" OF STAKE EXTENDING ABOVE THE WATTLE. STAKE SHOULD BE DRIVEN PERPENDICULAR TO SLOPE FACE.
4. USE MINIMUM 12"Ø COIR (COCONUT FIBER)/STRAW WATTLE.
5. USE 2' WOODEN STAKES WITH A 2"x2" NOMINAL CROSS SECTION.
6. ONLY INSTALL WATTLE(S) TO A HEIGHT IN DITCH SO FLOW WILL NOT WASH AROUND WATTLE AND SCOUR DITCH SLOPES AS DIRECTED.
7. INSTALL A MINIMUM OF 2 UP SLOPE STAKES AND 4 DOWN SLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO BOTTOM OF DITCH.
8. PROVIDE STAPLES MADE OF 0.125"Ø STEEL SIRE FORMED INTO A 'U; SHAPE NOT LESS THAN 12" IN LENGTH.
9. INSTALL STAPLES APPROX. EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.

WATTLE DETAILS

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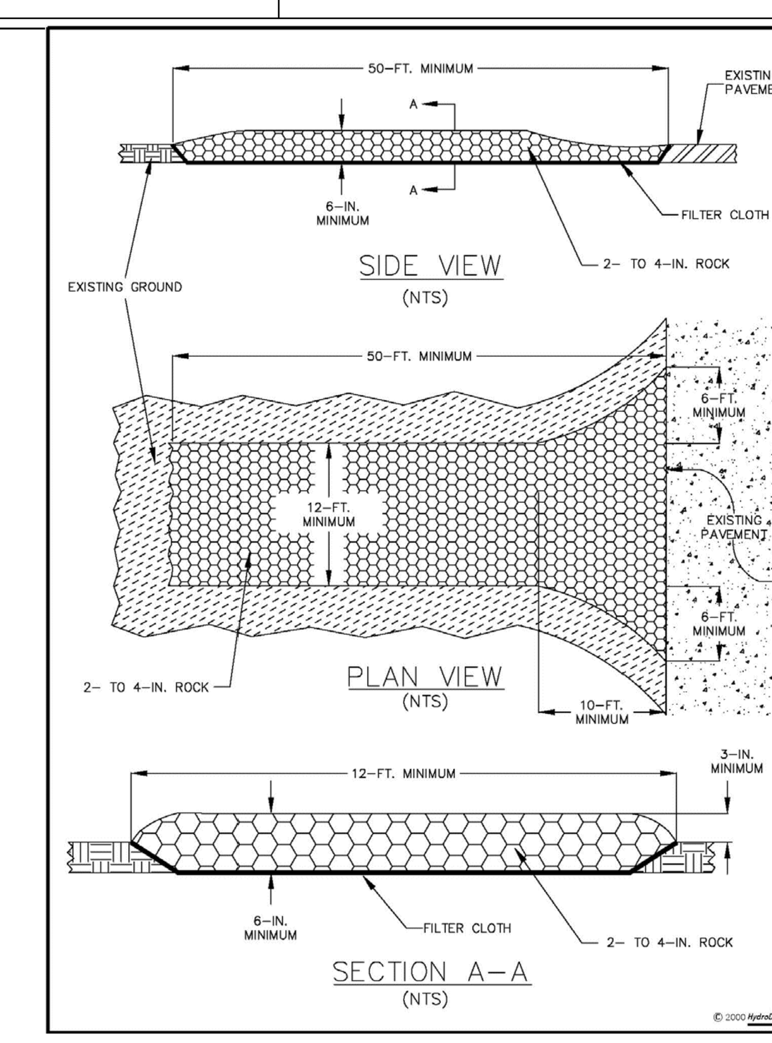

SOIL TRACKING PREVENTION DEVICE DETAIL

N.T.S.

CITY OF FORT PIERCE NOTES (EROSION CONTROL)

(a) THE CITY ENGINEERING DEPARTMENT SHALL MAKE INSPECTIONS AS HEREINAFTER REQUIRED AND NOTIFY THE BUILDING OFFICIAL UPON INSPECTION APPROVAL OR IF THE WORK FAILS TO COMPLY WITH THE EROSION AND SEDIMENT CONTROL PLAN AS APPROVED TO REQUEST A STOP-WORK ORDER. PLANS FOR GRADING / STRIPPING / EXCAVATING AND FILLING WORK BEARING THE STAMP OF APPROVAL OF THE CITY ENGINEER SHALL BE MAINTAINTED AT THE SITE DURING THE DURATION OF WORK. TO OBTAIN INSPECTIONS, THE PERMITTEE SHALL NOTIFY THE CITY ENGINEERING DEPARTMENT AT LEAST TWO WORKING DAYS BEFORE THE FOLLOWING:
(1) START OF CONSTRUCTION
(2) INSTALLATION OF SEDIMENT AND EROSION CONTROL MEASURES
(3) COMPLETION OF SITE CLEARING
(4) COMPLETION OF ROUGH GRADING
(5) COMPLETION OF FINAL GRADING
(6) CLOSE OF THE CONSTRUCTION SEASON
(7) COMPLETION OF FINAL LANDSCAPING.
(b) THE PERMITTEE SHALL BE RESPONSIBLE FOR THE FUNCTIONALITY OF ALL CONTROL MEASURES IN ACCORDANCE WITH THE INSPECTION SCHEDULE OUTLINED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
THE PURPOSE OF SUCH INSPECTIONS WILL BE TO DETERMINE THE OVERALL EFFECTIVENESS OF THE CONTROL PLAN AND POSSIBLE NEED FOR ADDITIONAL CONTROL MEASURES.
(c) THE CITY ENGINEER OR HIS DESIGNEE SHALL ENTER THE PROPERTY OF THE APPLICANT AS DEEMED NECESSARY TO MAKE REGULAR INSPECTIONS TO ENSURE THE EFFECTIVENESS OF THE CONTROL PLAN AND THE POSSIBLE NEED FOR ADDITIONAL CONTROL MEASURES.

REVISIONS	DATE
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JOB NO.	23-0060
DESIGNED	GWR
DRAWN	GWR
DATE	JANUARY 2024
CHECKED	AJB
DATE ISSUED	1/31/2024

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

EROSION CONTROL DETAILS

MARGARETA VILLAS MULTI-FAMILY

CITY OF FORT PIERCE FLORIDA

AARON J. BOWLES LICENSE No. 55313 STATE OF FLORIDA PROFESSIONAL ENGINEER

AARON J. BOWLES
FL P.E. #55313 1/31/24

SHEET

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