THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

DEVELOPMENT REVIEW

Property address or Location NEC US 1 & Ohio Ave, FT. Pierce, FL

Parcel ID #(s) 2415-602-0002-000-2

Project description Construct a 4-story climate controlled storage facility approximately 106,860 SF

LGFTP I LLC (DBA: Fort Pierce Self Storage LLC, Daniel Abreu)	Edward M. McDonald/ Principal/ Thomas Engineering Group
Property Owner(s)	**Applicant/Representative, Title, Company**
14011 SW 20th Street	1502 W. Fletcher Ave. Suite 101
Street Address	Street Address
Miami FL 33175	Tampa FL 33612
City State Zip	City State Zip
954-755-5817	813-379-4100
Phone Number	Phone Number
rich@lginst.net	emcdonald@thomaseg.com
Email Address	Email Address

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

Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY

The foregoing instrument was acknowledged before me this 20 day of October, 2021, by Daniel Abreu who is personally known to me or has produced _____ as identification.

Signature of Notary (seal)

NOTARY PUBLIC STATE OF FLORIDA
MAYTEE HERNANDEZ
Commission # GG 916449
Expires January 24, 2024
Bonded Thru Budget Notary Services

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

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic District	Historic Designation
				Contributing Individual Non-Contributing None

Pre-Application Meeting Date_____

Intake Planner_____

Planner Assigned_____

Approved By_____ Date _____

Comments_____

Fees_____ Control #_____ B. Permit #_____

Intake Date Stamp

❑ DEVELOPMENT REVIEW

General Information

- ❑ Incomplete application packets cannot be accepted.
- ❑ Site Plan approval is valid for one (1) year following City Commission approval. In order to maintain site plan approval, vertical improvements, permitted by the Building Department must commence prior to the 12-month expiration date, and building permits must be maintained until site plan is completed, per plans, or approval shall lapse.

Choose Application Type:

Application Type		
■ Site Plan	■ Conditional Use with New Const.	❑ Major Amendment
❑ Conceptual Development Plan		❑ Minor Amendment

Site Information:

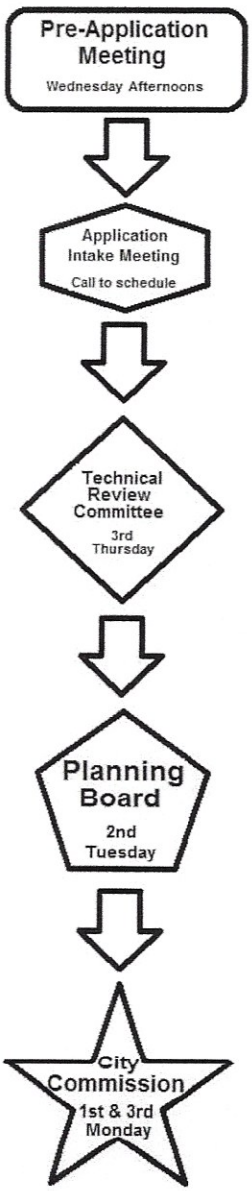
Site: 60,039

Non-Residential: Proposed Sq. Ft.: _____ Residential: Proposed Units: 0

Surrounding Uses: *(i.e. single family home, retail, industrial, etc.)*

North	South	East	West
Retail	Retail	OS	Retail

Application Outlook



Site Plan submittal requirements:

Submit one (1) original & thirteen (13) hard copies and one (1) CD of the following. Additional copies will be required of subsequent submittals.

- ❑ Complete notarized application
- ❑ Warranty Deed
- ❑ SLC Property Record Card
- ❑ Statements of ownership & control of proposed development. Statement describing in detail: character & intended use.
- ❑ General location map (see Section 22-58.d.2)
- ❑ Survey (see Section 22-58.d.3)
- ❑ Site Plan (see Section 22-58.d.4)
- ❑ Landscaping Plan (see Section 22-187)
- ❑ Storm Drainage Plan (see Section 22-58.d.6)
- ❑ Environmental Impact Report
- ❑ Beach/Dune System protection plan, if applicable (see Section 22-58.d.7)
- ❑ Lighting Plan (see Section 22-58.d.8)
- ❑ Design Review submittals (see Design Review application)
- ❑ Traffic Impact Report
- ❑ Concurrency Review submittals (see Concurrency Review application)

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

Design Review

Property address or Location NEC US1 & Ohio Ave, FT. Pierce, FL

Parcel ID #(s) 2415-602-0002-000-2

Project Description Construct a 4-story climate controlled storage facility approximately 106,860 SF

LGFTP I LLC (DBA: Fort Pierce Self Storage LLC, Daniel Abreu)	Thomas Engineering Group
Property Owner(s)	Applicant/Representative, Title, Company
14011 SW 20th Street	1502 W Fletcher Avenue, Suite 101
Street Address	Street Address
Miami FL 33175	Tampa FL 33612
City State Zip	City State Zip
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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 Application (if other than the property owner) and/or Representative to act in his/her behalf for the purposes of seeking approval for the application described herein.*

Property Owner(s) Signature(s)

STATE OF FLORIDA -- COUNTY

The foregoing instrument was acknowledged before me this 20 day of October, 2021, by Daniel Abreu who is personally known to me or has produced _____ as identification.

MAYTEE HERNANDEZ
Commission # GG 916449
Expires January 24, 2024
Bonded Thru Budget Notary Services

Signature of Notary

(seal)

TO BE COMPLETED BY STAFF

Zoning	Future Land Use	Total Acres	Historic Districts	Historic Designation

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

Intake Planner _____

Planner Assigned _____

Approved _____ Date _____

Comments _____

Intake Date Stamp

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

Submittal for Administrative Approval

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

Submittal for Board Approval

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

Building Use and Environment Narrative

for

Fort Pierce Storage Facility

S US Highway 1, Fort Pierce
St. Lucie County, Florida

Prepared for:

Leonardi Investment Group

Prepared by

1502 W. Fletcher Ave, Suite 101
Tampa, FL 33612
813-379-4100

October 15, 2021

TEG Project # FT210079

Project Name: **Fort Pierce Storage Facility**
Location: **S US Highway 1, City of Fort Pierce, St. Lucie County, FL**
Sec/Twp/Rge: **S15/T35S/R40E**
Permittee: **LGFTP I LLC (DBA Fort Pierce Self Storage LLC)**
Property Owner: **LGFTP I LLC (DBA Fort Pierce Self Storage LLC)**
Project Area: **1.38 Acres**

I. Building Narrative

The proposed building is a four-story, climate-controlled, self-storage facility located off on US Highway 1. The hours of operation may vary based on local demands. The expected hours of operation will be from 6AM to 10PM. The storage facility will employee approximately three to five people with two employees per shift.

II. Environmental Impact Statement

An environmental engineer was contacted and provided the following statement

"The most recent Phase II Environmental Site Assessment conducted during August 2021 demonstrated that petroleum hydrocarbon impacted groundwater is present at the property at levels which will require further assessment and remediation. Furthermore, Phase II ESA demonstrated that petroleum hydrocarbon concentrations in excess of the Leachability standards have been identified in the soil. Currently, our environmental consultant is working on a proposal to continue the assessment in an effort to define the extent of the impacted groundwater and soil both vertically and horizontally. In addition, interim remedial action strategies will be implemented in an effort to mitigate these impacts."

III. FDOT and SFWMD

Required permits will be submitted and approved prior to site approval.

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

Property Identification

Site Address: TBD
Sec/Town/Range: 15/35S/40E
Parcel ID: 2415-602-0002-000-2
Jurisdiction: Fort Pierce

Use Type: 1000
Account #: 181883
Map ID: 24/15N
Zoning: General Co

Ownership

LGFTP I LLC
7307 NW 122nd AVE
Parkland, FL 33076

Legal Description

LG CENTER (PB 74-39) LOT 2 (1.38 AC - 60,113 SF)

Current Values

Just/Market Value:	$270,500
Assessed Value:	$270,500
Exemptions:	$0
Taxable Value:	$270,500

Property taxes are subject to change upon change of ownership.

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

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

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	1.38
Land Size (SF):	60,113

Building Design Wind Speed

Occupancy Category	I	II	III & IV
Speed	140	160	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price

Special Features and Yard Items

Type	Qty	Units	Year Blt

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$270,500
Just/Market:	$270,500
Ag Credit:	$0

Current Year Exemption Value Breakdown

Save Our Homes or 10% Cap:	$0
Assessed:	$270,500
Exemption(s):	$0
Taxable:	$270,500

Current Year Special Assessment Breakdown

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
2020	$270,500	$270,500	$0	$270,500
2019	$270,500	$270,500	$0	$270,500
2018	$270,500	$270,500	$0	$270,500

Permits

Number	Issue Date	Description	Amount	Fee
BP17-0880	May 23, 2017	Commercial New Construction	$2,336,928	$0
BP17-0887	May 18, 2017	Site Work	$700,000	$0

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

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
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July 30, 2021

LETTER OF AUTHORIZATION

To Whom It May Concern:

Please accept this letter as authorization for Edward M. McDonald with Thomas Engineering Group LLC, to serve as Agent for any permitting or other governmental approvals including City of Fort Pierce, St. Lucie County, FDEP, and SFWMD, on behalf of **LGFTP I LLC.** for the proposed development located at **Enter Address Here.**
I hereby designate and authorize **Thomas Engineering Group, LLC** to act on my behalf, or on behalf of my corporation, as the agent in the processing of this application for the permit and/or proprietary authorization indicated above; and to furnish, on request, supplemental information in support of the application. In addition, I authorize the above-listed agent to bind me, or my corporation, to perform any requirements which may be necessary to procure the permit or authorization indicated above.

Signature: Rich Leonardi

Company: LGFTP I LLC

Printed Name: Rich J. Leonardi

Title: MGR

Address: 7307 NW 122nd Avenue

City: Parkland State:FL Zip:33076

Phone:954-755-5817

Email:rich@lginvest.net

STATE OF Florida COUNTY OF Broward
On this 30 day of July, 2021, before me, the undersigned Notary Public of the State of Florida, personally appeared Rich Leonardi and whose name(s) is/are subscribed to the within instrument, and acknowledge that he/she/they executed it. The individual(s) is/are ✓ personally known to me, or ___ presented the following identification: _____.

WITNESS my hand and official seal. NOTARY SEAL & COMMISSION EXPIRATION:

Notary Signature

MARTHA E. MENDIBLE
Notary Public - State of Florida
Commission # GG 280552
My Comm. Expires Nov 29, 2022
Bonded through National Notary Assn.

Electronic Articles of Organization
For
Florida Limited Liability Company

L21000321263
FILED 8:00 AM
July 14, 2021
Sec. Of State
jcmiller

Article I

The name of the Limited Liability Company is:

FORT PIERCE SELF STORAGE LLC

Article II

The street address of the principal office of the Limited Liability Company is:

14011 SW 20 STREET
MIAMI, FL. 33175

The mailing address of the Limited Liability Company is:

14011 SW 20 STREET
MIAMI, FL. 33175

Article III

The name and Florida street address of the registered agent is:

DANIEL ABREU
14011 SW 20 STREET
MIAMI, FL. 33175

Having been named as registered agent and to accept service of process for the above stated limited liability company at the place designated in this certificate, I hereby accept the appointment as registered agent and agree to act in this capacity. I further agree to comply with the provisions of all statutes relating to the proper and complete performance of my duties, and I am familiar with and accept the obligations of my position as registered agent.

Registered Agent Signature: DANIEL ABREU

Article IV

L21000321263
FILED 8:00 AM
July 14, 2021
Sec. Of State
jcmiller

The name and address of person(s) authorized to manage LLC:

Title: MBR
TPAD FORT PIERCE LLC
14011 SW 20 STREET
MIAMI, FL. 33175

Title: MBR
LGFTP I, LLC
5944 CORAL RIDGE DRIVE, SUITE 312
CORAL SPRINGS, FL. 33076

Signature of member or an authorized representative

Electronic Signature: DANIEL ABREU

I am the member or authorized representative submitting these Articles of Organization and affirm that the facts stated herein are true. I am aware that false information submitted in a document to the Department of State constitutes a third degree felony as provided for in s.817.155, F.S. I understand the requirement to file an annual report between January 1st and May 1st in the calendar year following formation of the LLC and every year thereafter to maintain "active" status.

FILE # 4297810 OR BOOK 3984 PAGE 2394, Recorded 04/13/2017 04:05:27 PM Doc Tax: $3500.00

THIS INSTRUMENT WAS PREPARED BY:

REGINA NAPPI, ESQ.
TD BANK, N.A.
75 JOHN ROBERTS ROAD, BLDG. B
SOUTH PORTLAND, ME 04106

PARCEL ID# 2415-601-0448-000-7 & 2415-601-0449-000-4

SPECIAL WARRANTY DEED

THIS INDENTURE, made this 12 day of April, 2017, between **FIRST CITIZENS PREMISES COMPANY, INC**, a Florida corporation, whose address is 2211 Okeechobee Road, Fort Pierce, FL 34950 ("Grantor"), and **LGFTP I, LLC,** a Florida limited liability company, whose address is 7307 NW 122nd Avenue, Parkland, FL 33076 ("Grantee"):

WITNESSETH THAT:

Grantor, for and in consideration of the sum of Ten and No/100 U.S. Dollars ($10.00), lawful money of the United States of America, to it in hand paid by the Grantee, at or before the ensealing and delivery of these presents, the receipt of which is hereby acknowledged, has granted, bargained, sold, alienated, remised, released, conveyed and confirmed and by these presents does grant, bargain, sell, alien, remise, release, convey and confirm unto the Grantee and its/his/her heirs or successors and assignees forever, the following parcel of land, situate, lying and being in the County of St. Lucie, State of Florida, and more particularly described as follows:

SEE **EXHIBIT A** ATTACHED HERETO AND MADE A PART HEREOF (the "Land").

SUBJECT TO AND TOGETHER WITH, HOWEVER, THE FOLLOWING:

1. Real property taxes and assessments for the year 2017 and for subsequent years.

2. Zoning and other regulatory laws and ordinances affecting the Land.

3. Easements, reservations, restrictions, rights of way, and other matters of record, if any, without re-imposing the same.

4. For a period of five (5) years from the recording hereof, the Land may not be used as a commercial bank, retail bank branch, savings bank, financial services institution, insurance company, brokerage firm, for the placement of an Automatic Teller Machine (ATM), savings and loan or credit union or affiliate thereof.

TOGETHER with all and singular the tenements, hereditaments and appurtenances thereunto belonging or in any way appertaining.

TO HAVE AND TO HOLD the same in fee simple forever.

AND the Grantor hereby covenants with said Grantee that it is lawfully seized of the Land hereby conveyed in fee simple; that it has good right and lawful authority to sell and convey said Land; that it hereby specially warrants the title to said Land and will defend the same against the lawful claims of any persons claiming by, through or under the said Grantor but against no others.

[TEXT AND SIGNATURES FOLLOW]

IN WITNESS WHEREOF, Grantor has caused these presents to be signed in its name by its proper officers and its corporate seal to be affixed, the day and year first above written.

FIRST CITIZENS PREMISES COMPANY , INC. (a Florida corporation)

By: _____
Name: Jason Lavegna
Title: Senior Vice President

_____
Witness
Sharen H Lerbuntz
Printed Name of Witness

_____
Witness
MALGORZATA CRANMER
Printed Name of Witness

STATE OF New Jersey)
) ss.:
COUNTY OF Burlington)

The foregoing Special Warranty Deed was acknowledged before me this 12 day of April, 2017, by Jason Lavegna, as Senior Vice President of **FIRST CITIZENS PREMISES COMPANY, INC.**, a Florida corporation, on behalf of the corporation, who (X) is personally known to me, or ( ) produced _____ as identification.

_____
Signature of Notary Public
Lauren Dercqu
Printed Name of Notary Public

LAUREN DERCQU
NOTARY PUBLIC OF NEW JERSEY
Comm. # 50046627
My Commission Expires 9/30/2021

EXHIBIT A

PARCEL 1:

The East 100 feet of Lots 1, 2, 3 and 4, Block 30 Pinewood Subdivision, according to the Map and Plat thereof as recorded in Plat Book 5, Page 24, of the public records of St. Lucie County Florida, less and except the South 30 feet of the above-described property as conveyed to the City of Fort Pierce, Florida by the Special Warranty Deed recorded in official records Book 2853, Page 832, of the public records of St. Lucie County, Florida.

PARCEL 2:

Lots 1, 2, 3 and 4, less and except the East 100 feet thereof of each, and all of Lots 27, 27A, 28, 28A, 29, 29A, 30 and 30A, Block 30 Pinewood Subdivision, according to the Map and Plat thereof as recorded in Plat Book 5, Page 24, of the public records of St. Lucie County, Florida; TOGETHER with all of that portion of the alley appurtenant to said lots, which alley has been vacated and closed by the City of Fort Pierce. Less and except the South 30 feet of the above-described property as conveyed to the City of Fort Pierce, Florida by the Special Warranty Deed recorded in official records Book 2853, Page 832, of the public records of St. Lucie County, Florida.

Prepared by and Return to:
Kenneth P. Wurtenberger, Esq.
Kopelowitz Ostrow P.A.
One West Las Olas Blvd., Suite 500
Fort Lauderdale, FL 33301
954-525-4100
File Number: 013354-000011

RECIPROCAL EASEMENT AGREEMENT WITH COVENANTS, CONDITIONS AND RESTRICTIONS

THIS RECIPROCAL EASEMENT AGREEMENT WITH COVENANTS, CONDITIONS AND RESTRICTIONS (the "Agreement") is made and entered into this 27th day of September, 2017, between **LGFTP I, LLC.**, a Florida limited company ("Owner") and **ALDI (FLORIDA) L.L.C.,** a Florida limited liability company ("ALDI").

RECITALS

A. Owner is the owner that certain real property situated in St. Lucie County, State of Florida, more particularly described on Exhibit "A" attached hereto and incorporated herein by this reference (the "Property").

B. Owner has leased to ALDI a portion of the Property, which is more particularly described on Exhibit "B", attached hereto and incorporated herein by reference (hereinafter referred to as "Lot 1") by that certain Aldi Ground Lease Agreement dated on or about February 20, 2017 (the "Lease").

C. Owner intends to lease to a future tenant the balance of the Property, which is more particularly described on Exhibit "C", attached hereto and incorporated herein by reference (hereinafter referred to as "Lot 2").

D. Owner and ALDI desire to impose certain easements upon Lot 1 and Lot 2, and to establish certain covenants, conditions and restrictions on Lot 1 and Lot 2, for the mutual and reciprocal benefit and complement of said future owners of Lot 1 and Lot 2 and occupants or tenants thereof, on the terms and conditions hereinafter set forth.

NOW, THEREFORE, in consideration of the above premises and of the covenants herein contained, Owner, and ALDI hereby covenant and agree that Lot 1 and Lot 2 and all present and future owners, occupants and tenants of Lot 1 and Lot 2 shall be and hereby are subject to the terms, covenants, easements, restrictions and conditions hereinafter set forth in this Agreement, so that said Parcels (as hereinafter defined) shall be maintained, kept, sold and used in full compliance with and subject to this Agreement and, in connection therewith, the parties hereto on behalf of themselves and their respective successors and assigns covenant and agree as follows:

AGREEMENTS

1. **Definitions.** For purposes hereof:

a) The term "ALDI" shall mean ALDI (FLORIDA) L.L.C., a Florida limited liability company (or any of its affiliates, subsidiaries, successors or assigns).

b) The term "Future Tenant" shall mean the tenant to which the Owner leases Lot 2 (or any of its affiliates, subsidiaries, successors or assigns).

c) The term "Easement" or "Easements" collectively shall mean the Cross Access Easement, Drainage Easement and Temporary Construction Easement, as set forth in this Agreement.

d) The term "Owner" or "Owners" shall mean the Owner of the Property and any and all successors or assigns of such persons as the owner or owners of fee simple title to all or any portion of the Property, whether by sale, assignment, inheritance, operation of law, trustee's sale, foreclosure, or otherwise, but not including the holder of any mortgage, lien or encumbrance on the Property.

e) The term "Parcel" or "Parcels" shall mean the two (2) separately identified parcels of real property that comprise the Property that is the subject of this Agreement, (i.e. Lot 1 described on Exhibit "B", and Lot 2 described on Exhibit "C").

f) The term "Permittees" shall mean the owner(s), tenant(s) or occupant(s) of a Parcel.

g) The term "Site Plan" shall mean the site plan of the Parcels attached hereto as "Exhibit "D" and by reference made a part hereof. Except as may be otherwise provided in this Agreement, the Site Plan is for identification purposes only.

h) The term "Tenant" shall mean Future Tenant or any other future tenant of Lot 1 or Lot 2.

2. **Easements.**

2.1 **Grant of Easements.** Subject to any express conditions, limitations or reservations contained herein, the Owner and ALDI hereby grant, establish, covenant and agree that the Parcels, and the Owner and Permittees of the Parcels, shall be benefitted and burdened by the following nonexclusive, perpetual easements which are hereby imposed upon the Parcels:

(a) A reciprocal easement for reasonable access, ingress and egress over the paved driveways, roadways and walkways (but not parking areas) as presently or hereafter constructed on Lot 1 and Lot 2, in the location depicted on the Site Plan and identified as the "Cross Access Easement". The Cross Access Easement shall provide for the passage of motor vehicles and pedestrians traffic.

(b) An easement for the installation, use and operation of utilities, including without limitation water, sewer, electric, telephone, and cable (each a "Utility" or collectively, "Utilities") upon, over, under and across those portions of Lot 2, which are depicted on the Site Plan as the "Drainage Easement" and to enter and access Lot 2 as necessary for the installation, maintenance, repair and replacement said Utility; provided that except in an emergency, the right of a Lot 1 Permittee to enter upon Lot 2 for the exercise of any right pursuant to such easements shall be conditioned upon providing reasonable prior advance written notice to the Owner (and, during the continuance of the Future Tenant's Lease, Future Tenant) as to the time and manner of entry. All such systems, structures, mains, sewers, conduits, lines and other public utilities shall be installed and maintained below the ground level or surface of Lot 2 (except for such parts thereof that cannot and are not intended to be placed below the surface, such as transformers and control panels, which shall be placed in such location as approved by the Permittee of Lot 2.

The Permittee of Lot 2 shall have the right at any time to relocate a Utility located upon Lot 2 upon 30-days prior written notice to all Permittees of Lot 1, including ALDI; provided, however, that such relocation shall not interfere with or diminish the utility service to Lot 1; shall not reduce or unreasonably impair the usefulness or function of such Utility; shall be performed without cost or expense to the benefitted Permittee; and shall be completed using materials and design standards which equal or exceed those originally used. Each Utility shall be installed, maintained and replaced, at the sole cost and expense of the benefitted Permittee and be kept in a good condition (except to the extent the provider of the service or a governmental or quasi-governmental authority has agreed to maintain such Utility). Any maintenance and repair of a Utility located on Lot 2 shall be performed in such a manner as to cause as little disturbance to Lot 2 as is practicable under the circumstances.

(c) A temporary construction easement over Lot 2, as necessary for ALDI to develop and construct improvements on Lot 1 (the "Temporary Construction Easement").

2.2 **Indemnification.** Each party having rights with respect to the Easements granted hereunder shall indemnify, defend, and hold the other party whose Parcel is subject to the Easements (the "Indemnified Party") harmless from and against all claims, liabilities and expenses (including reasonable attorneys' fees) relating to accidents, injuries, loss, or damage of or to any person or property arising from the negligent, intentional or willful acts or omissions of such party, its contractors, employees, tenants, agents, or others acting on behalf of such party unless caused by the act or omission of the Indemnified Party.

2.3 **Cross Access Easement Areas**. The Cross Access Easement shall in no event be blocked, closed, altered, changed or removed other than for routine maintenance or repair and shall at all times remain in place as shown on the Site Plan. The Cross Access Easement shall be properly maintained as set forth in paragraph 3.2(a). The Cross Access Easement shall be maintained to provide a smooth and level grade transition to allow the use for pedestrian and vehicular ingress and egress as set forth in paragraph 2.1 above.

3. Parking and Easements.

3.1 **Parking**. The Easements set forth herein shall not include parking; accordingly, each Parcel shall comply with applicable governmental parking ratio requirements without taking into account the parking provided on the other Parcel, such that each Parcel shall be self-sufficient for vehicular parking.

3.2 **Easements**.

(a) **Cross Access Easement.** Following possession of their respective Parcels, each Permittee and the Owner, on behalf of the Future Tenant, covenants at all times during the term hereof to operate and maintain or cause to be operated and maintained at its expense the portion of the Cross Access Easement located on its Parcel in good order, condition and repair. Following the construction of improvements thereon, maintenance of the Cross Access Easement shall include without limitation, maintaining and repairing all sidewalks and the surface of the roadway areas, removing all papers, debris and other refuse from and periodically sweeping all roadway areas to the extent necessary to maintain the same in a clean, safe and orderly condition, maintaining appropriate lighting fixtures for the Cross Access Easement areas, maintaining directional signs in good condition and repair, lines and striping as needed, maintaining landscaping, and performing any and all such other duties as are necessary to maintain such Cross Access Easements in a clean, safe and orderly condition. Except as otherwise expressly provided in this Agreement, once constructed, in the event of any damage to or destruction of all or a portion of the Cross Access Easement on any Parcel, the Tenant of such Parcel (or the Owner if there is no Tenant) shall, at its sole cost and expense, with due diligence repair, restore and rebuild such Easement to the condition that existed prior to such damage or destruction (or with such changes as shall not conflict with this Agreement). The Cross Access Easement shall not be altered, modified, reconfigured, relocated and/or removed without the written consent of the party occupying the benefited Parcel, which consent shall be given or withheld in said party's business judgment.

Notwithstanding anything herein to the contrary, for so long as ALDI is the tenant of Lot 1, the Cross Access Easement area shall be maintained and repaired by ALDI but the cost of such maintenance and repairs shall be shared equally between ALDI and the Owner. All invoices for such actual maintenance, repair and replacement costs shall be presented to the Owner with supporting documentation on a quarterly basis and shall be paid within thirty (30) days of such presentation. In the event Owner fails to timely remit payment of an invoice to ALDI, ALDI may, in Aldi's sole discretion, elect to purse either, or both, of the following remedies: (i) offset the cost for the same from any amounts owed by ALDI to Owner from time to time or (ii) bring a cause of action against Owner for damages or such other relief as is equitable in any court of competent jurisdiction or such other jurisdiction as may be agreed to between the Parties. ALDI shall also be entitled to the maximum rate of interest, notwithstanding any other rate of interest contained herein, permitted under applicable law which shall accrue beginning on the date ALDI submits the invoice to Owner and ending on the date ALDI receives payment for the same. In the event Aldi ceases to become the tenant and occupant of Lot 1, whether or not ALDI continues to remain liable under the lease, ALDI shall cease to be responsible for maintaining and repairing the Cross Access Easement area.

(b) **Drainage Easement**. The Permittee of Lot 1 shall at all times during the use of the Drainage Easement operate and maintain or cause to be operated and maintained, in good order, condition and repair, at its sole expense, any Utility serving Lot 1 and from time to time existing on Lot 2 pursuant to the Drainage Easement described herein. No Permittee of Lot 2 shall be permitted to tie in or otherwise join into a Utility in the Drainage Easement area benefitting Lot 1, whether existing on Lot 1 or Lot 2, without the prior written consent of the Permittee of Lot 1, which consent may be granted or withheld in the Permittee's reasonable discretion. The foregoing notwithstanding, the Permittee of Lot 2 shall be permitted to tie into a storm drain facility benefitting Lot 1 in the Drainage Easement area, provided that (i) the Lot 1 Permittee shall have the right to approve the location and all plans related to the construction, installation, and connection of Lot 2's storm sewer facility prior to the commencement of any work, which approval shall not be unreasonable withheld, conditioned or delayed, provided that, if the Lot 1 Permittee does not approve the location and such plans within thirty (30) days after receipt of the same then such plans shall be deemed approved by the Lot 1 Permittee; (ii) such tie in shall not interfere with or diminish the storm drain facilities to Lot 1; and (iii) the tie in shall not materially adversely affect the usefulness or function of Lot 1's storm drain facility.

No Permittee of Lot 2 shall construct or permit permanent improvements, trees, shrubs or other obstructions that would materially interfere with the usefulness and access to the Drainage Easement area or any Utility contained therein. Nor shall a Lot 2 Permittee grant the right or otherwise permit the use of the Drainage Easement area in a manner that would materially adversely affect the full use and enjoyment of the Drainage Easement by a Lot 1 Permittee.

4. Construction of Improvements.

Every building (including its appurtenant improvements located in the Easement), now or in the future constructed on Lot 1 and Lot 2, shall be constructed, operated and maintained so that the same is in compliance with all applicable governmental requirements.

5. Restrictions.

5.1 **General**. Each Parcel shall be used for lawful purposes in conformance with all restrictions imposed by all applicable governmental laws, ordinances, codes and regulations, and no use or operation shall be made, conducted or permitted on or with respect to all or any portion of a Parcel which is illegal. In addition to the foregoing, throughout the terms of this Agreement, it is expressly agreed that neither all nor any portion of Lot 1 or Lot 2 shall be used, directly or indirectly, for purposes of:

a) A use or operation that is generally considered to be an environmental risk to any portion of the Property or surrounding properties;

b) A business selling alcoholic beverages for on-premises consumption except for a restaurant with sit-down table service as its primary operation in which the sale of alcoholic beverages does not exceed 50% of its gross sales;

c) A laundry or dry cleaning establishment, provided the foregoing restriction shall not include an establishment for dry cleaning drop-off and pick-up only, with no cleaning services being performed at the subject property;

d) Any establishment which stocks, displays, sells, rents, or offers for sale or rent any merchandise or material commonly used or intended for the use with or in consumption of any narcotic, dangerous drug, or other controlled substance (provided that the foregoing is not intended and shall not be construed to prohibit a drug store).

e) Adult book store, an establishment selling or exhibiting pornographic materials or any form of adult entertainment or an operation whose principal use is an exotic dancing and/or massage parlor (provided this restriction shall not prohibit massages in connection with a beauty salon, health club or athletic facility, or a national massage chain such as Massage Envy);

f) A pool or billiard hall, arcade, night club, dance club, movie theater or cinema, gyms or health clubs greater than 5,000 square feet, schools or learning centers having more than thirty students at any one time, skating rink or bowling alley.

g) Any business or use that would negatively impact ALDI's access to parking spaces;

h) Children's play or party center, telemarketing, poling and surveying center, or office use; however, the foregoing shall be permitted if there is sufficient parking to maintain a ratio of 6 spaces per 1,000 sq. ft. of gross leaseable area.

i) An abortion clinic; Planned Parenthood;

j) A pet sore;

k) A gasoline station or an auto repair shop;

l) A lot for the sale of used automobiles;

m) A mobile home park, trailer court (except that this provision shall not prohibit the temporary use of construction trailers during any periods of construction, reconstruction or maintenance), mobile home sales lot, living quarters, hotel or apartment building;

n) Off-tract betting establishment, bingo parlor or any gambling use;

o) A business which would emit or produce noxious fumes, gases, excessive dust, dirt or loud noises;

p) An assembly, manufacturing, distilling, refining, smelting, industrial, agricultural, drilling or mining operation;

q) A junk yard, stock yard, animal raising operation, a dump or disposal or any operation for the incineration or reduction of garbage of refuse;

r) A pawn shop, a thrift store, consignment shop or "re-sell" shop, a "Good Will" or "Salvation Army" type store, flea market or a store dedicated to the sale of tobacco products;

s) A mortuary or funeral home;

t) A church or other place of worship, banquet hall, auditorium or meeting hall;

u) The outdoor display, sale or storage of seasonal merchandise (Christmas trees, pumpkins, produce, flowers, etc.) and/or the temporary or periodic (i.e., not permanent) outdoor display, sale or storage of merchandise (art work, novelties, clothing, etc.); and/or

v) Carnival amusement park, or circus.

5.2 **Additional Restrictions**.

A. No portion of Lot 2 during the term of the ALDI lease as may be extended, shall be used, directly or indirectly, for any of the following purposes: The operation of a Retail Grocery Store (the "Exclusive Use"). The term "Retail Grocery Store" means a supermarket, meat market, grocery store, fruit and vegetable store or stand, frozen or otherwise processed food store and any other store where more than 50 grocery items are sold for off-premises consumption. The term "Retail Grocery Store" shall not include a delicatessen, or any restaurant wherein prepared food is sold for on-premises consumption or for "take-out" consumption.

B. In the event of a violation of the restrictions set forth in Section 5.1 or 5.2(A) (collectively, the "Restrictions"), the Owner, ALDI or Tenant of a Parcel shall be entitled to pursue all remedies available at law or in equity, including, without limitation, injunctive relief. In the event of any litigation relating to the enforcement of the provisions contained in this Section, the prevailing party shall be entitled to recover all costs and expenses, including reasonable attorney's fees. Nothing contained herein shall be construed to limit ALDI's rights and remedies under the Lease. The Restrictions shall run with the land.

C. Owner shall have no right to grant any additional easements of any kind or nature over the Access Easement for the benefit of any other property.

5.3 **Drive-Throughs**. No improvements constructed on the Parcels for vehicular drive-up or drive-through shall be used or operated in any manner such that motor vehicles in line at such facility stop or stand onto the other Parcel, or otherwise interfere with the normal pattern and flow of vehicular traffic on and across the other Parcel.

6. Insurance. Throughout the term of this Agreement, Owner shall require and/or cause Lot 1 and Lot 2 to be covered under an insurance policy for general and/or comprehensive public liability and property damage insurance against claims for personal injury (including contractual

liability arising under the indemnity contained in paragraph 2.2 above), death or property damage occurring upon such Permittee's Parcel, with single limit coverage of not less than an aggregate of Two Million and No/100 Dollars ($2,000,000.00) including umbrella coverage, if any, and naming Owner (provided the Owner obtaining such insurance has been supplied with the name of such other Owner in the event of a change thereof), Future Tenant (during the continuance of the Future Tenant Lease) and ALDI (during the continuance of the ALDI Lease) as additional insureds. For so long as ALDI is the tenant and occupant of Lot 1, ALDI shall procure and maintain the required coverage under this paragraph 6, provided that such coverage can be obtained as permitted under the Lease.

7. No Rights in Public; No Implied Easements. Nothing contained herein shall be construed as creating any rights in the general public or as dedicating for public use any portion of Lot 1 or Lot 2. No Easements, except those expressly set forth in paragraph 2, shall be implied by this Agreement; in that regard, and without limiting the foregoing, no easements for parking or signage are granted or implied, except as specifically set forth herein.

8. Remedies and Enforcement.

8.1 **All Legal and Equitable Remedies Available.** In the event of a breach or threatened breach by any Owner or Permittee of any of the terms, covenants, restrictions or conditions hereof, the other Owner(s) and Permittee(s) shall be entitled forthwith to full and adequate relief by injunction and/or all such other available legal and equitable remedies from the consequences of such breach, including payment of any amounts due and/or specific performance.

8.2 **Self-Help.** In addition to all other remedies available at law or in equity, upon the failure of ALDI, Tenant, or Owner to cure a breach of this Agreement within thirty (30) days following receipt of written notice (unless, with respect to any such breach the nature of which cannot reasonably be cured within such 30-day period, the defaulting party commences such cure within such 30-day period and thereafter diligently prosecutes such sure to completion), any party shall have the right to perform such obligation contained in this Agreement on behalf of such defaulting party and be reimbursed by such defaulting party upon demand for the reasonable costs thereof together with interest at fifteen percent (15%). Notwithstanding the foregoing, in the event of (i) an emergency, (ii) blockage or material impairment of the easement rights, and/or (iii) the unauthorized parking of vehicles on either Parcel, ALDI, Owner or Tenant immediately may cure the same and be reimbursed by the other party upon demand for the reasonable cost thereof together with interest as above described if such blockage occurred on the parcel owned or occupied, or was caused, by the other party.

8.3 **Remedies Cumulative.** The remedies specified herein shall be cumulative and in addition to all other remedies permitted at law or in equity including the non-defaulting party's right to injunctive or other equitable relief to enjoin a violation or threat thereof.

8.4 **No Termination For Breach.** Notwithstanding the foregoing, no breach hereunder shall entitle any Owner or Tenant to cancel, rescind, or otherwise terminate this Agreement. No breach hereunder shall defeat or render invalid the lien of any mortgage

or deed of trust upon any Parcel made in good faith for value, but the Easements, covenants, conditions and restrictions shall be binding upon and effective against any Owner of a Parcel whose title is acquired by foreclosure, trustee's sale or otherwise, and its Permittees.

8.5 **Term**. Unless otherwise provided herein, the Easements, covenants, conditions and restrictions contained in this Agreement shall be effective commencing on the date of recordation of this Agreement in the office of the Clerk of Court of St. Lucie County, Florida and shall remain in full force and effect thereafter in perpetuity, unless this Agreement is modified, amended, canceled or terminated as provided in paragraph 9.2.

9. Miscellaneous.

9.1 **Attorneys' Fees**. In the event an Owner or Permittee institutes any legal action or proceeding for the enforcement of any right or obligation herein contained, the prevailing party after a final adjudication shall be entitled to recover its costs and reasonable attorneys' fees incurred in the preparation and prosecution of such action or proceeding.

9.2 **Amendment**. The parties agree that the provisions of this Agreement may be modified or amended, in whole or in part, or terminated, only by the written consent of all Permittees of Lot 1 and Lot 2, evidenced by a document that has been fully executed and acknowledged by all such Permittees and recorded in the official records of the Clerk of the Court of St. Lucie County, Florida.

9.3 **Consents**. Whenever in this Agreement the consent or approval of a Future Tenant, ALDI, Tenant or Owner is required, unless otherwise expressly provided herein, such consent or approval shall not be unreasonably withheld, delayed or conditioned. Any request for consent or approval shall: (a) be in writing; (b) specify the section hereof which requires that such notice be given or that such consent or approval be obtained; and (c) be accompanied by such background information as is reasonably necessary to make an informed decision thereon. The consent of ALDI, Future Tenant, Tenant or the Owner, to be effective, must be given, denied or conditioned expressly and in writing.

9.4 **No Waiver**. No waiver of any default of any obligation by any party hereto shall be implied from any omission by the other party to take any action with respect to such default.

9.5 **No Agency**. Nothing in this Agreement shall be deemed or construed by either party or by any third person to create the relationship of principal and agent or of limited or general partners or of joint venturers or of any other association between the parties.

9.6 **Covenants to Run with Land**. It is intended that each of the Easements, covenants, conditions, restrictions, rights and obligations set forth herein shall run with the land and create equitable servitudes in favor of the Property benefited thereby, shall bind every person having any fee, leasehold or other interest therein and shall inure to the benefit of the respective parties and their successors, assigns, heirs, and personal representatives.

9.7 **Grantee's Acceptance**. The grantee of any Parcel or any portion thereof, by acceptance of a deed conveying title thereto or the execution of a contract for the purchase

thereof, whether from an original party or from a subsequent owner of such Parcel, shall accept such deed or contract upon and subject to each and all of the easements, covenants, conditions, restrictions and obligations contained herein. By such acceptance, any such grantee shall for himself and his successors, assigns, heirs, and personal representatives, covenant, consent, and agree to and with the other party, to keep, observe, comply with, and perform the obligations and agreements set forth herein with respect to the Parcel or any portion thereof acquired by such grantee.

9.8 **Separability**. Each provision of this Agreement and the application thereof to Lot 1 and Lot 2 are hereby declared to be independent of and severable from the remainder of this Agreement. If any provision contained herein shall be held to be invalid or to be unenforceable or not to run with the land, such holding shall not affect the validity or enforceability of the remainder of this Agreement. Ownership of both Parcels by the same person or entity shall not terminate this Agreement nor in any manner affect or impair the validity or enforceability of this Agreement.

9.9 **Time of Essence**. Time is of the essence of this Agreement.

9.10 **Entire Agreement**. This Agreement contains the complete understanding and agreement of the parties hereto with respect to all matters referred to herein, and all prior representations, negotiations, and understandings are superseded hereby.

9.11 **Notices**. Notices or other communications hereunder shall be in writing and shall be sent certified or registered mail, return receipt requested, or by other national overnight courier company, or personal delivery. Notice shall be deemed given upon receipt or refusal to accept delivery. The Owner, ALDI and any Tenant of Lot 1 or Lot 2 may change from time to time their respective address for notice hereunder by like notice to the Owner, ALDI and any Tenant of Lot 1 or Lot 2. The notice addresses are as follows:

Owner:	**LGFTP I, LLC.** Attn: Richard Leonardi 7307 NW 122nd Avenue Parkland, FL 33076 Tel: (954) 755-5817 Email: rich@lginvest.net
With a copy to:	**KOPELOWITZ OSTROW P.A.** Attn: Kenneth P. Wurtenberger, Esq. One West Las Olas Blvd., Suite 500 Fort Lauderdale, FL 33301 Tel: (954) 332-4203 Fax: (954) 206-0188 Email: kwurtenberger@kolawyers.com
ALDI:	**ALDI (FLORIDA), L.L.C.** Attn: Jordan Ford, Director of Real Estate

1171 N. State Road 7
Royal Palm Beach, FL 33411
Tel: (561) 640-8000
Email: Jordan.ford@aldi.us

With a copy to:

KAYNE LAW GROUP
Attn: Adam Smith, Esq.
612 Park Street, Suite 100
Columbus, OH 43215
Tel: (614) 223-8800
Email: asmith@kaynelaw.com

9.12 **Governing Law**. The laws of the State of Florida shall govern the interpretation, validity, performance, and enforcement of this Agreement.

9.13 **Estoppel Certificates**. The Owner(s), Future Tenant, ALDI and any Tenant of Lot 1 or Lot 2, within thirty (30) days of its receipt of a written request from the Owner(s), ALDI or a future Tenant of Lot 1 or Lot 2, shall from time to time provide the requesting party, a binding certificate stating: (a) to the best of such parties' knowledge, whether any party to this Agreement is in default or violation of this Agreement and if so identifying such default or violation; and (b) that this Agreement is in full force and effect and identifying any amendments to the Agreement as of the date of such certificate.

9.14 **Bankruptcy**. In the event of any bankruptcy affecting any Owner, ALDI, or any future Tenant of Lot 1 or Lot 2, or occupant of any Parcel, the parties agree that this Agreement shall, to the maximum extent permitted by law, be considered an agreement that runs with the land and that is not rejectable, in whole or in part, by the bankrupt person or entity.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK.
SIGNATURE PAGES TO FOLLOW.]

IN WITNESS WHEREOF, the parties have executed this Agreement as of the date first written above.

Signed, Sealed and Delivered
In the Presence of:

Witness Signature

Print Name: Mathew Leonardi

Witness Signature

Print Name: Beverly Leonardi

LGFTP I, LLC, a Florida limited liability company

By: _____
Richard Leonardi, Manager

STATE OF FLORIDA)
: SS
COUNTY OF BROWARD)

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgements, the foregoing instrument was acknowledged before me by Richard Leonardi as Manager of LGFTP I, LLC, a Florida limited liability company, on behalf of the company, who is personally known to me.

WITNESS my hand and official seal in the County and State last aforesaid this 27 day of September, 2017.

MARTHA MENDIBLE
Notary Public - State of Florida
My comm. Expires Nov 20, 2018
Commission # FF 174607
Bonded Through National Notary Assn.

Notary Public, State of Florida

Print Name: Martha Mendible
My Commission Expires: 11/20/2018

Signed, Sealed and Delivered
In the Presence of:

Christina Nutter
Witness Signature

Print Name: Christina Nutter

Witness Signature

Print Name: LA Brooks

ALDI (FLORIDA) L.L.C., a Florida limited liability company

By: **ALDI INC.** (Pennsylvania), a Pennsylvania corporation its sole member

By: _____
Chris Hewitt, Vice President

STATE OF Florida)
COUNTY OF Palm Beach)

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgements, the foregoing instrument was acknowledged before me by Chris Hewitt as Vice President of ALDI INC. (Pennsylvania), a Pennsylvania corporation the sole member of ALDI (FLORIDA) L.L.C., a Florida limited liability company, on behalf of the company, who is personally known to me.

WITNESS my hand and official seal in the County and State last aforesaid this 27th day of September, 2017.

Jodi Ellen Gurewitz
Notary Public, State of Florida
Print Name: Jodi Ellen Gurewitz
My Commission Expires: May 27, 2021

JODI ELLEN GUREWITZ
Notary Public – State of Florida
Commission # GG 084812
My Comm. Expires May 27, 2021
Bonded through National Notary Assn.

EXHIBIT "A"

Legal Description of Property

Lot 1 and Lot 2 of the Plat of LG Center, as recorded in Plat Book 74, Page 39 of the public records of Saint Lucie County, Florida.

EXHIBIT "B"

Legal Description of Lot 1

LOT 1 OF THE PLAT OF LG CENTER, AS RECORDED IN PLAT BOOK 74, PAGE 39, OF THE PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL 1:
THE EAST 100 FEET OF LOTS 1, 2, 3 AND 4, BLOCK 30 PINEWOOD SUBDIVISION, ACCORDING TO THE MAP AND PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 24, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY FLORIDA, LESS AND EXCEPT THE SOUTH 30 FEET OF THE ABOVE-DESCRIBED PROPERTY AS CONVEYED TO THE CITY OF FORT PIERCE, FLORIDA BY THE SPECIAL WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 2863, PAGE 832, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

PARCEL 2:
LOTS 1, 2, 3 AND 4, LESS AND EXCEPT THE EAST 100 FEET THEREOF OF EACH, AND ALL OF LOTS 27, 27A, 28, 28A, 29, 29A, 30 AND 30A, BLOCK 30 PINEWOOD SUBDIVISION, ACCORDING TO THE MAP AND PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 24, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; TOGETHER WITH ALL OF THAT PORTION OF THE ALLEY APPURTENANT TO SAID LOTS, WHICH ALLEY HAS BEEN VACATED AND CLOSED BY THE CITY OF FORT PIERCE. LESS AND EXCEPT THE SOUTH 30 FEET OF THE ABOVE-DESCRIBED PROPERTY AS CONVEYED TO THE CITY OF FORT PIERCE, FLORIDA BY THE SPECIAL WARRANTY DEED RECORDED IN OFFICIAL RECORDS BOOK 2863, PAGE 832, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

A PORTION OF PARCEL 3 CONTAINED IN SAID LOT 1:
LOTS 5, 6, 7, 8, 9, 10, 24A, 25, 25A, 26, AND 26A, BLOCK 30, PINEWOOD SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 5, PAGE 24, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.
TOGETHER WITH THAT PORTION OF VACATED ALLEY CONTIGUOUS TO ABOVE DESCRIBED PARCEL, AS DESCRIBED IN ORDINANCE NO. C-118 RECORDED IN OFFICIAL RECORDS BOOK 1114, PAGE 2037, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA.

LESS AND EXCEPT ANY PORTION OF THE PROPERTY USED FOR PUBLIC RIGHT-OF-WAY.

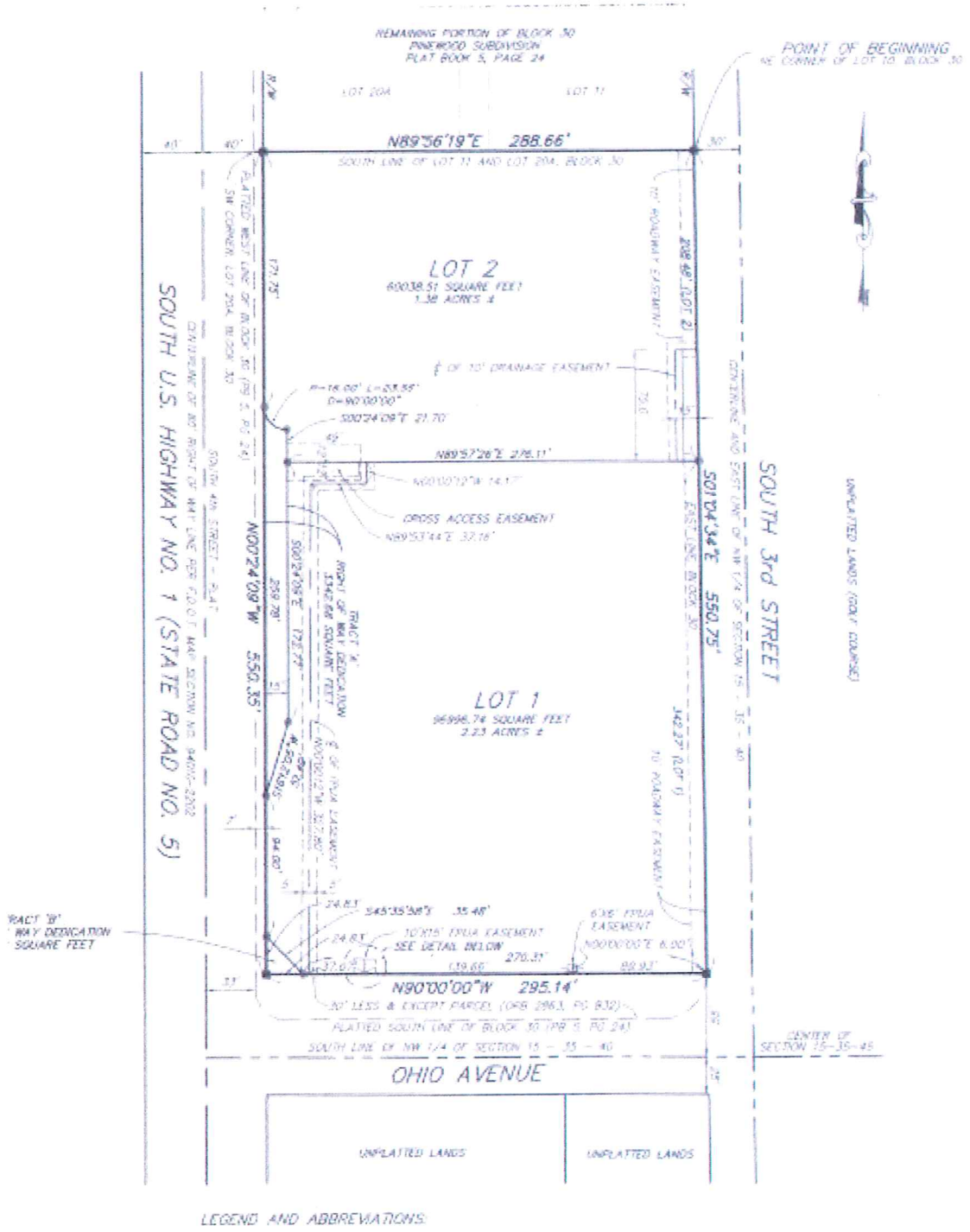
EXHIBIT "C"

Legal Description of Lot 2

Lot 2 of the Plat of LG Center, as recorded in Plat Book 74, Page 39 of the public records of Saint Lucie County, Florida.

EXHIBIT "D"

Site Plan of Parcels



THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	Retail	General Commercial	C-3
South	Retail	General Commercial	C-3
East	Recreational Open Space	Conservative & Open Space	OS-1
West	Retail	General Commercial	C-3

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	General Commercial	C-3	60,039	1.38	"X" & "AH"
****Proposed**	General Commercial	C-3	60,039 site, 106,860 Building	1.38	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 0
**Proposed Zoning/FLU	Total gallons per day 13,357.5
**Change in Demand	Total gallons per day 13,357.5

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 0
**Proposed Zoning/FLU	Total gallons per day 10,686 gpd
**Change in Demand	Total gallons per day 10,686 gpd

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

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

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

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

E. Solid Waste: Residential (2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)	
Demand Analysis	Maximum
Current Zoning/FLU	
****Proposed Zoning/FLU**	
***Change in Demand**	

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

Impact	The current site is a vacant lot and the proposed site has 80% impervious coverage.

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	0	0
****Proposed Zoning/FLU**	18	5 PM
***Change in Demand**	Trips 18	Trips Peak Parking Weekdays at 5 PM, Saturday at 4 PM
Impact to Capacity	Minimal (ITE 151 Mini Warehouse)	

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): 106,860			
Mixed-use (describe use):			
(If this is a single phase project, name it Phase I – Total)			

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

NON-RESIDENTIAL DATA					
Type(s) specify	**Phase**	**Square footage**	**Acres**	**Expecting beginning date**	**Expected completion date**
4 - story, climate controlled, self storage facility	1 of 1	Site: 60,039	1.38	10/08/2022	10/08/2024
		Bldg: 106,860			

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

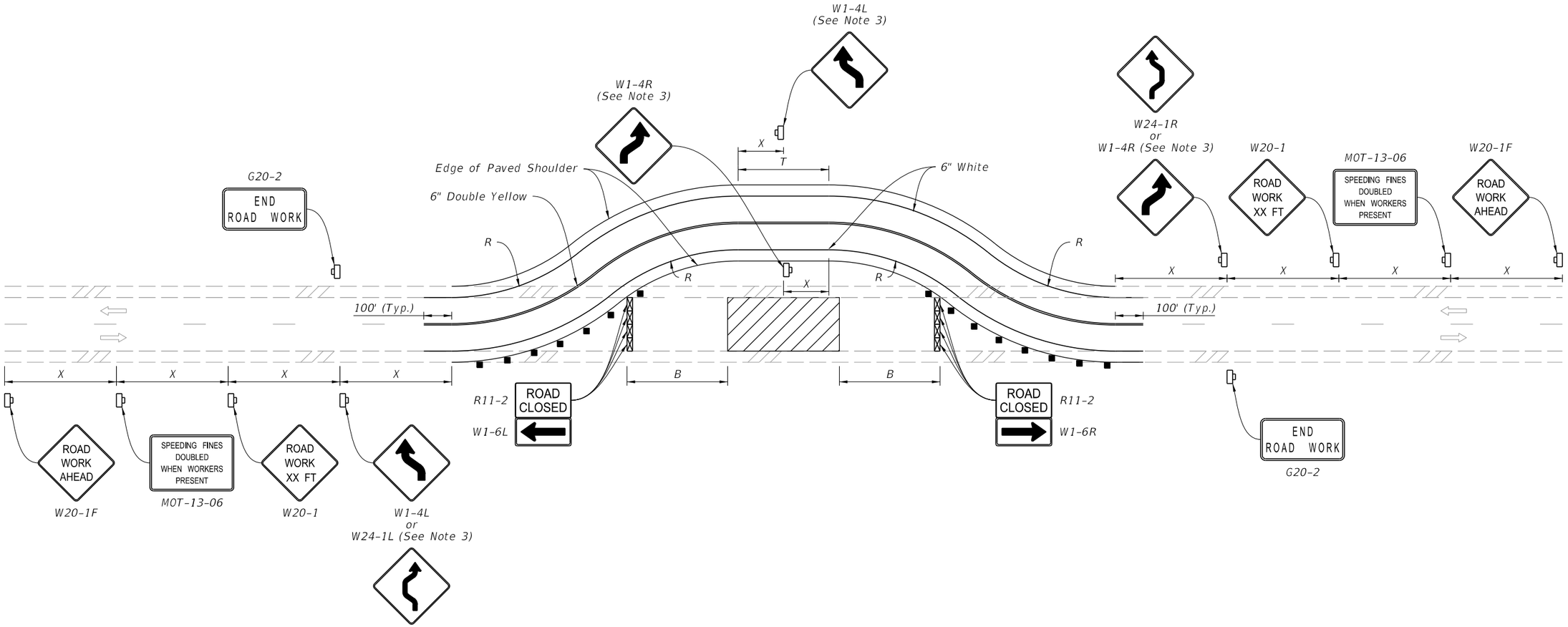
B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☑ No
If yes, what is the size of the structure(s) to be demolished or re-used? N/A

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

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

C. Exemptions Requested: N/A

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



SYMBOLS:

- Work Area
- Channelizing Device (See Index 102-600)
- Work Zone Sign
- Lane Identification and Direction of Traffic
- Type III Barricade

NOTES:

1. This Index applies to Two-Lane, Two-Way Roadways with temporary diversions.

2. B=Buffer Length
   X=Work Zone Sign Distance
   R=Radius of Curve
   See Index 102-600 for "B", "X", and channelizing device spacing values.
   See Plans for "R" values.

3. If the tangent distance "T" is less than 600', for each direction use a "Double Reverse Curve" sign (W24-1) instead of the first "Reverse Curve" sign (W1-4) and omit the second "Reverse Curve" sign.

11/23/2020 8:07:35 AM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	TWO-LANE, TWO-WAY TEMPORARY DIVERSION CONNECTION	INDEX	SHEET
11/01/20						102-608	1 of 1

TRANSPORTATION ENGINEERS & PLANNERS

McMahon Associates, Inc.
2090 Palm Beach Lakes Boulevard, Suite 400
West Palm Beach, FL 33409
P. 561.840.8650
mcmahonassociates.com

September 30, 2021

VIA E-MAIL

Mr. Rich Leonardi
LGFTP I LLC
7307 NW 122 Avenue
Parkland, FL 33076

RE: Fort Pierce Self Storage Parking Analysis
McMahon Project No. N21589.01

McMahon Associates, Inc. (McMahon) has completed a parking analysis associated with the proposed development of a parcel of land located between US-1 and S. 3 Street, north of Ohio Avenue, in the City of Fort Pierce, Florida. The site is currently vacant land. The proposed development, with an anticipated buildout year of 2023, will include 106,830 square feet of a self -storage facility. This facility includes approximately 900 square feet of office space ancillary to the facility, 980 climate-controlled storage units, and a maximum of two (2) employees per shift. **Figure 1** graphically depicts the site location. The site plan is attached in **Appendix A**.

Figure 1 Site Location

Proposed On-site Parking
The site will accommodate 24 parking spaces located along the west and north sides of the building. This includes 22 standard parking spaces and two (2) handicap parking spaces. In addition, three (3) loading spaces will be provided along the north side of the building.

Fort Pierce Parking Requirement
Per the City of Fort Pierce Code of Ordinances, Section 125-315 – *Off Street Parking and Loading*, the parking requirement for warehouse establishments is one (1) space for each 600 square feet of gross floor area. The Code does not specify whether the requirement applies to the entire self-storage facility, which for this project is 106,830 square feet, or if the requirement is intended to be applied to just the ancillary office portion of the self-storage facility, which for this project is approximately 900 square feet.

As no guidance is provided, the parking requirement was calculated assuming the entire self-storage facility:

- Code parking requirement: 106,830 square feet * (1 space/600 square feet) = 178 spaces

Based on experience at other similar sites, and a comparison to the vehicular trips anticipated to be generated by the proposed self-storage facility, the parking requirement of 178 spaces appears excessive. Therefore, research was conducted to determine if the proposed number of parking spaces would be sufficient.

Parking Rates per the Institute of Transportation Engineers (ITE)

The Institute of Transportation Engineers (ITE), *Parking Generation Manual*, 5th Edition was reviewed to determine appropriate parking rates for a self-storage facility. Per Land Use 151 Mini Warehouse, the parking rates, and calculated parking requirement for the proposed development using those rates, are as follows:

- Independent variable - storage units; weekday conditions; peak demand period: 4:00 – 6:00 PM
  - Average Rate: 1.36 spaces for every 100 storage units
  - Proposed Facility = (980 units/100 units) * 1.36 = 14 required parking spaces

- Independent variable - storage units; Saturday conditions; peak demand period: 1:00 – 5:00 PM
  - Average Rate: 0.94 spaces for every 100 storage units
  - Proposed Facility = (980 units/100 units) * 0.94 = 10 required parking spaces

- Independent variable – Gross Floor Area; weekday conditions; peak demand period: 4:00 – 6:00 PM
  - Average Rate: 0.10 spaces for every 1,000 square feet
  - Proposed Facility = (106,830 sf/1,000 sf) * 0.10 = 11 required parking spaces

- Independent variable – Gross Floor Area; Saturday conditions; peak demand period: 1:00 – 5:00 PM
  - Average Rate: 0.09 spaces for every 1,000 square feet
  - Proposed Facility = (106,830 sf/1,000 sf) * 0.09 = 10 required parking spaces

Based on the rates provided in ITE, the highest required parking for the proposed self-storage facility would be 14 parking spaces. Excerpts from ITE are attached in **Appendix B**.

Parking Codes for Nearby Municipalities

For comparison purposes, parking requirements were obtained for municipalities near the City of Fort Pierce. These municipalities included Port St. Lucie, Stuart, Palm Beach Gardens, and Jupiter. Excerpts from these codes are attached in **Appendix C.** The code information is summarized in **Table 1**.

Table 1 Parking Requirement Summary for Nearby Municipalities

JURISDICTION	PARKING REQUIREMENT
Port St. Lucie	2 spaces for the residential quarters, and 1 space for each 200 square feet of GFA used as an office in the rental of storage bays and 1 customer parking space for every 100 storage bays
Stuart	1 space per employee, plus 1 space per 50 storage units
Jupiter	Minimum of 5 spaces or 1 space per 250 square feet of GFA of office uses, whichever is greater, plus 2 spaces for a manager's residential unit
Palm Beach Gardens	1 space per 75 storage spaces plus 2 spaces per security quarters plus 4 spaces per office

Based on these parking requirements, the number of parking spaces that would be required for the proposed self-storage facility would be as follows: Port St. Lucie - 15 parking spaces; Stuart - 22 parking spaces; Jupiter - 5 parking spaces, and Palm Beach Gardens - 18 parking spaces.

Comparable Site

A parking reduction was requested by another Applicant for a similar use in the Town of Pembroke Park. As part of the parking reduction request, the Applicant conducted actual counts at three (3) self-storage facilities, and referenced ITE. Based on this study, a parking rate of one (1) space per 8,734 square feet of net floor area was approved by the Town of Pembroke Park. Excerpts from the Community Development Memorandum, dated March 15, 2016, is attached in **Appendix D.** Using this rate, the parking requirement for the proposed self-storage facility would be 13 parking spaces.

Conclusion

Based on the analysis contained herein, the proposed parking of 24 spaces on-site should be sufficient to accommodate the expected parking demand for the proposed self-storage facility. Should you have any questions or comments regarding these findings, please do not hesitate to call me.

Sincerely,

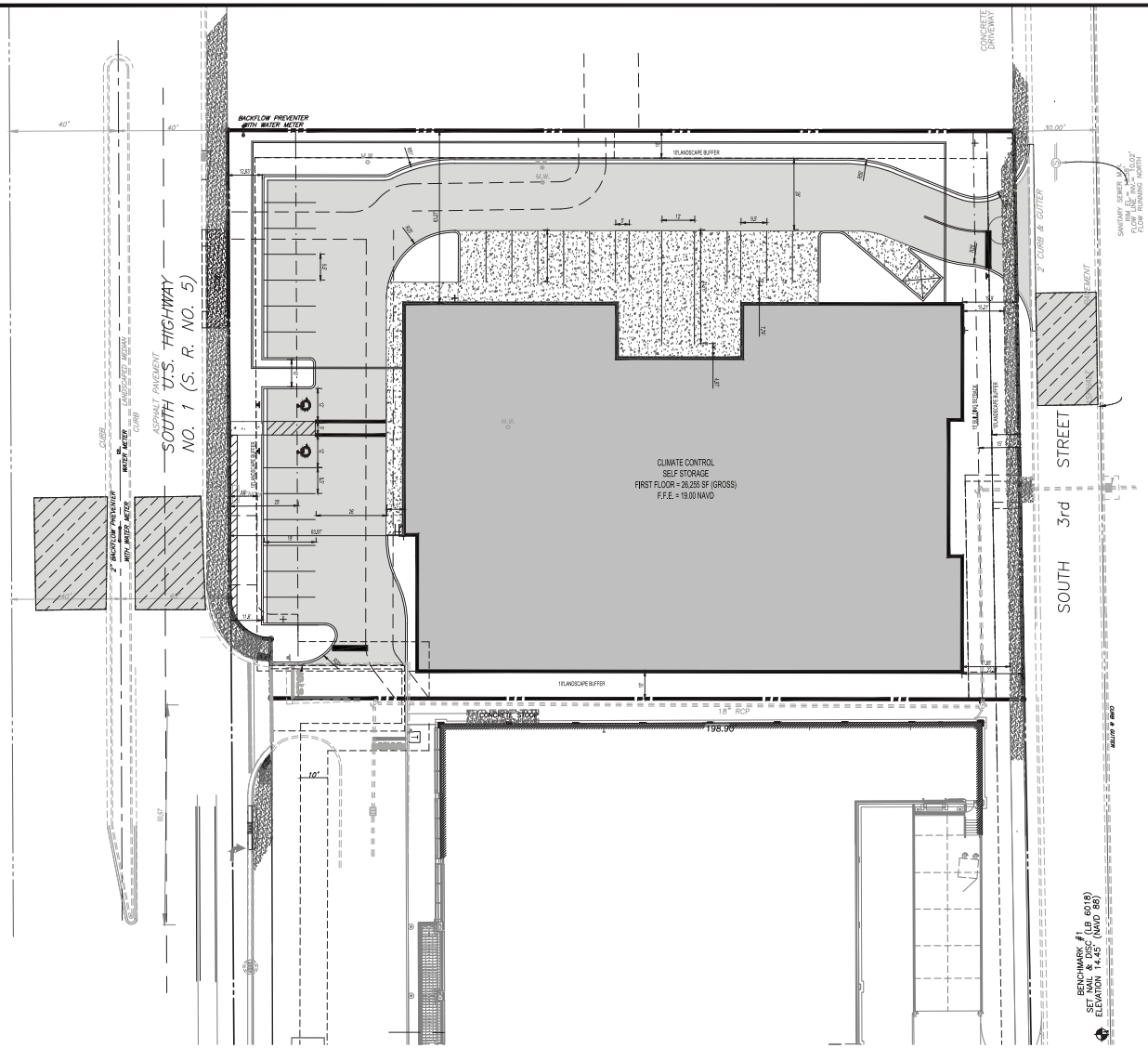
NATALIA THAIS LEFCARI LICENSE No. 68205 STATE OF FLORIDA PROFESSIONAL ENGINEER

Natalia Thais Lefcari, P.E.
Professional Engineer
License No. 68205
State of Florida, Board of Professional Engineers
Certificate of Authorization No. 4908
NTL/cec - Enclosure

F:\FL\21589N_LGFTP_FtPierceSelfStorageTA\N21589_01\Reports\Parking\LtrRL093021.docx

Appendix A

Site Plan



DISTRICT REQUIREMENTS & GENERAL NOTES

APPLICANT/OWNER: LGFTPI LLC
7307 NW 122ND AVE
PARKLAND, FL 33076

PARCEL NO. 2415-602-0002-000-2

FEMA FLOOD ZONE: ZONE X PER FLOOD PANEL 120286-0187-J, DATED FEB. 16, 2012
ZONE AH (16)

LAND USE INFORMATION:

CURRENT USE:	VACANT
PROPOSED USE:	RETAIL
FUTURE LAND USE DESIGNATION:	COMMERCIAL
ZONING DESIGNATION:	C3 - GENERAL COMMERCIAL

DEVELOPMENT STANDARDS:	REQUIRED	PROPOSED
MIN. LOT AREA (S.F.)	10,000	60,039
MIN. LOT FRONTAGE (FEET):	50	206.35
MIN. LOT DEPTH (FEET):	90	288.66
MIN. SET BACKS:		
FRONT - WEST (FEET):	25	63.97'
SIDE - NORTH (FEET):	0	63.37'
SIDE - SOUTH (FEET):	0	10'
REAR - EAST (FEET):	15	19.90'
MIN. LANDSCAPE BUFFER:		
FRONT - WEST (FEET):	10	XX'
SIDE - NORTH (FEET):	10	10'
SIDE - SOUTH (FEET):	10	10'
REAR - EAST (FEET):	10	15.21'
MAX. HEIGHT (FEET):	65'	XX'
MAX. LOT COVERAGE:	0.60	0.44
MIN. PERVIOUS AREA (%)	20	20
MIN. OPEN SPACE (RATIO):	25	25.7

PARKING DATA

REQUIRED:

USE	AREA	RATIO	AMOUNT
SELF STORAGE	106,830 S.F.	--	--

PROVIDED:

	SPACES
STANDARD SPACES (MIN. 9.5' X 19')	22 (9.5' X 19')
ACCESSIBLE SPACES (MIN. 12' X 19')	2 (12' X 19')
TOTAL SPACES	24

LOADING ZONE:

REQUIRED:
GROSS FLOOR AREA 106,830 S.F. - - REQUIRED
PROVIDED: 3 SPACES

BICYCLE PARKING:

REQUIRED: 1 SPACE PER 10 MOTOR VEHICLE SPACES; 2 MINIMUM - 2 REQUIRED
PROVIDED: 2 SPACES

NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH SECTIONS 17 AND 22 OF THE CITY OF FORT PIERCE CODE OF ORDINANCES.
2. ALL TRUNCATED DETECTABLE SURFACES SHALL BE CAST IN PLACE (ADHESIVE NOT PERMITTED) AND BE BRICK RED IN COLOR. ALL RAMPS AND FLUSH CONNECTIONS WITHIN PUBLIC RIGHT-OF-WAY OR ROAD EASEMENTS SHALL INCLUDE TRUNCATED DETECTABLE SURFACE 24" IN DEPTH CONSISTENT WITH FDOT STANDARD PLANS.

THOMAS ENGINEERING
CIVIL ENGINEERS · PROJECT MANAGERS · LAND PLANNING · LANDSCAPE ARCHITECTS
6300 NW 31st AVE. FT LAUDERDALE, FL 33309 P: 954.202.7000
1902 W. FLETCHER AVE. SUITE 101 TAMPA, FL 33612 P: 813.379.4100
125 W INDIANTOWN RD. SUITE 206 JUPITER, FL 33458 P: 561.203.7903

The engineering plans and designs for this project are and shall remain the property of Thomas Engineering Group, LLC and shall not be used in whole or in part for any other project without the written authorization of Thomas Engineering Group, LLC.

REVISIONS

REV	DATE	COMMENT	BY

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
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PERMIT SET

PROJECT No.:	FT210079
DRAWN BY:	HR
CHECKED BY:	EMM
DATE:	08/10/2021
SCALE:	AS NOTED
CAD I.D.:	FT210079 - TITLE

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

LG FORT PIERCE

SAINT LUCIE COUNTY

THOMAS ENGINEERING GROUP
1502 W. FLETCHER AVE, SUITE 101
TAMPA, FLORIDA 33612
Phone: (813) 379-4100
Fax: (813) 379-4040
www.ThomasEngineeringGroup.com

EDWARD M. McDONALD, P.E.
September 15, 2021
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

SHEET TITLE: **SITE PLAN**

SHEET NUMBER: **C-5.0**
OF

Appendix B

ITE Parking Generation Manual Information

Land Use: 151 Mini-Warehouse

Description

A mini-warehouse is a building in which a number of storage units or vaults are rented for the storage of goods. They are typically referred to as “self-storage” facilities. Each unit is physically separated from other units, and access is usually provided through an overhead door or other common access point.

Time of Day Distribution for Parking Demand

The following table presents a time-of-day distribution of parking demand on a weekday (nine study sites) and a Saturday (one study site) in a general urban/suburban setting.

	Percent of Peak Parking Demand	
Hour Beginning	**Weekday**	**Saturday**
12:00–4:00 a.m.	0	–
5:00 a.m.	0	–
6:00 a.m.	0	–
7:00 a.m.	0	–
8:00 a.m.	14	–
9:00 a.m.	71	–
10:00 a.m.	50	–
11:00 a.m.	79	–
12:00 p.m.	57	–
1:00 p.m.	64	91
2:00 p.m.	64	27
3:00 p.m.	79	55
4:00 p.m.	71	100
5:00 p.m.	100	91
6:00 p.m.	14	27
7:00 p.m.	0	0
8:00 p.m.	0	–
9:00 p.m.	0	–
10:00 p.m.	0	–
11:00 p.m.	0	–

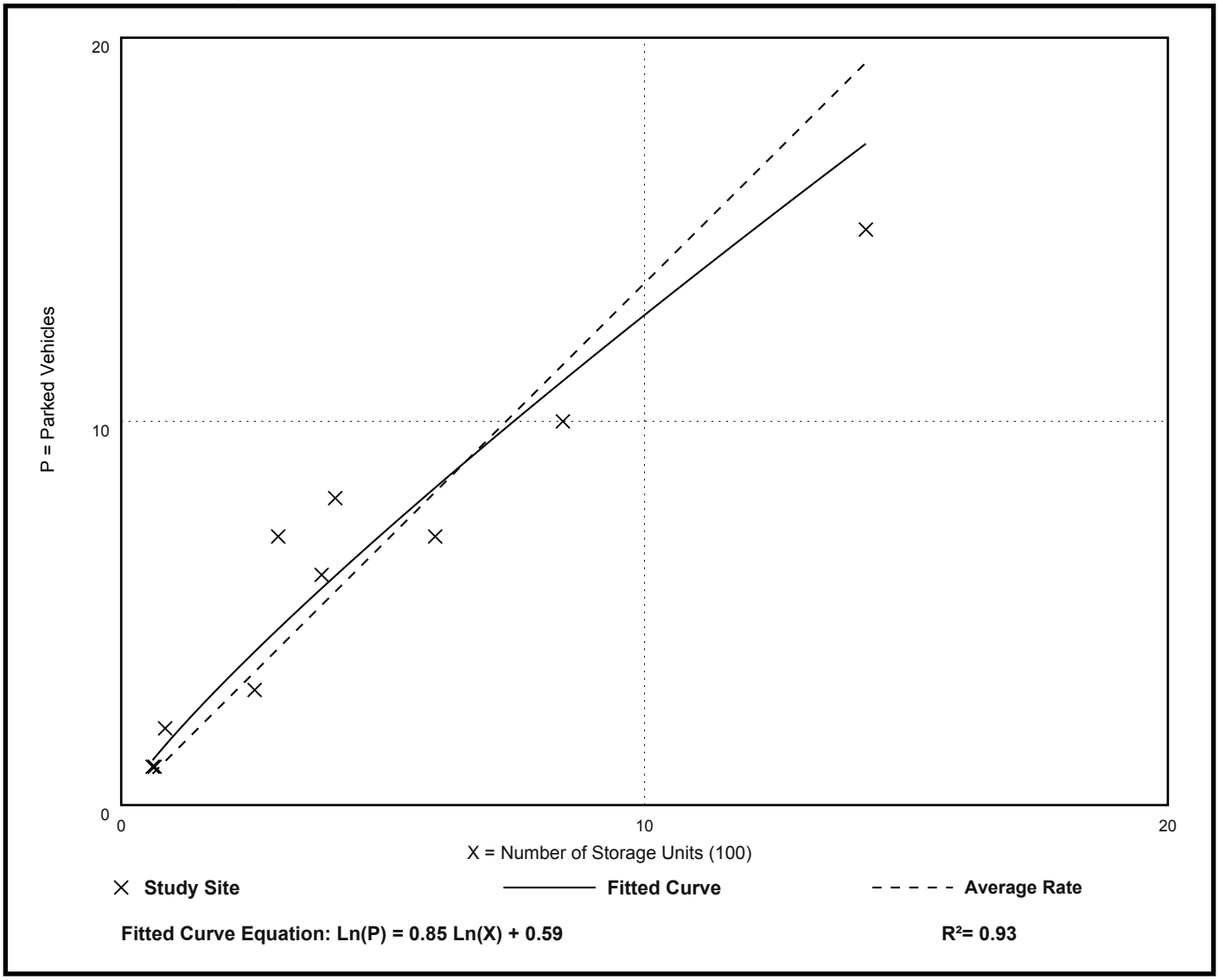
Mini-Warehouse
(151)

Peak Period Parking Demand vs: Storage Units (100)
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Peak Period of Parking Demand: 4:00 - 6:00 p.m.
Number of Studies: 10
Avg. Num. of Storage Units (100): 4.4

Peak Period Parking Demand per Storage Unit (100)

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
1.36	1.05 - 2.38	1.18 / 2.35	***	0.43 (32%)

Data Plot and Equation



Fitted Curve Equation: Ln(P) = 0.85 Ln(X) + 0.59

R^2= 0.93

Mini-Warehouse
(151)

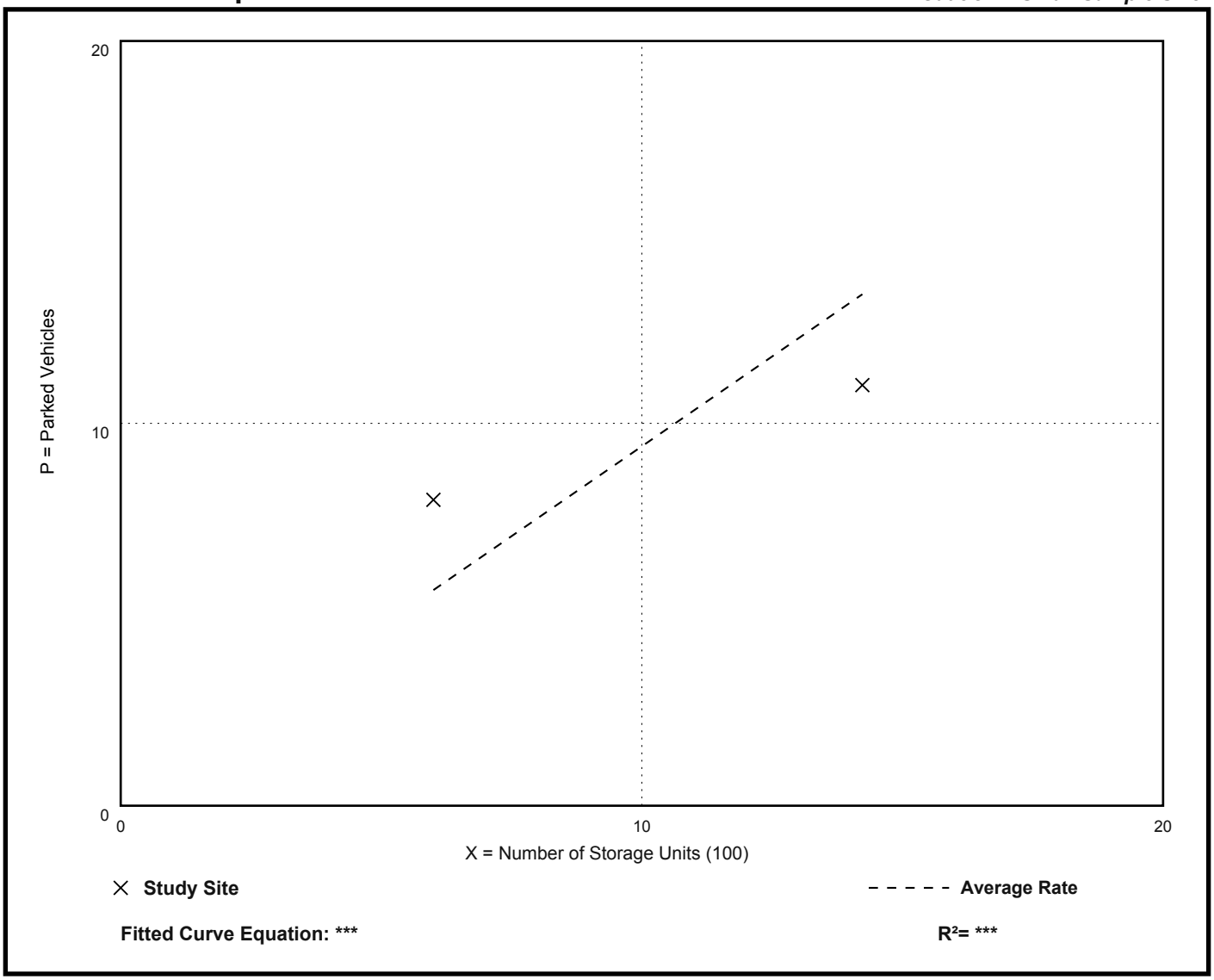
Peak Period Parking Demand vs: Storage Units (100)
On a: Saturday
Setting/Location: General Urban/Suburban
Peak Period of Parking Demand: 1:00 - 5:00 p.m.
Number of Studies: 2
Avg. Num. of Storage Units (100): 10

Peak Period Parking Demand per Storage Unit (100)

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.94	0.77 - 1.33	*** / ***	***	*** (***)

Data Plot and Equation

Caution – Small Sample Size



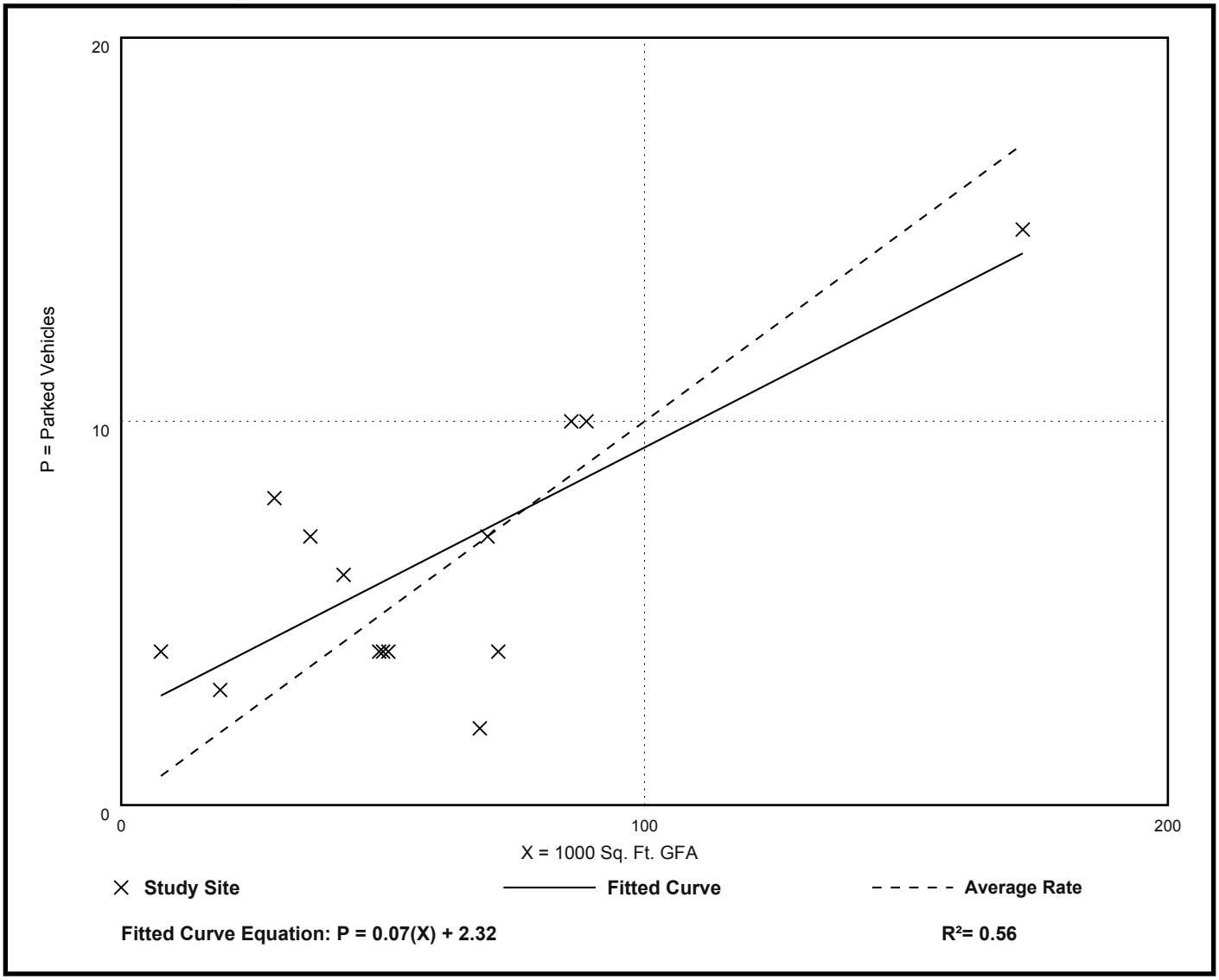
Mini-Warehouse
(151)

Peak Period Parking Demand vs: 1000 Sq. Ft. GFA
On a: Weekday (Monday - Friday)
Setting/Location: General Urban/Suburban
Peak Period of Parking Demand: 4:00 - 6:00 p.m.
Number of Studies: 14
Avg. 1000 Sq. Ft. GFA: 60

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.10	0.03 - 0.53	0.08 / 0.25	***	0.07 (70%)

Data Plot and Equation



Mini-Warehouse
(151)

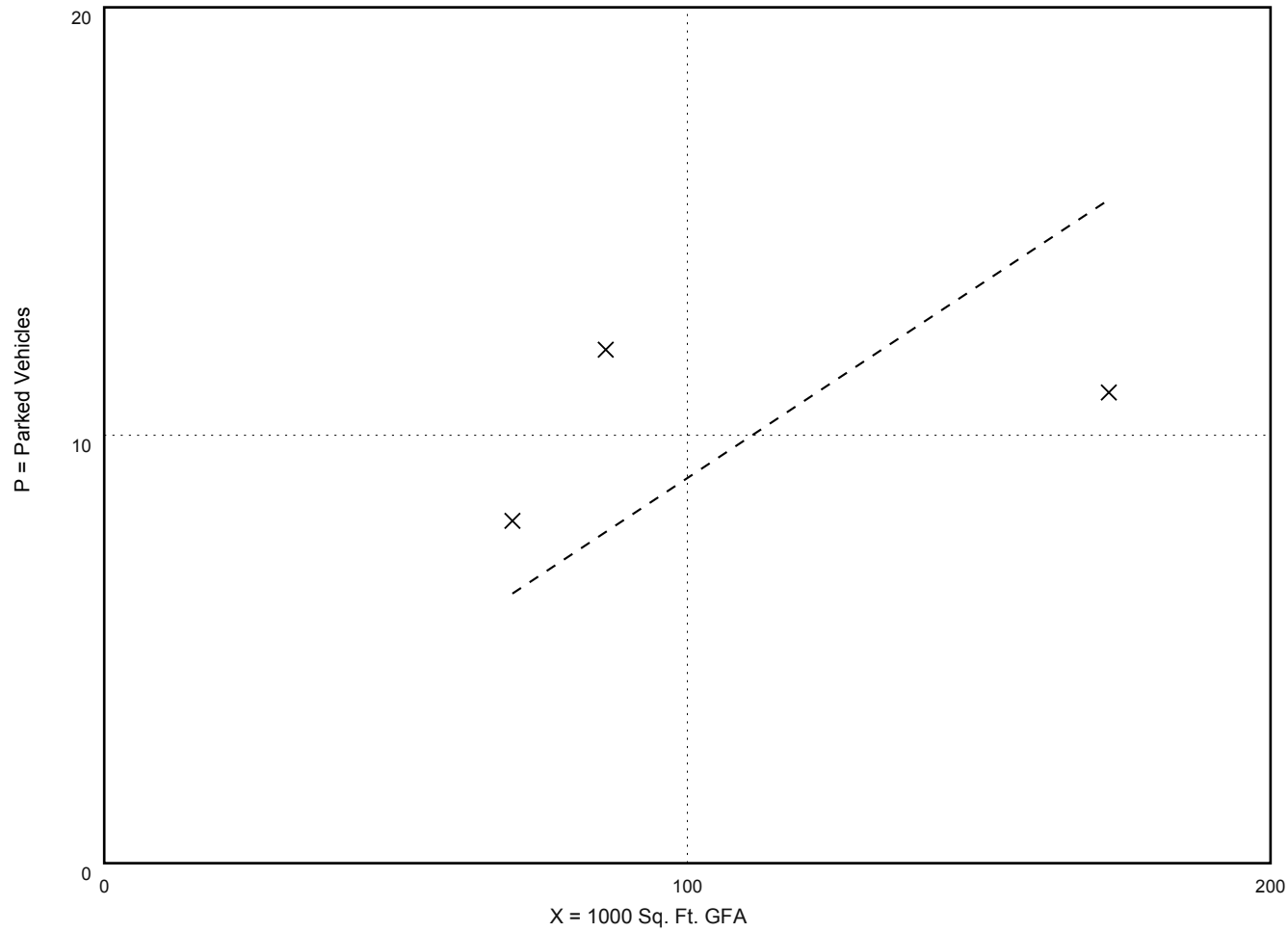
Peak Period Parking Demand vs: 1000 Sq. Ft. GFA
On a: Saturday
Setting/Location: General Urban/Suburban
Peak Period of Parking Demand: 1:00 - 5:00 p.m.
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 109

Peak Period Parking Demand per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	33rd / 85th Percentile	95% Confidence Interval	Standard Deviation (Coeff. of Variation)
0.09	0.06 - 0.14	0.08 / 0.14	***	0.04 (44%)

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: *

R^2= *

Appendix C

Parking Codes for Nearby Municipalities

Sec. 158.227. - Self-Service Storage Facilities.

(A) **In General.** The only commercial activities permitted on the site of self-service storage facility shall be rental of storage bays and pickup and deposit of goods and/or property in dead storage. Storage bays shall not be used to: manufacture, fabricate or process goods; service or repair vehicles, boats, small engines or electrical equipment, or to conduct similar repair activities; conduct garage sales or retail sales of any kind; or conduct any other commercial or industrial activity on the site.

(B) **Security Quarters Permitted.** Residential quarters for security purposes may be established on the site, subject to the requirements of all applicable zoning districts.

(C) **Bays Have No Legal Address.** Individual storage bays or private postal boxes within a self-service storage facility shall not be considered a premises for the purpose of assigning a legal address in order to obtain an occupational license or other governmental permit or license to do business.

(D) **Outside Storage.**

(1) Except as provided in this subsection (D), all property stored on site shall be entirely within enclosed buildings.

(2) Open storage of recreational vehicles and dry storage of pleasure boats of the type customarily maintained by private individuals for their personal use shall be permitted within a self-service storage facility provided that the following conditions are met:

a. Such storage shall take place only within a designated area. The area so designated shall be clearly delineated upon the approved site plan;

b. The open storage area shall not exceed twenty-five (25%) percent of the buildable area of the site;

c. The open storage area shall be entirely screened from view from adjacent residential areas and street rights-of-way by a solid building wall, an eight foot high opaque fence, or a masonry wall with a minimum height of eight (8) feet;

d. Vehicles shall not be stored within the area set aside for minimum building setbacks; and

e. No vehicle maintenance, washing or repair shall be permitted on site. Pleasure boats stored on the site shall be placed and maintained upon wheeled trailers. No dry stacking of boats shall be permitted on site.

(E) **Maximum and Minimum Lot Size and Building Coverage.** Please see all applicable zoning districts.

(F) **Separation Between Storage Buildings.** If separate buildings are constructed, there shall be a minimum ten (10) foot separation between individual buildings within the facility.

(G) **Maximum Bay Size.** The maximum size of a storage bay shall be five hundred (500) square feet.

(H) **Maximum Building Height.** For maximum height, please reference the applicable zoning district. In addition, a parapet wall shall be constructed to screen roof-mounted air conditioning and

other equipment, if any.

(I) **Supplemental Parking Requirements.** A minimum number of parking spaces shall be provided upon the site as follows:

(1) **Employee and Customer Parking.** Two (2) parking spaces for the residential quarters, and one (1) parking space for each two hundred (200) square feet of gross floor area used as an office in the rental of storage bays.

a. One (1) additional customer parking space for every one hundred (100), or fraction thereof, storage bays.

(2) **Interior Parking.** Interior parking shall be provided in the form of aisles adjacent to the storage bays. These aisles may be used both for circulation and temporary customer parking while using storage bays. The minimum width of these aisles shall be as follows:

a. If aisles permit two-way traffic, thirty (30) feet; and

b. If aisles permit only one-way traffic, twenty-one (21) feet.

(J) **Supplemental Landscape Requirements; Perimeter Landscape Buffers.** A self-service storage facility may dispense with the wall which is required to be erected within the required perimeter where all of the following conditions are met:

(1) The exterior facades of storage buildings present an unbroken, wall like appearance when seen from adjacent lots and rights-of-way; this shall not prevent the installation of fire access doors, if mandated by law;

(2) The exterior facades of separate storage buildings area joined by walls to give the appearance of structural continuity;

(3) The resulting area between the outer face of the buildings and the property line or right-of-way is maintained and appropriately planted as a landscape buffer;

(4) There are no aisles or other vehicle entry ways located in the area between the building and adjacent lot boundary or the right-of-way; and

(5) Either landscaping is installed in the perimeter landscape buffer or the area is maintained for vegetation preservation, provided the minimum requirements of Chapter 154 are met.

(K) **Miscellaneous Requirements.**

(1) **Outdoor Lighting.** All outdoor lighting shall be shielded away from adjacent property. Lights shall be low-intensity and the minimum necessary to discourage vandalism and theft. If a facility abuts a residential zone, outdoor lighting fixtures shall meet the requirements of subsection 158.221(B)(7).

(2) **No Loudspeakers.** Exterior loudspeakers or paging equipment shall not be permitted on the site.

(3) **Orientation of Storage Bay Doors.** Storage bay doors shall not face any abutting property which is residentially zoned, nor shall they be visible from any adjacent residential property

Pain management clinic	1 per 200 square feet (also refer to section 2.06.14.E.3)
Pool hall and billiard parlor	1 per 200 square feet, plus restaurant/bar seating requirements if applicable
Radio and/or television broadcast stations	1 per employee on largest shift
Railroad freight stations/terminals	1 per two employees
Repair services	1 per 300 square feet
Restaurant - general	1 per 3 seats based on the maximum seating capacity of the building, plus 1 space per employee
Restaurant - convenience (fast food, drive-through, or drive-in)	1 per employee on largest shift, plus 1 space per 100 square feet of service area, plus queuing spaces (refer to Section 6.01.07 for queuing requirements)
Restaurant - limited	1 per 4 seats based on the maximum seating capacity of the building, plus 1 space per employee
Retail - bulk merchandise	1 per 250 square feet
Retail - department store (freestanding)	1 per 250 square feet
Retail - furniture	1 per 500 square feet
Retail - intensive sales and service (including neighborhood retail establishment, pharmacies, gift shops, hardware stores, newsstands and similar uses)	1 per 200 square feet
Retail - non-intensive sales and service (including appliance stores, large-scale home improvement centers, lawn and garden supply centers, office equipment and supplies, super markets, farm and heavy equipment, and similar uses)	1 per 250 square feet
Retail - regional mall (greater than 50,000 square feet)	1 per 250 square feet
Retail - strip shopping center	1 per 250 square feet
Skating rink, roller or ice	1 per 200 square feet if located with retail, or 1 space per 150 square feet if located independently
Shooting range, indoor	1 space per firing point
Sign manufacturing/painting shops	1 per employee on largest shift
Studio (art, dance, music, exercise)	1 per 300 square feet
Telecommunications tower	1 space per tower
Theater	1 per 4 seats
Warehouse - mini-storage	1 per employee, plus 1 space per 50 storage units

Use Category	*Minimum Parking Space Requirements*
Restaurant, fast food	1 per 100 SF of GFA including outdoor seating areas pursuant to section 27-2795
Retail, service, and repair	1 per 250 SF of GFA
School—Elementary or junior high	1 per employee + 20 for visitors
School—Senior high (grades 9—12)	1 per 10 student stations + 1 per employee + 20 for visitors
School—Trade, vocational, college or university	1 per 2 student stations + 1 per employee + 1 per 4 seats in places of assembly + 20 for visitors
Self-service storage facilities (both types)	Minimum of 5 spaces or 1 space per 250 sq. ft. of GFA of office uses, whichever is greater plus 2 spaces for a manager's residential unit; plus
Multi-access	Parking/driving lanes shall be a minimum of 24 ft. wide when storage units open onto one side of the lane only and a minimum of 34 ft. when the storage units open onto both sides of the lane; or
Limited-access	Minimum of 5 additional spaces or 1 space per 100 storage units, whichever is greater, plus 2 12 ft. by 30 ft. loading spaces at the main entrance, plus one 12 ft. by 30 ft. loading space at each supplemental access point where loading and unloading may occur.

Marina, Commercial	1 space per two wet slips plus 1 space per 5 dry slips plus the greater of 1 space per 200 square feet of accessory uses or required parking for additional use (lounge, retail, restaurant, etc.)	
Marina, Private Mooring or Dock	None	
Massage Therapist	1 space per 250 square feet	
Motion Picture Studio	1 space per 300 square feet of office space plus 10 spaces per studio plus 1 space per 1,000 square feet	Parking study can be requested by city or provided by applicant to demonstrate overall parking demand.
Nursing Home or Convalescent Facility	1 space per 4 beds plus 1 space per 250 square feet of office space	
Painting and Decorating Contractor	1 space per 250 square feet	
Parking Lot, Commercial	None	
Picture Framing	1 space per 250 square feet	
Photo Studio and Processing	1 space per 250 square feet	
Print Shop	1 space per 250 square feet	
Self Service Storage	1 space per 75 storage spaces plus 2 spaces per security quarters plus 4 spaces per office	
Shoe Repair	1 space per 250 square feet	
Studio, Instructional	1 space per 250 square feet	
Studio, Professional	1 space per 250 square feet	
Tailor Shop	1 space per 250 square feet	
Travel Agency	1 space per 250 square feet	
Video Game and Amusement Parlor	1 space per 250 square feet	
Video Rental and Sales	1 space per 200 square feet	
OFFICE		
Business Incubator	1 space per 250 square feet	Parking study can be requested by city or provided by applicant to demonstrate overall parking demand.
Employment Office	1 space per 300 square feet	
Interior Design, including Sales	1 space per 250 square feet	
Office, Medical or Dental	1 space per 200 square feet	

Appendix D

Town of Pembroke Park Information

MICHAEL MILLER PLANNING ASSOCIATES, INC.
Land Design Municipal Planning Services Transportation Planning

TOWN OF PEMBROKE PARK
COMMUNITY DEVELOPMENT
MEMORANDUM

To: **Town of Pembroke Park**
Planning and Zoning Board

From: **Michael J. Miller, AICP**
Consultant Town Planner

Date: **March 15th, 2016**

Subject: **Off-Street Parking Reduction Request**
Proposed Self Storage Facility – Wheat Capital Management
2801 John P. Lyons Lane
Pembroke Park Acct. No. 16-284
MMPA Account No.: 00-1101-1091B

RECOMMENDED PLANNING AND ZONING BOARD ACTION

MMPA recommends the Planning and Zoning Board review the contents of this staff report, the applicant's engineering study, and if deemed acceptable, recommend **APPROVAL** of the Parking Reduction application to allow a reduction of the number of required parking spaces for the proposed self-storage warehouse use from one (1) parking space for each 600 square feet of net floor area (1:600) to one (1) parking space for each 8,734 square feet of net floor area (1:8,734).

GENERAL PROJECT INFORMATION

Land Use Designation: I - Industrial

Zoning District: M -1 Industrial District

General Location: 2801 John P. Lyons Lane

Legal Description: A portion of Parcel "B", Supreme Millwork Plat, according to the plat recorded in Plat Book 118, Page 33, of the public records of Broward County, Florida.

FORT PIERCE SELF STORAGE

S. US HIGHWAY 1, FORT PIERCE, FLORIDA

KENNETH CARLSON
ARCHITECT- P.A.
DESIGN
PLANNING
INTERIORS

SELF STORAGE
FORT PIERCE SELF STORAGE
S. US HIGHWAY 1, FORT PIERCE, FLORIDA
KENNETH CARLSON
ARCHITECT- P.A.
DESIGN
PLANNING
INTERIORS

FORT PIERCE SELF STORAGE

S. US HIGHWAY 1, FORT PIERCE, FLORIDA

KENNETH CARLSON
ARCHITECT- P.A.
DESIGN
PLANNING
INTERIORS

FORT PIERCE SELF STORAGE
S. US HIGHWAY 1, FORT PIERCE, FLORIDA

KENNETH CARLSON
ARCHITECT- P.A.
DESIGN
PLANNING
INTERIORS

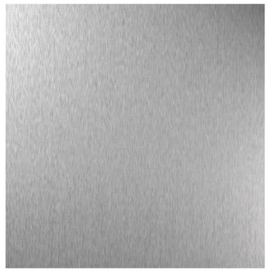
FORT PIERCE SELF STORAGE

S. US HIGHWAY No.1, FORT PIERCE, FLORIDA

KENNETH CARLSON
ARCHITECT- P.A.
DESIGN
PLANNING
INTERIORS

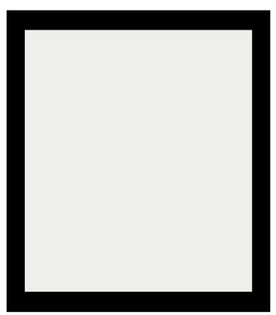
E1- SW 7006 EXTRA WHITE
E2- SW 7071 GRAY SCREEN
E3- SW 7072 ONLINE
E4- SW 9162 AFRICAN GRAY
E5- SW 7074 SOFTWARE
E6- SW 7075 WEB GRAY
E7- ORANGE ACCENT
E8- LIGHT GRAY GLAZING
E9- MILL ALUMINUM
E11- WHITE METAL

E8



E9-E12

E11-E13



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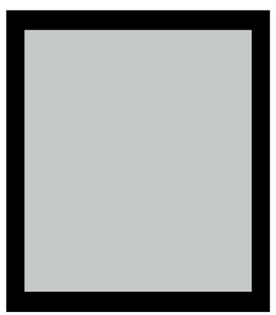

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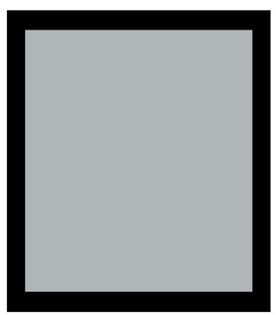

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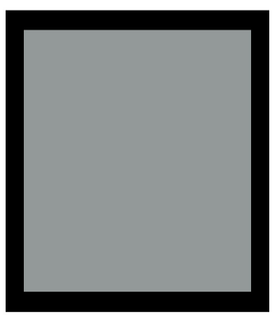

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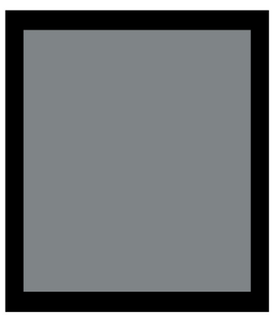
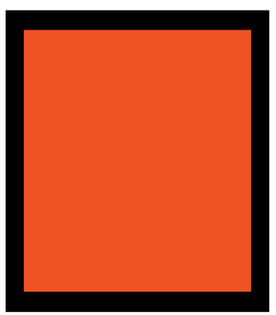


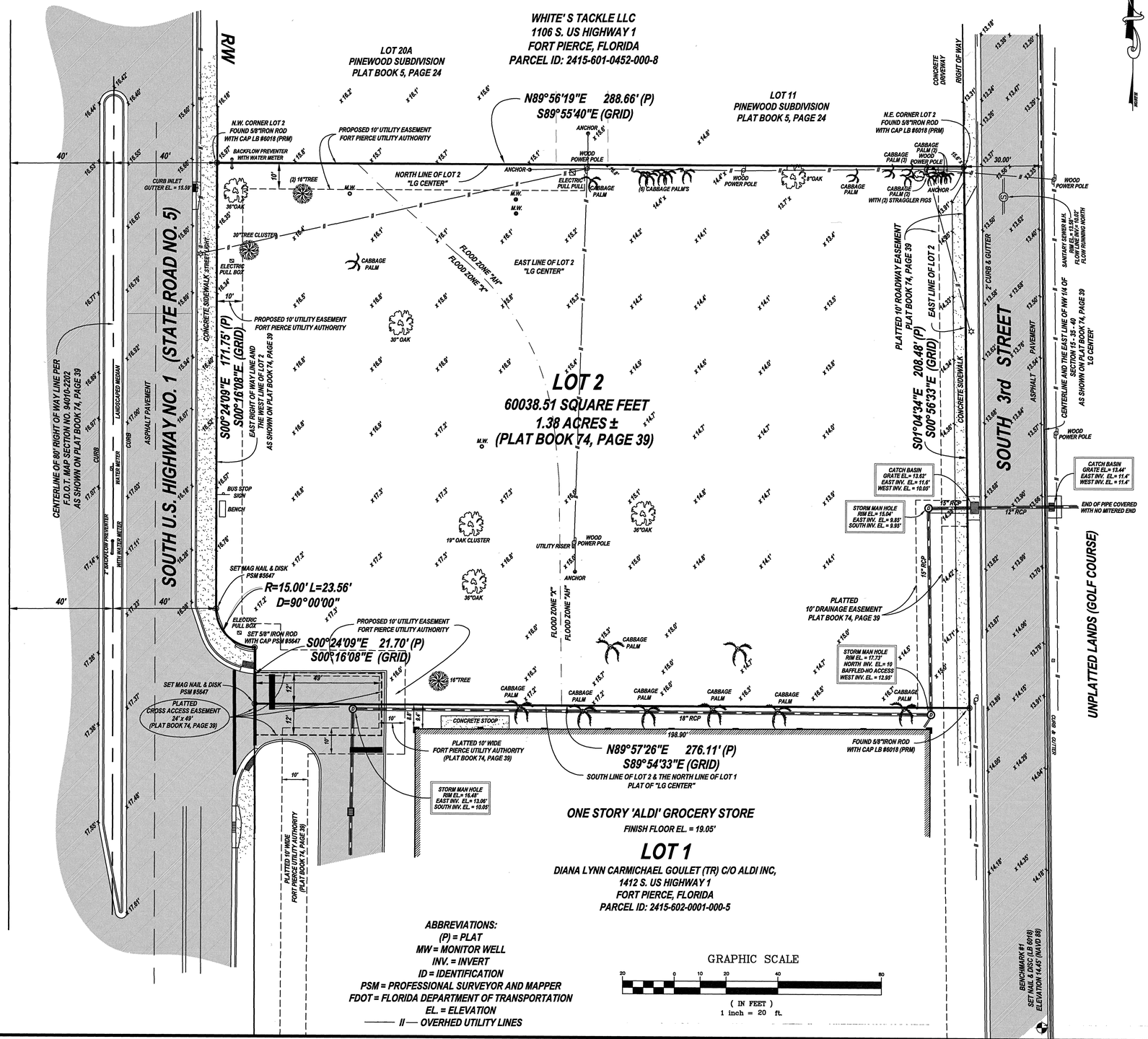
E5-E14

E6

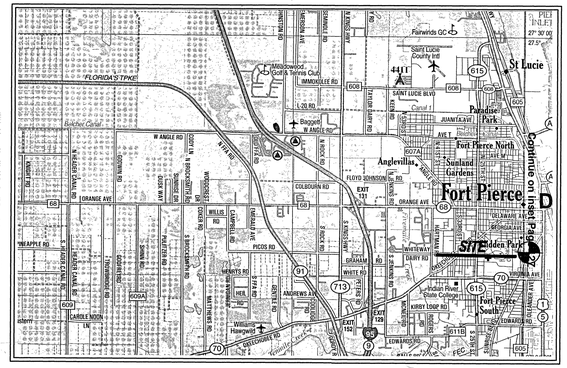


E7

SUBJECT PROPERTY LIES IN THE N.W. 1/4 OF SECTION 15, TOWNSHIP 35 SOUTH, RANGE 40 EAST CITY OF FORT PIERCE, ST. LUCIE COUNTY, FLORIDA



ABBREVIATIONS:
(P) = PLAT
MW = MONITOR WELL
INV. = INVERT
ID = IDENTIFICATION
PSM = PROFESSIONAL SURVEYOR AND MAPPER
FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
EL. = ELEVATION
——— // ——— OVERHED UTILITY LINES



LOCATION MAP: NOT TO SCALE

LEGAL DESCRIPTION:

LOT 2, LG CENTER, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 74, PAGE 39, PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA.

TITLE SEARCH REPORT:

LANDS SHOWN HEREON WERE ABSTRACTED FOR RESTRICTIONS, EASEMENTS, AND/OR RIGHTS OF WAY OF RECORD PER ATTORNEY'S TITLE FUND SERVICES, LLC, FUND FILE NUMBER: 1108940, DATE: JULY 8TH, 2021. EASEMENTS AND/OR RIGHTS OF WAY OF RECORD PER TITLE SEARCH REPORT THAT ARE PLOTTABLE ARE SHOWN ON THIS "BOUNDARY SURVEY".

RESTRICTIONS / EASEMENTS

1. RIGHTS OF THE LESSEES UNDER UNRECORDED LEASES. - NOT A SURVEY MATTER.
2. MEMORANDUM OF LEASE RECORDED IN O.R. BOOK 4053, PAGE 1331, ASSIGNMENT AND ASSUMPTION OF LEASE RECORDED IN O. R. BOOK 4085, PAGE 2902, PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA. - NOT A SURVEY MATTER.
3. ALL MATTERS CONTAINED ON THE PLAT OF LG CENTER, AS RECORDED IN PLAT BOOK 74, PAGE 39, PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA. - AFFECTS THE SUBJECT PROPERTY AS SHOWN ON SURVEY.
4. RECIPROCAL EASEMENT AGREEMENT WITH COVENANTS, CONDITIONS AND RESTRICTIONS RECORDED IN O.R. BOOK 4053, PAGE 1341, PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA. - AFFECTS THE SUBJECT PROPERTY AND IS UNPLOTTABLE.
5. ALL MATTERS CONTAINED ON THE PLAT OF PINEWOOD, AS RECORDED IN PLAT BOOK 5, PAGE 24, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. - DOES NOT AFFECT THE SUBJECT PROPERTY AND HAS BEEN RE-PLATTED AS LOT 2.
6. EASEMENT TO STANDARD OIL COMPANY, AS REFERENCED IN THAT CERTAIN DEED RECORDED IN O.R. BOOK 113, PAGE 205, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. - DOES NOT AFFECT THE SUBJECT PROPERTY.
7. MATTERS AS CONTAINED IN SPECIAL WARRANTY DEED RECORDED IN O.R. BOOK 2863, PAGE 830, PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA. - DOES NOT AFFECT THE SUBJECT PROPERTY.
8. EASEMENT SET FORTH IN QCD RECORDED IN O.R. BOOK 876, PAGE 2773, PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA. (BENEFIT) - DOES NOT AFFECT THE SUBJECT PROPERTY.

WETLAND NOTE:

LIMITS OF JURISDICTIONAL WETLANDS, DITCHES, DRAINAGE WAYS, WATER FLOWS, AND/OR BODIES OF WATER, IF ANY, ARE NOT DETERMINED BY THIS SURVEY. CLIENT IS ADVISED TO CONTACT APPROPRIATE GOVERNING AGENIES FOR POSSIBLE LIMITS OF JURISDICATION.

FLOOD ZONE NOTE:

LANDS SHOWN HEREON ARE LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF "X" AND "AH" BASE EL. 16.0' BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 12111C0187K, DATED FEBRUARY 19, 2020 AND IS RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM 1988.

SURVEYOR'S NOTES:

1. NO ATTEMPT WAS MADE BY THIS FIRM TO LOCATE UNDERGROUND UTILITIES ON/OR ADJACENT TO THIS SITE. THE APPROXIMATE LOCATION OF ALL UTILITIES SHOWN HEREON WERE TAKEN FROM ASBUILT DRAWINGS AND/OR ON-SITE LOCATION AND SHOULD BE VERIFIED BEFORE CONSTRUCTION.
2. NO ATTEMPT WAS MADE BY THIS FIRM TO LOCATE UNDERGROUND FOOTINGS OF BUILDINGS OR FENCES ON OR ADJACENT TO THIS SITE.
3. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR EASEMENTS AND/OR RIGHTS OF WAY OF RECORD EXCEPT AS SHOWN ON THE RECORD PLAT IF ANY.
4. THIS PROPERTY WAS SURVEYED WITHOUT THE BENEFIT OF A TITLE SEARCH.
5. THE BEARING BASE OF THIS SURVEY IS ALONG THE WEST LINE OF THE SECTION 15-35-40.
6. ALL BEARINGS AND DISTANCES SHOWN ARE PLAT AND MEASURED UNLESS OTHERWISE NOTED.
7. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
8. THE EXPECTED USE FOR THIS SURVEY AND MAP IS FOR COMMERICAL PURPOSES.
9. ALL MEASUREMENTS ARE IN ACCORDANCE WITH THE UNITED STATES STANDARD, IN FEET.

SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS SURVEY MAP AND/OR REPORT WAS PREPARED UNDER MY RESPONSIBLE CHARGE AND MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

CRAIG D. WATSON
PROFESSIONAL SURVEYOR & MAPPER
NO. 5647 STATE OF FLORIDA

DATE	REVISIONS

BOUNDARY AND TOPOGRAPHIC SURVEY

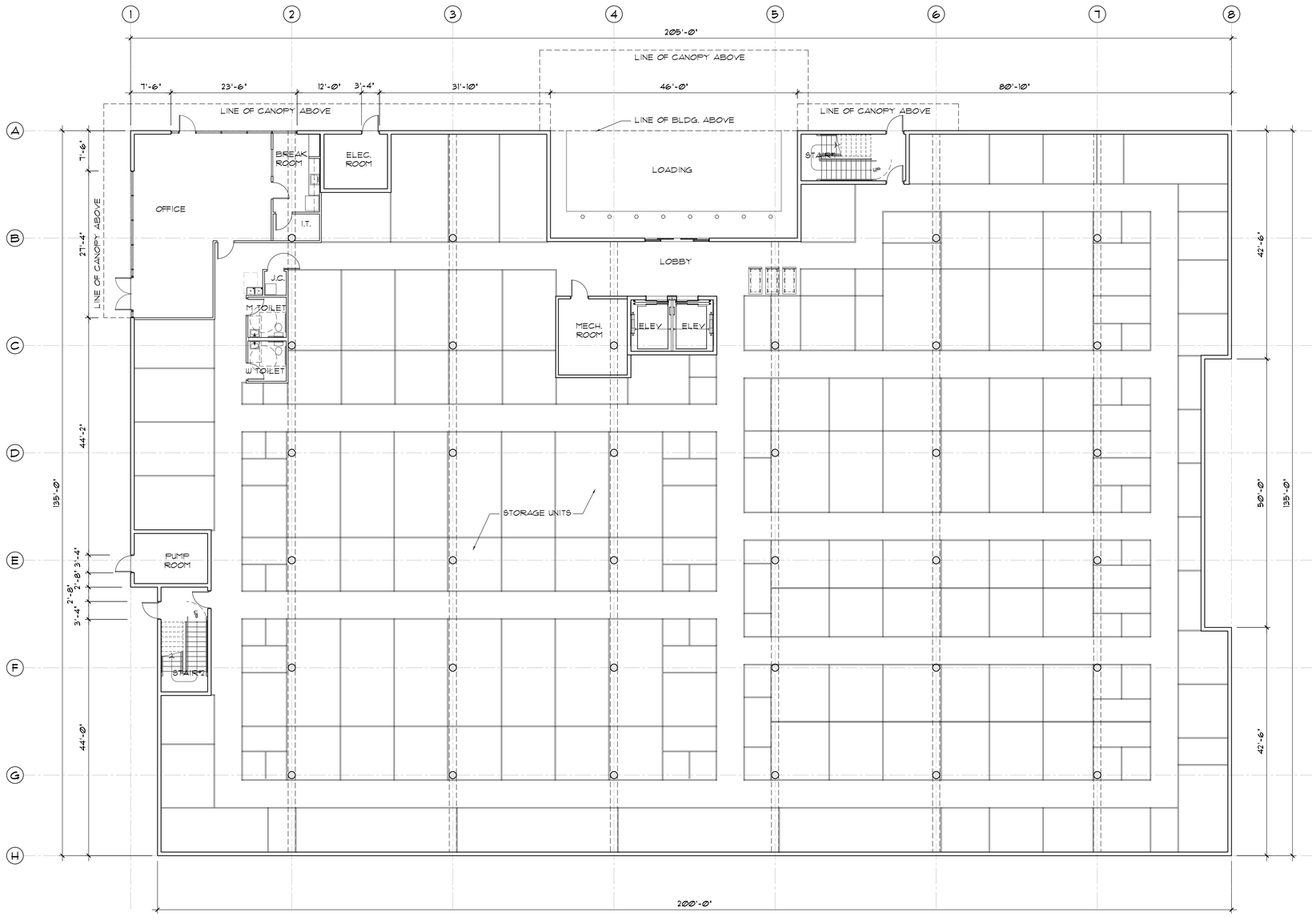
PREPARED FOR: LGFTP1, LLC, A FLORIDA LIMITED LIABLITY COMPANY

CRAIG WATSON AND ASSOCIATES LLC
PROFESSIONAL SURVEYING MAPPING
2240 NE DIXIE HIGHWAY - JENSEN BEACH - FLORIDA - 34957
O 772-334-0868 C 772-260-0249 craigwatsonOllive.com

2240 NE DIXIE HIGHWAY
JENSEN BEACH, FL 34957
CRAIGWATSON@LIVE.COM
PHONE 772-334-0868
CELL 772-260-0249

DATE: 7-22 THRU 8-4-21
SCALE: 1" = 20'
DWNG. BY C.D.W.
CHECKED BY: C.D.W.
JOB NUMBER: 21183

SHEET NUMBER
1 OF 1



1 A4.0 *GROUND FLOOR PLAN*

3/32"=1'-0"

NORTH

FORT PIERCE SELF-STORAGE

SOUTH U.S. HIGHWAY
FORT PIERCE, SAINT LUCIE COUNTY, FL.

KENNETH R. CARLSON – ARCHITECT, P.A.

1166 W. NEWPORT CENTER DR., SUITE #311 AA C001878
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 427 - 8848 FAX (954) 427 - 9329
e-mail: kencarlson@bellsouth.net

Revisions:

DRAWN BY: FS
CHECKED BY: KRC
DATE: 09/23/2021
SCALE: AS NOTED
PROJECT #: 21061
CAD DWG FILE: A4.0

KENNETH R. CARLSON
AR12546

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A4.0
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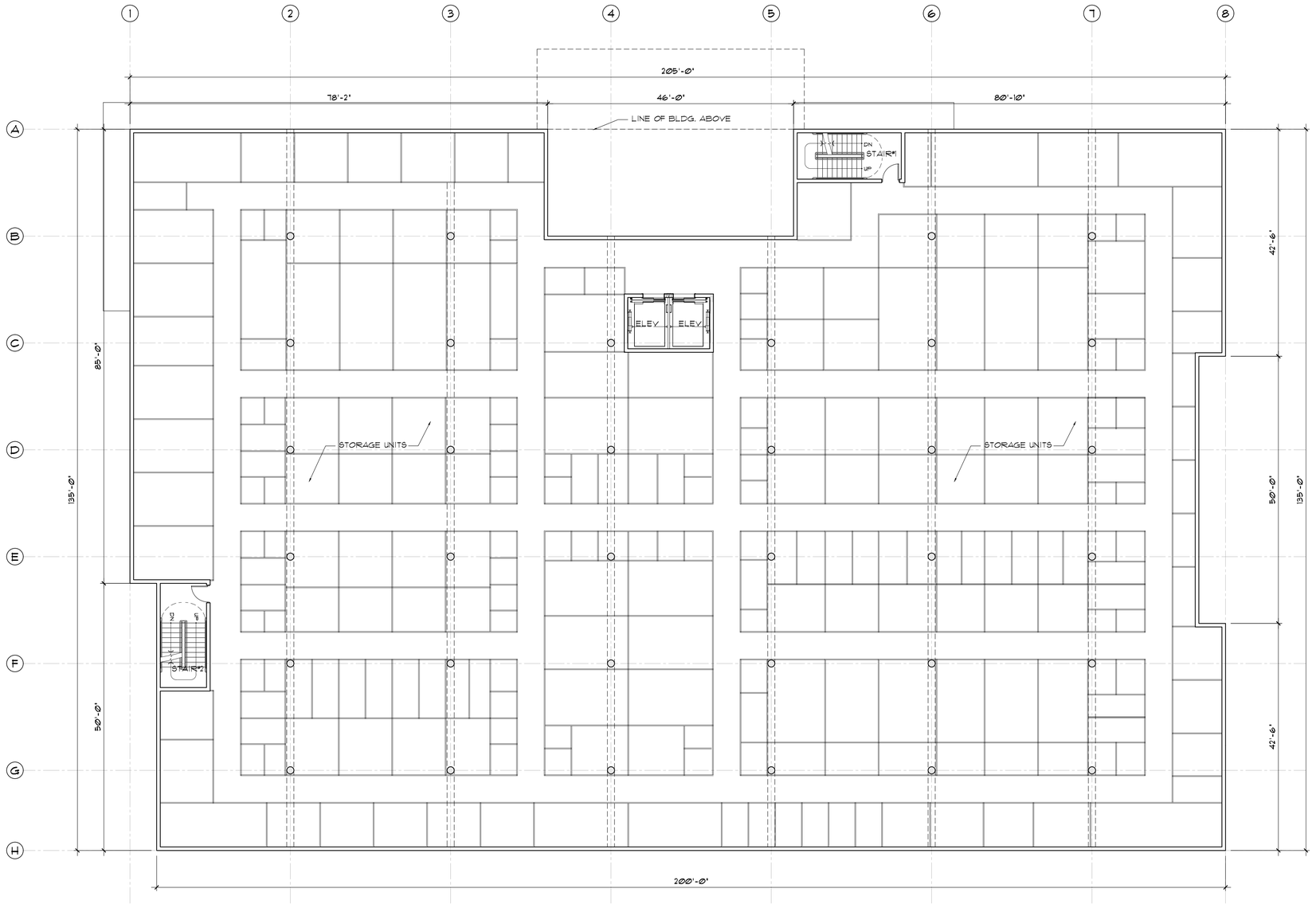

1 / A4.1 *SECOND FLOOR PLAN*

3/32"=1'-0"

NORTH

FORT PIERCE SELF-STORAGE

SOUTH U.S. HIGHWAY
FORT PIERCE, SAINT LUCIE COUNTY, FL.

KENNETH R. CARLSON – ARCHITECT, P.A.

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Revisions:

DRAWN BY: FS
CHECKED BY: KRC
DATE: 09/23/2011
SCALE: AS NOTED
PROJECT #: 2106.1
CAD DWG FILE: A4.1

KENNETH R. CARLSON
AR12546

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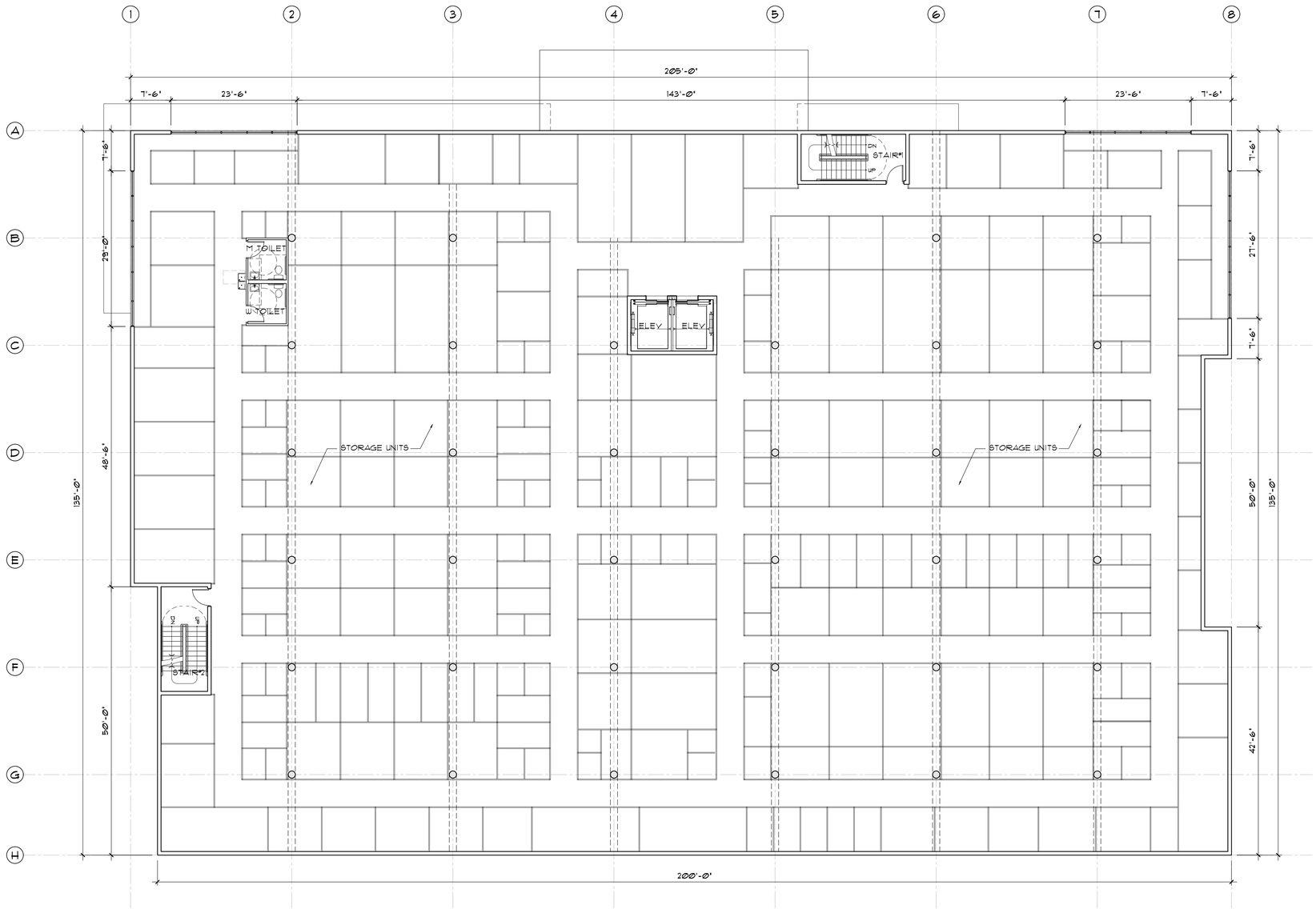

1 A4.2 *THIRD FLOOR PLAN*

3/32"=1'-0"

NORTH

FORT PIERCE SELF-STORAGE

SOUTH U.S. HIGHWAY
FORT PIERCE, SAINT LUCIE COUNTY, FL.

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Revisions:

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PROJECT #: 2096
CAD DWG FILE: A4.2

KENNETH R. CARLSON
AR12546

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A4.2

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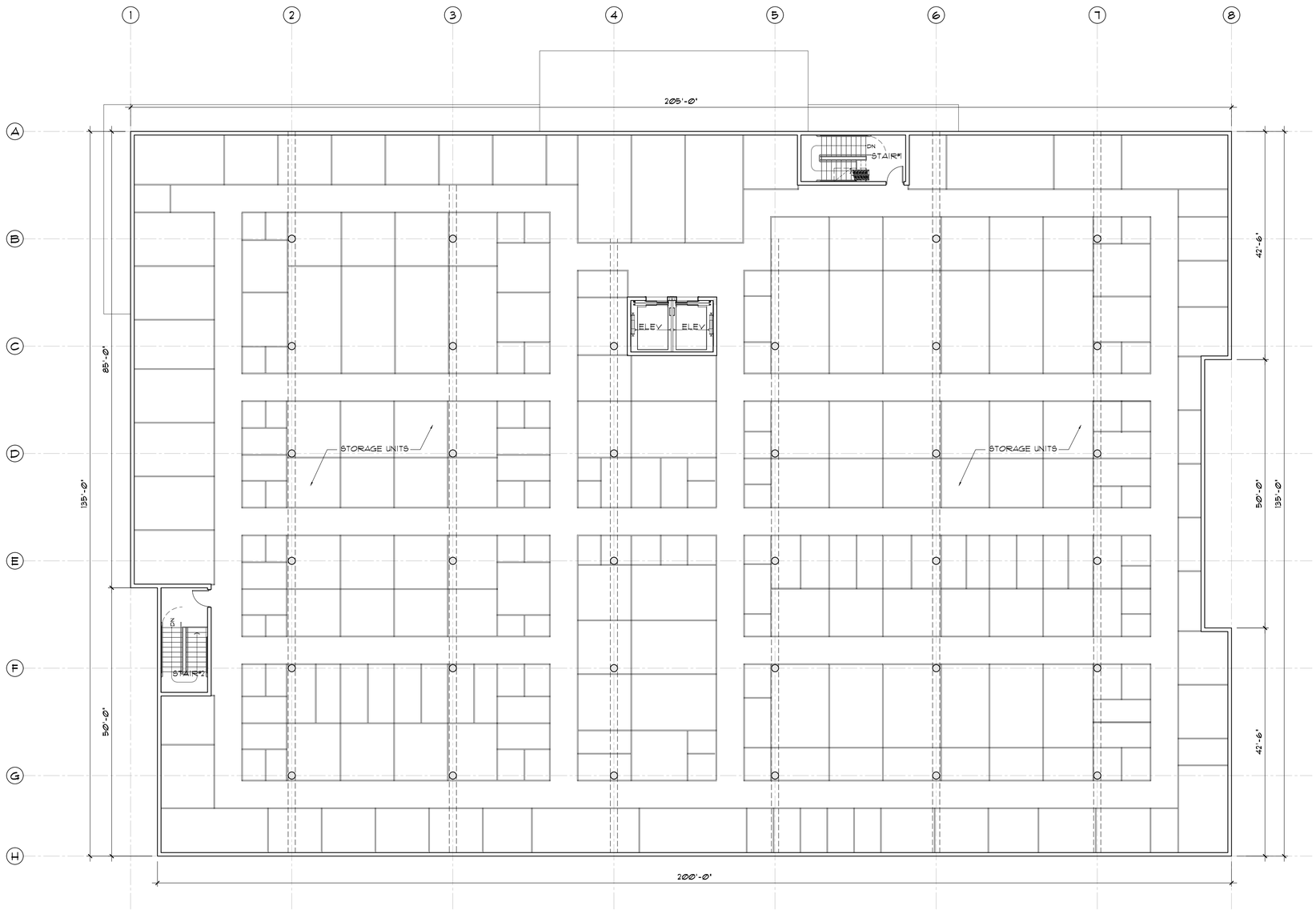

1 A4.3 *FOUTH FLOOR PLAN*

3/32"=1'-0"

NORTH

FORT PIERCE SELF-STORAGE

SOUTH U.S. HIGHWAY
FORT PIERCE, SAINT LUCIE COUNTY, FL.

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Revisions:

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DATE: 09/23/2011
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CAD DWG FILE: A4.3

KENNETH R. CARLSON
AR12546

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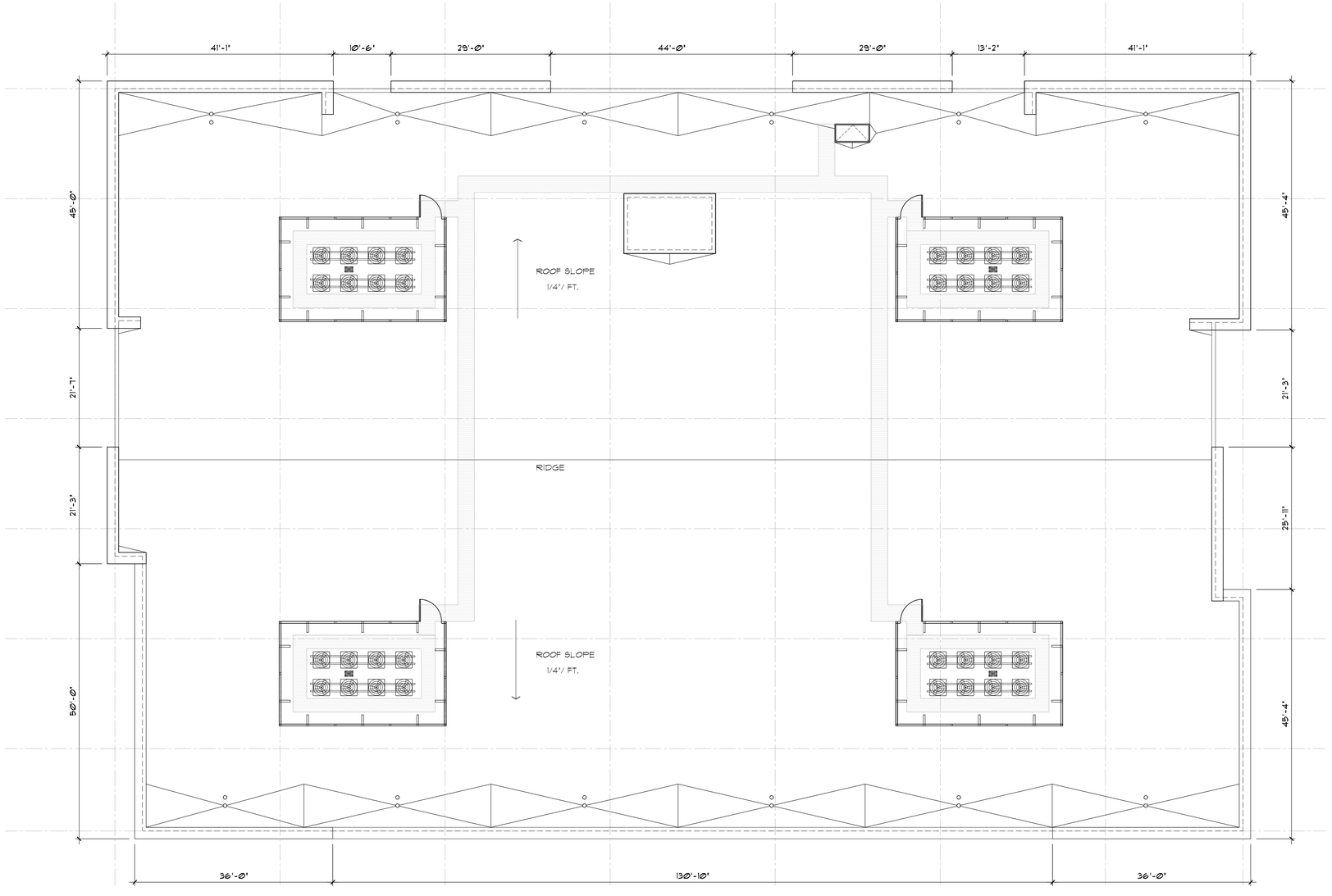

1 A4.4 **ROOF PLAN**

3/32"=1'-0"

NORTH

FORT PIERCE SELF-STORAGE

SOUTH U.S. HIGHWAY
FORT PIERCE, SAINT LUCIE COUNTY, FL.

KENNETH R. CARLSON – ARCHITECT, P.A.

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PROJECT #: 21061
CAD DWG FILE: A4.4

KENNETH R. CARLSON
AR12546

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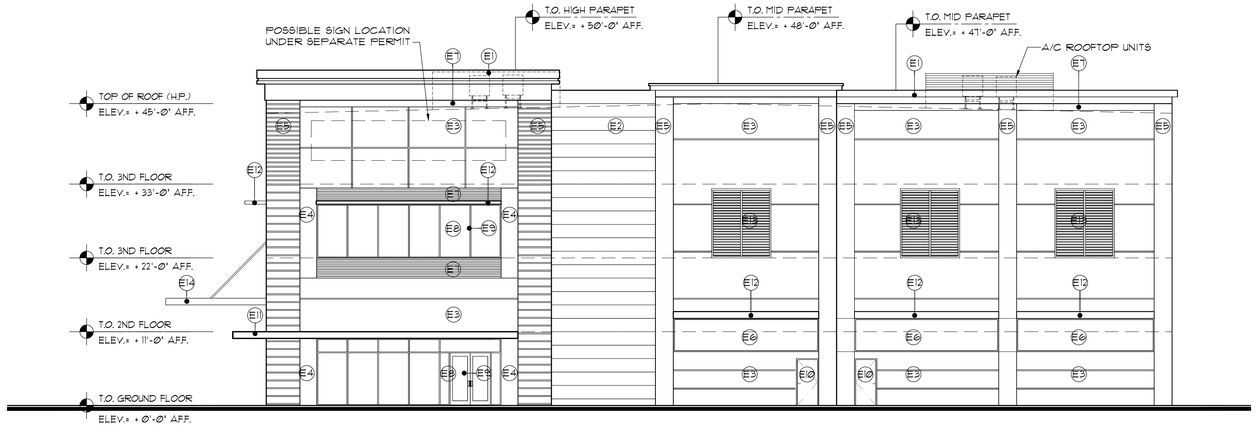


1 A5.0 *WEST ELEVATION*

3/32"=1'-0"

GRAPHIC SCALE

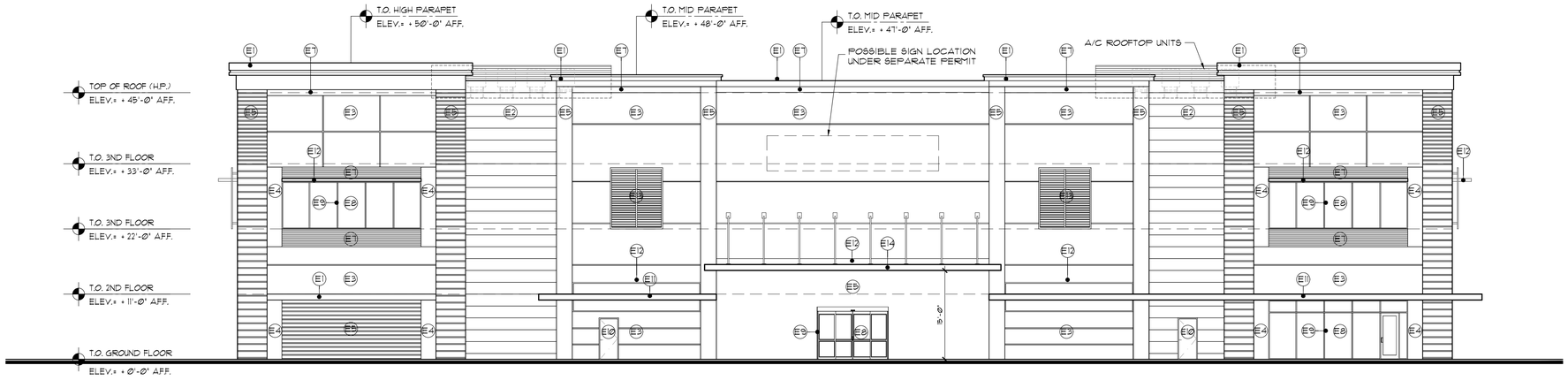
10 5 0

(in feet)

3/32 inch=1 ft

MARK	DESCRIPTION	MATCH MANUF.	CATALOG NO.	FINISH SCHEDULE COLOR	TYPE	FINISH	COATS	NOTE:	COMMON NAMES
E1	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7006	EXTRA WHITE	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL10 ON TEX-COTE PRIMER - SOLVENT BASED	WHITE
E2	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7071	GRAY SCREEN	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL10 ON TEX-COTE PRIMER - SOLVENT BASED	LIGHT GRAY
E3	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7072	ONLINE	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL10 ON TEX-COTE PRIMER - SOLVENT BASED	MEDIUM GRAY
E4	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 9162	AFRICAN GRAY	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL10 ON TEX-COTE PRIMER - SOLVENT BASED	GRAY
E5	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7074	SOFTWARE	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL10 ON TEX-COTE PRIMER - SOLVENT BASED	DARK GRAY
E6	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7075	WEB GRAY	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL10 ON TEX-COTE PRIMER - SOLVENT BASED	DARK GRAY
E7	PAINTED MEDIUM TEXTURE	RGB	R240/G83/B35	ORANGE	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL10 ON TEX-COTE PRIMER - SOLVENT BASED	ORANGE
E8	STOREFRONT GLAZING	YKK	-	LIGHT GRAY	IMPACT	-	-	IMPACT RATED	LIGHT GRAY
E9	STOREFRONT FRAME	YKK	-	MILL	ANODIZED	-	BY MANUF.	BY MANUF.	MILL
E10	PAINTED DOORS AND FRAMES	SHERWIN WILLIAMS	TO MATCH SW 7072	ONLINE	EXTERIOR ENAMEL	GLOSS	2 OVER 1 PRIMER	2 COATS SHER-CRYL HIGH PERFORMANCE ON 1 COAT KEM BOND HS PRIMER COLOR TO MATCH FINISH COAT	GRAY
E11	PREFAB. METAL CANOPY	YKK	-	WHITE	ANODIZED	-	BY MANUF.	PREFINISHED	WHITE
E12	PREFAB. METAL SHADES	YKK	-	MILL	ANODIZED	-	BY MANUF.	PREFINISHED	MILL
E13	PREFAB. METAL DECO. SHUTTERS	YKK	-	WHITE	ANODIZED	-	BY MANUF.	PREFINISHED	WHITE
E14	PREFAB. METAL CANOPY	YKK	-	TO MATCH SW7074	ANODIZED	-	BY MANUF.	PREFINISHED	DARK GRAY

3 A5.0 *FINISH SCHEDULE*



2 A5.0 *NORTH ELEVATION*

3/32"=1'-0"

GRAPHIC SCALE

10 5 0 5 10 20

(in feet)

3/32 inch=1 ft

FORT PIERCE SELF-STORAGE

SOUTH U.S. HIGHWAY
FORT PIERCE, SAINT LUCIE COUNTY, FL.

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Revisions:

DRAWN BY: FS
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DATE: 09.23.2021
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PROJECT #: 21061
CAD DWG FILE: A5.0

KENNETH R. CARLSON

AR12546

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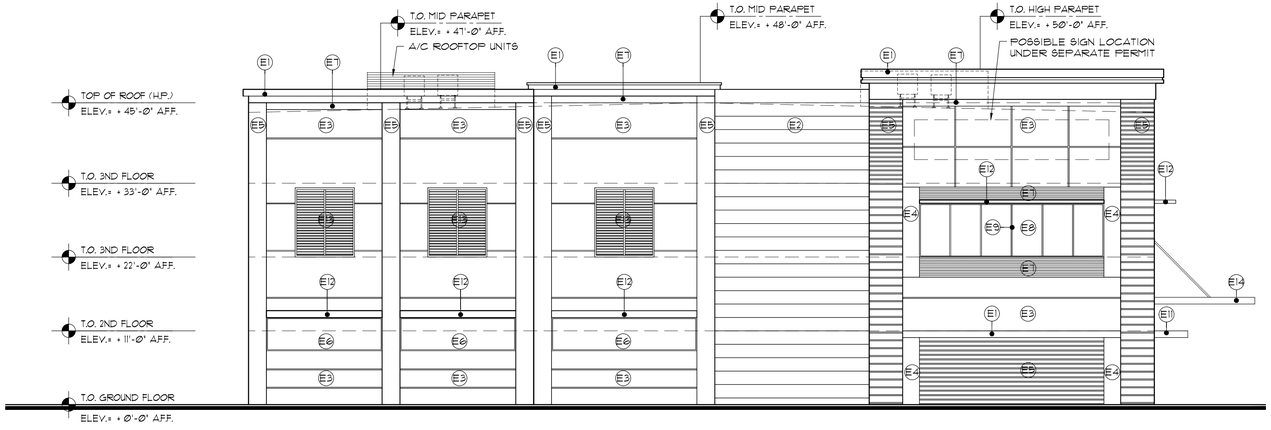
A5.0

PAGE 5 OF



1 A5.1 **EAST ELEVATION**

3/32"=1'-Ø"

GRAPHIC SCALE

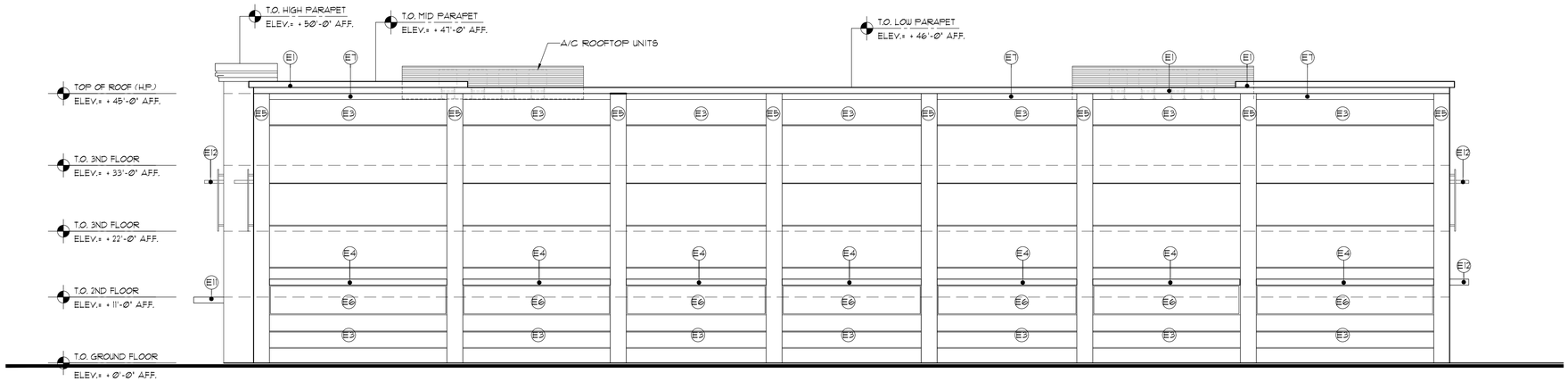
10 5 0 5 10 20

(in feet)

3/32 inch=1 ft

MARK	DESCRIPTION	MATCH MANUF.	CATALOG NO.	FINISH SCHEDULE COLOR	TYPE	FINISH	COATS	NOTE:	COMMON NAMES
E1	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7006	EXTRA WHITE	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL7Ø ON TEX-COTE PRIMER - SOLVENT BASED	WHITE
E2	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7071	GRAY SCREEN	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL7Ø ON TEX-COTE PRIMER - SOLVENT BASED	LIGHT GRAY
E3	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7072	ONLINE	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL7Ø ON TEX-COTE PRIMER - SOLVENT BASED	MEDIUM GRAY
E4	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 9162	AFRICAN GRAY	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL7Ø ON TEX-COTE PRIMER - SOLVENT BASED	GRAY
E5	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7074	SOFTWARE	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL7Ø ON TEX-COTE PRIMER - SOLVENT BASED	DARK GRAY
E6	PAINTED MEDIUM TEXTURE	SHERWIN WILLIAMS	SW 7075	WEB GRAY	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL7Ø ON TEX-COTE PRIMER - SOLVENT BASED	DARK GRAY
E7	PAINTED MEDIUM TEXTURE	RGB	R240/GB3/B35	ORANGE	EXTERIOR ACRYLIC	FLAT	2 OVER 1 PRIMER	TEX-COTE XL7Ø ON TEX-COTE PRIMER - SOLVENT BASED	ORANGE
E8	STOREFRONT GLAZING	YKK	-	LIGHT GRAY	IMPACT	-	-	IMPACT RATED	LIGHT GRAY
E9	STOREFRONT FRAME	YKK	-	MILL	ANODIZED	-	BY MANUF.	BY MANUF.	MILL
E10	PAINTED DOORS AND FRAMES	SHERWIN WILLIAMS	TO MATCH SW 7072	ONLINE	EXTERIOR ENAMEL	GLOSS	2 OVER 1 PRIMER	2 COATS SHER-CRYL HIGH PERFORMANCE ON 1 COAT KEM BOND HS PRIMER COLOR TO MATCH FINISH COAT	GRAY
E11	PREFAB. METAL CANOPY	YKK	-	WHITE	ANODIZED	-	BY MANUF.	PREFINISHED	WHITE
E12	PREFAB. METAL SHADES	YKK	-	MILL	ANODIZED	-	BY MANUF.	PREFINISHED	MILL
E13	PREFAB. METAL DECO. SHUTTERS	YKK	-	WHITE	ANODIZED	-	BY MANUF.	PREFINISHED	WHITE
E14	PREFAB. METAL CANOPY	YKK	-	TO MATCH SW7014	ANODIZED	-	BY MANUF.	PREFINISHED	DARK GRAY

3 A5.Ø **FINISH SCHEDULE**



2 A5.1 **SOUTH ELEVATION**

3/32"=1'-Ø"

GRAPHIC SCALE

10 5 0 5 10 20

(in feet)

3/32 inch=1 ft

FORT PIERCE SELF-STORAGE

SOUTH U.S. HIGHWAY
FORT PIERCE, SAINT LUCIE COUNTY, FL.

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PROJECT #: 21061
CAD DWG FILE: A5.1

KENNETH R. CARLSON

AR12546

SHEET OF

A5.1

PAGE 5 OF

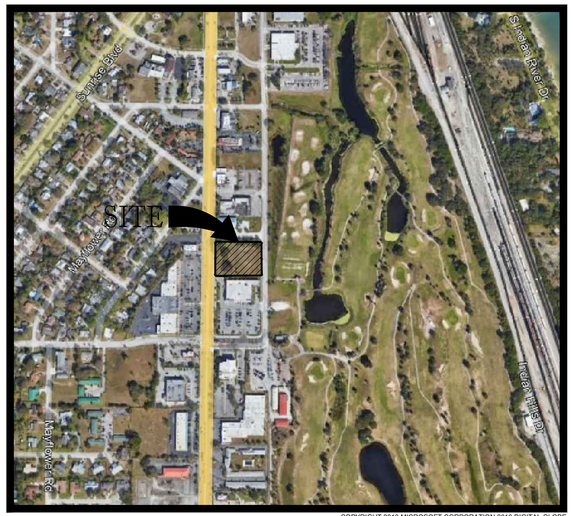
SITE DEVELOPMENT DRAWINGS FOR:

FORT PIERCE STORAGE FACILITY

CITY OF FORT PIERCE
ST. LUCIE COUNTY, FL
SECTION 15, TOWNSHIP 35 S, RANGE 40 E

VICINITY \ AERIAL MAP

SCALE: 1"=200'



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LEGAL DESCRIPTION:

LOT 2, LG CENTER, ACCORDING TO THE MAP OR PLAT THEREOF AS RECORDED IN PLAT BOOK 74, PAGE 39, PUBLIC RECORDS OF SAINT LUCIE COUNTY, FLORIDA

FEMA MAP INFORMATION:

LANDS SHOWN HEREON ARE LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF 'X' AND 'AH' BASE EL. 16.0' BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 12111CO187K, DATED FEBRUARY 19, 2020 AND IS RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM 1988

DATUM NOTE:
ALL ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988, (NAVD' 88)

CAUTION – NOTICE TO CONTRACTOR

811

CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON THE RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE LOCAL UTILITY NOTIFICATION CENTER AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATIONS OF THE UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING IMPROVEMENTS AND UTILITIES AND SHALL REPAIR ANY DAMAGE AT HIS EXPENSE.

THOMAS ENGINEERING GROUP
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THE INFORMATION, DESIGN, AND CONCEPTS CONTAINED HEREIN ARE THE PROPERTY AND COPYRIGHT OF THOMAS ENGINEERING GROUP, LLC. AND SHALL NOT BE USED IN WHOLE OR IN PART WITHOUT THE WRITTEN PERMISSION OF THOMAS ENGINEERING GROUP, LLC. ONLY APPROVED, SIGNED AND SEALED PLANS SHALL BE UTILIZED FOR CONSTRUCTION.

REVISIONS

REV	DATE	COMMENT	BY
1	02-10-22	REV - CITY COMMENTS	JMB

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PROJECT No.:	FT210079
DRAWN BY:	HR
CHECKED BY:	EMM
DATE:	08/10/2021
SCALE:	AS NOTED
CAD I.D.:	FT210079-C1.0 CVR

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

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EDWARD M. McDONALD, P.E.
March 10, 2022
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

SHEET TITLE:

COVER SHEET

SHEET NUMBER:

C-1.0
OF

GENERAL NOTES

CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH THE NOTES AND SPECIFICATIONS CONTAINED HEREIN. CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE CONFORMANCE TO THESE REQUIREMENTS BY ALL SUBCONTRACTORS.

1. THE FOLLOWING DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THIS SITE PLAN:

   - BOUNDARY AND TOPOGRAPHIC SURVEY - CRAIG WATSON AND ASSOCIATES LLC, DATED 08-04-21.

PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL VERIFY THAT HE/SHE HAS THE LATEST EDITION OF THE DOCUMENTS REFERENCED ABOVE.

2. ALL HANDICAPPED PARKING SPACES SHALL BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. SEC. 12101 ET SEQ. AND 42 U.S.C. SEC. 4151 ET SEQ.) OR THE REQUIREMENTS OF THE JURISDICTION WHERE THIS PROJECT IS TO BE CONSTRUCTED.

3. PRIOR TO STARTING CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION SHALL BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE COMMENTS TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AUTHORITIES. CONTRACTOR SHALL HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.

4. THE OWNER/CONTRACTOR SHALL BE FAMILIAR WITH AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

5. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE REQUIREMENTS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES HAVING JURISDICTION OVER THIS PROJECT.

6. THE GEOTECHNICAL REPORT AND RECOMMENDATIONS SET FORTH HEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, SHALL TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY SUCH DISCREPANCY BETWEEN THE GEOTECHNICAL REPORTS AND PLANS AND SPECIFICATIONS PRIOR TO PROCEEDING WITH ANY FURTHER WORK.

7. THE BOUNDARY AND TOPOGRAPHIC SURVEY PREPARED BY CRAIG WATSON AND ASSOCIATES LLC, DATED 08-04-21, SHALL BE CONSIDERED A PART OF THESE PLANS.

8. THESE PLANS ARE BASED ON INFORMATION PROVIDED TO THOMAS ENGINEERING GROUP BY THE OWNER AND OTHERS PRIOR TO THE TIME OF PLAN PREPARATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS AND NOTIFY THOMAS ENGINEERING GROUP IF ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLAN, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES.

9. ALL DIMENSIONS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. CONTRACTOR SHALL NOTIFY ENGINEER IN WRITING IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO THE GIVING OF SUCH NOTIFICATION AND THE ENGINEER'S WRITTEN AUTHORIZATION OF SUCH ADDITIONAL WORK.

10. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL/BUILDING PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, EXACT BUILDING UTILITY LOCATIONS.

11. PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE BUILDING LAYOUT BY CAREFUL REVIEW OF THE SITE PLAN AND LATEST ARCHITECTURAL PLANS (INCLUDING, BUT NOT LIMITED TO, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLAN, WHERE APPLICABLE). CONTRACTOR SHALL IMMEDIATELY NOTIFY OWNER, ARCHITECT AND SITE ENGINEER OF ANY DISCREPANCIES.

12. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE AND ALL UNSUITABLE EXCAVATED MATERIAL AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ALL GOVERNMENTAL AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT.

13. THE CONTRACTOR IS RESPONSIBLE FOR ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT AND CONTIGUOUS STRUCTURES.

14. THE CONTRACTOR IS TO EXERCISE EXTREME CARE WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT, STRUCTURES, ETC. WHICH ARE TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR TAKING THE APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT, ETC. WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA.

15. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR AND SHALL REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY SHALL RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE EXISTING CONDITIONS, AND IN CONFORMANCE WITH APPLICABLE CODES. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGE AND NOTIFY THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF CONSTRUCTION.

16. ALL CONCRETE SHALL HAVE THE MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS UNLESS OTHERWISE NOTED ON THE PLANS, DETAILS AND/OR GEOTECHNICAL REPORT.

17. THE ENGINEER IS NOT RESPONSIBLE FOR CONSTRUCTION METHODS / MEANS FOR COMPLETION OF THE WORK DEPICTED NEITHER ON THESE PLANS, NOR FOR ANY CONFLICTS/SCOPE REVISIONS WHICH RESULT FROM SAME. CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE METHODS/MEANS FOR COMPLETION OF THE WORK PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

18. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE SAFETY NOR HAS THE ENGINEER OF RECORD BEEN RETAINED FOR SUCH PURPOSES.

19. ALL CONTRACTORS MUST CARRY THE SPECIFIED STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND LIMITS OF COMMERCIAL GENERAL LIABILITY INSURANCE (CGL). ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME THOMAS ENGINEERING GROUP, AND ITS SUB-CONSULTANTS AS ADDITIONAL NAMED INSURERS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THIS HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED BY THE CONTRACTORS. ALL CONTRACTORS MUST FURNISH THOMAS ENGINEERING GROUP WITH CERTIFICATIONS OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE PRIOR TO COMMENCING WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION. IN ADDITION, ALL CONTRACTORS WILL, TO THE FULLEST EXTENT PERMITTED BY LAW, INDEMNIFY AND HOLD HARMLESS THOMAS ENGINEERING GROUP AND ITS SUB-CONSULTANTS FROM AND AGAINST ANY DAMAGES, LIABILITIES OR COSTS, INCLUDING REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE PROJECT, INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTORS.

20. THOMAS ENGINEERING GROUP WILL REVIEW AND APPROVE OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND/OR METHODS, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THOMAS ENGINEERING GROUP'S SHOP DRAWING REVIEW WILL BE CONDUCTED WITH REASONABLE PROMPTNESS WHILE ALLOWING SUFFICIENT TIME TO PERMIT ADEQUATE REVIEW. REVIEW OF A SPECIFIC ITEM SHALL NOT INDICATE THAT THOMAS ENGINEERING GROUP HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. THOMAS ENGINEERING GROUP WILL NOT BE RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS NOT BROUGHT TO ITS ATTENTION, IN WRITING, BY THE CONTRACTOR. THOMAS ENGINEERING GROUP WILL NOT BE REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED.

21. NEITHER THE PROFESSIONAL ACTIVITIES OF THOMAS ENGINEERING GROUP, NOR THE PRESENCE OF THOMAS ENGINEERING GROUP OR ITS EMPLOYEES AND SUB-CONSULTANTS AT A CONSTRUCTION / PROJECT SITE, SHALL RELIEVE THE GENERAL CONTRACTOR OF ITS OBLIGATIONS, DUTIES AND RESPONSIBILITIES INCLUDING, BUT NOT LIMITED TO, CONSTRUCTION MEANS, METHODS, SEQUENCE, TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND ANY HEALTH OR SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES. THOMAS ENGINEERING GROUP AND ITS PERSONNEL HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER ANY CONSTRUCTION CONTRACTOR OR ITS EMPLOYEES IN CONNECTION WITH THEIR WORK OR ANY HEALTH OR SAFETY PROGRAMS OR PROCEDURES. THE GENERAL CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THOMAS ENGINEERING GROUP SHALL BE INDEMNIFIED BY THE GENERAL CONTRACTOR AND SHALL BE NAMED AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE.

22. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER FOR SUCH DEVIATIONS, CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK DONE WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS RELATED TO SAME.

23. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE AND PROTECTION OF TRAFFIC PLAN FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE R.O.W. OR ON SITE. THE COST FOR THIS ITEM SHOULD BE INCLUDED IN THE CONTRACTOR'S PRICE.

24. IF THE CONTRACTOR DEVIATES FROM THE PLANS AND SPECIFICATIONS, INCLUDING THE NOTES CONTAINED THEREON, WITHOUT FIRST OBTAINING PRIOR WRITTEN AUTHORIZATION FOR SUCH DEVIATIONS FROM THE OWNER AND ENGINEER, IT SHALL BE RESPONSIBLE FOR THE PAYMENT OF ALL COSTS TO CORRECT ANY WORK DONE, ALL FINES OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM. THE CONTRACTOR SHALL INDEMNIFY AND HOLD THE OWNER AND ENGINEER HARMLESS FROM ALL SUCH COSTS TO CORRECT ANY SUCH WORK AND FROM ALL SUCH FINES AND PENALTIES, COMPENSATION AND PUNITIVE DAMAGES AND COSTS OF ANY NATURE RESULTING THEREFROM.

25. CONTRACTOR SHALL CONFIRM ADA ACCESSIBILITY PRIOR TO INSTALLING FINISHING COURSES OF SIDEWALKS AND PARKING AREAS.

26. UPON THE RECEIPT OF THE "NOTICE TO PROCEED", THE CONTRACTOR SHALL CONTACT THE ENGINEER OF RECORD AND ARRANGE A RECONSTRUCTION CONFERENCE TO INCLUDE ALL INVOLVED GOVERNMENTAL AGENCIES, UTILITY OWNERS, THE OWNER AND THE ENGINEER OF RECORD.

27. ALL UTILITY EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION (IF REQUIRED) PRIOR TO CERTIFICATE OF OCCUPANCY. THESE EASEMENTS SHALL BE SKETCHED, DESCRIBED, AND RECORDED AT THE SOLE COST OF THE CONTRACTOR.

28. CONTRACTOR SHALL PROVIDE MINIMUM 48 HOUR NOTICE TO ENGINEER AND APPLICABLE AGENCIES FOR SCHEDULING INSPECTIONS.

29. PRIOR TO THEIR CONSTRUCTION OR INSTALLATION, SHOP DRAWINGS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEER OF RECORD AND CITY OF FORT PIERCE FOR THE FOLLOWING: CATCH BASINS, FIRE HYDRANTS, VALVES, AND ALL REQUIRED ACCESSORIES. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO OBTAIN ALL OTHER AGENCY APPROVALS IF REQUIRED.

30. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES AND ELECTRICITY.

31. MAINTENANCE OF TRAFFIC IN THE PUBLIC RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH M.U.T.C.D. AND FDOT STANDARDS AND INDEX 606, LATEST EDITION, AND APPROVED BY CITY OF FORT PIERCE AND ST. LUCIE COUNTY WHERE APPLICABLE PRIOR TO IMPLEMENTATION.

32. ALL OPEN TRENCHES AND HOLES ADJACENT TO ROADWAYS OR WALKWAYS SHALL BE PROPERLY MARKED AND BARRICADED TO ASSURE THE SAFETY OF BOTH VEHICULAR AND PEDESTRIAN TRAFFIC.

33. NO TRENCHES OR HOLES NEAR WALKWAYS, IN ROADWAYS OR THEIR SHOULDERS ARE THE BE LEFT OPEN DURING NIGHTTIME HOURS WITHOUT EXPRESS PERMISSION FROM CITY OF FORT PIERCE.

34. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR FOR ANY NECESSARY CONSTRUCTION, PAVEMENT MARKING AND SIGNAGE OR ANY PEDESTRIAN SIGNALIZATION AND/OR SIGNAL MODIFICATION TO ACCOMMODATE AN ALTERNATE SAFE WALK ROUTE. ALL RESTORED TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE GOVERNING AGENCY'S TRAFFIC ENGINEERING STANDARDS.

SANITARY SEWER NOTES:

A. GENERAL:
   1. DISTANCE AND LENGTHS SHOWN ON PLANS REFERENCE THE CENTER OF STRUCTURES.

B. MATERIALS:
   1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS. (24" SHALL BE DR-25)
   2. DUCTILE IRON PIPE (DIP) SHALL BE CEMENT OR POLYLINED INSIDE AND SHALL HAVE A COAL TAR EPOXY COATING, MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C151/A21.51-86 OR LATEST REVISION, MINIMUM WALL THICKNESS CLASS 52 (4"-12") & CLASS 51 (14"-20") (UNLESS OTHERWISE SPECIFIED).
   3. ALL FITTINGS AND ACCESSORIES SHALL BE AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.

C. INSTALLATION:
   1. PIPE AND FITTINGS:
      a. SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, AND THE UNI-BELL PLASTICS PIPE ASSOCIATION'S 'RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE".
      b. D.I.P. SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600-93 OR LATEST REVISION.
      c. BEDDING AND INITIAL BACKFILL OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK (PER CITY OF FORT PIERCE ENGINEERING STANDARDS.

   3. SERVICE:
      a. MINIMUM SLOPE OF ALL SERVICE LINES SHALL BE AS INDICATED IN THE FLORIDA BUILDING CODE.
      b. SERVICE LATERALS SHALL TERMINATE AT A DEPTH 30" BELOW FINISHED GRADE OR AS INDICATED ON PLUMBING PLAN.
      c. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED PLUG.
      d. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2"x4" TREATED STAKE PAINTED RED, EXTENDING 18"(MIN) ABOVE GRADE.
      e. CONTRACTOR SHALL ROUGH IN RISER TO 1 FOOT ABOVE FINISHED GRADE AND PLUG. AT PROJECT COMPLETION, CUT BACK TO FINISHED GRADE.
      f. CONNECTION OF SERVICES TO BUILDING'S PLUMBING SHALL BE COORDINATED WITH THE CITY'S BUILDING DEPARTMENT, PLUMBING SECTION.

D. TESTING:
   1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
   2. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER.
   3. MANHOLE LEAKAGE TEST SHALL NOT EXCEED FOUR GALLONS PER DAY PER UNIT. NO VISIBILE LEAKAGE ALLOWED.
   4. SEWER PIPE LEAKAGE ALLOWABLE SHALL NOT EXCEED 150 GALLONS PER DAY PER INCH DIAMETER PER MILE IN ATWO HOUR TEST PERIOD FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL BE ALLOWED AND ALL LINES SHALL BE T.V. INSPECTED.
   5. SANITARY SEWER SHALL BE TELEVISED AND LAMPED AT DEVELOPER'S EXPENSE, PRIOR TO FINAL ACCEPTANCE. OWNER / CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES PRIOR TO CERTIFICATION TO ANY AGENCY.
   6. VISIBLE INFILTRATION LEAKAGE INTO MANHOLES AND SEWER PIPE SHALL NOT BE PERMITTED.

WATER DISTRIBUTION AND/OR SANITARY SEWER FORCE MAIN SYSTEM

A. GENERAL:
   1. NO CONNECTIONS TO THE EXISTING LINES SHALL BE MADE UNTIL PRESSURE TESTS, FOR THE WATER AND SEWER FORCE MAINS, AND BACTERIOLOGICAL TESTS HAVE BEEN PERFORMED AND THE SYSTEM IS ACCEPTABLE TO THE CITY OF FORT PIERCE UTILITIES DEPARTMENT AND THE ST. LUCIE COUNTY PUBLIC HEALTH UNIT.
   2. BEDDING AND INITIAL BACKFILL FOR MAINS SHALL BE SAND WITH NO ROCK (PER CITY OF FORT PIERCE - UTILITY SYSTEMS DEPARTMENT - UTILTIY STANDARDS MANUAL 2011 EDITION.)
   3. USE "DETECTO' TAPE ON ALL PVC MAINS (18" ABOVE), AND USE "NON-DETECTO" TAPE ON ALL D.I.P. MAINS (18" ABOVE).
   4. SEPARATION REQUIREMENTS SHALL BE PER THE CITY OF WEST ST. LUCIE ENGINEERING STANDARDS.
   5. CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH CITY OF FORT PIERCE ENGINEERING STANDARDS AND SPECIFICATIONS.

B. MATERIALS:
   1. DUCTILE IRON PIPE (DIP) SHALL BE CLASS 52 UP TO 12" SIZE & CLASS 51 FOR 14" AND LARGER WITH INTERIOR CEMENT LINING AND BITUMINOUS COATED OUTSIDE, WATER MAIN & EPOXY LINED & COATED FORCE MAIN MANUFACTURED IN ACCORDANCE WITH ANSI/AWWA C151/A21.51-91 OR LATEST REVISION. THE PIPE SHALL WITHSTAND A WORKING PRESSURE OF 350 PSI. THE JOINTS SHALL BE BELL AND SPIGOT PUSH-ON TYPE UNLESS OTHERWISE NOTED ON THE PLANS.
   2. ALL PVC MAINS SHALL BE SERIES 1120, CLASS 150 (DR 18) PRESSURE PIPE CONFORMING TO ANSI/AWWA C900-89 OR LATEST REVISION, AND SHALL HAVE PUSH-ON JOINTS, AND IRON PIPE O.D. (PVC ON-SITE ONLY)
   3. FITTINGS FOR MAINS 4" AND LARGER SHALL BE DUCTILE IRON MECHANICAL JOINT CONFORMING TO ANSI/AWWA C110/A21.10-93 OR LATEST REVISION, COMPLETE WITH GLANDS, GASKETS, BOLTS AND NUTS. ALL FITTINGS SHALL BE CEMENT LINED AND SEAL COATED WITH THE SAME MATERIALS AS THE PIPE & USE MEGALUG SERIES 1100 RESTRAINED JOINT ADAPTERS.
   4. VALVES SHALL BE GATE VALVES, IRON BODY, FULLY RESILIENT SEAT BRONZED MOUNTED NON-RISING STEM, RATED AT 200 PSI AND CONFORMING TO ANSI/AWWA C509-87 OR LATEST REVISION, AND SHALL HAVE MECHANICAL JOINTS.
      a. GATE VALVES 4" AND LARGER SHALL BE MUELLER A-2360-20, RESILIENT SEATED GATE VALVES SHALL BE AMERICAN 500/2500 LINE OR CLOW F-6100, CONFORMING TO ANSI/AWWA C509-87.
      b. TAPPING VALVES SHALL BE MUELLER H667 OR APPROVED EQUAL..
      c. GATE VALVES SHALL BE PER THE CITY OF FORT PIERCE ENGINEERING STANDARDS.
   5. TAPPING SLEEVES SHALL BE MUELLER H615 OR APPROVED EQUAL PER CITY OF FORT PIERCE.
   6. VALVE BOXES SHALL BE TYLER/UNION 461-S OR APPROVED EQUAL PER CITY OF FORT PIERCE.
   7. RETAINER GLANDS SHALL CONFORM TO ANSI/AWWA C111/A21.11-90 OR LATEST REVISION. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS LISTED BY UNDERWRITERS LABORATORIES FOR 250 PSI MINIMUM WATER PRESSURE RATING. CLOW CORPORATION MODEL F-1058 OR STANDARD FIRE PROTECTION EQUIPMENT COMPANY OR APPROVED EQUAL.
   8. DRESSER COUPLINGS SHALL BE REGULAR BLACK COUPLINGS WITH PLAIN GASKETS FOR GALVANIZED STEEL PIPE. THEY SHALL BE DRESSER STYLE 90. NO SUBSTITUTIONS ALLOWED.
   9. FIRE HYDRANTS SHALL HAVE A 5 1/4 " MAIN VALVE OPENING. PUMPER NOZZLE TO BE 18" FROM FINISH GRADE. ALL HYDRANTS TO BE INSTALLED WITH ANCHORING TEE AND CONTROL VALVE. FIRE HYDRANT SHALL COMPLY WITH ANSI/AWWA C502-85 (OR LATEST REVISION). HYDRANTS SHALL BE AMERICAN DARLING B-84-B. BLUE REFLECTIVE PAVEMENT MARKER REQUIRED IN CENTER OF NEAREST DRIVING LANE FOR FIRE HYDRANTS.

C. SERVICE CONNECTION:
   1. CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY IN ACCORDANCE WITH ASTM B-62 WITH THREADED ENDS, AS MANUFACTURED BY MUELLER OR APPROVED EQUAL.
   2. CURB STOPS SHALL BE MUELLER OR APPROVED EQUAL.
   3. METER STOPS SHALL BE 90° LOCK WING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE WITH ASTM B-62. METER STOPS SHALL BE CLOSED BOTTOM DESIGN AND RESILIENT "0" RING SEALED AGAINST EXTERNAL LEAKAGE AT THE TOP. STOPS SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES, AS MANUFACTURED BY MUELLER OR APPROVED EQUAL.
   4. SERVICE PIPING SHALL BE POLYETHYLENE TUBING.

D. INSTALLATION:
   1. GENERAL:
      CONNECTION OF ALL NEW SYSTEMS TO EXISTING MAINS SHALL BE DONE BY USING ONE OF THE FOLLOWING METHODS:
      a. METHOD A PER ST. LUCIECOUNTY PUBLIC HEALTH UNIT STANDARDS, WHICH INVOLVES A REDUCED SIZE TEMPORARY CONNECTION BETWEEN THE EXISTING MAIN AND THE NEW ONE.
      b. METHOD B PER ST. LUCIECOUNTY PUBLIC HEALTH UNIT STANDARDS, WHICH INVOLVES A DIRECT CONNECTION BETWEEN THE NEW AND EXISTING MAINS USING TWO GATE VALVES SEPARATED BY A SLEEVE WITH A VENT PIPE.
      c. METHOD C APPROVED BY THE ST. LUCIECOUNTY PUBLIC HEALTH UNIT, WHICH INVOLVES A TAP WITH ONE GATE VALVE REQUIRING DISINFECTION OF THE NEW SYSTEM PRIOR TO CONDUCTING THE PRESSURE TEST.
   2.BEDDING:
      BEDDING AND INITIAL BACKFILL OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK (PER CITY OF FORT PIERCE ENGINEERING STANDARDS).
   3. PVC PIPE:
      a. PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION'S GUIDE FOR INSTALLATION OF PVC PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEMS.
      b. PVC PIPE SHALL BE INSTALLED WITH A MINIMUM OF 36" COVER
      c. DETECTOR TAPE SHALL BE INSTALLED THE FULL LENGTH OF ALL PVC MAINS APPROXIMATELY 18" ABOVE THE PIPE, COLOR SIDE UP.
   4. DUCTILE PIPE:
      a. D.I.P. SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/AWWA C600-99 OR LATEST REVISION.
      b. D.I.P. SHALL BE INSTALLED WITH A MINIMUM OF 30" COVER.
      c. "NON-DETECTOR" TAPE SHALL BE INSTALLED THE FULL LENGTH OF ALL D.I.P. MAINS APPROXIMATELY 18" ABOVE THE MAIN COLOR SIDE UP
   5. VALVES:
      a. ALL VALVES SHALL BE INSTALLED WITH ADJUSTABLE CAST IRON VALVE BOXES WITH THE WORD "WATER" OR "SEWER" CAST IN THE COVER. A BRASS DISK INDICATING, SIZE, TYPE, KIND & OPERATOR INSTRUCTIONS SHALL BE INSTALLED ADJACENT TO VALVE BOX.
      b. MAIN VALVES SHALL BE LOCATED ON AN EXTENSION OF THE RIGHT-OF-WAY LINE UNLESS DIMENSIONED OTHERWISE.
      c. MAIN VALVES SHALL BE INSTALLED AWAY FROM PARKING AREAS. IF THIS IS UNAVOIDABLE, PROPER MEASURES SHALL BE TAKEN TO AVOID THE PARKING OF VEHICLES OVER THE VALVES. HYDRANT VALVES SHALL BE INSTALLED AS CLOSE TO THE MAIN AS POSSIBLE. VALVES LOCATED IN NON-PAVED AREAS OR IN PARKING STALLS REQUIRE A REFLECTIVE PAVEMENT MARKER ON THE CENTER OF THE NEAREST LANE OF ROAD PAVEMENT. WHITE REFLECTORS FOR THE WATER MAIN VALVES, GREEN REFLECTORS FOR FORCE MAIN VALVES. d.THE DISTANCE FROM THE TOP OF THE VALVE ACTUATOR NUT TO FINAL GRADE SHALL BE A MINIMUM OF 12 INCHES AND A MAXIMUM OF 18 INCHES.
   6.SERVICE:
      a. COVER OVER SERVICE LINES SHALL BE 18" MINIMUM, 36" MAXIMUM BELOW FINISHED GRADE AND 36" UNDER PAVEMENT.
      b. SERVICES UP TO 2" SHALL BE POLYETHYLENE TUBING PER CITY OF FORT PIERCE.
      c. METER STOPS SHALL HAVE 8" TO 10" COVER AS REQUIRED FOR PROPER METER/BOX INSTALLATION.
      d. WATER SERVICES UNDER PAVEMENT SHALL BE ENCASED IN A SCHEDULE 80 PVC SLEEVE FOR THE FULL LENGTH OF THE PAVEMENT AND FOR 2' BEYOND THE EDGE. SLEEVE DIAMETER SHALL BE TWICE THE DIAMETER OF THE SERVICE PIPE.
      e. THE END OF EACH SERVICE CONNECTION SHALL BE MARKED WITH A 2"x4" TREATED STAKE, PAINTED BLUE EXTENDING 18" (MINIMUM) ABOVE GRADE UNLESS INDICATED OTHERWISE.

E. TESTING
   1. BEFORE ANY PHYSICAL CONNECTIONS TO THE EXISTING WATER MAINS ARE MADE, THE COMPLETE WATER SYSTEM SHALL BE PRESSURE TESTED AND DISINFECTED.HYDROSTATIC TESTING OF NEW MAINS SHALL BE PERFORMED AT A MINIMUM STARTING PRESSURE OF 150 PSI FOR TWO HOURS IN ACCORDANCE WITH ANSI/AWWA C600-99 OR LATEST REVISION, THE PRESSURE TEST SHALL NOT VARY MORE THAN ±5 P.S.I. DURING THE TEST.
   2. THE PRESSURE TEST SHALL BE WITNESSED BY A REPRESENTATIVE OF THE CITY OF FORT PIERCE AND THE ENGINEER OF RECORD.
   3. BEFORE ACCEPTANCE FOR OPERATION, THE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH THE ANSI/AWWA C651-92; 150 PSI MINIMUM STARTING TEST PRESSURE, WITH BACTERIOLOGICAL SAMPLES APPROVED BY THE ST. LUCIE COUNTY PUBLIC HEALTH DEPARTMENT.
   4. SAMPLING POINTS SHALL BE PROVIDED AT THE LOCATIONS SHOWN ON THE PLANS.IF NOT SPECIFIED, SAMPLING POINTS SHALL BE PROVIDED AT INTERVALS OF 1500' MAXIMUM FOR LINES GREATER THAN 1500' IN LENGTH.PROVIDE A MINIMUM OF TWO SAMPLING POINTS FOR ALL OTHER TEST SEGMENTS. SAMPLE POINTS MUST BE APPROVED BY ST. LUCIECOUNTY PUBLIC HEALTH DEPARTMENT.
   5. THE ALLOWABLE LEAKAGE SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:

$$L = \frac{S\,D\,P^{0.5}}{148{,}000}$$

IN WHICH:
L EQUALS THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR.
S EQUALS LENGTH OF PIPE (LINEAR FEET),
D EQUALS NOMINAL DIAMETER OF PIPE (INCHES) AND
P EQUALS THE MINIMUM TEST PRESSURE (POUNDS PER SQUARE INCH).

SEPARATION OF WATER AND SEWER MAINS

SEPARATION REQUIREMENTS SHALL BE PER THE CITY OF FORT PIERCE ENGINEERING STANDARDS.

A. SANITARY SEWERS, STORM SEWERS, AND FORCE MAINS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, STORM SEWERS, AND FORCE MAINS CROSSING WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHENEVER POSSIBLE.

   ALL CROSSING SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING).

B. A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

   IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10 FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON AN UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER IS AT LEAST 18 INCHES ABOVE THE TOP OF THE SEWER.

STORM DRAINAGE:

A. GENERAL:
   1. CATCH BASIN GRATES AND RIM ELEVATIONS AS SHOWN ON PLANS SHALL BE ADJUSTED TO CONFORM TO NEW OR EXISTING GRADES.
   2. DISTANCES AND LENGTHS SHOWN ON PLANS REFERENCE THE CENTER OF STRUCTURES.

B. MATERIALS:
   1. ALL DRAINAGE CATCH BASINS AND STRUCTURES SHALL BE PRECAST CONCRETE AND SHALL MEET THE REQUIREMENTS OF A.S.T.M. SPECIFICATION C-478 AND 64T UNLESS OTHERWISE NOTED IN THE PLANS. BLOCK CATCH BASINS WILL BE ALLOWED ONLY WITH APPROVAL OF THE ENGINEER. THE MINIMUM WALL AND SLAB THICKNESS SHALL BE 8 INCHES AND THE MINIMUM REINFORCING SHALL BE NO. 4 BARS AT 12 INCHES EACH WAY UNLESS OTHERWISE INDICATED. CONCRETE SHALL BE MINIMUM OF fc=3750 PSI AT 28 DAYS.

C. INSTALLATION
   1. PIPE SHALL BE PLACED ON A MINIMUM OF 8" STABLE GRANULAR MATERIAL FREE OF ROCK FORMATION AND OTHER FOREIGN FORMATIONS, AND CONSTRUCTED TO A UNIFORM GRADE AND LINE. PIPE JOINTS SHALL BE WRAPPED IN FILTER FABRIC.
   2. BACKFILL MATERIAL SHALL BE WELL GRADED GRANULAR MATERIAL, WELL TAMPED IN LAYERS NOT TO EXCEED 6 INCHES TO A HEIGHT OF 12 INCHES ABOVE PIPE AS SHOWN ON THE PLANS
   3. PROVIDE A MINIMUM PROTECTIVE COVER OF 18 INCHES OVER STORM SEWER AND AVOID UNNECESSARY CROSSING BY HEAVY CONSTRUCTION VEHICLES DURING CONSTRUCTION.
   4. THE CONTRACTOR SHALL NOTIFY CITY OF FORT PIERCE ENGINEERING DEPARTMENT/ FDOT AND THE ENGINEER OF RECORD AT LEAST 7 DAYS PRIOR TO THE START OF THE CONSTRUCTION AND INSPECTION.
   5. THE CONTRACTOR SHALL WRAP EACH JOINT WITH FILTER FABRIC.

PAVING:

A. GENERAL:
   1. ALL UNDERGROUND UTILITIES SHALL BE COMPLETED PRIOR TO CONSTRUCTION OF LIMEROCK BASE.
   2. ALL EXISTING PAVEMENT, CUT OR DAMAGED BY CONSTRUCTION SHALL BE PROPERLY RESTORED AT THE CONTRACTOR'S EXPENSE.
   3. WHERE ANY PROPOSED PAVEMENT IS TO BE CONNECTED TO EXISTING PAVEMENT, THE EXISTING EDGE OF PAVEMENT SHALL BE SAW CUT TO ENSURE A PROPER JOINT.
   4. PRIME COAT SHALL BE APPLIED AT A RATE OF 0.25 GALLONS PER SQUARE YARD. PRIME AND TACK COAT FOR BASE SHALL CONFORM TO THE REQUIREMENTS AND SPECIFICATIONS OF SECTIONS 300-1 THROUGH 300-7 OF FDOT STANDARDS AND SPECIFICATIONS.

B. MATERIALS:
   1. LIMEROCK BASE: (ASPHALT,VEHICULAR PAVERS AREAS) LIME ROCK BASE COURSE MATERIAL FOR PAVED AREAS SHALL BE A MINIMUM 8" THICKNESS AND COMPACTED TO 98% MAXIMUM DRY DENSITY PER AASHTO T-180 (LBR 100). OTHER SUBSTITUTES SHALL BE PER FDOT SPECIFICATIONS AND PROVIDE EQUIVALENT STRUCTURAL NUMBER AS ABOVE (MIN LBR 100).
   2. WEARING SURFACE (ASPHALT SURFACE ONLY) INSTALLATION OF THE 1 1/2" ASPHALTIC CONCRETE SURFACE COURSE SHALL CONFORM WITH THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR TYPE S-III ASPHALTIC CONCRETE, AND SHALL BE CONSTRUCTED WITH 2 LIFTS ¾" S-III ASPHALTIC CONCRETE WITH TACK COAT BETWEEN LIFTS. (VIRGIN ASPHALT TO BE USED FOR FINAL LIFT).
   3. REINFORCED CONCRETE SLABS SHALL BE CONSTRUCTED OF CLASS I CONCRETE WITH A MINIMUM STRENGTH OF 3,000 PSI AND SHALL BE REINFORCED WITH A 6" x 6" NO. 6 GAUGE WIRE MESH.

C. INSTALLATION:
   1. SUB-BASE 12" STABILIZED SUB-BASE COMPACTED TO 98% OF MAX. DRY DENSITY PER AASHTO T-180 (MIN LBR 40).
   2. BASE COURSE SHALL BE COMPACTED TO 98% OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
   3. INSTALLATION OF THE WEARING SURFACE SHALL CONFORM WITH THE REQUIREMENTS OF THE D.O.T. STANDARD SPECIFICATIONS FOR TYPE S-I & S-III ASPHALTIC CONCRETE OR THE LATEST REVISION.

D. TESTING
   1. THE FINISHED SURFACE OF THE BASE COURSE AND THAT OF THE WEARING SURFACE SHALL NOT VARY MORE THAN 1/4" FROM THE TEMPLATE. ANY IRREGULARITIES EXCEEDING THIS LIMIT SHALL BE CORRECTED.
   2. DENSITY TESTS SHALL BE TAKEN BY AN INDEPENDENT TESTING LABORATORY CERTIFIED BY THE STATE OF FLORIDA, WHERE DIRECTED BY THE ENGINEER.
   3. ALL TESTING COSTS (PAVING) SHALL BE PAID FOR BY THE CONTRACTOR.
   4. DENSITY TESTS ON THE BASE AND STABILIZED SUBGRADE SHALL BE SUPPLIED TO THE ENGINEER OF RECORD AND CITY OF FORT PIERCE, AND APPROVED BEFORE ANY BASE IS CONSTRUCTED.
   5. DENSITY TESTS AND "AS-BUILTS" ON THE FINISHED BASE SHALL BE SUPPLIED TO CITY OF FORT PIERCE, AND APPROVED BEFORE ANY ASPHALT PAVEMENT IS CONSTRUCTED.
   6. LABORATORY PROCTOR COMPACTION TESTS (T-180) SHALL BE PERFORMED ON ALL MATERIAL, SUB-GRADE AND BASE. LIMEROCK BEARING RATIONS, SIEVE ANALYSIS AND DENSITIES REQUIRED BY THE CONTRACT DOCUMENTS SHALL BE SUBMITTED TO THE CITY OF FORT PIERCE.

PAVEMENT MARKING & SIGNAGE:

ALL PAVEMENT MARKINGS AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," LATEST EDITION; AND CITY OF FORT PIERCE ENGINEERING STANDARDS.

POLLUTION PREVENTION:

1. THE CONTRACTOR SHALL CONTINUOUSLY ENSURE THAT THE PERIMETER OF THE SITE, INCLUDING CONSTRUCTION ENTRANCES, IS SECURED FROM ALLOWING DEBRIS TO LEAVE THE SITE DUE TO CONSTRUCTION ACTIVITY OR RAINFALL EVENTS. A WEEKLY LOG SHALL BE UPDATED AND KEPT ON-SITE IN ACCORDANCE WITH THE NPDES PERMIT. BY BIDDING DOCUMENTS CONTRACTOR ACKNOWLEDGES HE/SHE IS AWARE OF NPDES GUIDELINES AND POLICIES AS WELL AS BEST MANAGEMENT PRACTICES AND ASSUMES SOLE RESPONSIBILITY FOR FINES IMPOSED BY GOVERMENTAL AGENCIES DUE TO VIOLATIONS.

PROJECT RECORD DOCUMENTS:

A. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE EXACT LOCATION, LENGTH AND ELEVATION OF ANY FACILITY NOT BUILT EXACTLY ACCORDING TO PLANS.

B. UPON COMPLETION OF DRAINAGE IMPROVEMENTS AND BASE CONSTRUCTION (AND BEFORE PLACING ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD "AS-BUILT" PLANS FOR THESE IMPROVEMENTS,SHOWING THE LOCATIONS AND APPLICABLE GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN OR INVERT AND EDGES OF PAVEMENT AT 50 FOOT INTERVALS, INCLUDING LOCATIONS AND ELEVATIONS OF ALL HIGH AND LOW POINTS.

C. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL PAYMENT, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES AND DIMENSIONS, LOCATIONS, AND ELEVATIONS OF ALL IMPROVEMENTS IN A FORMAT APPROVED BY CITY OF FORT PIERCE PUBLIC UTILITIES / ENGINEERING DEPARTMENT.

D. "AS-BUILT" INFORMATION OF GRAVITY SEWERS MUST CONTAIN LOCATION OF SERVICE LATERALS. STATIONING OF BOTH THE WYE, CLEAN-OUTS, AND THE SERVICE END MUST ALSO BE INCLUDED.

E. "AS-BUILT" INFORMATION OF WATER DISTRIBUTION SYSTEMS MUST CONTAIN LOCATIONS OF ALL VALVES, FITTINGS, FIRE HYDRANTS, SERVICES AND APPURTENANCES. TOP OF PIPE ELEVATIONS ALONG THE WATER MAIN ARE REQUIRED AT INTERVALS OF 100 FEET (MAXIMUM).

F. ALL "AS-BUILT" INFORMATION ON ELEVATIONS SHALL BE CERTIFIED BY A FLORIDA PROFESSIONAL SURVEYOR & MAPPER

G. "AS-BUILTS" OF WATER LINES SHALL INCLUDE THE FOLLOWING INFORMATION:
   1. TOP OF PIPE ELEVATIONS EVERY 100 LF.
   2. LOCATIONS AND ELEVATIONS OF ALL FITTINGS INCLUDING BENDS, TEES, GATE VALVES, DOUBLE DETECTOR CHECK VALVES, FIRE HYDRANTS, ETC.
   3. ALL TIE INS TO EXISTING LINES SHALL BE "AS-BUILT".
   4. THE ENDS OF ALL WATER SERVICES AT THE BUILDINGS OR HOMES SHALL BE "AS-BUILT" OR WHERE THE WATER SERVICE TERMINATES.

H. "AS-BUILTS" OF ALL GRAVITY SANITARY SEWER LINES SHALL INCLUDE THE FOLLOWING INFORMATION:
   1. RIMS, INVERTS AND LENGTH OF PIPING BETWEEN STRUCTURES AS WELL AS SLOPES.
   2. THE STUB ENDS OF ALL SEWER LATERALS SHALL BE LOCATED, AND IF THERE ARE ANY CLEANOUTS INSTALLED ON THE SEWER LATERALS, THEN THE INVERT ELEVATION OF THESE CLEANOUTS NEED TO BE OBTAINED.
   3. LIFT STATION "AS-BUILTS" SHALL BE PER THE CITY OF WEST ST. LUCIE UTILITY DEPARTMENT STANDARDS.

I. FORCE MAIN "AS-BUILTS" SHALL BE PREPARED THE SAME AS THE WATER LINE "AS-BUILTS".

J. "AS-BUILTS" OF ALL DRAINAGE LINES SHALL INCLUDE THE FOLLOWING INFORMATION:
   1. RIMS, INVERTS AND LENGTH OF PIPING BETWEEN STRUCTURES AND WEIR ELEVATIONS IF APPLICABLE.
   2. THE SIZE OF THE PIPING SHALL BE VERIFIED BY THE SURVEY CREW AT THE TIME OF "AS-BUILT".
   3. DRAINAGE WELL STRUCTURE "AS-BUILTS" SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP OF CASING ELEVATION, TOP AND BOTTOM ELEVATIONS OF THE BAFFLE WALLS, RIM ELEVATIONS AND INVERTS OF PIPING.

K. ALL ROCK "AS-BUILTS" FOR PARKING LOT AREAS SHALL CONSIST OF THE FOLLOWING:
   1. ROCK ELEVATIONS AT ALL HIGH AND LOW POINTS, AND AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY.
   2. ROCK "AS-BUILTS" SHALL BE TAKEN AT ALL LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS.
   3. ALL CATCH BASIN AND MANHOLE RIM ELEVATIONS SHALL BE SHOWN.
   4. ELEVATIONS AROUND ISLAND AREAS WILL ALSO BE REQUIRED.
   5. WHERE CONCRETE IS TO BE USED AS A FINISHED PRODUCT FOR THE ROADWAY OR PARKING LOT ROCK "AS-BUILTS" WILL BE REQUIRED AS INDICTED ABOVE, AS WELL AS "AS-BUILTS" ON THE FINISHED CONCRETE AT LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS.
   6. "AS-BUILTS" SHALL BE TAKEN ON ALL PAVED AND UNPAVED SWALES, PRIOR TO PLACEMENT OF ASPHALT OR TOPSOIL/SOD, AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY AND CONFORMANCE TO THE PLAN DETAILS.

L. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PREPARE RECORD DRAWINGS, "AS-BUILTS", ON FULL SIZE, 24" X 36" REPRODUCIBLE MATERIAL. WHERE WATER AND SEWER INFORMATION ARE ON THE SAME PAGE THE WATER LINE SHALL BE "AS-BUILT" BY STATION AND OFFSET UTILIZING THE SANITARY SEWER SYSTEM AS THE BASE LINE. IF IT IS NOT PRACTICAL TO UTILIZE THE SEWER SYSTEM AS A BASE LINE THEN THE SURVEYOR SHALL CONTACT THE ENGINEER OF RECORD SO THAT A SUBSTITUTE BASELINE MAY BE CHOSEN. ALL RECORD DRAWING, "AS-BUILT", INFORMATION SHALL BE PUT ON THE LATEST ENGINEERING DRAWINGS. ONE (1) SET OF REPRODUCIBLE RECORD DRAWINGS, "AS-BUILTS", SHALL BE SUBMITTED ALONG WITH EIGHT (8) SETS OF BLACKLINE DRAWINGS. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL LAND SURVEYOR. ADDITIONALLY, AN ELECTRONIC COPY OF THESE RECORD DRAWINGS, "AS-BUILTS", SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN AUTOCAD, VERSION 2007.

PROJECT CLOSEOUT:

A. CLEANING UP:
   1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE SWEPT BROOM CLEAN.
   2. THE CONTRACTOR SHALL RESTORE OR REPLACE, WHEN AND AS DIRECTED, ANY PUBLIC OR PRIVATE PROPERTY DAMAGED BY HIS WORK, EQUIPMENT, OR EMPLOYEES, TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF OPERATIONS. TO THAT END, THE CONTRACTOR SHALL DO, AS REQUIRED, ALL NECESSARY HIGHWAY, DRIVEWAY, WALK AND LANDSCAPING WORK. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.
   3. WHERE MATERIAL OR DEBRIS HAS WASHED OR FLOWED INTO OR HAS BEEN PLACED IN WATER COURSES, DITCHES, DRAINS, CATCH BASINS, OR ELSEWHERE AS A RESULT OF THE CONTRACTOR'S OPERATIONS, SUCH MATERIAL OR DEBRIS SHALL BE REMOVED AND SATISFACTORILY DISPOSED OF DURING THE PROGRESS OF THE WORK, AND THE AREA KEPT IN A CLEAN AND NEAT CONDITION.

B. ALL PROPERTY MONUMENTS OR PERMANENT REFERENCES, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AND MAPPER AT THE CONTRACTOR'S EXPENSE.

C. ALL PAVED & UNPAVED SURFACES DISTURBED OR DAMAGED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
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REVISIONS

REV	DATE	COMMENT	BY
1	02-10-22	REV - CITY COMMENTS	JMB
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PROJECT No.:	FT210079
DRAWN BY:	HR
CHECKED BY:	EMM
DATE:	08/10/2021
SCALE:	AS NOTED
CAD I.D.:	FT210079-C-2.0 GN

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

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EDWARD M. McDONALD LICENSE No. 71615 STATE OF FLORIDA PROFESSIONAL ENGINEER
EDWARD M. McDONALD, P.E.
March 10, 2022
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

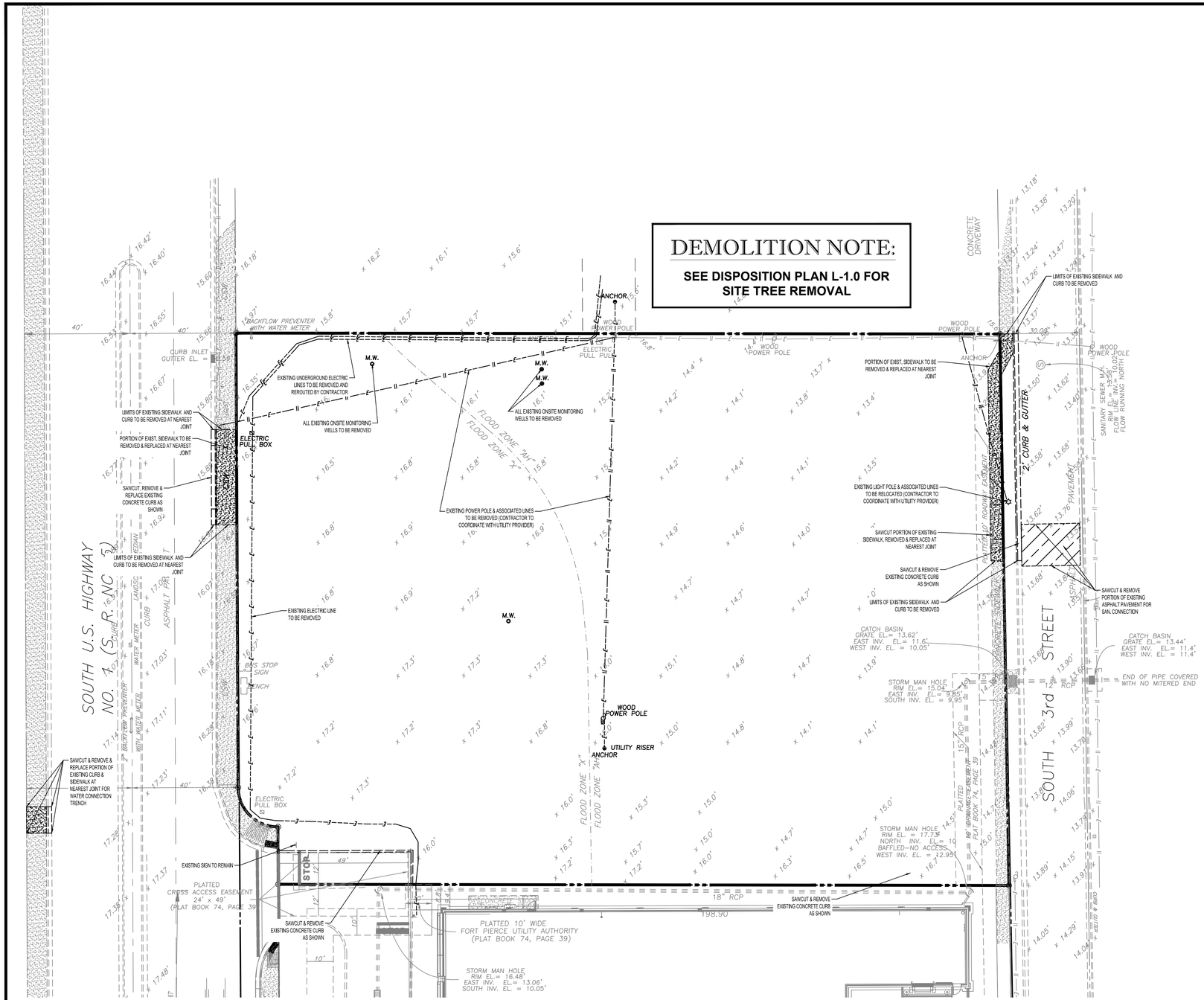
SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:

C-2.0

OF



N

W E

S

20 10 5 0 20

1"= 20'

DEMOLITION NOTES:

1. THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY:
   CRAIG WATSON AND ASSOCIATES LLC
   2240 NE DIXIE HIGHWAY,
   JENSEN BEACH, FL. 34957
   DATED: 08/04/2021
2. THOMAS ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION.
3. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR TO THOMAS ENGINEERING GROUP, LLC IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF SITE ACTIVITY.
4. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR/TO:

   A. THE CONTRACTOR SHALL OBTAIN A SUNSHINE STATE ONE CALL LOCATION CERTIFICATION PRIOR TO ANY EXCAVATION OR DEMOLITION. THE NUMBER IS 1-800-432-4770.

   B. ENSURING COPIES OF ALL PERMITS AND APPROVALS MUST BE MAINTAINED ON SITE AND AVAILABLE FOR REVIEW.

   C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.

   D. LOCATE/CAP ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE.

   E. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE SYSTEM THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.

   F. FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.

   G. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.

   H. A COMPLETE INSPECTION OF CONTAMINANTS BY A LICENSED ENVIRONMENTAL TESTING AGENCY, OF ALL BUILDINGS AND/OR STRUCTURES TO BE REMOVED. SAME SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ENVIRONMENTAL REGULATIONS. ANY/ALL CONTAMINANTS SHALL BE REMOVED AND DISPOSED OF BY A FEDERALLY LICENSED CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. ALL ENVIRONMENTAL WORK INCLUDING HAZARDOUS MATERIAL, SOILS, ASBESTOS, OR OTHER REFERENCED OR IMPLIED HEREIN IS THE SOLE RESPONSIBILITY OF THE OWNER'S ENVIRONMENTAL CONSULTANT. THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE.

5. SAFETY OR SUPERVISION. CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY.
6. TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE DEMOLITION CONTRACTOR IS RESPONSIBLE FOR ALL REPAIRS OF DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.
7. IN THE ABSENCE OF SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
8. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROGRAM. THE CONTRACTOR IS ALSO RESPONSIBLE FOR ALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.
9. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH: THE "MANUAL ON UNIFORM TRAFFIC CONTROL," AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHTS - OF - WAY.
10. CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY.
11. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINE WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.
12. USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED OF ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.
13. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.
14. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THAT ALL METHODS AND MEANS ARE TO BE IN ACCORDANCE WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.
15. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL CITY, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES.

HATCH LEGEND

EXISTING ASPHALT TO BE REMOVED

EXISTING CONCRETE TO BE REMOVED

NOTES
1. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
2. ALL EXISTING UTILITIES SHALL BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH CITY OF FORT PIERCE AND LOCAL UTILITY COMPANY REQUIREMENTS. ALL DEMOLITON DEBRIS TO BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
3. CONTRACTOR SHALL REFER TO CONSTRUCTION PHASING PLANS FOR ORDER OF REMOVAL OF ANY UTILITIES AND/OR STRUCTURES.
4. EXISTING WATER SERVICES TO EXISTING RETAIL SPACE SHALL NOT BE REMOVED UNTIL PROPOSED WATER SERVICES ARE INSTALLED AND RELEASE FOR USE BY FORT PIERCE UTILITY AUTHORITY.

CONTRACTOR SHALL REFER TO LANDSCAPING PLAN FOR TREE REMOVAL

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
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1502 W. FLETCHER AVE. SUITE 206 UNIT NO. 1012 TAMPA, FL 33612 P: 813-379-4100
125 W INDIANTOWN RD. SUITE 206 JUPITER, FL 33458 P: 561-203-7503

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

REVISIONS

REV	DATE	COMMENT	BY
1	02-10-22	REV - CITY COMMENTS	JMB

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PERMIT SET

PROJECT No.:	FT210079
DRAWN BY:	HR
CHECKED BY:	EMM
DATE:	08/10/2021
SCALE:	AS NOTED
CAD I.D.:	FT210079-C-3.0 DM

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

THOMAS ENGINEERING GROUP
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EDWARD M. McDONALD LICENSE No. 71615 STATE OF FLORIDA PROFESSIONAL ENGINEER

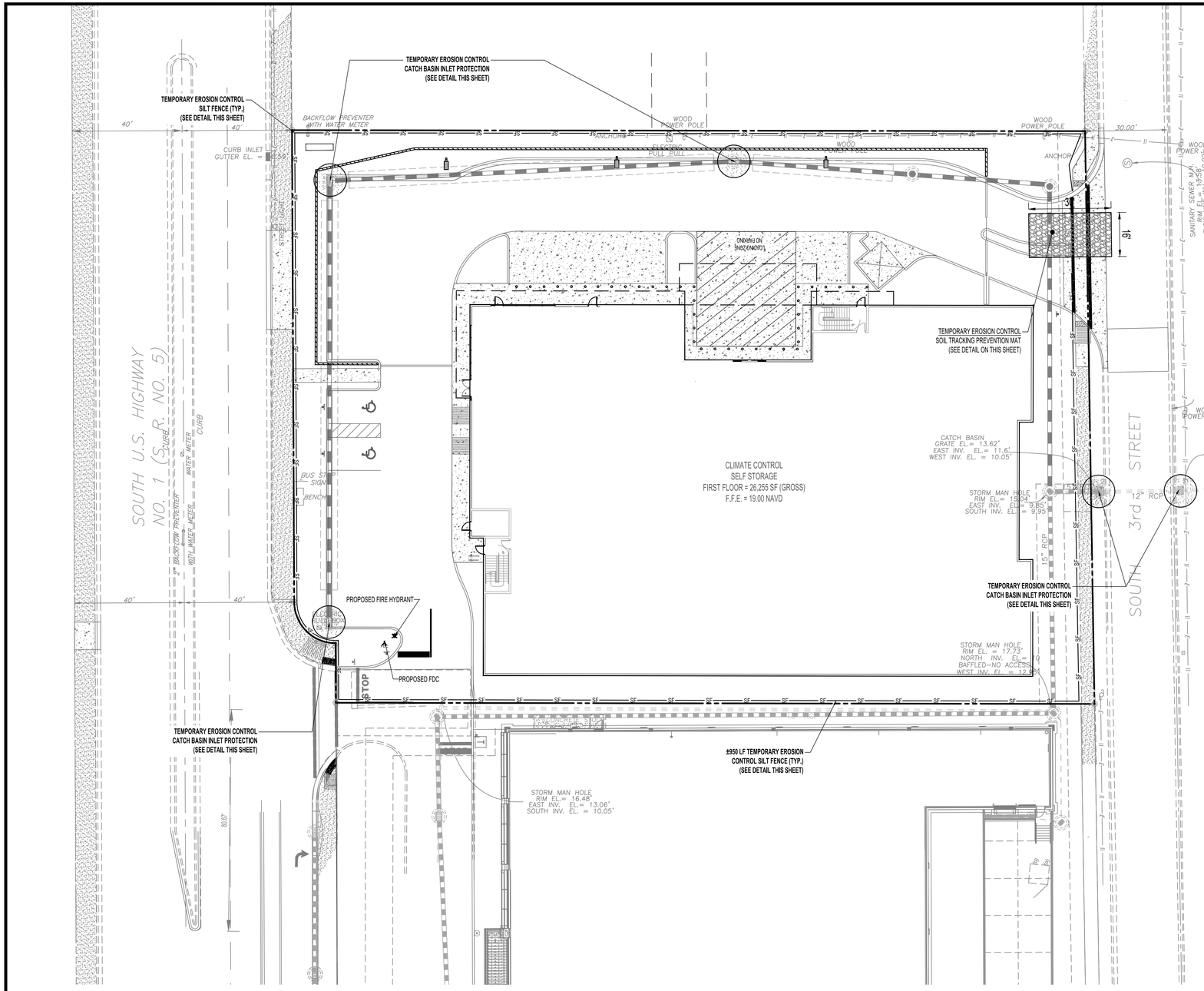
EDWARD M. McDONALD, P.E.
March 10, 2022
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

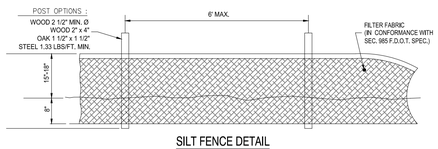
SHEET TITLE:

DEMOLITION PLAN

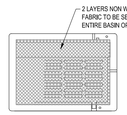
SHEET NUMBER:

C-3.0
OF

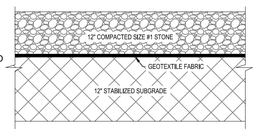




SILT FENCE DETAIL
NOT TO SCALE
(PER FDOT INDEX #102)



CATCH BASIN INLET FILTER DETAIL
NOT TO SCALE



SOIL TRACKING PREVENTION MAT DETAIL
NOT TO SCALE
(PER FDOT INDEX #106)

NOTE TO SILT FENCE INSTALLERS:

TO FACILITATE "EFFECTIVE" PRESERVATION OF TREES (THOSE WITH DRIP LINES DEPICTED ON PLAN) SILT FENCE SHALL NOT BE TRENCHED IN WITHIN DRIP LINES OF TREES WHERE AVOIDABLE. IF UNAVOIDABLE THEN EITHER INSTALL SILT FENCE AT GRADE (NO TRENCHING) OR USE HAY BALES IN THESE LOCATIONS.

LEGEND:

- PROPERTY LINE
- EXISTING CATCH BASIN
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- PROPOSED SILT FENCE / CONSTRUCTION FENCE
- PROPOSED INLET / STRUCTURE PROTECTION
- PROPOSED STORM SEWER
- PROPOSED ROOF DRAIN
- SOIL TRACKING PREVENTION MAT

EROSION AND SEDIMENT CONTROL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING SILT FROM SITE IF NOT REUSABLE ON-SITE AND ASSURING PLAN ALIGNMENT AND GRADE IN ALL DITCHES AND SWALES AT COMPLETION OF CONSTRUCTION.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE TEMPORARY EROSION AND SEDIMENT CONTROL DEVICES AFTER COMPLETION OF CONSTRUCTION AND ONLY WHEN AREAS HAVE BEEN STABILIZED.
3. ADDITIONAL PROTECTION - ON-SITE PROTECTION IN ADDITION TO THE ABOVE MUST BE PROVIDED THAT WILL NOT PERMIT SILT TO LEAVE THE PROJECT CONFINES DUE TO UNSEEN CONDITIONS OR ACCIDENTS.
4. CONTRACTOR SHALL INSURE THAT ALL DRAINAGE STRUCTURES, PIPES, ETC. ARE CLEANED OUT AND WORKING PROPERLY AT TIME OF ACCEPTANCE.
5. WIRE MESH SHALL BE LAID OVER THE DROP INLET SO THAT THE WIRE EXTENDS A MINIMUM OF 1 FOOT BEYOND EACH SIDE OF THE INLET STRUCTURE. HARDWARE CLOTH OR COMPARABLE WIRE MESH WITH 1/2-INCH OPENINGS SHALL BE USED. IF MORE THAN ONE STRIP OF MESH IS NECESSARY, THE STRIPS SHALL BE OVERLAPPED.
6. FDOT NO. 1 COARSE AGGREGATE SHALL BE PLACED OVER THE WIRE MESH AS INDICATED IN D-903. THE DEPTH OF STONE SHALL BE AT LEAST 12 INCHES OVER THE ENTIRE INLET OPENING. THE STONE SHALL EXTEND BEYOND THE INLET OPENING AT LEAST 18 INCHES ON ALL SIDES.
7. IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE INLET, CLEANED AND REPLACED.
8. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES.
9. BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
10. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 8 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE FILTER BARRIER.
11. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
12. LOOSE STRAW SHOULD BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.
13. STRAW BALE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
14. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED BALES, END RUNS AND UNDERCUTTING BENEATH BALES.
15. NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BALES SHALL BE ACCOMPLISHED PROMPTLY.
16. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE STRAW BALE BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.
17. SILT FENCES AND FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
18. SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
19. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-THIRD THE HEIGHT OF THE BARRIER.
20. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDED.
21. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN AND REPAIRS MADE AS NEEDED.
22. SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/3 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
23. THE CONTRACTOR IS RESPONSIBLE FOR FOLLOWING THE BEST EROSION AND SEDIMENT CONTROL PRACTICES AS OUTLINED IN THE PLANS, SPECIFICATIONS AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT SPECIFICATIONS AND CRITERIA.
24. FOR ADDITIONAL INFORMATION ON SEDIMENT AND EROSION CONTROL REFER TO "THE FLORIDA DEVELOPMENT MANUAL - A GUIDE TO SOUND LAND AND WATER MANAGEMENT" FROM THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION (F.D.E.R.) CHAPTER 6.
25. EROSION AND SEDIMENT CONTROL BARRIERS SHALL BE PLACED ADJACENT TO ALL WETLAND AREAS WHERE THERE IS POTENTIAL FOR DOWNSTREAM WATER QUALITY DEGRADATION. SEE DETAIL SHEET FOR TYPICAL CONSTRUCTION.
26. ALL DISTURBED AREAS SHALL BE GRASSED, FERTILIZED, MULCHED AND MAINTAINED UNTIL A PERMANENT VEGETATIVE COVER IS ESTABLISHED.
27. SOD SHALL BE PLACED IN AREAS WHICH MAY REQUIRE IMMEDIATE EROSION PROTECTION TO ENSURE WATER QUALITY STANDARDS ARE MAINTAINED.
28. ANY DISCHARGE FROM DEWATERING ACTIVITY SHALL BE FILTERED AND CONVEYED TO THE OUTFALL IN A MANNER WHICH PREVENTS EROSION AND TRANSPORTATION OF SUSPENDED SOLIDS TO THE RECEIVING OUTFALL.
29. DEWATERING PUMPS SHALL NOT EXCEED THE CAPACITY OF THAT WHICH REQUIRES A CONSUMPTIVE USE PERMIT FROM THE ST. JOHNS RIVER WATER MANAGEMENT DISTRICT.
30. ALL DISTURBED AREAS TO BE STABILIZED THROUGH COMPACTION, SILT SCREENS, HAY BALES, AND GRASSING. ALL FILL SLOPES 3:1 OR STEEPER TO RECEIVE STAKED SOLID SOD.
31. ALL DEWATERING, EROSION, AND SEDIMENT CONTROL TO REMAIN IN PLACE AFTER COMPLETION OF CONSTRUCTION AND REMOVED ONLY WHEN AREAS HAVE STABILIZED.
32. THIS PLAN INDICATES THE MINIMUM EROSION AND SEDIMENT MEASURES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL APPLICABLE RULES, REGULATIONS AND WATER QUALITY GUIDELINES AND MAY NEED TO INSTALL ADDITIONAL CONTROLS.
33. THE CONTRACTOR SHALL BE REQUIRED TO RESPOND TO ALL WATER MANAGEMENT DISTRICT INQUIRIES, RELATIVE TO COMPLIANCE OF SJRWMD FOR EROSION AND SEDIMENTATION CONTROL. THE COST OF THIS COMPLIANCE SHALL BE PART OF THE CONTRACT.

POLLUTION PREVENTION NOTES:

A.) EROSION AND SEDIMENT CONTROL BMP'S IN ADDITION TO THOSE PRESENTED ON THESE PLANS SHALL BE IMPLEMENTED AS NECESSARY TO PREVENT TURBID DISCHARGES FROM FLOWING ONTO ADJACENT PROPERTIES OR ROADWAYS, OFF SITE STORMWATER CONVEYANCES OR RECEIVING WATERS, OR ON SITE WETLANDS AND SURFACE WATERS. BMP'S SHALL BE DESIGNED, INSTALLED, AND MAINTAINED BY THE SITE OPERATOR TO ENSURE THAT OFF SITE SURFACE WATER QUALITY REMAINS CONSISTENT WITH STATE AND LOCAL REGULATIONS. [THE OPERATOR IS THE ENTITY THAT OWNS OR OPERATES THE CONSTRUCTION ACTIVITY AND HAS AUTHORITY TO CONTROL THOSE ACTIVITIES AT THE PROJECT NECESSARY TO ENSURE COMPLIANCE.]

B.) OFF SITE SURFACE WATER DISCHARGES, OR DISCHARGES TO ONSITE WETLANDS OR SURFACE WATERS WITH TURBIDITY IN EXCESS OF 29 NEPHELOMETRIC TURBIDITY UNITS (NTU'S) ABOVE BACKGROUND LEVEL SHALL BE IMMEDIATELY CORRECTED. SUCH INCIDENTS SHALL BE REPORTED TO WATER RESOURCES WITHIN 24 HOURS OF THE OCCURRENCE. THE REPORT SHALL INCLUDE THE CAUSE OF THE DISCHARGE AND CORRECTIVE ACTIONS TAKEN.

C.) THE OPERATOR SHALL ENSURE THAT ADJACENT PROPERTIES ARE NOT IMPACTED BY WIND EROSION, OR EMISSIONS OF UNCONFINED PARTICULATE MATTER IN ACCORDANCE WITH RULE 62-296.320(4)(C)1, F.A.C., BY TAKING APPROPRIATE MEASURES TO STABILIZE AFFECTED AREAS.

D.) FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ENTER STORMWATER DRAINS OR WATERBODIES, OR FUEL AND OTHER PETROLEUM PRODUCT SPILLS THAT ARE IN EXCESS OF 25 GALLONS SHALL BE CONTAINED, CLEANED UP, AND IMMEDIATELY REPORTED TO WATER RESOURCES. SMALLER GROUND SURFACE SPILLS SHALL BE CLEANED UP AS SOON AS PRACTICAL.

E.) IF CONTAMINATED SOIL AND/OR GROUNDWATER IS DISCOVERED DURING DEVELOPMENT OF THE SITE, ALL ACTIVITY IN THE VICINITY OF THE CONTAMINATION SHALL IMMEDIATELY CEASE, AND WATER RESOURCES SHALL BE CONTACTED.

F.) PRIOR TO DEMOLITION OF EXISTING ON SITE STRUCTURES AN ASBESTOS SURVEY AND/OR ASBESTOS NOTIFICATION MAY BE REQUIRED.

G.) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM:
- i. NPDES CONSTRUCTION GENERIC PERMIT COVERAGE SHALL BE OBTAINED AT LEAST 48 HOURS IN ADVANCE OF CONSTRUCTION COMMENCEMENT IN ACCORDANCE WITH RULE 62-621.300(4)(a), F.A.C.
- ii. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE POSTED AT THE SITE IN ACCORDANCE WITH RULE 62-621.300(4)(A) PART III.C.2, F.A.C.
- iii. A COPY OF THE CERTIFIED NPDES NOI, OR A COPY OF THE FDEP COVERAGE CONFIRMATION LETTER SHALL BE PROVIDED TO WATER RESOURCES IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART III.D.1, F.A.C.
- iv. THE SWPPP SHALL BE CERTIFIED IN ACCORDANCE WITH RULE 62-621.300(4)(a)PART V.D.6, F.A.C.
- v. A COPY OF THE SWPPP, AND COPIES OF THE INSPECTION AND MAINTENANCE RECORDS SHALL BE MAINTAINED AT THE PROJECT SITE, AND SHALL BE READILY AVAILABLE TO COUNTY OR STATE INSPECTORS.

H.) THE DISCHARGE OF GROUNDWATER PRODUCED THROUGH DEWATERING, TO SURFACE WATERS, OR ANY PORTION OF THE MS4 WILL REQUIRE SEPARATE PERMITTING FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP). PERMIT(S) SHALL BE OBTAINED PRIOR TO THE COMMENCEMENT OF DEWATERING.

MAINTENANCE NOTES:

N.P.D.E.S. PERMIT COMPLIANCE REQUIRES INSPECTIONS EVERY 7 CALENDAR DAYS BY AN NPDES QUALIFIED INSPECTOR AND PERIODIC INSPECTIONS WITHIN 24 HOURS OF ANY RAINFALL EVENT OF 0.5 INCHES OR GREATER. THESE INSPECTIONS MAY RESULT IN RECOMMENDATIONS FOR ROUTINE MAINTENANCE OF THE SOIL EROSION CONTROL DEVICES, AS WELL AS FURTHER MAINTENANCE AS OUTLINED BELOW.

1. THROUGHOUT THE CONSTRUCTION PERIOD, ALL MUD/SILT TRACKED ONTO EXISTING FDOT ROADS FROM THE SITE DUE TO CONSTRUCTION SHALL BE IMMEDIATELY REMOVED BY THE CONTRACTOR.
2. CATCH BASIN INLET AND CONCRETE FLUME FILTERS SHALL BE MAINTAINED CLEAN AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD. WEEKLY INSPECTIONS WILL BE PERFORMED EVERY 7 CALENDAR DAYS. IF A FILTER HAS HOLES OR IS INUNDATED WITH SEDIMENT, THE FILTER WILL REQUIRE REPLACEMENT.
3. CONSTRUCTION ACCESS AND TRACKING MAT MUST BE MAINTAINED AS NECESSARY. REPLENISH CRUSHED AGGREGATE IF PRESENT LAYER IS FILLED WITH SEDIMENT, POOLING WATER OR HAS RUTS. A NEW LAYER MAY BE ADDED IF OLD LAYERS BECOME COMPACTED.
4. SILT FENCE IS TO BE INSPECTED DAILY BY CONTRACTOR AND EVERY 7 CALENDAR DAYS BY NPDES QUALIFIED INSPECTOR. IF REPAIRS OR REPLACEMENT IS NECESSARY, IT SHALL BE PERFORMED IMMEDIATELY. THE SILT FENCE SHOULD BE TRENCHED IN, BACK-FILLED, AND STAPLED OR STAKED ACCORDING TO THE MANUFACTURER'S SPECIFICATIONS. MAINTENANCE INCLUDES THE REMOVING OF BUILT-UP SEDIMENT. WHEN THE SEDIMENT ACCUMULATES TO 1/3 OF THE HEIGHT OF THE FENCE, CONTRACTOR MAY HAVE TO REMOVE, REPLACE, RETRENCH, OR RE-BACKFILL THE FENCE IF IT FAILS. IT WOULD ALSO BE NECESSARY TO REINSTALL IF ANY PORTION OF THE FENCING WAS DAMAGED BY CONSTRUCTION MACHINERY.
5. SEEDING OR RESEEDING MAY BE REQUIRED IMMEDIATELY TO AREAS WHICH HAVE BEEN DAMAGED BY RUNOFF.
6. REMOVE ANY VISIBLE SEDIMENT FROM THE POND BOTTOM TO KEEP THE BASIN DESIGNED INFILTRATION PERFORMANCE.
7. THE CONTRACTOR SHALL CONTINUOUSLY ENSURE THAT THE PERIMETER OF THE SITE, INCLUDING CONSTRUCTION ENTRANCES, IS SECURED FROM ALLOWING DEBRIS TO LEAVE THE SITE DUE TO CONSTRUCTION ACTIVITY OR RAINFALL EVENTS. A WEEKLY LOG SHALL BE UPDATED AND KEPT ON-SITE IN ACCORDANCE WITH THE NPDES PERMIT. BY BIDDING DOCUMENTS CONTRACTOR ACKNOWLEDGES HE/SHE IS AWARE OF NPDES GUIDELINES AND POLICIES AS WELL AS BEST MANAGEMENT PRACTICES AND ASSUMES SOLE RESPONSIBILITY FOR FINES IMPOSED BY GOVERNMENTAL AGENCIES DUE TO VIOLATIONS.

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
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REVISIONS

REV	DATE	COMMENT	BY
1	02-10-22	REV - CITY COMMENTS	JMB

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CAD I.D.:	FT210079-C-4.0 EC

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

THOMAS ENGINEERING GROUP
1502 W. FLETCHER AVE, SUITE 101
TAMPA, FLORIDA 33612
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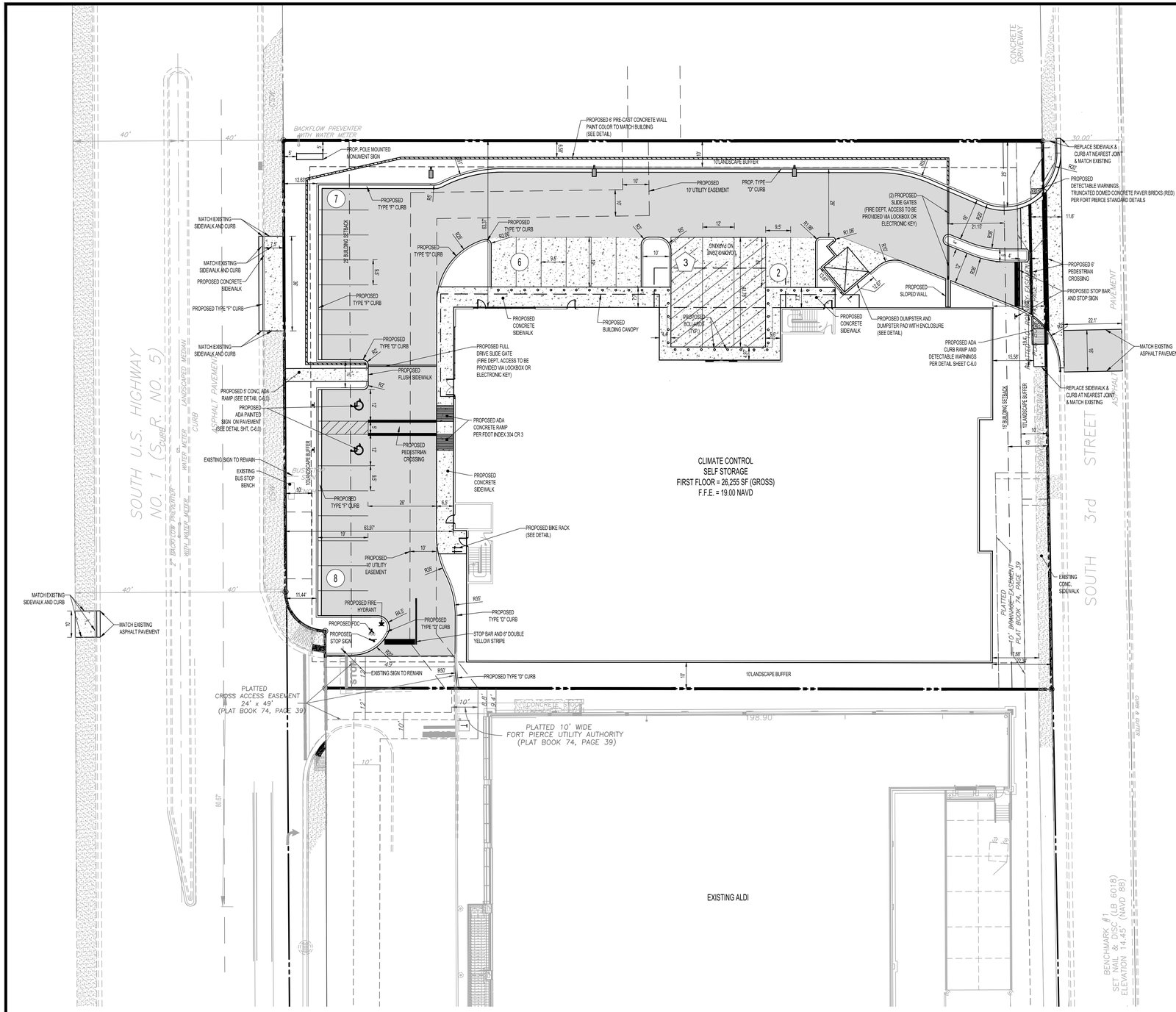
EDWARD M. McDONALD LICENSE No. 71615 STATE OF FLORIDA PROFESSIONAL ENGINEER

EDWARD M. McDONALD, P.E.
March 10, 2022
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

SHEET TITLE:
EROSION CONTROL PLAN

SHEET NUMBER:
C-4.0
OF



LEGEND:

- EXISTING PROPERTY LINE
- EXISTING STORM DRAINAGE LINE
- PROPOSED BUILDING
- PROPOSED CONCRETE PAVEMENT
- 2 — PROPOSED REGULAR PARKING SPACE COUNT
- 3 — PROPOSED LOADING SPACE PARKING COUNT
- PROPOSED ASPHALT PAVEMENT
- EXISTING CONCRETE PAVEMENT
- PROPOSED LIGHT (REFER TO PHOTOMETRIC PLAN)

DISTRICT REQUIREMENTS & GENERAL NOTES

APPLICANT/OWNER: LGFTPI LLC
7307 NW 122ND AVE
PARKLAND, FL 33076

PARCEL NO. 2415-602-0002-000-2

FEMA FLOOD ZONE: ZONE X PER FLOOD PANEL 120286-0187-J, DATED FEB. 16, 2012
ZONE AH (16)

LAND USE INFORMATION:

CURRENT USE:	VACANT
PROPOSED USE:	RETAIL
FUTURE LAND USE DESIGNATION:	COMMERCIAL
ZONING DESIGNATION:	C3 - GENERAL COMMERCIAL

DEVELOPMENT STANDARDS:	REQUIRED	PROPOSED
MIN. LOT AREA (S.F.)	10,000	60,039
MIN. LOT FRONTAGE (FEET):	50	208.35
MIN. LOT DEPTH (FEET):	90	288.66
MIN. SET BACKS:		
FRONT - WEST (FEET):	25	63.97'
SIDE - NORTH (FEET):	0	63.37'
SIDE - SOUTH (FEET):	0	10'
REAR - EAST (FEET):	15	19.90'
MIN. LANDSCAPE BUFFER:		
FRONT - WEST (FEET):	10	11.6'
SIDE - NORTH (FEET):	10	10'
SIDE - SOUTH (FEET):	10	10'
REAR - EAST (FEET):	10	15.21'
MAX. HEIGHT (FEET):	65'	50'
MAX. LOT COVERAGE:	0.60	0.44
MIN. PERVIOUS AREA (%)	20	20
MIN. OPEN SPACE (RATIO):	25	25.5

PARKING DATA:

REQUIRED PER CODE:

USE	AREA	RATIO	AMOUNT
SELF STORAGE	106,860 S.F.	1 SPACE / 600 S.F.	178 SPACES

PROVIDED:	SPACES
STANDARD SPACES (MIN. 9.5' X 19')	21
ACCESSIBLE SPACES (MIN. 12' X 19')	2
TOTAL SPACES	23

SEE PARKING STUDY: MAXIMUM REQUIRED PER PARKING STUDY = 22 SPACES

LOADING ZONE:

REQUIRED:
GROSS FLOOR AREA 106,830 S.F. - 3 REQUIRED
PROVIDED: 3 SPACES

BICYCLE PARKING:

REQUIRED: 1 SPACE PER 10 MOTOR VEHICLE SPACES; 2 MINIMUM - 2 REQUIRED
PROVIDED: 2 SPACES

NOTES:

1. ALL CONSTRUCTION SHALL COMPLY WITH SECTIONS 17 AND 22 OF THE CITY OF FORT PIERCE CODE OF ORDINANCES.
2. ALL TRUNCATED DETECTABLE SURFACES SHALL BE CAST IN PLACE (ADHESIVE NOT PERMITTED) AND BE BRICK RED IN COLOR. ALL RAMPS AND FLUSH CONNECTIONS WITHIN PUBLIC RIGHT-OF-WAY OR ROAD EASEMENTS SHALL INCLUDE TRUNCATED DETECTABLE SURFACE 24" IN DEPTH CONSISTENT WITH FDOT STANDARD PLANS.
3. 2 EMPLOYEES MAX PER SHIFT AT SELF STORAGE FACILITY

FEMA MAP INFORMATION:

LANDS SHOWN HEREON ARE LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF 'X' AND 'AH' BASE EL. 16.0' BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 12111C0187K, DATED FEBRUARY 19, 2020 AND IS RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM 1988

DATUM INFORMATION:

ALL ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988, (NAVD' 88)

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
6300 NW 31st AVE. FT. LAUDERDALE, FL 33309 P: 954-202-7000
1502 W. FLETCHER AVE. SUITE 206 TAMPA, FL 33612 P: 813-379-4100
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REVISIONS

REV	DATE	COMMENT	BY
1	02-10-22	REV - CITY COMMENTS	JMB

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PERMIT SET

PROJECT No.:	FT210079
DRAWN BY:	HR
CHECKED BY:	EMM
DATE:	08/10/2021
SCALE:	AS NOTED
CAD I.D.:	FT210079-C-5.0 SP

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

THOMAS ENGINEERING GROUP
1502 W. FLETCHER AVE, SUITE 101
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EDWARD M. McDONALD LICENSE No. 71615 STATE OF FLORIDA PROFESSIONAL ENGINEER
EDWARD M. McDONALD, P.E.
March 10, 2022
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

SHEET TITLE:

SITE PLAN

SHEET NUMBER:

C-5.0
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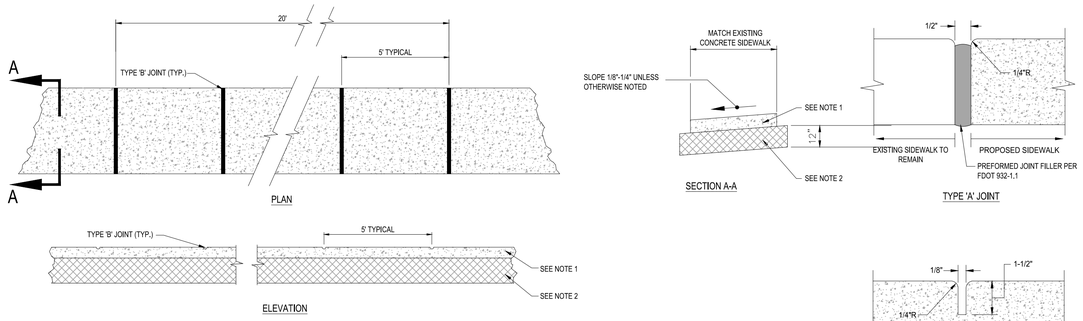


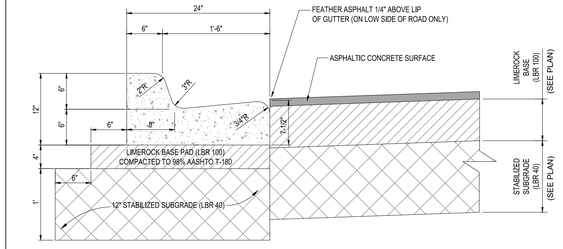
NOTES:

1. SIDEWALK SHALL BE 4" THICK EXCEPT IN DRIVEWAYS WHERE THE THICKNESS SHALL BE 6".
2. SUBGRADE BELOW SIDEWALK SHALL BE COMPACTED TO 98% OF MAX. DENSITY PER A.A.S.H.T.O. T-180, (12" THICKNESS)
3. CONCRETE STRENGTH SHALL BE MIN. 3000 PSI @ 28 DAYS.
4. SIDEWALK REMOVAL & REPLACEMENTS TO CONSIST OF FULL FLAGS.
5. PROVIDE EXPANSION JOINT (TYPE 'A') AT CONNECTIONS BETWEEN NEW AND EXISTING SIDEWALK.
6. CONCRETE SIDEWALKS SHALL BE REINFORCED BY FIBER MESH.
7. ADDITION OF FIBERMESH OR 6X6 WWF FOR SIDEWALKS TO BE CONSTRUCTED IN PUBLIC RIGHT-OF-WAYS.

TABLE OF SIDEWALK JOINTS	
TYPE	LOCATION
'A'	AT CONNECTION BETWEEN NEW AND EXISTING SIDEWALK
'B'	5 FEET CENTER TO CENTER ON SIDEWALKS.

1 SIDEWALK DETAILS

SCALE: NONE

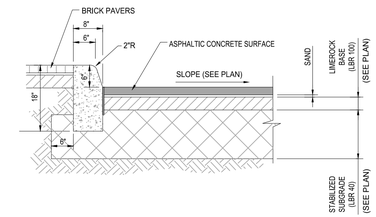


NOTE:

1. WHEN USED ON HIGH SIDE OF ROADWAYS THE CROSS SLOPE OF THE GUTTER SHALL MATCH THE CROSS SLOPE OF THE ADJACENT PAVEMENT AND THE THICKNESS OF THE LIP SHALL BE 6" INSTEAD OF 7 1/2".
2. REFER TO FDOT INDEX 300 FOR NOTES AND DETAILS
3. LIMEROCK BASE SHALL BE COMPACTED TO A 98% MAX. DENSITY PER A.A.S.H.T.O. (T-180)
4. 12" SUBGRADE BELOW SIDEWALK SHALL BE COMPACTED TO 98% OF MAX. DENSITY PER A.A.S.H.T.O. (T-180)

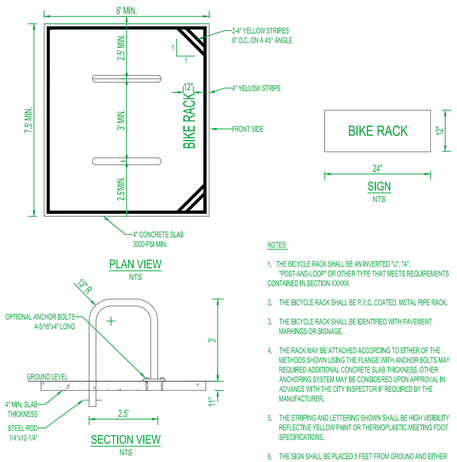
2 TYPE 'F' CURB & GUTTER DETAIL

SCALE: NONE



3 CONCRETE CURB (TYPE 'D') DETAIL

SCALE: NONE

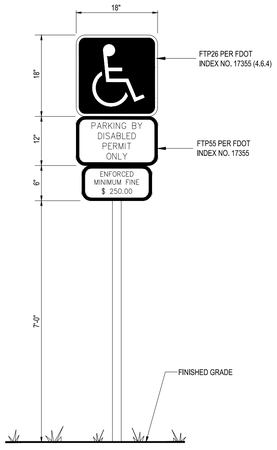


NOTES:

1. THE BICYCLE RACK SHALL BE AN INVERTED "U", "A", "POST-AND-LOOP" OR OTHER TYPE THAT MEETS REQUIREMENTS CONTAINED IN SECTION XXXXX
2. THE BICYCLE RACK SHALL BE P.V.C. COATED, METAL PIPE RACK.
3. THE BICYCLE RACK SHALL BE IDENTIFIED WITH PAVEMENT MARKINGS OR SIGNAGE.
4. THE RACK MAY BE ATTACHED ACCORDING TO EITHER OF THE METHODS SHOWN USING THE FLANGE WITH ANCHOR BOLTS MAY REQUIRED ADDITIONAL CONCRETE SLAB THICKNESS, OTHER ANCHORING SYSTEM MAY BE CONSIDERED UPON APPROVAL IN ADVANCE WITH THE CITY INSPECTOR IF REQUIRED BY THE MANUFACTURER.
5. THE STRIPING AND LETTERING SHOWN SHALL BE HIGH VISIBILITY REFLECTIVE YELLOW PAINT OR THERMOPLASTIC MEETING FDOT SPECIFICATIONS.
6. THE SIGN SHALL BE PLACED 5 FEET FROM GROUND AND EITHER PLACED ON A POST OR WALL IF AVAILABLE.

4 BIKE RACK

SCALE: NONE

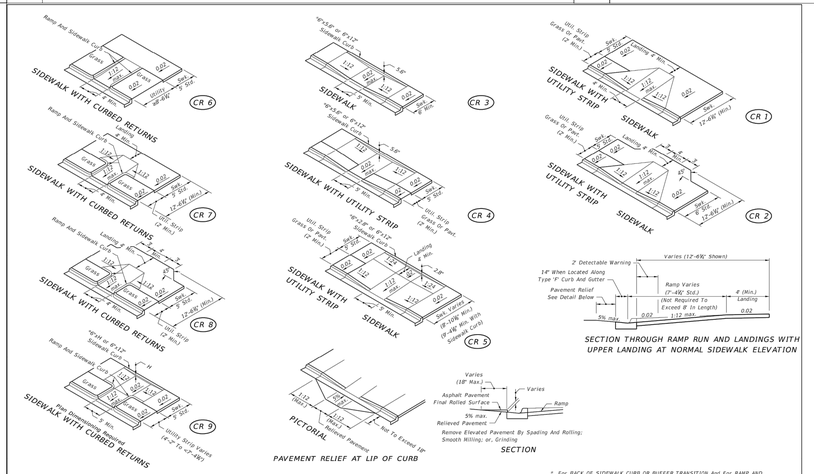


NOTES

1. HANDICAPPED SIGN WILL BE OF A D.O.T. (BLUE) COLOR PAVEMENT BORDER LINES (ONE ON EACH SIDE) OF THE HANDICAPPED SPACE WILL BE OF A BLUE COLOR OF A QUALITY EQUIVALENT TO SUPER STRIPE TRAFFIC PAINT SOLD BY FOX VALLEY SYSTEMS INC. OF CARY ILLINOIS, PHONE 1-800-323-4770 SHALL BE STRIPED ON THE WEARING SURFACE OF EACH SPACE DESIGNED FOR THE HANDICAPPED SPACE.

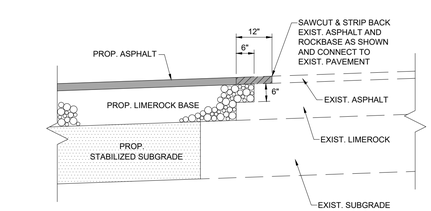
5 ACCESSIBLE PARKING SIGN

SCALE: NONE



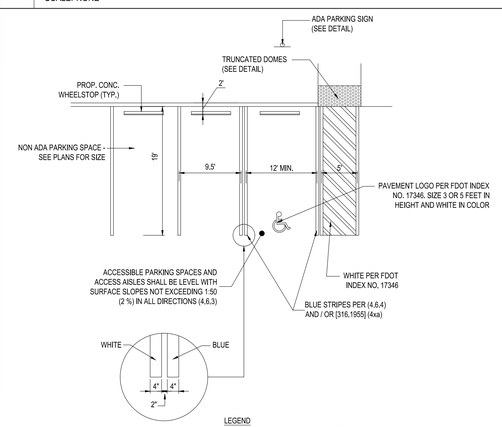
* For BACK OF SIDEWALK CURB OR BUFFER TRANSITION And For RAMP AND SIDEWALK CURB OPTIONS See Sheet 4.

LAST REVISION	DESCRIPTION:	FDOT DESIGN STANDARDS 2013	PUBLIC SIDEWALK CURB RAMPS	INDEX NO. 304	SHEET NO. 2
01/01/11					



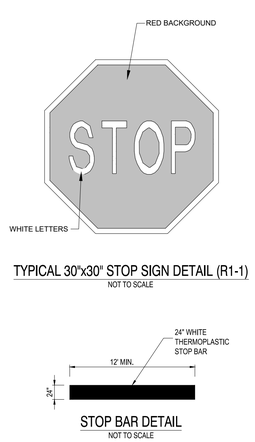
6 SAWCUT/MATCH ASPHALT PAVEMENT DETAIL

NONE



7 ACCESSIBLE PARKING SPACE - ADA COMPLIANT

SCALE: NONE

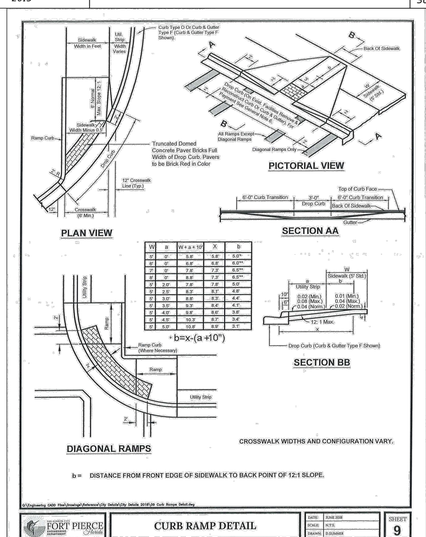


TYPICAL 30"x30" STOP SIGN DETAIL (R1-1)

NOT TO SCALE

STOP BAR DETAIL

NOT TO SCALE



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REVISIONS

REV	DATE	COMMENT	BY
	04/20/2017	ENGINEERING COMMENTS	SKG
1	02-10-22	REV - CITY COMMENTS	JMB
2	05/10/2017	FDOT COMMENTS	JMG
		COMMENTS	

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PROJECT No.:	FT210079
DRAWN BY:	HR
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DATE:	08/10/2021
SCALE:	AS NOTED
CAD I.D.:	FT210079-C-6.0 SP DETAILS

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

THOMAS ENGINEERING GROUP
1502 W. FLETCHER AVE, SUITE 101
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EDWARD M. McDONALD LICENSE No. 71615 STATE OF FLORIDA PROFESSIONAL ENGINEER

EDWARD M. McDONALD, P.E.
March 10, 2022
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

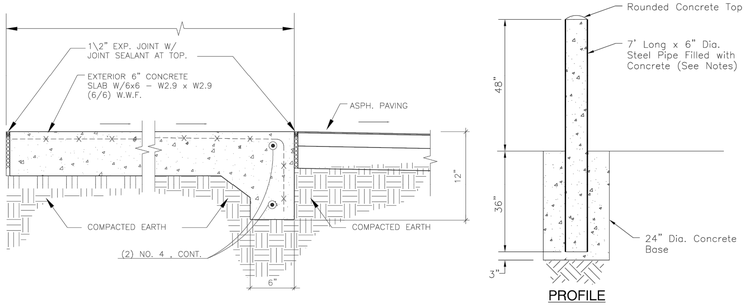
SHEET TITLE:

SITE PLAN DETAILS

SHEET NUMBER:

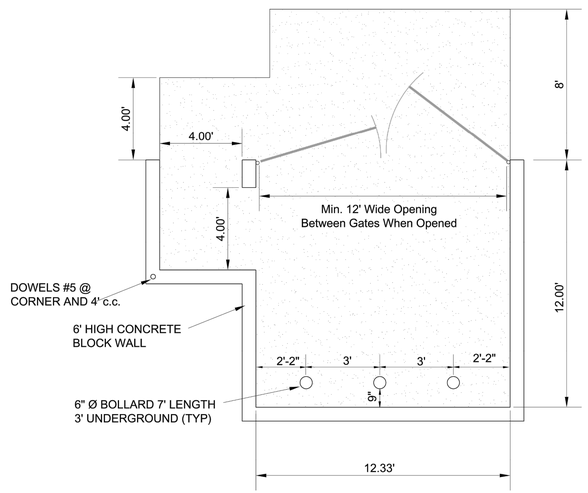
C-6.0

OF

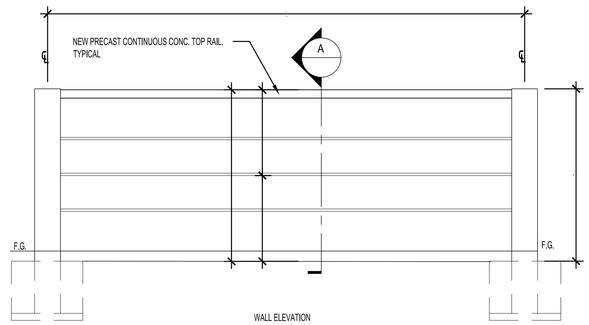


NOTES:

1. The minimum wall thickness of the pipe shall be 0.188".
2. All posts shall have 2 coats of primer and 2 coats of Yellow top coat, unless otherwise noted.
3. The primer coat shall meet the requirements of FDOT 971-5.
4. All concrete shall be FDOT class 1.

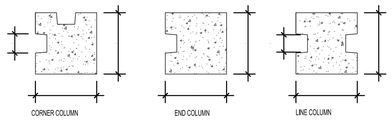


DUMPSTER WITH SIDE OPENING



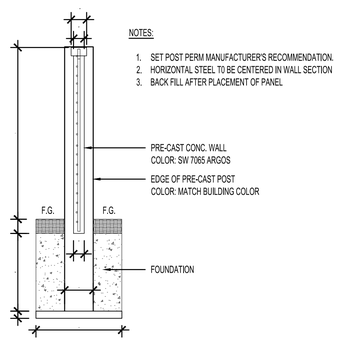
WALL ELEVATION

SCALE : N.T.S



NOTES:

1. ALL CONCRETE TO BE 3,000 PSI FOR FOUNDATIONS AND 4,000 PSI FOR ALL PRECAST UNITS
2. ALL REINFORCING STEEL TO BE ASTM A615 DEFORMED BARS 60,000 PSI
3. WIND LOAD DESIGN CONFORMS TO F.B.C. 2017 AND ASCE 7-10, FOR WIND LOAD OF 170 MPH 3 SECOND GUST, EXPOSURE "C", ASD DESIGN FOR A SOLID FENCE
4. SOIL BEARING CAPACITY OF 2000 P.S.F. MIN..



SECTION 'A'

SCALE : N.T.S

PRE-CAST CONCRETE WALL

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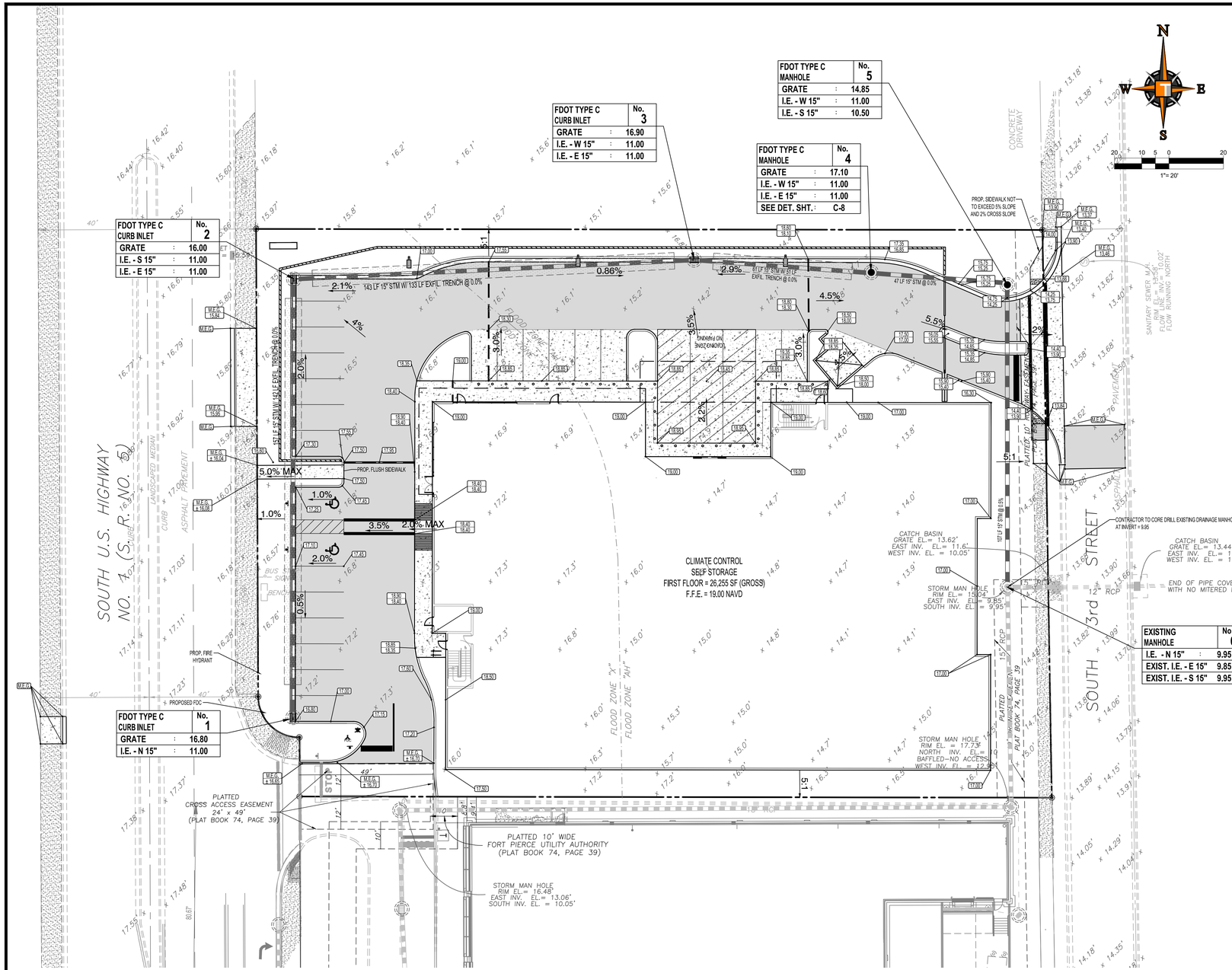
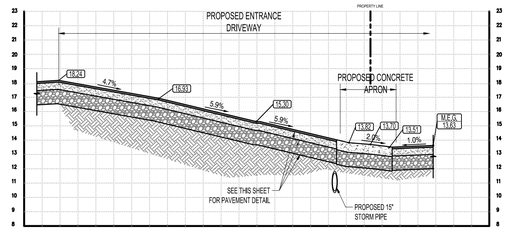


PAVING, GRADING & DRAINAGE LEGEND

EXISTING	(TYP.)CAL NOTE TEXT	PROPOSED
W	UNDERGROUND WATER LINE	W
	STORM SEWER	
	SANITARY SEWER MAIN	S
	SANITARY SEWER LATERAL	SL
	CATCH BASIN	
	MANHOLE	
×	GRADE SPOT SHOT	X.XX
	FIRE HYDRANT	
	DECORATIVE LIGHTING	
	RIGHT OF WAY	
	PROPERTY LINE	
	UTILITY EASEMENT	
	FPL TRANSFORMER	T
	SLIDE GATE GRADE AREA	

HATCH LEGEND

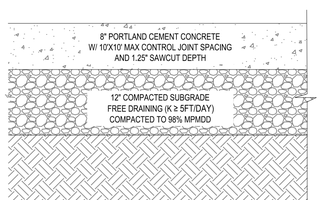
- PROPOSED ASPHALT PAVEMENT
- PROP. CONC. PAVEMENT
- HEAVY DUTY ASPHALT
- PROP. HEAVY DUTY CONC. PAVEMENT



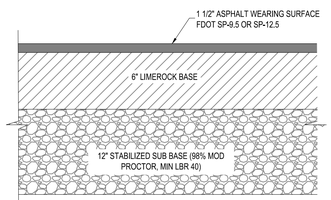
SECTION A-A
HORIZ. SCALE: 1"= 20'
VERT. SCALE 1"= 5'

CONSTRUCTION NOTES:

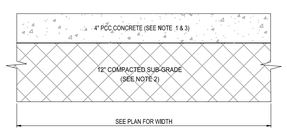
1. CONTRACTOR TO SAW-CUT AT ALL LOCATIONS OF REMOVAL OF EXISTING CONC. S/W, CONC. CURB AND ASPHALT UNLESS OTHERWISE NOTED. ALL BASE AND SUBASE MATERIAL SHALL BE REMOVED WITHIN THE PROPOSED LANDSCAPED AREA.
2. CONTRACTOR TO MATCH EXIST. GRADES AND TO CONSTRUCT A SMOOTH TRANSITION FROM EXISTING FACILITIES TO PROPOSED.
3. CONTRACTOR TO REMOVE ALL CONSTRUCTION DEBRIS FROM CONSTRUCTION SITE AND DISPOSE PER LOCAL ORDINANCES.
4. CONTRACTOR TO ENSURE ALL CONSTRUCTION IS IN ACCORDANCE WITH CITY DESIGN STANDARDS.
5. CONTRACTOR TO SOD ALL DISTURBED AREAS, SODDING INCLUDES MAINTAINING SLOPE AND SOD UNTIL COMPLETION AND ACCEPTANCE OF THE TOTAL PROJECT OR GROWTH IS ESTABLISHED WHICHEVER COMES LAST.
6. ALL EXISTING TRAFFIC SIGNS DISTURBED DURING CONSTRUCTION SHALL BE REINSTALLED WHERE APPLICABLE BY THE CONTRACTOR.
7. THESE PLANS REFLECT CONDITIONS KNOWN DURING PLAN DEVELOPMENT. IN THE EVENT THAT ACTUAL PHYSICAL CONDITIONS PREVENT THE APPLICATION OF THESE STANDARDS OR THE PROGRESSION OF THE WORK, THE CONTRACTOR SHALL NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION OF AFFECTED AREA.
8. THE CONTRACTOR SHALL PROTECT ALL EXISTING STRUCTURES, STORM DRAINS, UTILITIES, AND OTHER FACILITIES TO REMAIN AND SHALL REPAIR ANY DAMAGES DUE TO HIS/HER CONSTRUCTION ACTIVITIES AT NO ADDITIONAL COST TO THE OWNER.
9. NOTIFY SUNSHINE STATE ONE CALL (1-800-432-4770) OR (811) PRIOR TO CONSTRUCTION.
10. PROJECT BASED ON DESIGN SURVEY PREPARED BY OTHERS.
11. THE CONTRACTOR SHALL NOT ENCROACH ONTO PRIVATE PROPERTY WITHOUT EASEMENTS NECESSARY FOR COMPLETION OF THE WORK.
12. THE EXISTING UNDERGROUND UTILITIES SHOWN ARE PER ABOVE GROUND SURVEY DATA AND UTILITY AS-BUILT DATA. THIS INFORMATION DOES NOT WARRANT EXACT SIZE AND LOCATION OF THE UTILITIES. ALSO, THERE MAY BE ADDITIONAL UTILITIES WITHIN THE LIMITS OF CONSTRUCTION THAT MAY BE AFFECTED. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING EXISTING UTILITIES DURING THE COURSE OF CONSTRUCTION.
13. 2.0% MAXIMUM SLOPE ON ADA ACCESS WAYS.
14. ALL SIDEWALKS SHOULD HAVE A MAXIMUM CROSS SLOPE OF 2.0%.
15. EXISTING COVER MUST BE MAINTAINED ON ALL WATER AND SANITARY LINES.
16. EXISTING SEWER MUST REMAIN FREE FROM CONSTRUCTION DEBRIS AND FLOW MUST BE MAINTAINED.
17. ANY WORK CONDUCTED IN FDOT ROW TO BE DESIGNED AND CONSTRUCTED USING THE LATEST YEAR STANDARDS AND SPECIFICATIONS.



CONCRETE PAVEMENT DETAIL (ON SITE, STANDARD DUTY)
NOT TO SCALE



ASPHALT PAVEMENT DETAIL (ON SITE)
NOT TO SCALE



NOTES:
1. SIDEWALK SHALL BE 4" THICK EXCEPT IN THE RIGHT-OF-WAY WHERE THE THICKNESS SHALL BE 6".
2. 12" SUBGRADE BELOW SIDEWALK SHALL BE COMPACTED TO 98% OF MAX. DENSITY PER A.A.S.H.T.O. (T-180)
3. T-180, CONCRETE STRENGTH SHALL BE MIN. 3000 PSI @ 28 DAYS.
4. SIDEWALK REMOVAL & REPLACEMENTS TO CONSIST OF FULL FLAGS.
5. PROVIDE EXPANSION JOINT (TYPE 'A') AT CONNECTIONS BETWEEN NEW AND EXISTING SIDEWALK.
6. PROVIDE FIBEROUS JOINTS 20' O.C.

TYPICAL CONCRETE SIDEWALK SECTION
NOT TO SCALE

STORMWATER DATA

PERCENT IMPERVIOUS	80%
MIN. PAVEMENT ELEVATION	15.03 NAVD
MIN. BERM. ELEVATION	16.32 NAVD
MIN. FINISHED FLOOR	19.00 NAVD

FEMA MAP INFORMATION:

LANDS SHOWN HEREON ARE LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION OF 'X' AND 'AH' BASE EL. 16.0' BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA), ON FLOOD INSURANCE RATE MAP NO. 12111C0187K, DATED FEBRUARY 19, 2020 AND IS RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM 1988

DATUM INFORMATION:

ALL ELEVATIONS SHOWN HEREON ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988, (NAVD' 88)

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
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DRAWN BY:	HR
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SCALE:	AS NOTED
CAD I.D.:	FT210079-C-7.0 PGD

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

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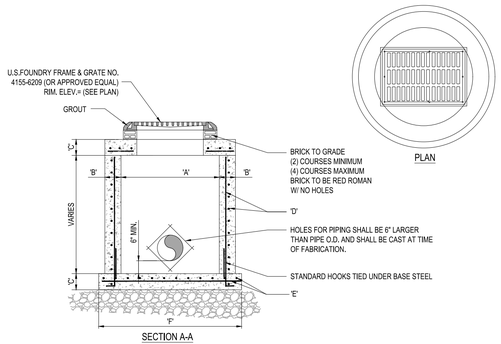
EDWARD M. McDONALD LICENSE No. 71615 STATE OF FLORIDA PROFESSIONAL ENGINEER

EDWARD M. McDONALD, P.E.
March 10, 2022
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

SHEET TITLE:
PAVING, GRADING, & DRAINAGE PLAN

SHEET NUMBER:
C-7.0
OF



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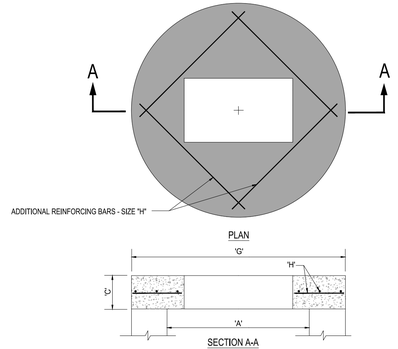
C-8	8'-0" Ø	10"	10"	2- W.W.M. w/ # 4 @ 12" C.C. VERT	# 5 @ 6" C.C.E.W.	10'-8" Ø

1 PRECAST CIRCULAR CATCH BASIN
SCALE: NONE



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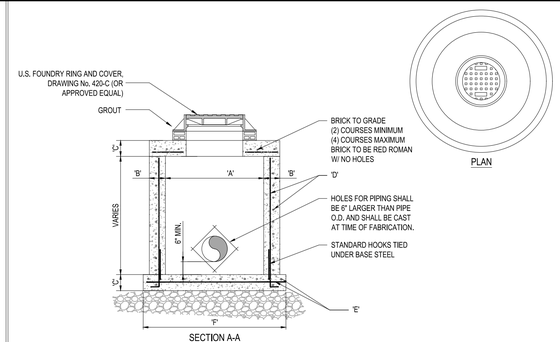
2 PRECAST CONCRETE-TOP SLAB
SCALE: NONE



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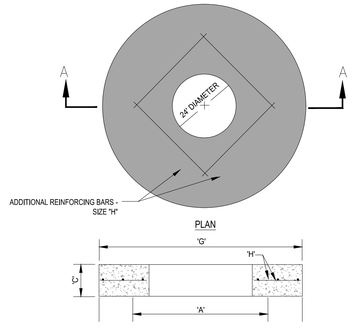
3 PRECAST CIRCULAR DRAINAGE MANHOLE
SCALE: NONE



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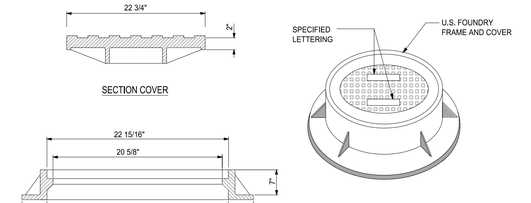
M-8	8'-0" Ø	10"	9'-8" Ø	# 5 @ 6" C.C.E.W.

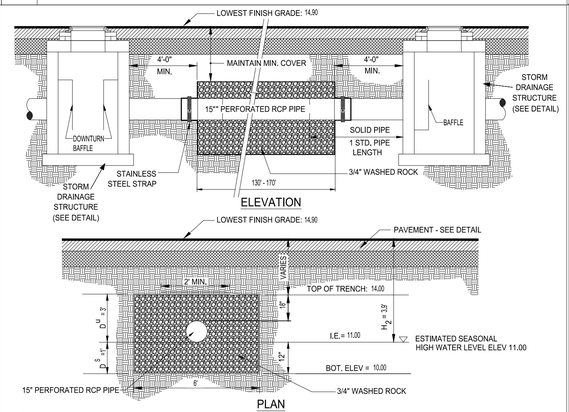
4 PRECAST CONCRETE-TOP SLAB FOR DRAINAGE MANHOLES
SCALE: NONE



NOTE:

1. RING AND COVER TO BE TYPE U.S.F. No. 420-C

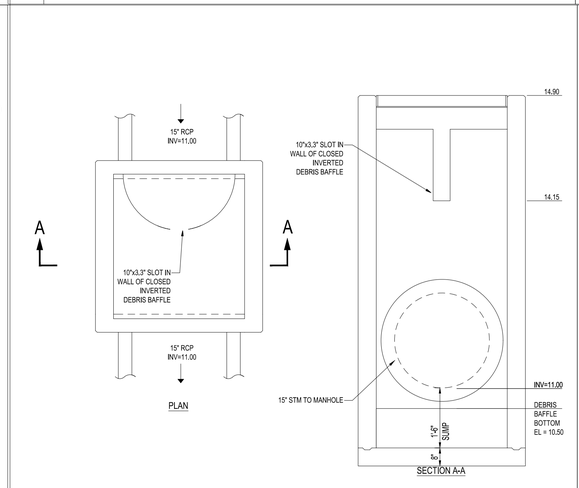
5 MANHOLE FRAME DETAIL
SCALE: NONE



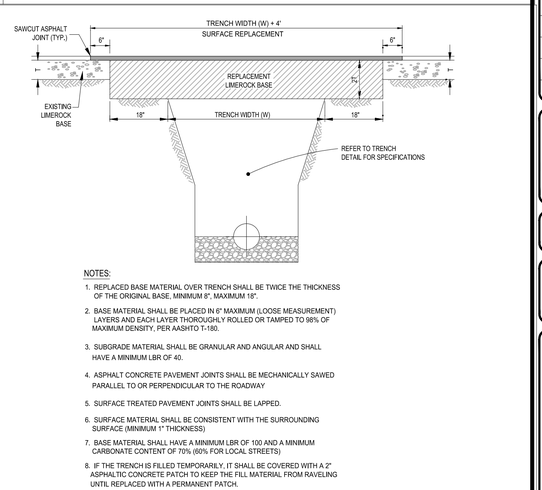
NOTES:

1. PIPES SHALL CONNECT TO ADDITIONAL CATCH BASINS AS REQUIRED.
2. BALLAST ROCK SHALL CONSIST OF 3/4" WASHED ROCK AND BE FROM FRESH WATER WASHED FREE OF DELETERIOUS MATTER.
3. TRENCH TO BE LINED WITH AMOCO PROPEX 4545 OR APPROVED EQUIVALENT TYPE FILTER FABRIC. OVERLAP TRENCH LINING MATERIAL A MINIMUM OF 2' AT TOP OF TRENCH. CLOSE ENDS AND STRAP AROUND PIPE.
4. IN AREAS OVER TRENCH WHERE THE FULL ROADWAY SECTION CANNOT BE CONSTRUCTED, THE AREA ABOVE THE TRENCH SHALL CONSIST ENTIRELY OF LIMEROCK BASE (LBR100).

6 EXFILTRATION TRENCH
SCALE: NONE



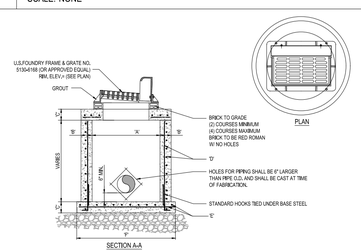
7 CONTROL STRUCTURE
N.T.S



NOTES:

1. REPLACED BASE MATERIAL OVER TRENCH SHALL BE TWICE THE THICKNESS OF THE ORIGINAL BASE, MINIMUM 8", MAXIMUM 18".
2. BASE MATERIAL SHALL BE PLACED IN 6" MAXIMUM (LOOSE MEASUREMENT) LAYERS AND EACH LAYER THOROUGHLY ROLLED OR TAMPED TO 98% OF MAXIMUM DENSITY, PER AASHTO T-180.
3. SUBGRADE MATERIAL SHALL BE GRANULAR AND ANGULAR AND SHALL HAVE A MINIMUM LBR OF 40.
4. ASPHALT CONCRETE PAVEMENT JOINTS SHALL BE MECHANICALLY SAWED PARALLEL TO OR PERPENDICULAR TO THE ROADWAY
5. SURFACE TREATED PAVEMENT JOINTS SHALL BE LAPPED.
6. SURFACE MATERIAL SHALL BE CONSISTENT WITH THE SURROUNDING SURFACE (MIMIMUM 1" THICKNESS)
7. BASE MATERIAL SHALL HAVE A MINIMUM LBR OF 100 AND A MINIMUM CARBONATE CONTENT OF 70% (60% FOR LOCAL STREETS)
8. IF THE TRENCH IS FILLED TEMPORARILY, IT SHALL BE COVERED WITH A 2" ASPHALTIC CONCRETE PATCH TO KEEP THE FILL MATERIAL FROM RAVELING UNTIL REPLACED WITH A PERMANENT PATCH.

8 PAVEMENT RESTORATION DETAIL
SCALE: NONE



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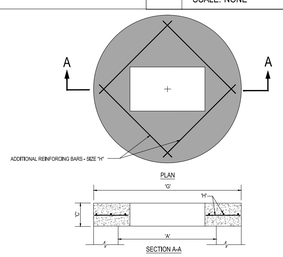
12 PRECAST CIRCULAR CURB INLET
SCALE: NONE



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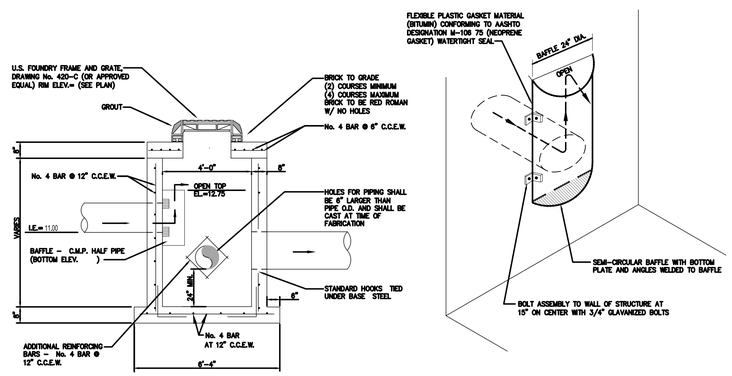
13 PRECAST CONCRETE-TOP SLAB
SCALE: NONE



INVERTED DEBRIS BAFFLE PRECAST DRAINAGE MANHOLE
SCALE: NONE

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FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

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SHEET NUMBER:

C-8.0

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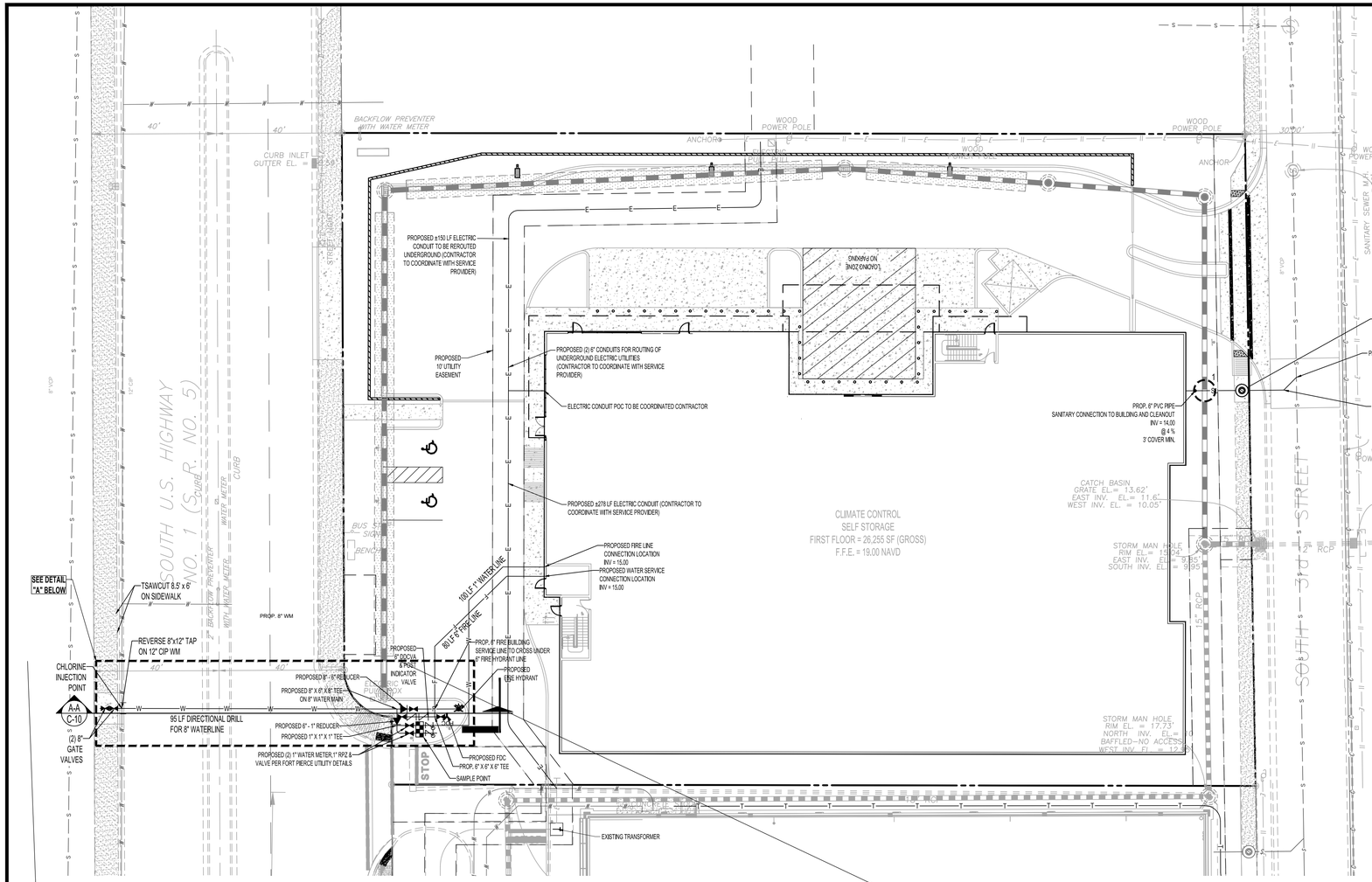
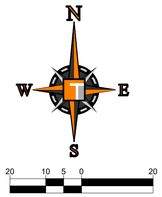


DETAIL "A":

SCALE: 1" = 10'



LEGEND:

- PROPERTY LINE
- EXISTING STORM SEWER
- EXISTING SANITARY SEWER
- EXISTING FORCE MAIN
- EXISTING WATER MAIN
- EXISTING OVERHEAD ELECTRIC
- PROPOSED SANITARY SEWER
- PROPOSED WATER MAIN
- PROPOSED ELECTRIC CONDUIT
- PROPOSED UTILITY CROSSING
- PROPOSED LIGHT (REFER TO PHOTOMETRIC PLAN)

SANITARY SEWER NOTES:

A. GENERAL:
1. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.
2. PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR TO TELEVISE EXISTING SANITARY SEWER LINE FROM POINT OF CONNECTION THROUGH THE NEXT SEQUENTIAL DOWNSTREAM RUN OF PIPE. ADDITIONALLY, PRIOR TO COMPLETION OF CONSTRUCTION, CONTRACTOR SHALL TELEVISE THE NEWLY INSTALLED SANITARY SEWER MAIN TO ENSURE NO DIPS OR DEBRIS WITHIN LINE.
3. ALL UNDERGROUND UTILITY WORK IN THE COUNTY EASEMENT OR ROW MUST BE COMPLETED BY UNDERGROUND UTILITY CONTRACTOR LICENSED BY THE STATE OF FLORIDA.

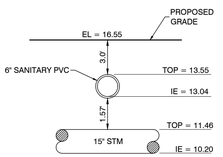
B. MATERIALS:
1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.
2. ALL FITTINGS AND ACCESSORIES SHALL BE AS MANUFACTURED OR SUPPLIED BY THE PIPE MANUFACTURER OR APPROVED EQUAL.
3. ALL SANITARY CLEANOUTS WITHIN PAVEMENT SHALL HAVE A LID THAT IS H20 LOADING.

C. INSTALLATION:
1. PIPE AND FITTINGS:
   a. SEWER PIPE SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, AND THE UNI-BELL PLASTICS PIPE ASSOCIATION'S "RECOMMENDED PRACTICE FOR THE INSTALLATION OF PVC SEWER PIPE".
   b. BEDDING AND INITIAL BACKFILL (12 INCHES) OVER SEWER MAINS AND SERVICES SHALL BE SAND WITH NO ROCK LARGER THAN 1" IN DIAMETER. PEA ROCK OR 3/4 " WASHED ROCK WILL BE USED IN WATER OR WHERE UNSUITABLE BEDDING EXISTS. ALL OTHER FILL SHALL NOT HAVE ROCK LARGER THAN 6" IN DIAMETER.
2. CLEANOUTS:
   a. CLEANOUTS SHALL BE SET PLUMB TO LINE AND GRADE ON FIRM CLEAN SUBGRADE PROVIDING UNIFORM BEARING UNDER THE BASE.
   b. ALL OPENINGS AND JOINTS SHALL BE SEALED WATER-TIGHT.
3. SERVICE:
   a. MINIMUM SLOPE OF ALL SERVICE LINES SHALL BE 1.04%.
   b. EACH SERVICE CONNECTION SHALL BE PLUGGED WATER-TIGHT WITH AN APPROVED PLUG.
   c. CONNECTION OF SERVICES TO BUILDING'S PLUMBING SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS.

D. TESTING:
1. AFTER CONSTRUCTION OF THE SEWER SYSTEM, THE ENGINEER MAY REQUIRE A VISUAL INFILTRATION AND/OR EXFILTRATION TEST TO BE PERFORMED ON THE ENTIRE SYSTEM OR ANY PART THEREOF.
2. AN AIR TEST MAY BE SUBSTITUTED FOR THE WATER EXFILTRATION TEST, UPON APPROVAL OF THE ENGINEER.
3. SEWER PIPE LEAKAGE ALLOWABLE SHALL NOT EXCEED 150 GALLONS PER DAY PER INCH DIAMETER PER MILE IN A TWO HOUR TEST PERIOD FOR ANY SECTION TESTED. NO VISIBLE LEAKAGE SHALL BE ALLOWED.
4. CONTRACTOR IS RESPONSIBLE FOR CORRECTING ANY DEFICIENCIES PRIOR TO THE CERTIFICATION TO ANY AGENCY.

NOTES:
1. ALL ELECTRICAL WORK ON-SITE TO BE PERFORMED BY A CERTIFIED ELECTRICIAN.
2. ALL ELECTRICAL WORK SHALL BE COORDINATED WITH FPUA AND THE ELECTRICAL DRAWINGS.
3. CERTIFIED ELECTRICIAN SHALL INSTALL CONDUITS AND PULL BOXES FROM ELECTRICAL ROOM TO EACH LIGHT POLE AND ENSURE SUFFIECIENT POWER IS SUPPLIED TO EACH POLE..
4. ELECTRICIAN SHALL RUN CONDUITS AND WIRES FROM ELECTRICAL ROOM TO MONUMENT SIGN AND IRRIGATION PUMP AND ENSURE SUFFICIENT POWER IS SUPPLIED TO EACH. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF TRAFFIC DURING CONSTRUCTION AND PREPARING ANY MOT PLANS WHICH MAY BE NEEDED BY GOVERNMENTAL AGENCIES.
5. ANY UTILITY INSTALLATION AND TAPS / CONNECTIONS SHALL INCLUDE NECESSARY PAVEMENT, CURB AND SIDEWALK RESTORATION TO COMPLETE WORK.
6. CONTRACTOR SHOULD INSTALL ELECTRICAL CONDUITS AND EQUIPMENT IN ACCORDANCE WITH THE FPUA PLAN FOR NEW SERVICE AT 1412 S. US 1 / ALDI. THIS PLAN IS A REFERENCE OF THAT WORK HOWEVER CONSTRUCTION OF THE ELECTRICAL SYSTEM SHALL NOT BE BASED OFF THIS PLAN.

UTILITY CROSSING SCHEDULE:



CROSSING #1

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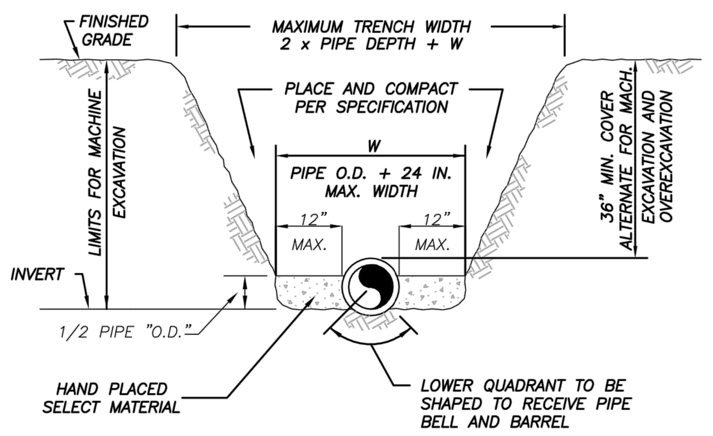
C-10.0
OF



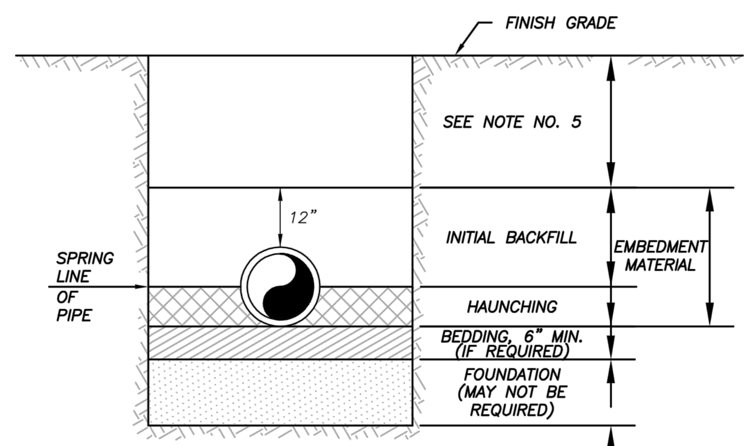
NOTES:

1) THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.

2) INITIAL BACKFILL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T-99.

TYPICAL TRENCH DETAIL
N.T.S.

TYPICAL TRENCH DETAILS				M-1
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER/GAS ENGINEERING
DESIGNED: JJM	COMPUTER FILE # MISC DETAILS 200602.DWG			FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: DECEMBER 2007			SHEET 1 OF 1



BACKFILLING REQUIREMENTS
N.T.S.

NOTES:

1) IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.

2) BEDDING IS REQUIRED PRIMARILY TO BRING THE TRENCH BOTTOM UP TO GRADE. BEDDING MATERIALS SHALL PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.

3) HAUNCHING MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE CONSOLIDATED UNDER THE PIPE AND HAND TAMPED TO PROVIDE ADEQUATE SIDE SUPPORT.

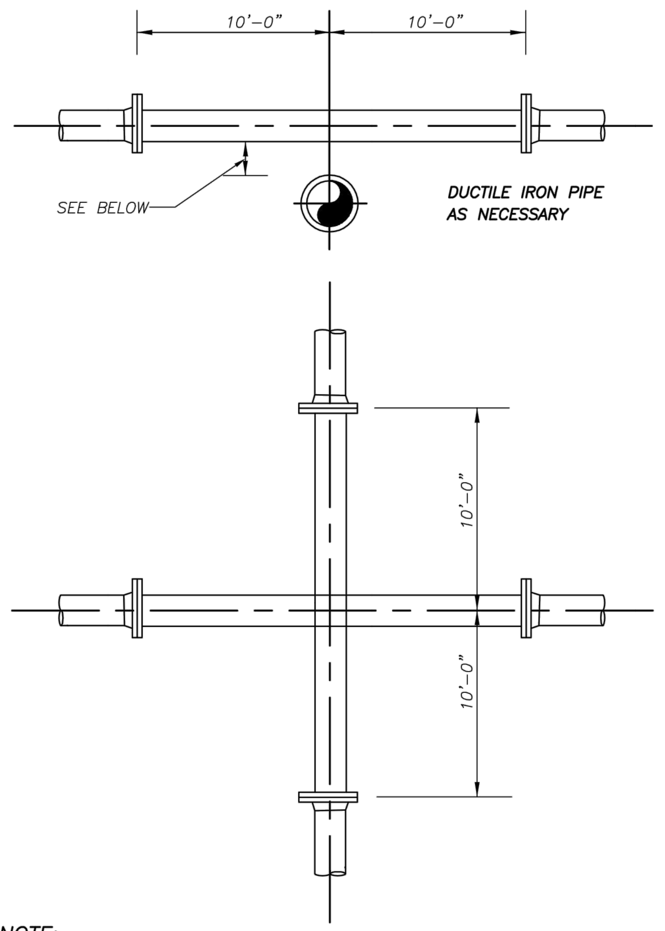
4) INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MAX. DENSITY.(AASHTO T-99)

5) BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER AASHTO T-99, TO A POINT 30" BELOW PROPOSED PROFILE GRADE OR EXISTING GRADE. THE FINAL 30" OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER AASHTO T-180.

6) DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITIES ENGINEER OR PERMIT AGENCY HAVING JURISDICTION, AT THE CONTRACTORS EXPENSE.

7) CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

BACKFILLING REQUIREMENTS				M-2
03-09	NOTES	SLL	JLC	
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER/GAS ENGINEERING
DESIGNED: JJM	COMPUTER FILE # MISC DETAILS 200602.DWG			FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: DECEMBER 2007			SHEET 1 OF 1



NOTE:

PLEASE REFER TO FORT PIERCE UTILTIES STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS.

UTILITY CROSSING DETAIL
N.T.S.

UTILITY CROSSING DETAIL				M-5
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER/GAS ENGINEERING
DESIGNED: JJM	COMPUTER FILE # MISC DETAILS 200602.DWG			FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
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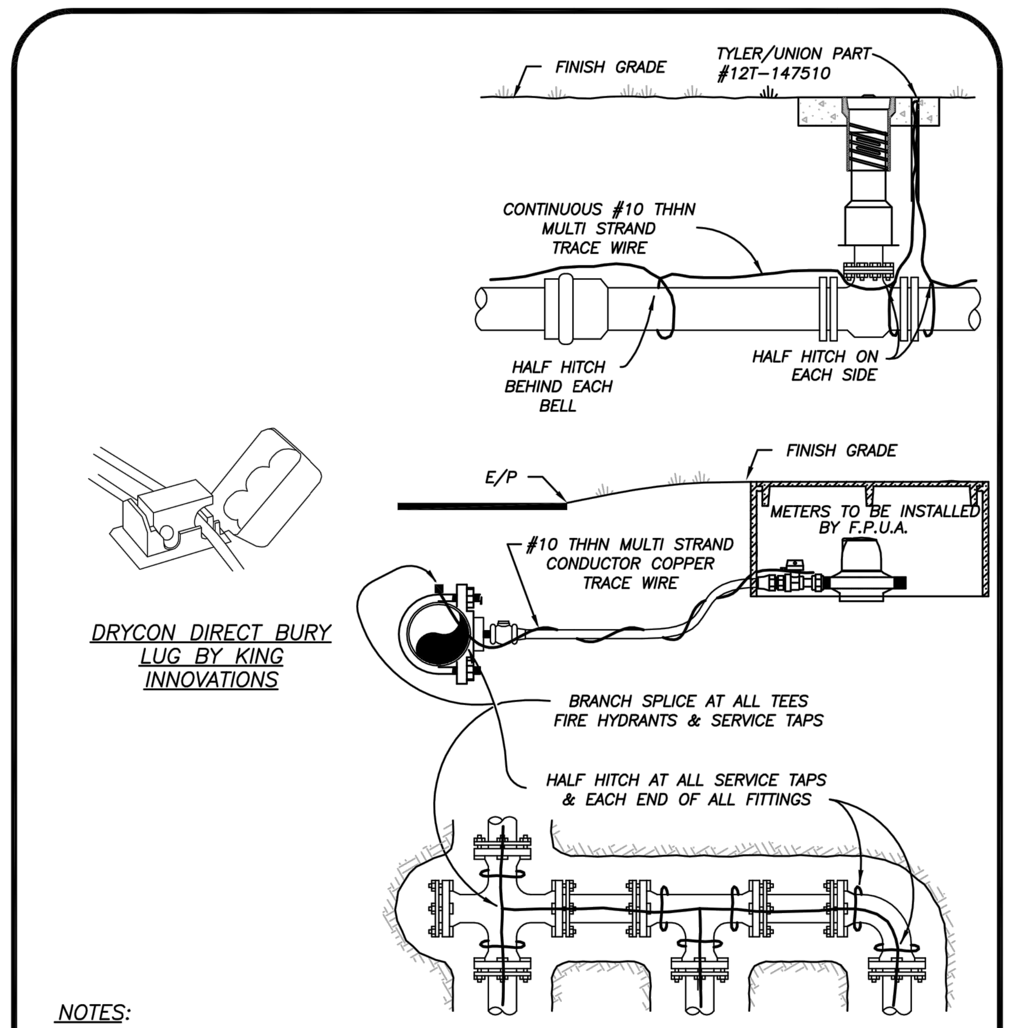
APPROVED: JLC	DATE: DECEMBER 2007			SHEET 1 OF 1



NOTES:

1) TRACE WIRE IS REQUIRED ON ALL PIPE AS NOTED BY UTILITIES ENGINEER AND SHOWN IN STANDARD DETAILS.
2) INCLUDE ALL COST OF MATERIAL & LABOR IN PRICE OF PIPE.
3) CONTRACTOR IS RESPONSIBLE FOR CONTINUITY OF ALL TRACE WIRE.

TRACE WIRE
(N.T.S.)

TRACE WIRE DETAIL				M-11
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER/GAS ENGINEERING
DESIGNED: JJM	COMPUTER FILE # MISC DETAILS 200602.DWG			FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: DECEMBER 2007			SHEET 1 OF 1

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.

2. WATER MAINS WHERE SPECIFIED AS POLYVINYL CHLORIDE (PVC) SHALL CONFORM TO AWWA C-900 OR C-905, PRESSURE CLASS 150, DR (18). WATER MAINS WHERE SPECIFIED AS POLYETHYLENE (PE) SHALL CONFORM TO AWWA C-901 OR C-906, STANDARD CODE DESIGNATION PE3408, PIPE CLASS 200, DIMENSION RATIO (DR) 17 FOR DIRECT BURY, (DR) 11 FOR DIRECTIONAL BORING, AND (DR) 9 FOR 2 INCH AND SMALLER PIPELINES.

3. WATER MAIN, WHERE SPECIFIED AS DUCTILE IRON PIPE , SHALL CONFORM TO ANSI/AWWA C151/A21.51 AND SHALL BE PRESSURE CLASS 250 (MINIMUM).

4. POLYVINYL CHLORIDE WATER MAIN SHALL BE BLUE IN COLOR OR WHITE IN COLOR WITH BLUE STRIPES. THE USE OF IDENTIFICATION TAPE ATTACHED TO THE TOP OF THE PIPE MAY BE USED IN LIEU OF MARKING ON THE PIPE, ALSO DIP PIPE SHALL REQUIRE THE USE OF IDENTIFICATION TAPE AND THHN WIRE.

5. FITTINGS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-110/A21.10, CLASS 250 MIN., CEMENT LINED AND FACTORY COATED

6. GATE VALVES SHALL BE MUELLER RESILIENT SEAT, KENNDY KEN-SEAL, AMERICAN OR APPROVED EQUAL. VALVES SHALL CONFORM TO AWWA C-509.

7. WATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY, COUNTY, FDOT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.

8. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE FPUA ENGINEER AND CITY/COUNTY/FDOT ENGINEER.

9. THE CONTRACTOR SHALL NOTIFY FPUA ENGINEERING AND CITY/COUNTY/FDOT ENGINEERING 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.

10. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, FPUA, AND CITY/ COUNTY/FDOT ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.

11. TRAFFIC CONTROL, BARRICADES, ETC., SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF OF TRANSPORTATION STANDARDS AND APPROVED BY THE CITY ENGINEER.

12. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/ COUNTY/FDOT ENGINEER. PIPES WITH COVER LESS THAN 30 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR IN PVC CASING.

13. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.

14. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.

15. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

WATER DISTRIBUTION				G-1 NOTES
02-06				
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010			SHEET 1 OF 2

FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES
CONTINUED

16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.

17. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, BLOWOFFS, AIR RELEASE VALVES, AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.

18. THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE TAPPING VALVE AND SLEEVE.

19. WATER MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN MULTI STRANDED WIRE (BLUE IN COLOR) AND IDENTIFCATION TAPE WITH "WATER" MARKED ON TAPE, PERMANENTLY ATTACHED TO THE TOP OF THE WATER MAIN IN ACCORDANCE WITH THE FORT PIERCE UTILITES AUTHORITY SPECIFICATIONS.

20. SERVICE TAPS SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AS SHOWN, FOR TESTING. FOLLOWING TESTING AND STERILIZATION OF WATER LINE. CONTRACTOR SHALL PLACE A BRASS PLUG IN CORPORATION STOPS AND CURB STOPS SHALL BE REMOVED FROM TESTING LOCATIONS.

21. MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURER'S OR ENGINEER'S RECOMMENDATIONS (WHICHEVER IS MORE STRINGENT) AND FPUA REQUIREMENTS.

22. ALL MAINS SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600. - 2 HR MINIMUM TEST

$$L= \frac{SD(P)^{1/2}}{148,000}$$

L= LEAKAGE IN GPH
S= LENGTH OF PIPE IN FEET
D= PIPE DIAMETER IN INCHES
P= TESTING PRESSURE IN PSI

23. PRIOR TO ANY TESTING, ALL MAINS 6" IN DIA. AND LARGER SHALL HAVE A SWAB PASSED THRU THE ENTIRE LENGTH OF THE LINE. NOTE: SWAB SHOULD BE PLACED IN 1st. JOINT OF NEW LINE. END OF MAIN SHOULD BE "TURNED UP" AT 45% AND EXTENDED SO THAT SWABBING AND A FULL BORE FLUSH CAN BE ACCOMPLISHED. BLOW-OFF ASSY CAN THEN BE PLACED. WHERE LINES BRANCH, SWABS WILL BE PLACED IN BRANCH LINES AND SEQUENTIALLY SWABBED AND FLUSHED.

24. A MINIMUM SIX FEET AND PREFERABLY TEN FEET HORIZONTAL SEPARATION SHALL BE MAIINTAINED BETWEEN THE WATER MAIN AND ANY WASTEWATER LINES. 6 INCHES MINIMUM VERTICAL SEPARATION IF WATER MAIN IS OVER WASTEWATER AND 12 INCHES IF WATER MAIN IS UNDER SHALL BE MAINTAINED BETWEEN THE WATER MAIN AND ANY WASTWATER LINES. THE DISTANCE SHALL BE MEASURED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR STRUCTURE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGHTS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.

25. WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM DRAIN PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF DIP AT THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20 FEET OF THE CROSSING.

26. CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WATER DISTRIBUTION				G-1 NOTES
02-06				
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010			SHEET 2 OF 2

FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE POLYVINYL CHLORIDE SDR-26, GREEN OR WHITE IN COLOR, GRAVITY SEWER MAIN SHALL HAVE LOCATOR TAPE WITH "SEWER" MARKED ON TAPE AND SHALL CONFORM TO ASTM D-3034.
3. THE MANHOLE BASE SHALL BE SET ON A FIRM, DRY AND STABLE OR COMPACTED BASE FOUNDATION. IF NECESSARY, THE CONTRACTOR SHALL UTILIZE ROCK TO PROVIDE A FIRM AND SUITABLE MANHOLE BASE FOUNDATION.
4. WASTEWATER LINES SHALL BE BACKFILLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT CERTIFIED DENSITY TESTS AS REQUIRED BY FPUA ENGINEERING AND THE CITY ENGINEERING DEPARTMENT. IN CASES WHERE PAVED AREAS FALL WITHIN THE JURISDICTION OF LOCAL OR STATE AGENCIES, THE COMPACTION REQUIRE-MENTS SHALL NOT BE LESS THEN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
5. A 1% MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISITING OF PIPE SIZES, LOCATION OF SERVICE TEE WYES, DIAMETER OF SERVICES, LOCATION OF ANY FITTINGS, FINAL RIM AND INVERT ELEVATION OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE ITEMS CONSTRUCTED UNDER THIS PROJECT.
7. MAINTAIN SIX FEET AND PREFERABLY 10 FEET HORIZONTAL DISTANCE BETWEEN WATER MAINS AND SEWER MAINS AS A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE SHALL BE PROVIDED WHENEVER POSSIBLE. WHERE THIS MINIMUM SEPARATION CANNOT BE MAINTAINED, THE CROSSING SHALL BE ARRANGED SO THAT THE WASTEWATER PIPE JOINTS AND THE WATER PIPE JOINTS ARE EQUIDISTANCE FROM THE POINT OF CROSSING, AND THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) AT THE CROSSING. SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN ANY TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED. A MINIMUM VERTICAL CLEARANCE OF 6 INCHES MUST BE MAINTAINED AT ALL CROSSINGS.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE ENGINEER, THE CONTRACTOR, AND FPUA/CITY COUNTY/FDOT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FORM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL FPUA/CITY/COUNTY/FDOT ENGINEER,
11. TRAFFIC CONTROL, BARRICADES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
12. CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMMENCING CONSTRUCTION.
13. WASTEWATER FORCE MAIN SHALL BE POLYVINYL CHLORIDE CONFORMING TO AWWA C-900, AND SHALL BE CLASS 150, DR-18.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO ANSI/AWWA C-110/A21.10 CLASS 250 MIN. AND INTERIOR EPOXY COATED.
16. WASTEWATER FORCE MAIN SHALL BE MARKED BY THE USE OF CONTINUOUS 10 GAUGE THHN WIRE (GREEN IN COLOR) PERMANENTLY ATTACHED TO THE TOP OF THE FORCE MAIN WITH LOCATOR TAPE MARKED "SEWER" ON TAPE IN ACCORDANCE WITH FPUA SPECIFICATIONS.
17. MINIMUM COVER SHALL BE 36 INCHES, PIPES WITH COVER LESS THAN 30 INCHES SHALL REQUIRE PRIOR APPROVAL OF THE UTILITES ENGINEER AND SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY 3M CORPORATION, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER RAIN GUARDS INSTALLED AS REQUIRED BY FPUA ENGINEER.
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS				G-2 CONSTRUCTION NOTES
02-06				
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1

STANDARD SEPARATION STATEMENT FOR WATER / SEWER CONFLICTS

1. SANITARY SEWER, FORCE MAINS, AND STORM SEWERS SHOULD CROSS UNDER WATER MAINS WHENEVER POSSIBLE. SANITARY SEWERS, FORCE MAINS AND STORM SEWERS CROSSING UNDER WATER MAINS SHALL BE LAID TO PROVIDE A MINIMUM VERTICAL DISTANCE OF 6 INCHES, PREFERABLY 12 INCHES BETWEEN THE INVERT OF THE UPPER PIPE AND THE CROWN OF THE LOWER PIPE WHEN ABOVE, AND AT LEAST 12 INCHES OF SEPARATION WHEN THE WATER MAIN IS BELOW.

WHERE SANITARY SEWER, FORCE MAINS, STORM SEWERS MUST CROSS A WATER MAIN WITH LESS THAN 6 INCHES VERTICAL SEPARATION, BOTH THE SEWER AND WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP) CENTERED ON THE CROSSING. (DIP IS NOT REQUIRED FOR STORM SEWERS.) SUFFICIENT LENGTHS OF DIP MUST BE USED TO PROVIDE A MINIMUM SEPARATION OF 10 FEET BETWEEN TWO JOINTS. ALL JOINTS ON THE WATER MAIN WITHIN 20 FEET OF THE CROSSING MUST BE MECHANICALLY RESTRAINED.

ALL CROSSINGS SHALL BE ARRANGED SO THAT THE SEWER PIPE JOINTS AND WATER MAIN PIPE JOINTS ARE EQUIDISTANT FROM THE POINT OF CROSSING (PIPES CENTERED ON THE CROSSING). AT SUCH CROSSINGS PIPES SHALL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY OR PRESSURE TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WHERE A NEW PIPE CONFLICTS WITH AN EXISTING PIPE WITH LESS THAN 6 INCHES VERTICAL CLEARANCE, THE NEW PIPE SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWERS) AND NEW PIPES SHALL BE ARRANGED TO MEET THE CROSSING REQUIREMENTS ABOVE.

2. A MINIMUM 3-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN ANY TYPE OF STORM SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 3-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN VACUUM TYPE SANITARY SEWER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN "ONSITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE.

A MINIMUM 6-FOOT, AND PREFERABLE 10-FOOT HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN GRAVITY OR PRESSURE TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER AND WATER MAIN IN PARALLEL INSTALLATIONS WHENEVER POSSIBLE. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO 3 FOOT WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER

IN CASES WHERE IT IS NOT POSSIBLE TO MAINTAIN A 10-FOOT HORIZONTAL SEPARATION, THE WATER MAIN MUST BE LAID IN A SEPARATE TRENCH OR ON A UNDISTURBED EARTH SHELF LOCATED ON ONE SIDE OF THE SEWER OR FORCE MAIN AT SUCH AN ELEVATION THAT THE BOTTOM OF THE WATER MAIN IS AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER.

WHERE IT IS NOT POSSIBLE TO MAINTAIN A VERTICAL DISTANCE OF 6 INCHES IN PARALLEL INSTALLATIONS, THE WATER MAIN SHALL BE CONSTRUCTED OF DIP AND THE SEWER OR THE FORCE MAIN SHALL BE CONSTRUCTED OF DIP (EXCEPT STORM SEWER) WITH A MINIMUM VERTICAL DISTANCE OF 6 INCHES. THE WATER MAIN SHOULD ALWAYS BE ABOVE THE SEWER. JOINTS ON THE WATER MAIN SHALL BE LOCATED AS FAR APART AS POSSIBLE FROM JOINTS ON THE SEWER OR FORCE MAIN (STAGGERED JOINTS).

3. ALL DIP SHALL BE PRESSURE CLASS 250 MIN.. ADEQUATE PROTECTIVE MEASURES AGAINST CORROSION SHALL BE USED AS DETERMINED BY THE DESIGN ENGINEER.

STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT				G-3 WATER/SEWER CONFLICT
02-06				
DATE:	REVISION:	BY:	APPD:	WATER/WASTEWATER ENGINEERING
DESIGNED: JJM	COMPUTER FILE # DETAIL NOTES 200602.DWG			FT. PIERCE UTILITIES AUTHORITY
DRAWN BY: JJM	SCALE: N.T.S.			
APPROVED: JLC	DATE: 2010			SHEET 1 OF 1

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
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125 W INDIANTOWN RD. SUITE 206 JUPITER, FL 33458 P: 561-203-7503

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REVISIONS

REV	DATE	COMMENT	BY
1	02-10-22	REV - CITY COMMENTS	JMB

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PROJECT No.:	FT210079
DRAWN BY:	HR
CHECKED BY:	EMM
DATE:	08/10/2021
SCALE:	AS NOTED
CAD I.D.:	FT210079-C-11.0 UD

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

THOMAS ENGINEERING GROUP
1502 W. FLETCHER AVE, SUITE 101
TAMPA, FLORIDA 33612
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EDWARD M. McDONALD LICENSE No. 71615 STATE OF FLORIDA PROFESSIONAL ENGINEER
EDWARD M. McDONALD, P.E.
March 10, 2022
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

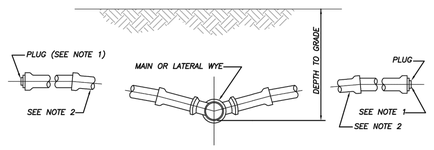
SHEET TITLE:

UTILITY DETAILS

SHEET NUMBER:

C-11.0

OF

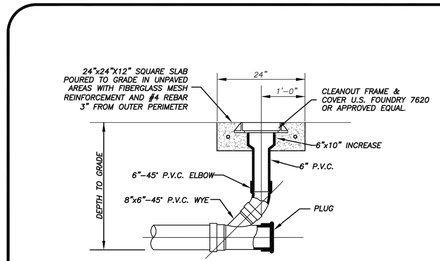


NOTES:

1) BALL TYPE WASTEWATER LOCATOR BY 3M CORP. OR APPROVED EQUAL.
2) MINIMUM SLOPE OF 1/8" PER FOOT, USE GREATER SLOPE WHERE POSSIBLE.
3) SERVICE LATERAL SHALL TERMINATE WITH A CLEANOUT.
4) INSTALL CLEANOUT AT THE PROPERTY LINE. REFER TO DETAIL S-1 FOR SPECIFIC PROPERTY LAYOUT.

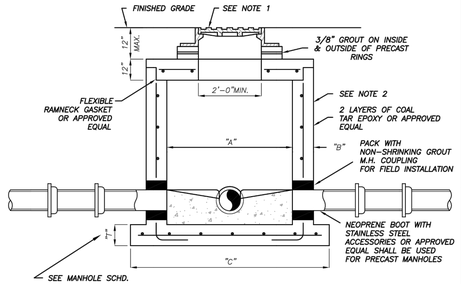
SERVICE CONNECTION
(N.T.S.)

SERVICE CONNECTION		S-2
WASTEWATER		
02-06 DATE:	REVISION:	BY: APPD:
DESIGNED: JJM	COMPUTER FILE # SEWER DETAIL 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING
DRAWN BY: JJM	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
APPROVED: JLC	DATE: DECEMBER 2007	SHEET 1 OF 1



TERMINAL CLEANOUT DETAIL (COMMERCIAL)
(N.T.S.)

TERMINAL CLEANOUT DETAIL		S-4B
WASTEWATER		
10-06 DATE:	REVISION:	RBC BY: APPD:
DESIGNED: JJM	COMPUTER FILE # SEWER DETAIL 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING
DRAWN BY: JJM	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
APPROVED: JLC	DATE: DECEMBER 2007	SHEET 2 OF 3



PIPE DIA.	"A"	"B"	"C"	BOT. SLAB "T"
8"-24"	4'-0"	"B"	76"	8"
30"-36"	5'-0"	"B"	88"	10"
42"-48"	6'-0"	"B"	100"	12"

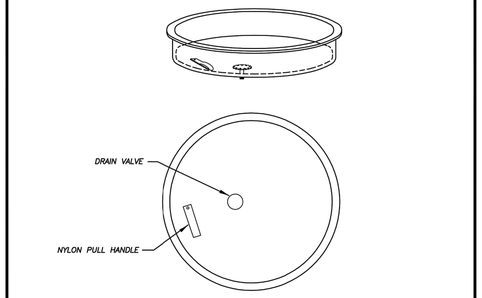
TYPICAL MANHOLE DIMENSIONS

NOTES:

1) MANHOLE FRAME & COVER WITH THE WORDS " SANITARY SEWER" CAST IN THE COVER. U.S. FOUNDRY 170 OR APPROVED EQUAL.
2) ALL CONCRETE MANHOLES TO BE 4000 P.S.I. TO MEET OR EXCEED ASTM C478 ALL CEMENT TO BE TYPE II ACID RESISTANT. REINFORCING AREA OF 0.02 SQ. IN/FT FOR WALL SECTION MIN. TO MEET OR EXCEED ASTM A 185.
3) A MAXIMUM OF 2 LAYERS OF PRECAST CONCRETE RINGS, IF REQUIRED.
4) RAIN GUARDS SHALL BE INSTALLED IN MANHOLES THAT HAVE GRAVITY MAINS 12" OR LESS.

SHALLOW MANHOLE
DEPTH OF LESS THAN 5'-0"
(N.T.S.)

PRECAST MANHOLE DEPTH OF		S-6
LESS THAN 5'- 0"		
02-06 DATE:	REVISION:	BY: APPD:
DESIGNED: JJM	COMPUTER FILE # SEWER DETAIL 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING
DRAWN BY: JJM	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
APPROVED: JLC	DATE: DECEMBER 2007	SHEET 1 OF 1

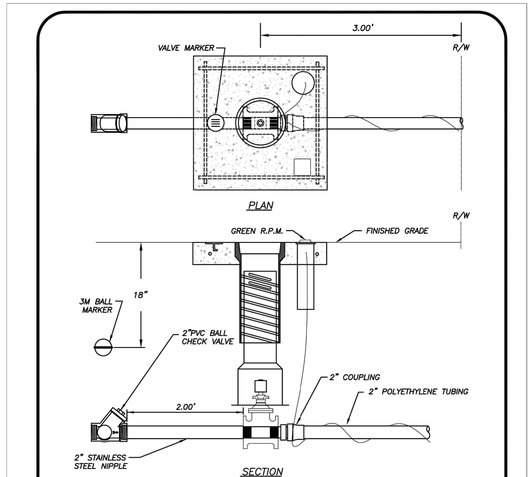


NOTES:

1) SEWER RAIN GUARDS SHALL BE INSTALLED ON ALL MANHOLES WHERE GRAVITY MAINS ARE 12" OR LESS AND IN AREAS DESIGNATED BY ENGINEER TO BE IN A FLOOD AREA.
2) SEWER RAIN GUARDS SHALL BE MANUFACTURED BY PARSON ENVIRONMENTAL PRODUCTS, INC., PART # PMI-23S (PARSON MANHOLE INSERTS) WITH DOUBLE VALVING, OR APPROVED EQUAL.
3) RAINGUARDS MUST BE "SNUG" FIT.

RAINGUARD DETAIL
(N.T.S.)

RAINGUARD		S-11
DETAIL		
03-09 DATE:	REVISION:	SLA JLC BY: APPD:
DESIGNED: SLA	COMPUTER FILE # SEWER DETAIL 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING
DRAWN BY: SLA	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
APPROVED: JLC	DATE: JANUARY 2009	SHEET 1 OF 1



NOTES:

1. FORCE MAIN CONNECTION SHALL CONSIST OF A 2" TAPPING SADDLE, 2" STAINLESS STEEL NIPPLE AND 2" THREADED RESILIENT SEAT GATE VALVE
2. GREEN 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.
3. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

GRINDER STATION CONNECTION		S-16
FPUA COMMUNITY PROUD FT. PIERCE UTILITIES AUTHORITY WASTEWATER & WATER TREATMENT 1701 SOUTH 25TH STREET FT. PIERCE, FLORIDA 34947 772-466-1600		
03-09 DATE: DESIGN	REVISION:	SLL JLC BY: APPD:
DESIGNED: JLC	COMPUTER FILE #	WATER/WASTEWATER ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S. SCALE	FT. PIERCE UTILITIES AUTHORITY
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1

GENERAL POLICY

WHERE COST JUSTIFIED AND OPERATIONALLY FEASIBLE, IT IS THE GENERAL POLICY OF THE F.P.U.A. TO PROVIDE WATER, ELECTRIC, SEWER AND GAS SERVICE FROM THE STREET SIDE OF A PIECE OF PROPERTY. DEPENDING ON FACTORS SUCH AS LOCATION OF EXISTING SUPPLY SOURCE FACILITIES, REAR OR SIDE LOT LINE SUPPLY MAY BE AUTHORIZED, BUT ONLY WITH PRIOR APPROVAL FROM THE F.P.U.A.

① THE PREFERRED POINT OF CONNECTION TO THE F.P.U.A. WATER METER, AREA ① SHALL BE LOCATED IN THE CORNER OF THE PROPERTY SELECTED BY THE F.P.U.A. AS THE BEST LOCATION FOR THE WATER METER. EVERY EFFORT WILL BE MADE TO SELECT THE CORNER WHERE TWO WATER SERVICES AND METERS CAN BE CONNECTED.

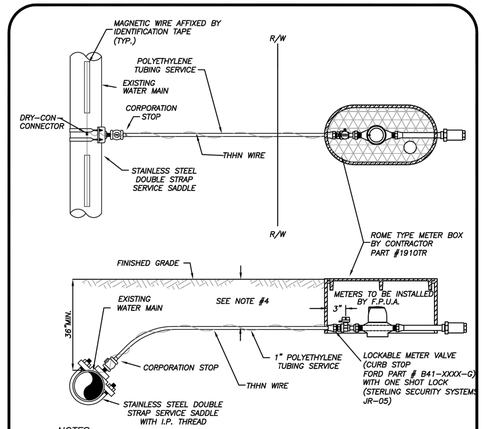
② IF PHYSICAL BARRIERS OR OTHER OBSTACLES PREVENT THE CONNECTION OF THE BUILDING SERVICE LINE TO THE F.P.U.A. WATER SERVICE, WITHIN AREA ① , THE F.P.U.A. ENGINEERING DEPARTMENT MAY AUTHORIZE THE CONNECTION ALONG THE PORTION OF THE R/W LINE MARKED AREA ② , OR ALONG THE PROPERTY LINES MARKED AREA ③.

NOTES:

1. HORIZONTAL SEPARATION OF WATER AND WASTEWATER SERVICES SHOULD BE A MINIMUM OF 6 FEET AND PREFERABLY 10 FEET.
2. ALL METERS SHALL BE INSTALLED IN AN UNRESTRICTED AREA FOLLOWING EASE OF ACCESS AND PROVIDING ADEQUATE PROTECTION.
3. THE F.P.U.A. SHALL BE RESPONSIBLE FOR THE MAINTENANCE AND REPAIR OF THE WATER LATERAL WITHIN THE EASEMENT OR RIGHT-OF-WAY, UP TO THE POINT OF CONNECTION.

WATER METER PLACEMENT
(N.T.S.)

WATER METER		W-1
PLACEMENT POLICY		
DATE:	REVISION:	BY: APPD:
DESIGNED: JJM	COMPUTER FILE # WATER DETAILS 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING
DRAWN BY: JJM	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
APPROVED: JLC	DATE: DECEMBER 2007	SHEET 1 OF 1

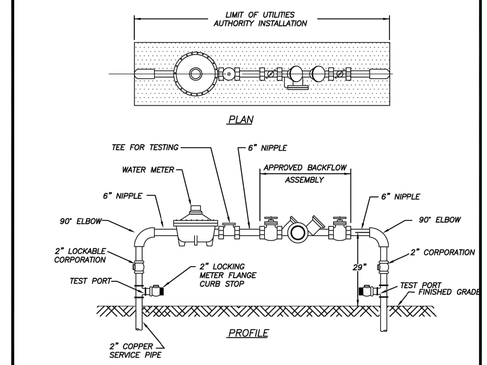


NOTES:

1. BLUE 10 GAUGE THHN WIRE SHALL BE ATTACHED TO THE SERVICE LINE.
2. WHERE SERVICES UNDER PAVEMENT ARE REQUIRED, THE POLYETHYLENE TUBING SHALL BE INSTALLED WITHIN SCHEDULE 40 PVC CASING PIPE.
3. 1" & 3/4" METER SIZES SHALL REQUIRE A LOCKABLE METER VALVE. (CURB STOP)
4. MINIMUM COVER IN UNPAVED AREAS SHALL BE 30", IN PAVED AREAS OR PLANNED ROADWAYS OR SWALES MIN. COVER SHALL BE 36".

TYPICAL SINGLE WATER SERVICE CONNECTION
(N.T.S.)

TYPICAL SINGLE WATER		W-2
SERVICE CONNECTION		
03-09 DATE:	REVISION:	BY: APPD:
DESIGNED: JJM	COMPUTER FILE # WATER DETAILS 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING
DRAWN BY: JJM	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
APPROVED: JLC	DATE: DECEMBER 2007	SHEET 1 OF 1



NOTES:

1. LANDSCAPING REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE. NO PLANTS OR TREES WITHIN 18" AROUND METER OR BACKFLOW. NO SOLDER JOINTS.
2. ASSEMBLY TO BE 29" FROM FINISH GRADE TO CENTERLINE OF THE FLANGED 90° BEND.

WATER METER/BACKFLOW PREVENTER ASSEMBLY
DOMESTIC SERVICE (COMMERCIAL)
(N.T.S.)

WATER METER/BACKFLOW PREVENTER		W-8
ASSEMBLY-DOMESTIC SERVICES (METER SIZE 2" OR LESS)		
03-09 DATE: DESIGN	REVISION:	SLL JLC BY: APPD:
DESIGNED: JLC	COMPUTER FILE # WATER DETAILS 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING
DRAWN BY: SLL	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466-1600
APPROVED: JLC	DATE: DECEMBER 2007	SHEET 1 OF 1

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
6300 NW 31st AVE. FT. LAUDERDALE, FL 33309 P: 954-202-7000
1502 W. FLETCHER AVE. SUITE 206 UNIT NO., 101 TAMPA, FL 33612 P: 813-379-4100
125 W INDIANTOWN RD. SUITE 210 JUPITER, FL 33458 P: 561-203-7503

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REVISIONS

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1	02-10-22	REV - CITY COMMENTS	JMB

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PROJECT No.:	FT210079
DRAWN BY:	HR
CHECKED BY:	EMM
DATE:	08/10/2021
SCALE:	AS NOTED
CAD I.D.:	FT210079-C-11.0 UD

PROJECT:

FORT PIERCE STORAGE FACILITY FORT PIERCE, FL

FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

THOMAS ENGINEERING GROUP
1502 W. FLETCHER AVE, SUITE 101
TAMPA, FLORIDA 33612
Phone: (813) 379-4100
Fax: (813) 379-4040
www.ThomasEngineeringGroup.com

EDWARD M. McDONALD LICENSE No. 71615 STATE OF FLORIDA PROFESSIONAL ENGINEER

EDWARD M. McDONALD, P.E.
March 10, 2022
FLORIDA LICENSE No. 71615
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

SHEET TITLE:

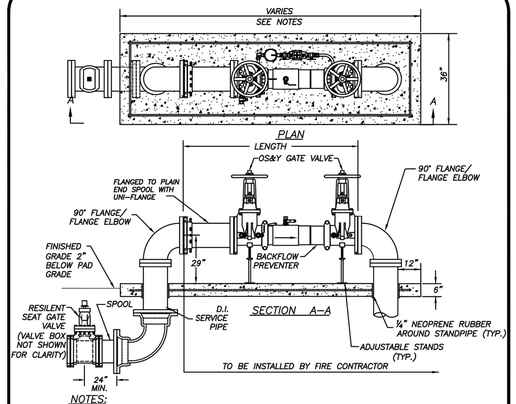
UTILITY DETAILS

SHEET NUMBER:

C-12.0

OF

Printed on Thursday, March 10, 2022, 2:03 PM by Julia Burroughs G:\2021\210079 - SPANISH TRAIL\10 SITE & CIVIL\11 PERMITTING\ENGINEERING\210079-C-11.0 UD.dwg



NOTES:

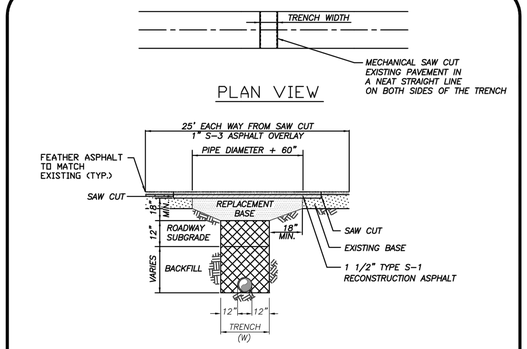
1. LANDSCAPING IS REQUIRED PER CITY OF FORT PIERCE OR ST. LUCIE COUNTY ORDINANCE.
2. ASSEMBLY TO BE 29" FROM FINISH GRADE TO CENTERLINE OF THE FLANGED 90° BEND.
3. PRIOR TO POURING THE CONCRETE PAD, VERIFY THAT THE STANDPIPES ARE PLUMB, TRUE AND INSTALLED AT THE SAME ELEVATIONSIN THE PRESENCE OF AN FPUA INSPECTOR.
4. ALL CONCRETE SHALL HAVE FIBERGLASS MESH REINFORCEMENT WITH #4 REBAR 3" FROM THE OUTER PERIMETER.

SIZE	SERVICE	LENGTH
4	DOUBLE DETECTOR	53 INCHES
6	DOUBLE DETECTOR	62 INCHES
8	DOUBLE DETECTOR	69 INCHES
10	DOUBLE DETECTOR	76 INCHES

BACKFLOW PREVENTER ASSEMBLY–4"–10" FIRE SERVICE
(N.T.S.)

FPUA COMMUNITY PROUD
FT. PIERCE UTILITIES AUTHORITY
WATER/WASTEWATER/GAS ENGINEERING
1701 SOUTH 5TH STREET
FT. PIERCE, FLORIDA 34947
772-466-1600

BACKFLOW PREVENTER ASSEMBLY 4"–10" FIRE SERVICE			W–10
03–09	CONCRETE PAD	SLI	JLC
DATE:	REVISION:	BY:	APPD:
DESIGNED: JLC	COMPUTER FILE # WATER DETAILS 200602.DWG	WATER/WASTEWATER ENGINEERING	
DRAWN BY: JLC	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY	
APPROVED: JLC	DATE: 2010	SHEET 1 OF 1	



PLAN VIEW

SECTION VIEW

LIMEROCK, SAND–CLAY, SHELL, ETC.
6" LAYERS, COMPACTED THICKNESS

DENSITY REQUIREMENTS:
98% UNDER ROADWAY
95% OUTSIDE TRAVELED ROADWAY
95% BENEATH SUBGRADE
METHOD AASHTO T–99

NOTE:

RESTORATIONS FOR LONGITUDINAL CUTS IN ARTERIAL STREETS SHALL INCLUDE FULL LANE WIDTH RESURFACING FOR EACH LANE WITHIN THE LIMITS OF THE CUT. ROADWAY CUTS AT INTERSECTIONS WILL INCLUDE OVERLAY PAVEMENT THROUGHOUT TURNOUTS. (PC AND PT)
REPLACEMENT BASE SHALL BE LIMEROCK OR COQUINA (LBR=100)
UNPAVED ROADWAYS SHALL OMIT ASPHALT RECONSTRUCTION/OVERLAY

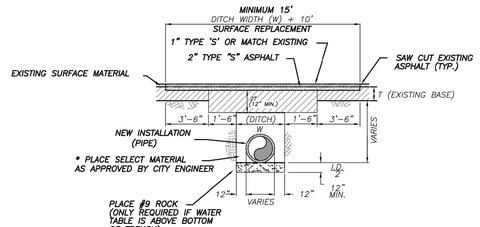
UTILITY ROAD CUT

PERMIT NO. _____

RESTORATION

PAGE _____

UTILITY PAVEMENT RESTORATION COUNTY REQUIREMENTS			R–2
DATE:	REVISION:	BY:	APPD:
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING	
DRAWN BY: JLC	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466–1600	
APPROVED: JLC	DATE: DECEMBER 2007	SHEET 1 OF 1	

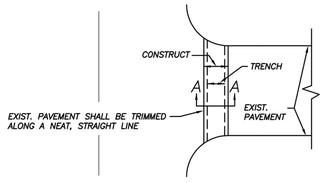


* INITIAL BACKFILL SHALL BE PLACED TO 12" ABOVE THE PIPE IN 6" LIFTS. BACKFILL SHALL BE MECHANICALLY TAMPED TO A MINIMUM OF 95% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T–99. UPPERMOST 12" TO BE COMPLETED TO 98% OF T–99.

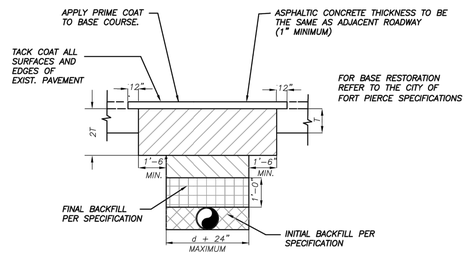
** LIMEROCK OR CRUSHED COQUINA COMPACTED TO 98% OF MAX. DENSITY AS DETERMINED BY AASHTO METHOD T–99.

PAVEMENT RESTORATION DETAIL
N.T.S.

UTILITY PAVEMENT RESTORATION CITY REQUIREMENTS			R–3
03–09	SPECIFICATION	SLI	JLC
DATE:	REVISION:	BY:	APPD:
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING	
DRAWN BY: JLC	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466–1600	
APPROVED: JLC	DATE: DECEMBER 2007	SHEET 1 OF 1	



PLAN



SECTION A–A
N.T.S.

PAVEMENT RESTORATION DETAIL

PAVEMENT RESTORATION			R–4
DATE:	REVISION:	BY:	APPD:
DESIGNED: JLC	COMPUTER FILE # MISC. DETAILS 200602.DWG	WATER/WASTEWATER/GAS ENGINEERING	
DRAWN BY: JLC	SCALE: N.T.S.	FT. PIERCE UTILITIES AUTHORITY 113 N. 2nd STREET FT. PIERCE, FLORIDA 34948 (772) 466–1600	
APPROVED: JLC	DATE: DECEMBER 2007	SHEET 1 OF 1	

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
6300 NW 31st AVE. FT. LAUDERDALE, FL 33309 P: 954-202-7000
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FOR

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EDWARD M. McDONALD, P.E.
March 10, 2022
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FLORIDA BUSINESS CERT. OF AUTH. No. 27528

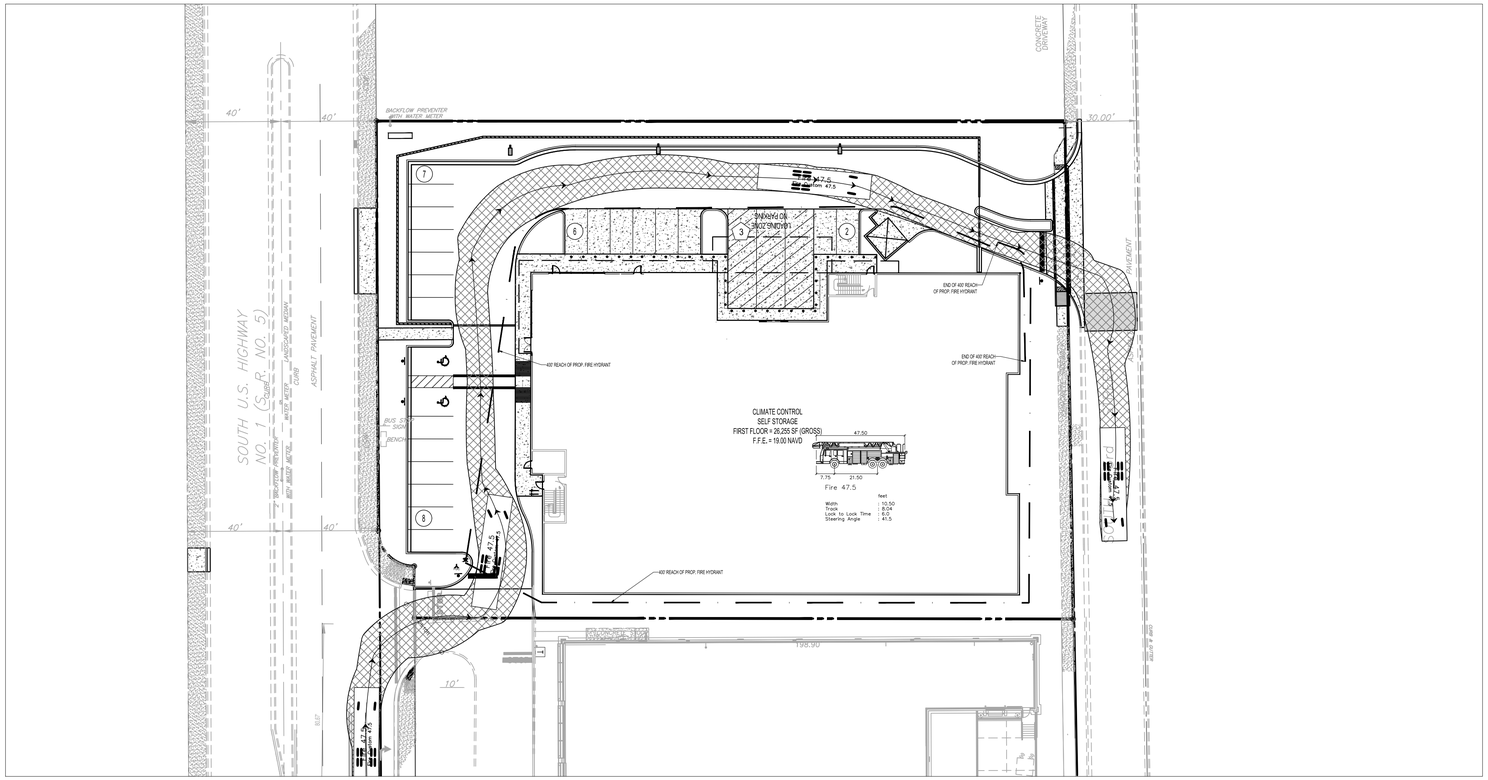
SHEET TITLE:

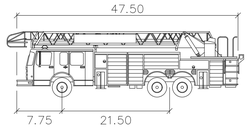
UTILITY DETAILS

SHEET NUMBER:

C-13.0

OF





Fire 47.5

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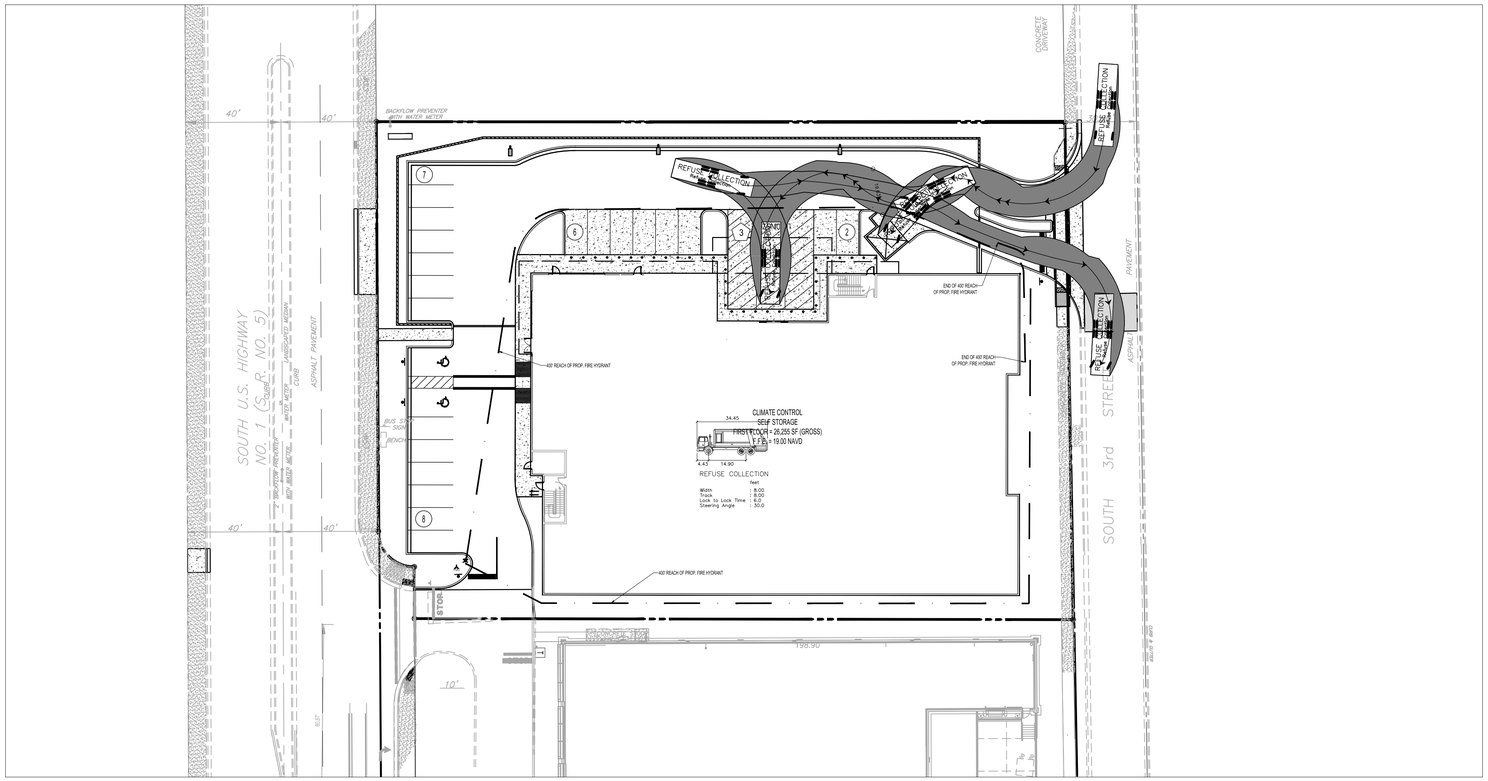
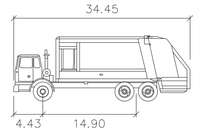
Width	: 10.50
Track	: 8.04
Lock to Lock Time	: 6.0
Steering Angle	: 41.5



400' REACH FROM FIRE HYDRANT



REFUSE COLLECTION

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 30.0

THOMAS ENGINEERING GROUP
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CAD I.D.:	FT210079-C-15.0 VMP

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FOR

FORT PIERCE SELF STORAGE LLC

SAINT LUCIE COUNTY

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1502 W. FLETCHER AVE, SUITE 101
TAMPA, FLORIDA 33612
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EDWARD M. McDONALD LICENSE No. 71615 STATE OF FLORIDA PROFESSIONAL ENGINEER

EDWARD M. McDONALD, P.E.
March 10, 2022
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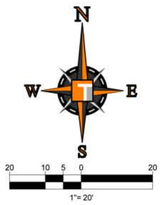
FLORIDA BUSINESS CERT. OF AUTH. No. 27528

SHEET TITLE:
VEHICLE MOVEMENT PLAN

SHEET NUMBER:
C-15.0
OF



ALL TREES AND PALMS PLANTED SHALL BE SECURELY GUYED, BRACED, AND/OR STAKED AT THE TIME OF PLANTING UNTIL ESTABLISHMENT. ALL STABILIZATION SYSTEMS SHALL BE CLEARLY MARKED (FLAGGING, PAINTED, ETC.) TO PREVENT HAZARDS.

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ANY PERVIOUS AREA TO REMAIN THAT IS DISTURBED BY CONSTRUCTION & IS NOT NOTED ON THE LANDSCAPE PLAN TO HAVE SHRUBS OR GROUNDCOVER SHALL BE SODDED

PLANT SCHEDULE

TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	CAL/DBH	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
	CS	2	Orange Geigar Tree	Cordia sebestena	B & B	2.5" DBH	12` Ht	5`	Yes	High	5` CT
	IC	11	Dahoon Holly	Ilex cassine	B & B	4" DBH	16` Ht	5-6`	Yes	High	5` CT
	LI	18	Crape Myrtle	Lagerstroemia indica `Tuskegee`	B & B	10" DBH	16` Ht	6-8`	No	High	5` CT; multi-trunk 5 trunks @ 2" dbh
	QV	3	Southern Live Oak	Quercus virginiana	B & B	6" dbh	18`-20` Ht	7-8`	Yes	High	5.5` CT
PALM TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	CAL/DBH	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
	SP	12	Cabbage Palmetto	Sabal palmetto	B & B		18-22` oa	10`	Yes	High	
	TR	6	Florida Thatch Palm	Thrinax radiata	B & B		10` oa		Yes	High	6` ct
SHRUBS	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	SPACING	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
	CER	214	Buttonwood	Conocarpus erectus	NA	30"	36"	24-30"	Yes	High	
	CES	235	Silver Button Wood	Conocarpus erectus sericeus	NA	24"	36"	24"	Yes	High	full to base
	IAH	3	East Palatka Holly	Ilex attenuata	NA	30"	48"	30"	Yes	High	Full to base; Pyramidal
SHRUB AREAS	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	SPACING	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
	CHR	85	Red Tip Cocoplum	Chrysobalanus icaco `Red Tip`	n/a	24"	18"	18"	Yes	High	Full to base
	FIM	305	Green Island Ficus	Ficus microcarpa	n/a	16"	16"	20"	No	Medium	Full
	MUH	143	Pink Muhly Grass	Muhlenbergia capillaris	n/a	18"	14-16"	14-16"	Yes	High	
GROUND COVERS	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	SPACING	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
	BFS	160	Bush Seaside Tansy	Borrichia frutescens	n/a	16"	16"-18"	18"	Yes	High	

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
6300 NW 31ST AVE. FT. LAUDERDALE, FL 33309 P: 954-202-1000
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PROJECT No.: FJ210016
DRAWN BY: JMG
CHECKED BY: JMG
DATE:
CAD I.D.: FJ210016 LANDSCAPE PLAN

PROJECT:

FORT PIERCE STORAGE FACILITY

FOR

LG FT PIERCE

FORT PIERCE
FLORIDA

THOMAS ENGINEERING GROUP
PEPWORTH PROFESSIONAL PLAZA
125 W. INDIANTOWN RD. SUITE 206
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MICHAEL D. GROSSWIRTH
LA 6666871
REGISTERED LANDSCAPE ARCHITECT
March 3, 2022
FLORIDA REG. No. LA6666871
FLORIDA BUSINESS CERTIFICATE No. 27528

SHEET TITLE:

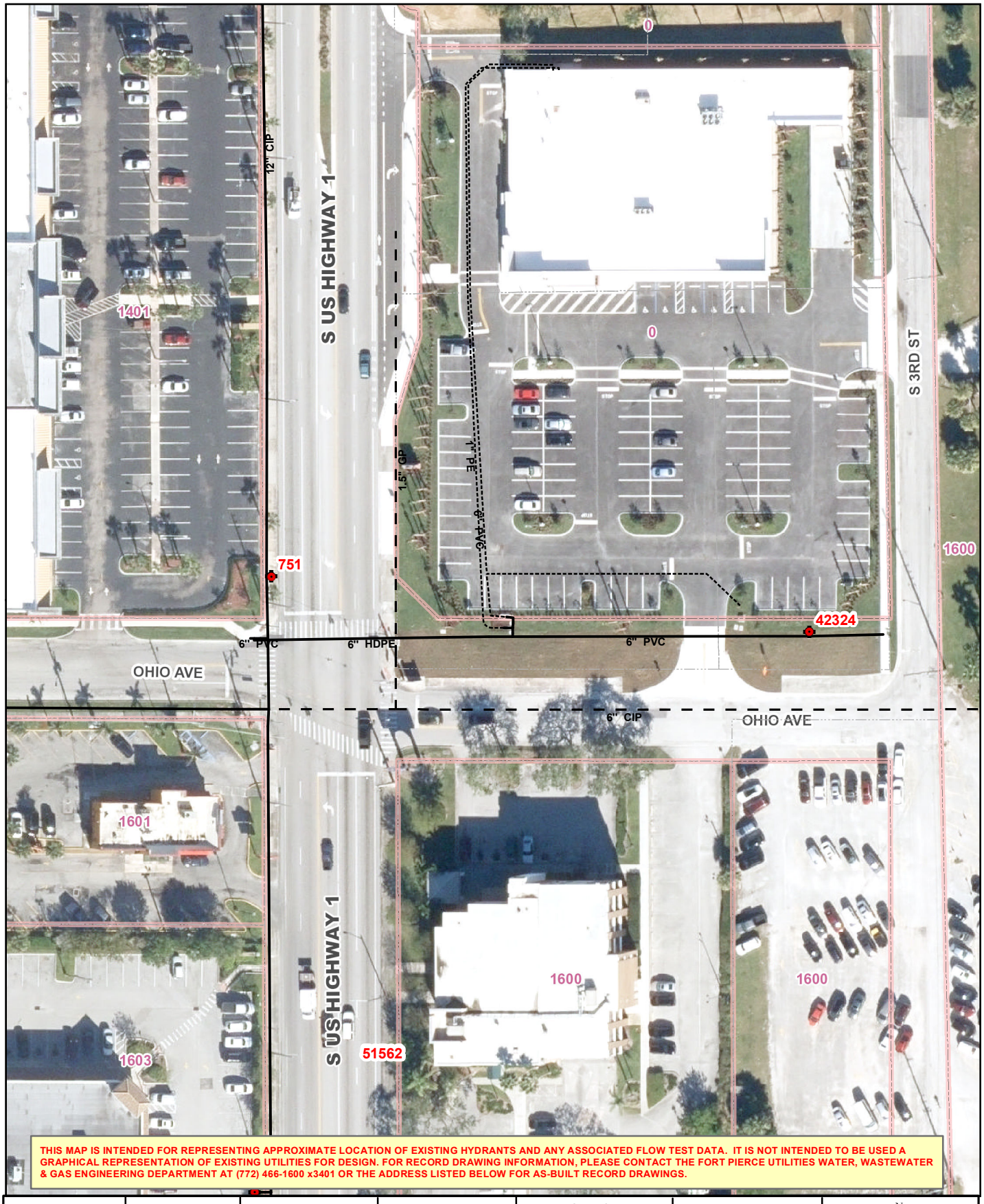
LANDSCAPE PLAN

SHEET NUMBER:

L-2.0A

Printed on Wednesday, March 09, 2022, 8:03 AM by Laura Reguera

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MICHAEL D. GROSSWIRTH, LA6666871 ON 2019-06-24



THIS MAP IS INTENDED FOR REPRESENTING APPROXIMATE LOCATION OF EXISTING HYDRANTS AND ANY ASSOCIATED FLOW TEST DATA. IT IS NOT INTENDED TO BE USED A GRAPHICAL REPRESENTATION OF EXISTING UTILITIES FOR DESIGN. FOR RECORD DRAWING INFORMATION, PLEASE CONTACT THE FORT PIERCE UTILITIES WATER, WASTEWATER & GAS ENGINEERING DEPARTMENT AT (772) 466-1600 x3401 OR THE ADDRESS LISTED BELOW FOR AS-BUILT RECORD DRAWINGS.

Test Date:	Flow Hydrant No.	Pressure Hydrant No. 1	Pressure Hydrant No. 2
10/27/2021	H-751	H-42324	H-*
Test Time:	**Pitot Gauge**	**Static Pressure / Residual Pressure**	**Static Pressure / Residual Pressure**
9:45	GPM - 920	75 / 70	N/A / N/A
Repump No. / Repump Status	PSI - 30	**Calculated Flow at 20 PSI (Gallons per Minute)**	**Calculated Flow at 20 PSI (Gallons per Minute)**
1 na	Flow Gauge is for 2 1/2 Butt	3358	N/A
2 na			

Legend

- Flow Test Hydrants
- Completed Flow Hydrant Test
- Fire Hydrants

Watermains

- Active
- Abandoned
- Private

FPUA COMMUNITY PROUD

Fort Pierce Utilities Authority
Water/Wastewater/Gas Engineering
113 North 2nd Street (34950)
P.O. Box 3191
Fort Pierce, FLorida 34948-3191

N W E S

0 40 80

Feet

Fire Hydrant Flow Test Map

ANY PERVIOUS AREA TO REMAIN THAT IS DISTURBED BY CONSTRUCTION & IS NOT NOTED ON THE LANDSCAPE PLAN TO HAVE SHRUBS OR GROUNDCOVER SHALL BE SODDED

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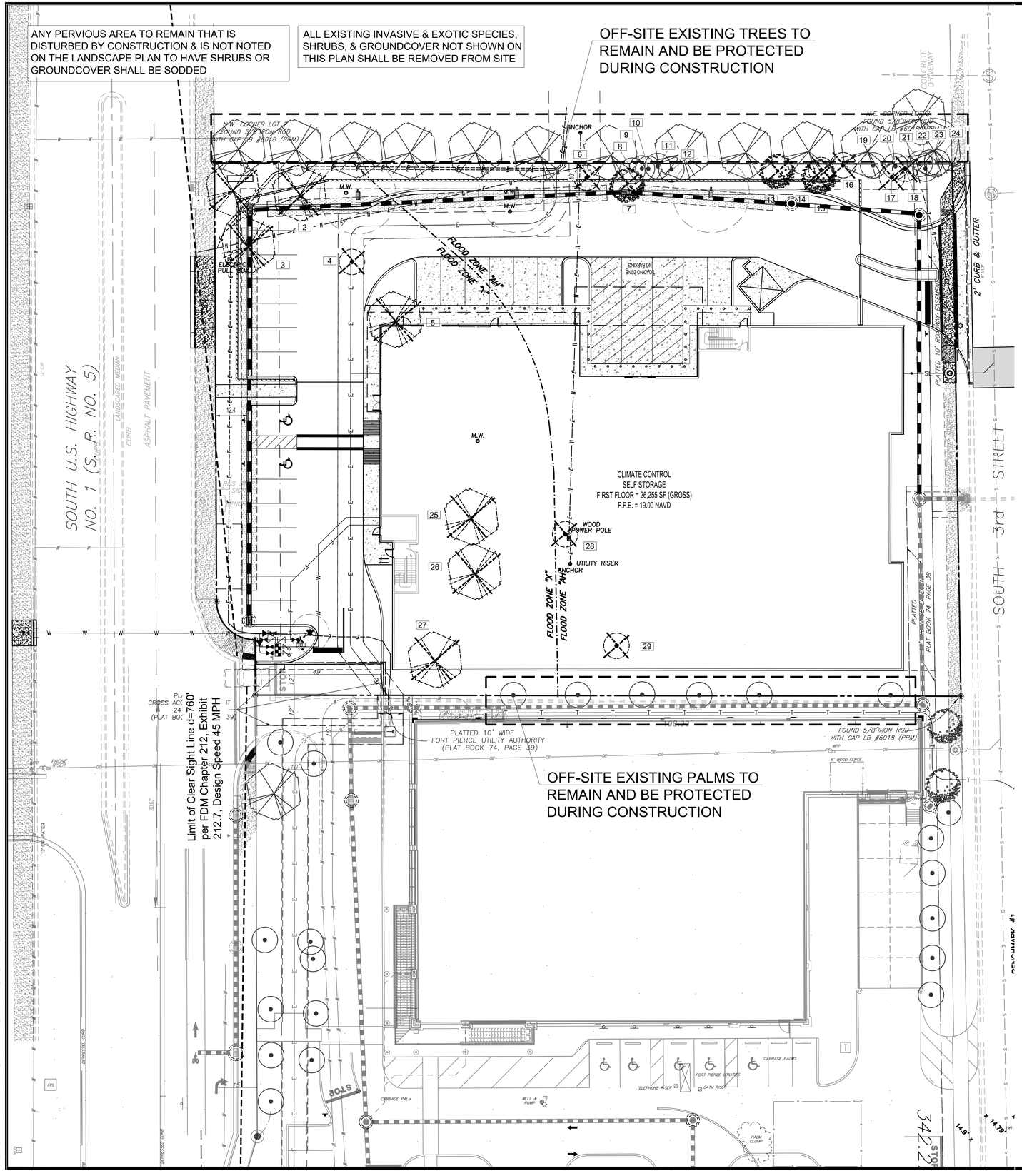
OFF-SITE EXISTING TREES TO REMAIN AND BE PROTECTED DURING CONSTRUCTION



OFF-SITE EXISTING PALMS TO REMAIN AND BE PROTECTED DURING CONSTRUCTION

EXISTING TREE DISPOSITION CHART

STORAGE FACILITY - FT. PIERCE, FL

TREE NO.	BOTANICAL NAME	COMMON NAME	DBH	HT.	CONDITION	DISPOSITION	COMMENTS	PROTECTED
1	Quercus virginiana	Live Oak	34.5	45'	poor	remove	incl. bark at major limb connection; large cavity ar major branch connection	NO
2	Swietnia mahoganii	West Indies Mahogany	35.5	40'	poor	remove	16"/14"/5.5" multi-trunk; cavity at major branch commection; incl. bark; poor structure; splitting bark	NO
3	Swietnia mahoganii	West Indies Mahogany	26.5	40'	poor	remove	5.5"/4"/9.5"/7.5", multi-trunk; incl bark at major branch connection; poor structure; tip die-back	NO
4	Sabal palmetto	Cabbage Palm		18' ct	poor	remove		YES
5	Quercus virginiana	Live Oak	27	35'	poor	remove	heavy lean; incl bark; broken limbs in upper canopy; signs of internal rot, weak branch connectins; up-lifting of grade on opposite sied of lean	NO
6	Sabal palmetto	Cabbage Palm		12' ct	Fair	remove		YES
7	Schinus terebinthifolia	Brazilian Pepper			poor	remove	invasive exotic	NO
8	Sabal palmetto	Cabbage Palm		18' ct	Fair	REMAIN		YES
9	Sabal palmetto	Cabbage Palm		16' ct	Fair	REMAIN		YES
10	Sabal palmetto	Cabbage Palm		18' ct	Fair	REMAIN		YES
11	Sabal palmetto	Cabbage Palm		18' ct	Fair	REMAIN		YES
12	Sabal palmetto	Cabbage Palm		12' ct	Fair	REMAIN		YES
13	Schinus terebinthifolia	Brazilian Pepper			poor	remove	invasive exotic	NO
14	Schinus terebinthifolia	Brazilian Pepper			poor	remove	invasive exotic	NO
15	Sabal palmetto	Cabbage Palm			dead	remove		NO
16	Sabal palmetto	Cabbage Palm		12' ct	poor	remove	schefflera wrapped around trunk	YES
17	Sabal palmetto	Cabbage Palm		16' ct	poor	remove	brazilian pepper growing out of base	YES
18	Sabal palmetto	Cabbage Palm		18' ct	poor	remove	encased in stragler fig	YES
19	Sabal palmetto	Cabbage Palm		18' ct	Fair	REMAIN		YES
20	Sabal palmetto	Cabbage Palm		18' ct	poor	REMAIN		YES
21	Sabal palmetto	Cabbage Palm		12' ct	Fair	REMAIN		YES
22	Sabal palmetto	Cabbage Palm		15' ct	Fair	REMAIN		YES
23	Sabal palmetto	Cabbage Palm		15' ct	Fair	REMAIN		YES
24	Sabal palmetto	Cabbage Palm		12' ct	Fair	REMAIN		YES
25	Swietnia mahoganii	West Indies Mahogany	45.5	45.0	poor	remove	10"/13"/7.5"/15" multi-trunk; broken limbs in upper canopy; signes of internal rot; incl bark; insects; brazilian pepper growing at base	NO
26	Quercus virginiana	Live Oak	30	45.0	Fair	remove	broken limbs; sparse canopy	NO
27	Quercus virginiana	Live Oak	15.5	25.0	poor	remove	major trunk/limb damage; rot; hazard tree	NO
28	Sabal palmettop-	Cabbage Palm		2' ct	poor	remove		NO
29	Sabal palmetto	Cabbage Palm		20' ct	Fair	remove		YES

TOTAL DBH ON SITE:	215
TOTAL DBH TO REMAIN:	0.0
TOTAL DBH TO BE REMOVED:	199
TOTAL QUALIFIED PALMS TO BE REMOVED, REPLACED @ 1:1 :	7
TOTAL QUALIFIED PALMS TO BE RELOCATED :	0

NOTE: NATIVE TREES WITH A DBH OF 14" OR GREATER ARE REQUIRED TO BE MITIGATED @ INCH/INCH; ONLY PALMS WITH A MIN. 10' OF CLEAR TRUNK ARE PROTECTED PER SEC. 22-194.(B); FURTHERMORE, PROTECTED/RELOCATED PALMS WILL COUNT TOWARDS ANY REQUIRED PALM TREE MITIGATION AT A RATE OF ONE PALM PRESERVED/PROTECTED = ONE PALM REMOVED PER SEC. 22-194.(D).2

EXISTING TREE NOTES:

1. Contractor is responsible for determining all utility locations and installing facilities so as to not conflict. All damage to existing utilities or improvements caused by Contractor shall be repaired at no additional cost to the Owner.

2. Contractor to notify "Sunshine State One Call of Florida, Inc." at 1-800-432-4770 Two Full Business Days prior to digging for underground utility locations.

3. Contractor shall be responsible for providing final grading of all associated planting areas.

4. After final grade, area to be raked to 6" depth and all rock and foreign inorganic materials removed and disposed of properly off-site.

5. No plant material will be accepted showing evidence of cable, chain marks, equipment scars, or otherwise damaged.

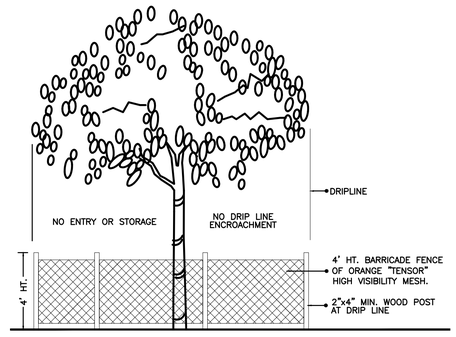
6. Plant material will not be accepted when the ball of earth surrounding its roots has been cracked, broken or otherwise damaged.

7. Root-prune all trees a minimum of (8) weeks prior to planting.

8. Tree protection barricades shall be provided by Landscape Contractor around existing trees that may be impacted by the proposed construction. Prior to any construction a tree protection barricade inspection shall be conducted by the landscape architect, owner or governing municipality. Refer to landscape detail for tree preservation barricade fencing.

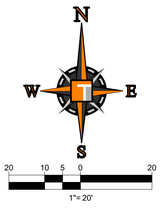
9. In all pedestrian areas, all trees and palms shall be maintained to allow for clear passage at an 8 foot clear trunk.

THIS PLAN WAS PREPARED BY ISA CERTIFIED ARBORIST, MICHAEL GROSSWIRTH, FL-9157A, AND SHALL SERVE AS THE ARBORIST'S REPORT FRO THIS PROJECT.



TREE PRESERVATION BARRICADE FENCING DETAIL

N.T.S.



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PROJECT No.: FJ210016
DRAWN BY: JMG
CHECKED BY: JMG
DATE:
CAD I.D.: FJ210016 LANDSCAPE PLAN

PROJECT:

FORT PIERCE STORAGE FACILITY

FOR

LG FT PIERCE

FORT PIERCE
FLORIDA

THOMAS ENGINEERING GROUP
PEPWORTH PROFESSIONAL PLAZA
125 W. INDIANTOWN RD. SUITE 206
PH: (561) 203-7503
FX: (561) 203-7721
www.ThomasEngineeringGroup.com

MICHAEL D. GROSSWIRTH
LA 6666871
STATE
REGISTERED LANDSCAPE ARCHITECT
March 8, 2022
FLORIDA REGISTRATION No. 6666871
FLORIDA BUSINESS LICENSE No. 27528

SHEET TITLE:

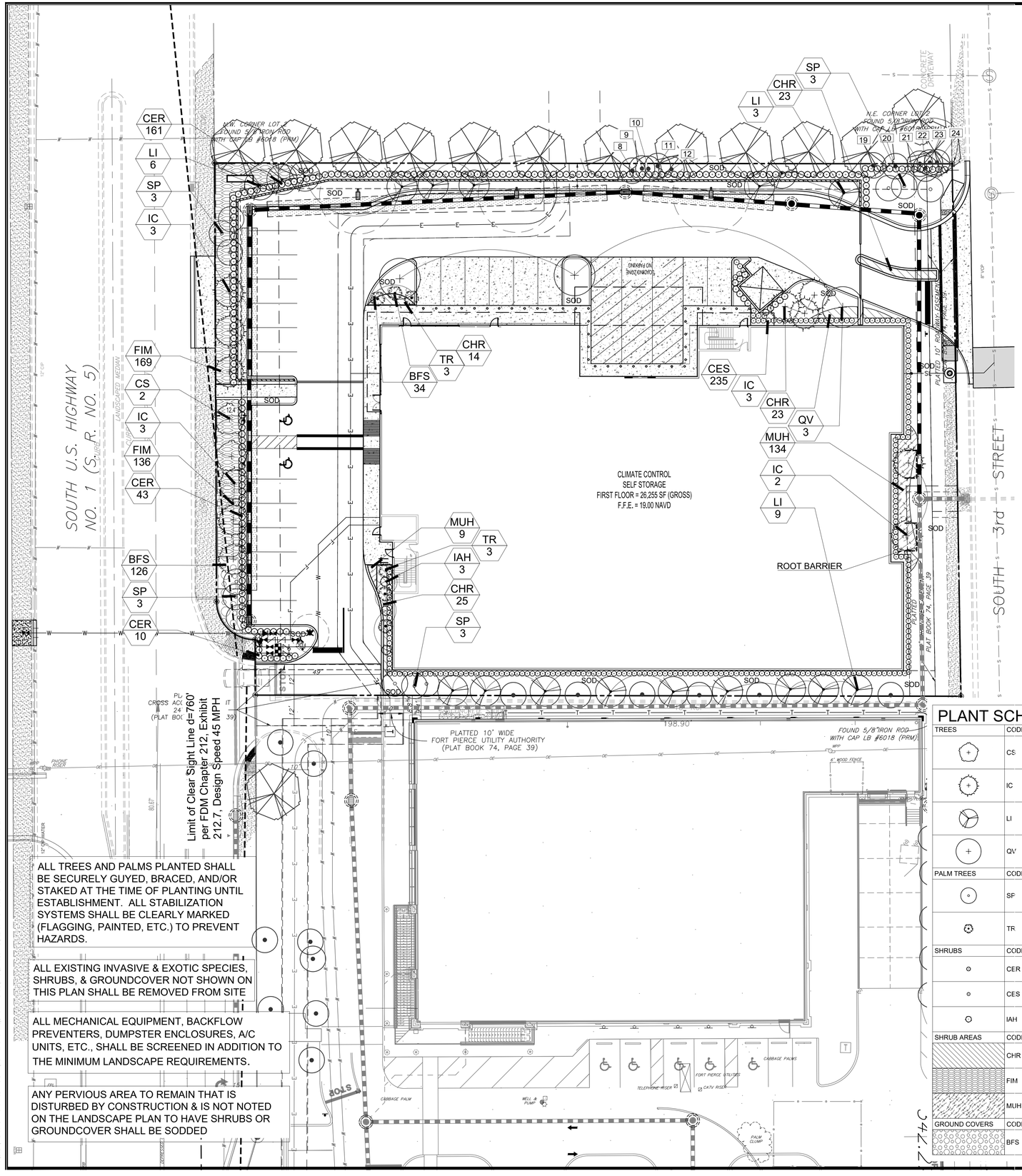
DISPOSITION PLAN

SHEET NUMBER:

L-1.0

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MICHAEL D. GROSSWIRTH, LA6666871 ON 2019-06-24

Printed on Tuesday, March 08, 2022, 2:31 PM by Michael Grosswirth - J:\JMG\LANDSCAPE\FJ210016 LANDSCAPE PLAN------HAWTHF 1:1.0



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LANDSCAPE CODE COMPLIANCE CHART

FORT PIERCE - CODE OF ORDINANCES; CH. 22; ART XII

STORAGE FACILITY

TOTAL SITE AREA: 60,039 sq.ft. (1.38 AC) ZONING: C-3 GENERAL COMMERCIAL
TOTAL VUA: 17,658.48 sq.ft.
TOTAL LANDSCAPE AREA: 12,060 sq.ft. (0.28 AC) (20.1%)

SEC. 123-37 - GENERAL LANDSCAPE REQUIREMENTS

1 - Requirements for Plant Materials
Trees: Minimum 12' height x 5' width, 5' clear trunk, 2.5" dbh
Palms: 3 Palms = 1 Tree (50% MAX)
Shrubs: Min. 24" height at time of Installation

4 - Landscape Strips
Between Street R/O/W and VUA Use, Building and/or Retention Areas

		REQUIRED	PROVIDED
10' width minimum Landscape Strip		10'	10'
1 Tree/300 sq.ft. (400.99 lf x 10' = 4,009.9 sq.ft.)		14 TREES	14 TREES
36" ht. Continuous Visual Screen			

6 - Vehicular Use, Building, Retention/Detention Areas Adjacent to Other Property

10' width minimum Landscape Strip			
1 Tree/200 sq.ft. (XX lf x 10' = XX sq.ft.)	N/A - OUTPARCEL	N/A	N/A
6' Continuous Visual Screen			

7 - Interior Vehicular Use Areas

1 sq.ft. of Interior Landscape Area/15 sq.ft. of VUA		1,177.23 sf	1,177.23 sf
1 Tree/100 sq.ft. of Required Interior Landscape Area		12 TREES	12 TREES
	TOTAL	26 TREES	26 TREES

SEC 123-66 - TREE PROTECTION AND MITIGATION

(d)(2) *Native Trees with a DBH of 14" or greater Shall be Mitigated Inch:Inch* **199" Removed**
Trees Preserved on-site, which exceed minimum code, count towards mitigation **0" Preserved**
Deficit Inches: **199"**

Planted Trees in Excess of Code Count at 50% towards mitigation:
Trees Over Code Minimum: **7.5 Credits**
Total DBH over Code Minimum: **58.5"**
Total Mitigation Required: **141.5"**

When property is not suitable for on-site mitigation, the applicant's plan may, with city approval, provide for use of a site on city public lands providing that the applicant furnishes all necessary services incident to such mitigaiton on public property, including, but not limited to, funding plants material and labor. Any contributions shall be placed at the City of Fort Pierce Tree Preservation Funds.

PLANT SCHEDULE

TREES	CODE	QTY	COMMON NAME	BOTANICAL NAME	SPECIFICATIONS	CAL/DBH	HEIGHT	SPREAD	NATIVE	XERIC	REMARKS
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20 10 5 0 20
1"= 20'

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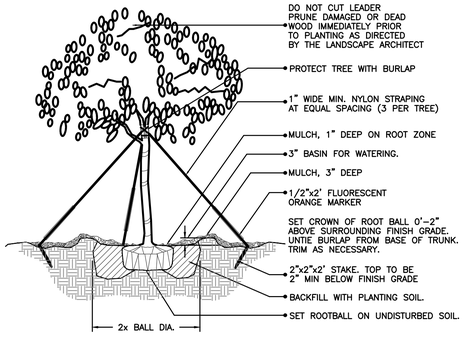
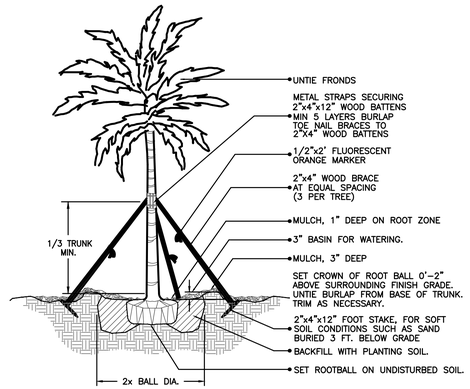
C:\...\LANDSCAPE\FJ210016 LANDSCAPE PLAN.dwg, LAYOUT: L-2.0



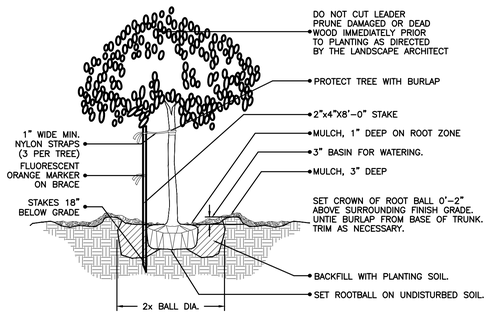
(2" cal. and over)
LARGE TREE PLANTING DETAIL

N.T.S.



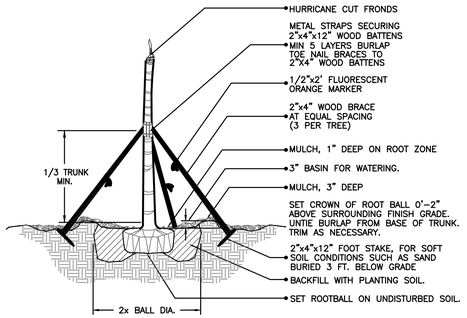
LARGE PALM PLANTING DETAIL

N.T.S.



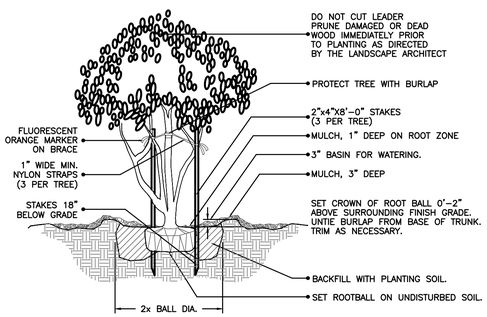
(2" cal. and under)
SMALL TREE PLANTING DETAIL

N.T.S.



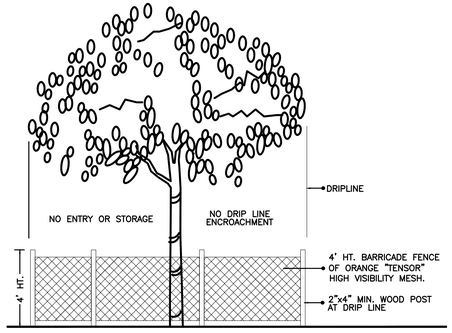
CIGARED SABAL PALM PLANTING DETAIL

N.T.S.



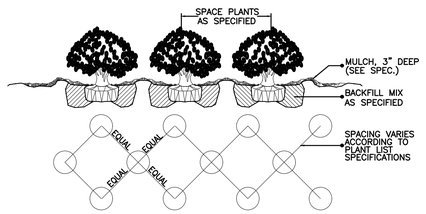
MULTI- TRUNK AND SMALL TREE (2" cal. and under) PLANTING DETAIL

N.T.S.



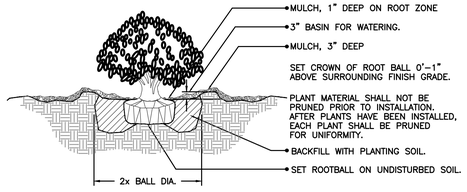
TREE PRESERVATION BARRICADE FENCING DETAIL

N.T.S.



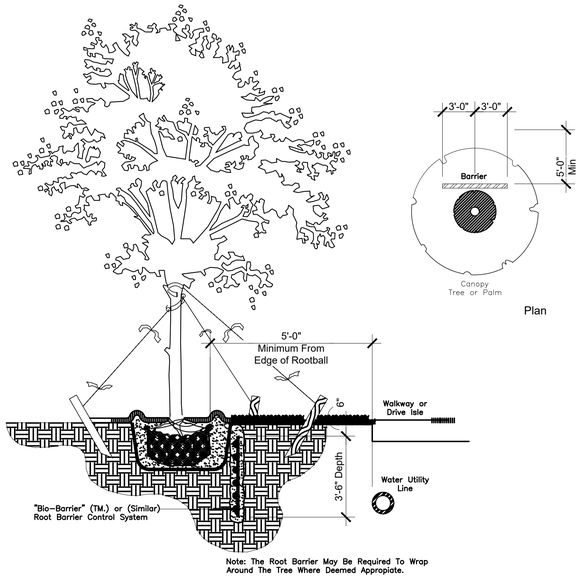
SHRUB / GROUNDCOVER SPACING / PLANTING DETAIL

N.T.S.



SHRUB PLANTING DETAIL

N.T.S.



Water/ Sewer
Service Line or
Edge of
Pavement

TYPICAL ROOT BARRIER APPLICATION DETAIL

Section

"Bio-Barrier" Is Manufactured By:
"Reemay, Inc." - 70 Old Hickory Blvd. - P.O.Box 511
Old Hickory, TN 37138 - Phone: 1-800-25-ROOTS

Applicable Use of Root Barriers:

If a Canopy Tree and/ or Palm Is To Be Installed Within Less Than (10') Ten Feet Separation From A Water Main (or Service) and/ or Sewer Main (or Service). The Landscape Contractor Shall Install a Root Barrier Parallel To The Utility As Required and as per This Detail. The Contractor Shall Maintain A (5') Five Feet Minimum Horizontal Distance From Outside Edge of Rootball To The Utility or any Paved or Concrete Surface.

The Landscape Contractor Shall Verify The Existing Locations of The Applicable Water Utilities, In The Field, Prior To Any Tree Installations Requiring A Root Barrier.

Suggested Installation Method:

Dig A Vertical Trench Between The Root Source of The Tree and The Surface and/ or Utility Line To Be Protected. The Trench Must Be At Least 6'-0" In Length (Centered On Tree) and Must Be at Least 4'-0" In Depth Parallel To The Applicable Surface, Service and/ or Utility. Note: For New Tree installations, Trench May Be Dug At The Same Time as The Hole For The Applicable Tree and/ or Palm.

Using Impervious Gloves, Roll Out "Bio-Barrier" and Trim To Fit The Specific Application. Insert The Barrier Vertically Into The Trench, With The Top Edge of The Barrier (6") Six Inches Below The Soil Surface.

Tamp Backfill Firmly Into Trench With 'Bio-Barrier" Contained, Eliminating Air Pockets or Soil Voids Accordingly. Dissolve The Coating and Activate The Product By Saturating The Backfill and 'Bio-Barrier" With Water. After Completed, Smooth The Soil Surface To Finish Grade, Allowing Excess Material For Soil Setting.

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
6300 NW 31ST AVE. FT. LAUDERDALE, FL 33309 P: 954-202-1000
4950 W. KENNEDY BLVD. SUITE 600 TAMPA, FL 33609 P: 813-379-4100
125 W INDIANTOWN RD. SUITE 206 JUPITER, FL 33458 P: 561-203-7503
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REVISIONS:

REV:	DATE:	COMMENT:	BY:

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CHECKED BY:	JMG
DATE:	
CAD I.D.:	FJ210016 LANDSCAPE PLAN

PROJECT:

FORT PIERCE STORAGE FACILITY

FOR

LG FT PIERCE

FORT PIERCE
FLORIDA

THOMAS ENGINEERING GROUP
PEPWORTH PROFESSIONAL PLAZA
125 W. INDIANTOWN RD. SUITE 206
PH: (561) 203-7503
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www.ThomasEngineeringGroup.com

MICHAEL D. GROSSWIRTH
LA 6666871
STATE
REGISTERED LANDSCAPE ARCHITECT
March 8, 2022
FLORIDA LICENSE No. 6666871
FLORIDA BUSINESS CERTIFICATE OF AUTH. No. 27528

SHEET TITLE:

LANDSCAPE DETAILS

SHEET NUMBER:

L-2.1

Printed on Tuesday, March 08, 2022, 2:31 PM by Michael Grosswirth
J:\PROJECTS\2021\FJ210016 LANDSCAPE PLAN\CIVIL\LANDSCAPE\FJ210016 LANDSCAPE PLAN-------->LAYOUT: L-2.1

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MICHAEL D. GROSSWIRTH, LA6666871 ON 2019-06-24

LANDSCAPE GENERAL NOTES

A. SCOPE OF WORK

1. THE WORK CONSISTS OF FURNISHING ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, TRANSPORTATION, AND ANY OTHER APPURTENANCES NECESSARY FOR THE COMPLETION OF THIS PROJECT AS SHOWN ON THE DRAWINGS, AS INCLUDED IN THE PLANT LIST, AND AS HEREIN SPECIFIED.

2. WORK SHALL INCLUDE MAINTENANCE AND WATERING OF ALL PLANTING AREAS OF THIS CONTRACT UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER.

B. PROTECTION OF EXISTING STRUCTURES

1. ALL EXISTING BUILDINGS, WALKS, WALLS, PAVING, PIPING, AND OTHER ITEMS OF CONSTRUCTION AND PLANTING ALREADY COMPLETED OR ESTABLISHED SHALL BE PROTECTED FROM DAMAGE BY THIS CONTRACTOR UNLESS OTHERWISE SPECIFIED. ALL DAMAGE RESULTING FROM NEGLIGENCE SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE OWNER.

C. PROTECTION OF EXISTING PLANT MATERIALS OUTSIDE LIMIT OF WORK

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UNAUTHORIZED CUTTING OR DAMAGE TO TREES AND SHRUBS, EXISTING OR OTHERWISE, CAUSED BY CARELESS OPERATION OF EQUIPMENT, STOCKPILING OF MATERIALS, ETC. THIS SHALL INCLUDE COMPACTION BY DRIVING OR PARKING INSIDE THE DRIP – LINE OR THE SPILLING OF OIL, GASOLINE, OR OTHER DELETERIOUS MATERIALS WITHIN THE DRIP – LINE.

2. NO MATERIALS SHALL BE BURNED WHERE THE HEAT WILL DAMAGE ANY PLANT, TREES KILLED OR DAMAGED SO THAT THEY ARE MISSHAPEN AND/OR UNSIGHTLY SHALL BE REPLACED AT THE COST TO THE CONTRACTOR OF ONE HUNDRED DOLLARS ($100) PER CALIPER INCH ON AN ESCALATING SCALE WHICH ADDS AN ADDITIONAL TWENTY PERCENT (20%) PER INCH OVER FOUR INCHES (4”) CALIPER AS FIXED AND AGREED LIQUIDATED DAMAGES, OR AS MAY BE REQUIRED BY THE REGULATING GOVERNMENT AGENCY, WHICHEVER IS GREATER. CALIPER SHALL BE MEASURED AT BREAST HEIGHT OR FOUR FEET (4’) ABOVE SURROUNDING GROUND.

D. MATERIALS

1. SUBMITTALS: GENERAL SAMPLES OF PLANTING MATERIALS AS LISTED BELOW SHALL BE SUBMITTED FOR APPROVAL, ON THE SITE OR AS OTHERWISE DETERMINED BY THE OWNER. UPON APPROVAL OF SAMPLES, DELIVERY OF MATERIALS MAY BEGIN.
MATERIALS SAMPLE SUBMITTALS
MULCH ONE (1) CUBIC FOOT
TOPSOIL ONE (1) CUBIC FOOT
PLANTS ONE (1) REPRESENTATIVE SAMPLE OF EACH VARIETY

2. PLANT MATERIALS

A) GENERAL: PLANT SPECIES, SIZES, & QUANTITIES SHALL, AT A MINIMUM, CONFORM TO THOSE INDICATED ON THE DRAWINGS. NOMENCLATURE SHALL CONFORM TO STANDARDIZED PLANT NAMES, 1942 EDITION. ALL NURSERY STOCK SHALL BE IN ACCORDANCE WITH “GRADES AND STANDARDS FOR NURSERY PLANTS” PARTS I AND II, LATEST EDITION PUBLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS SHALL BE FLORIDA NO. 1 AS AN ABSOLUTE MINIMUM UNLESS OTHERWISE SUPERSEDED BY A FLORIDA FANCY DESIGNATION, AS DETERMINED BY THE FLORIDA DIVISION OF PLANT INDUSTRY. ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL – BRANCHED AND FREE OF DISEASE AND INSECTS, INSECT EGGS AND LARVAE, AND SHALL HAVE ADEQUATE ROOT SYSTEMS. TREES FOR PLANTING IN ROWS SHALL BE UNIFORM IN SIZE AND SHAPE. ALL MATERIALS SHALL BE SUBJECT TO APPROVAL BY THE OWNER. WHERE ANY REQUIREMENTS ARE OMITTED FROM THE PLANT LIST, THE PLANTS FURNISHED SHALL BE NORMAL FOR THE VARIETY. PLANTS SHALL BE PRUNED PRIOR TO DELIVERY ONLY UPON THE APPROVAL OF THE OWNER.

B) MEASUREMENTS: THE HEIGHT AND/OR WIDTH OF TREES SHALL BE MEASURED FROM THE TOP OF ROOT BALL (TRUNK FLARE) AND/OR ACROSS THE AVERAGE SPREAD OF BRANCHES WITH THE PLANTS IN THEIR NORMAL POSITION. THIS MEASUREMENT SHALL NOT INCLUDE THE IMMEDIATE TERMINAL GROWTH. PLANTS LARGER IN SIZE THAN THOSE SPECIFIED IN THE PLANT LIST MAY BE USED IF APPROVED BY THE OWNER. IF THE USE OF LARGER PLANTS IS APPROVED, THE BALL OF EARTH OR SPREAD OF ROOTS SHALL BE INCREASED IN PROPORTION TO THE SIZE OF THE PLANT.

C) INSPECTION: PLANTS SHALL BE SUBJECT TO INSPECTION AND APPROVAL AT THE PLACE OF GROWTH, OR UPON DELIVERY TO THE SITE, AS DETERMINED BY THE OWNER, FOR QUALITY, SIZE, AND VARIETY; SUCH PRELIMINARY APPROVAL SHALL NOT SUPERSEDE THE RIGHT OF INSPECTION AND REJECTION AT THE SITE DURING PROGRESS OF THE WORK OR AFTER COMPLETION FOR SIZE AND CONDITION OF BALLS OR ROOTS, LATENT DEFECTS OR INJURIES, PRESENCE OF INSECTS, AND OTHER CONDITIONS THAT MAY HAVE OCCURRED SINCE THE NURSERY INSPECTION. REJECTED PLANTS SHALL BE REMOVED IMMEDIATELY FROM THE SITE. NOTICE REQUESTING INSPECTION SHALL BE SUBMITTED IN WRITING BY THE CONTRACTOR AT LEAST ONE (1) WEEK PRIOR TO ANTICIPATED DATE.

D) AMENDED PLANTING SOIL: PLANTING SOIL FOR USE IN BACK FILLING PLANTING HOLES SHALL BE FORTY PERCENT (40%) TOPSOIL AND SIXTY PERCENT (60%) SAND AND BE FERTILE, FRIABLE, AND OF A LOAMY CHARACTER, WITHOUT MIXTURE OF SUBSOIL MATERIALS, AND OBTAINED FROM A WELL–DRAINED, ARABLE SITE. IT SHALL CONTAIN THREE (3) TO FIVE (5) PERCENT DECOMPOSED ORGANIC MATTER AND SHALL BE FREE FROM HEAVY CLAY, COARSE SAND, STONES, LIME, LUMPS, PLANTS, ROOTS OR OTHER FOREIGN MATERIALS, OR NOXIOUS WEEDS. IT SHALL NOT CONTAIN TOXIC SUBSTANCES WHICH MAY BE HARMFUL TO PLANT GROWTH. PH RANGE SHALL BE 5.0 TO 7.0 INCLUSIVE.

E) SAND SHALL BE CLEAN, WELL DRAINING NATIVE SAND. IF REQUESTED, CONTRACTOR SHALL AT ANY TIME AND AT NO COST TO OWNER, SUBMIT RESULTS OF SOIL TESTS FOR TOPSOIL AND SAND PROPOSED FOR USE UNDER THIS CONTRACT FOR APPROVAL BY OWNER.

E. WATER

1. WATER NECESSARY FOR PLANTING AND MAINTENANCE SHALL BE OF SATISFACTORY QUALITY TO SUSTAIN AN ADEQUATE GROWTH OF PLANTS AND SHALL NOT CONTAIN HARMFUL NATURAL OR MAN – MADE ELEMENTS DETRIMENTAL TO PLANTS. WATER MEETING THE ABOVE STANDARD SHALL BE OBTAINED ON THE SITE FROM THE OWNER, IF AVAILABLE, AND THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE ARRANGEMENTS FOR ITS USE BY HIS TANKS, HOSES, SPRINKLERS, ETC. IF SUCH WATER IS NOT AVAILABLE AT THE SITE, THE CONTRACTOR SHALL PROVIDE SUCH SATISFACTORY WATER FROM SOURCES OFF THE SITE AT NO ADDITIONAL COST TO THE OWNER.

F. COMMERCIAL FERTILIZER

1. COMMERCIAL FERTILIZER SHALL BE A COMPLETE FORMULA; IT SHALL BE UNIFORM IN COMPOSITION, DRY AND FREE FLOWING. THIS FERTILIZER SHALL BE DELIVERED TO THE SITE IN THE ORIGINAL UNOPENED CONTAINERS, EACH BEARING THE MANUFACTURER’S GUARANTEED STATEMENT OF ANALYSIS.
FIFTY PERCENT (50%) OF THE NITROGEN SHALL BE DELIVERED FROM NATURAL ORGANIC SOURCES. THE FOLLOWING FERTILIZERS SHALL BE USED AND APPLIED AT RATES AS SUGGESTED BY MANUFACTURER’S SPECIFICATIONS:
1. SHRUBS AND TREES – MILORGANITE, OR APPROVED EQUAL
2. ANNUALS AND GROUNDCOVERS – OSMOCOTE/SIERRA BLEND 14 – 14 – 14
3. SOD – 8 – 8 – 8
IN ADDITION TO SURFACE APPLIED FERTILIZERS, ALL CONTAINER GROWN AND FIELD GROWN PLANT MATERIAL SHALL RECEIVE “AGRIFORM” PLANTING TABLETS 24 – 10 – 5 FORMULA, 21 GRAM OR EQUAL. THESE TABLETS SHALL BE PLACED AT THE RATE AND DEPTH SPECIFIED BY MANUFACTURER.

G. MULCH

1. MULCH SHALL BE FROM SHREDDED WOOD DERIVED FROM MELALEUCA OR OTHER INVASIVE TREE SPECIES AND SHALL BE STERILIZED TO EFFECTIVELY ELIMINATE ALL SEEDS, SPORES, ETC. AND RENDER THEM BARREN.

2. MULCH MATERIAL SHALL BE MOISTENED AT THE TIME OF APPLICATION TO PREVENT WIND DISPLACEMENT AND APPLIED AT A DEPTH OF THREE INCHES (3”). MULCH IS TO BE KEPT 2-3” FROM THE STEM OF ALL GROUNDCOVERS & 3-6” FROM THE TRUNK OF ALL TREES & PALMS.

3. MULCH SHALL BE GRADE ‘B’ SHREDDED, AND SHALL BE APPLIED EVENLY AND SMOOTH TO PLANTED AREAS.

4. NO RED OR COLORED MULCH SHALL BE ACCEPTED UNLESS SPECIFIED ACCORDINGLY. NO CYPRESS MULCH OR PINE BARK SHALL BE USED.

H. DIGGING AND HANDLING

1. PROTECT ROOT SYSTEMS OR ROOT BALLS OF PLANTS AT ALL TIMES FROM SUN AND DRYING WINDS, WATER EROSION, AND OTHER HARMFUL CRITERIA AS NECESSARY UNTIL PLANTING. PLANT MATERIALS SHALL BE ADEQUATELY PACKED TO PREVENT BREAKING AND DRYING OUT DURING LOADING, TRANSIT, AND UNLOADING/PLANTING. TREES TRANSPORTED MORE THAN TEN (10) MILES OR WHICH ARE NOT PLANTED WITHIN THREE (3) DAYS OF DELIVERY TO SITE SHALL BE SPRAYED WITH AN ANTITRANSPIRANT PRODUCT (“WILTPRUF” OR EQUAL) TO MINIMIZE TRANSPIRATIONAL WATER LOSS.

2. BALLED AND BURLAPPED PLANTS (B&B) SHALL BE DUG WITH FIRM, NATURAL BALLS OF SOIL SUFFICIENT SIZE TO ENCOMPASS THE FIBROUS AND FEEDING ROOTS OF THE PLANTS, AND IN ACCORDANCE WITH “GRADES AND STANDARDS FOR NURSERY PLANTS” FLORIDA PUBLICATION. NO PLANT WITH A ROOTBALL SHALL BE PLANTED IF THE BALL IS CRACKED OR BROKEN. PLANTS BALLED AND BURLAPPED OR CONTAINER GROWN SHALL NOT BE HANDLED BY STEMS.

3. PLANTS MARKED “BR” IN THE PLANT LIST SHALL BE DUG WITH BARE ROOTS. THE ROOTS SHALL NOT BE CUT WITHIN THE MINIMUM SPREAD SPECIFIED IN THE PLANT LIST. CARE SHALL BE EXERCISED THAT THE ROOTS DO NOT DRY OUT IN MOVING AND PRIOR TO PLANTING.

4. PROTECTION OF PALMS (IF APPLICABLE): ONLY A MINIMUM OF FRONDS SHALL BE REMOVED FROM THE CROWN OF THE PALM TREES TO FACILITATE MOVING AND HANDLING. CLEAR TRUNK (CT) SHALL BE AS BY “GRADES AND STANDARDS FOR NURSERY PLANTS” FLORIDA PUBLICATION. PRUNING PRACTICED OTHER THAN MINIMAL PRUNING OF FRONDS, PRIMARILY TO REACH A “CLEAR TRUNK” SPECIFICATION, MAY CONSTITUTE REJECTION, OF ALL PALMS SUBJECTED TO SUCH PRACTICE. LIKEWISE, EXCESSIVE PRUNING OR “SHAVING” OF ROOT BALLS TO MEET “CLEAR TRUNK” CRITERIA MAY CONSTITUTE REJECTION ONSITE. ALL PALMS SHALL BE BRACED PER PALM PLANTING DETAIL ON THE PLANTING DETAILS SHEET.

5. EXCAVATION OF PLANTING HOLES SHALL BE DONE USING EXTREME CARE TO AVOID DAMAGE TO SURFACE AND SUBSURFACE ELEMENTS SUCH AS UTILITIES OR HARDSCAPE ELEMENTS, FOOTERS, AND PREPARED SUB-BASES.

I. CONTAINER GROWN STOCK

1. ALL CONTAINER GROWN MATERIAL SHALL BE HEALTHY, VIGOROUS, WELL – ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE OF GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION, AND SHALL MEET MINIMUM SPECIFICATIONS IN THE PLANT LIST.

2. AN ESTABLISHED CONTAINER GROWN PLANT SHALL BE TRANSPLANTED INTO A CONTAINER AND GROWN IN THAT CONTAINER SUFFICIENTLY LONG FOR THE NEW FIBROUS ROOTS TO HAVE DEVELOPED SO THAT THE ROOT MASS WILL RETAIN ITS SHAPE AND HOLD TOGETHER WHEN REMOVED FROM THE CONTAINER. CONTAINER GOWN STOCK SHALL NOT BE HANDLED BY THEIR STEMS.

3. PLANT ROOTS BOUND IN CONTAINERS OR WITH CIRCLING ROOTS SHALL NOT BE ACCEPTABLE.

4. SUBSTITUTION OF NON-CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE CONTAINER GROWN WILL NEED AUTHORIZATION FROM THE OWNER. LIKEWISE, SUBSTITUTION OF CONTAINER GROWN MATERIAL FOR MATERIAL EXPLICITLY SPECIFIED TO BE BALLED AND BURLAPPED/FIELD GROWN WILL NEED AUTHORIZATION FROM THE OWNER AND LA OF RECORD PRIOR TO THE ORDERING OF ANY MATERIALS.

5. ALL PLANT MATERIALS SHALL MEET THE MINIMUM SPECIFICATIONS LISTED IN THE PLANT SCHEDULE; SIZE (HEIGHT/SPREAD) SPECIFICATIONS TAKE PRECEDENCE OVER GALLON SIZES (IF GALLON SIZES ARE SPECIFIED).

J. COLLECTED STOCK

1. WHEN THE USE OF COLLECTED STOCK IS PERMITTED AS INDICATED ON THE PLANT LIST SCHEDULE, THE MINIMUM SIZES OF ROOT BALLS SHALL BE EQUAL TO THAT SPECIFIED FOR THE NEXT LARGER SIZE OF NURSERY GROWN STOCK OF THE SAME VARIETY.

K. NATIVE STOCK

1. PLANTS COLLECTED FROM WILD OR NATIVE STAND SHALL BE CONSIDERED GROWN WHEN THEY HAVE BEEN SUCCESSFULLY REESTABLISHED IN A NURSERY ROW AND GROWN UNDER REGULAR NURSERY CULTURAL PRACTICES FOR A MINIMUM OF TWO (2) GROWING SEASONS AND HAVE ATTAINED ADEQUATE ROOT AND TOP GROWTH TO INDICATE FULL RECOVERY FROM TRANSPLANTING INTO THE NURSERY ROW.

L. MATERIALS LIST

1. QUANTITIES NECESSARY TO COMPLETE THE WORK ON THE DRAWINGS SHALL BE FURNISHED. QUANTITY ESTIMATES HAVE BEEN MADE CAREFULLY, BUT THE LANDSCAPE ARCHITECT OR OWNER ASSUMES NO LIABILITY FOR OMISSIONS OR ERRORS. SHOULD A DISCREPANCY OCCUR BETWEEN A BIDDER’S TAKE OFF AND THE PLANT LIST QUANTITY, THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED FOR CLARIFICATION PRIOR TO THE SUBMISSION OF BIDS. DRAWING SHALL TAKE PRECEDENCE. ALL DIMENSIONS AND/OR SIZES SPECIFIED SHALL BE THE MINIMUM ACCEPTABLE SIZE. WHERE NO GALLON SIZE IS SPECIFIED ON CONTAINERIZED SHRUBS OR GROUNDCOVERS, THE HEIGHT & SPREAD SPECIFICATIONS SHALL PREVAIL.

M. FINE GRADING

1. FINE GRADING UNDER THIS CONTRACT SHALL CONSIST OF FINAL FINISHED GRADING OF LAWN AND PLANTING AREAS THAT HAVE BEEN ROUGH GRADED BY OTHERS. BERMING AS SHOWN ON THE DRAWINGS SHALL BE THE RESPONSIBILITY OF THE LANDSCAPE CONTRACTOR, UNLESS OTHERWISE NOTED.

2. THE CONTRACTOR SHALL FINE GRADE THE LAWN AND PLANTING AREAS TO BRING THE ROUGH GRADE UP TO FINAL FINISHED GRADE ALLOWING FOR THICKNESS OF SOD AND/OR MULCH DEPTH. THIS CONTRACTOR SHALL FINE GRADE BY HAND AND/OR WITH ALL EQUIPMENT NECESSARY INCLUDING A GRADING TRACTOR WITH FRONT-END LOADER FOR TRANSPORTING SOIL WITHIN THE SITE.

3. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER. AREAS ADJACENT TO BUILDINGS SHALL SLOPE AWAY FROM THE BUILDINGS.

N. PLANTING PROCEDURES

1. CLEANING UP BEFORE COMMENCING WORK: THE CONTRACTOR SHALL CLEAN UP WORK AND SURROUNDING AREAS OF ALL RUBBISH OR OBJECTIONABLE MATTER. ALL MORTAR, CEMENT, AND TOXIC MATERIAL SHALL BE COMPLETELY REMOVED FROM THE SITE. THESE MATERIALS SHALL NOT BE MIXED WITH THE SOIL. SHOULD THE CONTRACTOR FIND SUCH SOIL CONDITIONS BENEATH THE SOIL WHICH WILL IN ANY WAY AFFECT THE VIABILITY OF THE PLANTS TO BE INSTALLED, HE/SHE SHALL IMMEDIATELY CALL IT TO THE ATTENTION OF THE OWNER’S CONSTRUCTION MANAGER OR DESIGNEE.

2. DURING LAND ALTERATION AND CONSTRUCTION ACTIVITIES, IT SHALL BE PROHIBITED TO REMOVE VEGETATION BY GRUBBING OR TO PLACE SOIL DEPOSITS, DEBRIS, SOLVENTS, CONSTRUCTION MATERIAL, MACHINERY OR OTHER EQUIPMENT OF ANY KIND WITHIN THE DRIPLINE OF A TREE TO REMAIN ON THE SITE UNLESS OTHERWISE APPROVED BY THE JURISDICTIONAL MUNICIPALITY

3. VERIFY LOCATIONS OF ALL UTILITIES, CONDUITS, SUPPLY LINES AND CABLES. INCLUDING BUT NOT LIMITED TO: ELECTRIC, GAS (LINES AND TANKS), WATER, SANITARY SEWER, STORM WATER LINES, CABLE AND TELEPHONE. PROPERLY MAINTAIN AND PROTECT EXISTING UTILITIES.

4. SUBGRADE EXCAVATION: CONTRACTOR IS RESPONSIBLE TO REMOVE ALL EXISTING AND IMPORTED LIMEROCK AND LIMEROCK SUB-BASE FROM ALL LANDSCAPE PLANTING AREAS TO MINIMUM DEPTH OF APPROXIMATELY 20% GREATER THAN THE RECOMMENDED PLANTING SOIL DEPTH – UNLESS OTHERWISE SPECIFIED BY JURISDICATIONAL CODE. CONTRACTOR IS RESPONSIBLE TO BACKFILL THESE PLANTING AREAS TO ROUGH FINISHED GRADE WITH CLEAN TOPSOIL FROM AN ONSITE SOURCE OR AN IMPORTED SOURCE. IF LIMEROCK CONDITIONS OCCUR IN PLANTED AREAS AFTER 36” DEEP EXCAVATION BY THE CONTRACTOR, AND POSITIVE DRAINAGE CAN NOT BE ACHIEVED, CONTRACTOR SHALL UTILIZE PLANTING DETAIL THAT ADDRESSES POOR DRAINAGE OR CONTACT OWNER’S CONSTRUCTION MANAGER OR DESIGNEE FOR RESOLUTION.
CONTRACTOR IS TO ENSURE THAT ALL COMPACTED SOIL, ROAD ROCK, & EXCESS DEBRIS SHALL BE REMOVED & A 24" LAYER OF NON-LIMEROCK PLANTING SOIL FAVORABLE TO SHRUB GROWTH & SUSTAINABILITY EXISTS OVER ALL PLANTING AREAS. TREE PITS SHALL BE EXCAVATED & BACKFILLED WITH PLANTING SOIL TO A MINIMUM DEPTH OF 30”.

5. RECOMMENDED PLANTING SOIL DEPTH IS GENERALLY AS FOLLOWS:
ALL TREES AND TALL SHRUBS (INDICATED AS ‘SHRUBS’ & ‘SHRUBS AREAS’ ON THE PLANT SCHEDULE) SHALL BE PLANTED WITH A MINIMUM OF 12" TOPSOIL AROUND AND BENEATH THE ROOTBALL; MINIMUM TOPSOIL SHALL BE 6" FOR LOW SHRUBS/GROUNDCOVER AREAS AND 2" FOR SODDED GRASS AREAS.
THE MINIMUM TOPSOIL DEPTHS ARE IN ADDITION TO A MINIMUM NON-LIMEROCK SOIL DEPTH OF 10"-18", CONSISTING OF EXISTING UNDISTURBED OR NATIVE SOIL THAT WAS STORED/STOCKPILED ON SITE AND REUSED, OR CLEAN IMPORTED PLANTING SOIL WITH A RANGE OF ORGANIC MATTER BETWEEN 3-5% CONTAINING NO STONES GREATER THAN AN INCH AND A HALF IN DIAMETER IN ANY DIRECTION. TOPSOIL DEPTHS PLUS PLANTING SOIL/EXISTING NATIVE SOIL MINIMUM DEPTHS ARE IN ADDITION TO ANY LIMESTONE/LIMEROCK SUBGRADE, & IN ADDITION TO EXCAVATION WIDTHS REQUIRED FOR TREE PITS AS SHOWN ON THE PLANTING DETAILS.
PURSUANT TO THE ABOVE, THE TOTAL MINIMUM DEPTH OF VIABLE NON-LIMEROCK PLANTING SOIL, INCLUDING EXISTING VIABLE UNDISTURBED/OR STOCKPILED SOIL (IF PRESENT), REQUIRED TO BE PROVIDED ABOVE ANY LIMESTONE/LIMEROCK SUBGRADE CONDITION SHALL BE 12” MINIMUM TOTAL NON-LIMEROCK SOIL DEPTH FOR SOD AREAS; 16” MINIMUM TOTAL NON-LIMEROCK SOIL DEPTH FOR GROUNDCOVERS; 24” MINIMUM TOTAL NON-LIMEROCK SOIL DEPTH FOR SHRUBS/SHRUB AREAS; AND 30” MINIMUM TOTAL NON-LIMEROCK SOIL DEPTH FOR TREE PITS. DESIGNATION OF ‘TREES,’ ‘SHRUBS’/’SHRUB AREAS,’ AND ‘GROUNDCOVERS‘ SHALL BE CONSISTENT WITH THE LABELING OF PLANT MATERIALS SHOWN ON THE LANDSCAPE PLAN’S PLANT SCHEDULE, WITH THE EXCEPTION OF COMMON TURFGRASSES WHICH MAY BE INDICATED AS ‘GROUNDCOVERS.’ NONE OF THE ABOVE MINIMUMS SHALL PRECLUDE THE CONTRACTOR FROM EXCAVATING & PROVIDING SOIL IN ACCORDANCE WITH NOTE N.4 OR N.9. IMPORTED PLANTING SOIL SHALL BE IN ACCORDANCE WITH NOTE D.2.D.
IT IS THE CONTRACTORS RESPONSIBILITY TO VISIT THE SITE & TAKE REASONABLE MEASURES AS PART OF DUE DILIGENCE TO DETERMINE THE EXTENT OF EXCAVATION REQUIRED & TO DETERMINE THE AMOUNT OF PLANTING SOIL NECESSARY TO ENSURE LONG-TERM SUSTAINABILITY & SURVIVAL OF THE PLANT MATERIALS IN ACCORDANCE WITH THIS CONTRACT.

6. FURNISH NURSERY’S CERTIFICATE OF COMPLIANCE WITH ALL REQUIREMENTS AS HEREIN SPECIFIED AND REQUIRED. INSPECT AND SELECT PLANT MATERIALS BEFORE PLANTS ARE DUG AT NURSERY OR GROWING SITE.

7. GENERAL: COMPLY WITH FEDERAL, STATE, COUNTY AND LOCAL REGULATIONS GOVERNING LANDSCAPE MATERIALS AND WORK. CONFORM TO ACCEPTED HORTICULTURAL PRACTICES AS USED IN THE TRADE. PLANTS SHALL BE PROTECTED UPON ARRIVAL AT THE SITE BY BEING THOROUGHLY WATERED AND PROPERLY MAINTAINED UNTIL PLANTED. PLANTS SHALL NOT REMAIN UNPROTECTED FOR A PERIOD EXCEEDING TWENTY-FOUR (24) HOURS. AT ALL TIMES WORKMANLIKE METHODS CUSTOMARY IN GOOD HORTICULTURAL PRACTICES SHALL BE EXERCISED.

8. THE WORK SHALL BE COORDINATED WITH OTHER TRADES TO PREVENT CONFLICTS. COORDINATE THE PLANTING WITH THE IRRIGATION WORK TO ASSURE AVAILABILITY OF WATER AND PROPER LOCATION OF IRRIGATION ITEMS AND PLANTS.

9. ALL PLANTING HOLES SHALL BE EXCAVATED TO SIZE AND DEPTH IN ACCORDANCE WITH THE USA STANDARD TO NURSERY STOCK 280.1, UNLESS SHOWN OTHERWISE ON THE DRAWINGS, AND BACKFILLED WITH THE PREPARED PLANTING SOIL AS SPECIFIED HEREIN BEFORE (SEE MATERIALS, SECTION D). TEST ALL TREE PITS WITH WATER BEFORE PLANTING TO ASSURE PROPER DRAINAGE PERCOLATION IS AVAILABLE. NO ALLOWANCE WILL BE MADE FOR LOST PLANTS DUE TO IMPROPER DRAINAGE. IF POOR DRAINAGE EXISTS, UTILIZE PLANTING DETAIL THAT ADDRESSES THIS CONDITION. POOR DRAINAGE CONDITIONS TYPICALLY HAVE A PERCOLATION RATE OF 4” OR LESS PER HOUR, AS DETERMINED BY THE GEOTECHNICAL ENGINEER. TREES SHALL BE SET PLUMB AND HELD IN POSITION UNTIL THE PLANTING MIXTURE HAS BEEN FLUSHED INTO PLACE WITH A SLOW, FULL HOSE STREAM. ALL PLANTING SHALL BE PERFORMED BY PERSONNEL FAMILIAR WITH PLANTING PROCEDURE AND UNDER THE SUPERVISION OF A QUALIFIED PLANTING FOREMAN. PROPER “JETTING IN” SHALL BE ASSURED TO ELIMINATE AIR POCKETS AROUND THE ROOTS. “JET STICK” OR EQUAL RECOMMENDED.

10. TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO BUILDINGS, CURBS, PAVING, AND OTHER HARDSCAPE MATERIALS WHILE INSTALLING TREES.

11. SOIL MIXTURE SHALL BE AS SPECIFIED IN SECTION D (MATERIALS) OF THESE SPECIFICATIONS. IN ADDITION, EACH PLANTING HOLE SHALL RECEIVE 21-GRAM “AGRIFORM” PLANTING TABLETS PER MANUFACTURER’S SPECIFICATIONS OR AS FOLLOWS:
- TWO (2) TABLETS PER 1 GAL. PLANT
- THREE (3) TABLETS PER 3 GAL. PLANT
- FOUR (4) TABLETS PER 10 GAL. PLANT
LARGER MATERIAL
-TWO (2) TABLETS PER HALF INCH (1/2”) OF TRUNK CALIPER

12. TREES AND SHRUBS SHALL BE SET STRAIGHT AND AT SUCH A LEVEL THAT AFTER SETTLEMENT, THE TOP OF THE ROOT SYSTEM (FOR SHRUBS AND GROUNDCOVER) OR TRUNK FLARE (TREES AND PALMS) WILL STAND ONE (1) TO TWO (2) INCHES ABOVE FINAL GRADE. EACH PLANT SHALL BE SET IN THE CENTER OF THE PLANTING HOLE. PLANTING SOIL MIXTURE SHALL BE BACKFILLED AND THOROUGHLY TAMPED AROUND THE BALL AND SHALL BE SETTLED BY WATER AFTER TAMPING.

13. FILL HOLE WITH SOIL MIXTURE, MAKING CERTAIN ALL SOIL IS SATURATED. TO DO THIS, FILL HOLE WITH WATER AND ALLOW TO SOAK MINIMUM TWENTY (20) MINUTES, TURNING SOIL IF NECESSARY TO GET SOIL THOROUGHLY WET. PACK LIGHTLY WITH FEET OR OTHER TAMPING DEVICE. ADD MORE WET SOIL MIXTURE. DO NOT COVER TOP OF BALL WITH SOIL MIXTURE, ONLY WITH MULCH. ALL BURLAP, ROPE, WIRES, ETC., SHALL BE PULLED FROM UNDERNEATH.

14. PRUNING: FOR DAMAGED OR BROKEN LIMBS, EACH TREE SHALL BE PRUNED TO PRESERVE THE NATURAL CHARACTER OF THE SPECIES. ALL SUCKER GROWTH SHALL BE COMPLETELY REMOVED PRIOR TO DIGGING.

15. SHRUBS AND GROUNDCOVER PLANTS SHALL BE EVENLY SPACED IN ACCORDANCE WITH THE DRAWINGS AND AS INDICATED IN THE PLANT LIST. CULTIVATE ALL MASS PLANTING AREAS TO A MINIMUM DEPTH OF 6”, REMOVE AND DISPOSE OF ALL DEBRIS, TILL 4” OF PLANTING SOIL MIX INTO THE NEWLY TILLED PLANTING BED FOR GENERAL NUTRIENT DISBURSEMENT. MASS PLANTING BED IS NOW READY TO RECEIVE HOLES FOR NEW PLANTS. THOROUGHLY WATER ALL PLANTS AFTER INSTALLATION.

16. TREE GUYING AND BRACING SHALL BE INSTALLED BY THE LANDSCAPE CONTRACTOR IN ACCORDANCE WITH THE PLANS TO ENSURE STABILITY AND MAINTAIN TREES IN AN UPRIGHT POSITION. TREES SHALL USE ARBORTIE AS PER DETAIL SHEET. PALMS SHALL USE WOOD BRACING PER DETAIL SHEET.

17. MULCHING: PROVIDE A THREE INCH (3”) MINIMUM LAYER OF SPECIFIED MULCH OVER THE ENTIRE AREA OF EACH SHRUB BED, GROUNDCOVER AND VINE BED AND TREE PIT (FOR TREES AND PALMS, MIN. THREE INCH (3”) FROM EDGE OF TRUNKS). – UNLESS OTHERWISE REQUIRED BY LOCAL CODES AND SPECIFIED AS SUCH.

18. SYSTEMIC HERBICIDE WEED CONTROL: ALL PLANT BEDS SHALL BE KEPT FREE OF NOXIOUS WEEDS UNTIL FINAL ACCEPTANCE OF WORK. IF DIRECTED BY THE OWNER OR THEIR DESIGNEE, A SYSTEMIC HERBICIDE SHALL BE APPLIED FOR WEED CONTROL BY QUALIFIED PERSONNEL TO ALL PLANTING AREAS IN SPOT APPLICATIONS PER MANUFACTURER’S PRECAUTIONS AND SPECIFICATIONS. AFTER MULCH HAS BEEN APPLIED TO PLANTING BEDS AND TREE RINGS, TREAT ALL MULCHED AREAS WITH AN APPROVED PRE-EMERGENT HERBICIDE AT AN APPLICATION RATE RECOMMENDED BY THE MANUFACTURER.

O. LAWN SODDING

STENOTAPHRUM SECUNDATUM, V. ‘FLORITAM’ UNLESS OTHERWISE NOTED. (ST. AUGUSTINE SOLID SOD).
1. THE WORK CONSISTS OF LAWN BED PREPARATION, SOIL PREPARATION, AND SODDING:
COMPLETE IN STRICT ACCORDANCE WITH THE SPECIFICATIONS AND THE APPLICABLE DRAWINGS TO PRODUCE A GRASS LAWN ACCEPTABLE TO THE OWNER AND GOVERNING AGENCIES.

2. LAWN BED PREPARATION: ALL AREAS THAT ARE TO BE SODDED SHALL BE CLEARED OF ANY ROUGH GRASS, WEEDS, AND OTHER DEBRIS, AND THE SOIL BROUGHT TO AN EVEN PREPARED GRADE TO ALLOW FOR SOIL PREPARATION BELOW.

3. SOIL PREPARATION: PREPARE LOOSE BED FOUR INCHES (4”) DEEP. APPLY FERTILIZER AT A RATE OF TWENTY (20) POUNDS PER ONE THOUSAND (1000) SQUARE FEET. APPLICATION SHALL BE UNIFORM, UTILIZING COMMERCIAL BROADCAST SPREADERS. MIX FERTILIZER THOROUGHLY WITH THE SOIL TO A DEPTH OF THREE INCHES (3”). HAND RAKE UNTIL ALL BUMPS AND DEPRESSIONS ARE REMOVED. WET PREPARED AREA THOROUGHLY TO PREPARE FOR SOD INSTALLATION.

4. SODDING: THE CONTRACTOR SHALL SOD ALL THE PERVIOUS AREAS THAT ARE NOT PAVED OR PLANTED AS DESIGNATED ON THE DRAWINGS WITHIN THE CONTRACT LIMITS TO CREATE A UNIFORM, NEW TURF BLANKET FOR THE SITE. ALL PERVIOUS AREAS TO REMAIN THAT ARE DISTURBED BY CONSTRUCTION & NOT SHOWN TO HAVE SHRUBS OR GROUNDCOVER ON THE LANDSCAPE PLAN SHALL BE SODDED BY CONTRACTOR. ALL SOD OFF-SITE OR IN THE RIGHT-OF-WAY (DEDICATED OR OTHERWISE) SHALL BE BAHIA 'ARGENTINE' SOLID SOD UNLESS OTHERWISE NOTED.

A) THE SOD SHALL BE CERTIFIED TO MEET FLORIDA STATE BOARD SPECIFICATIONS, ABSOLUTELY TRUE TO VARIETY TYPE, AND FREE FROM WEEDS, FUNGUS, INSECTS, AND DISEASE OF ANY KIND, SOD PANELS SHALL BE LAID TIGHTLY TOGETHER TO MAKE A SOLID, SODDED LAWN AREA.

B) SOD SHALL BE LAID IN ROWS WITH EVERY OTHER ROW STAGGERED HALFWAY BETWEEN THE NEXT TO INSURE NO CONTINUOUS STACKED JOINTS. SEW JOINTS OF SOD TO INSURE A TIGHT FIT AT JOINTS, WITH GAPS NO GREATER THAN 1” BETWEEN SOD PANELS.

C) SOD SHALL BE LAID UNIFORMLY AGAINST THE EDGES OF ALL CURBS AND OTHER HARDSCAPE ELEMENTS, PAVED AND PLANTED AREAS. ADJACENT TO BUILDINGS, A FOUR INCH (4”) MULCH STRIP SHALL BE PROVIDED. IMMEDIATELY FOLLOWING SOD LAYING, THE LAWN AREAS SHALL BE ROLLED WITH A LAWN ROLLER CUSTOMARILY USED FOR SUCH PURPOSES, AND THEN THOROUGHLY IRRIGATED TO THOROUGHLY MOISTEN THE SOIL BENEATH. IF, IN THE OPINION OF THE OWNER, TOP-DRESSING IS NECESSARY AFTER ROLLING TO FILL THE VOIDS BETWEEN THE SOD PANELS AND TO EVEN OUT INCONSISTENCIES IN THE SOD, CLEAN SAND AS APPROVED BY THE LANDSCAPE ARCHITECT OR OWNER SHALL BE UNIFORMLY SPREAD OVER THE ENTIRE SURFACE OF THE SOD AND THOROUGHLY WATERED IN.

5. DURING DELIVERY, PRIOR TO ADD DURING THE PLANTING OF THE LAWN AREAS, THE SOD PANELS SHALL AT ALL TIMES BE PROTECTED FROM EXCESSIVE DRYING AND UNNECESSARY EXPOSURE OF THE ROOTS TO THE SUN. ALL SOD SHALL BE INSTALLED DURING THE DAY OF ITS ARRIVAL.

6. LAWN MAINTENANCE:

A) WITHIN THE SITE, THE CONTRACTOR SHALL PRODUCE A DENSE, WELL ESTABLISHED LAWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RE-SODDING OF ALL ERODED, SUNKEN OR BARE SPOTS UNTIL CERTIFICATION OF ACCEPTABILITY BY OWNER OR AS IN THE ORIGINAL WORK SCOPE AND PROCESS (INCLUDING REGRADING IF NECESSARY).

B) WATER EVERY DAY FOR FOURTEEN (14) SUCCESSIVE DAYS, THEN WATER THREE (3) TIMES PER WEEK (AT EVEN INTERVALS) UNTIL FULLY ESTABLISHED OR UNTIL AUTOMATIC IRRIGATION SYSTEM IS FULLY OPERATIONAL AND PROGRAMMED ACCORDINGLY. COORDINATE WATERING SCHEDULE WITH NATURAL RAINFALL. RAINFALL EVENTS IN DURATION OF TWENTY (20) MINUTES OR MORE THAT PRODUCE MORE THAN A HALF INCH (1/2”) OF PRECIPITATION WILL NEGATE THE NEED FOR WATERING OF THE FOLLOWING DAY IF PREVIOUSLY SCHEDULED. ALL WATERING SHALL BE OF SUFFICIENT QUANTITY TO WET OR RESTORE WATER TO A DEPTH OF FOUR INCHES (4”).

P. CLEANUP

1. UPON COMPLETION OF ALL PLANTING WORK AND BEFORE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL MATERIAL, EQUIPMENT, AND DEBRIS RESULTING FROM HIS WORK. ALL PAVED AREAS SHALL BE BROOM CLEANED AND THE SITE LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER’S AUTHORIZED REPRESENTATIVE.

Q. PLANT MATERIAL MAINTENANCE

1. ALL PLANTS AND PLANTING MATERIALS INCLUDED UNDER THIS CONTRACT SHALL BE MAINTAINED BY WATERING, CULTIVATING, SPRAYING, AND ALL OTHER OPERATIONS (SUCH AS RE-STAKING OR REPAIRING GUY SUPPORTS) NECESSARY TO INSURE A HEALTHY CONDITION BY THE CONTRACTOR UNTIL CERTIFICATION OF ACCEPTABILITY BY THE OWNER OR OWNER’S DESIGNEE. MAINTENANCE AFTER THE CERTIFICATION OF AN ACCEPTABILITY SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS IN THIS SECTION. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE TO COVER LANDSCAPE AND IRRIGATION MAINTENANCE FOR A PERIOD OF NINETY (90) CALENDAR DAYS COMMENCING AFTER ACCEPTANCE (SEE NEXT SECTION).

R. MAINTENANCE (ALTERNATIVE BID ITEM)

1. CONTRACTORS ARE REQUESTED TO PROVIDE A BID ESTIMATE FOR LANDSCAPE AND IRRIGATION MAINTENANCE FOLLOWING THE INITIAL 90-DAY MAINTENANCE PERIOD ON A COST PER MONTH BASIS.

S. GUARANTEE

1. THE LIFE AND SATISFACTORY CONDITION OF ALL PLANT MATERIAL INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A MINIMUM OF ONE (1) CALENDAR YEAR COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNER OR OWNER’S DESIGNEE. THE LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR CARE & MAINTENANCE OF THE PLANT MATERIAL UNTIL THE END OF ESTABLISHMENT OR 60 DAYS AFTER FINAL LANDSCAPE CERTIFICATION BY THE LANDSCAPE ARCHITECT, WHICHEVER IS LATER, & SHALL COORDINATE WITH THE IRRIGATION CONTRACTOR AS NEEDED TO ENSURE ADEQUATE WATER IS SUPPLIED TO THE PLANT MATERIALS DURING ESTABLISHMENT. AT THE END OF THE ESTABLISHMENT PERIOD, THE LANDSCAPE CONTRACTOR SHALL ENSURE THAT THE IRRIGATION TIMECLOCK IS ADJUSTED TO A NORMAL WATERING CYCLE PER THE IRRIGATION WATERING SCHEDULE SHOWN ON THE IRRIGATION PLANS.

2. THE LIFE AND SATISFACTORY CONDITION OF ALL SOD INSTALLED BY THE CONTRACTOR SHALL BE GUARANTEED BY THE CONTRACTOR FOR A MINIMUM OF NINETY (90) CALENDAR DAYS, COMMENCING AT THE TIME OF CERTIFICATION OF ACCEPTABILITY BY THE OWNERS OR OWNER’S DESIGNEE.

3. REPLACEMENT: ANY PLANT NOT IN A HEALTHY, THRIVING GROWING CONDITION SHALL BE REMOVED FROM THE SITE AND REPLACED AS SOON AS WEATHER CONDITIONS PERMIT. SHOULD THE OWNER ELECT, TREES AND PALMS MAY BE GIVEN A PERIOD OF NINETY (90) DAYS BEFORE REMOVAL TO ALLOW THE CONTRACTOR TO RESURRECT THE TREE OR PALM IN QUESTION AND BRING IT TO A THRIVING, HEALTHY CONDITION. ALL REPLACEMENTS SHALL BE PLANTS OF LIKE KIND, CONDITION AND SIZE AS SPECIFIED IN THE PLANT LIST. THEY SHALL BE FURNISHED, PLANTED, AND MULCHED AS SPECIFIED WITHIN THESE SPECIFICATIONS, AT NO ADDITIONAL COST TO THE OWNER. ANY REPAIRS FROM THIS REPLACEMENT MATERIAL SHALL BE SOLELY THE CONTRACTOR’S RESPONSIBILITY. REPLACEMENT MATERIAL SHALL BE GUARANTEED TO A ONE (1) YEAR PERIOD FROM THE DAY OF REPLACEMENT ACCEPTANCE BY THE OWNER. SHOULD REPLACEMENT MATERIAL FAIL WITHIN THE GUARANTEE PERIOD, OWNER MAY OPT FOR A CREDIT OF THE MONETARY AMOUNT FOR THE REPLACEMENT MATERIALS AT A RATE OF THE ORIGINAL CONTRACT BID RATE, IN LIEU OF AN ADDITIONAL REPLACEMENT.

4. IN THE EVENT THE OWNER ELECTS NOT TO CONTRACT WITH THE CONTRACTOR FOR LANDSCAPE (AND IRRIGATION) MAINTENANCE, THE CONTRACTOR IS ENCOURAGED TO VISIT THE PROJECT SITE PERIODICALLY DURING THE ONE (1) YEAR WARRANTY PERIOD TO EVALUATE MAINTENANCE PROCEDURES BEING PERFORMED BY THE OWNER OR THEIR DESIGNEE, AND SHALL NOTIFY THE OWNER IN WRITING OF MAINTENANCE PROCEDURES OR CONDITIONS WHICH THREATEN VIGOROUS AND HEALTHY PLANT GROWTH OF ITEMS UNDER REPLACEMENT WARRANTY. IT IS SUGGESTED SUCH SITE VISITS SHALL BE CONDUCTED A MINIMUM OF ONCE PER MONTH FOR A PERIOD OF TWELVE (12) MONTHS FROM THE DATE OF ACCEPTANCE.

T. FINAL INSPECTION AND ACCEPTANCE OF WORK

1. FINAL INSPECTION BY OWNER OR THEIR DESIGNEE AT THE END OF THE GUARANTEE PERIOD SHALL INCLUDE PLANTING, CONSTRUCTION AND ALL OTHER INCIDENTAL WORK PERTAINING TO THIS CONTRACT. ANY PLANTS NOT MEETING THE CRITERIA OF HEALTHY, VIGOROUS, AND THRIVING AT THIS TIME, AND THAT HAVE NOT ALREADY BEEN REPLACED PREVIOUSLY UNDER SAID WARRANTY, SHALL BE SUBJECT TO THE SAME ONE (1) YEAR GUARANTEE 9OR AS SPECIFIED BY THE OWNER IN WRITING) BEGINNING WITH THE TIME OF REPLACEMENT AND ENDING WITH THE SAME INSPECTION AND ACCEPTANCE HEREIN DESCRIBED.

U. GRADING AND DRAINAGE NOTES

1. PRIOR TO COMMENCING ANY EXCAVATION WORK, THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES IN ACCORDANCE WITH THE “DIG SAFE” NOTIFICATION PROCEDURES PROMOTED BY THE RESPECTIVE UTILITY COMPANIES IN FLORIDA, CALL FLORIDA SUNSHINE AT 811.

2. CONTRACTOR SHALL BLEND NEW EARTHWORK SMOOTHLY INTO EXISTING, PROVIDING VERTICAL CURVES OR ROUNDINGS AT ALL TOP AND BOTTOM OF SLOPES.

3. PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM SLOPE OF ONE-EIGHTH INCH (1/8”) PER FOOT. ANY DISCREPANCIES NOT ALLOWING THIS TO OCCUR SHALL BE REPORTED TO THE OWNER PRIOR TO CONTINUING WORK.

4. WHERE NEW PAVING OR EARTHWORK MEETS EXISTING PAVING OR EARTHWORK, SMOOTHLY BLEND LINE AND GRADE OF EXISTING WITH NEW, WHERE EXISTING VEGETATION IS TO REMAIN, MEET EXISTING GRADES; DO NOT FILL ABOVE BASAL FLARE OF EXISTING TREES.

V. UTILITY PLAN NOTES

1. CONTRACTOR SHALL INSTALL SCHEDULE 80 PVC CONDUIT (SLEEVES) FOR ALL IRRIGATION PIPING UNDER ALL PAVEMENT AREAS TO CONNECT ALL LANDSCAPE AREAS.

W. SITE PREPARATION

1. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL MEET THE OWNER AND IDENTIFY TREES AND SHRUBS WHICH ARE TO BE PROTECTED AS WELL AS THOSE WHICH ARE TO BE REMOVED. DO NO CLEARING WITHOUT A CLEAR UNDERSTANDING OF EXISTING CONDITIONS TO BE PRESERVED.

2. TREES AND SHRUBS TO REMAIN SHALL BE PROTECTED BY THE INSTALLATION OF FENCING AT THE DRIP LINE OR AS DIRECTED BY THE OWNER (SEE LANDSCAPE DETAIL SHEET). PROTECTIVE FENCING SHALL BE INSTALLED PRIOR TO CONSTRUCTION, PROTECTIVE FENCING SHALL BE SUFFICIENT TO PREVENT CONSTRUCTION EQUIPMENT FROM COMPACTING SOIL AT THE ROOT ZONE AND DAMAGING TRUNKS AND BRANCHES.

3. IF, IN ORDER TO PERFORM EXCAVATION WORK, IT SHOULD BECOME NECESSARY TO CUT ROOTS OF PLANTS TO BE SAVED, SUCH ROOTS SHALL BE CUT NEATLY WITH A SMOOTH CLEAN CUT BY A SHARP SAW, COVERED WITH BURLAP, AND KEPT MOIST UNTIL ROOTS ARE BACK FILLED. TEARS OR JAGGED CUTS TO ROOTS ARE UNACCEPTABLE.

4. TREE AND SHRUB REMOVAL SHALL INCLUDE THE FILLING, CUTTING, GRUBBING OUT OF ENTIRE ROOT SYSTEMS AND SATISFACTORY OFF-SITE DISPOSAL OF ALL TREES, SHRUBS, STUMPS, VEGETATIVE AND EXTRANEOUS DEBRIS PRODUCED BY THE REMOVAL OPERATIONS.

5. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE INSIDE AND OUTSIDE THE LIMITS OF CONSTRUCTION DUE TO HIS CONTRACT OPERATIONS.

6. ALL REFUSE, DEBRIS, UNSUITABLE MATERIALS AND MISCELLANEOUS MATERIALS TO BE REMOVED SHALL BE LEGALLY DISPOSED OF OFF-SITE BY CONTRACTOR.

7. ALL INVASIVE EXOTIC VEGETATION SHALL BE DISPOSED OF OR TREATED AS PER THE LOCAL OR REGIONAL GOVERNING AUTHORITIES, REQUIREMENTS OR RECOMMENDATIONS.

X. ROOT CONTROL BARRIER

1. ROOT CONTROL PRODUCT SHALL BE A BIOLOGICAL BARRIER PRODUCT. PRODUCT SHALL BE 810-BARRIER ROOT CONTROL SYSTEM, AS MANUFACTURED BY BBA FIBERWEB/REEMAY, INC. AND DISTRIBUTED BY HORT ENTERPRISES, INC. SEE WWW.BIOBARRIER.COM FOR ADDITIONAL INFORMATION AND PRODUCT SPECIFICATION.
HORT ENTERPRISES, INC.
P.O. BOX 2448
POMPANO BEACH, FL 33061
1-800-966-4678

2. PRODUCT SHALL BE A BIOLOGICAL BARRIER UTILIZING LIME-RELEASE CAPSULES INTEGRATED INTO A GEOTEXTILE FABRIC. ACTIVE HERBICIDE SHALL BE A TRIFLURALIN, AND MINIMUM TIME RELEASE OF EFFECTIVE PRODUCT SHALL BE 1-5 YEARS IN THE MOST ADVERSE CONDITIONS FOR SUCH A PRODUCT. ALTERNATIVELY, A RIGID PHYSICAL ROOT BARRIER SUCH AS ‘DEEP ROOT’ HARD PLASTIC AT LEAST 24” IN DEPTH SHALL BE USED.

3. PRODUCT SHALL BE INSTALLED PER MANUFACTURER’S SPECIFICATIONS AND INSTRUCTIONS FOR ROOT CONTROL SYSTEMS.

4. USE PRODUCT WHERE TREES ARE WITHIN TEN FEET (10’) OR LESS OF HARDSCAPE SURFACES OR UTILITIES INCLUDING BUT NOT LIMITED TO CURBS, SIDEWALKS, STEPS, ROADWAYS, WATER & SEWER LINES. SMALL TREES THAT TYPICALLY MATURE AT 18’ HEIGHT OR LESS REQUIRE ROOT BARRIERS WHERE SMALL TREES ARE WITHIN SIX FEET (6’) OR LESS OF HARDSCAPE SURFACES OR UTILITIES. EXISTING TREES TO BE PRESERVED (THAT ARE NOT WITHIN TEN FEET (10’) OF ANY NEW UTILITIES) DO NOT REQUIRE ROOT BARRIERS. ROOT BARRIERS ARE NOT REQUIRED WHERE PROPOSED TREES ARE LOCATED ADJACENT TO D-TYPE CURBING.

5. USE 36” DEPTH OPTION WHEN USING A BIOLOGICAL ROOT BARRIER. USE 24” DEPTH OPTION WHEN USING RIGID PLASTIC, PHYSICAL ROOT BARRIER SUCH AS ‘DEEP ROOT’.

6. WHERE CONDITIONS REQUIRE PRODUCT AS SET FORTH IN NO. 4 ABOVE, USE PRODUCT IN EITHER DIRECTION FROM THE CENTER OF THE TRUNK ALONG LINEAR FEATURES SUCH AS CURBS, WALKWAYS, ETC. THE INTENT OF THIS SPECIFICATION IS TO PROVIDE A ROOT CONTROL SYSTEM WHERE ROOTS WOULD LIKELY CAUSE PHYSICAL DAMAGE TO ADJACENT HARDSCAPE SURFACES, FOUNDATIONS, UTILITIES, OR OTHER ELEMENTS THAT MAY RECEIVE DAMAGE FROM ROOT SYSTEMS OF TREES. REFER TO NO. 5 ABOVE FOR THE REQUIRED DEPTH OF THE ROOT BARRIERS. THE USE OF ROOT BARRIERS SHALL BE MINIMUM 6' OVERALL LENGTH FROM THE CENTER OF THE TRUNK PARALLEL TO LINEAR FEATURES TO BE PROTECTED FOR SMALL TREES, OR MINIMUM 10' OVERALL LENGTH FROM THE CENTER OF THE TRUNK FOR MEDIUM TO LARGE MATURING SHADE TREES. MINIMUM LENGTHS OF ROOT BARRIER PRODUCTS MAY BE INCREASED BASED ON LENGTH GRAPHICALLY DEPICTED ON PLAN, OR AT THE DISCRETION OF THE LANDSCAPE INSPECTOR. IN PARKING LOT ISLANDS ONLY, THE ROOT BARRIER LENGTH SHALL BE PROVIDED FOR THE FULL LENGTH OF FEATURE (UTILITY, STRUCTURE, OR PAVEMENT) TO BE PROTECTED.

Y. IRRIGATION

1. CONTRACTOR TO PROVIDE AN IRRIGATION DESIGN FOR BOTH LAWN AND BED AREAS UNLESS ALREADY PROVIDED BY THE LANDSCAPE ARCHITECT AS PART OF THE CONTRACT DOCUMENTS. DESIGN TO BE SUBMITTED TO PROJECT LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTOR TO VERIFY STATIC PRESSURE PRIOR TO DESIGN. CONTRACTOR IS RESPONSIBLE FOR ANY PRESSURE REDUCING DEVICES REQUIRED TO MEET PRESSURE REQUIREMENTS. SYSTEM DESIGN TO SHOW ALL VALVES, PIPING, HEADS, BACKFLOW PREVENTION, METERS, AND CONTROLLERS. ALL SLEEVES IN PAVEMENT AREAS MUST BE SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR BACKFLOW PREVENTION DEVICE INSTALLATION AND PERMITTING. CONTRACTOR SHALL NOT INSTALL IRRIGATION IN RIGHT-OF-WAY UNLESS REQUIRED BY CITY. NETAFIM DRIP IRRIGATION TO BE INSTALLED IMMEDIATELY AROUND BUILDING TO PREVENT WATER SPRAY ON BUILDING, WALKS, AND WINDOWS. NETAFIM PIPING TO BE BURIED JUST BENEATH SOIL SURFACE AND COVERED, INSTALLED BY AN OWNER APPROVED CONTRACTOR.

2. DESIGNED SYSTEM SHALL CONSIST OF AN AUTOMATIC, UNDERGROUND IRRIGATION SYSTEM PROVIDING 100% COVERAGE WITH 100% OVERLAP, AND CONTAINING A RAIN SENSOR INSTALLED BY AN OWNER APPROVED CONTRACTOR. THIS SYSTEM SHALL BE INSTALLED AND OPERATIONAL WITHIN TEN (10) DAYS OF THE INITIAL LANDSCAPE INSTALLATION.

SITE NOTES

1. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE FIELD AND REPORT ANY DISCREPANCIES IN THE SITE SURVEY OR DISPOSITION PLAN TO THE OWNER & LANDSCAPE ARCHITECT OF RECORD PRIOR TO STARTING WORK. ANY OVERHEAD POWERLINES, UNDERGROUND UTILITIES, EXISTING TREES, ETC. IN CONFLICT WITH PROPOSED LANDSCAPING, INCLUDING FPL RIGHT-TREE-RIGHT-PLACE GUIDELINES, SHALL BE REPORTED IMMEDIATELY TO THE OWNER’S REPRESENTATIVE OR DESIGNEE, AND TO THE LANDSCAPE ARCHITECT OF RECORD PRIOR TO SUBJECT PLANT MATERIAL INSTALLATION. FAILURE TO NOTIFY THE LANDSCAPE ARCHITECT & OWNER OF ANY DISCREPANCIES SHALL BE THE FULL RESPONSIBILITY OF THE CONTRACTOR AND WILL RESULT IN THE CONTRACTOR MOVING OR REPLACING THE PLANT MATERIAL AT THEIR OWN EXPENSE. LARGE MATURING SHADE TREES (THOSE THAT TYPICALLY GROW TO A SPREAD OR HEIGHT GREATER THAN 25 FEET) SHALL NOT BE PLANTED WITHIN 20 FEET OF ANY OTHER LARGE MATURING SHADE TREES UNLESS OTHERWISE SPECIFICALLY SHOWN ON THE LANDSCAPE PLAN. CONTRACTOR SHALL NOT WILLFULLY INSTALL PLANT MATERIALS IN CONFLICT WITH EXISTING OR PROPOSED SITE FEATURES.

GENERAL PLANTING NOTES

1. THE CONTRACTOR SHALL SUPPLY ALL PLANT MATERIALS IN QUANTITIES SUFFICIENT TO COMPLETE THE PLANTING SHOWN ON THIS DRAWING.
2. ALL BIODEGRADABLE BURLAP SHALL BE UNTIED AND PULLED DOWN TO EXPOSE THE TOP 1/3 OF THE BALL. WIRE BASKETS AND OTHER NON-BIODEGRADABLE MATERIALS ATTACHED TO PLANTS SHALL BE REMOVED PRIOR TO PLANTING. CARE SHALL BE TAKEN NOT TO BREAK OR DISTURB ROOT BALL OF PLANTS.
3. ALL PLANTS SHALL BE WATERED BY HAND IN SUFFICIENT QUANTITIES TO THOROUGHLY WET ENTIRE ROOT SYSTEM IMMEDIATELY AFTER PLANTING.
4. PLANTS SHALL BE GUARANTEED TO A PERIOD OF ONE (1) YEAR AFTER ACCEPTANCE OF THE PROJECT AND SHALL BE VIGOROUS AND THRIVING AT THE END OF THE GUARANTEE PERIOD. SEE SECTIONS S, GUARANTEE FOR MORE DETAILS.
5. CONTRACTOR SHALL LOCATE AND VERIFY ALL EXISTING UTILITY LINES PRIOR TO PLANTING AND SHALL REPORT ANY CONFLICTS TO THE OWNER.
6. CONTRACTOR SHALL FAMILIARIZE HIM/HER -SELF WITH THE LIMITS OF WORK AND EXISTING CONDITIONS AND VERIFY ALL INFORMATION. IF DISCREPANCIES EXIST, CONTRACTOR SHALL NOTIFY OWNER OR OWNER’S DESIGNEE IN WRITING WITHIN SEVEN (7) CALENDAR DAYS OF NOTICE TO PROCEED.
7. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES AND OBTAIN AS-BUILT INFORMATION. DRAWINGS WERE PREPARED ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME. CONTRACTOR SHALL NOTIFY OWNER’S REPRESENTATIVE IN WRITING WITHIN SEVEN (7) CALENDAR DAYS OF NOTICE TO PROCEED OF ANY DISCREPANCIES.
8. CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES FORTY-EIGHT (48) HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES AND OTHER OBSTRUCTIONS AND COORDINATE WITH OWNER’S DESIGNEE IN WRITING PRIOR TO INITIATING OPERATIONS.
9. CONTRACTOR SHALL TAG AND NUMBER ALL PLANT MATERIAL TO BE RELOCATED. THE CONTRACTOR SHALL FULLY ASSIST AND COORDINATE THIS WORK WITH THE OWNER’S DESIGNEE PRIOR TO INITIATING FIELD DIGGING THE TREES.
10. LOCATIONS OF RELOCATED PLANT MATERIAL ARE APPROXIMATED ON THE DRAWINGS. EXACT LOCATIONS OF RELOCATED PLANT MATERIAL WILL BE CLARIFIED BY THE OWNER’S DESIGNEE ON SITE.
11. THE CONTRACTOR SHALL BEAR ALL COSTS OF TESTING SOILS, AMENDMENTS, ETC. ASSOCIATED WITH THE WORK AND INCLUDED IN THE SPECIFICATIONS.
12. TYPICALLY, SHRUB AND GROUNDCOVER PLANTINGS ARE SHOWN IN MASS PLANTING BEDS. PLANTS SHALL BE PLACED ON A LINEAR SPACING CONFIGURATION AROUND BUILDING FOUNDATION AS SHOWN ON DRAWING. PLANT CENTER TO CENTER DIMENSIONS (O.C.) ARE LISTED ON THE PLANT LIST. FOR PERIMETER AND PARKING ISLAND SPACING, USE THE TRIANGULAR SPACING METHOD.
13. CONTRACTOR SHALL FIELD STAKE THE LOCATIONS OF ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE OWNER’S DESIGNEE.
14. CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO ALL EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR’S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER’S DESIGNEE.
15. ALL PLANTING AREAS, UNLESS OTHERWISE NOTED, SHALL INCLUDE A THREE INCH (3”) LAYER OF MULCH AS PER THE SPECIFICATIONS.
16. ALL TREES PLANTED IN LAWN AREAS SHALL RECEIVE A THREE-FOOT DIAMETER (3’) MULCH RING AT DEPTH OF THREE INCHES (3”).
17. ALL EXISTING TREES TO REMAIN IN LAWN AREA SHALL RECEIVE A MULCH RING TWO FEET (2’) OUT FROM EDGE OF TRUNK OR TO THE LIMIT OF THE ADJACENT LAWN AREA AT A DEPTH OF THREE INCHES (3”) AS PER SPECIFICATIONS.
18. ANY SUBSTITUTIONS IN SIZE AND/OR PLANT MATERIAL MUST BE APPROVED BY THE OWNER’S DESIGNEE IN WRITING. ALL PLANTS WILL BE SUBJECT TO APPROVAL BY THE OWNER’S DESIGNEE BEFORE PLANTING CAN BEGIN.
19. PLANT LIST QUANTITIES ARE PROVIDED FOR CONVENIENCE ONLY. IN THE EVENT OF QUANTITY DISCREPANCIES, THE DRAWING SHALL TAKE PRECEDENCE. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT.
20. CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, GENERAL NOTES AND THE PROJECT MANUAL AND SPECIFICATIONS FOR FURTHER AND COMPLETE INSTRUCTIONS.
21. ALL UTILITY BOXES, CLEANOUTS, ETC., SHALL BE PAINTED GREEN IF IN GRASS AREAS AND BROWN IF IN MULCH AREAS.
22. THIS SITE MAY CONTAIN EXISTING TREES WHICH REQUIRE TRIMMING AND/OR PRUNING. THE LANDSCAPE COMPANY/CONTRACTOR MUST HAVE A CERTIFIED ARBORIST ON STAFF TO ENSURE PROPER ISA HORTICULTURAL PROCEDURES ARE FOLLOWED REGARDING THE TRIMMING, PRUNING, TRANSPLANTING, ETC. OF THESE TREES.

THOMAS ENGINEERING GROUP
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PROJECT No.: FJ210016
DRAWN BY: JMG
CHECKED BY: JMG
DATE:
CAD I.D.: FJ210016 LANDSCAPE PLAN

PROJECT:

FORT PIERCE STORAGE FACILITY

FOR

LG FT PIERCE

FORT PIERCE
FLORIDA

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PEPWORTH PROFESSIONAL PLAZA
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MICHAEL D. GROSSWIRTH
REGISTERED LANDSCAPE ARCHITECT
FLORIDA LICENSE No. 6666871
FLORIDA BUSINESS CERT. OF AUTH. No. 27528
REGISTERED LANDSCAPE ARCHITECT MICHAEL D. GROSSWIRTH LA 6666871 STATE OF FLORIDA
March 8, 2022

SHEET TITLE:

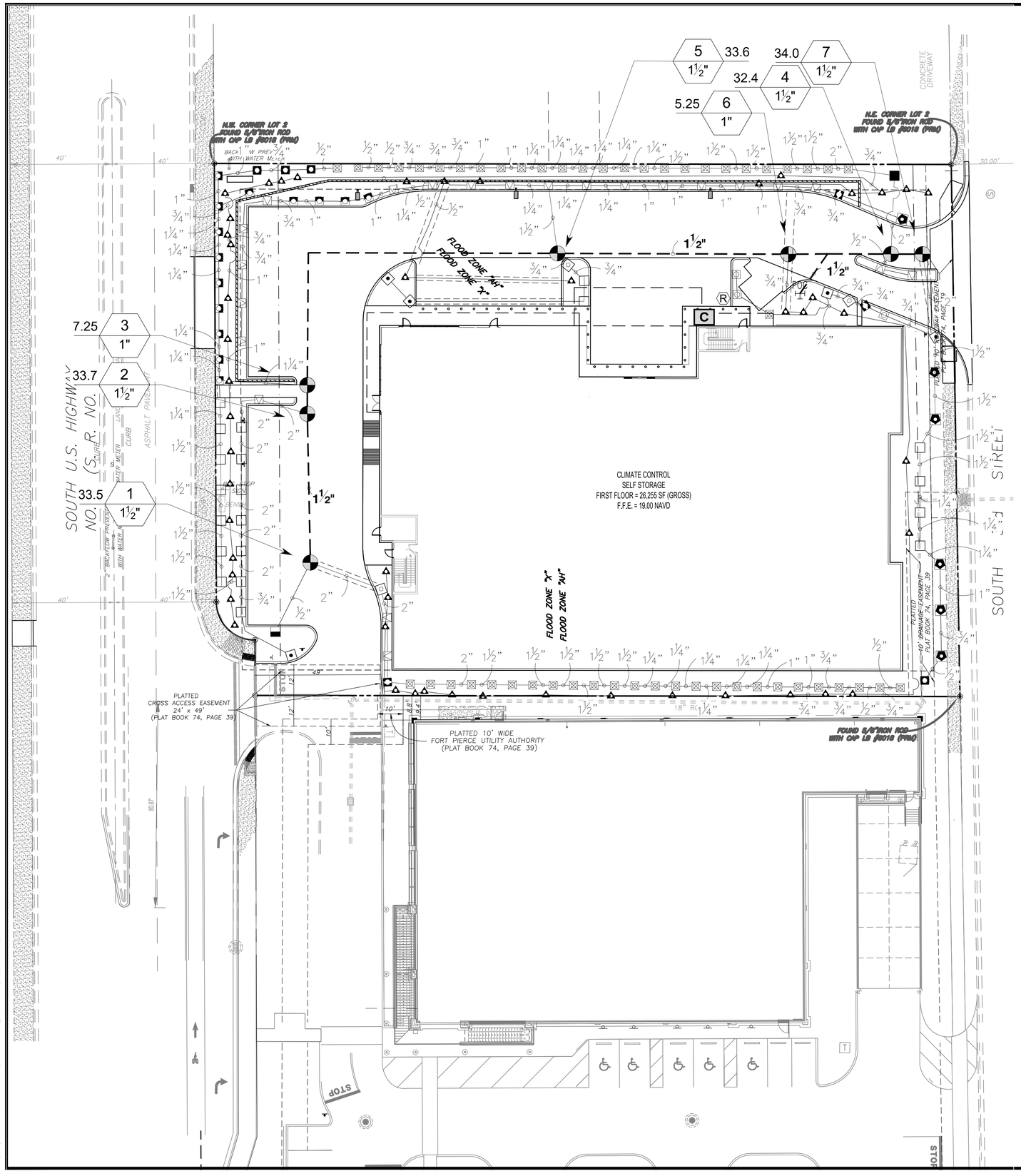
LANDSCAPE GENERAL NOTES

SHEET NUMBER:

L-2.2

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MICHAEL D. GROSSWIRTH, LA6666871 ON 2019-06-24

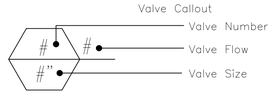
Printed on Tuesday, March 08, 2022, 2:31 PM by Michael Grosswirth
X:\2021\FT210079 – STORAGE FACILITY (US 1 & OHIO AVE), FORT PIERCE\DWG\LANDSCAPE\FJ210016 LANDSCAPE PLAN----->LAYOUT: L-2.2



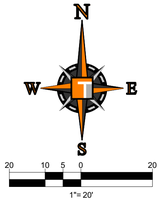
IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
EST LCS RCS CST SST	Rain Bird 1806-PRS 15 Strip Series Turf Spray 6" popup with pressure regulator.	22	30
Q T H F	Rain Bird 1806-PRS 8 Series MPR Turf Spray 6" popup with pressure regulator.	55	30
Q T H F	Rain Bird 1806-PRS 10 Series MPR Turf Spray 6" popup with pressure regulator.	18	30
Q T H TT TQ F	Rain Bird 1806-PRS 12 Series MPR Turf Spray 6" popup with pressure regulator.	20	30
Q T H TT TQ F	Rain Bird 1806-PRS 15 Series MPR Turf Spray 6" popup with pressure regulator.	2	30
4 6 8 10 12 15 18	Rain Bird 1806-PRS ADJ Turf Spray 6" popup with pressure regulator.	17	30
1402 1408 1401 1404	Rain Bird 1804-1400 Flood Flood Bubbler 4" popup	50	40

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
	Rain Bird PEB Electric Remote Control Valve	7
C	Rain Bird ESP-13Mi Modular Controller, 13 stations, indoor model.	1
R	Rain Bird RSD-BEx Rain Sensor, with bracket, extension wire	1
POC H	Point of Connection 2 HP CENTRIFUGAL PUMP @34 GPM, 50 PSI & 4" CASED WELL	1
	Irrigation Lateral Line: Polyethylene and PVC Class 160 Polyethylene SDR-7 up to 1-1/4, then PVC Class 160 SDR 26 for 1-1/2" and larger. Only lateral transition pipe sizes 3/4" and above are indicated on the plan, with all others being 1/2" in size.	2,931 l.f.
	Irrigation Mainline: Polyethylene and PVC Class 200	380.9 l.f.
	Pipe Sleeve: PVC Schedule 80 Typical pipe sleeve for irrigation pipe. Pipe sleeve size shall allow for irrigation piping and their related couplings to easily slide through sleeving material. Extend sleeves 18 inches beyond edges of paving or construction.	248.5 l.f.



PLEASE REFER TO SHEET L-3.1 FOR IRRIGATION SCHEDULES, L-3.2 FOR LANDSCAPE GENERAL NOTES.



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PROJECT No.: FJ210016
DRAWN BY: JMG
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CAD I.D.: FJ210016 IRRIGATION PLAN

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MICHAEL D. GROSSWIRTH
LA 6666871
STATE
REGISTERED LANDSCAPE ARCHITECT
March 8, 2022
FLORIDA LICENSE No. LA6666871
FLORIDA BUSINESS CERTIFICATE OF AUTH. No. 27528

SHEET TITLE:

IRRIGATION PLAN

SHEET NUMBER:

L-3.0

Printed on Tuesday, March 08, 2022, 2:31 PM by Michael Grosswirth
J:\FJ210016 LG FT PIERCE\LDSC\LDSC.APE\FJ210016 IRRIGATION PLAN------XLAYOUT, L-3.0

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IRRIGATION NOTES

1. ALL LOCAL MUNICIPAL AND STATE LAWS, RULES AND REGULATIONS GOVERNING OR RELATING TO ANY PORTION OF THIS WORK ARE HEREBY INCORPORATED INTO AND MADE A PART OF THESE SPECIFICATIONS AND THEIR PROVISIONS SHALL BE CARRIED OUT BY THE CONTRACTOR.
2. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES BEFORE COMMENCING WORK. THE LOCATIONS OF UTILITIES, STRUCTURES AND SERVICES SHOWN IN THESE PLANS ARE APPROXIMATE ONLY. ANY DISCREPANCIES BETWEEN THESE PLANS AND ACTUAL FIELD CONDITIONS SHALL BE REPORTED TO THE OWNER'S REPRESENTATIVE.
3. THE CONTRACTOR SHALL OBTAIN THE PERTINENT ENGINEERING OR ARCHITECTURAL PLANS BEFORE BEGINNING WORK.
4. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS REQUIRED TO PERFORM THE WORK INDICATED HEREIN BEFORE BEGINNING WORK.
5. THIS DESIGN IS DIAGRAMMATIC. ALL EQUIPMENT SHOWN IN PAVED AREAS IS FOR DESIGN CLARITY ONLY AND IS TO BE INSTALLED WITHIN PLANTING AREAS.
6. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY EQUIPMENT AS SHOWN ON THE PLANS WHEN IT IS OBVIOUS IN THE FIELD THAT UNKNOWN CONDITIONS EXIST THAT WERE NOT EVIDENT AT THE TIME THESE PLANS WERE PREPARED. ANY SUCH CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER'S REPRESENTATIVE PRIOR TO ANY WORK OR THE IRRIGATION CONTRACTOR SHALL ASSUME ALL RESPONSIBILITY FOR ANY FIELD CHANGES DEEMED NECESSARY BY THE OWNER.
7. INSTALL ALL EQUIPMENT AS SHOWN IN THE DETAILS AND SPECIFICATIONS. CONTRACTOR SHALL BE RESPONSIBLE TO COMPLY WITH LOCAL CITY, COUNTY AND STATE REQUIREMENTS FOR BOTH EQUIPMENT AND INSTALLATION.
8. ACTUAL LOCATION FOR THE INSTALLATION OF THE BACKFLOW PREVENTER AND THE AUTOMATIC CONTROLLER IS TO BE DETERMINED IN THE FIELD BY THE OWNER'S AUTHORIZED REPRESENTATIVE.
9. CONTRACTOR IS TO PROVIDE AN ADDITIONAL PILOT WIRE FROM CONTROLLER ALONG ENTIRETY OF MAIN LINE TO THE LAST RCV ON EACH AND EVERY LEG OF MAIN LINE. LABEL SPARE WIRES AT BOTH ENDS.
10. ALL PIPE UNDER PAVED AREAS TO BE INSTALLED IN SLEEVING TWICE THE DIAMETER OF THE PIPE CARRIED. SEE LEGEND FOR TYPE. ALL WIRE UNDER PAVED AREAS TO BE INSTALLED IN A SCH. 40 SLEEVE THE SIZE REQUIRED TO EASILY PULL WIRE THROUGH. ALL SLEEVES TO BE INSTALLED WITH A MINIMUM DEPTH AS SHOWN ON THE SLEEVING DETAILS. SLEEVES TO EXTEND AT LEAST 12" PAST THE EDGE OF THE PAVING.
11. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED IN SHRUB OR GROUND COVER AREAS WHERE POSSIBLE. ALL QUICK COUPLER AND REMOTE CONTROL VALVES TO BE INSTALLED AS SHOWN ON THE INSTALLATION DETAILS. INSTALL ALL QUICK COUPLER AND REMOTE CONTROL VALVES WITHIN 18" OF HARDSCAPE.
12. ALL HEADS ARE TO BE INSTALLED WITH THE NOZZLE, SCREEN AND ARCS SHOWN ON THE PLANS. ALL HEADS ARE TO BE ADJUSTED TO PREVENT OVERSPRAY ONTO BUILDINGS, WALLS, FENCES AND HARDSCAPE. THIS INCLUDES, BUT NOT LIMITED TO, ADJUSTMENT OF DIFFUSER PIN OR ADJUSTMENT SCREW, REPLACEMENT OF PRESSURE COMPENSATING SCREENS, REPLACEMENT OF NOZZLES WITH MORE APPROPRIATE RADIUS UNITS AND THE REPLACEMENT OF NOZZLES WITH ADJUSTABLE ARC UNITS.
13. THE CONTRACTOR SHALL USE PROPER GROUNDING TECHNIQUES FOR GROUNDING THE CONTROLLER AND RELATED EQUIPMENT PER MANUFACTURERS SPECIFICATIONS. THOMAS ENGINEERING GROUP RECOMMENDS MEASURING FOR PROPER GROUND AT LEAST ONCE ANNUALLY, AND NECESSARY ADJUSTMENTS MADE TO COMPLY WITH MANUFACTURER SPECIFICATIONS.

NOTE A:
POINT OF CONNECTION SHALL BE A 2 HP SUBMERSIBLE AND A 4" CASED WELL. VERIFY THE ACTUAL LOCATION, SIZE AND WATER PRESSURE IN THE FIELD PRIOR TO STARTING WORK. IF ANY OF THE POC INFORMATION SHOWN ON THESE DRAWING IS FOUND TO BE DIFFERENT THAN THE ACTUAL POC INFORMATION GATHERED IN THE FIELD, IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT AND IRRIGATION CONSULTANT. SHOULD THE CONTRACTOR FAIL TO VERIFY THE POC INFORMATION ANY CHANGES REQUIRED BY LOW PRESSURE OR VOLUME SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

MINIMUM PRESSURE REQUIRED: 36.8 PSI @ POC
DESIGN WATER PRESSURE: 50 PSI
MAXIMUM SYSTEM DEMAND: 33.98 GPM

NOTE B:
CONTROLLER SHALL BE AS NOTED. FINAL LOCATION OF CONTROLLER AND ELECTRICAL POC SHALL BE CONFIRMED WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK. CONTROLLER MAY BE EXISTING WITHIN PUMP HOUSE. REUSE EXISTING CONTROLLER IF POSSIBLE.

NOTE C:
MAINLINE AND RELATED EQUIPMENT SHOWN WITHIN PAVING FOR CLARITY ONLY, ACTUAL MAINLINE AND RELATED EQUIPMENT LOCATION TO BE WITHIN PLANTERS AND A MINIMUM OF 18" OFF ADJACENT HARDSCAPE AND OTHER OBSTACLES TYP.

NOTE D:
CONTRACTOR SHALL ADJUST ALL HEADS AS REQUIRED TO ACCOMMODATE ANY VERTICAL OBSTRUCTIONS THAT MAY OCCUR, INCLUDING BUT NOT LIMITED TO LIGHT POLES, FIRE HYDRANTS, ETC. VERIFY ALL HEAD LAYOUT WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

NOTE E:
BUBBLERS AND LATERAL LINES ARE SHOWN WITHIN PAVING FOR CLARITY ONLY, ACTUAL LOCATION TO BE WITHIN PLANTER. BUBBLERS SHALL BE ALIGNED WITH TREES AND AS DIRECTED BY OWNER'S AUTHORIZED REPRESENTATIVE. CONFIRM ALL LAYOUT IN FIELD WITH OWNER'S AUTHORIZED REPRESENTATIVE PRIOR TO STARTING WORK.

VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	HEADS	WIRE	FRICTION LOSS	PSI	PSI @ POC	PRECIP
1	Rain Bird PEB	1-1/2"	Turf Spray	33.48	30	337.1	2.02	35.58	43.24	0.83 in/h
2	Rain Bird PEB	1-1/2"	Turf Spray	33.74	30	278.8	2.65	36.21	42.67	1.01 in/h
3	Rain Bird PEB	1"	Bubbler	7.25	29	267.6	4.35	46.09	46.45	7.66 in/h
4	Rain Bird PEB	1-1/2"	Turf Spray	32.37	28	158.3	2.31	35.89	36.8	0.78 in/h
5	Rain Bird PEB	1-1/2"	Turf Spray	33.60	28	118.1	3.35	36.91	39.71	1.19 in/h
6	Rain Bird PEB	1"	Bubbler	5.25	21	118.1	8.04	49.75	49.78	7.66 in/h
7	Rain Bird PEB	1-1/2"	Turf Spray	33.98	18	170.7	2.22	35.78	37.07	0.88 in/h
	Common Wire					380.9				

WATERING SCHEDULE

NUMBER	MODEL	TYPE	PRECIP	IN./WEEK	MIN./WEEK	GAL./WEEK	GAL./DAY
1	Rain Bird PEB	Turf Spray	0.83 in/h	1	73	2,444	
2	Rain Bird PEB	Turf Spray	1.0 in/h	1	60	2,024	
3	Rain Bird PEB	Bubbler	7.66 in/h	1	8	58	
4	Rain Bird PEB	Turf Spray	0.78 in/h	1	78	2,525	
5	Rain Bird PEB	Turf Spray	1.19 in/h	1	51	1,714	
6	Rain Bird PEB	Bubbler	7.66 in/h	1	8	42	
7	Rain Bird PEB	Turf Spray	0.88 in/h	1	69	2,344	
		TOTALS:			347	11,151	

CRITICAL ANALYSIS

Generated:	2022-02-22 13:50
P.O.C. NUMBER: 01	
Water Source Information:	2 HP CENTRIFUGAL PUMP @34 GPM, 50 PSI & 4" CASED WELL
FLOW AVAILABLE	
Custom Max Flow:	34 GPM
Flow Available	34 GPM
PRESSURE AVAILABLE	
Static Pressure at POC:	50.00 PSI
Pressure Available:	50.00 psi
DESIGN ANALYSIS	
Maximum Station Flow:	33.98 GPM
Flow Available at POC:	34 GPM
Residual Flow Available:	0.02 GPM
Critical Station:	6
Design Pressure:	40 PSI
Friction Loss:	7.29 PSI
Fittings Loss:	0.75 PSI
Elevation Loss:	0 PSI
Loss through Valve:	1.71 PSI
Pressure Req. at Critical Station:	49.76 PSI
Loss for Fittings:	0 PSI
Loss for Main Line:	0.02 PSI
Loss for POC to Valve Elevation:	0 PSI
Loss for Backflow:	0 PSI
Critical Station Pressure at POC:	49.78 PSI
Pressure Available:	50 PSI
Residual Pressure Available:	0.22 PSI

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March 8, 2022
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SHEET TITLE:
IRRIGATION NOTES & SCHEDULES

SHEET NUMBER:
L-3.1

Printed on Tuesday, March 08, 2022, 2:31 PM by Michael Grosswirth
C:\USERS\MGROSSWIRTH.CLYDEMOLLANDSC.APEX\FJ210016 IRRIGATION PLAN - - - - XLAYOUT: L-3.1

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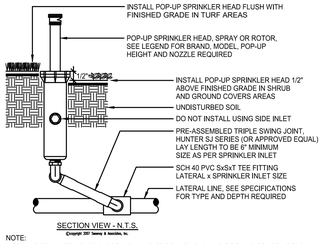
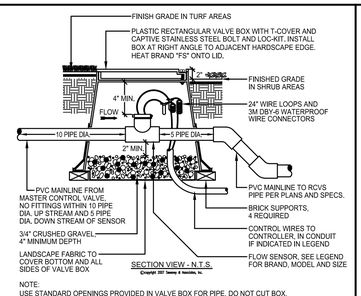


NOTE:
INSTALL SPRINKLER HEADS 6" FROM PAVING EDGE IN SHRUB AND GROUND COVER AREAS.
INSTALL SPRINKLER HEADS 12" FROM THE FACE OF BUILDING WALLS OR WINDOWS.
INSTALL SPRINKLER HEADS 4" FROM PAVING EDGE IN TURF AREAS.

INSTALL SPRINKLER HEADS PLUMB. ADJUST SPRAYS OR NOZZLE STREAM TO COVER LANDSCAPE AREA WITHOUT OVERSPRAY ONTO PAVING, FENCES, WALLS OR BUILDINGS.

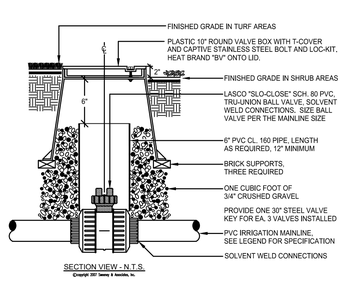
Ⓐ POP-UP SPRINKLER



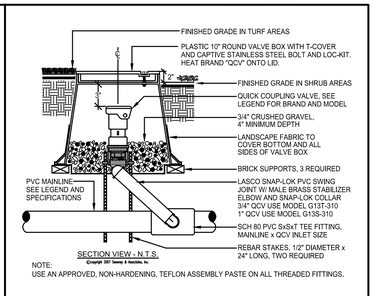
NOTE:
USE STANDARD OPENINGS PROVIDED IN VALVE BOX FOR PIPE, DO NOT CUT BOX.

USE SCH 80 PVC 45 DEGREE ELLS TO ACHIEVE MAINLINE DEPTH AS REQUIRED.

Ⓒ FLOW SENSOR

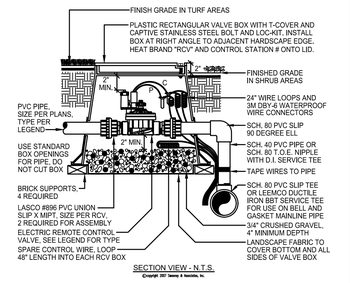


Ⓓ BALL VALVE

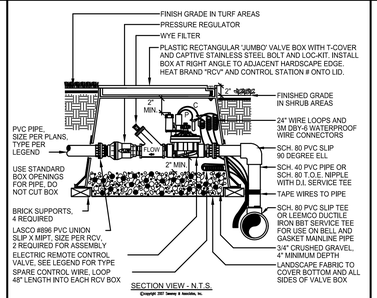


NOTE:
USE AN APPROVED, NON-HARDENING, TEFLON ASSEMBLY PASTE ON ALL THREADED FITTINGS.

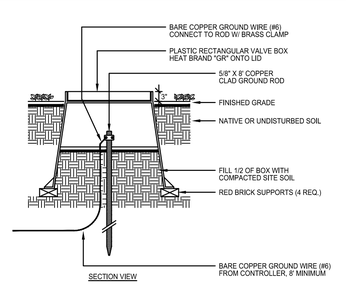
Ⓔ QUICK COUPLER VALVE



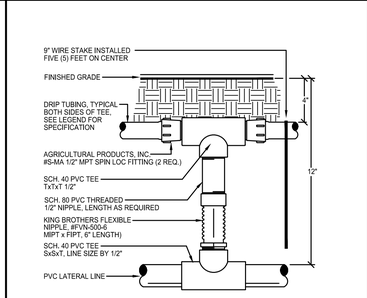
Ⓕ REMOTE CONTROL VALVE



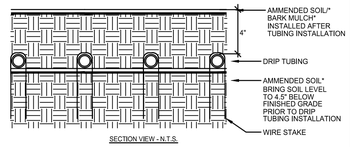
Ⓖ DRIP RCV ASSEMBLY



Ⓘ GROUND ROD INSTALLTION



Ⓙ DRIPLINE TUBING



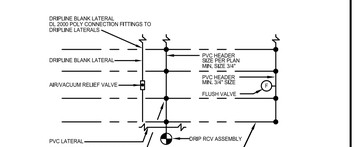
RECOMMENDED INSTALLATION: * AS PER LANDSCAPE DRAWINGS

TO INSURE EVEN PARALLEL AND LEVEL TUBING ROWS IT IS RECOMMENDED THAT THE SOIL LEVEL IN THE PLANTER AREAS BE BROUGHT TO 4.5" BELOW FINISHED GRADE AND PROPERLY COMPACTED AS PER THE LANDSCAPED DRAWINGS PRIOR TO THE INSTALLATION OF THE TUBING.

INSTALL TUBING AS INDICATED ON THESE DRAWINGS AND SECURE TO GRADE USING WIRE HOOP STAKES AT 5 FEET ON CENTER SPACING.

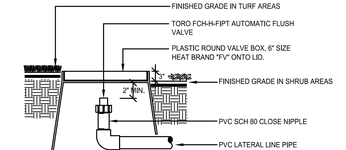
BACKFILL FINAL 4.5" OF SOIL/BARK MULCH OVER THE TUBING AFTER INSTALLATION OF THE TUBING AND OBSERVATION BY THE OWNER'S AUTHORIZED REPRESENTATIVE.

Ⓚ DRIPLINE CONNECTION(SECTION)

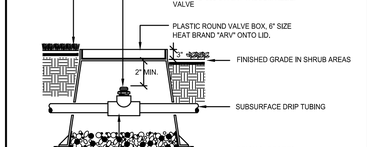


INSTALL DRIP FLUSH VALVE PER DETAIL AT THE END OF EACH TUBING SECTION PER PLAN
INSTALL AIR RELIEF VALVES PER DETAIL AT HIGH POINTS OF EACH TUBING SECTION PER PLAN.
RUN AIR/VACUUM RELIEF BLANK TUBING LATERAL ALONG HIGH POINT OF MOUND OR BERM.
ATTACH ALL IN-LINE DRIP TUBING TO BLANK LATERAL. MORE THAN TWO RELIEF VALVES MAY NEED TO BE INSTALLED PER SECTION

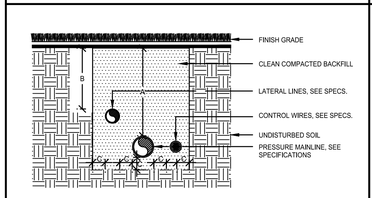
Ⓛ DRIPLINE CONNECTION(PLAN)



Ⓜ DRIP FLUSH VALVE

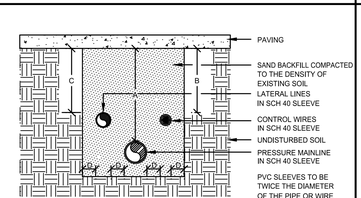


Ⓝ DRIP AIR RELIEF VALVE



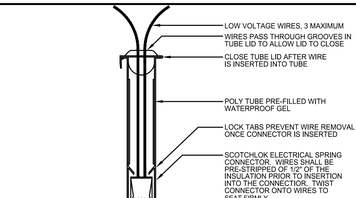
DIMENSION	A	B	C
1/2" TO 2-1/2" IN SIZE	18"	12"	4"
3" TO 6" IN SIZE	24"		4"

Ⓞ PIPE INSTALLATION



DIMENSION	A	B	C	D
1 1/2" TO 6" IN SIZE	36"	24"	24"	4"

Ⓟ SLEEVE INSTALLATION

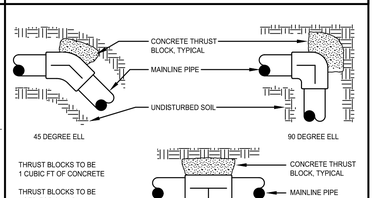


NOTE:
WIRE CONNECTOR SHALL BE A 3M DBY-6 DIRECT BURY SPLICE KIT.

KIT SHALL INCLUDE A SCOTCHLOK Y SPRING CONNECTOR, A POLYPROPYLENE TUBE AND A WATERPROOF SEALING GEL. TUBE SHALL BE SUPPLIED PREFILLED WITH GEL.

DIRECT BURY SPLICE KIT SHALL BE USED TO ELECTRICALLY CONNECT 2 - 3 #14 OR 2 #12 PRE-STRIPPED COPPER WIRES. LARGER WIRES OR GREATER QUANTITIES OF WIRES SHALL REQUIRE A LARGER APPROVED WIRE CONNECTION.

Ⓠ WIRE CONNECTION



Ⓡ THRUST BLOCKING

NOTE: DISCHARGE PIPES & HEADER TO IRRIGATION MAIN SHALL BE SCHED 40 GALVANIZED STEEL PIPE WITH GALV. ROLL GROOVE FITTINGS. PUMP DROP PIPE SHALL BE HDPE HEAT FUSED OR SCHED 40 GALV. STEEL SET PUMP 60' ON 2" PIPE. INSTALL MOTOR CABLE SPLICE BETWEEN MOTOR AND CONTROL PANEL IN NEMA 4X JUNCTION BOX ADJACENT TO WELL IN ACCORDANCE WITH ELECTRICAL CODES.

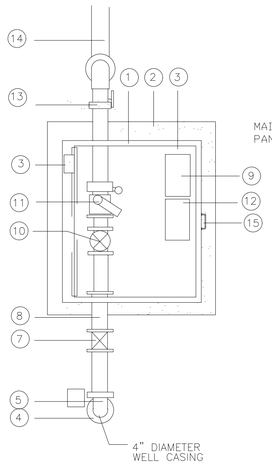
WELL DRILLER SHALL NOTIFY THE PUMP SYSTEM MANUFACTURER IN WRITING WITHIN 24 HOURS OF DEVELOPING THE WELL IF THE WELL PUMPING LEVEL IS GREATER THAN 50' BELOW FINISHED GRADE AFTER 8 HOURS OF CONTINUOUS PUMPING AT 150% OF THE DESIGN FLOW BELOW.

PROVIDE MINIMUM OF 4' CLEARANCE ON ALL SIDES OF PUMP SYSTEM

* OPTIONAL FEATURES ARE INCLUDED IF MARKED WITH AN "X"

X VARIABLE FREQUENCY DRIVE
_ IRRIGATION CONTROLLER _ STATIONS, WITH RAIN SENSOR ON 8' POLE
_ PRESSURE TANK FOR PRESSURE DEMAND SYSTEM

SAFETY FEATURES:
CLOCK START:
-LOSS OF PRIME
-OVERHEAT
-TRANSIENT SURGE



MAINTAIN 3.5' CLEARANCE IN FRONT OF CONTROL PANEL AND 4' ALL SIDES OF PUMP SYSTEM.

1 3' X 3' FIBERGLASS REINFORCED ENCLOSURE (OPTIONAL) FOREST GREEN GELCOAT FINISH
2 48" X 48" REINFORCED CONCRETE PAD (4" THICK)
3 JUNCTION BOX WITH 110VAC POWER AND PUMP START CIRCUIT FOR CUSTOMER FURNISHED AND INSTALLED IRRIGATION CONTROLLER
4 WELL SEAL
5 WELL, JUNCTION BOX & DISCHARGE PIPE
6 SUBMERSIBLE PUMP MOTOR ASSEMBLY 3 HP (NOT SHOWN)
7 CHECK VALVE
8 GALV. STEEL DISCHARGE
9 VARIABLE FREQUENCY DRIVE
10 FLOW METER OUTSIDE ENCLOSURE ON DISCHARGE
11 PRESSURE TRANSDUCER
12 CONTROL PANEL ASSEMBLY UL LISTED MAINTAIN 42" CLEARANCE MOUNTED ON BACK OF ENCLOSURE
13 DISCHARGE VALVE
14 3" x 36" PVC SCH 40 GROOVED NIPPLE FOR FOR TIE-IN TO IRRIGATION MAINLINE
15 LOCKABLE HANDLE

PLAN VIEW NTS

ELECTRIC SERVICE TO BE, IN ORDER OF PREFERENCE:
460V 3-PHASE, 230V CLOSED-DELTA 3-PHASE, 208 WYE 3-PHASE,
230 1-PHASE, 208V 1-PHASE, 230 OPEN-DELTA 3-PHASE.

PUMP PERFORMANCE
34 GPM @ 120 TDH, 50 PSI DISCHARGE PRESSURE
MINIMUM FLOW 12 GPM

FRANKLIN PUMPING MODEL: #35FA3S4-PE
Pompano Beach, Florida, Tel: 954-971-7350
OR APPROVED EQUAL

SUBMERSIBLE PUMP SYSTEM DETAIL

FIBERGLASS ENCLOSED SINGLE WELL SUCTION
VARIABLE FREQUENCY DRIVE (VFD) CLOCK START
OR APPROVED EQUAL

THOMAS ENGINEERING GROUP
CIVIL ENGINEERS - PROJECT MANAGERS - LAND PLANNING - LANDSCAPE ARCHITECTS
6300 NW 31ST AVE. SUITE 602 FT. LAUDERDALE, FL 33309 P: 954-202-71000
4950 W. KENNEDY BLVD. SUITE 600 TAMPA, FL 33609 P: 813-379-4100
125 W INDIANTOWN RD. SUITE 206 JUPITER, FL 33458 P: 561-203-7503
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REVISIONS:

REV:	DATE:	COMMENT:	BY:

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PROJECT No.: FJ210016
DRAWN BY: JMG
CHECKED BY: JMG
DATE:
CAD I.D.: FJ210016 IRRIGATION PLAN

PROJECT:

FORT PIERCE STORAGE FACILITY

FOR

LG FT PIERCE

FORT PIERCE
FLORIDA

THOMAS ENGINEERING GROUP
PEPWORTH PROFESSIONAL PLAZA
125 W. INDIANTOWN RD. SUITE 206
PH: (561) 203-7503
FX: (561) 203-7721
www.ThomasEngineeringGroup.com

MICHAEL D. GROSSWIRTH
LA 6666871
STATE
REGISTERED LANDSCAPE ARCHITECT
March 8, 2022
LICENSE No. 6666871
FLORIDA BUSINESS No. LC26000471
MICHAEL D. GROSSWIRTH, No. 27528

SHEET TITLE:

IRRIGATION DETAILS

SHEET NUMBER:

L-3.2

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MICHAEL D. GROSSWIRTH, LA6666871 ON 2019-06-24

Printed on Tuesday, March 08, 2022, 2:31 PM by Michael Grosswirth
C:\USERS\MGROSSWIRTH\DOCUMENTS\CLIENTWORK\LANDSCAPE\FJ210016 IRRIGATION PLAN-----JAARVIR L-3.2

Project		Catalog #		Type	S1
Prepared by		Notes		Date	

McGraw-Edison

GALN Galleon II

Area / Site Luminaire

Typical Applications

Outdoor • Parking Lots • Walkways • Roadways • Building Areas

Interactive Menu

- Ordering Information page 2
- Mounting Details page 3
- Optical Distributions page 5
- Product Specifications page 5
- Energy and Performance Data page 6
- Control Options page 10

Product Certifications

Resources

Quick Facts

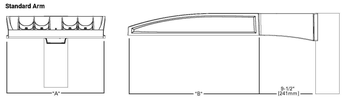
- Lumen packages range from 3,300 - 73,500 (33W - 552W)
- 16 optical distributions
- Efficacy up to 159 lumens per watt

Connected Systems

- WaveLinx Lite
- WaveLinx

Dimensional Details

Standard Arm



Number of Light Squares	Width "A"	Housing Length "B"	Weight with Standard or QM Arm	EPA with Standard or QM Arm
1-4	16"	22"	29 lb	0.55
5-6	22"	22"	39 lb	0.95
7-9	22"	28 1/8"	48 lb	1.1

NOTES:
*For arm selection requirements and additional line art, see Mounting Details section.

COOPER Lighting Solutions

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August 2, 2021 1:53 PM

Project		Catalog #		Type	W1-2
Prepared by		Notes		Date	

McGraw-Edison

GWC Galleon Wall

Wall Mount Luminaire

Typical Applications

Exterior Wall • Walkway

Interactive Menu

- Ordering Information page 2
- Product Specifications page 2
- Optical Configurations page 3
- Energy and Performance Data page 4
- Control Options page 6

Product Certifications

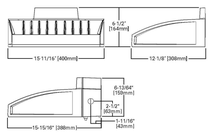
Quick Facts

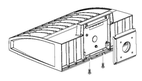
- Choice of thirteen high-efficiency, patented AccuLED Optics™
- Downward and inverted wall mounting configurations
- Eight lumen packages from 3,215 up to 17,056
- Efficacies up to 154 lumens per watt

Connected Systems

- WaveLinx
- Enlighted

Dimensional Details





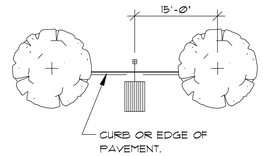
COOPER Lighting Solutions

PS500045EN page 1
April 12, 2021 1:55 PM

2 SL1 *LIGHTING FIXTURES*
N.T.S.

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	Lum. Watts
□	1	W1	SINGLE	N.A.	0.900	GWC-AF-02-LED-E1-SL4	113
□	3	W2	SINGLE	N.A.	0.900	GWC-AF-02-LED-E1-T4FT-1200	129
•	4	S1	SINGLE	N.A.	0.900	GALN-SA2C-740-U-T4FT-HSS	108

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
PARKING AND DRIVELANE	Illuminance	Fc	2.97	7.8	0.9	3.30	8.67
PROPERTY LINE	Illuminance	Fc	0.06	0.3	0.0	N.A.	N.A.



3 SL1 *LIGHT/TREE SPACING*
NTS

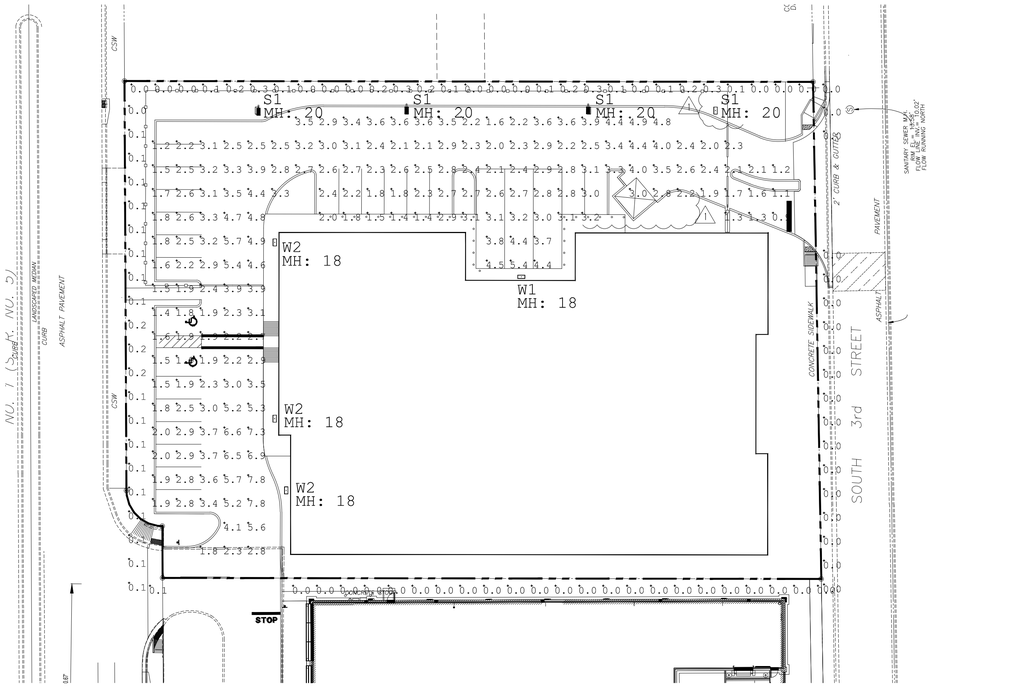
1. ILLUMINANCE IS GIVEN IN HORIZONTAL FOOTCANDLES
2. LIGHTING DESIGN DERIVED FROM PUBLISHED IES PHOTOMETRIC FILES

CROSS VERIFY VOLTAGE / PHASE W/ PROJECT CONDITIONS PRIOR TO ORDERING W/ ARCHITECT / OWNER. LIGHTING FIXTURES MARKED WITH (•) ARE PRODUCT SPECIFIC AND ARE NOT TO BE SUBSTITUTED WITHOUT SPECIFIC APPROVAL WITH ARCHITECT / OWNER PRIOR TO START OF CONSTRUCTION. THESE FIXTURES ARE PART OF A LIGHTING ANALYSIS FOR THE EXTERIOR OF THE BUILDING. FOR ADDITIONAL INFORMATION REGARDING LIGHTING PRODUCTS CONTACT: "MATT MARSHALL" AT "LIGHTING DYNAMICS, INC." 1835 W. COMMERCIAL BLVD. TAMARAC, FL. 33351 (954) 944-0286

SUBMITTALS OF ALTERNATE LIGHT FIXTURES REQUIRE COMPLETE PHOTOMETRICS SIGNED AND SEALED BY FLORIDA REGISTERED, LICENSED ELECTRICAL ENGINEER FOR ARCHITECTS REVIEW AND IF ACCEPTABLE SUBMITTAL TO BUILDING DEPARTMENT FOR PERMIT REVISION BY GENERAL CONTRACTOR AT CONTRACTOR'S EXPENSE.

NOTE:

AN OUTDOOR LIGHTING INSTALLATION SHALL NOT BE PLACED IN PERMANENT USE UNTIL A LETTER OF COMPLIANCE SIGNED AND SEALED BY A REGISTERED ENGINEER OR ARCHITECT IS PROVIDED TO THE CITY STATING THE THE LIGHTS HAVE BEEN FIELD-TESTED AND MEET THE STANDARDS OF THIS CODE.



1 SL-1 *SITE PHOTOMETRIC*
SCALE: 1" = 30'-0"

NORTH

GRAPHIC SCALE
30 0 15 30 60
(in feet)
1 inch=30 ft

KENNETH R. CARLSON – ARCHITECT, P.A.
1166 W. NEWPORT CENTER DR., SUITE #11
DEERFIELD BEACH, FLORIDA 33442
PH. (954) 427 - 9848 FAX (954) 427 - 9329
e-mail: kenc@kencarlson.com
AA C00818

FORT PIERCE SELF-STORAGE
SOUTH U.S. HIGHWAY
FORT PIERCE, SAINT LUCIE COUNTY, FL.

Revisions:
07/07/22 CITY COMMENTS

DRAWN BY: FS
CHECKED BY: KRC
DATE: 09/23/2021
SCALE: AS NOTED
PROJECT #: 21061
CAD DWG FILE: SL-1

KENNETH R. CARLSON
AR12546

SHEET OF
SL-1
PAGE OF