

CITY OF GREEN COVE SPRINGS PLANNING & ZONING BOARD MEETING

321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA
TUESDAY, JANUARY 26, 2021 – 5:00 PM



AGENDA

GENERAL INFORMATION

ANYONE WISHING TO ADDRESS THE PLANNING AND ZONING BOARD REGARDING ANY TOPIC ON THIS EVENING'S AGENDA IS REQUESTED TO COMPLETE A CARD AVAILABLE AT THE CLERK'S DESK. SPEAKERS ARE RESPECTFULLY REQUESTED TO LIMIT THEIR COMMENTS TO THREE (3) MINUTES.

THE PLANNING AND ZONING BOARD PROHIBITS THE USE OF CELL PHONES AND PAGES WHICH EMIT AN AUDIBLE SOUND DURING ALL MEETINGS WITH THE EXCEPTION OF LAW ENFORCEMENT, FIRE AND RESCUE, OR HEALTH CARE PROFESSIONALS ON CALL. PERSONS IN VIOLATION WILL BE REQUESTED TO LEAVE THE MEETING.

THIS WILL BE AN IN-PERSON MEETING. PLEASE FOLLOW SOCIAL DISTANCING PROTOCOLS

ROLL CALL

APPROVAL OF MINUTES

1. Review and approval of the meeting minutes for December 8, 2020.

PUBLIC HEARINGS

2. Review of Special Exception Application for Alcohol Sales for Off-Site Consumption at 26 N Orange Avenue for Green Cove Liquors
3. Review and recommendation on Ordinance No. O-16-2020, amending Section 101-5 to add new definitions and revise definitions for lot width and setback, establishing Section 101-160 concerning flag lot requirements, and amending Sections 113-131 and 113-132 to revise access requirements.

ACTION ITEMS

4. Review of Revised Site Development Plan for Harbor Road Wastewater Treatment Facility

BOARD BUSINESS

BOARD DISCUSSION / COMMENTS

STAFF COMMENTS

ADJOURNMENT

NEXT MEETING: TUESDAY, FEBRUARY 23, 2021 AT 5:00PM

Minutes of the Planning & Zoning Board Meeting can be obtained from the City Clerk's office. The Minutes are recorded, but are not transcribed verbatim.

Persons requiring a verbatim transcript may make arrangements with the City Clerk to duplicate the recordings, or arrange to have a court reporter present at the meeting. The cost of duplication and/or court reporter will be at the expense of the requesting party.

ADA NOTICE

In accordance with Section 286.26, Florida Statutes, persons with disabilities needing special accommodations to participate in this meeting should contact the City Clerk's office no later than 5:00 p.m. on the day prior to the meeting.

EXPARTE COMMUNICATIONS

Oral or written exchanges (sometimes referred to as lobbying or information gathering) between a Special Magistrate and others, including staff, where there is a substantive discussion regarding a quasi-judicial decision by the Special Magistrate. The exchanges must be disclosed by the Special Magistrate

CITY OF GREEN COVE SPRINGS PLANNING & ZONING BOARD MEETING

321 WALNUT STREET, GREEN COVE SPRINGS, FLORIDA
TUESDAY, DECEMBER 08, 2020 – 4:30 PM



MINUTES

ROLL CALL

PRESENT

Chairman Henrietta Francis
Vice Chair Gary Luke (*via Microsoft Teams*)
Board Member Brian Cook
Board Member Justin Hall
Board Member Richard Hobbs (*arrived at 4:47PM*)

APPROVAL OF MINUTES

1. *Review and approval of the 11/17/2020 Planning & Zoning Board Meeting Minutes*

Motion to approve made by Board Member Cook, **Seconded** by Board Member Hall.
Voting Yea: Chairman Francis, Vice Chair Luke, Board Member Cook, Board Member Hall.
Absent during voting: Board Member Hobbs.

Motion passes 4-0.

PUBLIC HEARINGS

2. *Review of Special Exception Application for an Enclosed Garage exceeding 12 Feet in Height*

Mr. Daniels presented the application to the board. To comply with the compatibility requirement, the applicant has proposed hardiboard siding and metal roofing for the primary structure. Mr. Daniels stated the garage meets the Special Exception criteria. In respond to a question from City Attorney Arnold, Mr. Daniels indicated the building does not have to be attached, but if it were, a special exception would not be required.

Chairman Francis opened the public hearing. The applicant, Richard Gambill, was present. She asked if there are any questions for Mr. Gambill. Board Member Cook asked whether the RV Mr. Gambill would like to store is currently on the property. Mr. Gambill indicated it is not.

Chairman Francis closed the public hearing.

Vice Chair Luke asked whether the siding of the principal structure and accessory structure would be the same. Mr. Daniels felt the requirement would be met by the metal roof. Vice

Chair Luke asked if the two structures would be the same color. Mr. Gambill indicated they would be.

Chairman Francis requested a motion.

Motion to approve 202001017 to permit a Special Exception for an accessory structure greater than 12 feet in height at 1514 Thomas Street subject to the following conditions:

1. The accessory structure must have architectural finishes compatible with the principal structure within one year of approval of the Special Exception, including the proposed matching metal roofs.

Board Member Hobbs arrived at 4:47PM.

Chairman Francis called for any additional discussion. With no further discussion, Chairman Francis called for the vote.

Motion made by Board Member Hall, **Seconded** by Board Member Cook. **Voting Yea:** Chairman Francis, Vice Chair Luke, Board Member Cook, Board Member Hall, Board Member Hobbs

Motion passes 5-0.

3. ***Review and recommendation on Ordinance No. O-16-2020, amending Section 101-5 to add new definitions and revise definitions for lot width and setback, establishing Section 101-160 concerning flag lot requirements, and amending Sections 113-131 and 113-132 to revise access requirements.***

Mr. Daniels explained the purpose behind the ordinance and presented the proposed ordinance to the Board. In response to questions from Vice Chair Luke, Mr. Daniels explained there are about 20 flag lots and explained how their creation may have been justified in the past based on an interpretation of the code. Vice Chair Luke asked for City Attorney Arnold's opinion. Mr. Daniels added an explanation that the City had closed Hazel Street in 1974, which is the road the Bishop lot would have fronted if it hadn't been closed.

Chairman Francis called for additional questions. Vice Chair Luke requested additional time to review the ordinance. Mr. Daniels indicated it could be tabled to the January meeting.

Mr. Daniels asked if Vice Chair Luke would like any additional information for review. He indicated he will review the deeds for the existing flag lots. He would also like to review the land development regulations to ensure there is a problem and this ordinance fixes it.

Board Member Cook requested clarification that the ordinance being proposed is to remove ambiguity from the code, that it will not allow additional flag lots to be created. He asked what's in the best interest of the community, to leave the lots undevelopable or allow them to develop through these proposed ordinance changes. Board Member Cook expressed support for tabling the motion.

Board Member Hall asked if we know how many of these lots are undeveloped. Mr. Daniels indicated we could review it and provide that information. Board Member Cook asked if it could be done as a Special Exception. City Attorney Arnold agreed a Special Exception could work and specific criteria that must be met could be established. Mr. Daniels explained that was the point of 101-160, although more requirements could be added. Board Member Cook added that they should be a Special Exception so they undergo review on a case-by-case basis due to the concerns related to flag lots Mr. Daniels mentioned in his presentation, such as safety and access. Board Member Cook also mentioned the importance of neighbors being able to be heard.

Mr. Kennedy explained benefits to the proposed ordinance - cleaning up ambiguity, encouraging in-fill development.

Mr. Daniels suggested adding the requirement to get a Special Exception if they meet the flag lot criteria. Board Member Cook indicated support for that and requested Vice Chair Luke's opinion. Vice Chair Luke requested additional time to review changes and inconsistencies, and he would like to see the Special Exception language added.

Motion to table the ordinance to the January meeting with the provision that the requirement to get a Special Exception be added.

Motion made by Board Member Hobbs, **Seconded** by Vice Chair Luke.
Voting Yea: Chairman Francis, Vice Chair Luke, Board Member Cook, Board Member Hall, Board Member Hobbs

Motion passes 5-0.

BOARD BUSINESS

4. *Comprehensive Plan Discussion*

Mr. Daniels let the Board know the RFP was sent out on 11/25/2020. Mr. Daniels went over the evaluation criteria and the process for the Selection Committee. After completion of consultant interviews, the selection committee could vote and then an agreement be drafted and taken to Council.

Mr. Daniels explained for the selection committee, it would be best to have a Planning & Zoning Board member, a Council member, and three staff members. Board Member Cook expressed interest in being on the committee.

Board Member Cook, Mr. Daniels, and Mr. Kennedy discussed the budget for the project. Mr. Kennedy added that some CARES Act funding may be allocated toward the process due to changes in the regulations.

Board Member Cook suggested a Work Breakdown structure to provide clarity as to what we expect of the consultant.

STAFF COMMENTS

Mr. Daniels discussed receiving an annexation application for the Gustafson property from D.R. Horton.

ADJOURNMENT

5:57PM

NEXT MEETING: TUESDAY, JANUARY 26, 2021 AT 5:00PM

CITY OF GREEN COVE SPRINGS, FLORIDA

Henrietta Francis, Chairman

Attest:

Heather Glisson, Planning & Zoning Clerk



STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: Planning & Zoning Board **MEETING DATE:** January 26, 2021
FROM: Michael Daniels, AICP, Planning & Zoning Director
SUBJECT: Review of Special Exception Application for Alcohol Sales for Off-Site Consumption at 26 N Orange Avenue for Green Cove Liquors

PROPERTY DESCRIPTION

APPLICANT: James Van Laere **OWNER:** Rusty Chaney
PROPERTY LOCATION: 26 N Orange Avenue
PARCEL NUMBER: 017251-000-00
FILE NUMBER: 202001169
CURRENT ZONING: CBD – Central Business District
FUTURE LAND USE DESIGNATION: CHI – Commercial High Intensity

SURROUNDING LAND USE

<p>NORTH: FLU: CHI Z: CBD Use: Convenience Store (H&H)</p>	<p>SOUTH: FLU: CHI Z: CBD Use: Restaurant / Event Space / Retail</p>
<p>EAST: FLU: CHI Z: CBD Use: Vacant (Clay Theatre Parking)</p>	<p>WEST: FLU: CHI Z: CBD Use: Restaurant (Sweet Sensations)</p>

BACKGROUND

James Van Laere, owner of Green Cove Liquors, is requesting a special exception for alcohol sales for off-site consumption at 26 N Orange Avenue. The applicant currently operates Green Cove Liquors at 208 N Orange Ave and is relocating the business to this site.

Historically, there is no record of a special exception for alcohol sales (on-site or off-site consumption) being granted for the property, however, La Casita does have an alcohol license through the Florida Department of Professional Regulation.

Special Exception Review Criteria

When deciding on special exception requests, the Planning and Zoning Board (PZB) will ensure the following criteria are satisfied:

- (1) Compliance with all elements of the comprehensive plan.
The proposed use is consistent with the Future Land Use Objective 1.6.1(b)(3): "Commercial High Intensity. This category consists of a wide array of commercial uses, such as hotels, motels, automobile sales, service and repair, housing above businesses, churches and others. The maximum Floor Area Ratio shall be .40" and Objective 1.6.1(b)(4): "Central Business District. This category consists of retail and service establishments consistent with the redevelopment of the downtown area. The maximum Floor Area Ratio shall be 2.0."
- (2) The establishment, maintenance or operation of the special exception will not be detrimental to or endanger the public health, safety or general welfare, and is not contrary to established standards, regulations or ordinances of other governmental agencies.
The proposed development will be consistent with the existing neighborhood and will not negatively impact the area
- (3) Each structure or improvement is so designed and constructed that it is not unsightly, undesirable or obnoxious in appearance to the extent that it will hinder the orderly and harmonious development of the city and the zoning district in which it is proposed.
No construction or improvements are being proposed as part of this special exception. Any building or site permits that are requested for the development of the site will be reviewed under a separate permit.
- (4) The special exception will not adversely impact the permitted uses in the zoning district nor unduly restrict the enjoyment of other property in the immediate vicinity nor substantially diminish or impair property values within the area.
The proposed use will be consistent with the existing uses in the downtown area and will not negatively impact the area.
- (5) The establishment of the special exception will not impede the orderly development and improvement of the surrounding property for uses permitted in the zoning district.
The proposed development will not impact the improvement of surrounding properties.
- (6) Adequate water supply and sewage disposal facilities will be provided in accordance with state and county health departments.
Water and sewer are available.
- (7) Adequate access roads, onsite parking, onsite loading and unloading berths, and drainage have been or will be provided where required.
Vehicular access is available to the rear of the building in a parking lot shared with La Casita and accessible from Palmer Street. 17 parking spaces are available onsite as well as 8 parallel parking spaces along this block of Palmer Street, additional parallel parking spaces are available on Magnolia Street. Pursuant to the parking requirements a total of 28 parking spaces are required for the building which includes the La Casita restaurant, however the site is located within the Central Business District Zoning Designation which allows for relief from the parking requirements as long as parking is provided to the extent possible onsite.
- (8) Adequate measures have been taken to provide ingress and egress to the property, which is designed in a manner to minimize traffic congestion on local roads.
Access is provided off Palmer Street. Based on the ITE trip generation for general retail, this use will generate approximately 69 total trips and 5 peak hour trips.
- (9) Adequate screening and buffering of the special exception will be provided, if needed.
Screening is not required for this use.

- (10) The special exception will not require signs or exterior lighting which will cause glare, adversely impact area traffic safety or have a negative economic effect on the area. Any signs or exterior lighting required by the special exception shall be compatible with development in the zoning district.

The special exception will not require signs specific to it, however, the business may have signage, as is allowed within the city's code. Such signage would have to be permitted through the Building Department and would be reviewed at that time.

- (11) The special exception will conform to all applicable regulations of the zoning district in which it is proposed.

STAFF RECOMMENDATION

Staff recommends approval of the Special Exception Application for Alcohol Sales for Off-Site Consumption at 26 N Orange Avenue for Green Cove Liquors.

Recommended Motion:

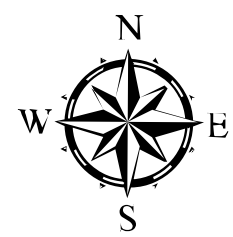
Motion to approve application 202001169, a Special Exception for alcohol sales for off-site consumption at 26 N Orange Ave, for Green Cove Liquors



Item # 2.

Aerial Map

	Parcels
	Roads



0	55	110	Page 10
Feet			

front



26 N. Orange Ave
Green Cove Springs



City of Green Cove Springs Special Exception Application

FOR OFFICE USE ONLY

P Z File # 202001169

Item # 2.

Application Fee: 550

Filing Date: 12/22/2020 Acceptance Date: _____

Review Type: SDRT P & Z

A. PROJECT

- 1. Project Name: Green Cove Liquors Relocation
- 2. Address of Subject Property: 26 North Orange Ave
- 3. Parcel ID Number(s): 38-06-26-017251-000-00
- 4. Existing Use of Property: Empty Building
- 5. Future Land Use Map Designation : _____
- 6. Zoning Designation: CBD
- 7. Acreage: .291

B. APPLICANT

- 1. Applicant's Status Owner (title holder) Agent
- 2. Name of Applicant(s) or Contact Person(s): JAMES VAN LAERE Title: President
Company (if applicable): MADISON ILLU, INC.
Mailing address: 1921 LAKE FOREST LANE, FLEMING ISLAND, FL 32003
City: FLEMING ISLAND State: FL ZIP: 32003
Telephone: (904) 708-6025 FAX: () e-mail: MC.VAN.LAERE@ATT.NET

- 3. If the applicant is agent for the property owner*:
Name of Owner (title holder): FRANKLIN CHANEY
Company (if applicable): _____
Mailing address: 116 N ORANGE AVE
City: GREEN COVE SPRINGS State: FL ZIP: 32093
Telephone: (904) 327-3434 FAX: () e-mail: UNKNOWN

* Must provide executed Property Owner Affidavit authorizing the agent to act on behalf of the property owner.

C. ADDITIONAL INFORMATION

- 1. Is there any additional contact for sale of, or options to purchase, the subject property? Yes No
If yes, list names of all parties involved: _____
If yes, is the contract/option contingent or absolute? Contingent Absolute

D. STATEMENT OF SPECIAL EXCEPTION SOUGHT

- 1. Requested Special Exception: Approval of Green Cove Liquor to do business
- 2. Section of Land Development Regulations under which the Special Exception is sought _____ ^{at} _{this}
- 3. Reason Special Exception is requested: Allow liquor store to operate at this location _{location}
- 4. Statement of Facts for Requested Special Exception (Use additional pages if necessary)

(PLEASE ANSWER THE FOLLOWING QUESTIONS TO THE BEST OF YOUR ABILITY. THESE FACTS WILL BE USED BY THE STAFF TO MAKE A RECOMMENDATION AND THE PLANNING AND ZONING BOARD IN MAKING THEIR DECISION)

a. Is this exception in compliance with all elements of the Comprehensive Plan?

yes

b. Is the establishment, maintenance or operation of the special exception detrimental to or endanger the public health, safety or general welfare, or contrary to established standards, regulations or ordinances of other governmental agencies?

NO

c. Is the structure or improvement so designed and constructed that it is not unsightly, undesirable or obnoxious in appearance to the extent that it will hinder the orderly and harmonious development of Green Cove Springs and zoning district in which it is proposed?

yes

d. Will the special exception adversely impact the permitted use in the zoning district or unduly restrict the enjoyment of the other property in the immediate vicinity nor substantially diminish or impair property values within the area?

NO

e. Will the establishment of the special exception impede the orderly development and improvement of the surrounding property for uses permitted in the zoning district?

NO

f. Are adequate water and sewage disposal facilities provided?

yes

g. Are access roads adequate, on-site parking, on-site loading and loading berths, and drainage have been or will be provided where required?

yes

h. Have adequate measures been taken to provide ingress and egress to the property and design in a manner to minimize traffic congestion on local roads?

yes

i. Is adequate screening and buffering signs of the special exception provided, if needed??

yes

j. Will the special exception require signs or exterior lighting, which will cause glare, adversely impact area traffic safety or have a negative economic effect on the area? Any signs or exterior lighting required by the special exception shall be compatible with development in the zoning district?

no

k. Will the special exception conform to all applicable regulations of the zoning district in which it is proposed?

yes

E. ATTACHMENTS (One hard copy or one copy in PDF format)

- 1. Copy of Warranty Deed or other proof of ownership
- 2. Legal description

F. FEE.

Home Occupation - \$150
 Residential property - \$250
 Non- residential - \$500

- a. The Cost of postage, signs, advertisements, and outside consultants are in addition to the application fee.
- b. The applicant is responsible to pay the cost of the advertisement and signs.
- c. All applications are subject 10% administrative fee and must pay the cost of any outside consultants' fees.

No application shall be accepted for processing until the required application fee is paid in full by the applicant. Any fees for advertising, signs, necessary technical review or additional reviews of the application by a consultant will be billed to the applicant at the rate of the reviewing entity. The invoice shall be paid in full prior to any action of any kind on the development application.

Both attachments are required for a complete application. A completeness review of the application will be conducted within five (5) business days of receipt. If the application is determined to be incomplete, the application will be returned to the applicant.

I/We certify and acknowledge that the information contained herein is true and correct to the best of my/our knowledge:

James R. Van Laere
Signature of Applicant

Signature of Co-applicant

JAMES R. VAN LAERE
Typed or printed name and title of applicant

Typed or printed name of co-applicant

12/22/20
Date

Date

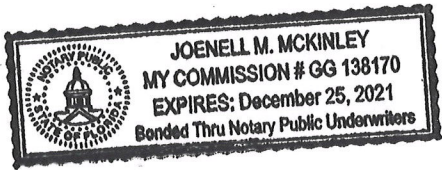
State of Florida County of Clay

The foregoing application is acknowledged before me this 22nd day of Dec, 2020 by James Van

Laere, who is/are personally known to me, or who has/have produced Drivers License
as identification. V 546-456-52-411-0

NOTARY SEAL

Joanell M McKinley
Signature of Notary Public, State of Florida





Parcel Summary

Parcel ID 38-06-26-017251-000-00
Location Address 20-26 ORANGE Ave
 Green Cove Springs 32043
Brief Tax Description* LOT 2 BLK 6 GCS AS REC O R 1607 PG 568 & 3183 PG 1997
 (Note: *The Description above is not to be used on legal documents.)
Property Use Code UNANCHORED SHOPPING CENTER (1610)
Sec/Twp/Rng 38/6/26
Tax District Tax Dist 002
Millage Rate 16.7246
Acreage 0.291
Homestead N

Map



Owner Information

[CHANEY FRANKLIN E TRUSTEE](#)
 116 N ORANGE AVE
 GREEN COVE SPRINGS FL 32043-3404

Land Information

Land Use	Number of Units	Unit Type	Land Type	Frontage	Depth
Unanchored Shopping Center (1610)	12,696.00	Commercial	Site	100	134

Buildings

Building	1	Effective Year Built	1960
Building Type	SHOP NBHD / 3800	Frame	MASONRY
Gross Sq Ft	7,600	Roof Type	RIDGE FRME
Finished Sq Ft	6,923	Roof Coverage	TR&GVL/VNL
Stories	1.0 Stories	Flooring Type	CARPET with 30% ASPH TILE
Heat	ENG F AIR	Heating Type	ENG F AIR
Interior Walls	DRYWALL	Bedrooms	
Exterior Walls	CB STUCCO with 30% COMMON BRK	Full Bathrooms	0
Year Built	1946	Half Bathrooms	0

Yard Items

Description	Year Built	Out Building Type	Size	Quantity	Units	Grade
ASP 3000+	1997	ASP 3000+	100 x 63	1	6300 SF	
OVHD DOOR	1997	OVHD DOOR	0 x 0	1	160 SF	

Sales

Sale Date	Sale Price	Instrument	Deed Book	Deed Page	Sale Qualification	Vacant or Improved	Grantor	Grantee
12/22/2009	\$100	Warranty Deed	3183	1997	Unqualified - UNQUAL/CORRECTIVE/QCD,TD	Improved	CHANEY FRANKLIN	CHANEY FRANKLIN E TRUSTEE
6/10/1996	\$118,000	Warranty Deed	1607	568	Qualified	Improved	BARNETT BANK OF JACKSONVILLE	CHANEY FRANKLIN
5/15/1995	\$100	Certificate of Title	1551	89	Qualified	Improved	WM H HUTCHINGS IV & MYRNA	BARNETT BANK OF JACKSONVILLE N A
5/1/1985	\$1	Warranty Deed	866	380	Qualified	Improved		

Sale date range:

From:

12/20/2010

Item # 2.

To:

12/20/2020

Sales by Neighborhood

1500

Feet

Sales by Distance

TRIM Notice

[38-06-26-017251-000-00\(PDF\)](#)

Valuation

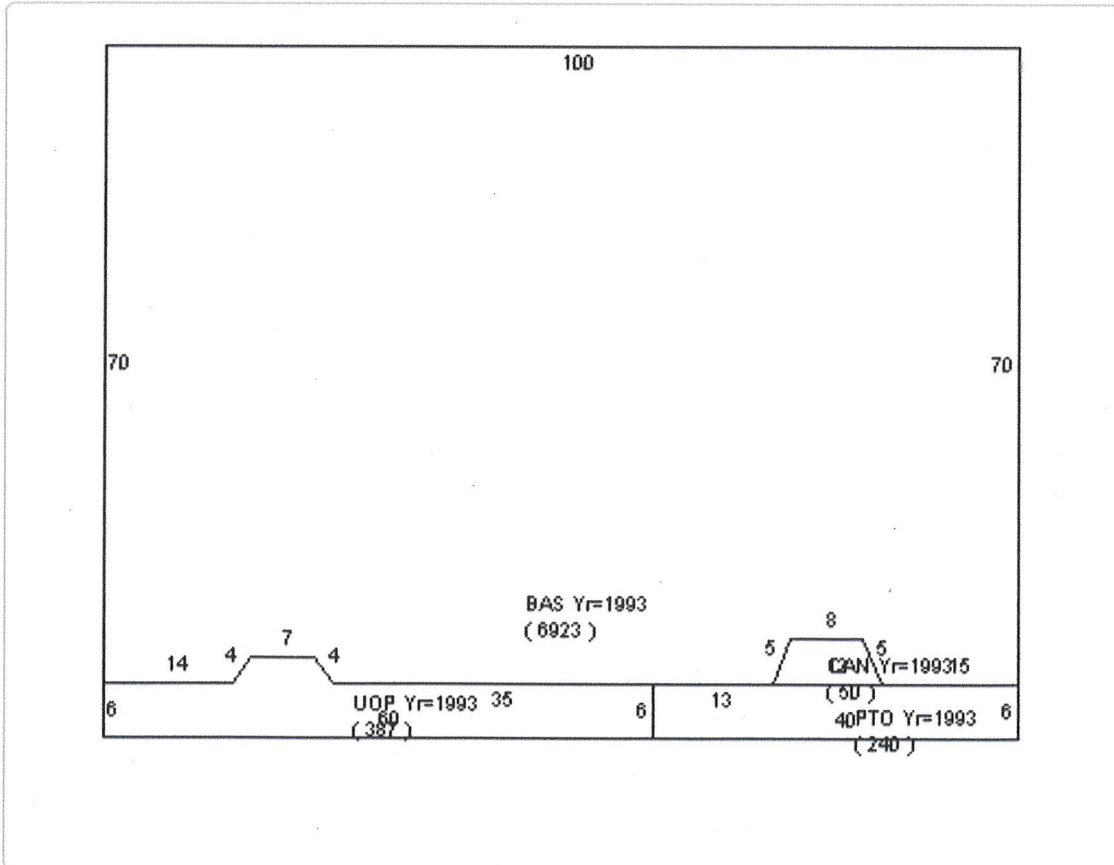
	2020 Certified Values	2019 Certified	2018 Certified	2017 Certified
+ Building Value	\$157,648	\$137,648	\$172,876	\$164,302
+ Extra Features Value	\$0	\$0	\$0	\$0
+ Land Value	\$152,352	\$152,352	\$97,124	\$85,698
Land Agricultural Value	\$0	\$0	\$0	\$0
Agricultural (Market) Value	\$0	\$0	\$0	\$0
= Just Market Value	\$310,000	\$290,000	\$270,000	\$250,000
= Total Assessed Value	\$310,000	\$290,000	\$270,000	\$250,000
- Exempt Value	\$0	\$0	\$0	\$0
= Total Taxable Value	\$310,000	\$290,000	\$270,000	\$250,000
Maximum Save Our Homes Portability	\$0	\$0	\$0	\$0

"Just (Market) Value" description - This is the value established by the Property Appraiser for ad valorem purposes. This value does not represent anticipated selling price.

Property Record Card

[2020 Property Record Card \(PDF\)](#)

Sketches



500
8/10

WARRANTY DEED
 NEW'S FORM NO. 185-V

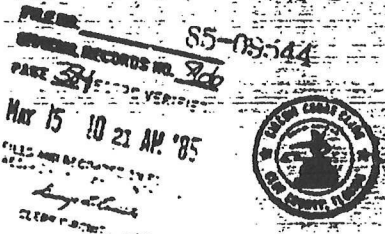
This Warranty Deed Made this 17th day of April A.D. 1985
 Ellen Wiggins Kirchner F/K/A Ellen Wiggins Davenport
 866-2384

hereinafter called the grantor, for WILLIAM H. HUTCHINGS IV and by next of kin HUTCHINGS, husband and wife
 whose post office address is 3264 Market Oak Street, Green Cove Springs, FL 32043
 hereinafter called the grantee.

Witnesseth: That the grantor for and in consideration of the sum of \$ 10.00 and other valuable considerations, receipt whereof is hereby acknowledged, hereby grants, bargains, sells, conveys, releases, conveys and confirms unto the grantee, all that certain land situate in Clay County, Florida, to-wit:

All the grantor's undivided one-fifth interest in and to the following described lands:
 A lot on the corner of Palmer and Orange Streets in Green Cove Springs, Florida, being Lot (2) of Block (6) GREEN COVE SPRINGS, as recorded in Plat Book 2, Page 1 of the public records of Clay County, Florida.

Franklin Chaney
 26 W Orange Ave
 Warranty Deed



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

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

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 19 84

In Witness Whereof, the said grantor has signed and sealed these presents the day and year first above written

Signed, sealed and delivered in our presence:
 Ellen Wiggins Kirchner
 Ellen Wiggins Kirchner

STATE OF South Carolina
 COUNTY OF Beaufort

I HEREBY CERTIFY that on this day, before me, an officer duly authorized in the State aforesaid and in the County aforesaid to take acknowledgments, personally appeared

Ellen Wiggins Kirchner F/K/A Ellen Wiggins Davenport

as he known to be the person described in and who executed the foregoing instrument and she acknowledged before me that she executed the same.

WITNESS my hand and official seal in the County and State last aforesaid this 17th day of April A.D. 1985

My commission expires: 12/27/94

From: Franklin Chaney
 26 W Orange Ave
 Warranty Deed



PROPERTY OWNER AFFIDAVIT

Owner Name: <u>Rusty Chaney</u>	
Address: <u>26 N Orange Ave</u>	Phone:
Agent Name: <u>James Van Laere</u>	
Address: <u>26 N Orange Ave</u>	Phone:
Parcel No.:	

Requested Action:
Obtain special exception for alcohol sales for off-site consumption

I hereby certify that:

I am the property owner of record. I authorize the above listed agent to act on my behalf for the purposes of this application.

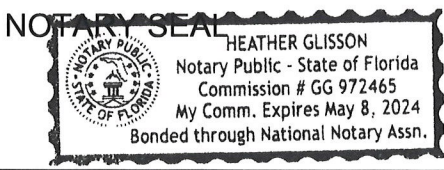
Property owner signature: Rusty Chaney

Printed name: Rusty Chaney

Date: 1-11-2021

The foregoing affidavit is acknowledged before me this 11 day of January, 2021, by Rusty Chaney, who is/are

personally known to me, or who has/have produced as identification.



Heather Glisson
Signature of Notary Public, State of FL



STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: Planning and Zoning Commission **MEETING DATE:** January 26, 2021

FROM: Michael Daniels, AICP, Planning & Zoning Director

SUBJECT: Review and recommendation on Ordinance No. O-16-2020, amending Section 101-5 to add new definitions and revise definitions for lot width and setback, establishing Section 101-160 concerning flag lot requirements, and amending Sections 113-131 and 113-132 to revise access requirements.

BACKGROUND

At the November 10th City Council meeting there was discussion regarding the development of residential lots that are commonly referred to as “flag lots”. Flag lots are parcels of land that are generally situated behind a lot or lots and do not meet the required lot width requirements at the required front yard setback. Approving this type of development conflicts with the lot width requirements of the underlying zoning districts. Beyond the code requirements, Planning staff has concerns about approving this type of development pattern for many reasons, particularly because of the potential concerns regarding access management and impact on emergency services. On the other hand, there are equity concerns when existing “flag lots” are rendered unusable for development purposes. As a result, in an effort to balance property rights concerns with public safety, City Council has directed staff to make revisions to the City’s Land Development Regulations to create flag lots as a lawful nonconforming use subject to specific restrictions in order to mitigate for potential public safety concerns. Staff has provided the following attachments for review purposes:

- Map of existing City Flag lots, 50% of the existing flag lot are developed.
- Proposed City Ordinance Revision provided in an underline and strike-thru version for your review.

Pursuant to the discussion at the Planning and Zoning Commission meeting on December 8th, staff has revised the ordinance to require the applicant to secure a special exception for the development of a flag lot.

HOUSING ELEMENT

GOAL 3: The City of Green Cove Springs shall make provisions for adequate and affordable housing that meets the physical and social needs of all segments of the current and future population of the City.

Objective 3.1: Adequate and Affordable Housing. The City shall continue to assist the private sector in providing dwelling units of various types, sizes, and costs to meet the housing needs of the current and future residents and residents with special housing needs

Policies 3.1.1: The City shall review, and revise if necessary, any ordinances, codes, regulations, and the permitting process to eliminate unnecessary requirements and requirements that may inhibit the provision

of low and moderate income housing, and to streamline the development review process, while maintaining opportunity for public participation in the review process and insuring the health, welfare, and safety of the residents.





RECOMMENDATION

Staff recommends approval of Ordinance No. O-16-2020, amending City Code Chapter 101, Article I; establishing Chapter 101, Article II, Division 3, Section 101-160 Flag Lots; and amending Chapter 113, Article II, Division 4.

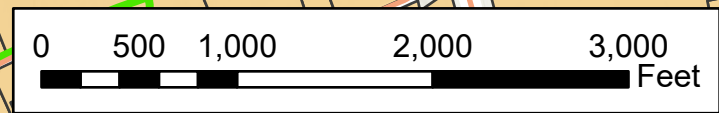
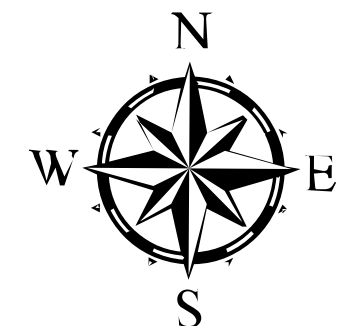
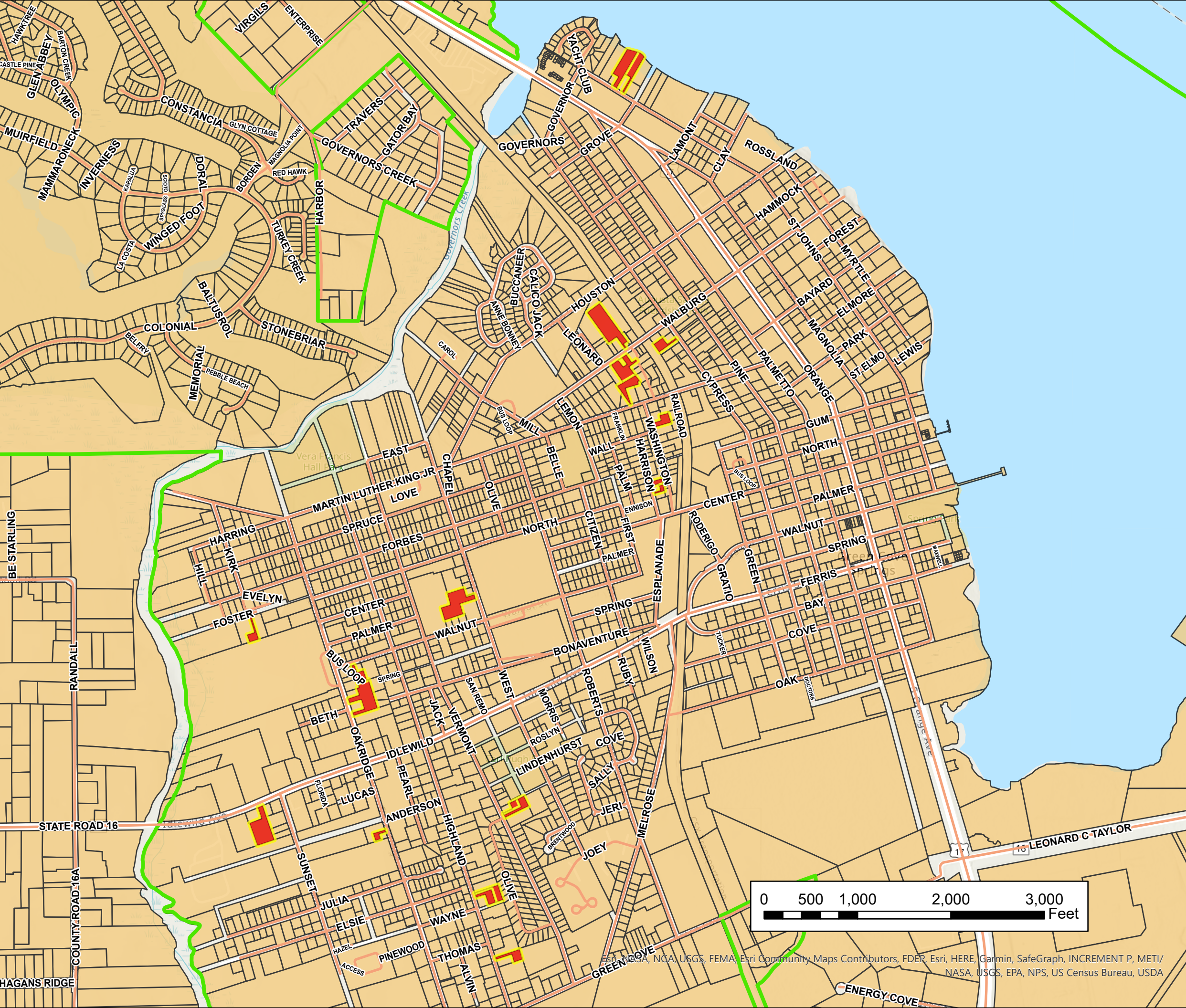
Motion: To recommend to City Council approval of Ordinance No. O-16-2020, amending City Code Chapter 101, Article I; establishing Chapter 101, Article II, Division 3, Section 101-160 Flag Lots; and amending Chapter 113, Article II, Division 4.



Flag Lots

-  Flag Lot
-  Roads
-  Parcels
-  Municipal Boundary

Non-exhaustive visual representation of flag lots within the city.



Chapter 117 Lot Width Requirements by Zoning District

Item # 3.

	<u>R-1</u>	<u>R-2</u>	<u>R-3</u>	<u>RPO</u>	<u>C-1</u>	<u>C-2</u>	<u>REC</u>	<u>CBD</u> ¹	<u>GCR</u> ² <u>RLD</u>	<u>GCR</u> ² <u>RMD</u>	<u>GCN</u>	<u>GCC</u>	<u>INS</u>	<u>M-1</u>	<u>M-2</u>	
<u>LOT WIDTH</u> (Minimum feet):																
<u>Single-family dwelling unit, detached</u>	<u>70</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>			<u>70</u>	<u>50</u>	<u>50</u>	<u>50</u>				
<u>Single-family dwelling unit, attached</u>		<u>75</u> ¹¹	<u>75</u>	<u>75</u> ¹¹	<u>75</u> ¹¹	<u>75</u> ¹¹				<u>75</u> ¹¹	<u>75</u> ¹¹	<u>100</u>				
<u>Multi-family dwelling unit</u>			<u>100</u>									<u>100</u>				
<u>Mobile Home Park / Subdivision</u>			<u>100</u> ¹⁰													
<u>Nonresidential uses</u>				<u>50</u>	<u>NMR</u>	<u>NMR</u>		<u>NMR</u>			<u>NMR</u>	<u>NMR</u>	<u>NMR</u>	<u>100</u>	<u>100</u>	

ORDINANCE NO. O-16-2020

AN ORDINANCE OF THE CITY OF GREEN COVE SPRINGS, FLORIDA, AMENDING CHAPTER 101, ARTICLE I, SEC. 101-5 TO ADD NEW DEFINITIONS FOR FLAG LOT; LOT LINE, FRONT; LOT LINE, SIDE; AND LOT LINE, REAR; AND REVISE DEFINITIONS FOR LOT WIDTH AND SETBACK; ESTABLISHING CHAPTER 101, ARTICLE II, DIVISION 3 SEC. 101-160 CONCERNING FLAG LOT REQUIREMENTS; AMENDING CHAPTER 113 ARTICLE II, DIVISION 4, SEC 113-131 AND 113-132 TO REVISE ACCESS REQUIREMENTS; AMENDING CHAPTER 117, ARTICLE II, DIVISION 2, SEC. 117-62, SPECIAL EXCEPTIONS, TO REQUIRE A SPECIAL EXCEPTION FOR THE DEVELOPMENT OF A FLAG LOT; AMENDING CHAPTER 117, ARTICLE II, DIVISION 3, SEC. 117-87, SPECIAL EXCEPTIONS, TO REQUIRE A SPECIAL EXCEPTION FOR THE DEVELOPMENT OF A FLAG LOT; AMENDING CHAPTER 117, ARTICLE II, DIVISION 4, SEC. 117-122, SPECIAL EXCEPTIONS, TO REQUIRE A SPECIAL EXCEPTION FOR THE DEVELOPMENT OF A FLAG LOT; AMENDING CHAPTER 117, ARTICLE IX, DIVISION 4, SEC. 117-541, SPECIAL EXCEPTIONS, TO REQUIRE A SPECIAL EXCEPTION FOR THE DEVELOPMENT OF A FLAG LOT; AMENDING CHAPTER 117, ARTICLE IX, DIVISION 5, SEC. 117-565, SPECIAL EXCEPTIONS, TO REQUIRE A SPECIAL EXCEPTION FOR THE DEVELOPMENT OF A FLAG LOT; PROVIDING FOR CONFLICTS, SEVERABILITY AND SETTING AN EFFECTIVE DATE.

WHEREAS, the City Code was adopted to promote the health, safety, morals and general welfare of the community;

WHEREAS, it is necessary to amend the land development regulations from time to time to update the permitted uses and permitted special exceptions within the zoning districts to fit the character of development in the City;

WHEREAS, it may be necessary to create development standards for specific uses; and

WHEREAS, the Green Cove Springs City Council has determined that this amendment is consistent with the Comprehensive Plan, is in the best interest of the public, and will promote the public health, safety and welfare of the City.

NOW, THEREFORE BE IT ENACTED BY THE CITY COUNCIL OF GREEN COVE SPRINGS, FLORIDA AS FOLLOWS:

Section 1. Code Amended. That Chapter 101 Article I Section 101-5 of the City Code is hereby amended to read as follows:

CHAPTER 101
Article I: - In General.

Sec. 101-5. - Definitions.

The following words, terms and phrases, when used in this subpart, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

A-weighted sound level means the sound pressure level in decibels as measured on a sound level meter using the A-weighting network. The level so read is designated dB(A).

Abandoned motor vehicle means a motor vehicle that is in a visible state of disrepair and incapable of being moved under its own power and which does not have a current vehicle registration certificate and license plate. This definition does not apply to a vehicle that is not visible from public or private streets.

Abandoned sign means a sign on which a business advertised on that sign is no longer licensed, no longer has a certificate of occupancy or is no longer an ongoing business at that location for a period of six months.

Abandoned sign face means the area of a sign on which graphics, letters, figures, symbols, trademark or written copy is placed advertising a business that is no longer licensed, no longer has a certificate of occupancy or is no longer an ongoing business at that location for a period of six months.

Abandonment means the intentional and willful termination, relinquishment or cessation of an existing use or occupation of property. Any termination, relinquishment or cessation for a six-month period shall be considered an intentional and willful abandonment.

Abut means to physically touch or border upon, or to share a common property line.

Abutting or adjacent property means property that is immediately contiguous to the property being considered under these land development regulations. Adjacent property may be contiguous, across a right-of-way, or close enough to be directly impacted by a use or proposed use on the property being considered under these land development regulations meaning the distance for adjacency varies with the degree of impact.

Access way means a paved area intended to provide ingress and egress of vehicular traffic from a public right-of-way to an off-street parking area or loading area.

Accessory sign means a permanent ground or building sign permitted under this subpart as incidental to an existing or proposed use of land, identifying or advertising a business, person, activity, goods, product, commodity, service or entertainment located on the premises where the sign is installed and maintained.

Accessory use or structure means any use or attached or detached structure clearly incidental, subordinate and related to the principal use or structure and located on the same lot with such principal use or structure not to exceed 50 percent of the principal use. Examples of accessory uses in a single-family residential zoning district include, but are not limited to, storage buildings and detached garages; provided, however, a recreational vehicle; motor vehicle; mobile home; trailer or semi-trailer; railroad car; bus, truck or automobile body, or other similar unit shall not be used as an accessory structure or converted into an accessory structure even when altered, stripped, or otherwise rebuilt.

Addition means an extension or increase in floor area or height of a building or structure.

Administrator means the planning and zoning director designated by the city manager for the administration and enforcement of land development regulations.

Adult arcade amusement center means a business that is located on the premises of a facility that is licensed by the state pursuant to F.S. ch. 550, and operates an adult arcade amusement machine that complies with F.S. § 849.161(1)(a)1 and is also defined in the county Ordinance Number 2012-02.

Adult arcade amusement machine means an electronic, mechanical, computer or other device which operates by the insertion of coin and may also operate by the use or insertion of other type of monetary consideration or requires the payment of monetary consideration, ticket, token, or card that activates the play of a game or multiple games which, by application of skill, may entitle the person operating the machine to receive points representing a unit of game play on the machine or coupons which may be exchanged for merchandise available for sale to the general public on the premises of the adult arcade amusement center or via catalogs or kiosks produced by an adult arcade amusement center, other than alcoholic beverages and cash, provided the value of the merchandise does not exceed the amount set forth in F.S. § 849.161(1)(a)1. The presence of a device as described herein that requires the payment of monetary consideration for its operation shall result in the presumption that such machine is an adult arcade amusement machine as defined herein.

Adult day care means any building, or part of a building, whether operated for profit or not, in which is provided through its ownership or management, for a part of a day, basic services to three or more persons who are 18 years of age or older, who are not related to the owner or operator, and who require such services. The adult day care center must maintain the required licensing from the state agency for health care administration and shall comply with the requirements of F.S. ch. 400, pt. V. The approval for this type of care shall be by special exception within each residential zoning category.

Adult living facility (ALF) means a type of residential care facility, as provided for in F.S. ch. 429, pt. I (F.S. § 429.01 et seq.).

Adversely affected person means any person who is suffering or will suffer an adverse effect to an interest protected or furthered by the local government comprehensive plan, including, but not limited to, interests related to health and safety; police and fire protection services; densities or intensities of development; transportation facilities; recreational facilities; educational facilities; health care facilities, equipment, or services; and environmental or natural resources. The alleged adverse effect may be shared in common with other members of the community at large, but it must exceed in degree the general interest in community good shared by all persons.

Adverse effect includes, but is not necessarily limited to, increases in flood elevations on adjacent properties attributed to physical changes in the characteristics of the official 100-year flood area due to development.

Advertising means sign copy intended to directly or indirectly promote the sale or use of a product, service, commodity, entertainment, or real or personal property.

Agent means a representative of an owner who performs any services for the owner with respect to the real estate of the owner.

Alley or service drive means a roadway dedicated to public use that affords only a secondary means of access to abutting property and is not intended for general traffic circulation.

Alter or alteration of a stormwater management system means any change or modification in work done other than that necessary to maintain the system's original design and function.

Alteration means any change in size, shape, occupancy, character or use of a building or structure.

Antenna means an arrangement of wires or metal rods used in transmitting or receiving electromagnetic waves.

Applicant means the record owner, or his authorized representative, of a tract of land which is the subject of a request for a change in zoning classification, an exception, a variance or an appeal.

Aquifer or aquifer system means a geologic formation, group of formations, or part thereof that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Area of shallow flooding means a designated AO zone on the city's flood insurance rate map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

Area of special flood hazard means the area designated within the V zones on the FEMA (Federal Emergency Management Agency) maps.

Arterial streets means streets (roads) which conduct large volumes of traffic over long distances and are functionally classified as such on the state department of transportation current highway functional classification and systems map for the city, as amended, and in the city's comprehensive plan.

Attic means the space between the top story and a pitched roof.

Auditorium means the room, hall, building or part of a building used for public gatherings.

Automobile service station means an establishment whose principal business is the dispensing at retail of alternative fuels, diesel fuel, electric and gasoline and oil and where grease, batteries, tires and automobile accessories may be supplied and dispensed at retail, principally for automobiles and not for trucks (or in connection with a private operation where the general public is excluded from the use of the facilities), and where, in addition, the following services may be rendered and sales made, and no other:

- (1) Sales and servicing of spark plugs, batteries and distributors and distributor parts;
- (2) Tire servicing and repair, but not recapping or regrooving;
- (3) Replacement of water hoses, fan belts, brake fluid, light bulbs, fuses, floor mats, seat covers, windshield wipers and wiper blades, grease retainers, wheel bearings, mirrors, and the like;
- (4) Radiator cleaning and flushing; provision of water, antifreeze and the like;
- (5) Washing and polishing and sale of automotive washing and polishing materials;
- (6) Providing and repairing fuel pumps and lines;
- (7) Minor servicing and repair of carburetors;
- (8) Emergency wiring repairs;
- (9) Adjusting and emergency repair of brakes;
- (10) Minor motor adjustments not involving removal of the head or crankcase;
- (11) Greasing and lubrication;
- (12) Sales of cold drinks, package foods, tobacco and similar convenience goods for service station customers, but only as accessory and incidental to the principal business operation;
- (13) Provision of road maps and other informational material to customers; provision of restroom facilities;
- (14) Uses permissible at a service station do not include major mechanical and body work, straightening of frames or body parts, steam cleaning, painting, welding, storage of automobiles not in operating condition, operation of a commercial parking lot or commercial garage as an accessory use, or other work involving undue noise, glare, fumes, smoke or other characteristics to an extent greater than normally found in service stations;

- (15) A service station is not a repair garage, a body shop, or a truck stop;
- (16) Rental of luggage or utility trailers, trucks, but not rental of automobiles. All such allowed servicing shall be done in an enclosed building; however, minor adjustments and replacements of minor parts, e.g., replacing a windshield wiper blade, shall be permitted while a vehicle is being serviced at a pump island;
- (17) Work bays of up to three spaces are allowed.

Automobile wrecking or storage yard means the dismantling or disassembling of used motor vehicles or trailers, or the storage, sale or dumping of dismantled, partially dismantled, obsolete or wrecked motor vehicles, trailers or their parts.

Awning means an architectural projection that provides weather protection, identity or decoration and is wholly supported by the building to which it is attached and may also be retractable. An awning is comprised of a lightweight, rigid skeleton structure over which a rigid covering is attached.

Awning sign or canopy sign means any shelter, supported partially or entirely from the exterior wall of a building, which is used for advertising. Such sign may be constructed of canvas, plastic, metal, or other similar material.

Balcony means an exterior platform that projects from or into the facade of a building and is surrounded by a railing, handrail, or parapet.

Banner sign means any sign composed of lightweight material either enclosed or not enclosed in a rigid frame, secured or mounted so as to allow movement of the sign caused by movement of the atmosphere, possessing characters, letters, illustrations, or ornamentations applied to paper, flexible plastic, or fabric of any kind. National flags and flags of political subdivisions shall not be considered banners for the purpose of this Code.

Barbershop or beauty shop or salon means an establishment whose sole business is a combination of shaving or trimming the beards, cutting or dressing hair of the heads, or cosmetology services and manicuring the nails of its customers.

Bar, cocktail lounge, saloon, or tavern means any establishment devoted primarily to the retailing and on-premises drinking of malt, vinous, or other alcoholic beverages. All establishments requiring an SRX license shall conform to F.S. § 561.20(2)(a)(4) which requires that 51 percent of monthly receipts come from the sale of food and nonalcoholic beverages.

Base flood elevation means the elevation designated by FEMA (Federal Emergency Management Agency) as the level above the 100-year flood zone (see definition for Area of special flood hazard).

Basement means that portion of a building between floor and ceiling, which is partly below and partly above grade, but so located that vertical distance from grade to the floor below is less than the vertical distance from grade to ceiling; provided, however, that the distance from grade to ceiling shall be at least four feet, six inches.

Bed and breakfast means a limited occupancy visitor accommodation facility consisting of a residential building or group of residential buildings containing a total of not less than four and not greater than ten guest rooms and a manager's residence, where visitor occupancy is limited to a maximum of seven consecutive days, where such lodging and daily meals are provided for compensation, and said meals are served only to resident guests of the inn. Bed and breakfast inns are limited to the adaptive conversion and reuse of, or reproductions of, historically or architecturally unique residential structures, which are compatible with the surrounding neighborhood.

Bicycle and pedestrian ways means any road, path or way which is open to bicycle travel and traffic afoot and from which motor vehicles are excluded.

Billboard means a sign structure, including a building, for any sign advertising an establishment, merchandise, service or entertainment, which is sold, produced, manufactured and/or furnished at a place other than on the property on which such sign is located.

Blight, blighting influence or blighting factor means either that which endangers life or property by fire or other causes that which substantially impairs or arrests property values or the sound growth of the city and is a menace to the public health, safety, morals, or welfare in its present condition and use.

Block includes tier or group means a group of lots existing with well-defined and fixed boundaries, usually being an area surrounded by streets or other physical barriers and having an assigned number, letter, or other name through which it may be identified.

Boardinghouse means an establishment with lodging for four or more persons, where meals are regularly prepared and served for compensation and where food is placed upon the table family-style, without service or ordering of individual portions from a menu.

Boat slips at marinas means an accessory structure designed solely for the parking or storage of watercraft. Such slip can be no smaller than eight feet by 20 feet. Boat slips must be transient in nature and cannot have electrical or water hookups.

Body shop means any enclosed structure used for the alteration, repairs, restoration and refinishing of the body parts or appurtenances of a motor vehicle body.

Borrow pit means an excavation from which natural materials are removed for use elsewhere, leaving a hole (pit).

Boutique means any retail establishment selling clothing, specialty food goods, gifts, coffees and antiques, located in a freestanding building not more than two stories in height and not containing more than 2,000 square feet on either floor.

Breakaway wall means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or to the supporting foundation system.

Break point means the location on a communication tower of a designed feature which, in the event of a tower failure, would result in the tower falling entirely within the boundaries of the property on which it is located.

Buildable area means the portion of developable land within a lot remaining after required yards, parking and landscaping areas have been provided. Buildings may be placed in any part of the buildable area, but limitations on percent of the lot which may be covered by buildings may require open space within the buildable area.

Building arcade means a covered walkway attached to a building and supported on the sides but not attached to the building by columns.

Building means any structure, either temporary or permanent, having a roof impervious to weather and used or built for the shelter or enclosure of persons, animals, chattels or property of any kind. This definition shall include tents, awnings, cabanas or vehicles such as manufactured or mobile homes situated on private property and serving, in any way, the function of a building, but does not include recreational vehicles such as campers, motor homes or pop-up trailers and screened enclosures not having a roof impervious to weather (recreational vehicles shall not be allowed for permanent habitable use).

Building front yard setback line means the rear edge of a required front yard as specified within these land development regulations.

Building height means the vertical distance from grade to the highest finished roof surface. The height of a building in stories does not include basements and cellars, except as specifically provided otherwise, and does not exceed 35 feet.

Building line means a line across a parcel of land that is the distance a structure must be set back from a lot boundary line, street center line or right-of-way, as defined in chapter 117, for the zoning district in which the parcel is located.

Building permit means, for purposes of this subpart, a development permit is that official city document which authorizes the commencement of construction or land alteration without need for further application or approval. Development permits include all types of construction permits (plumbing, electrical, foundation, mechanical, and so forth, in addition to the building permit itself), grading and clearing permits, septic tank permits, tree removal permits, sign permits, etc.

Building sign means a sign displayed upon or attached to any part of the exterior of a building, including walls, windows, doors, parapets, marquees and roof slopes.

Building story height means the vertical distance from top to top of two successive finished floor surfaces.

Business day means every working day of the official workweek, as designated by the city council, and does not include public holidays and weekends.

Cafe means a small informal restaurant, generally consisting of a seating capacity of 30 or less where food items, drinks and snacks are sold.

Capital budget means the portion of the city's annual budget which reflects capital improvements scheduled for a fiscal year.

Capital improvements means physical assets constructed or purchased to provide, improve or replace a public facility and which are large-scale and high in cost. The cost of a capital improvement is generally nonrecurring and may require multi-year financing. For purposes of these land development regulations, physical assets which have been identified as existing or projected needs in the individual comprehensive plan elements are considered capital improvements.

Canopy means a permanent roof-like shelter extending from part or all of a building face and constructed in conformity with the standard building code, as adopted by the city council and as amended from time to time.

Car wash means a facility where vehicles are cleaned, washed, waxed, vacuumed, or otherwise detailed. This includes, but is not limited to, a coin-operated, self-service, full-service, or an automatic car wash. A car wash can be freestanding or part of a service station. Car washes are restricted to use by vehicles of size and weight no greater than 22 feet long by 12 feet high and 8,000 pounds (gross weight), respectively.

Carport means an accessory structure or portion of a principal structure, consisting of a roof and supporting members such as columns or beams, unenclosed from the ground to the roof on at least one side, and designed or used for the storage of motor driven vehicles owned and used by occupants of the building to which it is accessory.

Certificate of completion means a written document required prior to occupancy, issued for a use upon a developer's compliance with the provisions of this Code and any applicable development agreement.

Certificate of compliance means a statement signed by an administrative officer, setting forth that a building, structure, or use complies with the zoning ordinance and building codes and that the same may be used for the purposes stated on the permit.

Certificate of occupancy means a document issued by the proper authority allowing occupancy or use of a building and certifying that the structure or use has been constructed or will be used in compliance with all applicable municipal codes and ordinances.

Change of occupancy means discontinuance of an existing use and the substitution of a different kind or class of use.

Child care center means a facility holding a license with the state, as per F.S. § 402.302, as amended, for the care, protection, and supervision of a child, for a period of less than 24 hours a day on a regular basis, which supplements parental care, enrichment, and health supervision for the child, in accordance with his individual needs, and for which a payment, fee, or grant is made for care.

Church means all houses of worship.

City engineer means the individual designated as such by the city council or city manager.

Clinic/office/lab, medical or dental, means an establishment where patients, who are not lodged overnight, are admitted for examination and treatment by one person or a group of persons practicing any form of the healing arts, whether such persons be medical doctors, chiropractors, osteopaths, chiroprudists, naturopaths, optometrists, dentists, or any such profession, the practice of which is regulated by the state.

Club, night, means a restaurant, dining room, or other facility serving alcoholic beverages wherein paid floor shows or other forms of paid entertainment are provided for customers as a part of the commercial enterprise.

Club, private, means an organization, whether incorporated or not, which is the owner, lessee, or occupant of a building or portion thereof used for club purposes, which is operated solely for a social, educational, recreational, patriotic, benevolent, athletic or fraternal purpose, but not for pecuniary gain, and if food and alcoholic beverages are sold, such sale is incidental to its operation. The affairs and management of the organization are conducted by a board of directors, executive committee, or similar body chosen by the members at an annual meeting. The organization has established bylaws and/or a constitution to govern its activities. The organization has been granted an exemption from the payment of federal income tax as a club under 26 USC 501. The term "private club" also includes the term "lodge."

Club, tennis, means any associated, chartered or incorporated club owning or leasing and maintaining any bona fide tennis club or four-wall indoor racquetball club consisting of not less than ten regulation size four-wall indoor racquetball courts, or ten of any combination of such courts, with clubhouse facilities, pro shop, locker rooms and attendant facilities, all located on a contiguous tract of land owned or leased by such club.

Collector street, major, means a major collector street carries medium volumes of traffic collected primarily from minor collector streets and delivering the traffic to arterial streets.

Collector street, minor, means a minor collector street carries relatively light volumes of traffic primarily from minor streets to major collector streets.

Combined use building means a use which contains a mixture of one or more residential units and commercial business uses within the same building.

Commercial vehicle means any motor vehicle licensed by the state as a commercial vehicle or any vehicle designed for a commercial or industrial function.

Communication antenna means an antenna designed to transmit or receive communications as authorized by the Federal Communications Commission. The term "communication antenna" shall not include CB, marine band, or class C commercial antennas less than 20 feet in height or direct broadcast antennas less than 12 feet and less than 39 inches in diameter.

Communication tower means a tower greater than 35 feet in height (including antenna) which supports communication (transmission or receiving) equipment. The term "communication tower" shall not include amateur radio operators' equipment, as licensed by the Federal Communications Commission (FCC). No tower shall exceed 200 feet in height (including antenna) when freestanding, or 20 feet over the building height, when placed on top of buildings.

Community residential home means a dwelling unit licensed to serve clients of the state department of health and rehabilitative services, and which provides a living environment for seven to 14 unrelated residents who operate as the functional equivalent of a family, including such supervision and care by supportive staff as may be necessary to meet the physical, emotional, and social needs of the residents.

Community theaters means a profit or nonprofit organization to produce live onstage performances for the cultural benefit of the city.

Completely enclosed building means a building separated on all sides from adjacent open space, or from other buildings or other structures, by a permanent roof and by solid exterior walls or solid party walls which are pierced only by windows and normal entrance or exit doors.

Comprehensive plan means the local government comprehensive plan, which was adopted by codes consistent with F.S. § 163.3161, as amended, and serves as the legal guideline for the future development of the local government.

Concurrency means a condition in which specified facilities and services have or will have the necessary capacity to meet the adopted level of service standard at the time of impact of the development project.

Condominium means a type of ownership in which buildings are divided into separate, individual units, such as apartments or office suites, which may be sold and owned separately, while common areas and some outdoor areas may be owned in common.

Cone of influence means an area around one or more major water wells, the boundary of which is determined by the city based on groundwater travel or drawdown depth.

Construction, actual or start, means and includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling, nor does it include the installation of streets and/or walkways, nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms, nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

Contiguous means a sharing of a common border at more than a single point of intersection.

Convenience store means a retail, self-service store, usually open extended hours, that typically sells limited lines of food items, household goods, and snacks oriented to daily convenience, including fueling stations.

County health department means the health department of the county.

Court means an area open to the sky or having a glass roof and mostly or entirely surrounded by buildings, walls or other improvement of a similar nature.

Crown means the main mass of branching of a plant above the ground.

Cul-de-sac means a local street of relatively short length with one end open and the other end terminating in a vehicular turnaround.

Curb break means a driveway or other opening for vehicles entering a public street.

Curb level means the elevation of the street curb established by the city.

Decay-resistant woods means those woods that are known to be resistant to moisture and insect damage because of their natural properties, such as cypress, redwood and preservative-treated lumber.

Decibel (dB) means a unit describing the amplitude of sound, equal to 20 times the logarithm to the base ten of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micronewtons per square meter.

Deck means a paved or wooden horizontal platform without a roof or covering of any description, and attached or unattached to a building.

Density or *gross density* means the total number of dwelling units divided by the total site area, exclusive of dedicated public rights-of-way, holding ponds, canals, drainage ditches, lakes and rivers except in previously platted subdivisions. Alleys are included in density calculations.

Department means the building, code enforcement, planning, and zoning department.

Detention means the collection and storage of surface water for subsequent gradual discharge.

Developable land means all of a parcel of land except:

- (1) Lands lying within proposed public rights-of-way;
- (2) Marshlands, swamps, floodplains or other environmentally sensitive lands where local, state or federal regulations otherwise prohibit development;
- (3) Bodies of water such as ponds, lakes and reservoirs, either natural or manmade; and
- (4) Alleyways, easements, streets, public rights-of-way and trails.

Developed area means that portion of a plot or parcel upon which a building, structure, paved ground surface area, gravel landscaping or other improvements have been placed.

Developer means any person, including a governmental agency, undertaking development as defined in F.S. ch. 163, part II and F.S. § 380.031, as amended, who engages in or proposes to engage in a development activity either as the owner or as the agent of an owner of property.

Development or *development activity* means any of the following activities:

- (1) Construction, clearing, filling, excavating, grading, paving, dredging, mining, drilling or otherwise significantly disturbing the soil of a site.
- (2) Building, installing, enlarging, replacing or substantially restoring a structure, impervious surface, or water management system, and including the long-term storage of materials.
- (3) Subdividing land into two or more parcels.
- (4) A tree removal for which authorization is required under this subpart.
- (5) Erection of a permanent sign unless expressly exempted by chapter 125.
- (6) Alteration of a historic property for which authorization is required under this subpart.
- (7) Changing the use of a site so that the need for parking is increased.
- (8) Construction, elimination or alteration of a driveway onto a public street.

Developer's agreement means a legislatively approved agreement or contract between the city and a developer that clearly establishes the developer's responsibility regarding project phasing, the provision of public and private facilities, and improvements and any other mutually agreed to conditions, requirements and terms that are in the best interests of the city and will promote the public interest and welfare of the city.

Development order means an order granting, denying, or granting with conditions an application for a development permit and includes any building permit, subdivision approval, rezoning, certification or designation, special exception, variance, special or temporary permit, or other official action of the appropriate city approval body or land development regulation administrator having the effect of permitting the development of land.

Diameter at breast height (DBH) means the average diameter of tree measured 4½ feet above ground level.

District means a section or sections of the city for which the zoning regulations governing the use of buildings and premises, the height of buildings, the size of yards, and the intensity of use are uniform.

Dock means a structure built on pilings over the water which is designed or used to provide anchorage for and access to one or more boats at anchorage. Necessary services such as water and other utilities are considered a part of a dock.

Drainage basin means the area defined by topographic boundaries which contributes stormwater to a drainage system, estuarine waters, or oceanic waters, including all areas artificially added to the basin.

Drainage detention structure means a structure which collects and temporarily stores stormwater for its gradual release. The stormwater may receive prior purpose treatment through physical, chemical, or biological processes with subsequent gradual release of the stormwater.

Drainage facilities means a system of manmade structures designed to collect, convey, hold, divert or discharge stormwater and includes stormwater sewers, canals, detention structures, and retention structures.

Drainage retention structure means a structure designed to collect and prevent the release of a given volume of stormwater by complete onsite storage.

Drive-in restaurant or refreshment stand means any place or premises where provision is made on the premises for the selling, dispensing or serving of food, refreshments or beverages to persons in automobiles and/or in other than a completely enclosed building on the premises, including those establishments where customers may serve themselves and may eat or drink the food, refreshments, or beverages in automobiles on the premises. A restaurant that provides drive-in facilities of any kind in connection with regular restaurant activities shall be deemed a drive-in restaurant. A barbecue stand or pit having the characteristics noted in this definition shall be deemed a drive-in restaurant. A drive-in restaurant, as defined herein, is not a restaurant.

Driveways means access ways that connect streets to drives or parking areas on individual parcels.

Drugs or drug sales means those substances that can affect a human's or animal's biological or neurological state and are sold by a pharmacy with a physician's prescription. This definition shall include medical marijuana being lawfully sold by an approved Medical Marijuana Treatment Center Dispensing Facility (MMTC).

Dwelling means a building or portion thereof designed or used exclusively for residential occupancy but not including campers, hotels, motels, motor homes (also referred to as trailer coaches), motor lodges, boardinghouses and lodginghouses, tents, tourist courts, tourist homes, dormitories, fraternity or sorority houses, hospitals, nursing homes or portable building.

Dwelling, mobile home, means a structure including the plumbing, heating, air conditioning, and electrical components contained therein, built on an integral chassis, transportable in one or more sections which structure is eight feet (2.4 meters) or more in width and over 40 feet in length, or which, when erected onsite, is 320 or more square feet designed to be used as a dwelling unit with or without a permanent foundation when connected the required utilities. If fabricated after June 15, 1976, each section should bear a HUD label certifying that it is built in compliance with the Federal Manufactured Home Construction and Safety Standards, 42 USC 5401 and 24 CFR 3282 and 3283. This use does not include manufactured buildings meeting the criteria contained in the definition of the term "single-family dwelling." This use includes manufactured single-family units certified by the state department of community affairs to be in compliance with the Florida Manufactured Building Act of 1979, F.S. ch. 553, pt. IV. This definition does not include recreational vehicle, manufactured home or modular home.

Dwelling, multiple-family, for the purposes of these LDRs, means a dwelling containing two or more individual dwelling units for families living independently of each other, within individual dwelling units, with separate cooking and toilet facilities within the units, often stacked one above the other in a vertical configuration, sharing common vertical walls and/or horizontal floors and ceilings. Each individual unit being two stories or more with independent entrances. The term "multiple-family dwelling" includes apartments, condominiums, group homes, row houses, townhomes and housing for the aged (which does not provide for routine nursing and/or medical care).

Dwelling, single-family, attached, means two dwelling units, each owned in fee and located on individual lots but joined along a single lot line, each of which is totally separated from the other by an un-pierced wall extending from ground to roof.

Dwelling, single-family, detached, means a residential building containing not more than one dwelling unit to be occupied by one family, not physically attached to any other principal structure. For regulatory purposes, the term "single-family detached dwelling" does not include mobile homes, recreational vehicles or other forms of temporary or portable housing. Manufactured buildings constructed for use as single-family dwelling units (manufactured home dwellings) are treated similarly to single-family detached dwellings.

Dwelling, townhouse, means a type of multifamily dwelling, in which five or more individual dwelling units are attached by one or more vertical party walls, with the habitable spaces of different dwelling units arranged on a side-by-side, rather than a stacked, configuration, and each individual unit being two stories or more. Each individual townhouse dwelling unit has its own front and rear access to the outside.

Dwelling unit (D.U.) means a single housing unit providing complete, independent living facilities for one housekeeping unit, including permanent provisions for living, sleeping, eating, cooking and sanitation.

Easement means the right to use the land of another for a limited purpose, all other rights and title remaining in the owner.

Electronic equipment means any electronic or mechanical device intended and used for a single player at a time provided by or on behalf of an operator of an electronic game promotion that is used or adapted for use to conduct and/or reveal the results of a game promotion or sweepstakes or drawing by chance conducted in connection with the sale of a consumer product or service that displays results by simulating a game or games ordinarily played on a slot machine.

Electronic game promotion center means any place or premises where an electronic game promotion is conducted and is permitted.

Electronic game promotion means a sweepstakes or other game promotion which utilizes electronic equipment and a drawing by chance conducted in connection with the sale of a consumer product or service which utilizes electronic equipment.

Elevation means height in feet above mean sea level as established by the National Geodetic Vertical Datum (NGVD) of 1929 and or NAVD 88.

Elevated building means a non-cellar building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

Emergency work means any work performed for the purpose of preventing or alleviating physical trauma or property damage threatened or caused by an existing or imminent peril.

EMF means electromagnetic field.

Engineer means a professional engineer registered to practice engineering by the state and who is in good standing with the state board of professional engineers.

Encroachment means a protrusion into a vehicular access way, pedestrian way, or landscaped area.

Environmentally sensitive lands means areas designated on the future land use map as conservation.

Erected means and includes built, constructed, reconstructed, moved upon, or any physical operation on the premises required for building; or excavations, fill, drainage, demolition of an existing structure, in conjunction with erection.

Essential services means public utility facilities either underground or overhead and related to the transmission or distribution systems of water, sanitary or storm sewerage, telephone, gas, electricity, solid waste disposal, cable or community television and public safety, including poles, wires, mains, hydrants, drains, pipes, conduits, police or fire call boxes, traffic signals and other similar equipment necessary for the furnishing of adequate service, but not including buildings, provided that:

- (1) This section shall be deemed to permit the location in a district of such major installations as electrical or gas generating plants, sewage treatment plants, water pumping or aeration facilities and other similar major installation, unless such facilities were constructed or construction was started prior to the adoption of this zoning ordinance; that:
- (2) This section shall not be deemed to permit the erection of structures for commercial activities such as sales of related merchandise or collection of bills in districts from which such activities would otherwise be prohibited. Construction of appropriate buildings with appropriate screening and/or landscaping shall be compatible with surrounding neighborhood.

Existing means the condition immediately before development or redevelopment commences.

Exterior walls. Exterior walls of a principal structure shall be constructed of finished materials such as stucco, natural brick or stone, finished concrete, wood or other similar material on all sides.

Facility means a building, appurtenant structures, surrounding land area, the system or location used by a single business private entity or governmental unit or sub-unit to provide for the collection, treatment or disposal of solid waste, potable water, drainage and sewage.

Family means one person or a group of two or more persons living together and interrelated by bonds of consanguinity, marriage, civil union, or legal adoption, or a group of persons not more than three in number who are not so interrelated, occupying the whole or part of a dwelling as a separate housekeeping unit with a single set of culinary facilities. An unrelated roomer, boarder, or tenant is not a member of a family.

Fence means any barrier, defined herein, as something which hinders and/or restricts that is naturally grown or constructed.

Fenestration means the placement of window openings in a building wall, one of the important elements in controlling the exterior appearance of a building.

Fill means any materials deposited for the purpose of raising the level of natural land surface.

Flammable liquids means liquids having a flash point below 200 degrees Fahrenheit, closed cup tester. Class 1 flammable liquids (e.g., gasoline) have a flash point of 25 to 69 plus degrees Fahrenheit.

Flashing sign means any illuminated sign on which the artificial source of light is not maintained stationary or constant in intensity and color at all times when such sign is illuminated. Illuminated signs which indicate the time and/or temperature shall not be considered flashing signs, provided that the total area of the sign so used shall not exceed ten square feet in size. For the purposes of this definition, any moving illuminated sign affected by intermittent lighting shall be deemed a flashing sign.

Flat or wall sign means any sign erected parallel to the face or the outside wall of any building that is supported throughout its length by the wall of the building.

Flood means the unusual and rapid accumulation or runoff of surface water of any source.

Flood elevation of record means the maximum flood elevation for which historical records exist.

Flood insurance rate map (FIRM) means an official map of a community issued by FEMA (the Federal Emergency Management Agency), on which the Federal Insurance Administration has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Flood insurance study means a study provided by FEMA (the Federal Emergency Management Agency) containing flood profiles as well as the flood boundary floodway map and the water surface elevation of the base flood, and is the official such report for the city.

Flood protection elevation means the elevation of the base flood plus two feet in the V zones as defined by FEMA (the Federal Emergency Management Agency).

Flood zones means areas where there is wetland vegetation, the areas of transition between wetland vegetation and upland areas, and those areas outlined in the federal insurance floodprone maps.

Floodplain means land which will be inundated by floods known to have occurred or reasonably characteristic of what can be expected to occur (during a 100-year flood event) from the overflow of inland or tidal waters and the accumulation of runoff of surface waters from rainfall or identified by FEMA (the Federal Emergency Management Agency) as an A zone on flood insurance rate maps or flood hazard boundary maps.

Floodway means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Floor area, except as may be otherwise specifically indicated in relation to particular districts and uses, shall be construed as the sum of the gross horizontal areas of the several floors of a building measured from the exterior faces of the exterior walls or from the centerline of walls separating two buildings, excluding attic areas with a headroom of less than seven feet, unenclosed stairs or fire escapes, elevator structures, cooling towers, areas devoted to air conditioning, ventilating or heating or other building machinery and equipment, parking structures, and basement space where the ceiling is not more than an average of 48 inches above the general finished and graded level of the lot.

Floridan aquifer system means the thick carbonate sequence which includes all or part of the Paleocene to early Miocene Series and functions regionally as a water-yielding hydraulic unit. Where overlaid by either the intermediate aquifer system or the intermediate confining unit, the Floridan contains

water under confined conditions. Where overlaid directly by the surficial aquifer system, the Floridan may or may not contain water under confined conditions, depending on the extent of low permeability materials in the surficial aquifer system. Where the carbonate rocks crop out, the Floridan generally contains water under unconfined conditions near the top of the aquifer system, but, because of vertical variations in permeability, deeper zones may contain water under confined conditions. The Floridan aquifer is the deepest part of the active groundwater flow system. The top of the aquifer system generally coincides with the absence of significant thicknesses of clastics from the section and with the top of the vertically persistent permeable carbonate section. For the most part, the top of the aquifer system coincides with the top of the Suwannee Limestone, where present, or the top of the Ocala Group. Where these are missing, the Avon Park Limestone or permeable carbonate beds of the Hawthorn Formation form the top of the aquifer system. The base of the aquifer system coincides with the appearance of a regionally persistent sequence of anhydride beds that lie near the top of the Cedar Keys Limestone.

Food and grocery stores means stores primarily engaged in retailing a general line of food items, such as canned and frozen foods, fresh fruits and vegetables, and fresh and prepared meats, fish, and poultry. Included in this industry are delicatessen-type establishments primarily engaged in retailing a general line of food and which typically also offer other home care and personal care products and which are substantially larger and carry a broader range of merchandise than convenience stores.

Foster home means any establishment that provides care for children unrelated to the operator in adherence to current regulations established by the state department of children and families and which receives a payment, fee or grant for any of the children receiving care, wherever operated and whether or not operated for a profit.

Foundation systems means those structural members of a building consisting of piers, sills, girders, joists, concrete slabs or any other members designed and used to support a building upon, in or under the ground.

Freestanding sign means a sign supported by a sign structure secured in the ground and which is essentially structurally independent of any building, structure or vehicle, excluding a monument sign.

Frontage. The linear length of a property line of any one premises abutting a street or public right-of-way and parallel to and along each public right-of-way it borders.

Frontage, street, means all the property on one side of a street between two streets, which intersects such street (crossing or termination), measured along the line of the street, or if the street is dead ended, then all of the property abutting on one side between a street, which intersects such street and the dead end of the street.

Functionally dependent facility means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water such as a docking facility necessary for the loading or unloading of cargo or passengers, boat building, boat repair, or fishery processing facilities. The term "functionally dependent facility" does not include long term storage, manufacture, sales or service facilities.

Garage apartment means a single dwelling unit located over a private detached garage and containing square footage no greater than that of the garage.

Garage, parking, means a building or portion thereof designed or used for temporary parking of motor vehicles.

Garage, private, means a structure designed or used for inside private parking of private passenger vehicles by the occupants of the main building. A private garage attached to or a part of the main structure is considered part of the main building. An unattached private garage is considered an accessory building.

Garage, public, means a building, or portion thereof, other than a private garage, designed or used for equipment servicing, repairing, hiring, selling or storing of motor-driven vehicles, but not including the storage of wrecked or junked vehicles.

Garage, repair means a building or portion thereof, other than a private residential garage, designed or used for repairing, equipping or servicing of motor vehicles.

Garage, storage, means a building or portion thereof designed and used exclusively for the storage of motor vehicles, and within which temporary parking may also be permitted.

Garbage means every refuse accumulation of animal, fruit or vegetable matter that attends the preparation, use in cooking and dealing in or storage of meats, fish, fowl, fruit or vegetables; any matter of any nature whatsoever which is subject to decay and the generation of noxious or offensive gases or odors, or which, during or after decay, may serve as breeding or feeding material for flies, or other germ-carrying insects; and any bottles, cans or other containers, utilized in normal household use which, due to their facility to retain water, may serve as breeding places for mosquitoes or other insects.

Grade, average, means the elevation determined by averaging the highest and lowest elevations of a parcel, building site or other defined area of land.

Grade, finish, means the ground elevation at any point after final grading immediately adjacent to a building or structure.

Grading means the filling, excavation or other movement of earth for any purpose.

Grandfathered means or describes the status accorded certain properties, use, and activities that are legally existing prior to the date of adoption of the zoning ordinance or provisions of the zoning ordinance that is allowed to remain, as long as it is continuously used and not expanded.

Gross floor area means the sum of the gross horizontal areas of the several floors of a building measured from the exterior face of exterior walls, or from the centerline of a wall separating two buildings, but not including interior parking spaces, loading space for motor vehicles, or any space where the floor-to-ceiling height is less than six feet.

Gross vehicle weight rating (GVWR) means the value specified by the manufacturer as the recommended maximum loaded weight of a single motor vehicle. In cases where trailers and tractors are separable, the gross combination weight rating (GCWR), which is the value specified by the manufacturer as the recommended maximum loaded weight of the combination vehicle, shall be used.

Ground cover means low growing plants planted in such a manner as to form a continuous cover over the ground, such as Liriope, English Ivy, or like material.

Ground sign means a sign that is movable or permanently erected on a freestanding frame, mast, or pole and not attached to any building with a surface area of less than 100 square feet per side, exclusive of base, but including ornamentation.

Groundwater means water in saturated zones or stratum beneath the surface of land or water, whether or not it is relatively stationary or flowing through channels.

Group living facility means an establishment where lodging is provided:

- (1) For four or more persons who are not a family or for three or more roomers or boarders;
- (2) For residents rather than transients;
- (3) On a weekly or longer basis; and
- (4) In which residents may share common sleeping or kitchen facilities.

The term "group living facility" includes dormitories, fraternities, sororities, roominghouses or boardinghouses, convents or monasteries, orphanages, and housing for other institutional groups. For purposes of these land development regulations, community residential homes and one-, two-, or multiple-family dwellings which constitute separate housekeeping establishments for individual families are not considered group living facilities.

Group ownership (condominium) means any type of property ownership where common land is held by some other person, association, or corporation other than the dwelling unit owner.

Guest house or guest cottage means a dwelling unit in a building separate from and in addition to the main residential building on a lot, intended for intermittent or temporary occupancy by a nonpaying guest; provided, however, that such quarters shall have separate utility meters.

Guyed tower means a communication tower that is supported, in whole or in part, by guy wires and ground anchors.

Habitable room means a space in a structure for living, sleeping, eating or cooking. Bathrooms, toilet compartments, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

Habitable story means any story used or to be used for living purposes which includes working, sleeping, eating, cooking, recreation, or a combination thereof. A story used only for storage purposes and having only non-load-bearing walls (e.g., breakaway lattice-work, wall, or screen) is not a habitable story.

Handicap requirements means providing provisions for any person who has anatomical or physiological deficiency restricting or preventing movement without the aid of a mechanical device, wheelchair, walker, cane or canes, crutch, invalid tricycle or any similar device. Any person unable to climb stairs, any blind person and any other person with any physical handicap interfering with the person's ability to walk or travel on a surface other than a level surface.

Hazardous waste means solid waste, or a combination of solid wastes which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible or incapacitating reversible illness or may pose a substantial present or potential hazard to human health or the environment when improperly transported, disposed of, stored, treated or otherwise managed.

Home for the aged means a facility for the care of the aged with routine nursing or medical care provided known as a nursing home as defined by F.S. ch. 400.

Home improvement center means an establishment whose principal business is the retail sale of merchandise customary to the repair, maintenance and improvement of residential and business structures, including repairs, maintenance and improvements of the properties on which these structures are located. For the purpose of this zoning ordinance, a home improvement center shall not be deemed a business which sells merchandise in large quantities to builders and/or contractors. All materials shall be stored in a completely enclosed structure.

Home occupation means any occupation performed in a dwelling unit in which there is no stock kept or sold on the premises. No person is employed unless he is a member of the immediate family residing upon the premises. No mechanical equipment is used except as is necessary for purely domestic or household purposes. There is no sign other than an unlighted name plate not more than one foot square in area, or a display that will indicate from the exterior of the building that it is being used for any purpose other than a dwelling.

Hospital means a building or group of buildings having facilities for overnight care of one or more human patients, providing services to in-patients and medical care to the sick and injured, and which may include as related facilities: laboratories, out-patient services, sanitarium, sanatorium, preventorium,

clinic, rest home, nursing home, convalescent home and any other place for the diagnosis, treatment or other care of ailments, and shall be deemed to be limited to places for the diagnosis, treatment or other care of ailments training facilities, central service facilities, and staff facilities; provided, however, that any related facility shall be incidental and subordinate to principal hospital use and operation. Only those buildings licensed as a hospital under the laws of the state shall be included within this definition.

Hospital, general medical and surgical only, means a hospital other than for mental patients, contagious or infectious diseases, or liquor or drug addicts.

Hotel/motel/motor lodge means a structure or group of attached or detached buildings containing individual sleeping units, with automobile storage or parking spaces provided. It is kept, used, maintained, advertised as or held out to the public to be a place where sleeping accommodations are supplied for pay to guests or tenants. Sleeping accommodations and any dining room, restaurant or cafe is in the same building or in an accessory building.

Housing for the elderly means a facility defined as an adult congregate living facility or an adult day care center under F.S. ch. 400 in the nature of multiple-family housing, with no provision for routine nursing or medical care. Where this zoning ordinance permits housing for the elderly, such housing shall be used only for this purpose; if housing for the elderly is changed to multiple-family use, then the provisions of this subpart shall be met before such multiple-family use is permitted.

Illuminated sign means a sign which contains a source of light or which is designed or arranged to reflect light from an artificial source including indirect lighting, neon, incandescent lights, backlighting, and shall also include signs with reflectors that depend upon automobile headlights for an image.

Impervious surface means a surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. The term "impervious surface" includes, but is not limited to, semi-impervious surfaces such as compacted clay, as well as most conventionally surfaced streets, driveways, roofs, sidewalks, parking lots and other similar surfaces.

Improvement means any manmade, immovable item which becomes part of, is placed upon, or is affixed to real estate.

Infestation means the presence within or around a dwelling of any insects, rodents or other pests.

Junk yard means a place, structure or lot where junk, waste, discarded, salvaged or similar materials such as old metals, wood, slush, lumber, glass, paper, rags, cloth, bagging, cordage, barrels, containers, etc., are brought, bought, sold, exchanged, baled, packed, disassembled, sorted or handled, including used lumber and building material yards, house wrecking yards, heavy equipment wrecking yards, and yards or places for the storage, sale or handling of salvaged house wrecking or structural steel materials. This definition shall not include automobile wrecking and automobile storage yards, or pawnshops and establishments for the sale, purchase or storage of secondhand cars, clothing, salvaged machinery, furniture, radios, stoves, refrigerators or similar household goods and appliances, all of which shall be usable, nor shall it apply to the processing of used, discarded or salvaged materials incident to manufacturing activity. However, establishments for the sale, purchase or storage of secondhand refrigerators, stoves, plumbing fixtures and similar merchandise shall be considered a junk yard for the sole purpose of requiring that such establishments display their merchandise behind a visual barrier as required for junk yards by this zoning ordinance.

Kennel means any place or premises where four or more household pets over four months of age are kept for pay or for sale. This definition shall not apply to veterinarians operating under license from the state who board household pets on the same premises in conjunction with their practice incidental to observation and treatment.

Landscape development means trees, shrubs, ground cover, vines, or grass installed in planting areas for the purpose of fulfilling the requirements of this subpart.

Landscape dividing strip means a landscape area containing ground cover, shrubs and trees, or other landscaping used to partition parking areas into individual bays.

Laundry, self-service, means a business that renders a retail service by renting to the individual customer equipment for the washing, drying, and otherwise processing laundry, with the equipment serviced by and its use and operation supervised by an attendant.

Linear park means linear open spaces that can follow canals, rivers, shorelines, power transmission line rights-of-way, streets and highways or even bicycle paths. Names frequently given to this concept include parkways, boulevards or greenbelts. Regardless of the form they take, linear parks are intended to make movement from one part of the city to another more pleasant. Because of linear form, they are particularly conducive to recreational activities such as hiking, bicycling, horseback riding or driving for pleasure.

Loading space, off-street, means an on-the-property space, logically and conveniently located for pickups or deliveries or for loading and unloading of vehicles scaled to delivery vehicles expected to be used, and accessible to such vehicles when required off-street parking spaces are filled. Such space shall measure not less than 12 feet by 25 feet excluding surfaced area necessary for access and maneuvering.

Long-term rental means any residential rental that is rented for a period of six months or longer.

Lot means any discrete piece, parcel, plot, or tract of land shown on a recorded plat or any piece of land specifically described in a deed appearing in the public records occupied. For the purpose of this chapter, the term "lot" shall be taken to mean any number of contiguous lots or portions thereof, upon which one or more main structures for a single use are erected or are to be erected or which has the potential for occupancy by a building together with its accessory buildings, including the open space required under this chapter and includes the following:

- (1) Corner lot. Any lot situated at the junction of and abutting on two or more intersecting streets, roads, or highways, unless the angle of intersection is more than 135 degrees.
- (2) Double frontage. An interior lot having frontage on two parallel or approximately parallel streets, roads, or other thoroughfares streets, other than a corner lot.
- (3) Interior lot. A lot other than a corner lot having frontage on one street.

Lot coverage means the number determined by dividing that area of a lot which is occupied or covered by the total horizontal projected surface of all buildings, including covered porches, and accessory buildings, driveways, and paved, bricked, or wooden walkways, pool decks and patios, by the lot area.

Lot depth means the distance measured in the mean direction of the side lines of the lot from the midpoint of the front line to the midpoint of the opposite rear line of the lot.

Lot, Flag means a parcel of land that is situated generally behind a lot or lots fronting on the street; does not meet the required lot width requirements at the required front yard setback as per the Density Control Regulations as set forth for each specified zoning district in Chapter 117 of the City Land Development Code but does maintain a narrow street frontage along the width of the access strip.

Lot lines mean the lines bounding a lot, dividing one lot from another.

Lot line, front means that property line that abuts a public street. If a lot abuts on two or more streets, the front lot line shall be that property line abutting a street that has been so designated by the owner at the time of an application for a building permit, provided such lot is not thereby made nonconforming.

Lot line, side means any property line which is not a front lot line or a rear lot line. A side lot line separating a lot from another lot or lots is an interior side lot line.

Lot line, rear means that property line that is most distant from and is, or is most nearly, parallel to the front lot line.

Lot of record means a lot whose existence, location and dimensions have been legally recorded as part of a subdivision or registered in a deed or on a plat which has been legally recorded in the office of the clerk of the circuit court of the county prior to the effective date of this zoning ordinance. If a portion of a lot or parcel has been conveyed at the time of the adoption of the land development code, the remaining portion of said lot or parcel shall be considered a lot of record.

Lot width means the horizontal distance between the side lot lines of a lot at the depth of the required front yard setback where the lot abuts a street, or at the front lot line where no front yard setback is required ~~the mean horizontal distance between side lot lines as measured at right angles to the depth.~~

Lowest floor means the lowest enclosed floor of a structure, including a basement, but not including the floor of an area enclosed only with insect screening or wood lattice as permitted by the flood damage prevention regulations in this subpart.

Maintenance means that action taken to restore or preserve the original design and function.

Major thoroughfare means a multi-lane divided roadway with more than one lane in each direction.

Manufactured housing means it is mass-produced in a factory and is designed and constructed for transportation to a site. It is installed onsite and available for use as a dwelling when connected to required utilities. It can be constructed either as an independent, individual building or as a module for combination with other elements to form a building on the site.

Marina means a waterfront facility providing one or more of the following:

- (1) Docking and/or wet or dry storage of boats for a fee;
- (2) Sales of marine supplies, parts and fuel;
- (3) Boat sales, rental and/or charter;
- (4) Boat service and repair.

Marina accessory uses means uses normally ancillary and subordinate to a marina, including, but not limited to, live aboard facilities, if permitted, restaurants, gift shops, offices, self-service laundries, water taxi dockage and other commercial activities such as the ship's store, which shall be designed and situated within the marina facility to serve the boating community.

Marquee sign means a roof-like structure, often bearing a signboard, projecting over an entrance, as to a theater or hotel.

Massing means the overall bulk, size, physical volume, or magnitude of a structure or project.

Maximum lot/site coverage means the highest allowed percentage of a lot to be covered by structures.

Medical marijuana treatment center dispensing facility (MMTC) means a retail facility established by a licensed medical marijuana treatment center that sells or dispenses medical marijuana, products containing marijuana, or related supplies, but does not engage in any other activity related to the preparation, wholesale storage, distribution, transfer, cultivation, or processing of any form of marijuana, marijuana products, or related supplies.

Mini-warehouses means and includes personal property storage establishments in which storage space for personal property is provided and offered to the public for monetary compensation. Storage of

goods shall be limited to personal property or business with no retail sales, repairs or manufacturing service establishments, offices, and apartments (no commercial distribution, assembly of finished goods or warehousing allowed).

Minor replat means the subdivision of a single lot or parcel of land into two lots or parcels, or the subdivision of a parcel into two or more lots solely for the purpose of increasing the area of two or more adjacent lots or parcels of land, where there are no roadway, drainage or other required improvements, and where the resultant lots comply with the standards of this subpart.

Mixed-use building means a use which contains a mixture of one or more residential units and commercial businesses within the same building.

Mobile home park means a parcel of land set aside and rented by any person for the parking and accommodation of mobile homes which are to be occupied for sleeping or eating in exchange for a consideration or benefit to the owner of the mobile home park. This includes all land, buildings, structures or facilities used by occupants of mobile homes on such premises.

Modular home means any single-family residential dwelling unit constructed in a controlled factory environment in accordance with the provisions of the state minimum building, plumbing, electrical, fire, accessibility and energy codes, and which has building plans. A modular home can be shipped as a vehicle with wheels or may be delivered on a truck and may or may not be required to be constructed on an integral chassis. Modular homes are governed by F.S. §§ 553.35 through 553.41, regulated by the state department of community affairs and bear such an insignia over the electrical panel cover.

Modular office buildings/manufactured building means a closed structure, building assembly, or system of assemblies, which may include structural, electrical, plumbing, heating, ventilating, or other service systems manufactured in manufacturing facilities for installation or erection, with or without specified components, as a finished building or part of a finished building, which shall include, but not be limited to, residential, commercial, institutional, storage, or industrial structures. Manufactured building may also mean, at the option of the manufacturer, any building of open construction made or assembled in manufacturing facilities away from the building site for installation, or assembly and installation, on the building site.

Monopole tower means a communication tower consisting of a single pole, constructed without guy wires and ground anchors.

Motor vehicle means any vehicle which is propelled or drawn on land by a motor, such as, but not limited to, passenger cars, trucks, truck-trailers, semi-trailers, campers, go-carts, amphibious craft on land, dune buggies, or racing vehicles, but not including motorcycles.

Natural systems means systems which predominantly consist of or are used by those communities of plants, animals, bacteria and other flora and fauna which occur endogenously on the land, in the soil or in the water.

New construction means structures or substantial improvements for which the start of construction occurred on or after the effective date of the ordinance from which this subpart is derived, and any alteration, repair, reconstruction or improvements to a structure which is in compliance with these flood damage prevention regulations.

Noise control officer (NCO). The chief of police, or person designated by the chief of police, shall be the noise control officer.

Noise sensitive zone means those zones that are created from time to time by resolution of the city council upon a finding that the subject area contains a land use which is sensitive to or subject to adverse reactions from noise.

Nonconforming development means development that does not conform to the land use regulations in chapter 117 and/or the development design and improvement standards in chapter 113.

Nonconforming sign means any sign or structure related thereto within the city which was lawfully erected and maintained prior to the effective date of the ordinance from which this subpart is derived which is prohibited by or fails to conform to all applicable regulations, requirements, and restrictions of this subpart; except that signs that are within ten percent of the height and size limitations of this Code, and that in all other respects conform to the requirements of this subpart, shall be deemed to be in conformity with this subpart.

Nonconforming use of building means use of a building or portion thereof, or land or portion thereof, which does not conform with the land use regulations of the district in which the building is located, the use of which was legally established and existed prior to the effective date of such use regulation.

Nursing home means a public or private home, institution, building, residence or other place, profit or nonprofit, which undertakes through its ownership or management to provide for a period exceeding 24 hours, maintenance, personal care, or nursing for three or more persons not related by blood or marriage to the operator, who by reason of illness or physical infirmity or advanced age are unable to care for themselves; provided that this definition includes homes offering services for less than three persons when the homes are held out to the public to be establishments which regularly provide nursing and custodial services. Only those homes, buildings or places licensed under F.S. ch. 400, pts. I, II and IV, as nursing homes, adult congregate living facilities, and adult day care centers, respectively, shall be included within this definition.

Nuisance trees means trees that are exempted from the tree protection requirements of this subpart as defined in chapter 113.

100 percent clear zone means the requirement that in the event of a tower failure, the entire height of the tower would fall completely within the boundaries of the property on which it is located.

Occupied means arranged, designed, built, altered, converted to, or intended to be used or occupied.

Office, business or professional, means an office for such operations as accounting services, auditing and bookkeeping services, employment service agencies (permanent job placement), insurance offices, manufacturer's representative, mortgage broker, real estate offices, stockbroker's office, telephone answering and referral service, travel agency, and the like; or an office for the use of persons generally classified as professionals such as architects, attorneys, clinics, chiropractors, dentists, doctors, engineers (including surveyors), interior designers, land planners, licensed masseurs, medical and dental laboratories, ophthalmologists, osteopaths, psychiatrists, psychologists and other mental health services, veterinarians (but not including treatment or boarding of animals on the premises), and the like.

Open patio means an outdoor area or structure that, for the purposes of this subpart, adjoins or is adjacent to a restaurant, saloon, tavern, bar, cafe, cocktail lounge, delicatessen, food service type establishment or the like.

Open space means areas defined as undeveloped lands suitable for passive recreation without structures or buildings either in its natural state or landscaped with vegetation and/or grasses.

Operator means any person who has charge, care or control of a building or part thereof, in which dwelling units or rooming units are let.

Outdoor advertising display means any letter, figure, character, mark, plane, point, marquee sign, design, poster, pictorial, picture, stroke, stripe, line, trademark, reading matter or illuminated service, which shall be so constructed, placed, attached, painted, erected, fastened or manufactured in any manner whatsoever, so that the display shall be used for the attraction of the public to any place, subject, person, firm, corporation, public performance, article, machine or merchandise, whatsoever, which are displayed in any manner whatsoever out-of-doors.

Outdoor entertainment means the provision of onsite amplified or non-amplified music, song, and/or spoken word for the enjoyment of patrons associated with a permitted business use or activity. Outdoor entertainment may be permanent or restricted.

Outdoor seating means secondary seating solely to serve patrons with food/beverage, stored and/or prepared in the adjacent establishment.

Outdoor storage means the storage, keeping, maintaining or allowing the existence of merchandise, building materials, wood, junk, trash, debris or other similar items outside of a completely enclosed building.

Owner means a person who, or entity which, alone, jointly or severally with others, or in a representative capacity (including, without limitation, an authorized agent, attorney, executor, personal representative or trustee) has legal or equitable title to any property in question, or a tenant, if the tenancy is chargeable under his lease for the maintenance of the property.

Package store/liquor store means a place where alcoholic beverages with an alcoholic content in excess of 14 percent are dispensed or sold in containers for consumption off the premises.

Parcel means a unit of land within legally established property lines. If, however, the property lines are such as to defeat the purposes of this subpart or lead to absurd results, a parcel may be as designated for a particular site by the building official.

Parking area means a paved ground surface area used for the temporary parking and maneuvering of vehicles by employees or customers, either for compensation, or to provide an accessory service to a commercial, industrial, institutional or residential use.

Parking bays means a parking area subdivided into uninterrupted rows of parking spaces which are generally separated by only single or double painted lines.

Parking lot means an area or plot of land used exclusively for the storage or parking of motor vehicles, but no vehicles are equipped, repaired, rented or sold.

Parking space means a ground surface area used for the temporary storage of a single vehicle to serve a primary use. Groups of spaces and abutting access ways are called parking bays.

Parking space, off-street, means marked or unmarked parking located within a parcel and outside a private or public right-of-way supportive of needs of adjacent facility or facilities, adequate for parking a standard size motor vehicle with room for opening doors on both sides. Such space shall also be surfaced with erosion-resistant material in accordance with city specifications.

Parking space, on-street, means marked or unmarked parking located within a private or public right-of-way and outside of a parcel adequate for parking a standard size motor vehicle.

Patio home means a single-family attached/detached home; this style may be one- or two-story with windows facing protected enclosed spaces, the court or enclosed patio provides additional living space in complete privacy. Front and rear yard setbacks give the opportunity for additional fenced or walled private patio.

Paved ground surface area means any paved ground surface area (excepting public rights-of-way) constructed from concrete, asphalt, brick pavers, millings, or other surface material intended to withstand vehicular traffic without erosion and which does not include grass, dirt, wood chips, limerock and the like used for the purpose of driving, parking, storing or display of vehicles, boats, trailers and mobile homes, including new and used car lots and other open-lot uses. Parking structures, covered drive-in parking areas to the drip line of the covering or garages, shall not be considered as paved ground surface areas. Any off-street parking or loading space required under this subpart shall be considered as paved ground surface area for purposes of this subpart whether or not the off-street parking or loading space is paved.

Pergola means an arbor or a passageway of columns supporting a roof of trelliswork on which climbing plants are trained to grow. Pergolas are usually a separate structure from the main building.

Permanent means designed, constructed and intended for more than short-term use.

Person means any individual, association, partnership or corporation, and includes any officer, employee, department, agency, or instrumentality of the United States, the state, or any political subdivision thereof.

Pet, household, means any domestic live creature normally owned or kept as a pet, including cats, dogs, rabbits, reptiles, various small animals (such as hamsters and white mice) and birds, but excluding livestock and any breed of animals, such as, but not limited to, horses, cattle, swine, sheep, goats, chickens, geese, and ducks. Outdoor pens, cages, yards, etc., shall not exceed accommodations for more than a total of four.

Planning and architectural review board means the city planning advisory board as legally constituted for the city when so designated by the city council.

Planning and zoning director means the official designated by the city manager as the individual responsible for the administration of the city planning and zoning regulation matters.

Planned unit development means the development of land under unified control that is planned and developed as a whole in a single or programmed series of operations with uses and structures substantially related to the character of the entire development. A planned unit development must also include a program for the provision, maintenance and operation of all areas, improvements, facilities and necessary services for the common use of all occupants thereof.

Planting area means any area designed for landscape planting having a minimum of ten square feet of actual plantable area and a minimum inside dimension of 18 inches on any side.

Porch, enclosed and open, means an enclosed porch is a roofed space attached to the outside of the outer wall of the building, open on one or more sides, which has railings or screened enclosures. An open or unenclosed porch is a roofed space attached to an outer wall of a building open on one or more sides without railing, glass, canvas, screen or similar materials on the open sides.

Portable sign means any sign which is not permanently affixed to a building, structure or the ground, or which is attached to a vehicle or, whether on its own trailer, wheels, or otherwise, is designed or intended to be transported from one place to another. It is characteristic of a portable sign that the space provided for advertising messages may be changed at will by the replacement of lettering or symbols.

Portable storage unit means any container designed for the storage of personal property which is typically rented to owners or occupants of property for their temporary use and which is delivered and removed by truck or other means of conveyance.

Post, pedestal or column sign, means every sign mounted on a post, pedestal or column, with surface area of less than 140 square feet per side, exclusive of post, pedestal or column.

Poultry means any chickens, turkeys, ducks, geese, guineas or other fowl.

Premises means an improved area of land, a lot, plot or parcel of land with its appurtenances and buildings which, because of its unity of current use, may be regarded as the smallest conveyable unit of real estate, exclusive of easements where the premises is the dominant parcel.

Primary front facade means the facade of a building fronting onto a public or private street or pedestrian access way.

Professional office and services means a business that offers any type of personal service to the public in an approved zoning classification and building which requires as a condition precedent to the rendering of such service by obtaining of a license or other legal authorization. By way of example, and

without limiting the generality of this definition, professional services includes services rendered by certified public accountants, public accountants, engineers, chiropractors, dentists, osteopaths, chiropodists, architects, veterinarians, attorneys at law, physical therapists and life insurance agents.

Projection sign means any sign affixed to the wall of any building or structure and extending beyond the building wall, structure, building line or property line more than 12 inches, and a surface area of less than six square feet.

Protected tree means any tree that has a diameter at breast height of more than eight inches, and which is not otherwise exempted from this subpart. For the purpose of this subpart, all mangroves are hereby declared to be protected trees. In addition, all palms with at least 4½ feet of clear trunk between the ground level and the lowest branch are declared to be protected trees.

Public administrative and service facilities means any publicly-owned property and structures necessary to provide services to the surrounding area such as fire and police protection or other normal community service.

Rate means volume per unit of time.

Real estate sign means any temporary sign erected by the owner, or his exclusive agent, advertising that the real property upon which the sign is located, or any portion thereof, is for sale or for rent and not located within the public right-of-way.

Reconstruction means rehabilitation or replacement of a structure or structures which either have been removed or damaged, or altered to an extent of 70 percent or more of the assessed valuation of such structure or structures or 70 percent of the combined assessed valuation of such structure and land as shown on the most recent tax roll of the county.

Recreational vehicle means a vehicular portable structure built on a chassis with its own wheels, either self-propelled or towed by another vehicle designed to be used as a temporary dwelling for travel, vacation, camping or recreational purposes and including travel trailers, camping trailers, pickup campers, converted buses, motor homes, tent trailers, pop-up trailers, boats and boat trailers, and similar devices being more specifically described as:

- (1) Camping trailer means a canvas, folding structure, mounted on wheels and designed for travel, recreation and vacation uses.
- (2) Motorized home means a portable dwelling designed and constructed as an integral part of a self-propelled vehicle.
- (3) Pickup coach means a structure designed primarily to be mounted on a pickup or truck chassis and with sufficient equipment to render it suitable for use as a temporary dwelling for travel, recreational and vacation uses.
- (4) Self-contained travel trailer means a travel trailer which may operate independently of connections to electricity, water and sewers for a period of from one to seven days. Such a travel trailer has its own battery and/or LP gas to operate lights, refrigerator, stove, and heater; a large water tank with pressure systems; and a holding tank with a toilet.
- (5) Travel trailer means a vehicular, portable structure built on a chassis, standing on wheels, whether self-propelled or requiring a separate vehicle for power designed to be used for temporary or recreational living or sleeping purposes for travel, recreational, and vacation uses, permanently identified as travel trailer by the manufacturer on the trailer and, when factory equipped for the road, having body width not exceeding eight feet, and provided its gross weight does not exceed 4,500 pounds, or its body length does not exceed 29 feet.

Remove means to relocate, cut down, damage, poison, or in any other manner destroy, or cause to be destroyed, a tree.

Resort condominium means any unit or group of units in a condominium, cooperative, or timeshare plan which is rented less than six months or rented more than three times in a calendar year for periods of less than 30 days or one calendar month, whichever is less, or which is advertised or held out to the public as a place regularly rented for periods of less than 30 days or one calendar month, whichever is less.

Resort dwelling means any single-family dwelling that is rented less than six months or rented more than three times in a calendar year for periods of less than 30 days or which is advertised or held out to the public as a place regularly rented to guests.

Restaurant means an establishment where food is generally ordered from a menu, prepared, and served for pay, primarily for consumption on the premises in a completely enclosed room, under the roof of the main structure, or with secondary seating typically in an adjacent patio or open patio area. All establishments requiring an SRX license shall conform to F.S. § 561.20(2)(a)(4) which requires 51 percent of monthly receipts come from the sale of food and nonalcoholic beverages.

Roof line means a horizontal line intersecting the highest point or points of a roof.

Roof sign means a sign erected over or on, and wholly or partially dependent upon, the roof of any building for support, or attached to the roof in any way.

Rubbish means combustible and noncombustible waste materials, except garbage including the residue from the burning of wood, coal, coke or other combustible material, paper, rags, cartons, boxes, wood, excelsior, rubber, leather, tree branches, yard trimmings, tin cans, metal mineral matter, glassware, and scrap lumber or other building debris.

Runoff coefficient means ratio of the amount of rain which runs off a surface to that which falls on it; a factor from which runoff can be calculated.

School means an institution for the teaching of children or adults, including primary and secondary schools, colleges, professional schools, dance schools, business schools, trade schools, art schools, and similar facilities.

Screen enclosure means a structural network of metal or wood members with open mesh panels for both walls and roof.

Sediment means the mineral or organic particulate material that is in suspension or has settled in surface waters or groundwaters.

Self-support tower means a communication tower that is constructed without guy wires and ground anchors including lattice towers.

Service station, with major mechanical repairs, means a building or lot which, in addition to providing the sale of gasoline, diesel or other alternative fuels and normal accessories, provides in an enclosed structure major mechanical and body work, straightening of frames or body parts, steam cleaning, painting, minor welding and storage of automobiles not in operating condition.

Service station, without major mechanical repairs, means a building or lot that has as its primary purpose the sale of gasoline, diesel or other alternative fuels and normal accessories for passenger vehicles, and which may also provide not more than three work bays for minor repairs and maintenance to automobiles.

Setback means the required minimum distance ~~between the building line~~ buildings and structures and the related front, side or rear lot line over which no part of any building or structure may extend, except as otherwise provided.

Shared parking means parking that is utilized by two or more uses taking into account the variable peak demand times of each use; the uses can be located on more than one parcel.

Shingle sign means a projection or wall sign with a surface area of less than six square feet, constructed of metal or other noncombustible material attached securely to a building.

Ship's store means a facility that may provide bait, tackle, nautical supplies, snacks, soft drinks, beer and a variety of sundry items.

Shopping center, mall, or urban center means a group of retail stores or service establishments planned and developed as a unit by one operator, owner, organization, or corporation for sale or for lease on the site upon which they are built.

Sign means any letter, number, symbol, figure, character, mark, plane, point, design, stroke, strike, line, illuminated surface, light, string of lights, graphic, picture, mural, or any random or ordered variation of colors or dimensional textures, which shall be so constructed, placed, attached, painted, erected, or fastened in any manner whatsoever so that the same shall be used or intended to either convey information or attract the attention of the public to any place, item or idea, and which is visible by a pedestrian at ground level on any street, or water's edge of the St. Johns River, Governors Creek, or any adjoining premises; provided, however, that nothing in this definition shall be construed to make unlawful:

- (1) One or more dimensional architectural components or dimensional architectural details constructed as an integral part of a building and not used or intended to convey any information or depict any item or idea; or
- (2) Any such dimensional architectural component or dimensional architectural detail being consistently colored a color that is different from the color of such building or the color of another such component or detail (for example: roof versus fascia, fascia versus soffit, soffit versus wall, wall versus trim, trim versus window, window versus door).

Signs consisting of a group of detached letters, or two or more panels on the same support presented as a single advertisement, shall be considered as one sign.

Sign face area means the area of any regular geometric shape which contains the entire surface area of a sign upon which alphabetic or pictorial symbols or representations may be placed.

Site means generally, any tract, lot or parcel of land or combination of tracts, lots, or parcels of land that are in one ownership, or in diverse ownership but contiguous, and which are to be developed as a single unit, subdivision, or project.

Site plan means a scaled plan of the property to be developed, showing the locations of all structures and buildings, required yards, required parking, surface drive areas, loading spaces, stacking spaces, planting areas (both buffer yards and interior), dumpsters, exterior mechanical equipment, storm drainage retention areas, and all trees three inches or larger DBH, by species and DBH (both to be removed and to be retained), and any other necessary details required for review. Site plan shall comply with the requirements of article II of this chapter; this includes compliance with the checklist of requirements for submittal and approval of a site plan.

Sound level means the A-weighted sound pressure level obtained by the use of a sound level meter and frequency weighting network, such as A, B or C as specified in American National Standards Institute specification for sound level meters (ANSI S1.4-1971, Type 2 or the latest approved version thereof). If the frequency weighting employed is not indicated, the A-weighting shall apply.

Sound level meter means an instrument which includes a microphone, amplifier, RMS detector, response dampening circuit, output meter, and A-weighting network used to measure sound pressure levels.

Sound pressure level means 20 times the logarithm to the base ten of the ratio of the RMS sound pressure to the reference of 20 micronewtons per square meter. RMS sound pressure means the square root of the time averaged square of the sound pressure.

Soundproofed means sound baffled sufficiently to render all noise within the structure inaudible from adjoining properties and public rights-of-way.

Special exception means a use that would not be appropriate generally or without restriction throughout the zoning division or district, but which, if controlled as to number, area, location, or relation to the neighborhood, would promote the public health, safety, welfare, morals, order, comfort, convenience, appearance, prosperity or general welfare. Such uses may be permitted in such zoning division or district as exceptions, subject to the provisions of this chapter and in accordance with the procedures as set forth in section 101-352.

Start of construction means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation.

Stormwater means the flow of water which results from, and that occurs immediately following, a rainfall.

Stormwater management system means the system, or combination of systems, designed to treat stormwater, or collect, convey, channel, hold, inhibit, or divert the movement of stormwater on, through and from a site.

Stormwater runoff means that portion of the stormwater that flows from the land surface of a site either naturally, in manmade ditches, or in a closed conduit system.

Story means that portion of a building included between the surface of any floor and the surface of the next floor above it, then the space between such floor and the ceiling next above it or roof next above.

Story, half. means a story under a gabled, hipped or gambrel roof, the wall plates of which on at least two opposite exterior walls are not more than three feet above the finished floor of the story.

Story height means the vertical distance from top to top of two successive finished floor surfaces.

Street means a public thoroughfare that affords principal means of access to abutting property.

Street line means the line between the street and abutting property. The term "street line" also is referred to as right-of-way line.

Structural alterations means any change, except for repair or replacement, in the supporting members of a building, such as bearing walls, columns, beams or girders, floor joists or roof joists.

Structure means anything which is built, constructed or erected, the use of which requires permanent location in or upon the ground, an edifice of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner, or attachment to something having permanent location on the land. The term "structure" shall be construed as if followed by the words "or part thereof" and includes a building and any tents, lunch wagons, diners, camp cars or trailers on wheels or other supports, intended for business use or for use as living quarters.

Structural alterations means any change, except the repair or replacement, in the supporting members of a building, such as bearing walls, columns, beams or girders or the rearrangement of any interior partitions affecting more than five percent of the floor area of the building.

Subdivision means a division of a lot, tract or parcel of land or water into more than two lots, plats, sites or other subdivisions of land or water for the purpose, whether immediate or future, of sale, rent, lease, building development, anchorage, right-of-way dedication, or other use.

Substantial improvement means expansion of a building by more than 25 percent or more than 4,000 square feet, whichever is less (refers to section 101-158(d)(1)a).

Supplied means paid for, furnished or provided by or under control of the owner or operator.

Surface water means water above the surface of the ground whether or not flowing through definite channels. This includes any natural or artificial pond, lake, reservoir, or other area which ordinarily or intermittently contains water and which has a discernible shoreline; or any natural or artificial stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, street, roadway, swale or wash in which water flows in a definite direction, either continuously or intermittently, and which has a definite channel, bed or banks. All wetlands are classified as surface water.

Swimming pool means a structure of concrete, masonry or other approved material and finish, located either indoors or outdoors, used or designed to be used for bathing or swimming purposes, having a water holding capacity of more than two feet deep, and filled with a controlled water supply, together with buildings, appurtenances and equipment used in connection therewith.

Temporary housing means tents, plastic or tar paper lean-to and similar structures of a temporary nature not meeting any of the requirements of this subpart.

Tree protection zone means a circular zone around each protected tree. If the drip line is less than six feet from the trunk of the tree, the zone shall be that area within a radius of six feet around the tree. If the drip line is more than six feet from the trunk of the tree, but less than 20 feet, the zone shall be that area within a radius of the full drip line around the tree. If the drip line is 20 feet or more from the trunk of the tree, the zone shall be that area within a radius of 20 feet around the tree.

Use means the purpose for which land or water or a structure thereon or therein is designated, arranged or intended to be occupied or utilized or for which it is occupied or maintained.

Use of land means use of land, water, water surface, and land under water to the extent covered by zoning districts, and over which the city has jurisdiction.

Vacant land means any lot or parcel of land which is completely open, has no use associated with or upon it and is not utilized as the required yard area for any adjoining uses.

Variance means a modification or relaxation from the literal interpretation of the provisions or terms of the zoning ordinance where such variance will not be contrary to the public interest and where owing to conditions peculiar to the property and not the result of the actions of the applicant, a literal enforcement of the ordinance would result in unnecessary and undue hardship. As used in this subpart, a variance is authorized for height, area and size of structure, size of lot, yards and open spaces, establishment or expansion of a use within an approved zoning district. A variance shall not be granted because of the presence of nonconformities within a zoning district or uses in an adjoining zoning district.

Vehicle means a form of transportation, including motorized and non-motorized vehicles designed and required to be licensed for use upon a highway in the state.

Vehicle use area means an area used for circulation, parking, and/or display of motorized vehicles, except junk or automobile salvage yards.

Vine means any of a group of woody or herbaceous plants that may climb by twining, by means of aerial rootlets or by means of tendrils, or which may simply sprawl over the ground or other plants.

Visual barrier means any manmade or natural structure, including, but not limited to, a fence, wall, bush, tree or other item which prevents or restricts visual access, passage, interchange or freedom of movement.

Wall height means the vertical distance to the top, measured from the foundation wall or from a girder or other intermediate support of such wall.

Wetland is as defined in F.S. ch. 373.

Yard means a required open space other than a court on the same lot with a building, unoccupied and unobstructed from the ground upward, except by trees, or shrubbery, driveways, parking areas and related curbing or signage, or as otherwise allowed in this subpart; provided, however, that fences, walls, poles, posts, and other customary yard accessories, ornaments, and furniture may be allowed in any yard subject to height limitations and requirements limiting obstruction of visibility.

Yard, front, means an open unoccupied space across the full width of the lot extending from the front building line (front building line includes open porches) to the front line of the lot. On corner lots, the front yard is the lesser of the width/depth dimension.

Yard, rear, means an open unoccupied space extending across the full width of the lot and measured between the rear line of the lot and the rear building line of the main building.

Yard, side, means an open unoccupied space on the same lot with a building between the building line and the side line of the lot extending through from the front building to the rear yard or to the rear line of the lot where no rear yard is required. Width of a required side yard shall be measured in such a manner that the yard established is a strip of the minimum width required by district regulations with its inner edge parallel with the side lot line.

Yard, waterfront, means a lot where any of its boundary lines abut or are contiguous to any body of water, natural or artificial, not including a swimming pool. The waterfront yard shall be measured from the portion of said lot which borders the water, regardless of how any structure is situated on the lot.

Zero lot line means the location of a building on a lot in such a manner that one or more of the building's sides rest directly on a side lot line.

Section 2. Code Amended. That Chapter 101 Article II, Division 3. Section 101-160 of the City Code is hereby established to read as follows:

CHAPTER 101

Article II: - Administration.

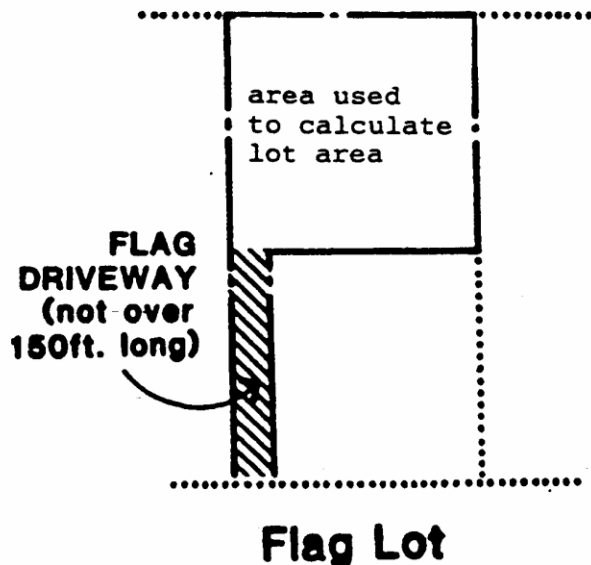
Division 3. – Hardship Relief.

Sec. 101-160. - Flag Lots.

(a) In any district where residential dwellings are permitted, one residential single family detached dwelling unit may be erected on a flag lot, meeting the definition set forth in Section 101-5 of the City Code on any lot in existence prior to the date of this ordinance; under the following conditions:

- (1) The owner of the lot on the effective date specified in Sec. 101-160 (a) above, and all successive property owners including the current property owner, did not own any adjoining property.
- (2) The lot shall abut for at least 25 feet on a street with no potential alternative access points.
- (3) Limitation on Number. A Flag lot shall only be permitted for one residential single family detached dwelling unit.

- (4) Compliance with all required density controls specified in the underlying Zoning District as set forth in Chapter 117 (except for lot width) of the City Code is required.
- (5) Calculation of Lot Area. The lot area occupied by the flag driveway shall not be counted as part of the required minimum lot area (see illustration below).
- (6) Driveway Length. No flag driveway shall be longer than 150 feet.
- (7) Addressing: All addresses for residential lots utilizing a flag lot design must be displayed at their closest point of access to a public street for emergency responders.
- (+)(8) Plan Review: A utility plan and driveway plan shall be submitted for review and approval with the building permit application.
- (9) *The underlying zoning district must allow a flag lot as a special exception..*



(b) Lots not meeting the requirements set forth in Sec. 101-160 (a) shall meet the lot width requirements as set forth in the underlying Zoning District.

Section 3. Code Amended. That Chapter 113 Article II, Division 4. Section 113-131 and Section 113-132 of the City Code are hereby amended to read as follows:

CHAPTER 113

Article II: - Transportation Systems.

Division 4. – Vehicular Access.

Sec. 113-131. - Access – Generally.

All proposed developments shall meet the development standards for vehicular access and circulation in this division and all other requirements as set forth in the City's Land Development Code.

Section 113-132. - Number of access points.

(a) All developments shall have access to a public right-of-way. ~~No building shall be erected on a lot which does not abut for at least 25 feet on a public street or other legal access.~~ Development shall meet the Density Control Requirements for the underlying Zoning District as set forth in Chapter 117, Land Use Regulations of the City Code.

(b) Notwithstanding the provisions in subsection (a) of this section, a nonresidential development or a multifamily residential development on a corner lot may be allowed two points of access. However, no more than one access shall be onto an arterial.

(c) Commercial and industrial lots shall have one access point for the first 100 feet of frontage or portion thereof and shall be entitled to one access point for every additional 100 feet of frontage.

(d) The maximum width for an access point shall be 36 feet for commercial and 60 feet for industrial.

Section 4. Code Amended. That Chapter 117 Article II, Division 2. Section 117-62 of the City Code is hereby amended to read as follows:

CHAPTER 117

Article II: - Residential.

Division 2. – Residential Low Density Land Use, R-1 Zoning Category.

Sec. 117-62. – Special exceptions.

The following are special exceptions in the residential low density land use, R-1 zoning category:

- (1) Home occupations.
- (2) Adult day care in compliance with requirements of the state, as per F.S. ch. 400, part V, as amended, and child care, in compliance with the requirements of the state, as per F.S. § 402.302, as amended.
- (3) Churches with their attendant education and recreational buildings and off-street parking areas.
- (4) Accessory buildings with heights in excess of 12 feet. The height of the accessory structure shall not exceed the height of the principal structure and must have architectural finishes compatible with the principal structure.
- (5) Single Family Residential Development on a flag lot as defined in section 101-5 and subject to the conditions set forth in Section 101-60.

Section 5. Code Amended. That Chapter 117 Article II, Division 3. Section 117-87 of the City Code is hereby amended to read as follows:

CHAPTER 117**Article II: - Residential.****Division 3. – Residential Medium Density Land Use, R-2 Zoning Category.**

Sec. 117-87. – Special exceptions.

The following are special exceptions in the residential medium density land use, R-2 zoning category:

(1) Special exceptions permitted in the residential low density category (R-1 zoning category).

(2) Pre-schools.

(3) Single-family attached dwellings, up to four units, subject to the approval of the site plan.

(4) Single Family Residential Development on a flag lot as defined in section 101-5 and subject to the conditions set forth in Section 101-60.

Section 6. Code Amended. That Chapter 117 Article II, Division 3. Section 117-122 of the City Code is hereby amended to read as follows:

CHAPTER 117**Article II: - Residential.****Division 4. – Residential High Density Land Use, R-3 Zoning Category.**

Sec. 117-122. – Special exceptions

The following are special exceptions in the residential medium density land use, R-3 zoning category:

(1) Special exceptions permitted in the residential medium density category, R-2 zoning;

(2) Off-street parking lots;

(3) Nursing homes and convalescence facilities;

(4) Mobile home parks or subdivisions, provided:

a. Piers with adequate foundations shall be located a minimum of ten feet on center under the chassis of each unit;

b. Organic material shall be removed from under each unit;

c. Appropriate skirting shall be used around all coaches;

d. A minimum of three tie-downs shall be provided for each unit with adequate anchoring, however, all tie-downs shall be provided on the unit shall be anchored;

e. Each street shall be paved surface of a minimum of 22 feet in width curb-to-curb;

f. Engineering design of all construction shall be approved by the city public works director;

g. Individual laundry facilities shall be located within the main unit or within an approved utility structure;

h. All utilities shall be provided underground;

- i. For a mobile or modular home subdivision, the design standard set forth in the city's subdivision regulations shall apply;
 - j. The park or subdivision complies with all state and federal laws.
- (5) Group care homes.
- (6) Multifamily dwelling units with out garages.
- (7) Single Family Residential Development on a flag lot as defined in section 101-5 and subject to the conditions set forth in Section 101-60.

Section 7. Code Amended. That Chapter 117 Article IX, Division 4. Section 117-541 of the City Code is hereby amended to read as follows:

CHAPTER 117

Article IX: - Gateway Corridor.

Division 4. – Gateway Corridor Neighborhood Zoning Category

Sec. 117-541. – Special exceptions.

Special exceptions are as follows:

- (1) Convenience retail stores with gas pumps;
- (2) Establishment of facilities for the retail sale of beer and wine off-premises;
- (3) Hospitals;
- (4) Restaurants with drive-through facilities;
- (5) Automotive service establishments:
 - a. Retail and service establishments for automotive service and repair and automobile parts store.
 - b. The permitted uses in section 117-540 (excluding automobile sales) are subject to the following limitations:
 - 1. Sale, repair (excluding automobile sales), service, and storage shall be conducted within a completely enclosed building.
 - 2. The building footprint used for the uses in this section shall not be larger than 2,500 square feet.
 - 3. Lot size of no more than 21,000 square feet shall be used for the uses in this section.
 - 4. Outdoor storage area is limited to 20 percent of the lot size, but no more than 40 percent of the building footprint of the principal structure.
 - 5. Outdoor storage area must be located in a fenced area with a visual barrier of not less than 85 percent opacity.

(6) Single Family Residential Development on a flag lot as defined in section 101-5 and subject to the conditions set forth in Section 101-60.

Section 8. Code Amended. That Chapter 117 Article IX, Division 4. Section 117-565 of the City Code is hereby amended to read as follows:

CHAPTER 117

Article IX: - Gateway Corridor.

Division 5. – Gateway Corridor Commercial Zoning Category

Sec. 117-565. – Special exceptions.

The following uses are special exceptions in the gateway corridor commercial zoning category:

- (1) Establishments or facilities for automobile parts, sales and services without use of an outdoor intercom or public address system or speakers, and no vehicle display racks that tilt vehicles in any way to show underside, unless they are located inside a show room.
- (2) Establishments or facilities for the retail sale and service of all alcoholic beverages for on-premises consumption.
- (3) Single-family detached dwelling units meeting the density requirements of the gateway corridor neighborhood zoning category.
- (4) Multifamily dwelling units without garages.
- (5) Single Family Residential Development on a flag lot as defined in section 101-5 and subject to the conditions set forth in Section 101-60.

Section 9. Conflicts. If any portion of this Ordinance is in conflict with any other ordinance, then the provisions of this Ordinance shall govern.

Section 10. Severability. If any section, sentence, clause or phrase of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this Ordinance.

Section 11. Effective Date. Upon its adoption by the City Council, this ordinance shall become effective.

INTRODUCED AND APPROVED AS TO FORM ONLY ON THE FIRST READING BY THE CITY COUNCIL OF GREEN COVE SPRINGS, FLORIDA, ON THIS 2nd DAY OF, FEBRUARY 2020.

CITY OF GREEN COVE SPRINGS, FLORIDA

By: _____
B. Van Royal, Mayor

ATTEST: _____
Erin West, City Clerk

PASSED ON SECOND AND FINAL READING BY THE CITY COUNCIL OF GREEN COVE SPRINGS, FLORIDA, THIS 16th DAY OF, FEBRUARY 2020.

CITY OF GREEN COVE SPRINGS, FLORIDA

By: _____
B. Van Royal, Mayor

ATTEST: _____
Erin West, City Clerk

APPROVED AS TO FORM:

L. J. Arnold III, City Attorney



STAFF REPORT

CITY OF GREEN COVE SPRINGS, FLORIDA

TO: Planning & Zoning Board **MEETING DATE:** January 26, 2021
FROM: Michael Daniels, AICP, Planning & Zoning Director
SUBJECT: Review of Revised Site Development Plan for Harbor Road Wastewater Treatment Facility

PROPERTY DESCRIPTION

APPLICANT: Scott Shultz, City of GCS **OWNER:** City of Green Cove Springs

PROPERTY LOCATION: 1277 / 1289 Harbor Rd

PARCEL NUMBER: 015719-000-00

FILE NUMBER: 202001054

CURRENT ZONING: INS – Institutional

FUTURE LAND USE DESIGNATION: INS – Institutional

SURROUNDING LAND USE

NORTH: Clay County Property - Enterprise Way Industrial Park **SOUTH:** Single Family Residential - Gator Bay Subdivision

EAST: Commercial - Railroad Tracks and Magnolia Layne Shopping Center **WEST:** Single Family Residential - Magnolia Point Subdivision

BACKGROUND

DEVELOPMENT DESCRIPTION:

The existing site houses the Harbor Road Wastewater Facility, Water Treatment Facility and Electric Facility. The site has a heavily vegetated berm along northeastern portion of the property adjacent to Harbor Road. In addition, there is also a vegetative buffer on the south edge of the property abutting the Gator Bay Subdivision. In August 2018, City Council approved a phased master plan for the Harbor Road Wastewater Treatment Facility. The City Council Staff Report and the Phased Site Plan for the site are attached. A request to revise the approved site plan was submitted in October/November 2020. The following revisions are proposed

- The vegetative buffer and berm on the southern edge of the property have been revised. The original plan showed a 16-foot wide berm with a 4-foot slope and to maintain the existing fencing, which is predominantly 8' chain link. The revised plan replaces the berm with an eco-stone privacy fence as shown in the attachments. The eco-stone privacy fence shall be 8 feet in height. The privacy fence will provide a clear delineation between the city's property and neighboring properties, and it will allow for more area for treatment of stormwater within the facility. The buffer will also be heavily vegetated with canopy trees exceeding the buffer requirement of one tree per 50 lineal feet.

- The Line Crew Building and offices have been revised from the approved plan to be expanded and moved closer to Harbor Road impacting the berm and tree canopy. As a result, additional landscaping, totaling 26 shade trees have been installed in the buffer area between Harbor Road and the Line Crew building.
- The total impervious area has been increased to an additional 26,627 square feet to accommodate additional pavement.

PROPOSED PLAN

The plan includes the following improvements:

- A total of 67,250 square feet of impervious area has been added to the site but offset by demolished impervious for a net addition of 26,627 SF
- A 6,460 square foot Line Crew building with a 1,500 square foot office
- A 2,160 square foot Operations Building
- Clarifier #1 and #2
- Oxidation Ditch
- A Chemical Feed and storage facility
- A Chlorine Contact Chamber

Parking

The plan shows 15 parking spaces plus 2 handicapped parking spaces. Per code they are required to have 1 space per 5,000 square feet of storage area and 1 space per 250 square feet of office area.

Drainage Retention

The Florida Department of Environmental Protection is the reviewing agency for stormwater retention due to the fact that the project is a Wastewater Treatment Facility. Six additional stormwater retention ponds have been added to the plan to address stormwater runoff.

Traffic and Access

Access will be provided off Harbor Road. There will be minimal traffic to this location.

Landscape, Buffer and Lighting Plan

The City is required to plant an additional 267 inches of trees to be replaced as shown on the site plan. The City is providing an additional 330” (55 shade trees at 6” caliper). A landscape buffer consisting of existing and planted trees as well as a berm are provided along Harbor Road. An 8’ Eco Stone Privacy Fence and landscape buffer is provided along the southern boundary adjacent to the Gator Road Subdivision.

STAFF RECOMMENDATION

Staff recommends approval of 202001054, to approve the revised Site Development Plan for improvements to the Wastewater Treatment Plant at 1277/1289 Harbor Road.

MOTION: To recommend approval of 202001054, to approve the revised site development plan for improvements to the Wastewater Treatment Plant at 1277/1289 Harbor Road.

DEP SRF HARBOR ROAD WRF EXPANSION PHASE 2

FOR CITY OF GREEN COVE SPRINGS, FLORIDA

M & A Project No. 8905-56-1

D R A W I N G I N D E X

SHEET No.	SHEET TITLE	SHEET No.	SHEET TITLE
G1	COVER SHEET	D16.1	LINE CREW BUILDING - FLOOR PLAN
G2	GENERAL NOTES, LEGEND & ABBREVIATIONS	D16.2	LINE CREW BUILDING - ELEVATIONS
C1.1	EXISTING CONDITIONS & DEMOLITION PLAN	D16.3	LINE CREW BUILDING - ELEVATIONS & SCHEDULE
C1.2	SITE MASTER PLAN & LANDSCAPE PLAN	D16.4	LINE CREW BUILDING - FOUNDATION PLAN & DETAILS
C1.3	SITE PLAN - HORIZONTAL CONTROL	D16.5	LINE CREW BUILDING - WALL SECTIONS
C1.4	GRADING & DRAINAGE PLAN	D16.6	LINE CREW BUILDING - WALL SECTIONS & DETAILS
C1.5	YARD PIPING PLAN	D16.7	LINE CREW BUILDING - FOUNDATION DETAILS
C1.6	ENLARGED DEMO & YARD PIPING PLAN	D16.8	LINE CREW BUILDING - REFLECTED CEILING, FLOOR FINISH PLANS & DETAILS
C2.1	SITE DETAILS	D16.9	LINE CREW BUILDING - PLUMBING PLAN, NOTES, DETAILS & SCHEDULE
C2.2	SITE DETAILS	D16.10	LINE CREW BUILDING - HVAC/MECHANICAL PLAN
C2.3	GRADING & DRAINAGE DETAILS	D16.11	LINE CREW BUILDING - ELECTRICAL PLAN & SCHEDULES
C2.4	CANTILEVER GATE & FENCING DETAILS	D16.12	LINE CREW BUILDING - LIFE SAFETY & FRAMING PLAN
C2.5	SAND DRYING BED FACILITY & DETAILS	E1	ELECTRICAL - LEGENDS, INDEX, LUMINAIRE SCHEDULE & ABBREVIATIONS
D1	PROCESS FLOW SCHEMATIC - HYDRAULIC PROFILE	E2	ELECTRICAL - POWER CONDUIT AND CABLE SCHEDULE
D2.1	INFLUENT STRUCTURE - UPPER & LOWER MECHANICAL PLAN	E3A	ELECTRICAL - PANEL SCHEDULES
D2.2	INFLUENT STRUCTURE - MECHANICAL SECTIONS	E3B	ELECTRICAL - PANEL SCHEDULES & LOAD CALCULATIONS
D2.3	INFLUENT STRUCTURE - MECHANICAL SECTIONS	E4B	ELECTRICAL - 480V ONE-LINE DIAGRAM
D2.4	INFLUENT STRUCTURE - MECHANICAL SECTIONS	E5	ELECTRICAL - ELECTRICAL ELEVATIONS
D2.5	INFLUENT STRUCTURE - STRUCTURAL PLANS	E6	ELECTRICAL - ELECTRICAL SITE PLAN - EXISTING CONDITIONS
D2.6	INFLUENT STRUCTURE - UPPER STRUCTURAL PLAN & DETAILS	E7.2	ELECTRICAL - ELECTRICAL SITE PLAN - PHASE 2
D2.7	INFLUENT STRUCTURE - STRUCTURAL SECTIONS	E8.1	ELECTRICAL - ELECTRICAL DETAILS
D2.8	INFLUENT STRUCTURE - ELEVATIONS	E8.2	ELECTRICAL - ELECTRICAL DETAILS
D2.9	INFLUENT STRUCTURE - STAIRS	EC1.1	ELECTRICAL - CONTROL CABLE SCHEDULE - SHEET 1
D3.1	OXIDATION DITCH - PLAN & ELEVATION	EC1.2	ELECTRICAL - CONTROL CABLE SCHEDULE - SHEET 2
D3.2	OXIDATION DITCH - MECHANICAL DETAILS	EC1.3	ELECTRICAL - CONTROL CABLE SCHEDULE - SHEET 3
D3.3	OXIDATION DITCH - ELEVATION & DETAILS	EC2	ELECTRICAL - PROCESS SCHEMATIC
D3.4	OXIDATION DITCH - STRUCTURAL SECTIONS & DETAILS	EC3	ELECTRICAL - FIBER SCHEMATIC
D3.5	OXIDATION DITCH - STRUCTURAL SECTIONS & DETAILS	EC5	ELECTRICAL - TYPICAL RTU EXAMPLE
D3.6	OXIDATION DITCH - STRUCTURAL SECTIONS & DETAILS	EC6.0	ELECTRICAL - RTU 90
D3.7	OXIDATION DITCH - STAIRS	EC6.1	ELECTRICAL - RTU 90 CONTINUED
D4.1	CLARIFIER FLOW SPLITTER - PLAN	EC7.0	ELECTRICAL - RTU 95
D4.2	CLARIFIER FLOW SPLITTER - SECTIONS & DETAILS	EC7.1	ELECTRICAL - RTU 95 CONTINUED
D4.3	CLARIFIER FLOW SPLITTER - STRUCTURAL PLANS & SECTIONS	EC8	ELECTRICAL - MCC SECTIONS, INSTRUMENT & SERVER RACKS
D4.4	CLARIFIER FLOW SPLITTER - STRUCTURAL SECTIONS & ELEVATIONS	ED2.1	ELECTRICAL - INFLUENT STRUCTURE
D4.5	CLARIFIER FLOW SPLITTER - STAIRS	ED3.1	ELECTRICAL - OXIDATION DITCH
D5.1	CLARIFIERS - MECHANICAL PLAN	ED4.1	ELECTRICAL - CLARIFIER FLOW SPLITTER
D5.2	CLARIFIERS - MECHANICAL PLAN & SECTION	ED5.1	ELECTRICAL - CLARIFIERS NO. 1 & 2
D5.3	CLARIFIERS - SECTIONS & DETAILS	ED6.1	ELECTRICAL - RAS/WAS PUMPS
D5.4	CLARIFIERS - SECTIONS & DETAILS	ED7.1	ELECTRICAL - FILTERS PLAN
D5.5	CLARIFIERS - STAIRS & WALKWAY	ED8.1	ELECTRICAL - CHLORINE CONTACT CHAMBER PLAN
D6.1	RAS/WAS PUMP STATION - PLAN & SECTION	ED11.1	ELECTRICAL - CHEMICAL FEED & STORAGE FACILITIES
D6.2	RAS/WAS PUMP STATION - BUILDING	ED12.1	ELECTRICAL - IN-PLANT PUMP STATION
D7.1	FILTERS - PLAN	ED13.2	ELECTRICAL - AEROBIC DIGESTER NO. 1 & NO. 2
D7.2	FILTERS - SECTIONS & DETAILS	ED13.3	ELECTRICAL - AEROBIC DIGESTER NO. 3 & NO. 4
D7.3	FILTERS - STRUCTURAL PLAN	ED14.1	ELECTRICAL - OPERATIONS BUILDING - LIGHTING
D7.4	FILTERS - STRUCTURAL SECTIONS	ED14.2	ELECTRICAL - OPERATIONS BUILDING - POWER
D8.1	CHLORINE CONTACT CHAMBER - PLAN	ED16.1	ELECTRICAL - ENLARGED ELECTRICAL BUILDING
D8.2	CHLORINE CONTACT CHAMBER - SECTIONS	ES1	ELECTRICAL - SITE SECURITY PLAN
D8.3	CHLORINE CONTACT CHAMBER - SECTIONS & DETAILS	ES2	ELECTRICAL - SECURITY DETAILS
D9.1	RECLAIMED WATER STORAGE TANK - PLAN	ES3	ELECTRICAL - SECURITY DETAILS
D9.2	RECLAIMED WATER STORAGE TANK - SECTIONS	ES4	ELECTRICAL - SECURITY DETAILS
D11.1	CHEMICAL FEED & STORAGE FACILITIES - PLAN	L1.3	LANDSCAPE PLAN
D11.2	CHEMICAL FEED & STORAGE FACILITIES - ELEVATIONS	L2.3	LANDSCAPE DETAILS
D11.3	CHEMICAL FEED & STORAGE FACILITIES - FOUNDATION PLAN & ROOF FRAMING PLAN		
D11.4	CHEMICAL FEED & STORAGE FACILITIES - SECTIONS & DETAILS		
D11.5	CHEMICAL FEED & STORAGE FACILITIES - SECTIONS & DETAILS		
D12.1	IN-PLANT PUMP STATION - PLAN & SECTION		
D12.2	IN-PLANT PUMP STATION - TYPICAL DETAILS		
D13.1	AEROBIC DIGESTER No. 1 & 2 - DEMOLITION		
D13.2	AEROBIC DIGESTER No. 1 & 2 - MODIFICATIONS		
D13.3	AEROBIC DIGESTER No. 3 & 4 - MODIFICATIONS		
D13.4	AEROBIC DIGESTERS - SECTIONS & DETAILS		
D14.1	OPERATIONS BUILDING - FLOOR PLAN		
D14.2	OPERATIONS BUILDING - ELEVATIONS		
D14.3	OPERATIONS BUILDING - LIFE SAFETY, FOUNDATION & ROOF PLANS		
D14.4	OPERATIONS BUILDING - SECTIONS & DETAILS		
D14.5	OPERATIONS BUILDING - STRUCTURAL DETAILS		
D14.6	OPERATIONS BUILDING - REFLECTED CEILING, FLOOR FINISH PLANS & DETAILS		
D14.7	OPERATIONS BUILDING - PLUMBING PLAN, NOTES, DETAILS & SCHEDULE		
D14.8	OPERATIONS BUILDING - HVAC/MECHANICAL PLAN		
D15.1	MISCELLANEOUS DETAILS - YARD PIPING DETAILS		
D15.2	MISCELLANEOUS DETAILS - MECHANICAL DETAILS		
D15.3	MISCELLANEOUS DETAILS - STRUCTURAL DETAILS		
D15.4	MISCELLANEOUS DETAILS - STRUCTURAL DETAILS		
D15.5	HANDRAIL & PORTABLE HOIST DETAILS		



VAN ROYAL
MAYOR

EDWARD GAW
VICE MAYOR

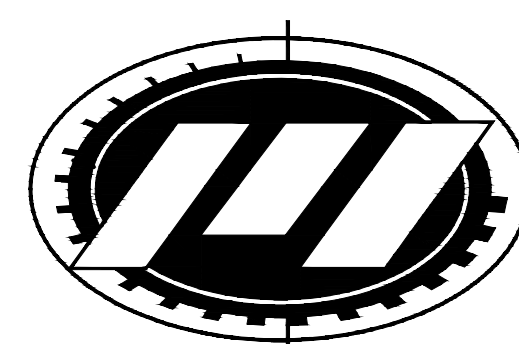
CONNIE BUTLER
COUNCIL MEMBER

MATT JOHNSON
COUNCIL MEMBER

STEVEN KELLEY
COUNCIL MEMBER

STEVEN KENNEDY
CITY MANAGER

MIKE NULL
PUBLIC WORKS DIRECTOR

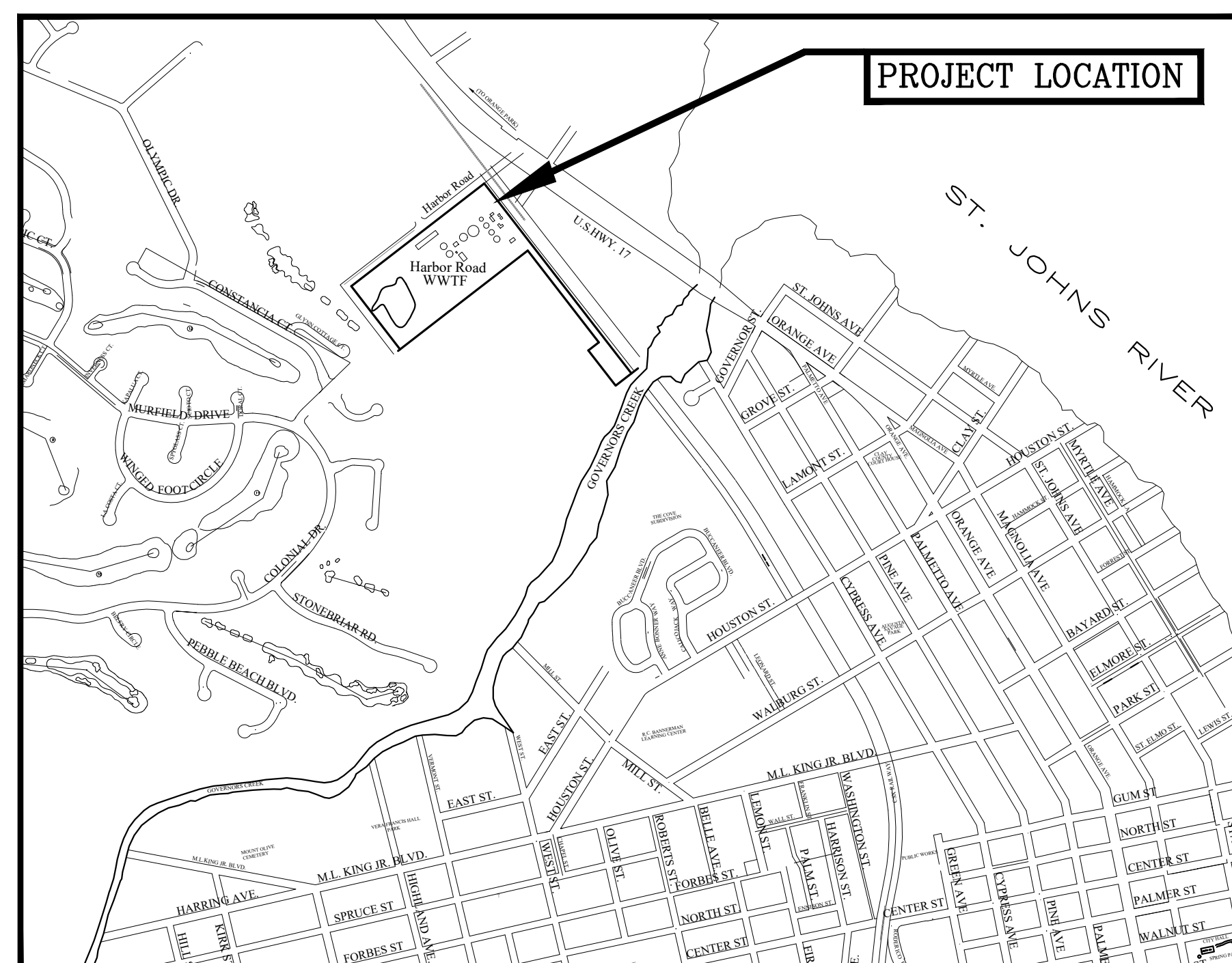
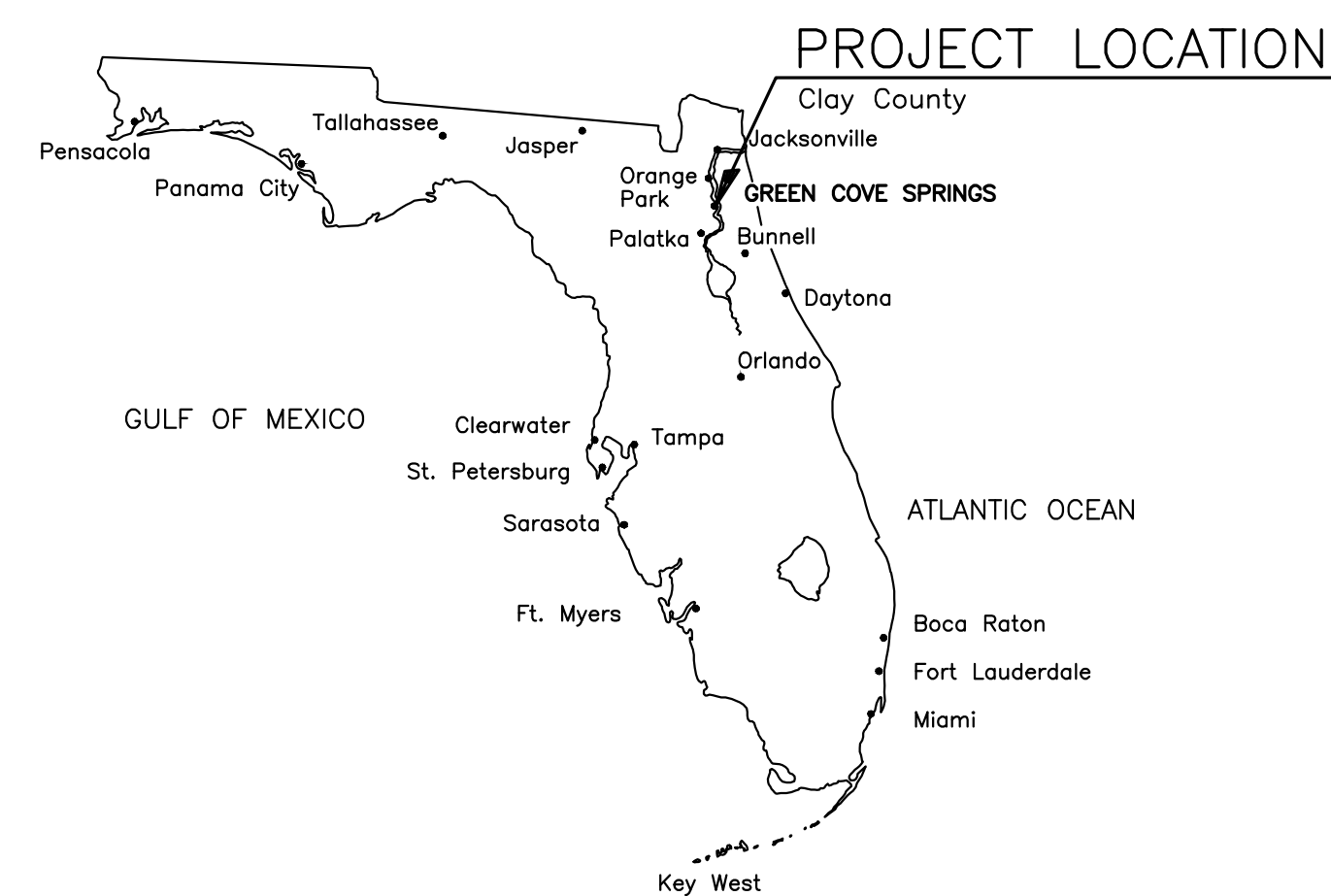


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CITY SITE PLAN SUBMITTAL

12/14/20



VICINITY MAP

GENERAL NOTES

A. GENERAL CONSTRUCTION NOTES

- Existing underground utilities have been shown from the best available information. Contractor shall field determine the location, size, and depth of all existing utilities. Contractor shall provide complete piping system including all fittings necessary to interconnect piping systems and to avoid conflicts with existing and proposed pipes/structures.
- It shall be the sole responsibility of the Contractor to locate and avoid all utilities, structures and obstructions both above and below the ground surface. All damages resulting from the Contractor's failure to comply with this requirement shall be repaired at the Contractor's expense.
- Contractor is responsible for supporting/protecting all existing improvements (i.e., utilities, utility poles, structures, pavement, sidewalks, monitoring wells, foundations, etc.) which may be damaged/undermined as a result of his operations. Contractor may be required to shore, sheet, brace, or support work to protect existing improvements. All costs associated with supporting/protecting existing improvements shall be borne by the Contractor.
- All existing facilities (e.g., pipes, roadways, sidewalks, landscaping, structures, etc.) not indicated to be disturbed/restored which are disturbed/damaged as a result of Contractor's operations shall be restored to a condition equal to or better than that which existed prior to construction, at Contractor's expense.
- Horizontal and vertical controls are subject to adjustments in the field if necessary to avoid utility conflicts upon approval of the Engineer or his representative. Contractor shall not adjust location of pipe or other facilities (either vertically or horizontally) without approval of Engineer or his representative.
- Contractor shall provide constant slope between indicated pipe invert elevations unless otherwise directed by Engineer.
- All pipe shall be properly restrained using mechanical type joint restrainers (see specifications). No thrust blocking will be allowed unless specifically indicated on drawings or directed by Engineer. All exposed piping 3" in diameter and smaller shall be properly wrapped with foam insulation to prevent freezing.
- All pipe shall have the following minimum cover unless otherwise directed by Engineer:

Pipe Type	Minimum Cover
PVC (< 3-inch)	30-inches
PVC (> 3-inch)	36-inches
DIP (All Sizes)	30-inches
Steel (All Sizes)	30-inches
- All aboveground piping shall be properly supported and/or secured to tanks, buildings, or other structures using S.S. straps and fasteners.
- Contractor shall be responsible for maintaining service to the existing treatment plant facilities. He shall perform all bypass pumping necessary to keep the plant operating properly during construction. He shall coordinate all diversions of flow, draining of tanks, demolition of existing facilities, etc. closely with Owner to avoid potential treatment violations and operating problems. Contractor may be required to perform some work during low demand hours (e.g. 12:00 a.m. to 5:00 a.m.). All arrangements for bypass pumping, diversion of flow, draining of tanks, demolition, etc. shall be subject to approval of Owner and Engineer. All costs associated with bypass pumping and other temporary facilities shall be borne by the Contractor.
- Contractor shall provide all fill required to achieve proposed grades at his expense.
- During any construction activity, including stabilization and revegetation of disturbed surfaces, the Contractor is responsible for the design, selection, permitting, implementation, and operation of all temporary construction phase erosion and sediment control measures required to retain on-site sediment and prevent violations of the State of Florida water quality standards. The Contractor shall use appropriate best management practices described in the *State of Florida Erosion and Sediment Control Designer and Reviewer Manual, June 2007, with revisions*. All turbidity/silt barriers must be in place downgradient from the construction zone prior to the start of any construction activity in general accordance with the plans and details provided in these documents. The barriers shall remain in place until all the disturbed areas have been properly stabilized.
- All grassed areas disturbed by construction shall be resodded unless otherwise directed by Engineer or his representative.
- The Contractor shall employ a land surveyor, registered in the State of Florida to reference and restore property corners and land markers which may be disturbed as a result of Contractor's operations.
- The Contractor shall be responsible for laying out the work and for establishing project temporary bench marks; elevation lines and grades; and right-of-way and property boundary limits for construction.
- Owner has the option of claiming any equipment/materials identified for removal by the Contractor. Contractor shall deliver any removed equipment/materials claimed by Owner to an onsite location as directed by Owner. Any equipment/materials identified for removal which are not claimed by the Owner shall become the property of the Contractor and shall be disposed of by the Contractor at his expense.
- Project Benchmark: See Sheet No. C.1.1 for location and description of Benchmark.

B. GENERAL STRUCTURAL NOTES

1. All construction shall be in accordance with the local Building & Zoning Department requirements and the 2017 Florida Building Code with all Revisions. All design shall be in accordance with the 2017 Florida Building Code with all Revisions, ACI318, ACI350 and ASCE 7-16.

Live Loads (minimum):

Roofs & Canopies	= 20 psf
Storage Spaces	= 150 psf
Stairs & Walkways	= 100 psf

Dead Loads: Actual Material Weights
 Aux. Load = 0 psf
 Collateral Load = 5 psf

Geotechnical:
 Design Load Bearing Value of Soil = 2,000 psf

Flood Zone: X; Map No. 12019C0170E

Windload Design Criteria
 Items per Florida Building Code Section 1603.1.4:
 Basic Wind Speed: (Vult) = 135 MPH
 (Vasd) = 105 MPH

Building Risk Category: III
 Wind Exposure Category: C
 Mean Roof Height: N/A
 Roof Slope: N/A
 Internal Pressure Coefficients: +/- 0.00 (Open Tanks)
 +/- 0.18 (Electrical Bldg., Operations, Line Crew Bldg.)
 +/- 0.56 (Chemical Feed Bldg.)

B. GENERAL STRUCTURAL NOTES (continued)

COMPONENT & CLADDING PRESSURE

GABLE ROOF

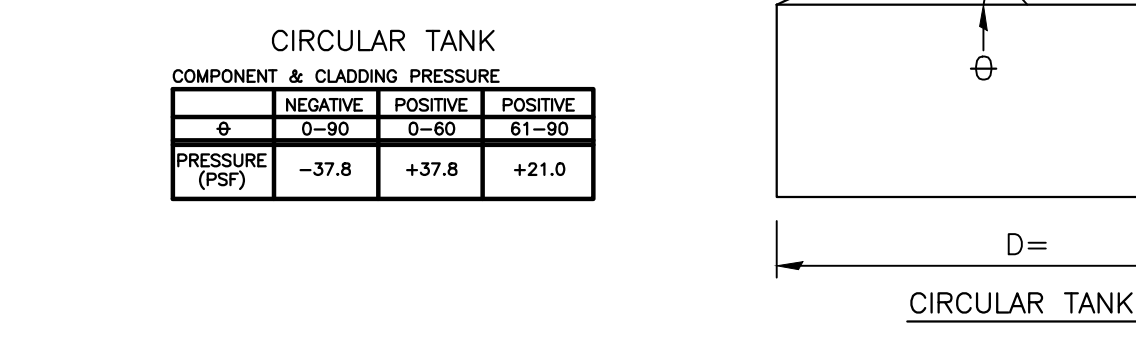
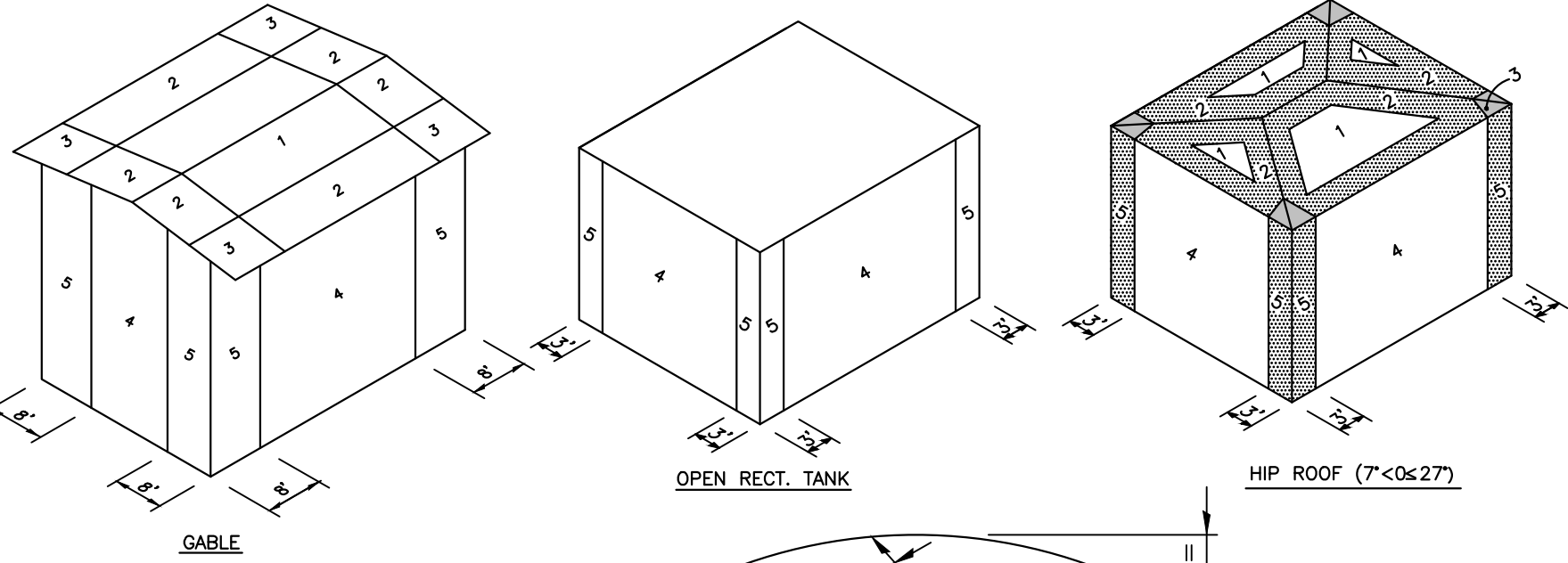
ZONE	EFFECTIVE AREA (SF)	WIND PRESSURE (PSF)	
		POSITIVE	NEGATIVE
1	10	26.20	-41.50
	20	25.68	-44.49
	50	25.15	-45.58
2	10	26.20	-76.20
	20	25.68	-79.19
	50	25.15	-80.10
3	10	26.20	-116.80
	20	25.68	-119.79
	50	25.15	-120.70
4	10	26.20	-157.40
	20	25.68	-160.39
	50	25.15	-161.30
5	10	26.20	-198.00
	20	25.68	-200.99
	50	25.15	-201.90

OPEN RECT. TANK

ZONE	EFFECTIVE AREA (SF)	WIND PRESSURE (PSF)	
		POSITIVE	NEGATIVE
1	10	N/A	-41.50
	20	N/A	-44.49
	50	N/A	-45.58
2	10	N/A	-76.20
	20	N/A	-79.19
	50	N/A	-80.10
3	10	N/A	-116.80
	20	N/A	-119.79
	50	N/A	-120.70
4	10	N/A	-157.40
	20	N/A	-160.39
	50	N/A	-161.30
5	10	N/A	-198.00
	20	N/A	-200.99
	50	N/A	-201.90

HIP ROOF

ZONE	EFFECTIVE AREA (SF)	WIND PRESSURE (PSF)	
		POSITIVE	NEGATIVE
1	10	26.20	-41.50
	20	25.68	-44.49
	50	25.15	-45.58
2	10	26.20	-76.20
	20	25.68	-79.19
	50	25.15	-80.10
3	10	26.20	-116.80
	20	25.68	-119.79
	50	25.15	-120.70
4	10	26.20	-157.40
	20	25.68	-160.39
	50	25.15	-161.30
5	10	26.20	-198.00
	20	25.68	-200.99
	50	25.15	-201.90



- All structural concrete shall have a min. compressive strength of 4,000 psi after 28 days unless otherwise noted.
- All reinforcing steel shall conform to ASTM A615 Grade 60, except bars to be welded shall conform to ASTM A706.
- For size and location of embedded items and openings, the Contractor must refer to mechanical, structural, piping and vendors drawings.
- Equipment anchor bolts and rods shall be set from templates made to fit holes in equipment according to approved manufacturers shop drawings.
- Contractor shall verify all dimensions and existing conditions at the site before proceeding with construction.
- Unless otherwise shown on drawings, min. cover for reinforcing steel shall be as follows:
 Concrete Cast Against Earth - 3"
 Slabs on Grade - Centered
 All Other - 2"
 Note: 6 mil polyethylene membrane required under all building base slabs.
- All reinforcing shall be fabricated and held securely in position with standard accessories in accordance with ACI 315 "Details and Detailing Concrete Reinforcement", latest edition.
- Splices in reinforcing, where permitted, shall be as noted, or as follows:
 9.1. Welded Wire Fabric - Two Mesh or 12" (min.)
 9.2. Temperature Reinforcing - 44 bar diameters but not less than 12"
 9.3. All Other Bars - Class "B" lap.
 9.3.1. For Top Bars (12" or more concrete below steel) multiply table lengths by 1.3
 9.3.2. For lightweight concrete multiply table lengths by 1.3.

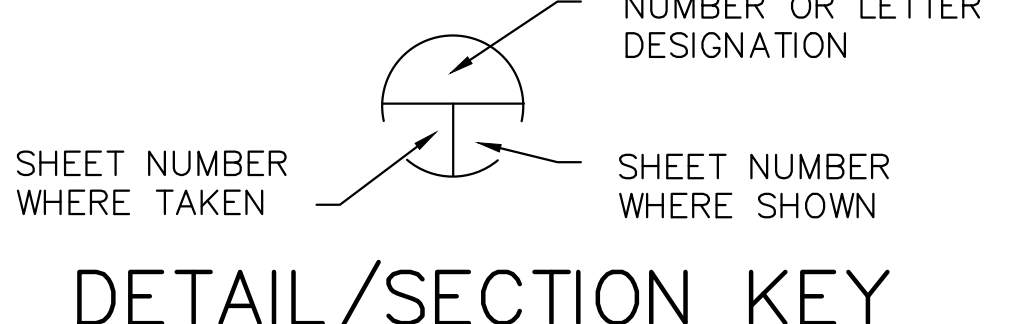
Class B Lap Length in Inches (fy=60ksi)

Bar Size	fc = 3,000 psi	fc = 4,000 psi	fc = 5,000 psi
#3	22	19	17
#4	29	25	23
#5	36	31	28
#6	43	38	34
#7	63	54	49
#8	72	62	56
#9	81	70	63

- Splices in top reinforcing shall be made at midspan, bottom reinforcing at support, or as noted on drawings.
- Provide 3/4" chamfer on all exposed edges of concrete.
- Provide 1/2" premolded expansion joint material where slab on grade is cast around columns or against walls.
- All masonry shall utilize standard precast masonry units and be laid true and plumb.
- All concrete lintels shall be reinforced with 2-#5 bars top and bottom as a minimum and have a masonry end bearing each end of 2" per foot of span with a minimum of 8."
- Compaction: unless otherwise noted, the required percentage of maximum compaction shall be as follows: (per modified proctor max. Dry density)
 Under Structures and Slabs - 95%
 Under Paved Areas (subgrade) - 98%
 Under Paved Areas (below 12") - 95%
 Landscaped Areas and Other - 90%
 Adjacent to Walls and Above Footing - 92%
 The more stringent requirement shall govern between any conflict of these compaction requirements & those listed within the specifications.
- Coating: Apply asphalt point coating between different metals and for aluminum set against concrete.
- The design of all structural concrete for tanks conforms to ACI 350: Code Requirements for Environmental Engineering Structures.
- Location of construction joints, proposed by the Contractor, shall be submitted to the Engineer for approval prior to initiating any construction or fabrication which could be affected by the location. All construction joints below either the plant liquid or ground level shall incorporate a properly designed and fabricated PVC waterstop.
- All structural anchoring systems shall be hot-dipped galvanized or S.S. as noted or specified.

LEGEND

- | PROPOSED | EXISTING | DESCRIPTION |
|----------|----------|-------------------------------|
| 8"S | 8"SAN | SANITARY SEWER |
| 8"FM | 4"FM | SANITARY FORCE MAIN |
| ○ | ○ | SANITARY MANHOLE |
| ○ | ○ | CLEANOUT |
| 8"W | 6"W | WATER MAIN |
| ○ | ○ | VALVE |
| ○ | ○ | FIRE HYDRANT |
| ○ | ○ | WATER SERVICE (SIZE VARIES) |
| ○ | ○ | TELEPHONE PEDESTAL |
| ○ | ○ | MAIL BOX |
| 18"SD | 18"RCF | STORM DRAIN PIPE |
| ○ | ○ | STORM DRAIN INLET/MES |
| -84.00 | -84.00 | GRADE CONTOURS |
| 63.00 | 63.00 | SPOT ELEVATIONS |
| ○ | ○ | POWER POLE/ W/ANCHOR |
| ○ | ○ | WIRING PULL BOX |
| ○ | ○ | ELECTRICAL METER |
| ○ | ○ | ELECTRICAL CABINET |
| ○ | ○ | TRANSFORMER |
| ○ | ○ | BOLLARD |
| ○ | ○ | UTILITY POLE, LIGHT POLE |
| ○ | ○ | BURIED TELEPHONE |
| ○ | ○ | FIBER CABLE |
| ○ | ○ | CABLE TELEVISION |
| ○ | ○ | OVER HEAD ELEC |
| ○ | ○ | SWALE |
| ○ | ○ | RIGHT-OF-WAY |
| ○ | ○ | FENCING |
| ○ | ○ | BUILDING OR STRUCTURE |
| ○ | ○ | ASPHALT PAVED DRIVE |
| ○ | ○ | CONCRETE SLAB OR SIDEWALK |
| ○ | ○ | DEMOLISH, REMOVE & DISPOSE OF |
| ○ | ○ | LIMITS OF WOODS |
| ○ | ○ | TREE |
| ○ | ○ | TEST PIT (SEE S.U.E. REPORT) |

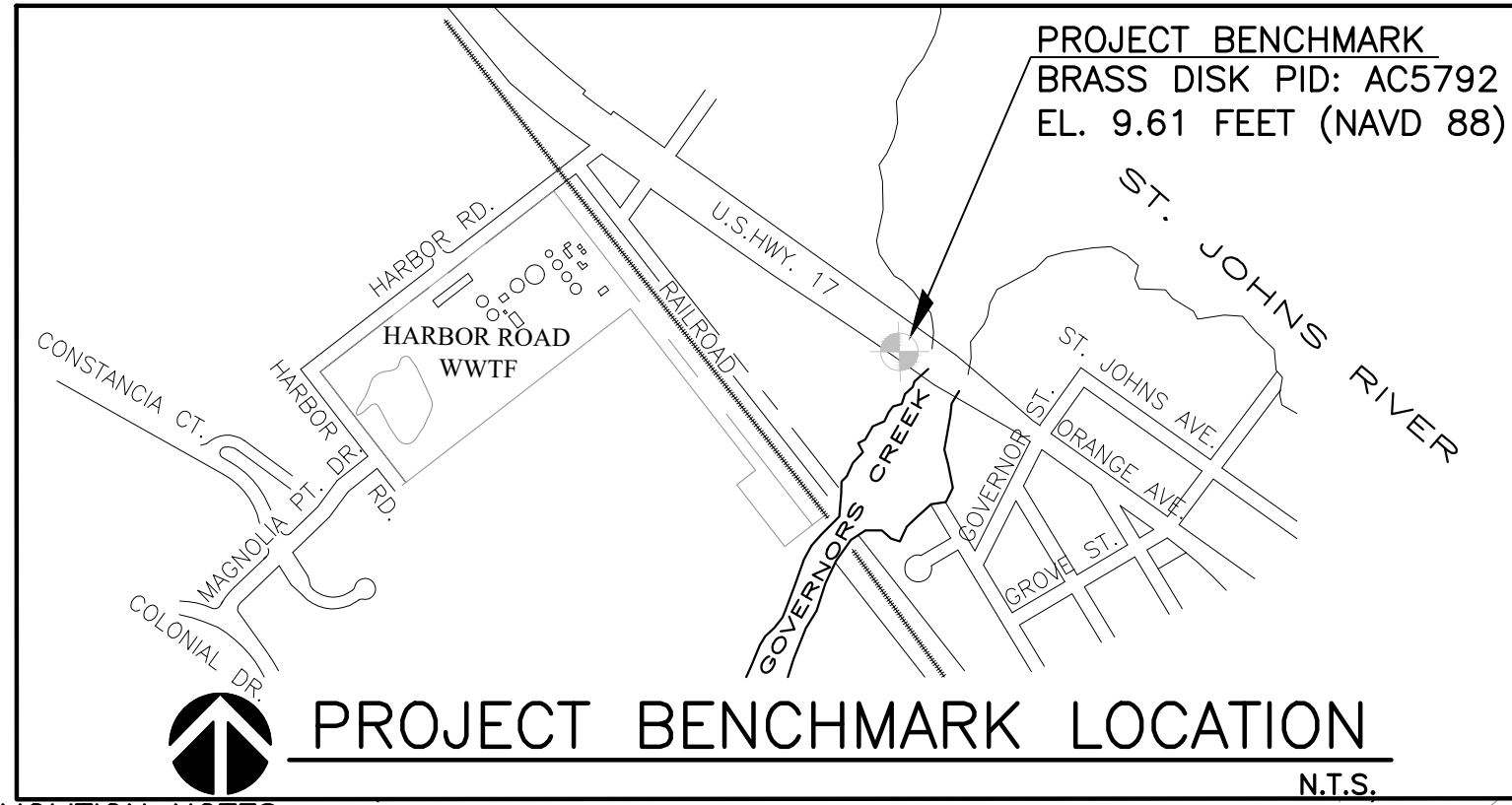


ABBREVIATIONS

ABBREVIATION	DESCRIPTION
ABS	ACRYLONITRILE BUTADIENE STYRENE
ABV	ABOVE
ACP	ASBESTOS CEMENT PIPE
AFB	ABOVE FINISH FLOOR (REF. ELEV.)
AFV	ABOVE FINISH GRADE (REF. ELEV.)
ALUM	ALUMINUM
ALT	ALTERNATE
APRX	APPROXIMATE(LY)
ARCH	ARCHITECT(URAL)
ARV	AIR RELEASE VALVE
ASPH	ASPHALT
ASSY	ASSEMBLY
BUR	BURIED ELECTRIC
BF	BOTTOM FACE
BFB	BURIED FIBER OPTIC
BY	BURIED TELEPHONE
BT	BOTTOM
BT	BURIED TELEPHONE-CABLE
BT	BALL VALVE
BW	BOTH WAYS
C	CIND
CAP	CAPACITY
CAV	CABLE TELEVISION
CCUA	CLAY COUNTY UTILITY AUTHORITY
CFM	CUBIC FEET PER MINUTE
CG	CUBIC FEET PER SECOND
CI	CAST IRON
CIP	CAST IRON PIPE, CAST-IN-PLACE
CH	CENTER LINE
CH	CENTER LINE
CH	CHAIN LINK FENCE
CL	CLEAR OR CLEARANCE
CLR	CONCRETE MONUMENT
CM	CORRUGATED METAL PIPE
CMP	CONCRETE MASONRY UNIT
CON	CONCRETE
CO	CLEAN OUT
CONC	CONCRETE
CONT	CONTINUOUS
COORD	COORDINATE
CPVC	CHLORINATED POLYVINYL CHLORIDE
CUL	CULVERT
CV	CHECK VALVE
CY	CUBIC YARD
C/C	CENTER TO CENTER
DEM	DEMOLITION
DI	DUCTILE IRON
DIA	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DOT	DEPARTMENT OF TRANSPORTATION
DR	DRAIN
DRW	DRIVEWAY
DWG	DRAWING
E	EAST
ECC	ECCENTRIC
ELEV	EACH FACE
ELEV	ELEVATION
ELEC	ELECTRIC
EMER	EMERGENCY
EMR	EDGE OF PAVEMENT
EPDM	ETHYLENE PROPYLENE DIENE MONOMER
EQUIP	EQUIPMENT
ESMT	EASEMENT
EST	ESTIMATE(D)
EW	EACH WAY
EXP	EXPANSION
EXIST	EXISTING
EXT	EXTERIOR
FB	FLOOR BRAN
FD	FOUNDATION
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
FIN	FINISH FLOOR
FR	FIRE HYDRANT
FR	FIRE HYDRANT
FIN	FINISHED
FIN GR	FINISH GRADE
FL	FLANGED JOINT
FL	FLANGE(D)
FM	FORCE MAIN
FM	FEET PER MINUTE
FPS	FEET PER SECOND
FP	FEMALE PIPE THREAD
FIB	FIBERGLASS REINFORCED PLASTIC
FT	FOOT OR FEET
F/F	FACE TO FACE
G	GAS MAIN
GAL	GALLON(S)
GALV	GALVANIZED
GIP	GALVANIZED IRON PIPE
GRD	GROUND
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GPS	GALLONS PER SECOND
GR	GRADE
GS	GALVANIZED STEEL
GSP	GALVANIZED STEEL PIPE
GW	GATE VALVE
HB	HOSE BIBB
HOPE	HEIGHT-DENSITY POLYETHYLENE
HOT	HOT
HR	HAND RAIL
HOA	HAND-OFF-AUTO SWITCH
HRKZ	HORIZONTAL
HP	HORSEPOWER
HUR	HOUR
HVAC	HEATING, VENTILATION, AND AIR CONDITIONING
HWL	HIGH WATER LEVEL
HIGHWAY	HIGHWAY
ID	INSIDE DIAMETER
INF	INSIDE FACE
INCH(S)	INCH(S)
INF	INFILTRANT
INT	INTERSECTION
INT	INTERIOR
INVT	INVERT
IP	IRON PIPE
IP	INTERNATIONAL PIPE STANDARD; IRON PIPE SIZE
JB	JUNCTION BOX
JOINT	JOINT
K	KIP(1,000 LB)
KVA	KILOVOLT-AMPERE
KWH	KILOWATT
L	LEFT
LAV	LABORATORY
LAV	LAVATORY
LB	POUND
LP	LINEAR FEET
LP	LIGHT POLE
LR	LONG RADIUS
LS	LUMP SUM
LWL	LOW WATER LEVEL
MANT	MAINTAIN OR MAINTENANCE
MAN	MANUALLY
MAX	MAXIMUM
MCC	MOTOR CONTROL CENTER
MES	MECHANICAL END SECTION
MECH	MECHANICAL
MG	MANUFACTURE
MGD	MILLION GALLON(S)
MGD	MILLION GALLONS PER DAY
MNG	MANNING
MIN	MINIMUM; MINUTE(S)
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MON	MONUMENT
MPH	MILES PER HOUR
MPT	MALE PIPE THREAD
MTD	MOUNTED
NW	MANWAY; MONITORING WELL
N	NORTH
NC	NORMALLY CLOSED
NE	NORTHEAST
NIC	NOT IN CONTRACT; NOT INCLUDED
NO	NORMALLY OPEN
NOM	NOMINAL
NO	NUMBER
NPT	NATIONAL PIPE THREAD
NPW	NON-POTABLE WATER
NTS	NOT TO SCALE
NW	NORTHWEST
NA	NOT APPLICABLE
OA	OVERALL DIMENSION
OC	ON CENTER
OD	OUTSIDE DIAMETER
OF	OUTSIDE FACE
OH	OVER HEAD
OHE	OVER HEAD ELECTRIC
OPT	OPTIONAL
O&M	OPERATION AND MAINTENANCE
PAVT	PAVEMENT
PC	POINT OF CURVE
PE	POINT OF INTERSECTION
PL	PLATE
PL	POUNDS PER LINEAR FOOT
POB	POINT OF BEGINNING
PP	POUNDS PER DAY
PPM	PARTS PER MILLION
PPRES	PRESSURE
PRV	PRESSURE REDUCING VALVE
PS	PUMP STATION
PSI	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAGE
PT	POINT OF TANGENCY
PT	PLUS VALVE
PVC	POLYVINYL CHLORIDE
PW	POWER
Q	FLOW
R	RADIUS
RA	REINFORCED CONCRETE PIPE
RD	REDUCER
REBAR	REINFORCING STEEL BARS
REF	REFERENCE
REIN	REINFORCE(D)(ING)(MENT)
REQD	REQUIRED
REST	RESTRICTION
RM	ROOM
RPM	REVOLUTIONS PER MINUTE
RR	RAIL

EROSION & SEDIMENTATION CONTROL NOTES:

- CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING, ACQUIRING AND ADHERING TO THE NOTICE OF INTENT TO USE GENERAL PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH SECTION 02370 OF THE SPECIFICATIONS.
- DURING ANY CONSTRUCTION ACTIVITY, INCLUDING STABILIZATION AND REVEGETATION OF DISTURBED SURFACES, THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, SELECTION, IMPLEMENTATION AND OPERATION OF ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE AND PREVENT VIOLATIONS OF THE WATER QUALITY STANDARDS IN CHAPTER 62-3 AND 62-4, F.A.C. THE CONTRACTOR SHALL USE APPROPRIATE BEST MANAGEMENT PRACTICES DESCRIBED IN THE STATE OF FLORIDA EROSION & SEDIMENT CONTROLS DESIGNER & REVIEWER MANUAL, LATEST EDITION (E&SC).
- THE ESCAPE OF SEDIMENT FROM THE WORK SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO OR CONCURRENT WITH LAND DISTURBING ACTIVITIES. IF IMPLEMENTATION DOES NOT PROVIDE FOR EFFECTIVE EROSION CONTROL, THE CONTRACTOR SHALL PROVIDE ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES TO CONTROL OR TREAT THE SEDIMENT SOURCE AS NEEDED UNTIL EFFECTIVE EROSION CONTROL AND SEDIMENT CONTROL IS ACHIEVED. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL REMOVE ANY SILTATION DEPOSITS AND CORRECT ANY EROSION PROBLEMS AS DIRECTED BY THE ENGINEER OF RECORD WHICH RESULTS FROM THE CONSTRUCTION OPERATIONS.
- DURING CONSTRUCTION THE CONTRACTOR SHALL CONSTRUCT EROSION & SEDIMENT INLET PROTECTION AT ALL STORM DRAIN INLETS, SEE DETAILS ON SHEET C2.1.
- EXCEPT WHERE SPECIFIC REQUIREMENTS ARE NOTED, EROSION & SEDIMENTATION CONTROLS SHOWN ON THESE PLANS ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MODIFY OR SUPPLEMENT THESE CONTROLS, AS NECESSARY, TO DEVELOP A SITE AND PROJECT SPECIFIC STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP SHALL MEET THE REQUIREMENTS OF THE FIELD CONDITIONS ENCOUNTERED AND CONFORM TO THE CONTRACTOR'S PROPOSED MEANS AND METHODS WHILE REMAINING COMPLIANT WITH ALL PERMITTING.
- THE CONTRACTOR'S CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MINIMUM OF 6-INCHES OF GRAVEL THE WIDTH OF THE DRIVE AND FOR A DISTANCE OF 25- FEET BEGINNING AT THE PROPERTY LINE AND EXTENDING ON THE PROJECT PROPERTY.
- THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING GENERAL CONSTRUCTION SEQUENCE:
 - ERECT ALL EROSION & SEDIMENT CONTROLS.
 - PREPARE AND PROTECT STAGING AREAS AND CONSTRUCTION AREAS.
 - CONSTRUCT STORMWATER POND.
 - SOD AND STABILIZE POND BANKS.
- CONTRACTOR SHALL PROVIDE & INSTALL ADDITIONAL EROSION CONTROLS AS NECESSARY TO REMAIN IN COMPLIANCE WITH ALL LOCAL, STATE & FEDERAL REGULATIONS.
- MAINTAIN ALL TEMPORARY EROSION CONTROLS FOR THE DURATION OF THE WORK AND REPAIR AS NECESSARY.
- CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROLS BY SUBSTANTIAL COMPLETION OF THE PROJECT. ALL DISTURBANCE/DAMAGE INCURRED DURING REMOVAL SHALL BE REPAIRED.
- ALL AREAS DISTURBED BY CONSTRUCTION AND NOT OTHERWISE RECEIVING PERMANENT IMPROVEMENTS, SHALL BE STABILIZED WITH SOD IN ACCORDANCE WITH THE SPECIFICATIONS.
- STOCKPILES OF MATERIALS SHALL NEITHER IMPEDE NOR DISTURB NATURAL DRAINAGE PATTERNS. THE CONTRACTOR SHALL USE DIVERSION SWALES AND SEDIMENT BASINS AS NECESSARY TO REDIRECT DRAINAGE PATTERNS IF NECESSARY TO PREVENT SEDIMENTATION FROM ADVERSELY IMPACTING PROPERTY OFFSITE.
- TEMPORARILY SEED AND MULCH ALL DISTURBED AREAS WITHIN 14 DAYS; SOD AS REQUIRED TO CONTROL EROSION THROUGH FINAL INSPECTION AND TO PRODUCE A UNIFORM STAND OF GRASS COVER.
- THE CONTRACTOR SHALL PREVENT OFFSITE TRACKING OF MATERIAL.

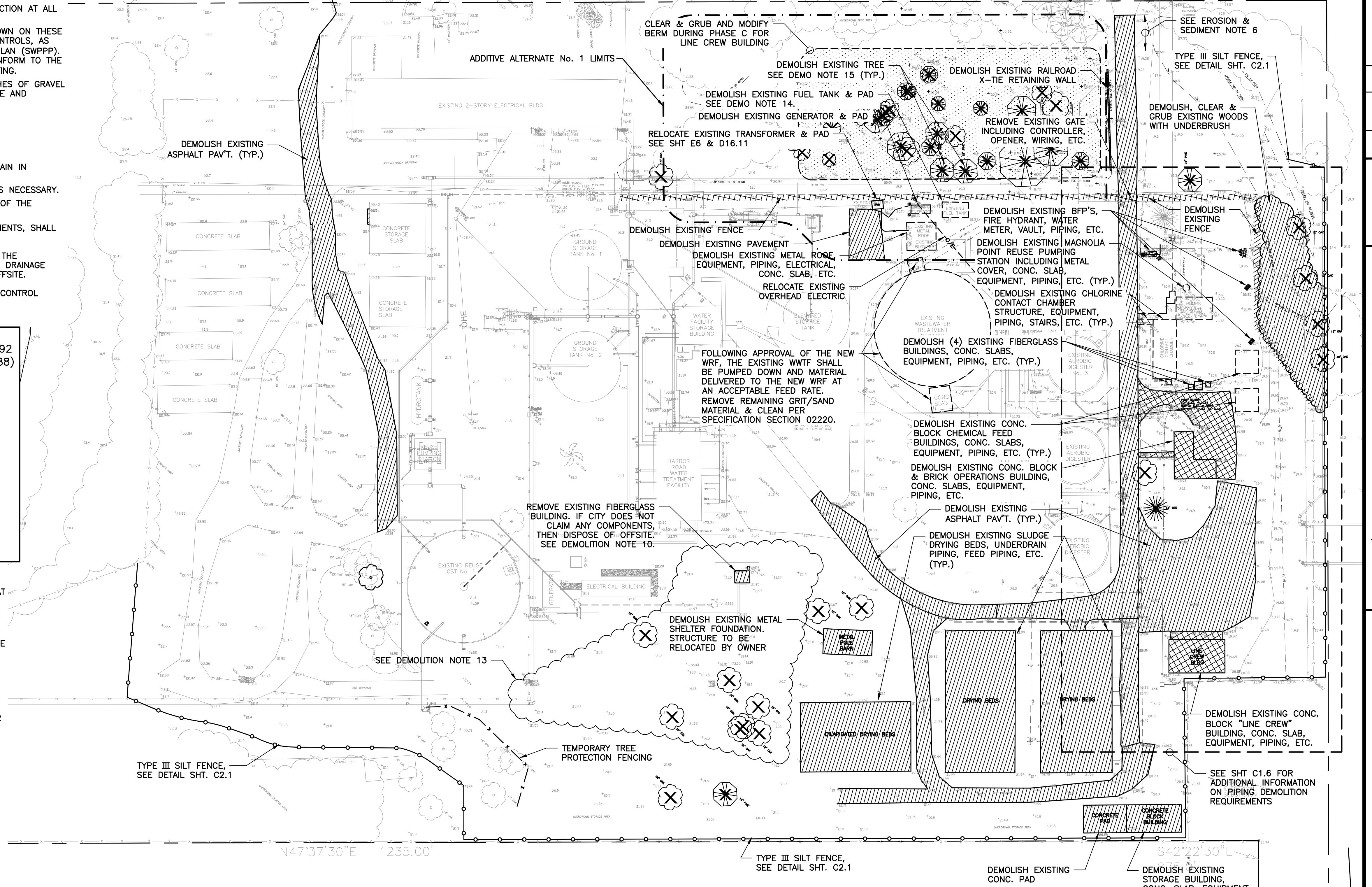


SURVEY NOTES:

- THIS SURVEY DOES NOT PURPORT TO BE A BOUNDARY SURVEY. ALTHOUGH SHOWN FROM THE BEST INFORMATION AVAILABLE, RIGHT-OF-WAY, EASEMENTS AND PROPERTY LINES SHOWN ARE FOR INFORMATIONAL PURPOSES ONLY.
- TOPOGRAPHIC SURVEY DATA PROVIDED BY MITTAUER & ASSOCIATES, INC. UNDERGROUND UTILITIES SHOWN ARE FOR REFERENCE ONLY AND HAVE NOT BEEN FIELD LOCATED.
- THIS PROJECT LIES WITHIN FLOOD ZONE 'X' AS SHOWN ON FEMA FLOOD PANEL No.: 12019C0190E, DATED 3/17/2014.
- FOR TEMPORARY BENCHMARKS AT PROJECT AREA SEE SHEET C1.1.
- ELEVATIONAL DATA IS REFERENCED TO 1988 NAVD.
- ALL PROPERTY CORNERS, PINS, MONUMENTS AND MARKERS DISTURBED BY THE WORK SHALL BE RESTORED BY A LICENSED PLS AT THE CONTRACTOR'S EXPENSE.

LEGEND:

- PHASE A DEMOLITION LIMITS
- PHASE B DEMOLITION LIMITS
- PHASE C DEMOLITION LIMITS



DEMOLITION NOTES:

- EXISTING TREES TO REMAIN SHALL BE PROTECTED BY WOODEN BARRIERS. BARRIERS SHALL BE CONSTRUCTED WITH 2X LUMBER. BARRIERS SHALL STAND 48" HIGH AND ENIRCLE THE TREE AT A MINIMUM DISTANCE OF 2' FROM THE TRUNK.
- SEE YARD PIPING PLAN FOR REMOVAL OF EXISTING UNDERGROUND PIPING AND OTHER PROJECT DEMOLITION REQUIREMENTS.
- STRUCTURES AND OTHER ITEMS TO BE DEMOLISHED WILL BE VACATED AND DISCONTINUED IN USE PRIOR TO THE START OF DEMOLITION WORK.
- THE OWNER ASSUMES NO RESPONSIBILITY FOR ACTUAL CONDITION OF THE ITEMS TO BE DEMOLISHED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ASSESSING AND VERIFYING EXISTING CONDITIONS PRIOR TO REMOVAL OR DEMOLITION OF ANY EXISTING IMPROVEMENT.
- ENSURE THE SAFE PASSAGE OF PERSONS AROUND THE AREA OF DEMOLITION. CONTRACTOR SHALL CONDUCT OPERATIONS TO PREVENT INJURY TO ADJACENT BUILDINGS, STRUCTURES, OTHER FACILITIES AND PERSONS.
- SEQUENCING OF ANY DEMOLITION WORK SHALL BE PERFORMED IN COORDINATION WITH THE OWNER'S STAFF IN ORDER TO ENSURE MINIMAL AND ACCEPTABLE INTERRUPTION OF FACILITY OPERATIONS.
- INCIDENTAL OR UNINTENTIONAL DAMAGE TO EXISTING IMPROVEMENTS NOT DESIGNATED FOR DEMOLITION SHALL BE PROMPTLY REPAIRED AT THE CONTRACTOR'S EXPENSE.
- DESIGN, CONSTRUCTION AND PERMITTING OF ANY TEMPORARY SHEETING, SHORING, BARRICADES, FENCING, PUMPING, PIPING OR PROTECTIVE STRUCTURES SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE, FURNISH AND INSTALL.
- ALL DEMOLITION SHALL BE PERFORMED IN STRICT CONFORMANCE WITH ALL APPLICABLE OSHA REQUIREMENTS.
- CONTRACTOR SHALL COORDINATE WITH OWNER REGARDING SALVAGE OF EXISTING EQUIPMENT & MATERIALS. THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL FOR ALL MATERIALS DESIGNATED FOR DEMOLITION OR REMOVAL.
- ALL DEMOLISHED MATERIALS (NOT OTHERWISE SALVAGED) SHALL BE LEGALLY AND SAFELY DISPOSED OF OFFSITE AT THE CONTRACTOR'S EXPENSE.
- SEE YARD PIPING PLAN ON SHEET C1.6 FOR REMOVAL OF EXISTING UNDERGROUND PIPING AND OTHER PROJECT DEMOLITION REQUIREMENTS.
- BURIED DEBRIS HAS BEEN IDENTIFIED IN VARIOUS AREAS AROUND THE SITE. ANY DEBRIS LOCATED BENEATH A PROPOSED STRUCTURE SHALL BE REMOVED & REPLACED WITH SUITABLE FILL. THE LIMITS OF DEBRIS REMOVAL SHALL EXTEND 10' BEYOND THE EXTERIOR OF THE STRUCTURE.
- FUEL TANKS SHALL BE EMPTIED OF FUEL. FUEL SHALL BE OFFERED TO OWNER FOR STORAGE OR REUSE ELSEWHERE ON SITE.
- EXISTING TREES WITHIN CLEAR & GRUB AREAS ARE NOT SHOWN, BUT SHALL BE REMOVED AS PART OF THE CLEARING OPERATIONS.

CONSTRUCTION PHASING REQUIREMENTS:

THE EXISTING WWT SHALL REMAIN IN SERVICE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR WILL BE REQUIRED TO SEQUENCE CONSTRUCTION ACTIVITIES TO ENSURE THE CITY CAN MAINTAIN WASTEWATER TREATMENT OPERATIONS. THE CRITICAL SEQUENCING REQUIREMENTS ARE OUTLINED AS FOLLOWS:

- PHASE A WORK** - CLEAR & GRUB AND DEMOLISH EXISTING DRYING BEDS AND DENOTED STRUCTURES TO CONSTRUCT THE OXIDATION DITCH, CLARIFIER SPLITTER BOX, CLARIFIER Nos. 1 & 2, FILTERS, CHLORINE CONTACT CHAMBER WITH TRANSFER PUMPING SYSTEM, CHEMICAL FEED FACILITIES, ELECTRICAL IMPROVEMENTS, AND ASSOCIATED WORK. THE OPERATIONS BUILDING WITH ASSOCIATED CLEARING & GRUBBING SHALL BE COMPLETED WITH TEMPORARY PARKING AREA. THE OPERATIONS BUILDING WITH ALL SCADA, ELECTRICAL AND CONTROL CAPABILITIES SHALL BE COMPLETED PRIOR TO PHASE B WORK. RTU90 & RTU95 APPROVAL SUBMITTALS SHALL BE DELIVERED TO THE ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE RTU'S MUST BE ON-SITE TO COMPLETE THE PHASE A OPERATIONS BUILDING IMPROVEMENTS.

CONSTRUCTION PHASING REQUIREMENTS (CONTINUED):

- PHASE B WORK** - AFTER THE OPERATIONS BUILDING HAS RECEIVED ITS CERTIFICATE OF OCCUPANCY AND IS FULLY FUNCTIONAL WITH ALL NEW SCADA AND RELOCATED DFS WATER PLANT & PUMP STATION SCADA COMPONENTS, THE DEMOLITION OF THE EXISTING OPERATIONS BUILDING AND LINE CREW BUILDING CAN OCCUR. THE EXISTING CHLORINE CONTACT CHAMBER & CHEMICAL FEED FACILITIES CAN ONLY BE DEMOLISHED AFTER THE NEW WRF IS IN OPERATION AND ACCEPTED BY THE FDP, OWNER & ENGINEER.
- PHASE C WORK** - AFTER THE NEW WRF IS APPROVED FOR OPERATION, THE DECOMMISSIONING OF THE EXISTING WWT CAN BEGIN AND BE COMPLETED PER SPECIFICATION SECTION 02220. THIS WILL INCLUDE DEMOLITION & REMOVAL OF THE EXISTING STRUCTURES AND FACILITY COMPONENTS. IN ADDITION CONSTRUCTION OF THE LINE CREW BUILDING AND PAVEMENT IMPROVEMENTS CAN BEGIN. THIS WILL INCLUDE RELOCATION OF THE EXISTING 480 V TRANSFORMER, CONSTRUCTION OF NEW CONDUCTORS FROM THE SECTIONALIZER TO THE RELOCATED 480 V TRANSFORMER LOCATION, AND EXTENSION OF NEW 480 V SERVICE TO THE NEW LINE CREW BUILDING.

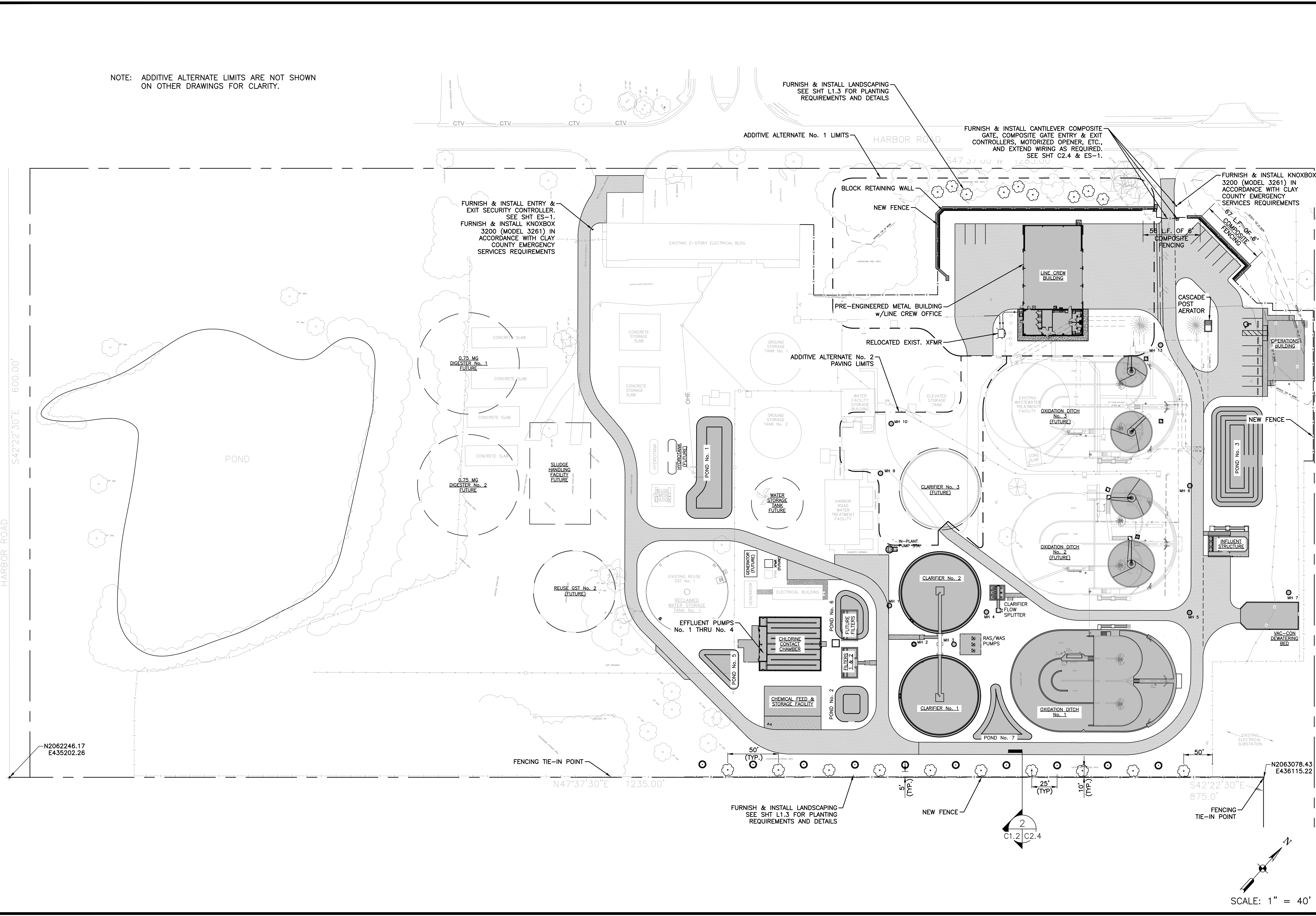
SCALE: 1" = 40'

MITTAUER & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
 TEL. (904) 278-0030 FAX. (904) 278-0840

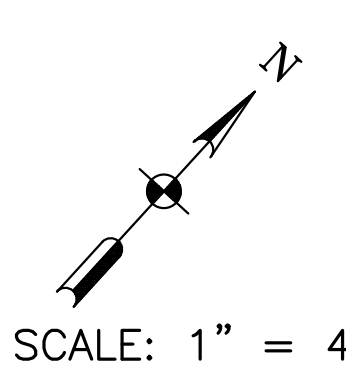
CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WRF Expansion Phase 2
 Existing Conditions & Demolition Plan
 Clay County, Florida

JOB NO. 8905-56-1
 SHEET NO. C1.1

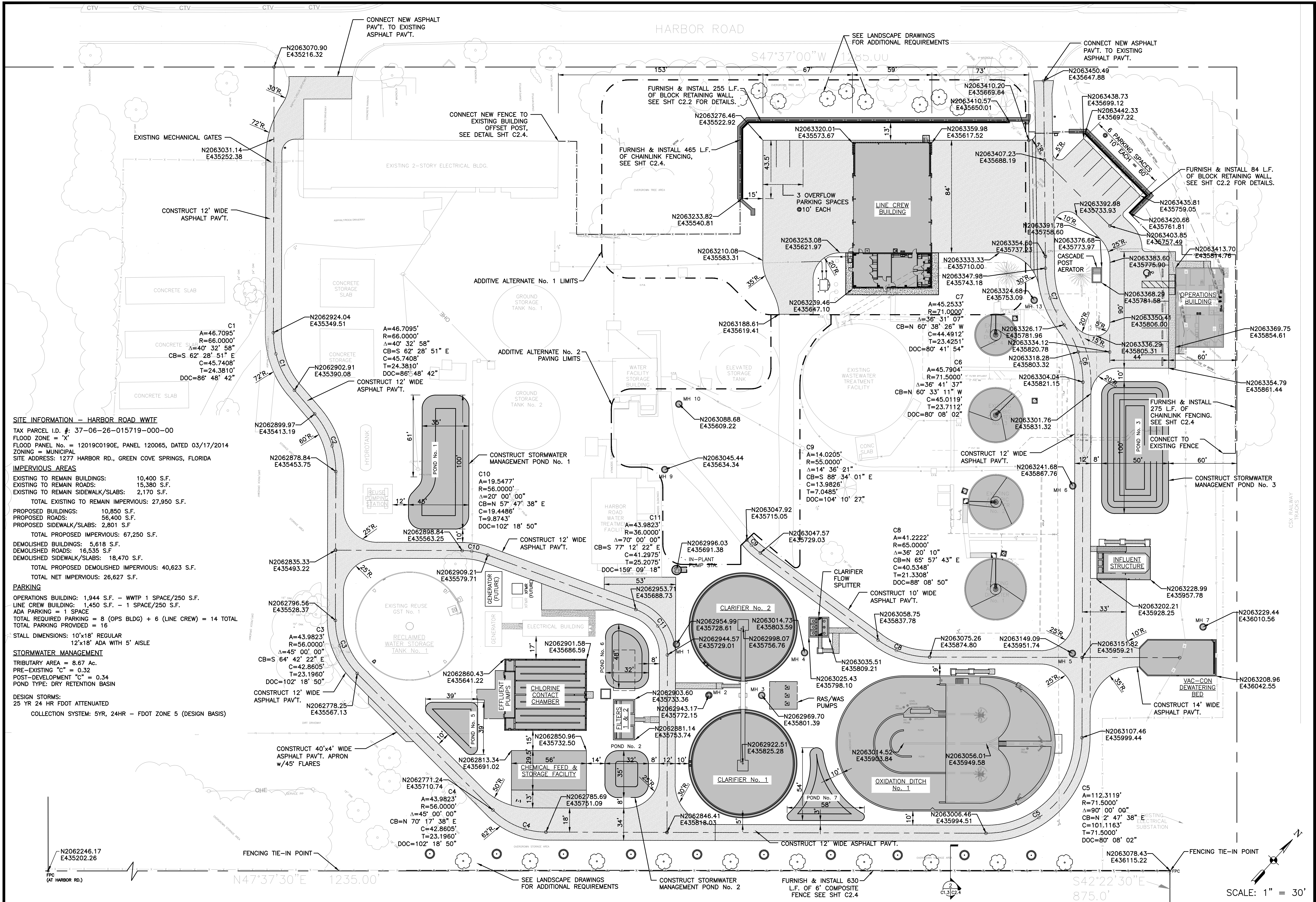
NOTE: ADDITIVE ALTERNATE LIMITS ARE NOT SHOWN ON OTHER DRAWINGS FOR CLARITY.



<p>MITTALNER & ASSOCIATES, INC. CONSULTING ENGINEERS</p> <p>580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073 TEL. (904) 278-0030 FAX. (904) 278-0840</p>		<p>DESIGNER: MPT DRAWN: KDH/USA PROJECT MGR: JRS DATE: 11/16/20 SCALE: 1" = 1" INCH</p>
<p>CITY OF GREEN COVE SPRINGS DEP SRF Harbor Road WRF Expansion Phase 2 Site Master Plan & Landscape Plan Clay County, Florida</p>		<p>NO. DATE BY</p>
<p>JOB NO. 8905-56-1 SHEET NO. C1.2</p>		<p>REVISION DESCRIPTION</p>



SCALE: 1" = 40'



SITE INFORMATION - HARBOR ROAD WWT
 TAX PARCEL I.D. #: 37-06-26-015719-000-00
 FLOOD ZONE = 'X'
 FLOOD PANEL No. = 12019C0190E, PANEL 120065, DATED 03/17/2014
 ZONING = MUNICIPAL
 SITE ADDRESS: 1277 HARBOR RD., GREEN COVE SPRINGS, FLORIDA

IMPERVIOUS AREAS
 EXISTING TO REMAIN BUILDINGS: 10,400 S.F.
 EXISTING TO REMAIN ROADS: 15,380 S.F.
 EXISTING TO REMAIN SIDEWALK/SLABS: 2,170 S.F.
 TOTAL EXISTING TO REMAIN IMPERVIOUS: 27,950 S.F.

PROPOSED BUILDINGS: 10,850 S.F.
 PROPOSED ROADS: 56,400 S.F.
 PROPOSED SIDEWALK/SLABS: 2,801 S.F.
 TOTAL PROPOSED IMPERVIOUS: 67,250 S.F.

DEMOLISHED BUILDINGS: 5,618 S.F.
 DEMOLISHED ROADS: 16,535 S.F.
 DEMOLISHED SIDEWALK/SLABS: 18,470 S.F.
 TOTAL PROPOSED DEMOLISHED IMPERVIOUS: 40,623 S.F.
 TOTAL NET IMPERVIOUS: 26,627 S.F.

PARKING
 OPERATIONS BUILDING: 1,944 S.F. - WWT 1 SPACE/250 S.F.
 LINE CREW BUILDING: 1,450 S.F. - 1 SPACE/250 S.F.
 ADA PARKING = 1 SPACE
 TOTAL REQUIRED PARKING = 8 (OPS BLDG) + 6 (LINE CREW) = 14 TOTAL
 TOTAL PARKING PROVIDED = 16
 STALL DIMENSIONS: 10'x18' REGULAR
 12'x18' ADA WITH 5' AISLE

STORMWATER MANAGEMENT
 TRIBUTARY AREA = 8.67 AC.
 PRE-EXISTING "C" = 0.32
 POST-DEVELOPMENT "C" = 0.34
 POND TYPE: DRY RETENTION BASIN

DESIGN STORMS:
 25 YR 24 HR FDOT ATTENUATED
 COLLECTION SYSTEM: 5YR, 24HR - FDOT ZONE 5 (DESIGN BASIS)

MITTALNER & ASSOCIATES, INC.
 CONSULTING ENGINEERS

580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
 TEL. (904) 278-0030 FAX. (904) 278-0840

CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WRF Expansion Phase 2
 Site Plan - Horizontal Control
 Clay County, Florida

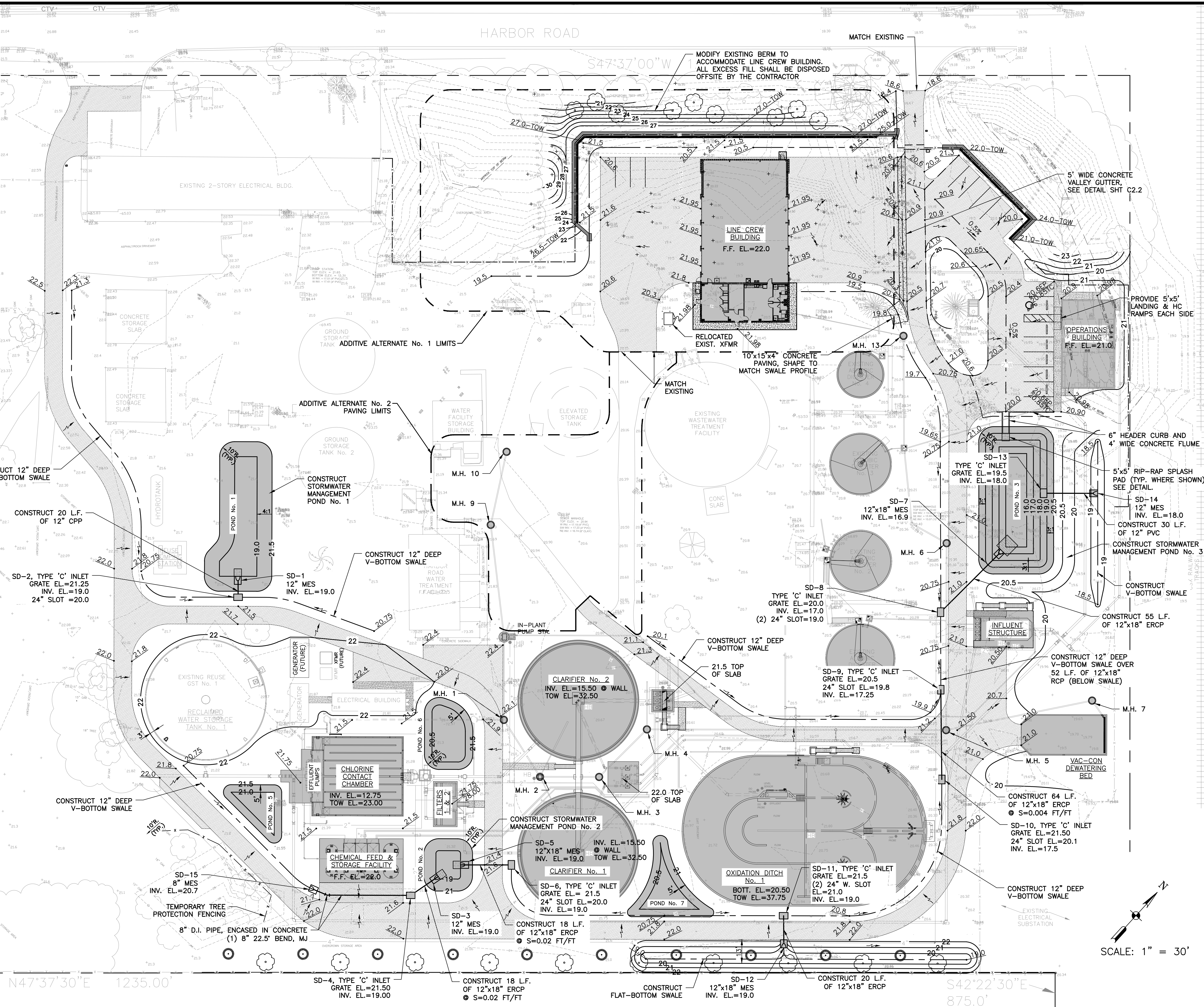
JOB NO. 8905-56-1
 SHEET NO. C1.3

SCALE: 1" = 30'

NO.	DATE	BY	REVISION DESCRIPTION

NOTES:

- PIPE LENGTHS ARE MEASURED ON THE HORIZONTAL PLANE CENTER TO CENTER OF INLET OR MANHOLE AND DO NOT INCLUDE MITERED END SECTIONS IF APPLICABLE. CONTRACTOR SHALL PROVIDE AND INSTALL THE LENGTH REQUIRED.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL CONSTRUCT EROSION & SEDIMENT INLET PROTECTION AT ALL EXISTING & PROPOSED STORM DRAIN INLETS, SEE DETAIL, SHT. C2.1.
- ALL SIDEWALKS ARE CONSIDERED HANDICAP ACCESSIBLE ROUTES AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH ADA STANDARDS FOR ACCESSIBLE DESIGN AND SLOPES SHALL NOT EXCEED THE FOLLOWING:
 - DIRECTION OF TRAVEL (LENGTH OF SIDEWALK) = 5% MAX.
 - CROSS SLOPE = 2% MAX.
 - RAMP = 1:12 MAX.
 SEE DETAIL SHT. C2.1.
- ALL SIDEWALKS FLUSH WITH PAVEMENT SHALL RECEIVE A CONTINUOUS 24" WIDE STRIP OF DETECTABLE WARNING TEXTURE.
- ALL CURB & GUTTERS ARE FRONT-DISCHARGE WHERE PAVEMENTS SLOPE DOWN & AWAY FROM GUTTERS.
- CONTRACTOR SHALL VERTICALLY ADJUST ALL EXISTING & NEW VALVE BOXES, MANHOLE FRAMES & COVERS, JUNCTION BOXES, PULL BOXES, ETC., WHERE REQUIRED DUE TO GRADE CHANGES, SO THEY ARE LOCATED FLUSH WITH FINISHED GRADE/SURFACE.
- SEE DETAIL SHT. C2.3 FOR ADDITIONAL DRAINAGE DETAIL.
- CONTRACTOR SHALL PROVIDE CONSTANT SLOPE BETWEEN ADJACENT SPOT ELEVATIONS.
- UNLESS OTHERWISE NOTED GRADES AT ALL PROPERTY LINES SHALL REMAIN UNCHANGED. CONTRACTOR SHALL PROVIDE A CONSTANT SLOPE BETWEEN EXISTING PROPERTY LINE GRADES AND NEAREST PROPOSED SPOT ELEVATIONS.

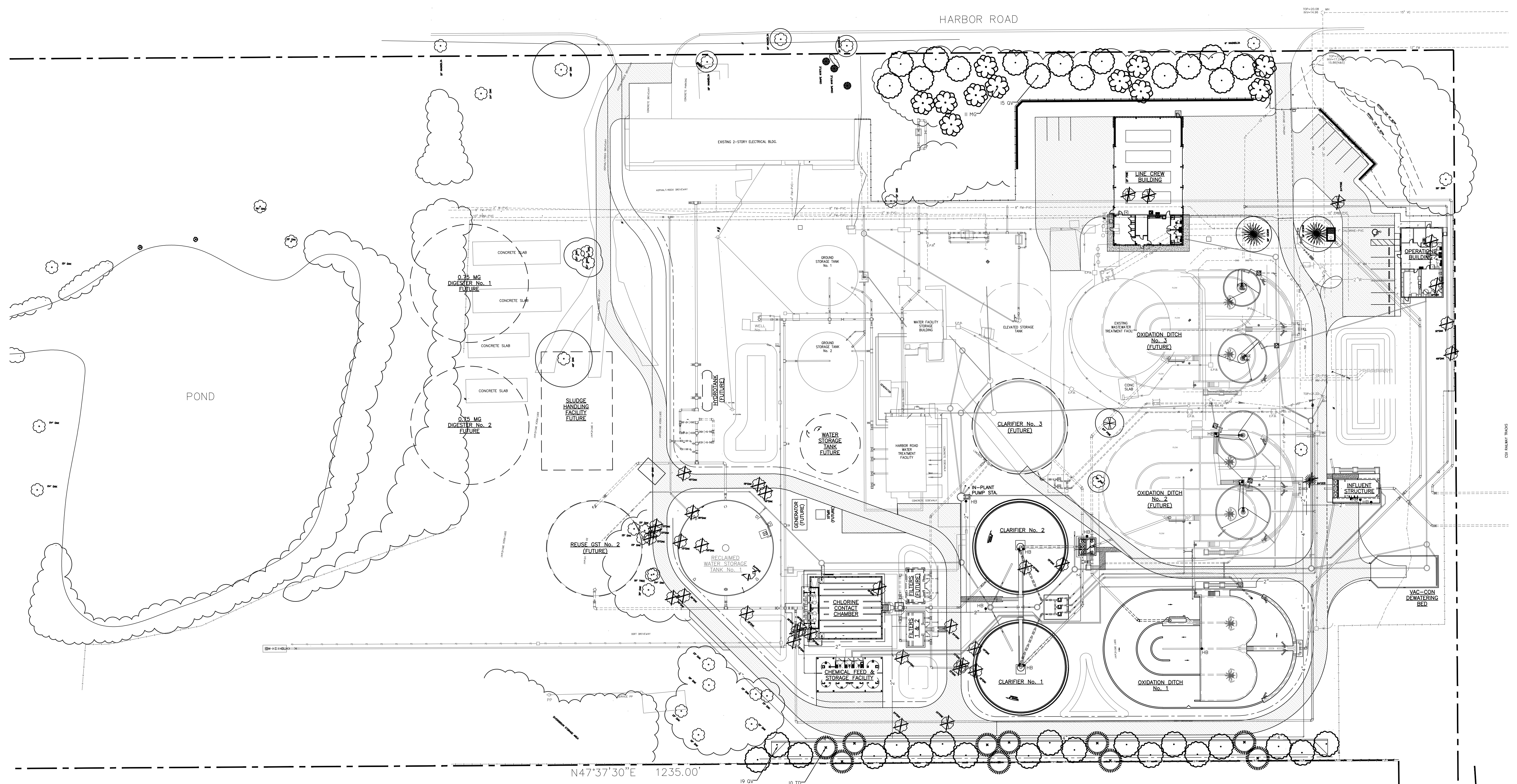


DESC	MPT	DATE	NO	BY
DRWN	KDJ/USA	11/16/20		
PROJ	JRS			
DATE				
1 INCH				

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CONSULTING ENGINEERS
580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
TEL. (904) 278-0030 FAX. (904) 278-0840

CITY OF GREEN COVE SPRINGS
DEP SRF Harbor Road WRF Expansion Phase 2
Grading & Drainage Plan
Clay County, Florida

JOB NO. 8905-56-1
SHEET NO. C1.4



N47°37'30"E 1235.00'

FIELD ADJUST TREES AS NECESSARY.
CGC TO IRRIGATE TREES UNTIL ESTABLISHED.

CITY GREEN COVE SPRINGS HARBOR ROAD WWTF
PLANT LIST

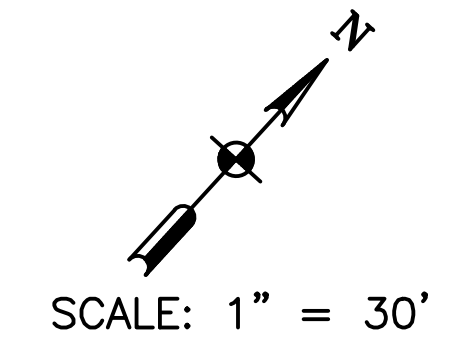
QTY	SYM	DESCRIPTION	SIZE	SPACING	NOTES*	TOTAL INCHES
34	QV	QUERCUS VIRGINIANA "CATHEDRAL LIVE OAK"	15'-17' x 7-8', 6" CAL., 4' CT., MATCHED	AS SHOWN	N, FYN, FF, WW	204
11	MG	MAGNOLIA GRANDIFLORA "SOUTHERN MAGNOLIA"	14-16' x 6-7', 6" CAL., 6' CT., MATCHED	AS SHOWN	N, FYN, FF, WW	66
10	TD	TAXODIUM DISTICHUM "BALD CYPRESS"	14-16' x 6-7', 6' CAL., 6' CT., MATCHED	AS SHOWN	N, FYN, FF, WW	60

SOD PASPALUM NOTATUM "ARGENTINE BAHIA" - TSA FREE (WEED FREE)
SOD ALL 4:1 SLOPES OR GREATER, 10' FROM EOP AND ALL DISTURBED ROW. COORDINATE FURTHER GRASSING WITH GENERAL CONTRACTOR
SELECTED SOD SPECIES MEETS ALL CURRENT LANDSCAPE AND IRRIGATION REQUIREMENTS. ANY VARIABLE WILL REQUIRE GOVERNMENT APPROVAL

48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
IT'S THE LAW IN FLORIDA

*PLANT LIST LEGEND: N-NATIVE, FYN- FLORIDA YARDS & NEIGHBORHOODS 2006, FF- FLORIDA FRIENDLY, WW- WATER WISE 2008,
OHE - JEA OVERHEAD ELECTRIC (ACCEPTABLE PLANT LIST)

prepared by:
JANET O. WHITMILL, R.L.A.
P.O. Box 5212, Jacksonville, FL 32247-5212
Telephone (904) 398 7688



LANDSCAPE REVISION
REVISION DESCRIPTION

NO	DATE	BY
1		

DESIGN: JOW, DRWN: DHM, JOW
CHECKED: MRSU, MGR: JOW
DATE: 4/7/18
SCALE: 1" = 1"

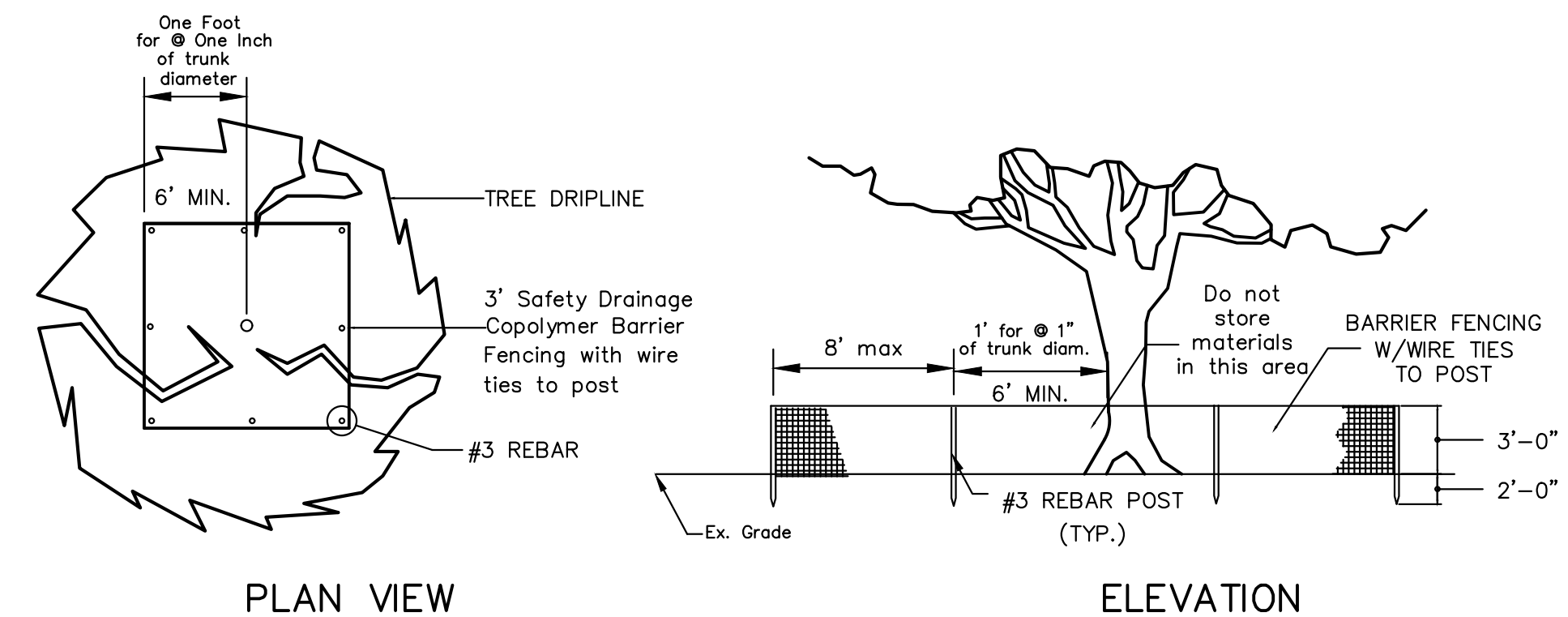
MITTAUER & ASSOCIATES, INC.
CONSULTING ENGINEERS
580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
TEL. (904) 278-0030 FAX. (904) 278-0840 FLORIDA CA NO. 6565

CITY OF GREEN COVE SPRINGS
DEP SRF Harbor Road WWTF
LANDSCAPE PLAN
Clay County, Florida

JOB No. 19118
SHEET No. L1.3

CITY GREEN COVE SPRINGS HARBOR ROAD WWTF PLANT LIST

QTY	SYM	DESCRIPTION	SIZE	SPACING	NOTES*	TOTAL INCHES
34	QV	QUERCUS VIRGINIANA "CATHEDRAL LIVE OAK"	15'-17' x 7-8', 6" CAL., 4' CT., MATCHED	AS SHOWN	N, FYN, FF, WW	204
11	MG	MAGNOLIA GRANDIFLORA "SOUTHERN MAGNOLIA"	14-16' x 6-7', 6" CAL., 6' CT., MATCHED	AS SHOWN	N, FYN, FF, WW	66
10	TD	TAXODIUM DISTICHUM "BALD CYPRESS"	14-16' x 6-7', 6' CAL., 6' CT., MATCHED	AS SHOWN	N, FYN, FF, WW	60



TREE PROTECTION FENCING DETAIL

THE TREE PROTECTION BARRICADE SHALL BE AT LEAST THREE (3) FEET HIGH. THE BARRIER SHALL CONSIST OF EITHER WOOD FENCE WITH 2X4 POSTS PLACED A MAXIMUM EIGHT (8) FEET APART, WITH A 2X4 MINIMUM TOPRAIL, OR A TEMPORARY WIRE MESH FENCE, OR OTHER SIMILAR BARRIER WHICH WILL LIMIT ACCESS TO PROTECTED AREA.

THE BARRICADE SHALL BE AT LEAST ONE FOOT IN DIAMETER FOR EACH INCH OF TRUNK DIAMETER. FOR TREES LESS THAN 12" DBH, THE MINIMUM BARRICADE SHALL BE PLACED AT LEAST SIX (6) FEET AWAY FROM THE BASE OF THE TREE.

TREE BARRICADE APPROVAL: OBTAIN CITY APPROVAL OF TREE BARRICADES BEFORE BEGINNING CLEARING OPERATIONS OR ANY SITE DEVELOPMENT.

48 HOURS BEFORE YOU DIG
CALL SUNSHINE
1-800-432-4770
IT'S THE LAW IN FLORIDA

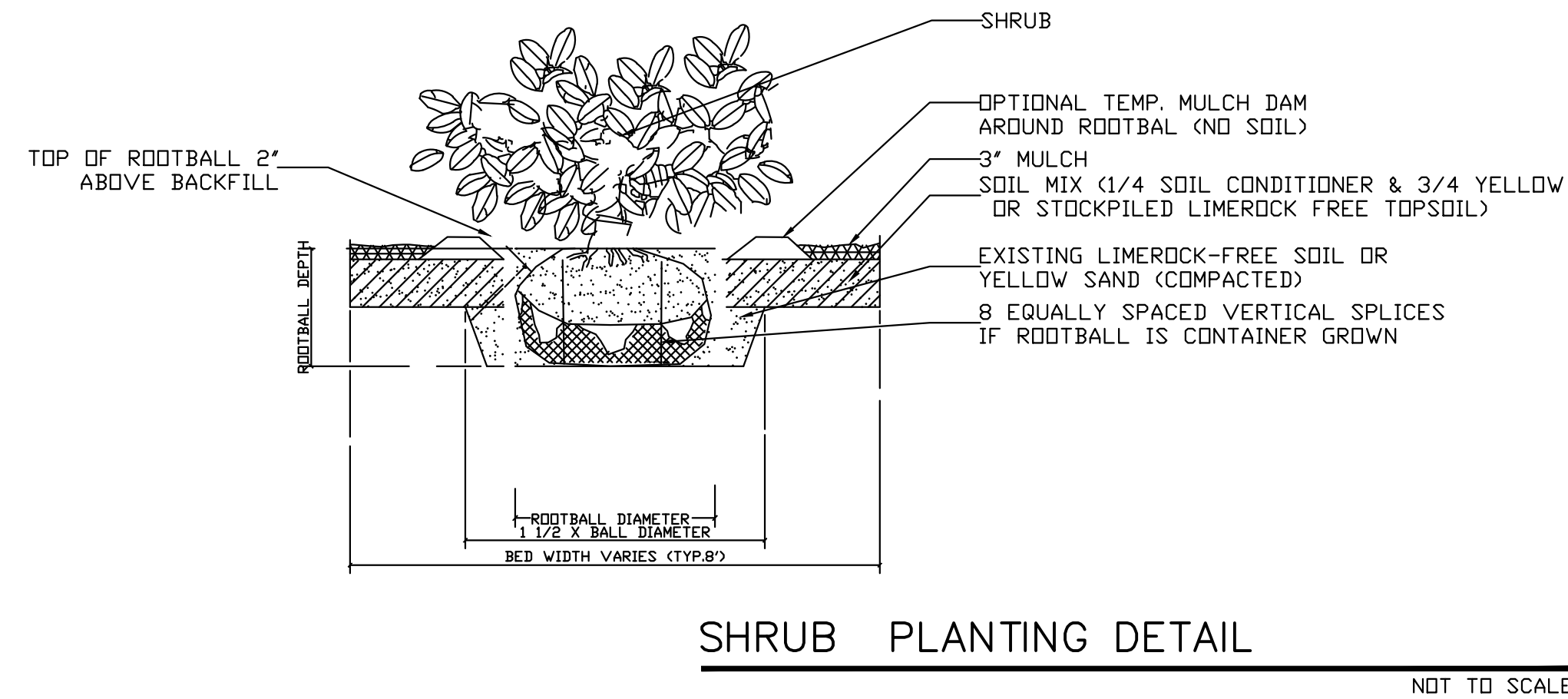
***PLANT LIST LEGEND:** N-NATIVE, FYN- FLORIDA YARDS & NEIGHBORHOODS 2006, FF- FLORIDA FRIENDLY, WW- WATER WISE 2008, OHE - JEA OVERHEAD ELECTRIC (ACCEPTABLE PLANT LIST)

CITY OF GREEN COVE SPRINGS HARBOR ROAD WWTF TREES TO BE REMOVED

TREE QTY	TREE SPECIES	SIZE (INCHES)	SUBTOTAL (INCHES)
10	OAK	12	120
15	OAK	15	225
8	OAK	18	144
4	OAK	24	96
1	OAK	30	30
2	OAK	36	72
1	OAK	42	42
1	OAK	48	48
1	CEDAR	24	24
TOTAL			801
NON-PROTECTED			
7	PINE	12	84
1	PINE	14	14
3	PINE	15	45
2	PINE	16	32
1	PINE	18	18
2	PINE	20	40
2	PINE	24	48
TOTAL			267

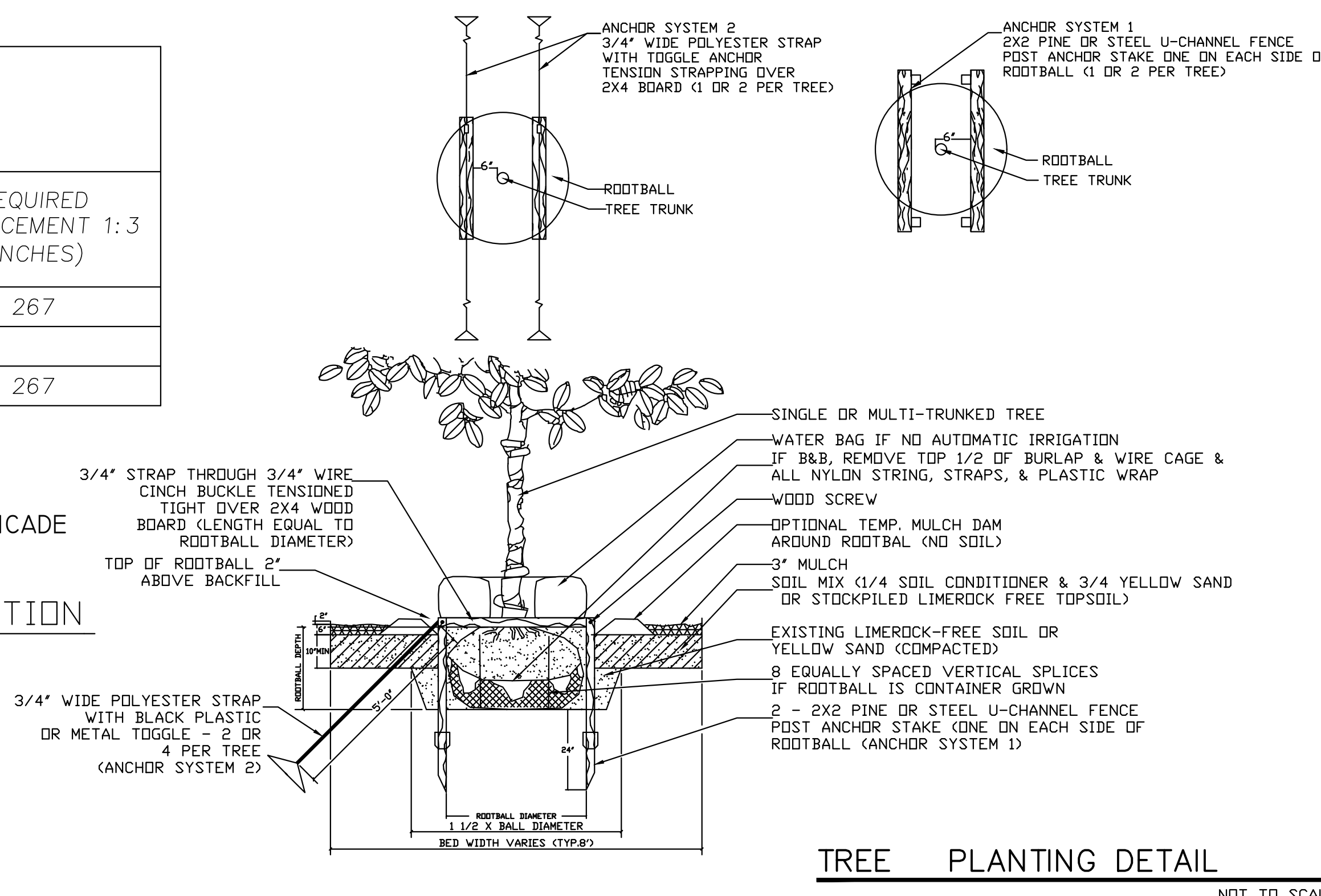
PLANTING NOTES

- The LANDSCAPE CONTRACTOR is responsible for verifying project site conditions and all quantities indicated on these plans before commencing any work. LANDSCAPE CONTRACTOR shall notify the LANDSCAPE ARCHITECT if soil conditions are poorly drained to determine if substitution of materials is necessary.
- Soil tests shall be provided to evaluate various areas of the landscape (especially the parking lot islands) for pH, available nutrients, phosphorus content, bulk density, etc. This will serve to ensure proper plant selection according to prevailing soil conditions, what lime/sulphur applications are needed (if any) and long-term survival of plant material.
- All plant material shall be Florida Grade No. 1 or better nursery grown in accordance to Florida Grades and Standards handbook.
- All plant material shall be container grown or B&B. B&B materials shall be "hardened off" root pruned during field production and shall be dug at least several weeks before planting is performed.
- Plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They shall be free of disease, insects, eggs or larvae and shall have healthy, well developed root systems. They shall be free from physical damage or adverse conditions that would prevent thriving growth.
- All plants shall conform to the varieties indicated in the plant list.
- Substitution of plant materials will not be permitted unless authorized in writing by the LANDSCAPE ARCHITECT. If proof is submitted that any plant specified is not obtainable, a proposal will be considered for use of the nearest equivalent size or variety with corresponding adjustment of contract price.
- Plant material locations and bed outlines shall be staked or flagged on site by the CONTRACTOR and shall be adjusted if required to fit actual as-built conditions on site and approved by the owner or owners representative.
- All proposed tree planting locations shall be staked or flagged before installation by the LANDSCAPE ARCHITECT and approved by the owner or owners representative.
- The CONTRACTOR shall estimate the depth of the planting hole by measuring the distance between the point where the topmost root emerges from the trunk and the bottom of the root ball. The planting hole shall be slightly shallower than this distance. No more than 2 to 3 inches of the root ball shall be above the soil unless the site is poorly drained. Poorly drained soil requires planting depths even or higher. Planting holes dug too deep are required to have soil added to the bottom and loosely compacted. If planting holes should fill with water as it is dug, position the bottom of the root ball above the water and mound soil to cover the sides of the ball. The hole shall be at least 1.5 times the diameter of the root ball. Wider holes shall be used for compacted soil and wet sites.
- The soil shall be freshly tilled and large clods of soil broken up. The growing medium shall be settled and firm at the time of herbicide application. Herbicides may be mechanically incorporated by mixing into top layer at a depth of 1-3 inches.
- All backfill around plant material shall be worked firmly by slicing a shovel down into the backfill 20 to 30 times around the tree as you add backfill soil. Large clumps shall be broken up. Do not pack the backfill. Only step firmly on backfill soil to stabilize the root ball. The top of the root ball shall remain 1 inch (small trees) to 3 inches (large trees) or approximately 10% above grade. Do not over-pack the loosened soil when wet. Add 10 to 20 gallons of water to the rootball and backfill. Fill in any holes or depressions with backfill soil. Do not attempt to eliminate air pockets by compaction. Water infiltrating the backfill soil will eliminate large air pockets.
- LANDSCAPE CONTRACTOR shall bear final responsibility for proper surface drainage of planted areas. Any discrepancy in the drawings, obstruction on the site, or prior to work done by any other party, which the CONTRACTOR feels precludes establishing proper drainage shall be brought to the attention of the LANDSCAPE ARCHITECT for correction or relief of said responsibility.
- When planting on slopes, set tree so top-most root in the ball on the uphill side is even with the soil. The side of the root ball on the downhill side will be well above the surrounding soil. Soil shall cover the sides of the root ball. Mulch shall cover the edge of the rootball and not piled on top.
- Planting beds shall be cut or edged to form a uniform clean line between beds and lawn areas.
- After all plant material in a plant bed area has been installed and approved, the areas between plants shall be raked to an even grade to conform to premulching finish grades. All planting beds and plant saucers shall then be uniformly covered with a minimum depth of three (3) inches of #2 grade or better of mini pine bark nuggets with a maximum diameter of two (2) inches. Contractor to provide a sample prior to installation.
- Before fertilization of a soil and/or foliar nutrient analysis shall be performed to determine whether phosphorus fertilizer with 30% slow release nitrogen will be required. All planting bed areas shall be fertilized approximately 4-6 weeks after installation.
- Plant material soil shall be "native" soil that was removed from the planting hole. If soil is badly contaminated, good quality soil shall be used as replacement after contaminated soil has been completely removed from planting area.
- After sodding is completed, the entire site areas shall be watered by hand or irrigation system each day for two weeks. After approximately one month of installation, sodded areas shall then be top dressed with a 15-0-15 commercial slow-release fertilizer at a rate of 6.67 pounds per 1,000 square feet of area in an evenly broad-case pattern.
- The LANDSCAPE CONTRACTOR is responsible for all fine grading preparation for planting. Apply pre-emergent to all beds prior to planting.
- Rough grades will be established by the owners general contractor at approximately 3 inches below curbs, sidewalks, hardscape amenities, mowing strips and abutments. All materials shall be a minimum 30" from buildings or walks.
- CONTRACTOR shall coordinate construction of planting areas with installation of irrigation system.
- Where seeding may be required on the plans, germination rate shall be the maximum percentage required for the variety specified at the rate of application specified.
- Sod areas shall be SPECIFIED Grass. Grass for sodding shall be freshly cut in squares one foot wide by two feet long. Sod shall be healthy, free of insects and weeds, in naturally flourishing conditions. Dry, brown and unfresh sod will be rejected.
- Sod shall be laid end to end and side to side in a staggered line to form a uniform layer. All uneven edges shall be squarely trimmed to allow close and firm fitting of each piece.
- After sodding is completed, the entire sod areas shall be watered by hand or irrigation system each day for two weeks. Sodded areas shall then be top dressed with a commercial fertilizer as directed herein at the rate of 12 pounds per 1000 square feet of area in an evenly broad case pattern.
- The LANDSCAPE CONTRACTOR is responsible for fully maintaining all plant material on site during and before planting, until the work is accepted by the LANDSCAPE ARCHITECT and/or owner. The LANDSCAPE CONTRACTOR is responsible for removing tree stakes after tree is established.
- All plants shall be guaranteed by the LANDSCAPE CONTRACTOR to be healthy plants and in flourishing condition of active growth for ninety (90) days from final inspection and acceptance. All trees shall be guaranteed an additional one year from final inspection and acceptance.
- The LANDSCAPE ARCHITECT, owner or owners representative shall have the right to reject any and all work which in his opinion does not meet with the requirements of the specifications at any stage of the project operation.
- In general, the work shall proceed as rapidly as the site becomes available. Keep all areas of work clean, neat, and orderly at all times.
- There will be special care to all existing trees to be retained on site to avoid construction damage.
- An automatic irrigation system is to be provided and a shop drawing of the layout and design must be submitted to the governmental agency, for review and approval, prior to installation.
- Irrigation system shall be fully automatic, providing 100% coverage to all planting areas, with all pop up heads in lawn area.
- Irrigation station shall be set where there will be no mixing of shrub and lawn areas, fixed spray heads with gear driven heads or impacts. Shrub risers shall be minimum 2.5' from eop and all heads minimum 2' from buildings.
- A double check backflow prevention (or approved equal); equal to a DCA-100; to be mounted in a rectangular valve box (12"x10") on the service side of the meter and immediately adjacent to the water meter.
- After the landscape plan is approved by the governmental agency any subsequent changes must be resubmitted for review and approval.
- Shade trees shall be planted minimum 5' from EOP and 15' from OHE.
- Do not plant trees below Normal Water Line (NWL) see civil drawings. Sod all 4:1 or greater slopes. Seed all other disturbed areas.



SHRUB PLANTING DETAIL

NOT TO SCALE



TREE PLANTING DETAIL

NOT TO SCALE

CITY OF GREEN COVE SPRINGS HARBOR ROAD WWTF MITIGATION REQUIREMENTS

TREE INCHES REMOVED	TOTAL INCHES	REQUIRED REPLACEMENT 1:3 (INCHES)
TREES GREATER THAN 12"	801	267
TOTAL		267

LEGEND

- TREE TO BE REMOVED
- TREE TO BE PRESERVED W/ BARRICADE

ESTIMATED WATER CONSUMPTION TREE ESTABLISHMENT

MONTH	NET IRR REQ.	GALLONS
MONTH 1	20 GPD X15	200
MONTH 2	20 GPD X10	200
MONTH 3	20 GPD X10	200
MONTH 4	10 GPD X10	100
MONTH 5	10 GPD X10	100
MONTH 6	10 GPD X10	100
MONTH 7	0	0

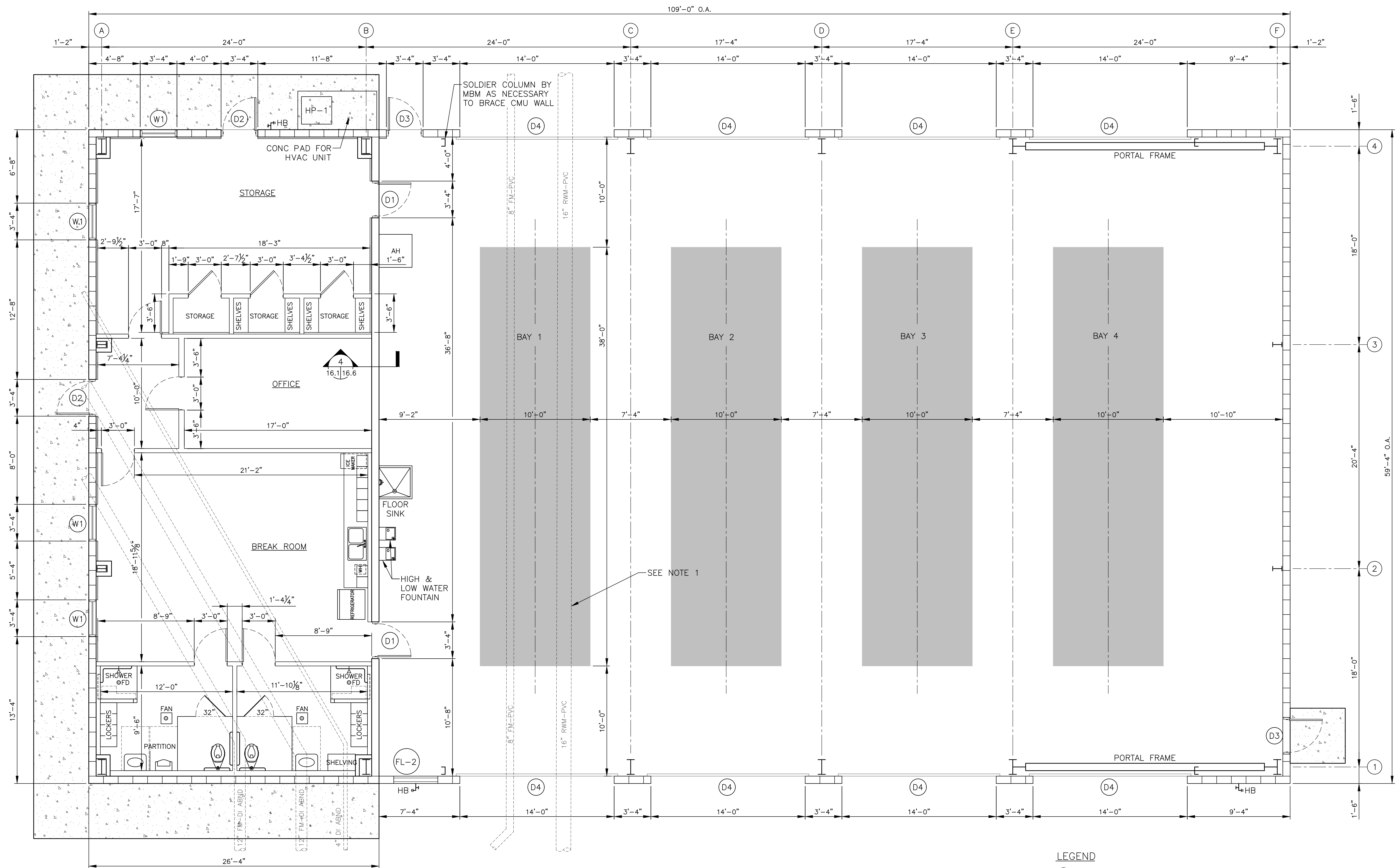
MITTAUER & ASSOCIATES, INC.
CONSULTING ENGINEERS

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TEL. (904) 278-0030 FAX. (904) 278-0840

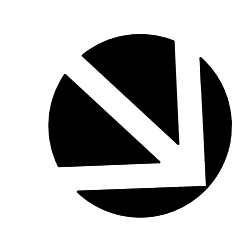
CITY OF GREEN COVE SPRINGS
DEP SRF Harbor Road WWTF
LANDSCAPE DETAILS
Clay County, Florida

prepared by:
JANET O. WHITMILL, R.L.A.
P.O. Box 5212, Jacksonville, FL 32247-5212
Telephone (904) 398 7688

JOB No. 19118
SHEET No. L2.3



NOTE:
 1. CONTRACTOR SHALL FIELD VERIFY LOCATION UG PIPE AND COORDINATE WITH ENGINEER ON FINAL LOCATION OF BUILDING. THE INTENT IS FOR THE 8" FM & 16" RWM TO BE CENTERED IN BAY 1.



LINE CREW BUILDING – FLOOR PLAN
 1/4" = 1'-0"

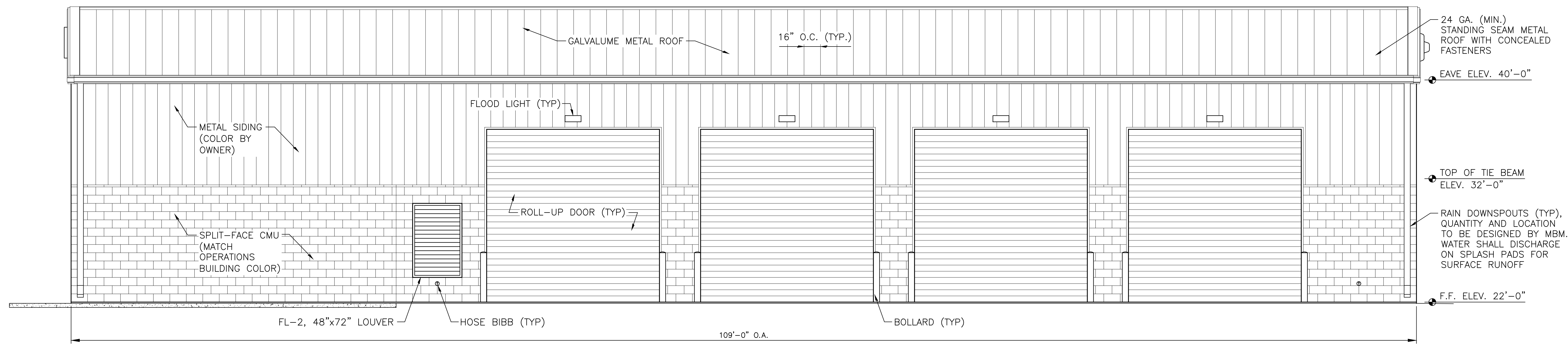
LEGEND

- (D1) DOOR TYPE (SEE SCHEDULE ON SHEET D16.3)
- (W1) WINDOW TYPE (SEE SCHEDULE ON SHEET D16.3)
- (FL-2) FIXED LOUVER
- (A) FRAME LINE
- (1) COLUMN LINE

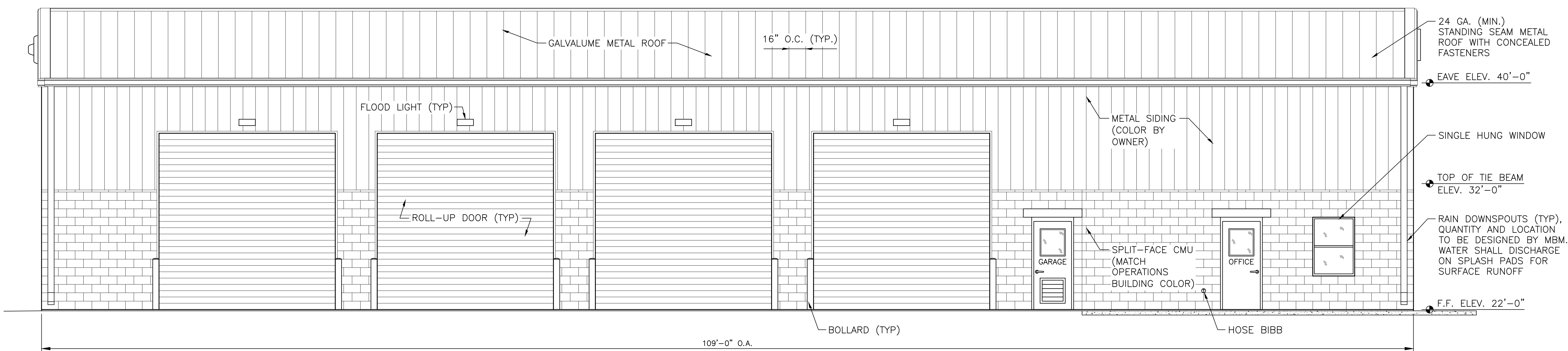
JRS
 DESC DRWN RBS
 PROJ MGR. JRS
 DATE 12/16/20
 1" = 1' INCH
 NO. DATE BY
 REVISION DESCRIPTION
MITTALUER & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
 TEL. (904) 278-0030 FAX. (904) 278-0840

CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WRF Expansion Phase 2
 Line Crew Building – Floor Plan
 Clay County, Florida

JOB NO.
 8905-56-1
 SHEET NO.
D16.1



NORTHEAST ELEVATION
1/4" = 1'-0"



SOUTHWEST ELEVATION
1/4" = 1'-0"

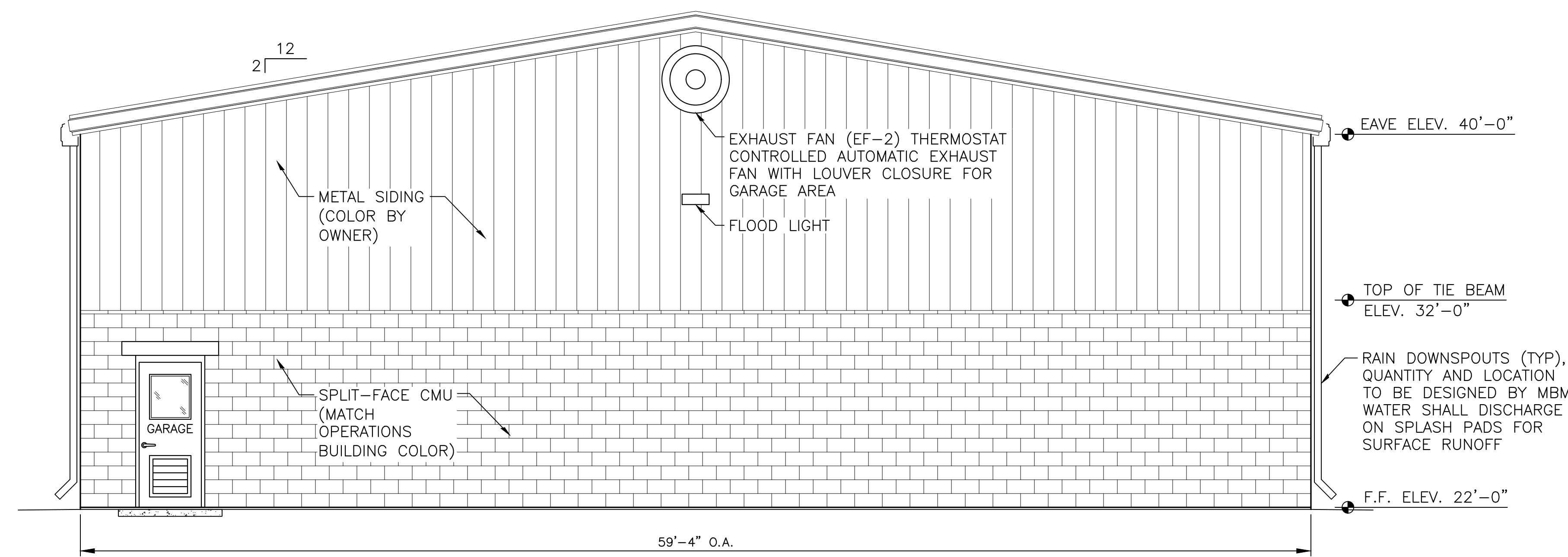
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 DRWN: RBS
 PROJ. MGR.: JRS
 DATE: 12/16/20
 SCALE: 1" = 1'-0"

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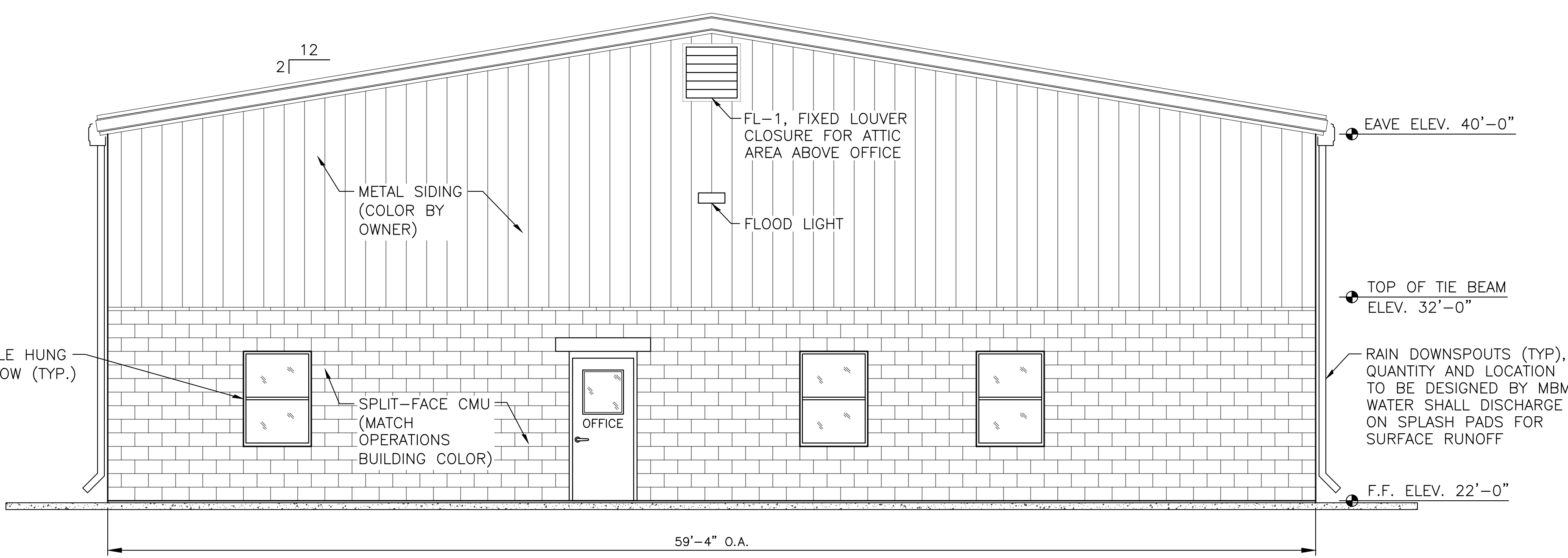
CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WRF Expansion Phase 2
 Line Crew Building - Elevations
 Clay County, Florida

JOB NO. 8905-56-1
 SHEET NO. D16.2

NO	DATE	BY	REVISION DESCRIPTION



NORTHWEST ELEVATION
1/4" = 1'-0"



SOUTHEAST ELEVATION
1/4" = 1'-0"

DOOR, WINDOW & LOUVER SCHEDULE						
NO.	WIDTH	HEIGHT	THICK	MATERIAL		REMARKS
				DOOR	FRAME	
D1	3'-0"	7'-0"	1 3/4"	STEEL	STEEL	HOLLOW METAL LVL 3, HALF LIGHT, WIRE GLASS, LOCKSET WITH DEADBOLT, CLOSER, DOOR & GLASS FIRE RATED FOR 1 1/2 HOUR
D2	3'-0"	7'-0"	1 3/4"	STEEL	STEEL	HOLLOW METAL LVL 3, HALF LIGHT, WIRE GLASS, LOCKSET WITH DEADBOLT, CLOSER
D3	3'-0"	7'-0"	1 3/4"	STEEL	STEEL	HOLLOW METAL LVL 3, HALF LIGHT, WIRE GLASS, LOCKSET WITH DEADBOLT, CLOSER, 24" SQ. LOUVER
D4	14'-0"	14'-0"	-	STEEL	STEEL	MANUAL ROLL UP DOOR
W1	40"	56"	-	-	VINYL	SINGLE HUNG VINYL, LOW E2 INSULATED GLASS, GRILLE, SCREEN
FL-1	30"	30"	-	-	STEEL	FIXED LOUVER
FL-2	48"	72"	-	-	STEEL	FIXED LOUVER

NOTES:

- ALL HOLLOW METAL DOORS SHALL HAVE A 2 LB POLYURETHANE CORE.
- LOCKSETS & DEADBOLTS SHALL BE ADA COMPLIANT WITH SATIN STAINLESS STEEL FINISH.
- DOOR FRAMES SHALL HAVE 2" FACE, EQUAL RABBETED, MASONRY BUTTED.
- ALL LOCKSETS SHALL BE MATCHING KEYPED WITH 6 KEYS DELIVERED TO OWNER.
- EXTERIOR DOORS TO BE INSTALLED WITH AN ALUMINUM THRESHOLD PLATE.
- VEHICLE BAY DOOR TO BE INSTALLED WITH AN ELECTRIC DOOR OPENER.
- ROLL-UP DOORS D14 THRU D19 SHALL BE 26 GAUGE GALVANIZED STEEL DOORS WITH SILICONIZED POLYESTER PAINTED FINISH. DOORS SHALL BE EQUIPPED WITH AN ELECTRIC 1/2 HP, 115V 60Hz OPENER WITH EMERGENCY DISCONNECT AND MANUAL OPERATOR. BASIS FOR DESIGN: GLOBAL INDUSTRIAL - INDUSTRIAL ROLL-UP DOOR - 14'X14'

GENERAL STRUCTURAL NOTES

- All construction shall be in accordance with the local Building & Zoning Department requirements and the 2017 Florida Building Code with all Revisions. All design shall be in accordance with the 2017 Florida Building with all Revisions, ACI318, ACI350 and ASCE 7-16.

Live Loads (minimum):
 Roofs & Canopies - 20 psf
 Storage Spaces - 150 psf
 Stairs & Walkways - 100 psf

Dead Loads: Actual Material Weights
 Aux. Load = 0 psf
 Collateral Load = 5 psf

Geotechnical:
 Design Load Bearing Value of Soil - 2,000 psf

Flood Zone: X; Map No. 12019C0170E

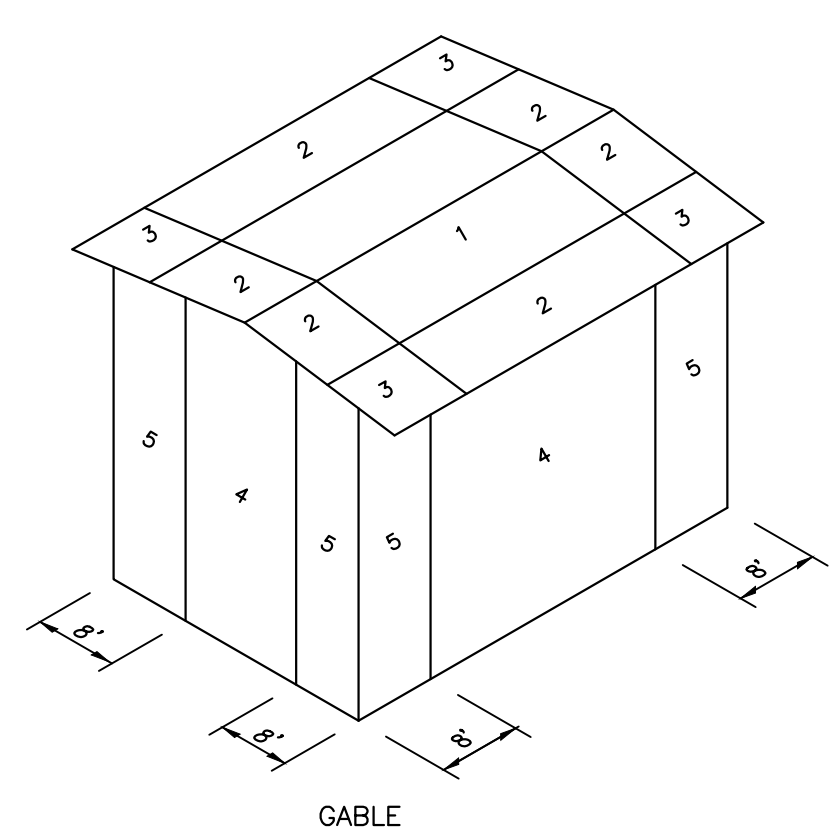
Windload Design Criteria
 Items per Florida Building Code Section 1603.1.4:
 Basic Wind Speed: (Vult) = 135 MPH
 (Vasd) = 105 MPH

Building Risk Category: III
 Wind Exposure Category: C
 Mean Roof Height: N/A
 Roof Slope: N/A

Internal Pressure Coefficients: +/- 0.00 (Open Tanks)
 +/- 0.18 (Electrical Bldg., Operations, Line Crew Bldg.)
 +/- 0.56 (Chemical Feed Bldg.)

COMPONENT & CLADDING PRESSURE

GABLE ROOF			
ZONE	EFFECTIVE AREA (SF)	WIND PRESSURE (PSF)	
		POSITIVE	NEGATIVE
1	10	26.20	-45.40
	20	25.68	-44.49
	50	25.15	-43.58
	100	24.63	-42.68
2	10	26.20	-76.20
	20	25.68	-73.53
	50	25.15	-70.10
	100	24.63	-67.06
3	10	26.20	-114.60
	20	25.68	-110.59
	50	25.15	-105.43
	100	24.63	-100.85
4	10	45.40	-49.20
	20	42.90	-47.48
	50	39.95	-45.26
	100	37.46	-43.30
5	10	41.50	-76.20
	20	39.22	-70.49
	50	36.52	-62.87
	100	34.24	-58.29
	500	29.05	-45.72



TPN
DESIGNER
RBS
DRAWN
JRS
PROJECT MGR.
DATE 12/16/20
1 INCH

MITTALUER & ASSOCIATES, INC.
CONSULTING ENGINEERS
580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
TEL. (904) 278-0030 FAX. (904) 278-0840

CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WRF Expansion Phase 2
 Line Crew Building - Elevations & Schedule
 Clay County, Florida

JOB NO.
8905-56-1
SHEET NO.
D16.3

**CITY OF GREEN COVE SPRINGS, FLORIDA
STAFF REPORT
FOR MEETING OF AUGUST 21, 2018**



SUBJECT: City Council review and approval of a Master Site Development Plan for the renovation and expansion of the Harbor Road Water and Wastewater Treatment Facility located at 1277 Harbor Road

BACKGROUND:

APPLICANT: Jason Shepler, P.E.
580-1 Wells Road
Orange Park, FL 32073

OWNER: City of Green Cove Springs
321 Walnut Street
Green Cove Springs, FL 32043

PROPERTY LOCATION: 1277 Harbor Road
Parcel #: 015719-000-00

FILE NO.: 201800434

SURROUNDING LAND USE:

- North – Clay County Property – Enterprise Way Industrial Park
- South – PUD & Clay County Property – Gator Bay Subdivision
- East – C-2 General Commercial – Railroad Tracks and Magnolia Layne Shopping Center
- West – PUD – Magnolia Point Subdivision

DEVELOPMENT DESCRIPTION:

Mr. Shepler has submitted, on behalf of the City of Green Cove Springs, a Site Development Plan Application for the renovation and expansion of the Harbor Road WWTF located at 1277 Harbor Road.

- Development Type- Major Development, as per Section 90-304.
- Site –19.246 acres
- Existing Buildings total 9,197 s.f., 700 for office space, 963 for garage space, and 7,534 for warehouse storage – per Property Appraiser
- Existing buildings to be demolished: 5,618 s.f. Existing roads to be demolished: 16,535 s.f. Existing sidewalks/slabs to be demolished: 18,470 s.f.
- Existing buildings to remain: 7,469 s.f. Existing roads to remain: 11,282 s.f. Existing

sidewalks/slabs to remain: 2,168 s.f.

- Proposed buildings: 10,172 s.f. Proposed roads: 36,656 s.f.. Proposed sidewalk/slabs: 2,801 s.f.
- Parking currently provided: 7 spaces (6 regular and 1 ADA)
- Minimum Setbacks: Front – 20 feet; Rear – 10 feet; Side – None, except 15 feet on corner lots

This site has housed the City's Harbor Road Wastewater Treatment Facility (HRWWTF) since 1965. The original treatment system consisted of four (4) round concrete tanks and four (4) sludge drying beds. In 1986, this system was replaced by a "package plant" which consists of one large round concrete tank to house the process. At that time, the original components remained in use and were incorporated into the new process. Reclaimed water improvements were constructed in 2001 which allowed the plant to discharge reclaimed water for irrigation to the Magnolia Point Golf Course until such time as other customers come online.

This site also houses the City's Harbor Road Water Treatment Plant (HRWTP) which was originally constructed in 1965. A new water plant was constructed in 2010 and houses the new WTP equipment.

Also on this parcel is the City's Electric Department compound. The main building was constructed in 1965. This compound acts as the base of operations for the City's electric department. This parcel also contains the City's Harbor Road Substation. This substation provides 13kV power to homes and businesses north of Harbor Road.

The proposed site plan eliminates the wastewater infrastructure on this parcel and replaces it with all new infrastructure. The water infrastructure will remain as it exists today, with the addition of another ground storage tank in the near future. The Harbor Road Substation will remain. Buildout of this site does contemplate the relocation of the Electric Department compound to another location at a future date. This site plan also involves modifications to site access controls as needed.

The proposed site plan contains a large vegetative buffer on the south edge of the property, which abuts the Gator Bay Subdivision. This subdivision is located in the County, outside of the City's corporate limits. Most of the residents in this area receive water and electric service from the City. The rest are either served by private wells or Clay Electric, respectively. All residents in this area have on-site septic systems. The buffer includes a sixteen-foot-wide earthen berm with multiple layers of landscaping. The berm starts at ground level near the south property line and rises to a height of four (4) feet. The high side of the berm rests against a sheet pile wall which will be covered with eight (8) foot high wooden privacy fence panels. The overall buffer is twelve (12) feet high and is 100% opaque.

The north property line abuts Harbor Road with an industrial park on the other side. There is an existing berm along the north property line which will remain. At such time as the Electric Department operations are relocated and the building demolished, the berm will be extended

along Harbor Road. The east property line is bounded by the CSX railroad with the Magnolia Layne Shopping Center on the other side of the tracks. The west property line faces the entrance to Magnolia Point. This westerly 350 feet (approximately 4.5 acres) will remain unchanged.

FISCAL IMPACT/FUNDING SOURCE: N/A

RECOMMENDATION: Staff recommends approval of 201800434, a Master Site Development Plan for the renovation and expansion of the Harbor Road Water and Wastewater Treatment Facility located at 1277 Harbor Road with the following conditions:

1. All comments generated by City Departments must be addressed prior to issuance of building permit.

MOTION: Staff recommends approval of 201800434, a Master Site Development Plan for the renovation and expansion of the Harbor Road Water and Wastewater Treatment Facility located at 1277 Harbor Road with the following conditions:

1. All comments generated by City Departments must be addressed prior to issuance of building permit.

Created/Initiated By: Heather Glisson, Service Rep on 08/16/2018 11:17 AM

Final Approval By: Danielle J. Judd, City Manager on 08/16/2018 01:38: PM



LEGEND

- EXISTING STRUCTURE/ BUILDING (TO REMAIN)
- PHASE I CONSTRUCTION
- PHASE II CONSTRUCTION
- PHASE III CONSTRUCTION
- PHASE IV CONSTRUCTION

SCALE: 1" = 30'

NO. DATE BY

DESC. JRS. KDH. JRS. JRS. JRS.

DRAWN. PROJ. MGR. DATE 7/20/18

1 INCH

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CONSULTING ENGINEERS

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TEL. (904) 278-0030 FAX. (904) 278-0840

CITY OF GREEN COVE SPRINGS
DEP. SRF Harbor Road WWT
Construction Phasing Plan
Clay County, Florida

JOB NO. 8905-34-1
SHEET NO. 1

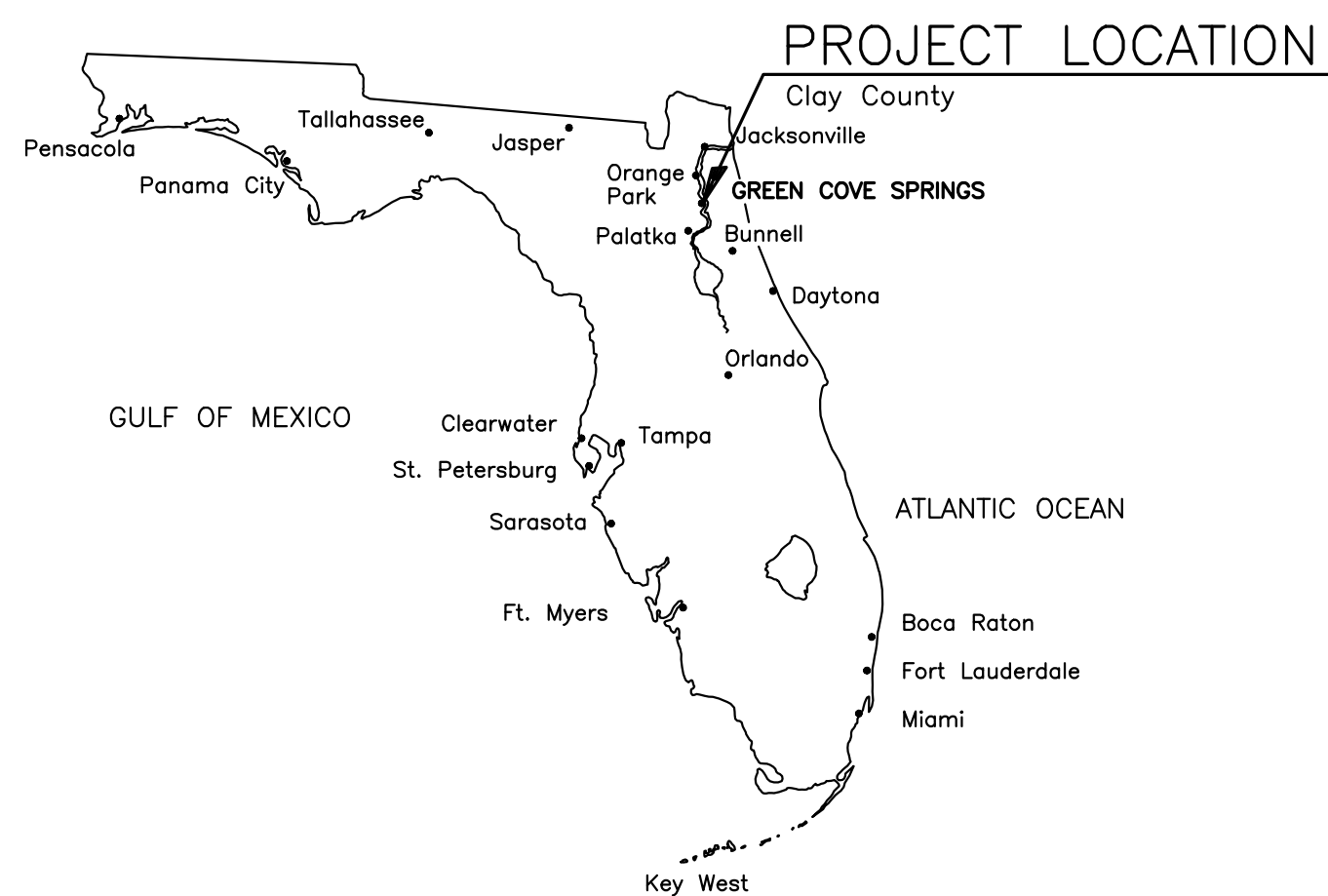
DEP SRF HARBOR ROAD WWTF EXPANSION

FOR

CITY OF GREEN COVE SPRINGS, FLORIDA

M & A Project No. 8905-34-1

DRAWING INDEX



CONSTANCE BUTLER
MAYOR

STEVEN KELLEY
VICE MAYOR

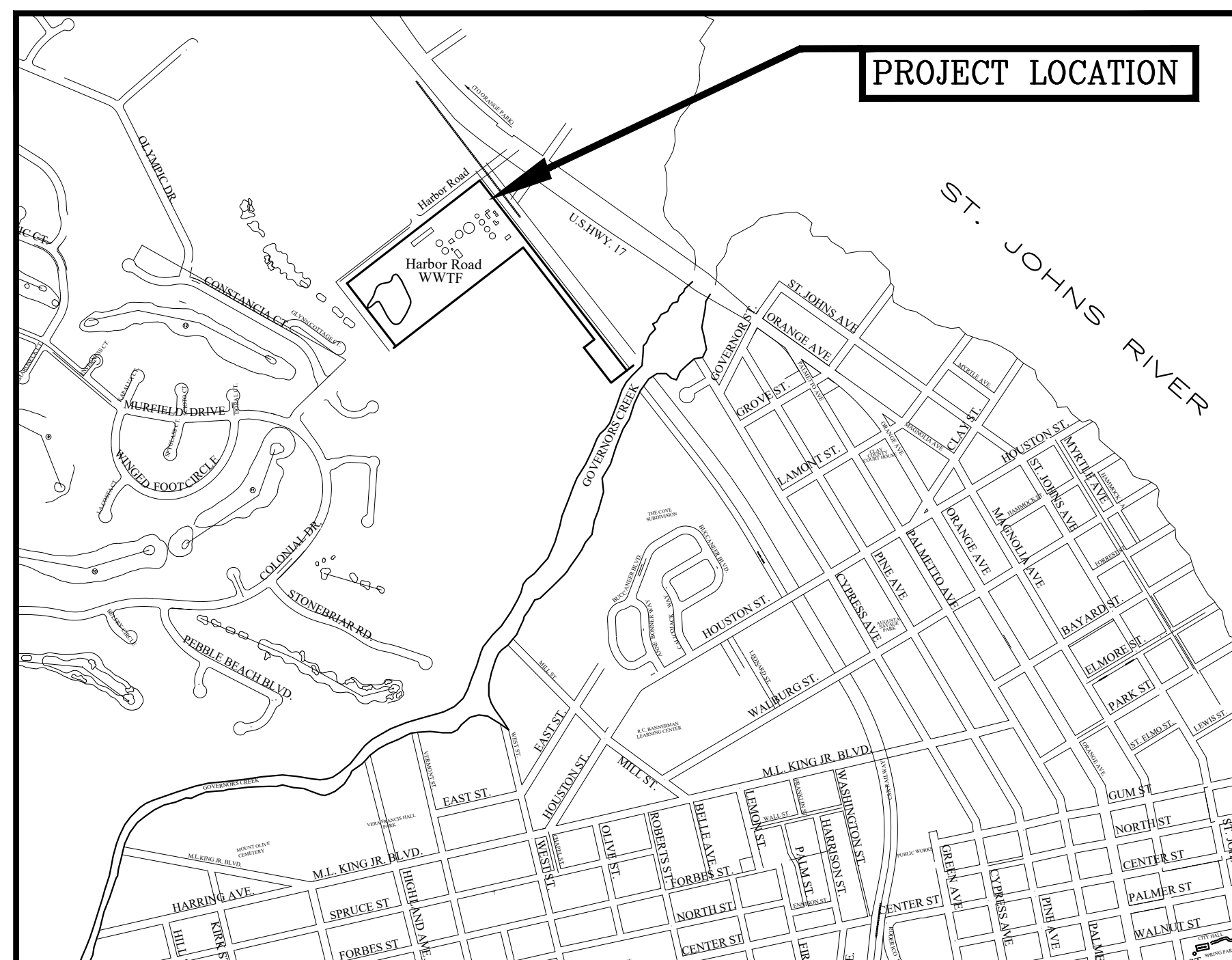
PAMELA LEWIS
COUNCIL MEMBER

VAN ROYAL
COUNCIL MEMBER

MITCH TIMBERLAKE
COUNCIL MEMBER

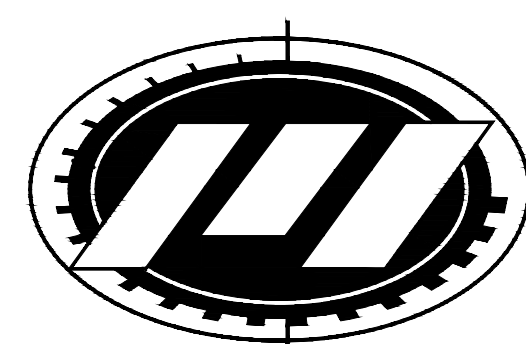
DANIELLE JUDD
CITY MANAGER

MIKE NULL
ASSISTANT CITY MANAGER /PUBLIC WORKS DIRECTOR



VICINITY MAP

SHEET No.	SHEET TITLE	SHEET No.	SHEET TITLE
G1	COVER SHEET	E1	ELECTRICAL - LEGEND, LUMINAIRE SCHEDULES & CALCULATIONS
G2	GENERAL NOTES, LEGEND & ABBREVIATIONS	E2	ELECTRICAL - CONDUIT AND CABLE SCHEDULE
C1.1	EXISTING CONDITIONS & DEMOLITION PLAN	E3	ELECTRICAL - PANEL SCHEDULES
C1.2	SITE MASTER PLAN	E4A	ELECTRICAL - 23KV ONE-LINE DIAGRAM
C1.3	SITE PLAN - HORIZONTAL CONTROL	E4B	ELECTRICAL - 480V ONE-LINE DIAGRAM
C1.4	GRADING & DRAINAGE PLAN	ESA	ELECTRICAL - MCC BUCKET WIRING DIAGRAMS
C1.5	YARD PIPING PLAN	ESB	ELECTRICAL - MCC BUCKET WIRING DIAGRAMS
C2.1	SITE DETAILS	E6	ELECTRICAL - EXISTING CONDITIONS SITE PLAN
C2.2	SITE DETAILS	E7A	ELECTRICAL - NEW WORK SITE PLAN - WEST
C2.3	GRADING & DRAINAGE DETAILS	E7B	ELECTRICAL - NEW WORK SITE PLAN - EAST
C2.4	GRAVITY WALL - PLAN, SECTION & DETAILS	E8	ELECTRICAL - ELECTRICAL DETAILS
D1	PROCESS FLOW SCHEMATIC - HYDRAULIC PROFILE	EC1	ELECTRICAL - CONTROLS LEGEND & CABLE SCHEDULE
D2.1	INFLUENT STRUCTURE - UPPER & LOWER MECHANICAL PLAN	EC2	ELECTRICAL - INSTRUMENT SCHEMATIC
D2.2	INFLUENT STRUCTURE - MECHANICAL SECTIONS	EC3	ELECTRICAL - SCADA SCHEMATIC
D2.3	INFLUENT STRUCTURE - MECHANICAL SECTIONS	EC4	ELECTRICAL - MASTER CONTROLLER PLC & BOM
D2.4	INFLUENT STRUCTURE - MECHANICAL SECTIONS	EC5	ELECTRICAL - I/O DIAGRAMS
D2.5	INFLUENT STRUCTURE - STRUCTURAL PLANS	EC6	ELECTRICAL - FIBER SCHEMATIC
D2.6	INFLUENT STRUCTURE - UPPER & LOWER STRUCTURAL SECTIONS	ED2.1	ELECTRICAL - INFLUENT
D2.7	INFLUENT STRUCTURE - STRUCTURAL SECTIONS	ED2.2	ELECTRICAL - INFLUENT
D2.8	INFLUENT STRUCTURE - ELEVATIONS	ED3.1	ELECTRICAL - OXIDATION DITCH
D2.9	INFLUENT STRUCTURE - STAIRS	ED4.1	ELECTRICAL - CLARIFIER FLOW SPLITTER
D3.1	OXIDATION DITCH - PLAN & ELEVATION	ED4.4	ELECTRICAL - CLARIFIER FLOW SPLITTER ACCESS STAIRS
D3.2	OXIDATION DITCH - MECHANICAL DETAILS	ED5.1	ELECTRICAL - CLARIFIERS NO. 1 & 2
D3.3	OXIDATION DITCH - MECHANICAL & DETAILS	ED5.5	ELECTRICAL - CLARIFIERS ACCESS STAIR
D3.4	OXIDATION DITCH - STRUCTURAL SECTIONS & DETAILS	ED6.1	ELECTRICAL - RAS/WAS PUMPS
D3.5	OXIDATION DITCH - STRUCTURAL SECTIONS & DETAILS	ED7.1	ELECTRICAL - FILTERS PLAN
D3.6	OXIDATION DITCH - STRUCTURAL SECTIONS & DETAILS	ED7.2	ELECTRICAL - FILTERS PLAN
D3.7	OXIDATION DITCH - STAIRS	ED8.1	ELECTRICAL - CHLORINE CONTACT CHAMBER PLAN
D4.1	CLARIFIER FLOW SPLITTER - PLANS & SECTIONS	ED9.1	ELECTRICAL - 1.25 MG RECLAIMED WATER STORAGE TANK
D4.2	CLARIFIER FLOW SPLITTER - SECTIONS & DETAILS	ED10.0	ELECTRICAL - REUSE PUMPING STATION PLAN
D4.3	CLARIFIER FLOW SPLITTER - STRUCTURAL PLANS & SECTIONS	ED11.1	ELECTRICAL - CHEMICAL FEED & STORAGE FACILITIES PLAN
D4.4	CLARIFIER FLOW SPLITTER - STRUCTURAL SECTIONS & DETAILS	ED14.1	ELECTRICAL - OPERATIONS BUILDING FLOOR PLAN
D4.5	CLARIFIER FLOW SPLITTER - STAIRS & WALKWAY	ED14.2	ELECTRICAL - ENLARGED ELEC MCC BUILDING
D5.1	CLARIFIERS - MECHANICAL PLAN	ES1A	ELECTRICAL - CAMERA LOCATIONS SITE PLAN - WEST
D5.2	CLARIFIERS - MECHANICAL PLAN & SECTION	ES1B	ELECTRICAL - CAMERA LOCATIONS SITE PLAN - EAST
D5.3	CLARIFIERS - SECTIONS & DETAILS		
D5.4	CLARIFIERS - SECTIONS & DETAILS		
D5.5	CLARIFIERS - STAIRS & WALKWAY		
D6.1	RAS/WAS PUMPS - PLAN & SECTION		
D7.1	FILTERS - PLAN		
D7.2	FILTERS - SECTIONS & DETAILS		
D7.3	FILTERS - STRUCTURAL PLAN		
D7.4	FILTERS - STRUCTURAL SECTIONS		
D8.1	CHLORINE CONTACT CHAMBER - PLAN		
D8.2	CHLORINE CONTACT CHAMBER - SECTIONS		
D8.3	CHLORINE CONTACT CHAMBER - SECTIONS & DETAILS		
D9.1	RECLAIMED WATER STORAGE TANK - PLAN		
D9.2	RECLAIMED WATER STORAGE TANK - SECTIONS & DETAILS		
D9.3	RECLAIMED WATER STORAGE TANK - SECTIONS & DETAILS		
D10.1	REUSE PUMPING STATION - PLAN		
D10.2	REUSE PUMPING STATION - SECTIONS & DETAILS		
D10.3	REUSE PUMPING STATION - BUILDING		
D11.1	CHEMICAL FEED & STORAGE FACILITIES - PLAN		
D11.2	CHEMICAL FEED & STORAGE FACILITIES - ELEVATIONS		
D11.3	CHEMICAL FEED & STORAGE FACILITIES - FOUNDATION PLAN & ROOF ELEVATION PLAN		
D11.4	CHEMICAL FEED & STORAGE FACILITIES - SECTIONS & DETAILS		
D11.5	CHEMICAL FEED & STORAGE FACILITIES - SECTIONS & DETAILS		
D12.1	IN-PLANT PUMP STATION - PLAN & DETAIL		
D13.1	AEROBIC DIGESTER No. 1 & 2 - DEMOLITION		
D13.2	AEROBIC DIGESTER No. 1 & 2 - MODIFICATIONS		
D13.3	AEROBIC DIGESTERS - SECTIONS & DETAILS		
D14.1	OPERATIONS BUILDING - FLOOR PLAN		
D14.2	OPERATIONS BUILDING - ELEVATIONS		
D14.3	OPERATIONS BUILDING - FOUNDATION & ROOF PLANS		
D14.4	OPERATIONS BUILDING - SECTIONS & DETAILS		
D14.5	OPERATIONS BUILDING - STRUCTURAL DETAILS		
D14.6	OPERATIONS BUILDING - LIFE SAFETY, REFLECTED CEILING		
D14.7	OPERATIONS BUILDING - PLUMBING PLAN - NOTES, DETAILS & SCHEDULE		
D14.8	OPERATIONS BUILDING - MECHANICAL PLAN		
D15.1	MISCELLANEOUS DETAILS - YARD PIPING DETAILS		
D15.2	MISCELLANEOUS DETAILS - MECHANICAL & STRUCTURAL DETAILS		
D15.3	MISCELLANEOUS DETAILS - STRUCTURAL DETAILS		
D16.1	ELECTRICAL BUILDING AND GENERATOR		



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& ASSOCIATES, INC.
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JULY, 2018

SITE PLAN REVIEW
NOT FOR CONSTRUCTION

GENERAL NOTES

A. GENERAL CONSTRUCTION NOTES

- Existing underground utilities have been shown from the best available information. Contractor shall determine the location, size, and depth of all existing utilities. Contractor shall provide complete piping system including all fittings necessary to interconnect piping systems and to avoid conflicts with existing and proposed pipes/structures.
- It shall be the sole responsibility of the Contractor to locate and avoid all utilities, structures and obstructions both above and below the ground surface. All damages resulting from the Contractor's failure to comply with this requirement shall be repaired at the Contractor's expense.
- Contractor is responsible for supporting/protecting all existing improvements (i.e., utilities, utility poles, structures, pavement, sidewalks, monitoring wells, foundations, etc.) which may be damaged/undermined as a result of his operations. Contractor may be required to shore, sheet, brace, or support work to protect existing improvements. All costs associated with supporting/protecting existing improvements shall be borne by the Contractor.

- All existing facilities (e.g., pipes, roadways, sidewalks, landscaping, structures, etc.) not indicated to be disturbed/restored which are disturbed/damaged as a result of Contractor's operations shall be restored to a condition equal to or better than that which existed prior to construction, at Contractor's expense.

- Horizontal and vertical controls are subject to adjustments in the field if necessary to avoid utility conflicts upon approval of the Engineer or his representative. Contractor shall not adjust location of pipe or other facilities (either vertically or horizontally) without approval of Engineer or his representative.

- Contractor shall provide constant slope between indicated pipe invert elevations unless otherwise directed by Engineer.

- All pipe shall be properly restrained using mechanical type joint restrainers (see specifications). No thrust blocking will be allowed unless specifically indicated on drawings or directed by Engineer. All exposed piping 3" in diameter and smaller shall be properly wrapped with foam insulation to prevent freezing.

- All pipe shall have the following minimum cover unless otherwise directed by Engineer:

Pipe Type	Minimum Cover
PVC (≤ 3-inch)	30-inches
PVC (> 3-inch)	36-inches
DIP (All Sizes)	30-inches
Steel (All Sizes)	30-inches

- All aboveground piping shall be properly supported and/or secured to tanks, buildings, or other structures using 3/16 S.S. straps and fasteners.

- Contractor shall be responsible for maintaining service to the existing treatment plant facilities. He shall perform all bypass pumping necessary to keep the plant operating properly during construction. He shall coordinate all diversions of flow, draining of tanks, demolition of existing facilities, etc. closely with Owner to avoid potential treatment violations and operating problems. Contractor may be required to perform some work during low demand hours (e.g. 12:00 a.m. to 5:00 a.m.). All arrangements for bypass pumping, diversion of flow, draining of tanks, demolition, etc. shall be subject to approval of Owner and Engineer. All costs associated with bypass pumping and other temporary facilities shall be borne by the Contractor.

- Contractor shall provide all fill required to achieve proposed grades at his expense.

- During any construction activity, including stabilization and revegetation of disturbed surfaces, the Contractor is responsible for the selection, implementation, and operation of all erosion and sediment control measures required to retain sediment on-site and prevent violations of the water quality standards in Chapters 62-3 and 62-4, FAC. The Contractor is encouraged to use appropriate Best Management Practices described in the Florida Land Development Manual: A Guide to Sound Land and Water Management (DER, 1988).

- All grassed areas disturbed by construction shall be resodded unless otherwise directed by Engineer or his representative.

- The Contractor shall employ a land surveyor, registered in the State of Florida to reference and restore property corners and land markers which may be disturbed as a result of Contractor's operations.

- The Contractor shall be responsible for laying out the work and for establishing project temporary bench marks; elevation lines and grades; and right-of-way and property boundary limits for construction.

- Owner has the option of claiming any equipment/materials identified for removal by the Contractor. Contractor shall deliver any removed equipment/materials claimed by Owner to an onsite location as directed by Owner. Any equipment/materials identified for removal which are not claimed by the Owner shall become the property of the Contractor and shall be disposed of by the Contractor at his expense.

- Project Benchmark Location: See Sheet No.

B. GENERAL STRUCTURAL NOTES

- All construction shall be in accordance with the local Building & Zoning Department requirements and the 2017 Florida Building Code with all Revisions. All design shall be in accordance with the 2017 Florida Building with all Revisions, ACI318, ACI350 and ASCE 7-16.

Live Loads (minimum):	
Roofs & Canopies	20 psf
Storage Spaces	150 psf
Stairs & Walkways	100 psf

Dead Loads: Actual Material Weights

Geotechnical: Design Load Bearing Value of Soil - 2,000 psf

Flood Zone: X; Map No. 12019C0170E

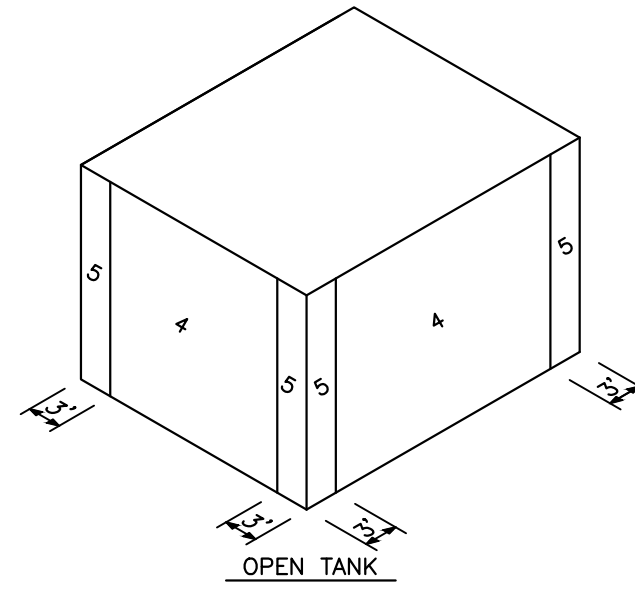
Windload Design Criteria

- Items per Florida Building Code Section 1603.1.4:
- Basic Wind Speed: (Vult) = 134 MPH
 - (Vasd) = 104 MPH
 - Building Risk Category: IV
 - Wind Exposure Category: C
 - Mean Roof Height: N/A
 - Roof Slope: N/A
 - Internal Pressure Coefficients: +/- 0.00 (open tanks)
 - +/- 0.18 (electrical bldg., operations bldg.)
 - +/- 0.56 (chemical feed bldg.)

B. GENERAL STRUCTURAL NOTES (continued)

COMPONENT & CLADDING PRESSURE

ZONE	EFFECTIVE AREA (SF)	WIND PRESSURE (PSF)	
		POSITIVE	NEGATIVE
1	10	N/A	-52.4
	20		-49.0
	50		-44.3
2	10	N/A	-82.3
	20		-77.8
	50		-72.5
3	10	N/A	-112.1
	20		-105.9
	50		-98.7
4	10	35.8	-35.8
	20	33.0	-33.0
	50	31.6	-31.6
5	10	29.8	-29.8
	20	27.4	-27.4
	50	21.5	-21.5



- All structural concrete shall have a min. compressive strength of 4,000 psi after 28 days unless otherwise noted.
- All reinforcing steel shall conform to ASTM A615 Grade 60, except bars to be welded shall conform to ASTM A706.
- For size and location of embedded items and openings, the Contractor must refer to mechanical, structural, piping and vendors drawings.
- Equipment anchor bolts and rods shall be set from templates made to fit holes in equipment according to approved manufacturers shop drawings.
- Contractor shall verify all dimensions and existing conditions at the site before proceeding with construction.
- Unless otherwise shown on drawings, min. cover for reinforcing steel shall be as follows:

Concrete Cast Against Earth - 3"
Slabs on Grade - Centered
All Other - 2"

 Note: 6 mil polyethylene membrane required under all building base slabs.

- All reinforcing steel shall be fabricated and held securely in position with standard accessories in accordance with ACI 315 "Details and Detailing Concrete Reinforcement", latest edition.
- Splices in reinforcing, where permitted, shall be as noted, or as follows:

- 9.1. Welded Wire Fabric - Two Mesh or 12" (min.)
- 9.2. Temperature Reinforcing - 44 bar diameters but not less than 12"
- 9.3. All Other Bars - Class "B" lap.
- 9.3.1. For Top Bars (12" or more concrete below steel) multiply table lengths by 1.3
- 9.3.2. For lightweight concrete multiply table lengths by 1.3.

Bar Size	Class B Lap Length in Inches (Fv=60ksi)		
	fc = 3,000 psi	fc = 4,000 psi	fc = 5,000 psi
#3	22	19	17
#4	29	25	23
#5	36	31	28
#6	43	38	34
#7	63	54	49
#8	72	62	56
#9	81	70	63

- Splices in top reinforcing shall be made at midspan, bottom reinforcing at support, or as noted on drawings.

- Provide 3/4" chamfer on all exposed edges of concrete.
- Provide 1/2" premolded expansion joint material where slab on grade is cast around columns or against walls.
- All masonry shall utilize standard precast masonry units and be laid true and plumb.
- All concrete lintels shall be reinforced with 2-#5 bars top and bottom as a minimum and have a masonry end bearing each end of 2" per foot of span with a minimum of 8."
- Compaction: unless otherwise noted, the required percentage of maximum compaction shall be as follows: (per modified proctor max. Dry density)
 - Under Structures and Slabs - 95%
 - Under Paved Areas (subgrade) - 98%
 - Under Paved Areas (below 12") - 95%
 - Landscaped Areas and Other - 90%
 - Adjacent to Walls and Above Footing - 92%
 The more stringent requirement shall govern between any conflict of these compaction requirements & those listed within the specifications.

- Coating: Apply asphalt point coating between different metals and for aluminum set against concrete.

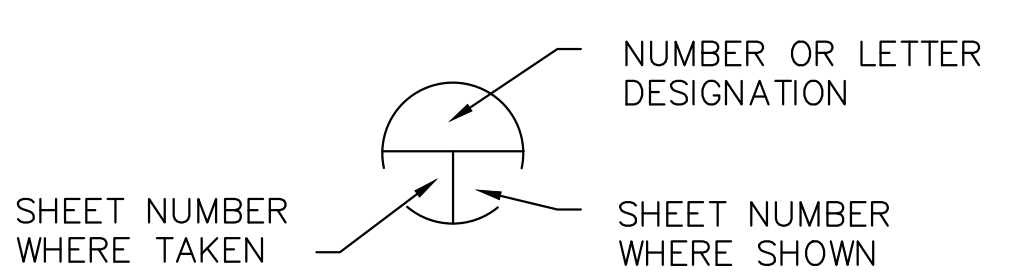
- The design of all structural concrete for tanks conforms to ACI 350: Code Requirements for Environmental Engineering Structures.

- Location of construction joints, proposed by the Contractor, shall be submitted to the Engineer for approval prior to initiating any construction or fabrication which could be affected by the location. All construction joints below either the plant liquid or ground level shall incorporate a properly designed and fabricated PVC waterstop.

- All structural anchoring systems shall be hot-dipped galvanized or 316 S.S. as noted or specified.

LEGEND

PROPOSED	EXISTING	
8" S	8" SAN	SANITARY SEWER
8" FM	4" FM	SANITARY FORCE MAIN
○	MH	SANITARY MANHOLE
○	○	CLEANOUT
8" W	6" W	WATER MAIN
⊗	⊗	VALVE
⊗	⊗	FIRE HYDRANT
⊗	⊗	WATER SERVICE (SIZE VARIES)
⊗	⊗	TELEPHONE PEDESTAL
18" SD	18" RCP	STORM DRAIN PIPE
⊗	⊗	STORM DRAIN INLET/MES
84.0	84.0	GRADE CONTOURS
63.00	63.00	SPOT ELEVATIONS
PP	PP	POWER POLE/ W/ANCHOR
⊗	⊗	WIRING PULL BOX
⊗	⊗	ELECTRICAL METER
⊗	⊗	ELECTRICAL CABINET
⊗	⊗	TRANSFORMER
⊗	⊗	BOLLARD
⊗	⊗	UTILITY POLE, LIGHT POLE
BT	BT	BURIED TELEPHONE
FC	FC	FIBER CABLE
CTV	CTV	CABLE TELEVISION
SW	SW	SWALE
---	---	RIGHT-OF-WAY
X-X	X-X	FENCING
---	---	BUILDING OR STRUCTURE
---	---	ASPHALT PAVED DRIVE
---	---	CONCRETE SLAB OR SIDEWALK
---	---	DEMOLISH, REMOVE & DISPOSE OF
---	---	LIMITS OF WOODS
---	---	TREE
---	---	TEST PIT (SEE S.U.E. REPORT)



DETAIL/SECTION KEY

ABBREVIATIONS

ABBREVIATION	DESCRIPTION	
ABS	ACRYLONITRILE BUTADIENE STYRENE	MANUT
ABV	ABOVE	MAN
ACP	ASBESTOS CEMENT PIPE	MAX
AFF	ABOVE FINISH FLOOR (REF. ELEV.)	MCC
AFR	ABOVE FINISH GRADE (REF. ELEV.)	MCS
ALUM	ALUMINUM	MECH
ALTR	ALTERNATE	MFR
APRX	APPROXIMATE(LY)	MG
ARCH	ARCHITECT(URAL)	MGD
ARV	AIR RELEASE VALVE	MGL
ASPH	ASPHALT	MIN
ASSY	ASSEMBLY	MISC
AV	BURIED ELECTRIC	MJ
BFO	BOTTOM FACE	MON
BV	BUTTERFLY VALVE	MPH
BT	BURIED TELEPHONE-CABLE	MPT
BU	BURIED	MTD
BY	BOTTOM FACE	NW
BY	BUTTERFLY VALVE	N
BTUM	BUTYRATED BITUMINOUS OR BITUMASTIC	NC
B	BASELINE	NE
B	BENCH MARK	NE
BOC	BACK OF CURB	NIC
BOT	BOTTOM	NO
BT	BURIED TELEPHONE-CABLE	NOM
BT	BURIED TELEPHONE-CABLE	No
BW	BOTH WAYS	NPT
C, C/	CONDUIT	NPW
CAP	CAPACITY	NTS
CAV	CABLE TELEVISION	NW
CCUA	CLAY CLAY UTILITY AUTHORITY	OA
CFM	CUBIC FEET PER MINUTE	OC
CFS	CUBIC FEET PER SECOND	OD
CST	CAST IRON	OD
CIP	CAST IRON PIPE, CAST-IN-PLACE	OH
CH	CENTERLINE	OH
CL	CHAIN LINK FENCE	OHE
CLR	CLEAR OR CLEARANCE	OPT
CLR	CONCRETE MONUMENT	O&M
CMU	CORRUGATED METAL PIPE	PAVT, PWT
CMP	CONCRETE MASONRY UNIT	PC
COR	CORNER	PE
CO	CLEAN OUT	PI
CONC	CONCRETE	PL
CONT	CONTINUOUS	PL
COORD	COORDINATE	POB
COUPL	COUPLER	PP
CPVC	CHLORINATED POLYVINYL CHLORIDE	PPD
CUL	CULVERT	PPM
CHK	CHECK VALVE	PPRES
CY	CUBIC YARD	PRV
C/C	CENTER TO CENTER	PS
DOURL	DEMOLITION	PSF
DEMO	DEMOLITION	PSI
DI	DUCTILE IRON	PSIA
DIA	DIAMETER	PSIG
DIM	DIMENSION	PT
DIP	DUCTILE IRON PIPE	PT
DOT	DEPARTMENT OF TRANSPORTATION	PV
DR	DRAIN	PVC
DRW	DRAWING	Q
DWG	DRAWING	R, RAD
E	EAST	R
EACH	EACH	RD
ECC	ECCENTRIC	RED
E	EACH FACE	REBAR
ELEV	ELEVATION	REF
ELEC	ELECTRICAL	REIN
EMER	EMERGENCY	REQD
EM	EDGE OF PAVEMENT	RES
EPDM	ETHYLENE PROPYLENE DIENE MONOMER	RM
EL	ELLIPSE	RPM
EQUIP	EQUIPMENT	RR
ESMT	EASEMENT	RT
EST	ESTIMATE	RW
EW	EACH WAY	RWM
EXP	EXPANSION	R/W
EXT	EXTERIOR	S
EXT	EXTERIOR	SAN
FB	FLAT BAR	SCHED
FBR	FLOOR BRAN	SCHD
FDN	FOUNDATION	SECT
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION	SECT
FIN	FINISH FLOOR	SECTION
FH	FIRE HYDRANT	SQUARE FOOT OR FEET
FIGURE	FIGURE	SHEET(ED)(ING)
FIN	FINISHED	SU
FIN GR	FINISH GRADE	SUV
FL	FLANGE	SP
FL	FLANGE	SP
FL	FLANGE	SPEC
FM	FORCE MAIN	SR
FM	FEET PER MINUTE	STA
FM	FEET PER MINUTE	ST
FPS	FEET PER SECOND	STA
FPT	FEMALE PIPE THREAD	STD
FRP	FIBERGLASS REINFORCED PLASTIC	STL
FT	FOOT OR FEET	STRUCT
FW	FINISHED WATER	STRUT
F/F	FACE TO FACE	SW
G	GAS MAIN	S/W
GAL	GALLON(S)	SYM
GALV	GALVANIZED	S/W
GIP	GALVANIZED IRON PIPE	TAN
GRD	GROUND	TBM
GPD	GALLONS PER DAY	TC, TOC
GPH	GALLONS PER HOUR	TDH
GPM	GALLONS PER MINUTE	TEL TELE
GPS	GALLONS PER SECOND	TEMP
GR	GRADE	TF
GAS	GALVANIZED STEEL PIPE	TH
GSP	GATE VALVE	THD
GV	GATE VALVE	THK
HB	HOSE BIBB	THK(NESS)
HDPE	HIGH-DENSITY POLYETHYLENE	TOB
HGT	HEIGHT	TOE
HR	HAND RAIL	TOS
HOA	HAND-OFF-AUTO SWITCH	TP
HORIZ	HORIZONTAL	TP
HP	HORSEPOWER	T&B
HR	HOUR	UG
HC	HEATING, VENTILATION, AND AIR CONDITIONING	UG
HVAC	HIGH WATER LEVEL	UN
HWL	HIGHWAY	UTL
HWY	HIGHWAY	V
ID	INSIDE DIAMETER	V
IF	INSIDE FACE	VAC
IN	INCH(ES)	VAR
INF	INFLENT	VCP
INT	INTERSECTION	VEL
INTR	INTERIOR	VERT
INV	INVERT	VFD
IP	IRON PIPE	VOL
IPS	INTERNATIONAL PIPE STANDARD; IRON PIPE SIZE	W
JB	JUNCTION BOX	WL
J	JOINT	WL
K	KIP(1,000 LB)	WP
KVA	KILOVOLT-AMPERE	WTF
KW	KILOWATT	WT
L	LEFT	WWF
LAB	LABORATORY	WWM
LAV	LAVATORY	WWT
LB	POUND	W/W
LF	LINEAR FEET	W/O
LP	LIGHT POLE	XFR
LR	LONG RADIUS	XFR
LS	LUMP SUM	YD
LW	LOW WATER LEVEL	YR

CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WWT
 General Notes, Legend & Abbreviations
 Clay County, Florida

MITTAUER & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
 TEL. (904) 278-0030 FAX. (904) 278-0840

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 PROJ MGR. JRS
 DATE 7/25/18
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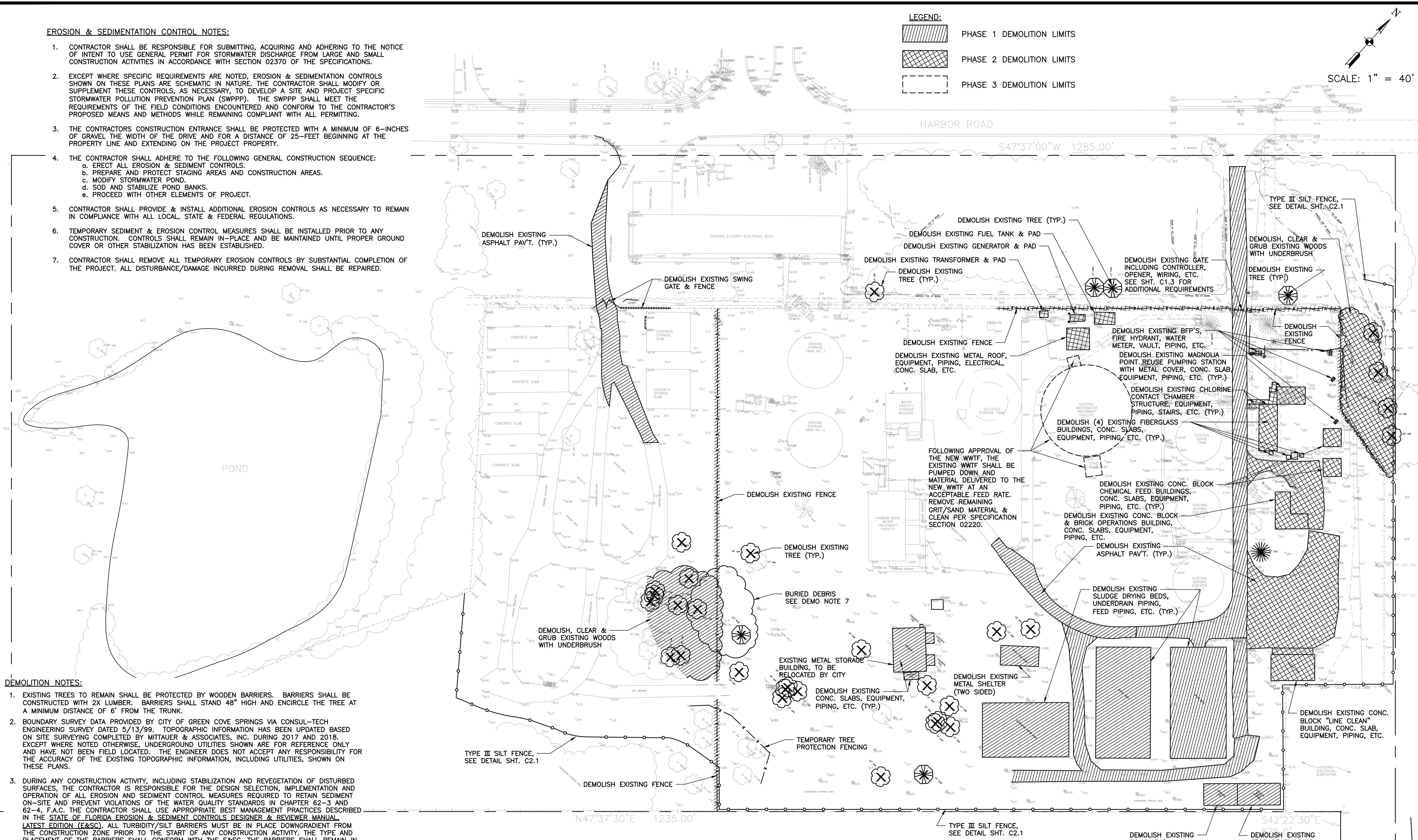
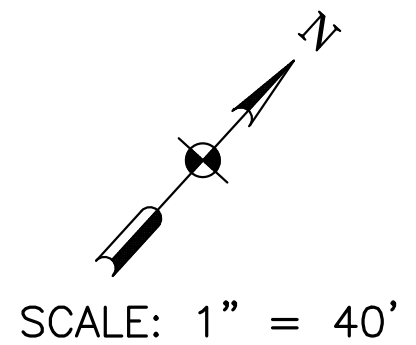
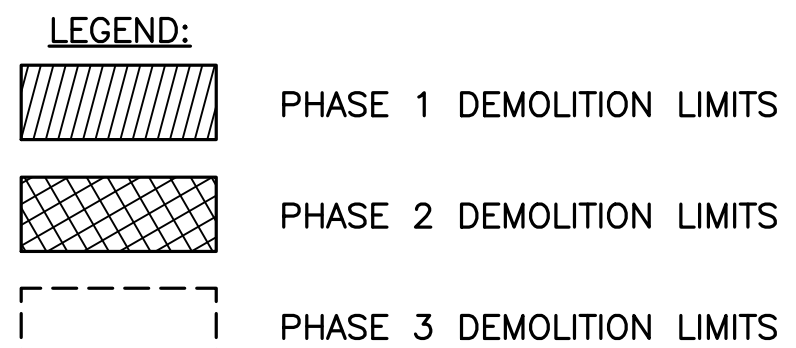
REVISION DESCRIPTION
 NO DATE BY

SITE PLAN REVIEW
NOT FOR CONSTRUCTION
 07/25/18

PROJECT CONTACTS				
TYPE	COMPANY	ADDRESS	PHONE	CONTACT PERSON
CABLE	COMCAST CABLE COMMUNICATIONS	5934 RICHARD STREET JACKSONVILLE, FL 32216	(904) 380-7574	LARRY WINBURN
TELEPHONE	AT&T	2315 GEES MILL BUSINESS PKWY NE CONYERS, GA 30013-1578	(770) 918-5424	NANCY SPENCE
WATER, SEWER & ELECTRIC	CITY OF GREEN COVE SPRINGS	321 WALNUT ST. GREEN COVE SPRINGS, FL 32043	(904) 297-7500	MIKE NULL
OWNER	CITY OF GREEN COVE SPRINGS	321 WALNUT ST. GREEN COVE SPRINGS, FL 32043	(904) 297-7500	MIKE NULL
DESIGN ENGINEER	MITTAUER & ASSOCIATES, INC.	580-1 WELLS ROAD ORANGE PARK, FL 32073	(904) 278-0030	JASON SHEPLER, P.E. TIM NORMAN, P.E.

EROSION & SEDIMENTATION CONTROL NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING, ACQUIRING AND ADHERING TO THE NOTICE OF INTENT TO USE GENERAL PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH SECTION 02370 OF THE SPECIFICATIONS.
2. EXCEPT WHERE SPECIFIC REQUIREMENTS ARE NOTED, EROSION & SEDIMENTATION CONTROLS SHOWN ON THESE PLANS ARE SCHEMATIC IN NATURE. THE CONTRACTOR SHALL MODIFY OR SUPPLEMENT THESE CONTROLS, AS NECESSARY, TO DEVELOP A SITE AND PROJECT SPECIFIC STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP SHALL MEET THE REQUIREMENTS OF THE FIELD CONDITIONS ENCOUNTERED AND CONFORM TO THE CONTRACTOR'S PROPOSED MEANS AND METHODS WHILE REMAINING COMPLIANT WITH ALL PERMITTING.
3. THE CONTRACTORS CONSTRUCTION ENTRANCE SHALL BE PROTECTED WITH A MINIMUM OF 6-INCHES OF GRAVEL THE WIDTH OF THE DRIVE AND FOR A DISTANCE OF 25- FEET BEGINNING AT THE PROPERTY LINE AND EXTENDING ON THE PROJECT PROPERTY.
4. THE CONTRACTOR SHALL ADHERE TO THE FOLLOWING GENERAL CONSTRUCTION SEQUENCE:
 - a. ERECT ALL EROSION & SEDIMENT CONTROLS.
 - b. PREPARE AND PROTECT STAGING AREAS AND CONSTRUCTION AREAS.
 - c. MODIFY STORMWATER POND.
 - d. SOD AND STABILIZE POND BANKS.
 - e. PROCEED WITH OTHER ELEMENTS OF PROJECT.
5. CONTRACTOR SHALL PROVIDE & INSTALL ADDITIONAL EROSION CONTROLS AS NECESSARY TO REMAIN IN COMPLIANCE WITH ALL LOCAL, STATE & FEDERAL REGULATIONS.
6. TEMPORARY SEDIMENT & EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION. CONTROLS SHALL REMAIN IN-PLACE AND BE MAINTAINED UNTIL PROPER GROUND COVER OR OTHER STABILIZATION HAS BEEN ESTABLISHED.
7. CONTRACTOR SHALL REMOVE ALL TEMPORARY EROSION CONTROLS BY SUBSTANTIAL COMPLETION OF THE PROJECT. ALL DISTURBANCE/DAMAGE INCURRED DURING REMOVAL SHALL BE REPAIRED.



DEMOLITION NOTES:

1. EXISTING TREES TO REMAIN SHALL BE PROTECTED BY WOODEN BARRIERS. BARRIERS SHALL BE CONSTRUCTED WITH 2X LUMBER. BARRIERS SHALL STAND 48" HIGH AND ENCIrcLE THE TREE AT A MINIMUM DISTANCE OF 6' FROM THE TRUNK.
2. BOUNDARY SURVEY DATA PROVIDED BY CITY OF GREEN COVE SPRINGS VIA CONSUL-TECH ENGINEERING SURVEY DATED 5/13/99. TOPOGRAPHIC INFORMATION HAS BEEN UPDATED BASED ON SITE SURVEYING COMPLETED BY MITTAUER & ASSOCIATES, INC. DURING 2017 AND 2018. EXCEPT WHERE NOTED OTHERWISE, UNDERGROUND UTILITIES SHOWN ARE FOR REFERENCE ONLY AND HAVE NOT BEEN FIELD LOCATED. THE ENGINEER DOES NOT ACCEPT ANY RESPONSIBILITY FOR THE ACCURACY OF THE EXISTING TOPOGRAPHIC INFORMATION, INCLUDING UTILITIES, SHOWN ON THESE PLANS.
3. DURING ANY CONSTRUCTION ACTIVITY, INCLUDING STABILIZATION AND REVEGETATION OF DISTURBED SURFACES, THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN SELECTION, IMPLEMENTATION AND OPERATION OF ALL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED TO RETAIN SEDIMENT ON-SITE AND PREVENT VIOLATIONS OF THE WATER QUALITY STANDARDS IN CHAPTER 62-3 AND 62-4, F.A.C. THE CONTRACTOR SHALL USE APPROPRIATE BEST MANAGEMENT PRACTICES DESCRIBED IN THE STATE OF FLORIDA EROSION & SEDIMENT CONTROLS DESIGNER & REVIEWER MANUAL, LATEST EDITION (E&SC). ALL TURBIDITY/SILT BARRIERS MUST BE IN PLACE DOWNGRADIENT FROM THE CONSTRUCTION ZONE PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY. THE TYPE AND PLACEMENT OF THE BARRIERS SHALL CONFORM WITH THE E&SC. THE BARRIERS SHALL REMAIN IN PLACE UNTIL ALL DISTURBED AREAS HAVE BEEN PROPERLY STABILIZED.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING & INSTALLING ANY PEDESTRIAN AND MOTORIST/ROADWAY TEMPORARY TRAFFIC CONTROL IN ACCORDANCE WITH FDOT STANDARDS AND THE LATEST EDITION OF THE MUTCD.
5. CONTRACTOR SHALL SALVAGE AND STORE EXISTING SIGNS FOR LATER USE. ONLY STRUCTURALLY SOUND AND READABLE SIGNS SHALL BE SALVAGED.
6. SEE YARD PIPING PLAN FOR REMOVAL OF EXISTING UNDERGROUND PIPING AND OTHER PROJECT DEMOLITION REQUIREMENTS.
7. BURIED DEBRIS HAS BEEN IDENTIFIED IN THE SOIL BORING LOGS FOR THIS AREA. THE CONTRACTOR SHALL PERFORM TEST PITS ON A 10' GRID TO IDENTIFY THE LIMITS OF THE DEBRIS. ANY DEBRIS BENEATH A PROPOSED STRUCTURE SHALL BE REMOVED AND REPLACED WITH SUITABLE FILL. THE LIMITS OF DEBRIS REMOVAL SHALL EXTEND 10' BEYOND THE EXTERIOR OF THE STRUCTURE. ALL FILL SHALL BE COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

CONSTRUCTION PHASING REQUIREMENTS:

THE EXISTING WWTF SHALL REMAIN IN SERVICE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR WILL BE REQUIRED TO SEQUENCE CONSTRUCTION ACTIVITIES TO ENSURE THE CITY CAN MAINTAIN WASTEWATER TREATMENT OPERATIONS. THE CRITICAL SEQUENCING REQUIREMENTS ARE OUTLINED AS FOLLOWS:

1. **PHASE 1 WORK** - CLEAR & GRUB AND DEMOLISH EXISTING DRYING BEDS AND DENOTED STRUCTURES TO CONSTRUCT THE OXIDATION DITCH, CLARIFIER SPLITTER BOX, CLARIFIER Nos. 1 & 2, FILTERS, CHLORINE CONTACT CHAMBER, CHEMICAL FEED FACILITIES, RECLAIMED WATER STORAGE TANK, REUSE PUMPING STATION, ELECTRICAL IMPROVEMENTS, AND ASSOCIATED WORK. THE OPERATIONS BUILDING WITH ASSOCIATED CLEARING & GRASSING SHALL BE COMPLETED WITH TEMPORARY PARKING AREA. THE OPERATIONS BUILDING WITH ALL SCADA, ELECTRICAL AND CONTROL CAPABILITIES SHALL BE COMPLETED PRIOR TO PHASE 2 WORK.

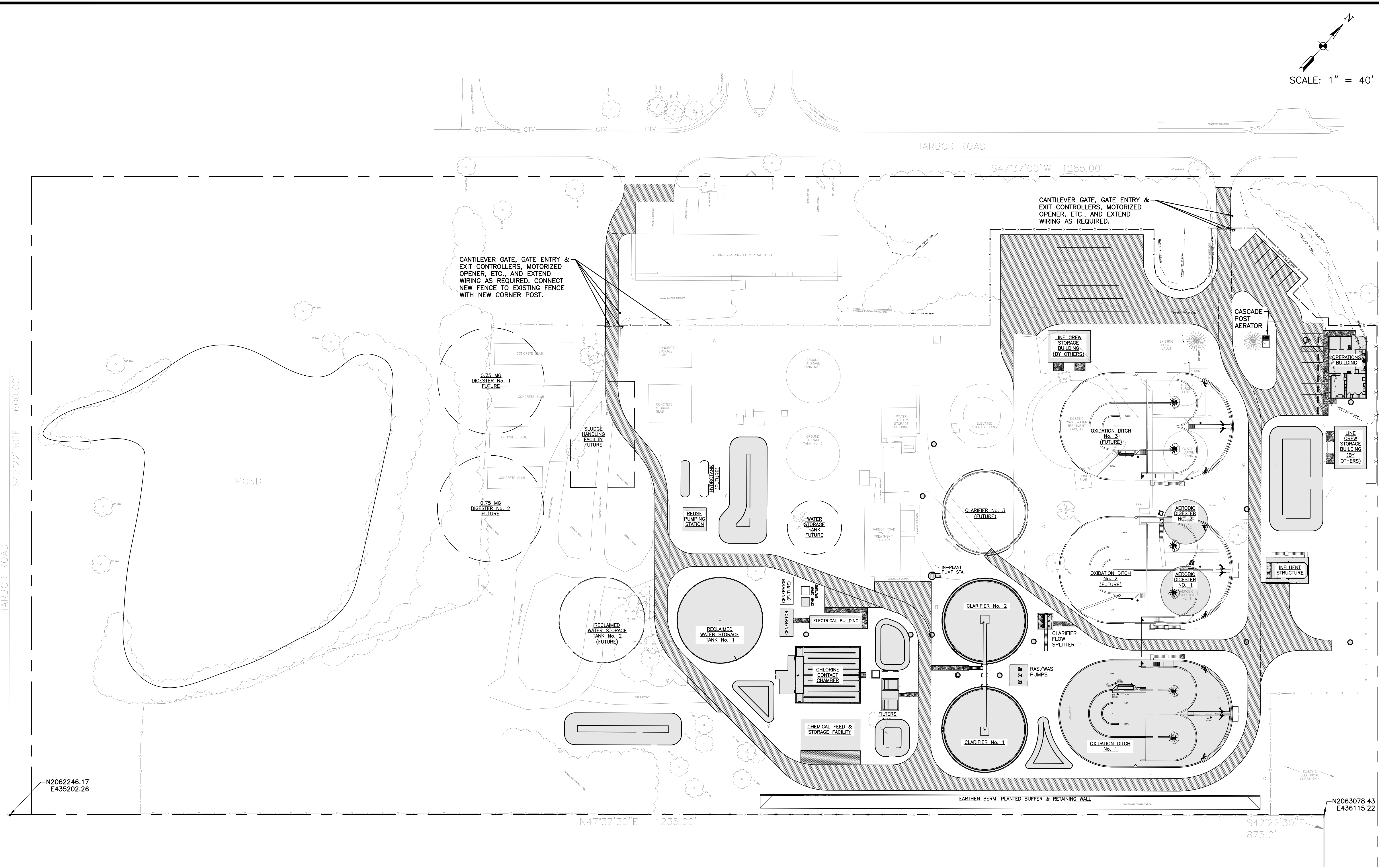
CONSTRUCTION PHASING REQUIREMENTS (CONTINUED):

3. **PHASE 2 WORK** - AFTER THE OPERATIONS BUILDING HAS RECEIVED ITS CERTIFICATE OF OCCUPANCY AND IS FULLY FUNCTIONAL WITH ALL NEW SCADA AND RELOCATED WATER PLANT SCADA COMPONENTS, THE DEMOLITION OF THE EXISTING OPERATIONS BUILDING AND LINE CREW BUILDING CAN OCCUR. THE EXISTING CHLORINE CONTACT CHAMBER & CHEMICAL FEED FACILITIES CAN ONLY BE DEMOLISHED AFTER THE NEW WWTF IS IN OPERATION AND ACCEPTED BY THE FDEP, OWNER & ENGINEER.
4. **PHASE 3 WORK** - AFTER THE NEW WWTF IS APPROVED FOR OPERATION, THE DECOMMISSIONING OF THE EXISTING WWTF CAN BEGIN AND BE COMPLETED PER SPECIFICATION SECTION 02220.

SITE PLAN REVIEW
NOT FOR CONSTRUCTION
 07/25/18

<p>MITTAUER & ASSOCIATES, INC. CONSULTING ENGINEERS</p> <p>580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073 TEL. (904) 278-0030 FAX. (904) 278-0840</p>		REVISION DESCRIPTION NO. DATE BY 1 7/25/18 JRS 1 INCH
CITY OF GREEN COVE SPRINGS DEP. SRF Harbor Road WWTF Existing Conditions & Demolition Plan Clay County, Florida		JOB NO. 8905-34-1 SHEET NO. C1.1

SCALE: 1" = 40'



NO	DATE	BY	REVISION DESCRIPTION

DESC	MPT	DATE
DRWN	KDH	7/25/18
PROJ	JRS	
MGR		

1" = 1 INCH

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CITY OF GREEN COVE SPRINGS
DEP SRF Harbor Road WWT
Site Master Plan
Clay County, Florida

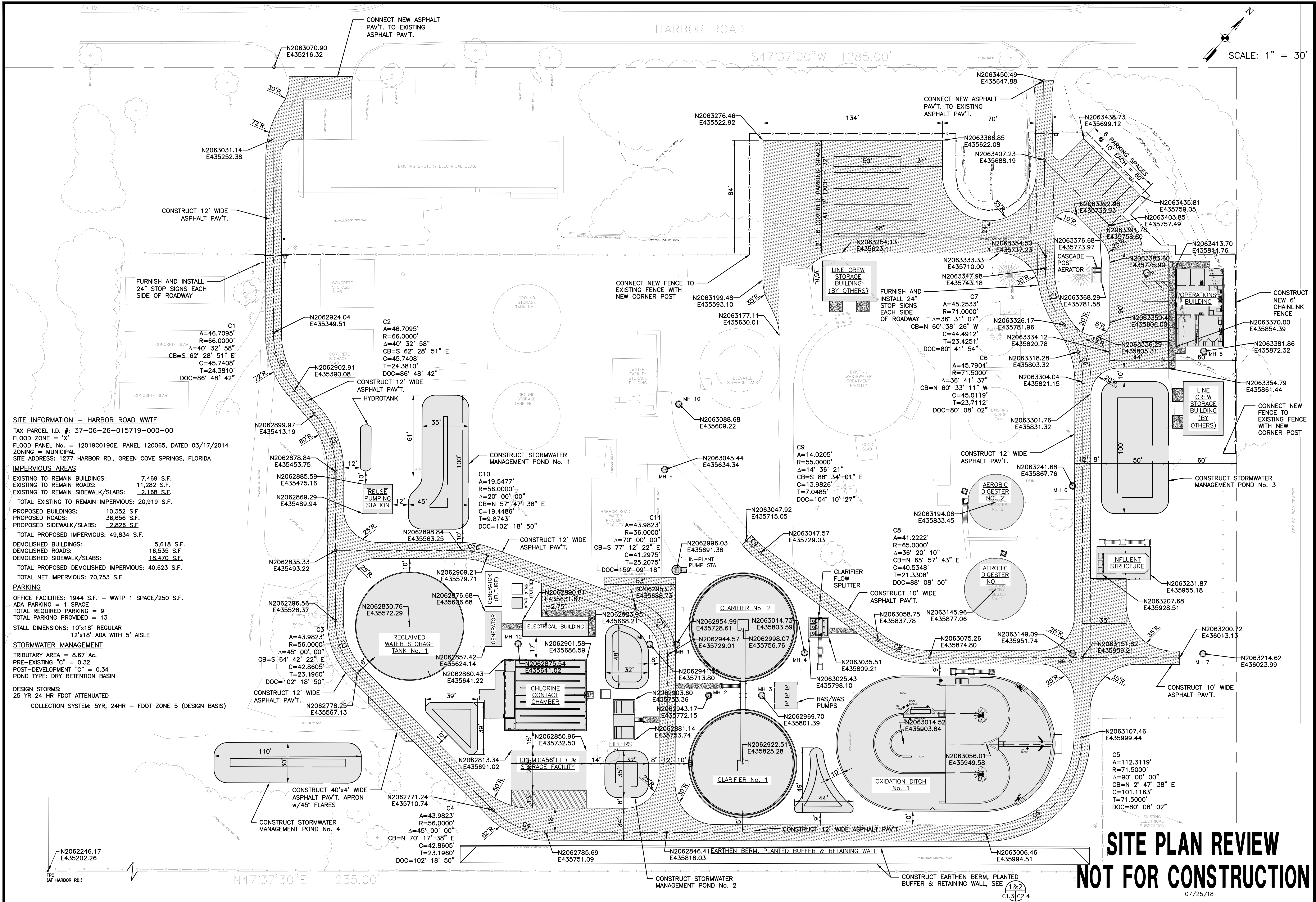
JOB NO.
8905-34-1
SHEET NO.
C1.2

SITE PLAN REVIEW
NOT FOR CONSTRUCTION

07/25/18

N2062246.17
E435202.26

N2063078.43
E436115.22



SCALE: 1" = 30'

SITE INFORMATION - HARBOR ROAD WWTF
 TAX PARCEL I.D. #: 37-06-26-015719-000-00
 FLOOD ZONE = 'X'
 FLOOD PANEL No. = 1201900190E, PANEL 120065, DATED 03/17/2014
 ZONING = MUNICIPAL
 SITE ADDRESS: 1277 HARBOR RD., GREEN COVE SPRINGS, FLORIDA

IMPERVIOUS AREAS

EXISTING TO REMAIN BUILDINGS:	7,469 S.F.
EXISTING TO REMAIN ROADS:	11,282 S.F.
EXISTING TO REMAIN SIDEWALK/SLABS:	2,168 S.F.
TOTAL EXISTING TO REMAIN IMPERVIOUS:	20,919 S.F.
PROPOSED BUILDINGS:	10,352 S.F.
PROPOSED ROADS:	36,856 S.F.
PROPOSED SIDEWALK/SLABS:	2,826 S.F.
TOTAL PROPOSED IMPERVIOUS:	49,834 S.F.
DEMOLISHED BUILDINGS:	5,618 S.F.
DEMOLISHED ROADS:	16,535 S.F.
DEMOLISHED SIDEWALK/SLABS:	18,470 S.F.
TOTAL PROPOSED DEMOLISHED IMPERVIOUS:	40,623 S.F.
TOTAL NET IMPERVIOUS:	70,753 S.F.

PARKING

OFFICE FACILITIES: 1944 S.F. - WWTP 1 SPACE/250 S.F.
 ADA PARKING = 1 SPACE
 TOTAL REQUIRED PARKING = 9
 TOTAL PARKING PROVIDED = 13

STALL DIMENSIONS: 10'x18' REGULAR
 12'x18' ADA WITH 5' AISLE

STORMWATER MANAGEMENT

TRIBUTARY AREA = 8.67 Ac.
 PRE-EXISTING "C" = 0.32
 POST-DEVELOPMENT "C" = 0.34
 POND TYPE: DRY RETENTION BASIN

DESIGN STORMS:
 25 YR 24 HR FDOT ATTENUATED
 COLLECTION SYSTEM: 5YR, 24HR - FDOT ZONE 5 (DESIGN BASIS)

SITE PLAN REVIEW
NOT FOR CONSTRUCTION

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CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WWTF
 Site Plan - Horizontal Control
 Clay County, Florida

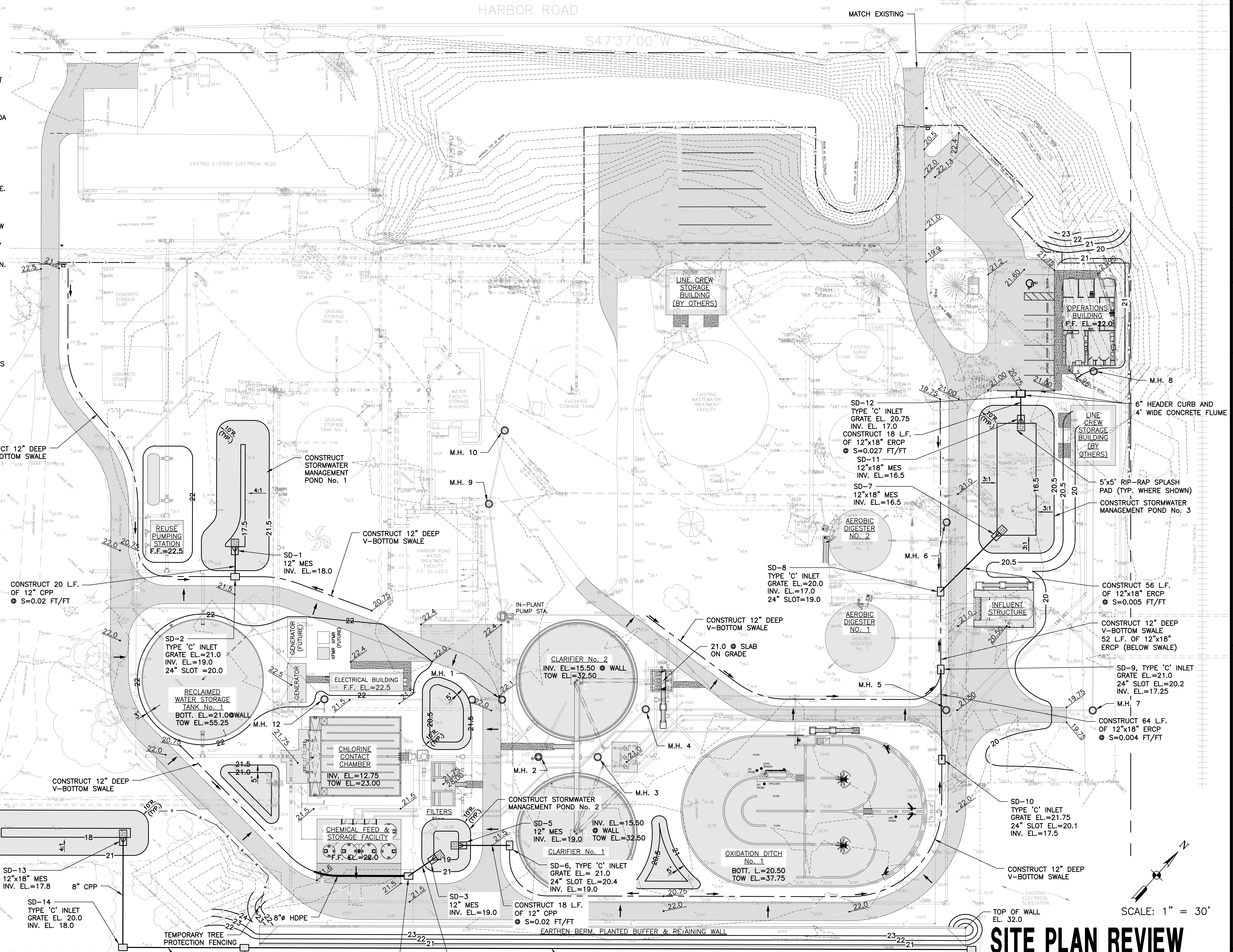
JOB NO. 8905-34-1
 SHEET NO. C1.3

07/25/18

NO.	DATE	BY	REVISION DESCRIPTION

NOTES:

- PIPE LENGTHS ARE MEASURED ON THE HORIZONTAL PLANE CENTER TO CENTER OF INLET OR MANHOLE AND DO NOT INCLUDE MITERED END SECTIONS IF APPLICABLE. CONTRACTOR SHALL PROVIDE AND INSTALL THE LENGTH REQUIRED.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL CONSTRUCT EROSION & SEDIMENT INLET PROTECTION AT ALL EXISTING & PROPOSED STORM DRAIN INLETS, SEE DETAIL, SHT. C2.1.
- ALL SIDEWALKS ARE CONSIDERED HANDICAP ACCESSIBLE ROUTES AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH ADA STANDARDS FOR ACCESSIBLE DESIGN AND SLOPES SHALL NOT EXCEED THE FOLLOWING:
 - DIRECTION OF TRAVEL (LENGTH OF SIDEWALK) = 5% MAX.
 - CROSS SLOPE = 2% MAX.
 - RAMP = 1:12 MAX.
 SEE DETAIL SHT. C2.1.
- ALL SIDEWALKS FLUSH WITH PAVEMENT SHALL RECEIVE A CONTINUOUS 24" WIDE STRIP OF DETECTABLE WARNING TEXTURE.
- ALL CURB & GUTTERS ARE FRONT-DISCHARGE WHERE PAVEMENTS SLOPE DOWN & AWAY FROM GUTTERS.
- CONTRACTOR SHALL VERTICALLY ADJUST ALL EXISTING & NEW VALVE BOXES, MANHOLE FRAMES & COVERS, JUNCTION BOXES, PULL BOXES, ETC., WHERE REQUIRED DUE TO GRADE CHANGES, SO THEY ARE LOCATED FLUSH WITH FINISHED GRADE/SURFACE.
- SEE DETAIL SHT. C2.3 FOR DETAIL OF MITERED END SECTION.
- SEE DETAIL SHT. C2.3 FOR DETAIL OF IN-LINE DRAIN.
- SEE DETAIL SHT. C2.3 FOR DETAIL OF TYPE 'C' INLET.
- SEE DETAIL SHT. C2.3 FOR TYPE 'E' INLET STRUCTURES.
- MANHOLES SHALL CONFORM TO DETAIL SHT. D12.2.
- CONTRACTOR SHALL PROVIDE CONSTANT SLOPE BETWEEN ADJACENT SPOT ELEVATIONS.
- UNLESS OTHERWISE NOTED GRADES AT ALL PROPERTY LINES SHALL REMAIN UNCHANGED. CONTRACTOR SHALL PROVIDE A CONSTANT SLOPE BETWEEN EXISTING PROPERTY LINE GRADES AND NEAREST PROPOSED SPOT ELEVATIONS.

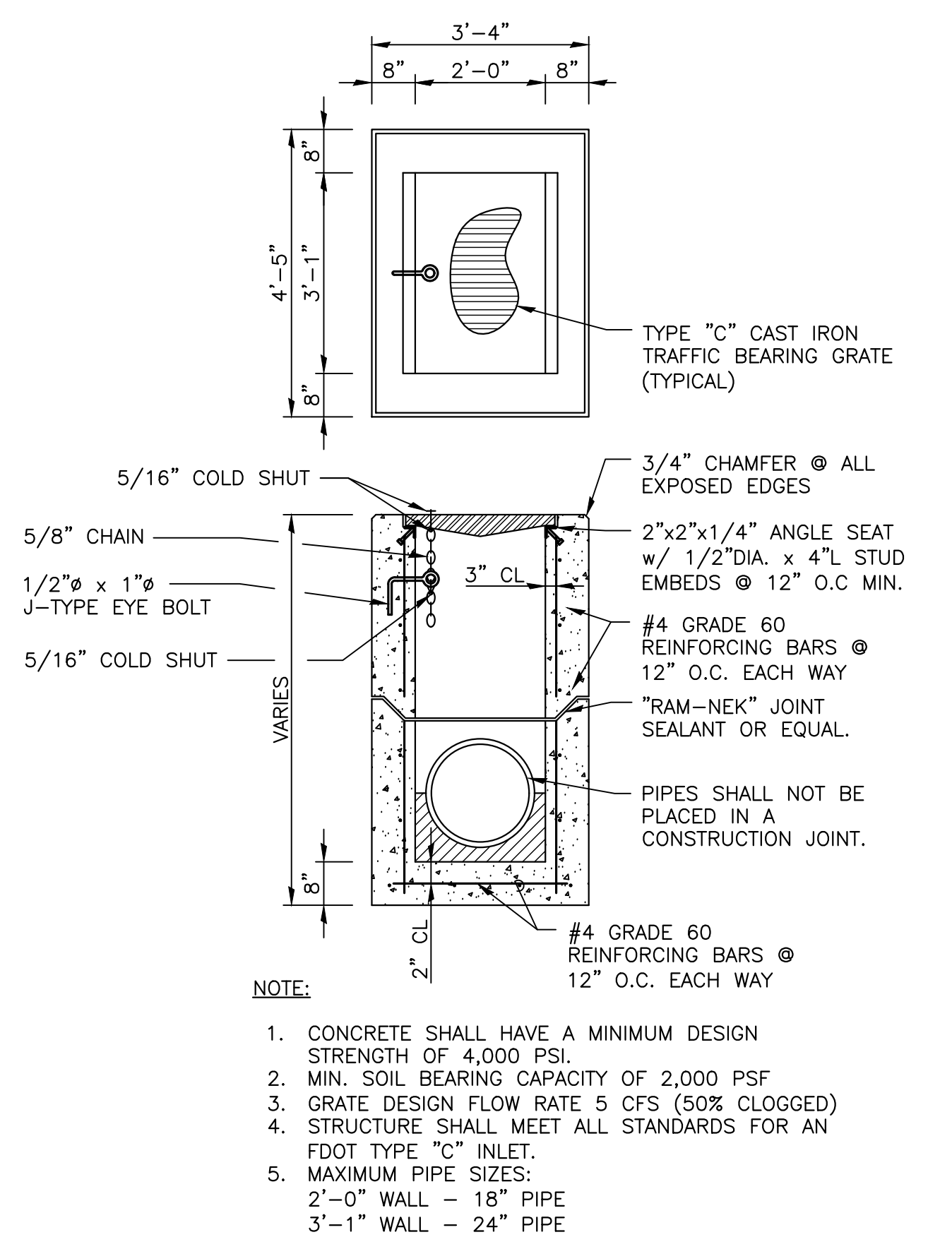


SITE PLAN REVIEW
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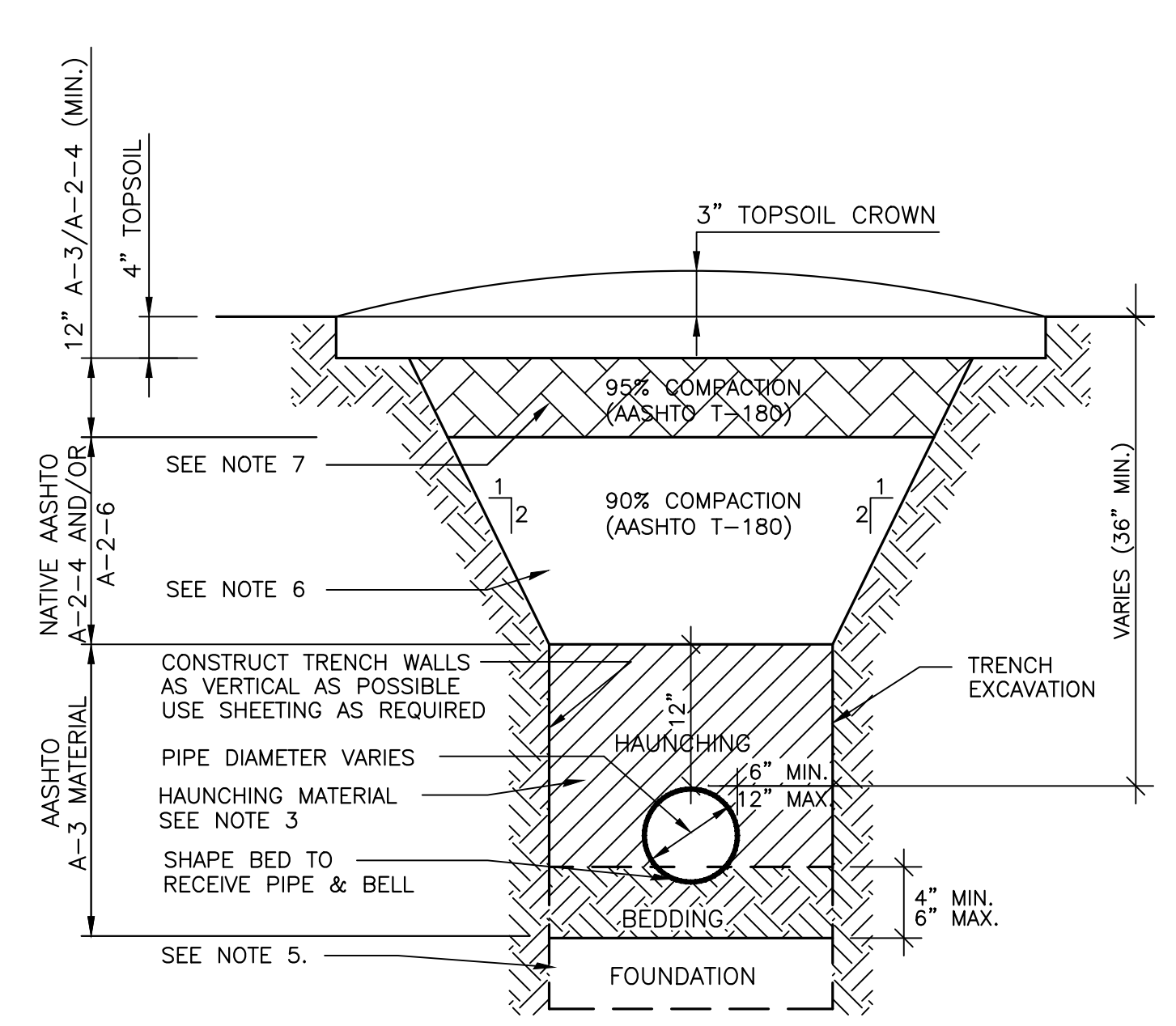
MITTALNER & ASSOCIATES, INC.
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CITY OF GREEN COVE SPRINGS
 DEP. SRF Harbor Road WWT
 Grading & Drainage Plan
 Clay County, Florida

JOB NO. 8905-34-1
 SHEET NO. C1.4

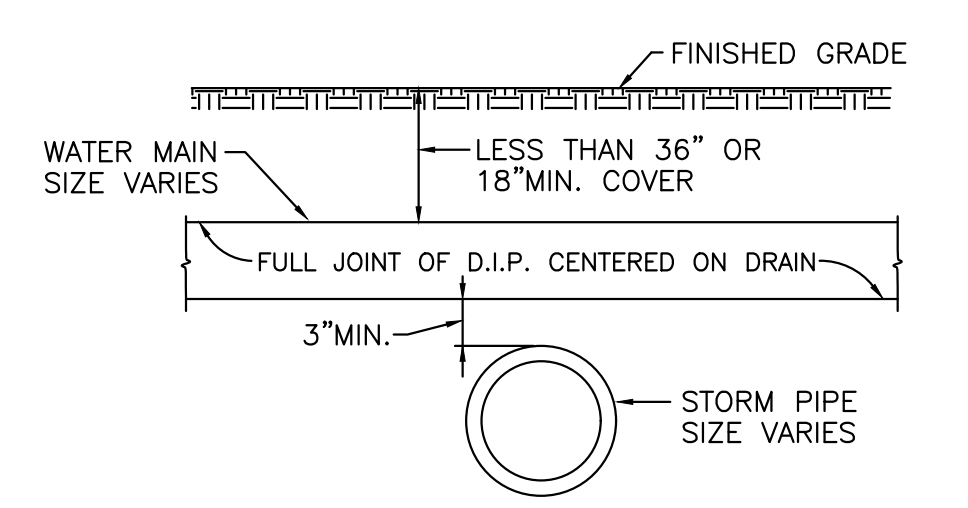


TYPICAL TYPE "C" INLET STRUCTURE
NTS

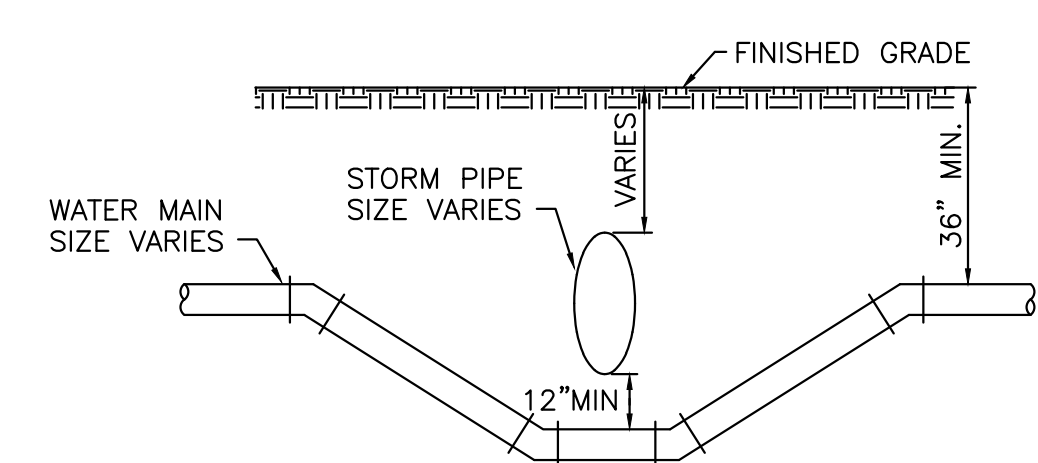


TYPICAL TRENCH DETAIL
NTS

- NOTES:**
1. DEWATERING SHALL CONTINUE UNTIL BACKFILL IS COMPACTED AT LEAST 2 FEET ABOVE WATER TABLE.
 2. PIPE INSTALLATION SHALL MEET THE REQUIREMENTS OF AWWA C-600 TYPE 4 LAYING CONDITION AND AS MODIFIED BY THIS DETAIL.
 3. COMPACT HAUNCHING MATERIAL IN 12" LIFTS COMPACTED TO 98% OF THE MAXIMUM DENSITY PER AASHTO T-180 TO 12 INCH ABOVE TOP OF PIPE.
 4. COMPACT A-3 FILL USED FOR BEDDING TO 98% OF THE MAX. DENSITY PER AASHTO T-180.
 5. FOUNDATIONS SHALL BE REQUIRED WHERE CONSTRUCTION ENCOUNTERS UNSUITABLE MATERIAL REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 6. USE OF NATIVE A-2-4 AND A-2-6 BACKFILL MATERIAL WHICH EXHIBITS HIGH MOISTURE CONTENT SHALL BE LIMITED TO AREAS WITHOUT SURFACE IMPROVEMENTS.
 7. A-2-4 USED IN THIS ZONE MUST BE MOISTURE CONDITIONED AS NECESSARY TO MEET THE REQUIRED COMPACTION CRITERIA.



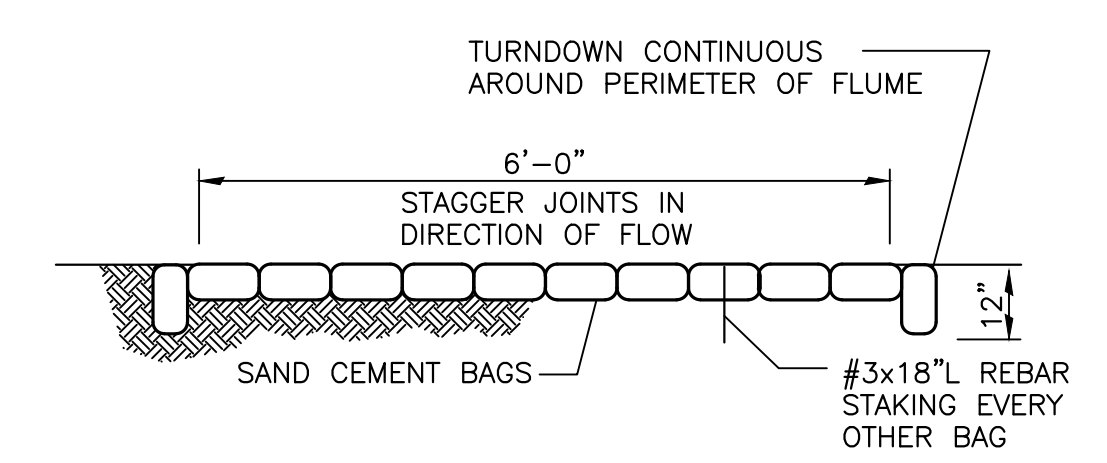
DRAIN CONFLICT "A"
NTS



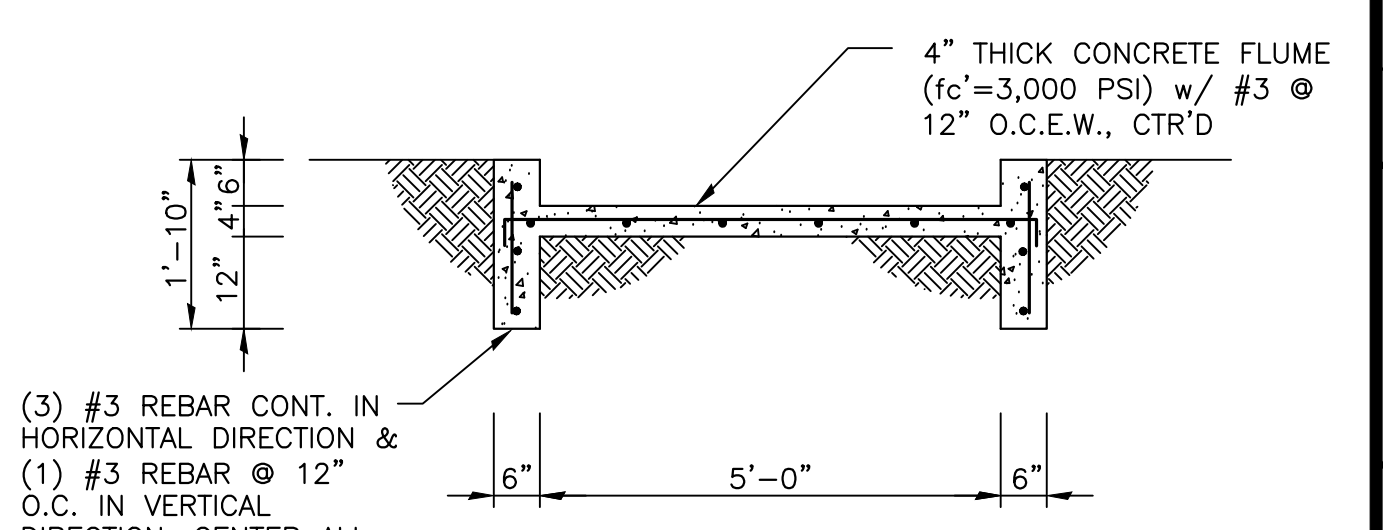
DRAIN CONFLICT "B"
NTS

- NOTE:**
- PIPE TO BE DEFLECTED BACK TO 36" COVER AND ENTIRE ASSEMBLY TO BE RESTRAINED PER MFG'R'S. RECOMMENDATIONS TO WITHSTAND 150 P.S.I. PRESSURE TEST

- NOTES:**
1. PIPE LESS THAN 4" SHALL BE THREADED OR SOLVENT WELD.
 2. PIPE 4" OR LARGER TO BE RODDED TWO FULL PIPE LENGTHS AND TIED TO A BELL CLAMP OR RESTRAINED WITH A BELL JOINT RESTRAINER PER MFGR. RECOMMENDATIONS.

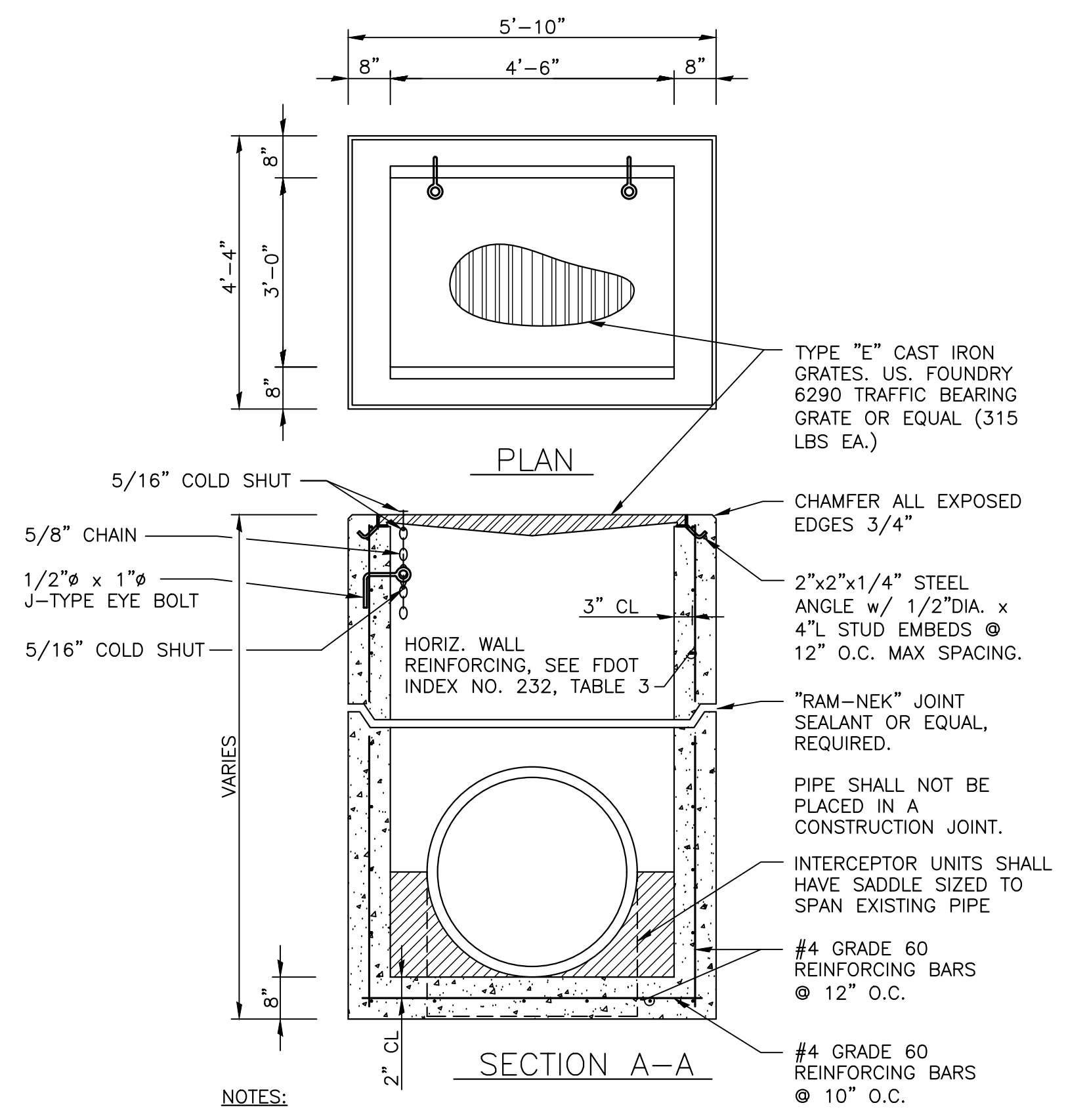


RIP-RAP SPLASH PAD
NTS

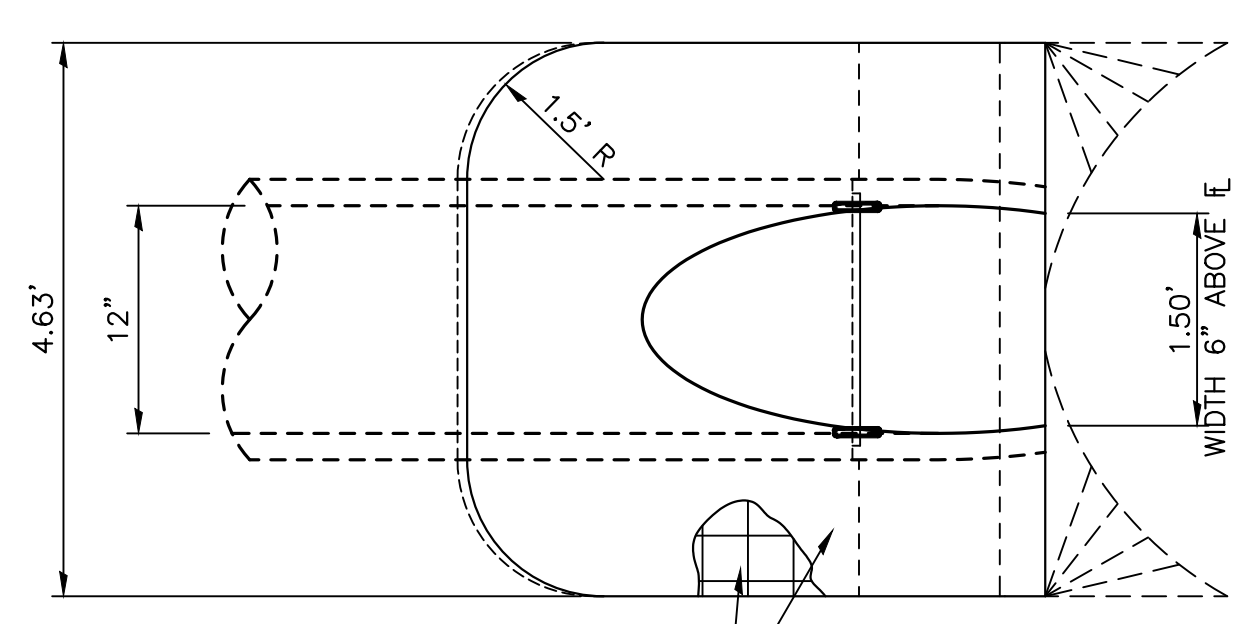


FLUME CROSS-SECTION
NTS

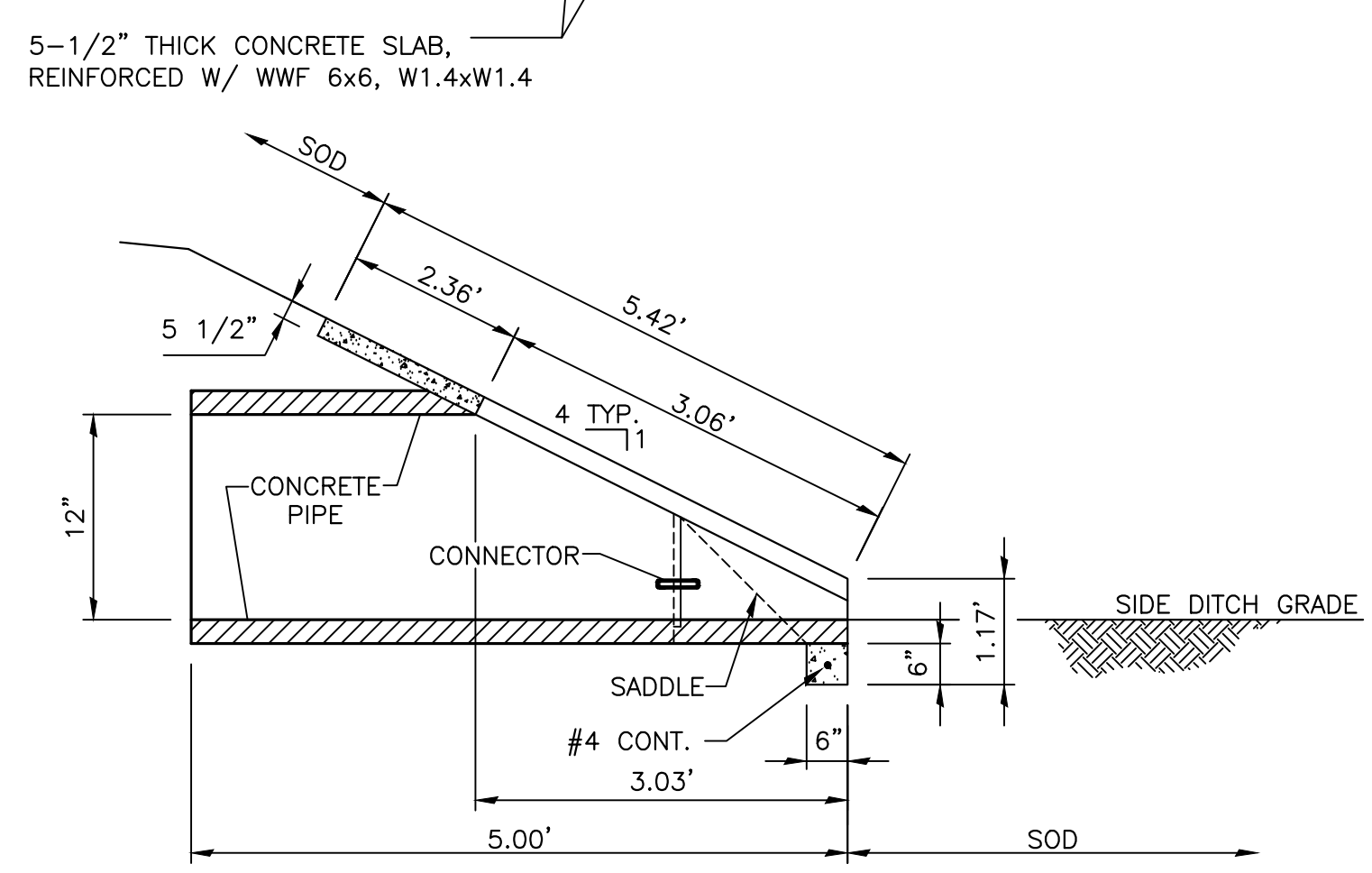
- (3) #3 REBAR CONT. IN HORIZONTAL DIRECTION & (1) #3 REBAR @ 12" O.C. IN VERTICAL DIRECTION, CENTER ALL STEEL IN CONCRETE. 3" EDGE CLEARANCE



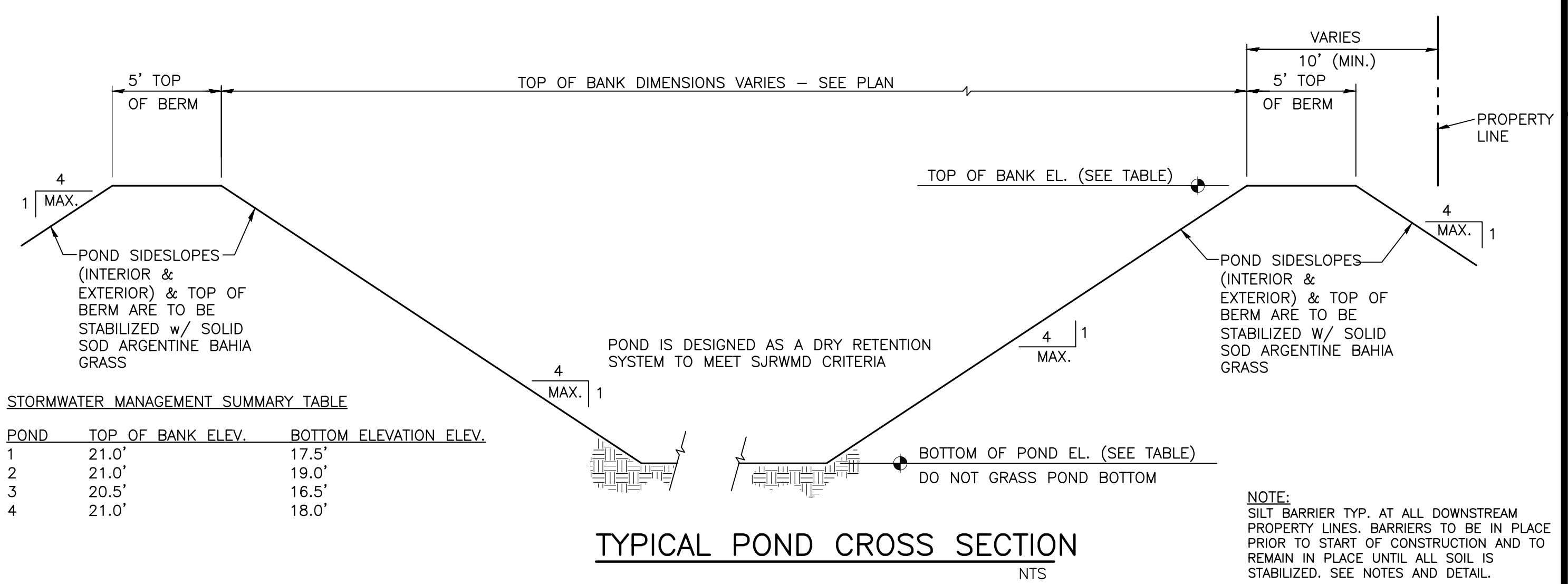
TYPE "E" FDOT INLET STRUCTURE
NTS



MITERED END SECTION
NTS



NOTE:
MITERED END SECTION PER D.O.T. STANDARDS



STORMWATER MANAGEMENT SUMMARY TABLE

POND	TOP OF BANK ELEV.	BOTTOM ELEVATION ELEV.
1	21.0'	17.5'
2	21.0'	19.0'
3	20.5'	16.5'
4	21.0'	18.0'

TYPICAL POND CROSS SECTION
NTS

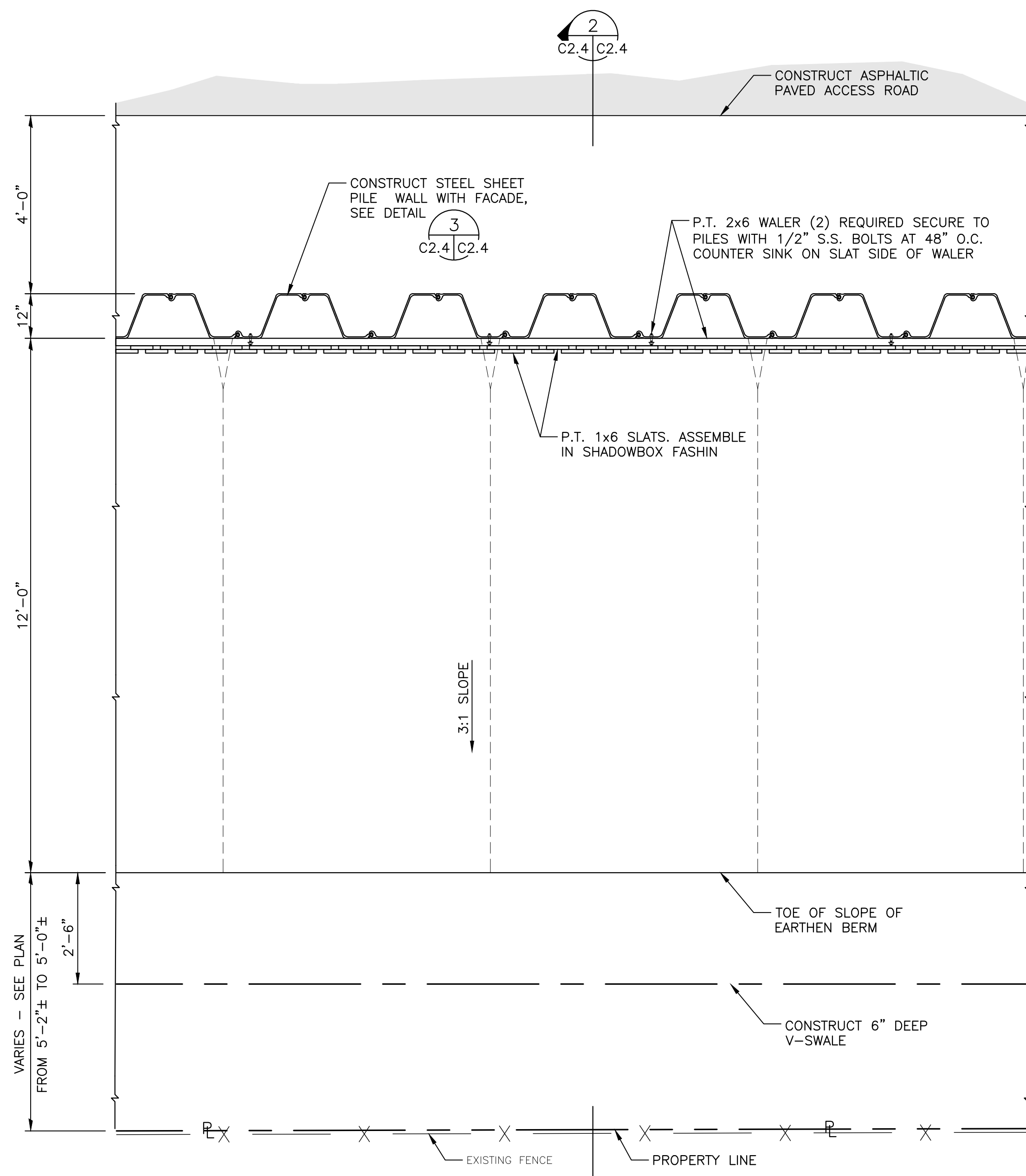
- NOTE:**
SILT BARRIER TYP. AT ALL DOWNSTREAM PROPERTY LINES. BARRIERS TO BE IN PLACE PRIOR TO START OF CONSTRUCTION AND TO REMAIN IN PLACE UNTIL ALL SOIL IS STABILIZED. SEE NOTES AND DETAIL.

SITE PLAN REVIEW
NOT FOR CONSTRUCTION
07/25/18

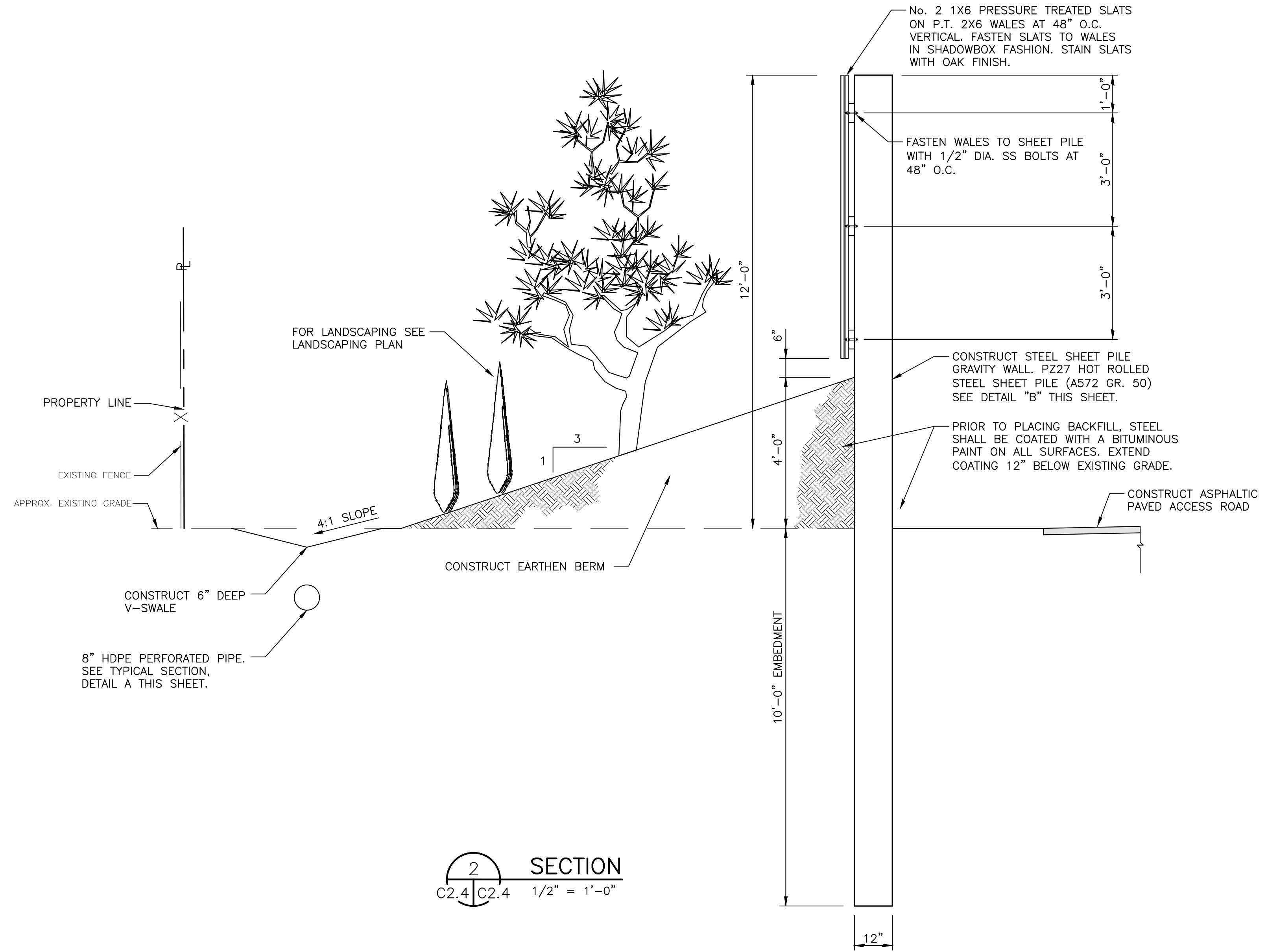
MITTALUER & ASSOCIATES, INC.
CONSULTING ENGINEERS
580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
TEL. (904) 278-0030 FAX. (904) 278-0040

CITY OF GREEN COVE SPRINGS
DEP. SRF Harbor Road WWTF
Grading & Drainage Details
Clay County, Florida

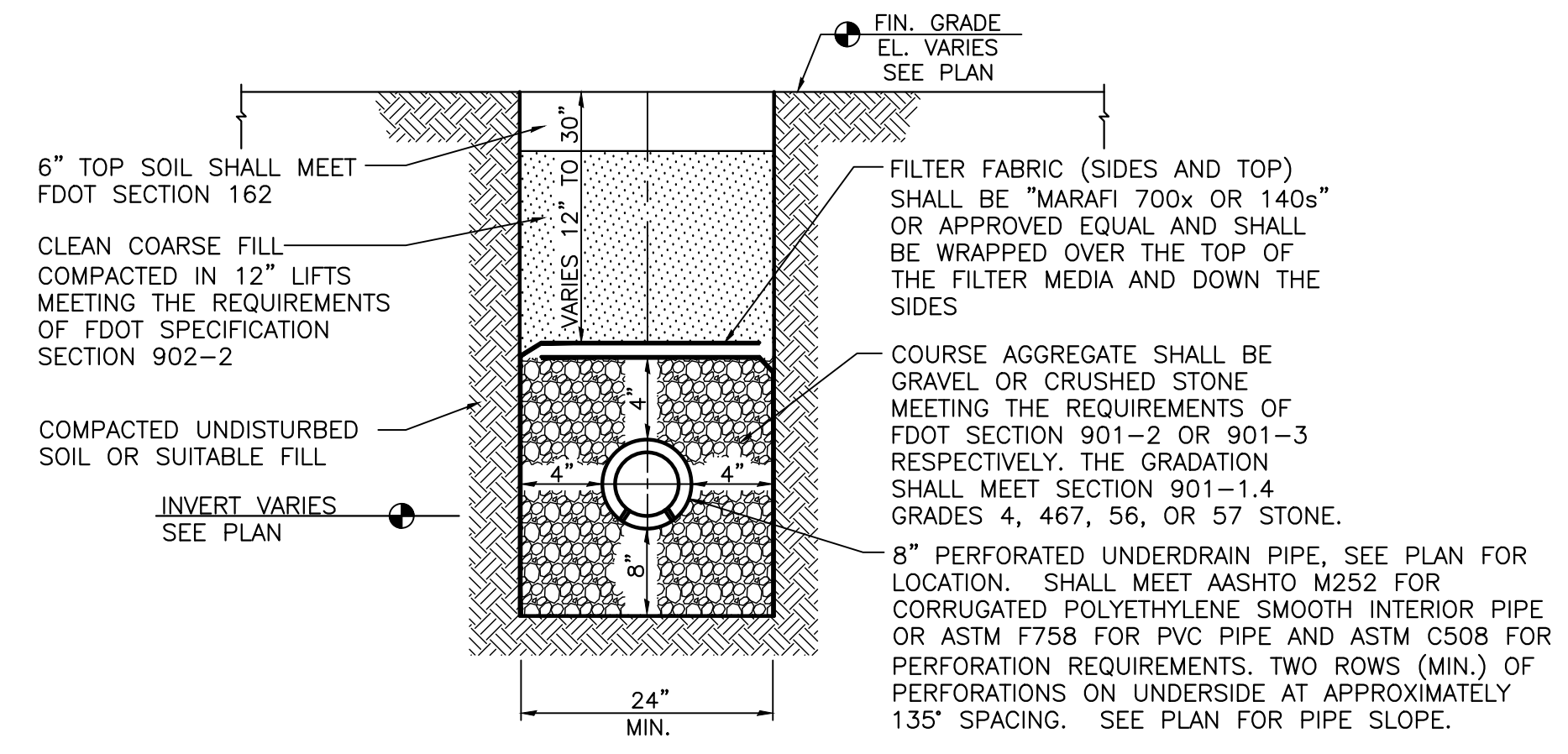
JOB NO. 8905-34-1
SHEET NO. C2.3



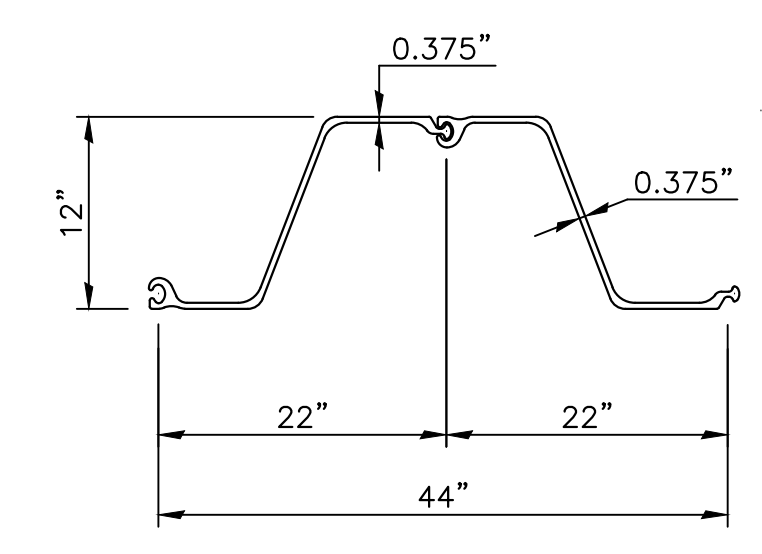
1 STEEL SHEET WALL PARTIAL PLAN
 C1.3/C2.4 1/2" = 1'-0"



2 SECTION
 C2.4/C2.4 1/2" = 1'-0"



A UNDERDRAIN PIPE DETAIL
 NTS



B SHEET PILE SECTION
 1/2" = 1'-0"

SITE PLAN REVIEW
NOT FOR CONSTRUCTION
 07/25/18

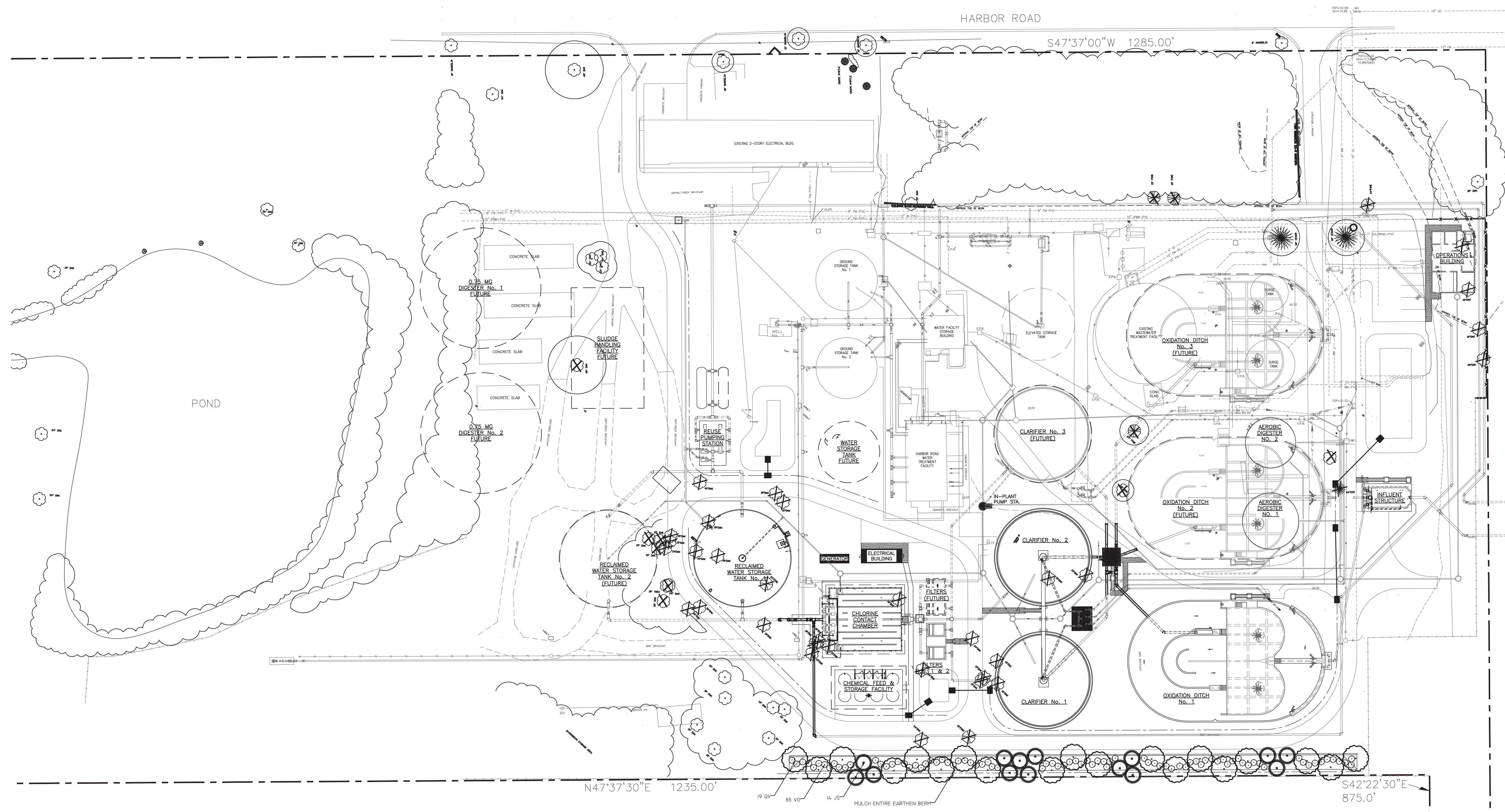
MITTALUER & ASSOGLIATES, INC.
 CONSULTING ENGINEERS
 580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
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CITY OF GREEN COVE SPRINGS
 DEP. SRF Harbor Road WWTF
 Gravity Wall - Plan, Section & Details
 Clay County, Florida

JOB No. 8904-34-1
 SHEET No. C2.4

NO.	DATE	BY	REVISION DESCRIPTION

TPN	DESIGN	1 INCH
KDH	DRWN	
JRS	PROJ. MGR.	
	DATE	7/25/18



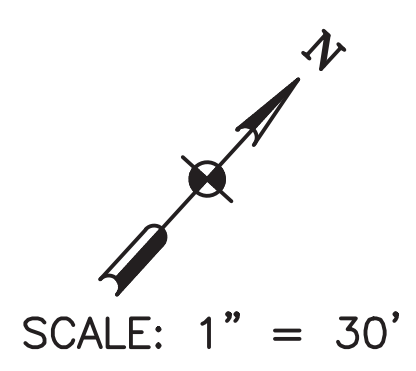
CITY GREEN COVE SPRINGS HARBOR ROAD WWTF
PLANT LIST

QTY	SYM	DESCRIPTION	SIZE	SPACING	NOTES*
19	QV	QUERCUS VIRGINIANA "CATHEDRAL LIVE OAK"	15'-17' x 7-8', 6" CAL., 4' CT., MATCHED	AS SHOWN	N, FYN, FF, WW
14	JS	JUNIPERUS VIRGINIANA SILICICOLA "SOUTHERN RED CEDAR"	12'-14' x 7-8', 6" CAL., FTG., MATCHED	AS SHOWN	N, FYN, FF, WW
84	VO	VIBURNUM ODORATISSIMUM "SWEET VIBURNUM"	48" x 48", FULL, MATCHED	60" OC.	FYN, FF, WW

SOD PASPALUM NOTATUM "ARGENTINE BAHIA" - TSA FREE (WEED FREE)
 SOD ALL 4:1 SLOPES OR GREATER, 10' FROM EOP AND ALL DISTURBED ROW. COORDINATE FURTHER GRASSING WITH GENERAL CONTRACTOR
 SELECTED SOD SPECIES MEETS ALL CURRENT LANDSCAPE AND IRRIGATION REQUIREMENTS. ANY VARIABLE WILL REQUIRE GOVERNMENT APPROVAL

48 HOURS BEFORE YOU DIG
 CALL SUNSHINE
1-800-432-4770
 IT'S THE LAW IN FLORIDA

prepared by:
JANET O. WHITMILL, R.L.A.
 P.O. Box 5212, Jacksonville, FL 32247-5212
 Telephone (904) 398 7688



DESIGN: JOW
 DRAWN: DHM
 PROJ. MGR.: JOW
 DATE: 4/15/18
 SCALE: 1" = 1'

MITTAUER & ASSOCIATES, INC.
 CONSULTING ENGINEERS
 580-1 WELLS ROAD, ORANGE PARK, FLORIDA 32073
 TEL. (904) 278-0030 FAX. (904) 278-0840

CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WWTF
 LANDSCAPE PLAN
 Clay County, Florida

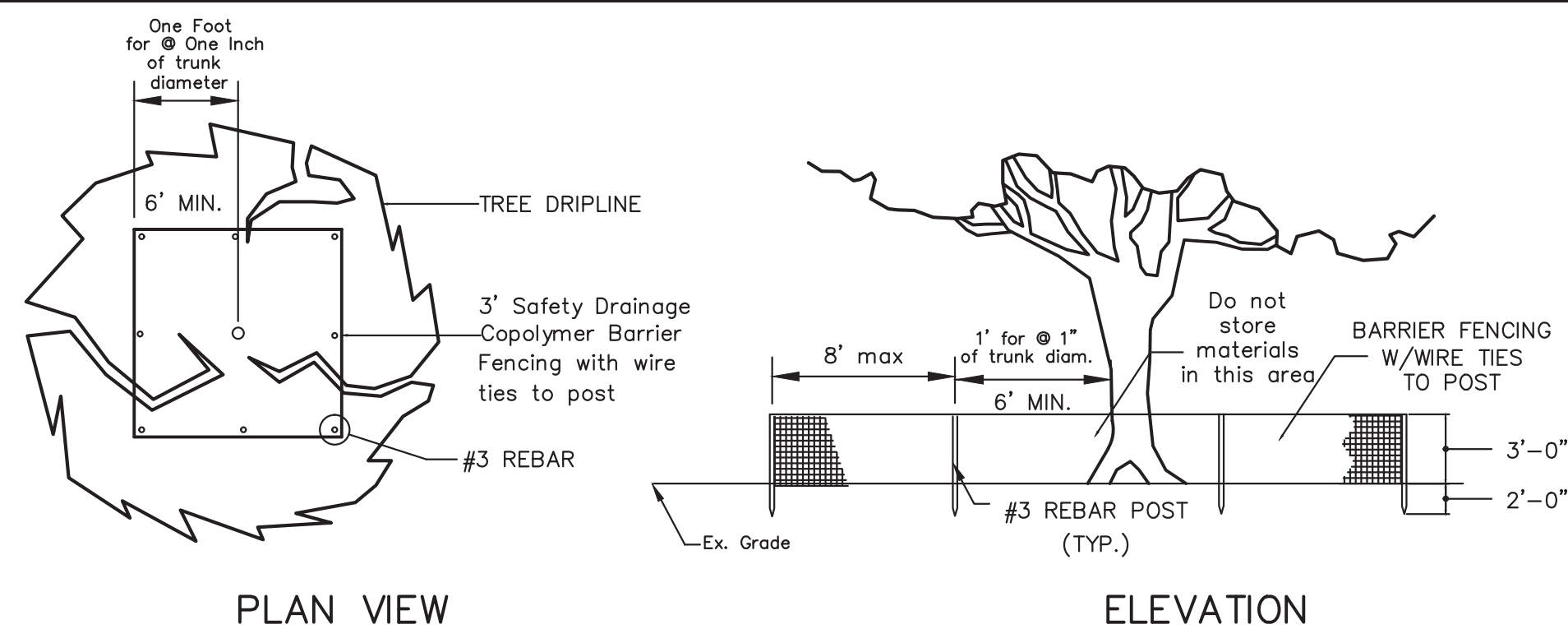
JOB No. 19118
 SHEET No. L1.3

CITY GREEN COVE SPRINGS HARBOR ROAD WWTF PLANT LIST

QTY	SYM	DESCRIPTION	SIZE	SPACING	NOTES*
19	QV	QUERCUS VIRGINIANA "CATHEDRAL LIVE OAK"	15'-17' x 7-8', 6" CAL., 4' CT., MATCHED	AS SHOWN	N, FYN, FF, WW
14	JS	JUNIPERUS VIRGINIANA SILICICOLA "SOUTHERN RED CEDAR"	12'-14' x 7-8', 6" CAL., FTG., MATCHED	AS SHOWN	N, FYN, FF, WW
84	VO	VIBURNUM ODORATISSIMUM "SWEET VIBURNUM"	48" x 48", FULL, MATCHED	60" OC.	FYN, FF, WW

SOD PASPALUM NOTATUM "ARGENTINE BAHIA" - TSA FREE (WEED FREE)
 SOD ALL 4:1 SLOPES OR GREATER, 10' FROM EOP AND ALL DISTURBED ROW. COORDINATE FURTHER GRASSING WITH GENERAL CONTRACTOR
 SELECTED SOD SPECIES MEETS ALL CURRENT LANDSCAPE AND IRRIGATION REQUIREMENTS. ANY VARIABLE WILL REQUIRE GOVERNMENT APPROVAL

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TREE PROTECTION FENCING DETAIL
 NOT TO SCALE

THE TREE PROTECTION BARRICADE SHALL BE AT LEAST THREE (3) FEET HIGH. THE BARRIER SHALL CONSIST OF EITHER WOOD FENCE WITH 2X4 POSTS PLACED A MAXIMUM EIGHT (8) FEET APART, WITH A 2X4 MINIMUM TOPRAIL, OR A TEMPORARY WIRE MESH FENCE, OR OTHER SIMILAR BARRIER WHICH WILL LIMIT ACCESS TO PROTECTED AREA.

THE BARRICADE SHALL BE AT LEAST ONE FOOT IN DIAMETER FOR EACH INCH OF TRUNK DIAMETER. FOR TREES LESS THAN 12" DBH, THE MINIMUM BARRICADE SHALL BE PLACED AT LEAST SIX (6) FEET AWAY FROM THE BASE OF THE TREE.

TREE BARRICADE APPROVAL: OBTAIN CITY APPROVAL OF TREE BARRICADES BEFORE BEGINNING CLEARING OPERATIONS OR ANY SITE DEVELOPMENT.

CITY OF GREEN COVE SPRINGS HARBOR ROAD WWTF TREES TO BE REMOVED

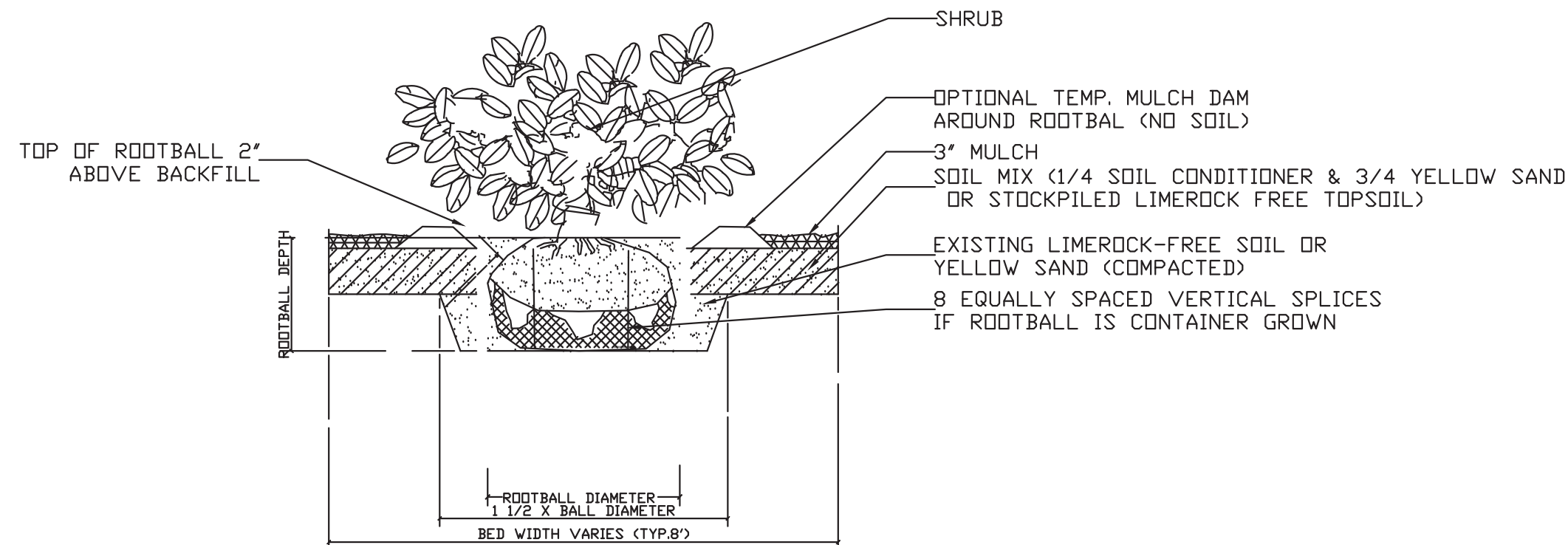
TREE QTY	TREE SPECIES	SIZE (INCHES)	SUBTOTAL (INCHES)
5	LIVE OAK	12	60
14	LIVE OAK	15	210
7	LIVE OAK	18	126
4	LIVE OAK	24	96
2	LIVE OAK	30	60
2	LIVE OAK	36	72
1	LIVE OAK	42	42
2	LIVE OAK	48	96
1	CEDAR	24	24
TOTAL			786
NON-PROTECTED			
2	PINE	15	30
2	PINE	20	40
2	PINE	24	48
TOTAL			118

CITY OF GREEN COVE SPRINGS HARBOR ROAD WWTF MITIGATION REQUIREMENTS

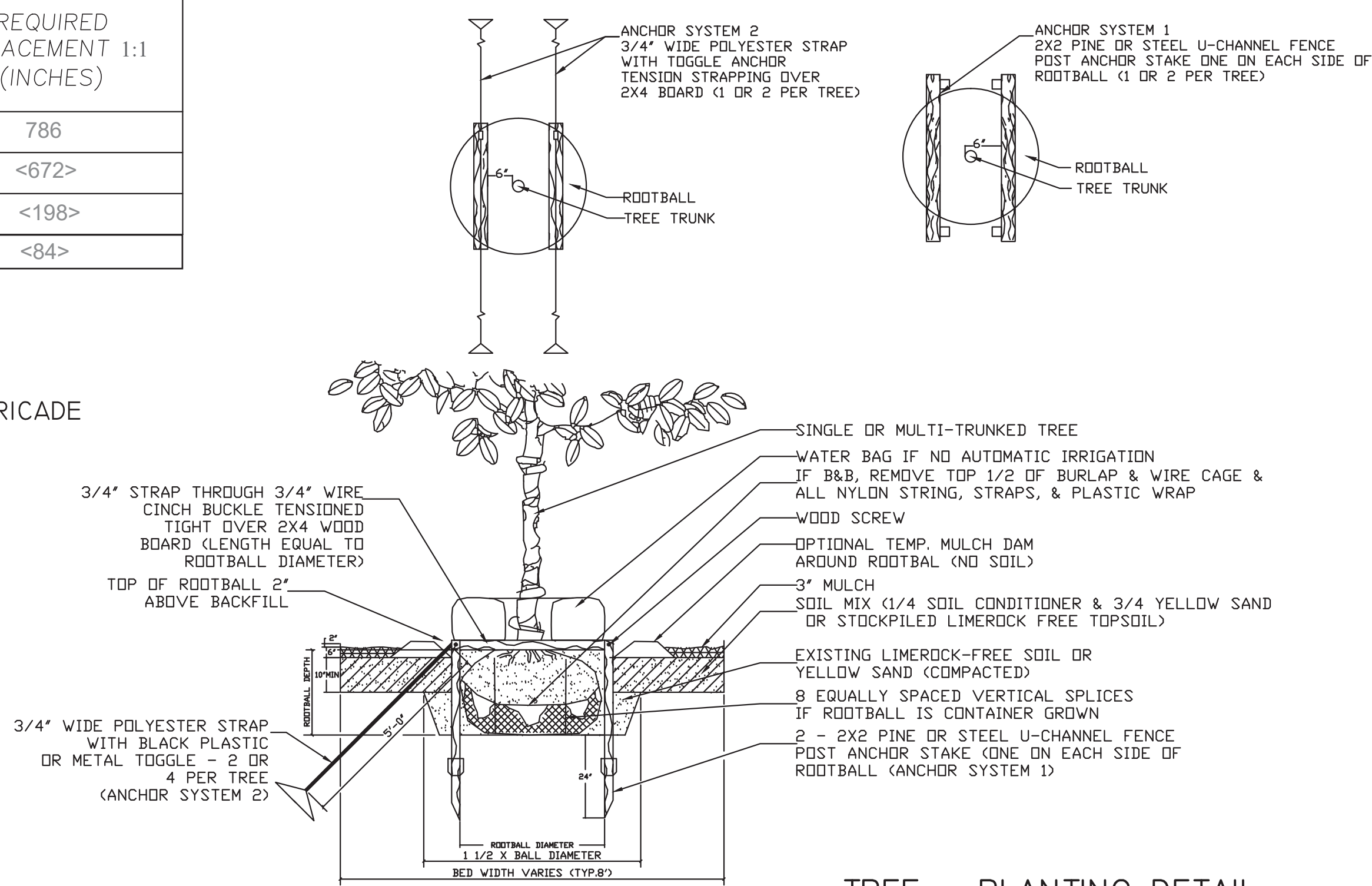
ITEM	TOTAL INCHES	REQUIRED REPLACEMENT 1:1 (INCHES)
TREES GREATER THAN 12"	621	786
TREES PROTECTED (PRESERVED)	456	<672>
TREES PLANTED	198	<198>
NET REQUIREMENT		<84>

LEGEND

- 15" DIA (X) TREE TO BE REMOVED
- 48" DIA (O) TREE TO BE PRESERVED W/ BARRICADE



SHRUB PLANTING DETAIL
 NOT TO SCALE



TREE PLANTING DETAIL
 NOT TO SCALE

- The LANDSCAPE CONTRACTOR is responsible for verifying project site conditions and all quantities indicated on these plans before commencing any work. LANDSCAPE CONTRACTOR shall notify the LANDSCAPE ARCHITECT if soil conditions are poorly drained to determine if substitution of materials is necessary.
- Soil tests shall be provided to evaluate various areas of the landscape (especially the parking lot islands) for pH, available nutrients, phosphorus content, bulk density, etc. This will serve to ensure proper plant selection according to prevailing soil conditions, what lime/sulphur applications are needed (if any) and long-term survival of plant material.
- All plant material shall be Florida Grade No. 1 or better nursery grown in accordance to Florida Grades and Standards handbook.
- All plant material shall be container grown or B&B. B&B materials shall be "hardened off" root pruned during field production and shall be dug at least several weeks before planting is performed.
- Plants shall be sound, healthy and vigorous, well branched and densely foliated when in leaf. They shall be free of disease, insects, eggs or larvae and shall have healthy, well developed root systems. They shall be free from physical damage or adverse conditions that would prevent thriving growth.
- All plants shall conform to the varieties indicated in the plant list.
- Substitution of plant materials will not be permitted unless authorized in writing by the LANDSCAPE ARCHITECT. If proof is submitted that any plant specified is not obtainable, a proposal will be considered for use of the nearest equivalent size or variety with corresponding adjustment of contract price.
- Plant material locations and bed outlines shall be staked or flagged on site by the CONTRACTOR and shall be adjusted if required to fit actual as-built conditions on site and approved by the owner or owners representative.
- All proposed tree planting locations shall be staked or flagged before installation by the LANDSCAPE ARCHITECT and approved by the owner or owners representative.
- The CONTRACTOR shall estimate the depth of the planting hole by measuring the distance between the point where the topmost root emerges from the trunk and the bottom of the root ball. The planting hole shall be slightly shallower than this distance. No more than 2 to 3 inches of the root ball needs to be above the soil unless the site is poorly drained. Poorly drained soil requires planting depths even or higher. Planting holes dug too deep are required to have soil added to the bottom and loosely compacted. If planting holes should fill with water as it is dug, position the bottom of the root ball above the water and mound soil to cover the sides of the ball. The hole shall be at least 1.5 times the diameter of the root ball. Wider holes shall be used for compacted soil and wet sites.
- The soil shall be freshly tilled and large clods of soil broken up. The growing medium shall be settled and firm at the time of herbicide application. Herbicides may be mechanically incorporated by mixing into top layer at a depth of 1-3 inches.
- All backfill ground plant material shall be worked firmly by slicing a shovel down into the backfill 20 to 30 times around the tree as you add backfill soil. Large clumps shall be broken up. Do not pack the backfill. Only step firmly on backfill soil to stabilize the root ball. The top of the root ball shall remain 1 inch (small trees) to 3 inches (large trees) or approximately 10% above grade. Do not over-pack the loosened soil when wet. Add 10 to 20 gallons of water to the rootball and backfill. Fill in any holes or depressions with backfill soil. Do not attempt to eliminate air pockets by compaction. Water infiltrating the backfill soil will eliminate large air pockets.
- LANDSCAPE CONTRACTOR shall bear final responsibility for proper surface drainage of planted areas. Any discrepancy in the drawings, obstruction on the site, or prior to work done by any other party, which the CONTRACTOR feels precludes establishing proper drainage shall be brought to the attention of the LANDSCAPE ARCHITECT for correction or relief of said responsibility.
- When planting on slopes, set tree so top-most root in the ball on the uphill side is even with the soil. The side of the root ball on the downhill side will be well above the surrounding soil. Soil shall cover the sides of the root ball. Mulch shall cover the edge of the rootball and not piled on top.
- Planting beds shall be cut or edged to form a uniform clean line between beds and lawn areas.
- After all plant material in a plant bed area has been installed and approved, the areas between plants shall be raked to an even grade to conform to pre-mulching finish grades. All planting beds and plant saucers shall then be uniformly covered with a minimum depth of three (3) inches of #2 grade or better of mini pine bark nuggets with a maximum diameter of two (2) inches. Contractor to provide a sample prior to installation.

- Before fertilization a soil and/or foliar nutrient analysis shall be performed to determine whether phosphorus fertilizer with 30% slow release nitrogen will be required. All planting bed areas shall be fertilized approximately 4-6 weeks after installation.
- Plant material soil shall be "native" soil that was removed from the planting hole. If soil is badly contaminated, good quality soil shall be used as replacement after contaminated soil has been completely removed from planting area.
- After sodding is completed, the entire side areas shall be watered by hand or irrigation system each day for two weeks. After approximately one month of installation, sodded areas shall then be top dressed with a 15-0-15 commercial slow-release fertilizer at a rate of 6.67 pounds per 1,000 square feet of area in an evenly broad-case pattern.
- The LANDSCAPE CONTRACTOR is responsible for all fine grading preparation for planting. Apply pre-emergent to all beds prior to planting.
- Rough grades will be established by the owners general contractor at approximately 3 inches below curbs, sidewalks, landscape amenities, mowing strips and abutments. All materials shall be a minimum 30" from buildings or walks.
- CONTRACTOR shall coordinate construction of planting areas with installation of irrigation system.
- Where seeding may be required on the plans, germination rate shall be the maximum percentage required for the variety specified at the rate of application specified.
- Sod areas shall be SPECIFIED Grass. Grass for sodding shall be freshly cut in squares one foot wide by two feet long. Sod shall be healthy, free of insects and weeds, in naturally flourishing conditions. Dry, brown and unrefresh sod will be rejected.
- Sod shall be laid end to end and side to side in a staggered line to form a uniform layer. All uneven edges shall be squarely trimmed to allow close and firm fitting of each piece.
- After sodding is completed, the entire sod areas shall be watered by hand or irrigation system each day for two weeks. Sodded areas shall then be top dressed with a commercial fertilizer as directed herein at the rate of 12 pounds per 1000 square feet of area in an evenly broad case pattern.
- The LANDSCAPE CONTRACTOR is responsible for fully maintaining all plant material on site during and before planting, until the work in accepted by the LANDSCAPE ARCHITECT and/or owner. The LANDSCAPE CONTRACTOR is responsible for removing tree stakes after tree is established.
- All plants shall be guaranteed by the LANDSCAPE CONTRACTOR to be healthy plants and in flourishing condition of active growth for ninety (90) days from final inspection and acceptance. All trees shall be guaranteed an additional one year from final inspection and acceptance.
- The LANDSCAPE ARCHITECT, owner or owners representative shall have the right to reject any and all work which in his opinion does not meet with the requirements of the specifications at any stage of the project operation.
- In general, the work shall proceed as rapidly as the site becomes available. Keep all areas of work clean, neat, and orderly at all times.
- There will be special care to all existing trees to be retained on site to avoid construction damage.
- An automatic irrigation system is to be provided and a shop drawing of the layout and design must be submitted to the governmental agency, for review and approval, prior to installation.
- Irrigation system shall be fully automatic, providing 100% coverage to all planting areas, with all pop up heads in lawn area.
- Irrigation station shall be set where there will be no mixing of shrub and lawn areas, fixed spray heads with gear driven heads or impacts. Shrub risers shall be minimum 2.5' from eop and all heads minimum 2' from buildings.
- A double check backflow prevention (or approved equal); equal to a DCA-100; to be mounted in a rectangular valve box (12"x 10") on the service side of the meter and immediately adjacent to the water meter.
- After the landscape plan is approved by the governmental agency any subsequent changes must be resubmitted for review and approval.
- Shade trees shall be planted minimum 5' from EOP and 15' from OHE.
- Do not plant trees below Normal Water Line (NWL) see civil drawings. Sod all 4:1 or greater slopes. Seed all other disturbed areas.

prepared by:
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 Telephone (904) 398 7888

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CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WWTF
 Sheet Title
 Clay County, Florida

JOB No. 19118
 SHEET No.

L2.3

UNDERGROUND IRRIGATION SPECIFICATIONS

1.0 GENERAL

- 1.1 SUMMARY: Includes but not limited to:
 - A. Furnishing and installing sprinkler system as described in Contract Documents complete with accessories necessary for proper functioning.
- 1.2 SYSTEM DESCRIPTION:
 - A. Design Requirements:
 1. Layout of Irrigation Heads:
 - a. Location of heads shown on Drawings is approximate. Actual placement may vary slightly as is required to achieve full, even coverage without spraying onto buildings, sidewalks, fences, etc.
- 1.3 QUALITY ASSURANCE:
 - A. Regulatory Requirements:
 1. Work and materials shall be in accordance with latest rules and regulations, and other applicable state or local laws. Nothing in Contract Documents is to be construed to permit work not conforming to these codes.
 - B. Pre-Installation Conference:
 1. Meet with Owner and Landscape Architect to discuss and clarify all aspects of job requirements prior to commencing work of this Section.
 - C. System Adjustments:
 1. Minor adjustments in system will be permitted to avoid existing fixed obstructions.
 2. Mainline, laterals, and valves are shown for clarity purposes only. All irrigation equipment to be with landscape area. Mainline, laterals and valves to be installed as far away from existing and new specimen trees as possible.
 - D. Documentation and submittal of actual water supply performance prior to commencing installation.
- 1.4 SUBMITTALS:
 - A. Record Drawings:
 1. Prepare an accurate as-built drawing as installation proceeds to be submitted prior to final inspection. Drawing shall include:
 - a. Detail and dimension changes made during construction.
 - b. Significant details and dimensions not shown in original Bidding Documents.
 2. Maintain, at job site, one copy of Contract Documents (as defined in General Conditions) and relevant shop drawings.
 3. Clearly mark each document "PROJECT RECORD COPY" and maintain in good condition for use of the Landscape Architect and Owner.
 4. As-built drawing shall be clearly drawn.
 5. Submit product literature for all sprinklers, valves, pipe, wire, wire connectors and controller.
 6. Final payment for system will not be authorized until accurate and complete submittals are delivered to the Landscape Architect.
 - B. Instruction Manual:
 1. Provide instruction manual which lists complete instructions for system operation and maintenance.
- 1.5 PRODUCT STORAGE:
 - A. During construction and storage, protect materials from damage and prolonged exposure to sunlight.
- 1.6 WARRANTY:
 - A. Standard one (1) year warranty stipulated in General Conditions shall include:
 1. Completed system including parts and labor.
 2. Filling and repairing depressions and replacing plantings due to settlement of irrigation trenches for one (1) year following final acceptance.
 3. System adjustment to supply proper coverage to areas to receive water.
- 1.7 MAINTENANCE:
 - A. Extra Materials:
 1. In addition to installed system, furnish Owner with the following items at close-out:
 - a. Two sprinkler head bodies of each size and type.
 - b. Two nozzles for each size and type.
 - c. Two adjusting keys for each sprinkler head cover type.

- B. Installation of Plastic Pipe:
 1. Install plastic pipe in a manner to provide for expansion and contraction as recommended by Manufacturer.
 2. Unless otherwise indicated on Drawings, install main lines with a minimum cover of eighteen (18") inches based on finish grade. Install lateral lines with a minimum cover of twelve (12") inches based on finish grade.
 3. Locate no sprinkler head closer than twelve (12") inches from building foundation. Heads immediately adjacent to mowing strips, walks or curbs shall be one (1") inch below top of mowing strip, walk or curb and have a minimum of one (1") inch clearance between head and mowing strip, walk or curb.
 4. Drawings show arrangement of piping. Should local conditions necessitate rearrangement, obtain approval of Landscape Architect prior to proceeding with work.
 5. Cut plastic pipe square. Remove burrs at cut ends prior to installation so unobstructed flow will result.
 6. Make solvent weld joints in the following manner:
 - a. Clean mating pipe and fitting with clean, dry cloth and apply one (1) coat of P-70 primer to each.
 - b. Apply uniform coat of 711 solvent to outside of pipe.
 - c. Apply solvent to fitting in similar manner.
 - d. Rubbing a light coat of solvent to pipe and quickly insert into fitting.
 - e. Give pipe or fitting a quarter turn to insure even distribution of solvent and make sure pipe is inserted to full depth of fitting socket.
 - f. Hold in position for fifteen (15) seconds minimum or long enough to secure joint.
 - g. Wipe off solvent appearing on outer shoulder of fitting.
 - h. Do not use an excessive amount of solvent thereby causing an obstruction to form on the inside of pipe.
 7. Allow joints to set at least 24 hours before applying pressure to PVC pipe.
7. Tape threaded connection with teflon tape.
- C. Control Valves and Controller:
 1. Install controller, control wires, and valves in accordance with Manufacturer's recommendations and according to applicable electrical code.
 2. Install valves in plastic boxes with reinforced heavy duty plastic covers. Locate valve box tops at finish grade.
 3. Install remote control valves in valve boxes positioned over valve so all parts of valve can be reached for service. Set cover of valve box even with finish grade.
 4. Install all valve boxes over nine (9") inches of gravel for drainage.
- D. Sprinkler Heads:
 1. Prior to the installation of sprinkler heads, open control valves and use full head of water to flush out system.
 2. Set sprinkler heads perpendicular to finish grade.
 3. Set lawn sprinkler heads adjacent to existing walks, curbs, and other paved areas to grade.
- E. Drip-line:
 1. Install RD-12-NP drip zone indicator head next to each control valve with closed nozzle.
 2. Stake drip-line every eight feet along drip-line laterals.

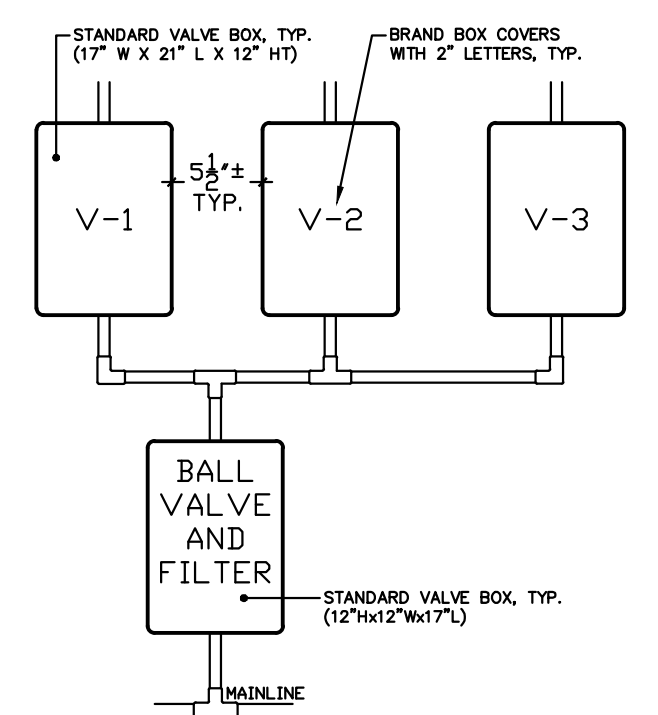
2.0 PRODUCTS

- 2.1 PIPE, PIPE FITTINGS, AND CONNECTIONS:
 - A. Pipe shall be continuously and permanently marked with Manufacturer's name, size, schedule, type, and working pressure.
 - B. Pipe:
 1. Pressure Lines: as indicated on plans.
 2. Lateral Lines: as indicated on plans.
 3. Risers: sch. 80 PVC, gray
 - C. Fittings:
 1. Schedule 40 PVC.
 - D. Steeving:
 1. Schedule 40 PVC.
- 2.2 SPRINKLER HEADS:
 - A. Conform to requirements shown on Drawings as to type, radius of throw, pressure, and discharge.
- 2.3 AUTOMATIC SPRINKLER SYSTEM:
 - A. Control valves shall be of size and type indicated on Drawings.
 - B. Control wire shall be UL listed, color coded copper conductor direct burial size 14. Use 3M-DBY waterproof wire connectors at splices and locate all splices within valve boxes. Use white or gray color for common wire and other colors for all other wire.
- 2.4 VALVES:
 - A. Electric Valves:
 1. Make and model shown on Drawings.
 - B. Automatic Controller:
 1. Make and model shown on Drawings.
- 2.5 VALVE ACCESSORIES:
 - A. Valve Boxes:
 1. Ametek or Brooks heavy duty valve box with locking lid or Landscape Architect approved equal.
 2. Do not install more than one (1) valve in a single box.
 3. Valve boxes shall be large enough for easy removal or maintenance of valves.

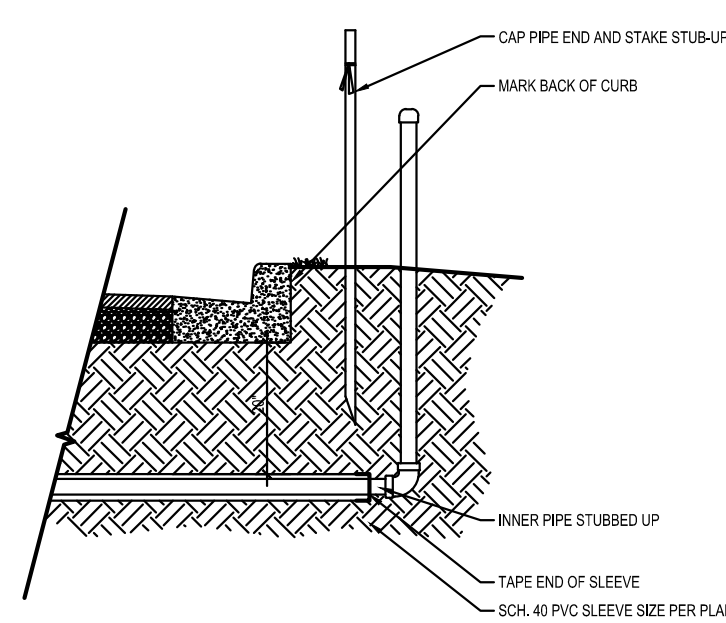
3.0 EXECUTION

- 3.1 PREPARATION:
 - A. Protection:
 1. Work of others damaged by this Section during course of its work shall be replaced or repaired by original installer at this Section's expense.
- 3.2 INSTALLATION:
 - A. Trenching and Backfilling:
 1. Over-excavate trenches by two (2") inches and bring back to indicated depth by filling with fine, rock-free soil or sand.
 2. Cover pipe both top and sides with two (2") inches of material specified in paragraph above. In no case shall there be less than two (2") inches of rock-free soil or sand surrounding pipe.

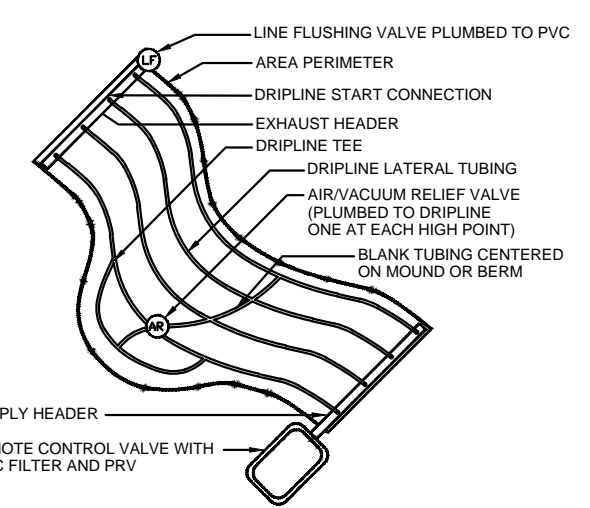
NOTES:
 VALVE GROUPINGS SHALL NOT HAVE MORE THAN 3 VALVE BOXES AND 1 GATE VALVE BOX.
 PLASTIC TAGS SHALL BE AFFIXED TO EACH VALVE WITH THE ZONE NUMBER AND ZONE TYPE (TURF, SHRUB, ETC) PREPRINTED OR LABELED WITH INDELIBLE INK.



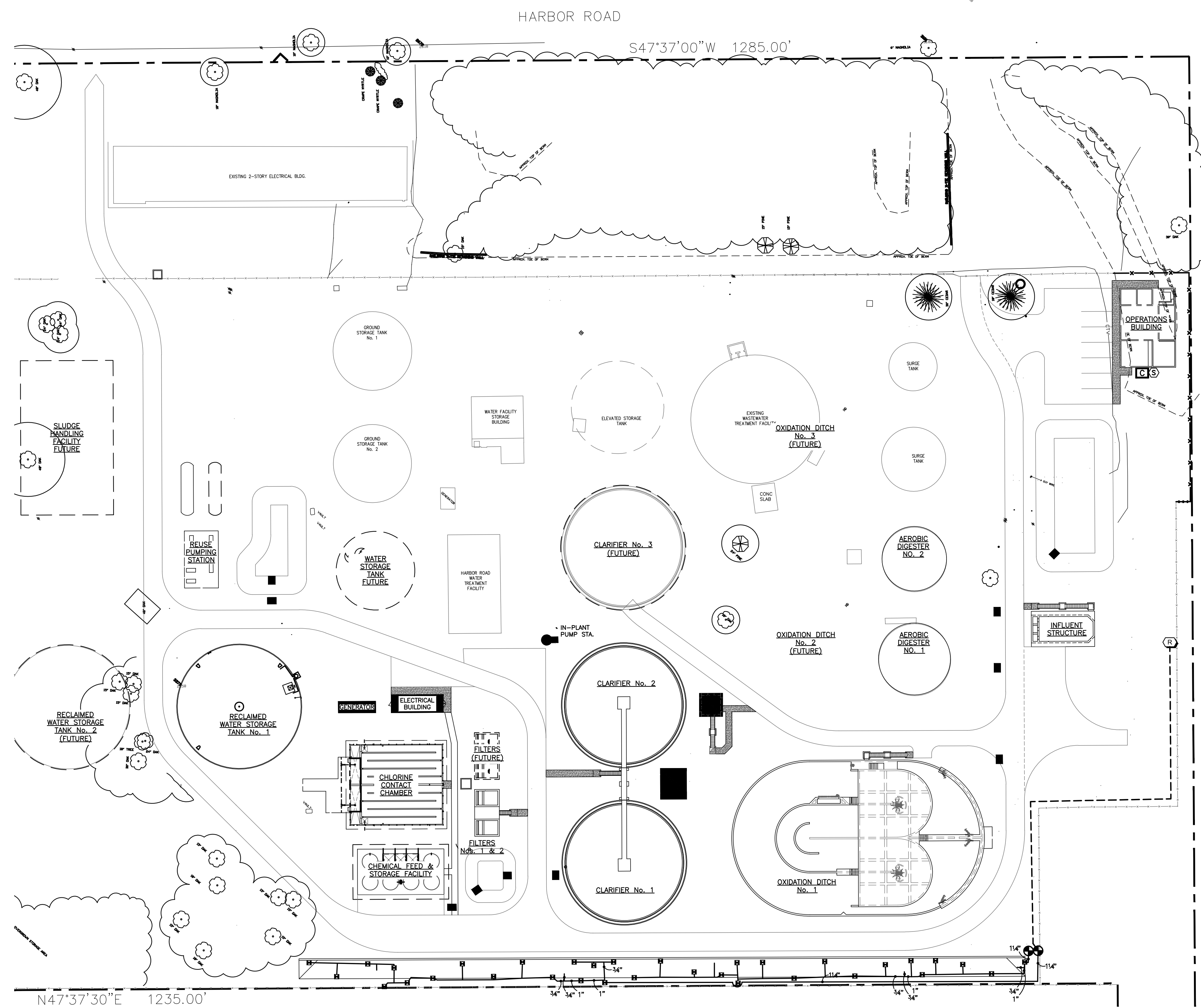
VALVE BOX DETAIL
 SCALE: NTS



SLEEVEING ROUGH-IN DETAIL
 SCALE: NTS



IRREGULAR AREA DIPLINE LAYOUT
 SCALE: NTS



IRRIGATION SCHEDULE

SYMBOL	MANUFACTURER/MODEL	QTY	ARC	PSI	GPM	RADIUS	PRECIP.
■	Two Rain Bird 1401 bubbler	33x2	360	30	0.50	3'	NA
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PRECIP.				
▨	Area to Receive Drip-line Rain Bird XFD-09-1.2 (1.6) XFD On-Surface Pressure Compensating Landscape Drip-line. 0.9GPH emitters at 12.0" O.C. Install drip-line on both sides of shrubs.	1,300 s.f.	1.1"/hr				
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY					
●	Rain Bird 100HVF in 10" Purple Valve Box. Install Rain Bird 1" PVC ball valve and PRB-QKCHK-100 in Jumbo Purple Valve Box.	2					
C	Rain Bird ESP4Me 4 Station Controller	1					
S	Rain Bird R5D-BEX Rain Sensor	1					
R	Reclaim Water Meter	1					
—	Irrigation Lateral Line: PVC Class 200 Purple	1,000 l.f.					
---	Irrigation Mainline: PVC 1-1/4" Class 200 Purple	300 l.f.					

IRRIGATION CONTRACTOR SHALL BE RESPONSIBLE FOR THEIR OWN TAKE OFF

Valve Callout
 Valve Number
 Valve Flow
 Valve Size

WATERING SCHEDULE

ZONE	GPM	WATER USE	PRECIP. RATE	MAR (2ND SUNDAY) - NOV (1ST SUNDAY) -	
				NDV < 1ST SUNDAY) DAYS - MINUTES	MAR (2ND SUNDAY) DAYS - MINUTES
1	17.0	LOW	1.1"/hr	TUES / F - 40 MIN	TUES - 40 MIN
2	15.0	LOW	1.1"/hr	TUES / F - 40 MIN	TUES - 40 MIN

ALL IRRIGATION IS LOW WATER USE
 NO WATERING TO TAKE PLACE BETWEEN THE HOURS OF 10:00AM - 4:00PM

Crawford Irrigation Design, Inc.
 IRRIGATION DESIGN AND CONSULTATION SERVICES
 Edgewater, Florida EMAIL: cid@atlantic.net
 Tel: (386) 424-0027

SCALE: 1" = 30'

DESIGN: JOW
 DRAWN: DHM
 PROJ. MGR.: JOW
 DATE: 4/15/18
 1" = 1" INCH

MITTAUER & ASSOCIATES, INC.
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CITY OF GREEN COVE SPRINGS
 DEP SRF Harbor Road WWTF
 IRRIGATION PLAN
 Clay County, Florida

JOB No. 19118
 SHEET No. L3.3

REVISION DESCRIPTION
 NO DATE BY