FRIENDS OF ST. SEBASTIAN RIVER
BOARD OF DIRECTORS' MEETING AGENDA
TUESDAY, MARCH 14, 2023 – 3pm, Ryall house/South Prong Preserve

CALL TO ORDER/ATTENDANCE

CALL FOR ADDITIONS/DELETIONS TO THE AGENDA

MINUTES FROM THE PREVIOUS MEETING(S) – p. 2

TREASURER'S REPORT – pp. 3-10

PRESIDENT'S REPORT – Ryall house update, Graves Bros. annexation

UNFINISHED BUSINESS

NEW BUSINESS
1) American Rivers Art posters – pp. 11-14
2) IR County Adopt-a-Road Program – p. 15

COMMITTEE REPORTS
Advocacy – Herrmann
SJRWMD permits – Sebastian River Middle School addition #40697
ACOE permits – none
Blue-Green Algae Blue Cypress Lake, WPTV report – pp. 16-18
New City maint. building at Sebastian airport – concern for drainage system, SJRWMD permit #68172-31 – pp. 19-60
Education/Outreach – Bolton/Stephen
St. Sebastian River PaddleFest – About Kayaks to donate 100% of rental fees
City of Sebastian Earth/Arbor Day festival – we are registered, need volunteers, Apr. 22, 8am to 4:30pm.
Financial – Greene, notice of Gen. Liability renewal in March, $773
Governance – Herrmann, election of Officers
Information – Glover, website stats – "Donate" added to each page, definition of "slough" added to Our River page
Membership – Herrmann – new members since Jan. - none
Publicity – Penny Phillips – Facebook stats, no update
Volunteer – vacant

Adjournment

ANNOUNCEMENTS
1) Next BOD meeting – Apr 11, 3pm, Ryall house
2) Ryall property/South Prong Preserve Open House, TBD
3) The Emerson Center E-Series, Jan 10-Mar 28, https://theemersoncenter.com/e-series-events
4) ELC LagoonFest, April 1, 10am to 3pm, $100 fee unless providing a kids' activity, plus 10% of sales
5) Sebastian Earth/Arbor Day, Riverview Park, Apr. 22, 9am-4pm
6) ORCA Data Jam Showcase, Riverhouse, Vero Beach, May 11, 4-6pm

Friends of St. Sebastian River
Board of Directors' Meeting, Tuesday, February 14, 2023
10 AM, Ryall House, South Prong Preserve

Present: President Tim Glover, VP Buzz Herrmann, Treasurer Terry Greene, Diana Bolton, Bob Stephen, Bruce Zingman. Excused: Carol Lynn Peterson. Advisory Director Karen Greb also attended.

President Glover called the meeting to order at 10 AM. Minutes from the Jan. 10, 2023 meeting: motion: Herrmann to approve. Second: Bolton. Passed unanimously.

Treasurer's report: motion: Greene to accept the Treasurer's report. Second: Bolton. Passed unanimously.

President's Report: Glover said he has reminded the County to fix the railing. Carol Lynn is home from the hospital. Herrmann to take minutes. Earthjustice: no legal path for potential use of herbicides in Sebastian. Tim to contact Allen Stewart regarding suction dredge, put together plan to improve treatment. Asbestos in sea walls—Cox. Glover spoke with Blake Johnston re: his failed seawall.

New Business:
* Roseland Community Association membership, Roseland Women's Club membership: Motion: Herrmann to donate $50 to each organization. Second: Stephen. Passed unanimously.

Committee Reports:
Advocacy
* SJRWMO: River Oaks exotic plant removal #93332-5
* Cypress Bay Farms: Waterstone Phase #2 #149177-8
* City of Sebastian: Gardenia St. drainage improvement #191141-1 (east of Babcock)
*Ashley Novander attorney
*Stenographer: Motion: Herrmann to pay FSSR share of for the services of taking minutes for the City Council meeting of Feb. 8th. Second: Greene Passed unanimously.
* Blue Green Algae updates – Glover will only include in agenda if there is any locally observed by the state.

Education/Outreach
*Goodrich Island – Glover trying to get more info from FL Audubon and presentation for May meeting
*Tree Lady Richard Baker would like updated/stronger tree ordinance for Sebastian
*Live Oak Permit
*Beth Powell would like to give Conservation Lands update presentation, perhaps fall meeting.
*Diana neotoxin NOAA, use of donated microscope, need partner
*New City of Sebastian Maintenance Garage at Airport—concern for drainage system….no SJRWMO permit since 2002 located…need to check with City of Sebastian Public Works
*FSSR March 28th General Meeting: Dr. Grant Gilmore on petition to EPA for "endangered" listing of SSR fish species… (Invite City of Sebastian Environmental person, notify Fishing Club, Pelican Island Audubon, newspapers, flyers and Facebook) When purchasing plates, cups, utensils for special events etc. please try to find recycled content items and reuse plastic utensils.
*St. Sebastian River Paddle Fest—April 29th, 9AM-2PM. $25 entry fee/ Woodys BBQ lunch available for an additional $15 or bring your own lunch.
*Outreach: St. Sebastian River sign, CR512, US#1 research (Bolton)

Financial: Notice of General Liability renewal is in March: $773 (maybe check for a lower premium—Dan Lamson of the IRNA)
Governance: election of officers: Motion by Herrmann to elect the standing officers for another term. Second: Bolton. Passed unanimously .

Sign in Sheet for next General meeting (make one)

Adjourment: Motion: Herrmann to adjourn. Second: Bolton. Meeting adjourned at 11:40 am.

Respectfully submitted,
Buzz Herrmann, Secretary pro tem

Friends of St. Sebastian River
Profit & Loss
February 2023

	Feb 23
Ordinary Income/Expense	
Income	
43400 · Direct Public Support	
43410 · Corporate Contributions	6.56
43440 · Gifts in Kind - Goods	23.00
43450 · Individ, Business Contributions	15.00
Total 43400 · Direct Public Support	44.56
47200 · Program Income	
47230 · Membership Dues	1,231.01
Total 47200 · Program Income	1,231.01
Total Income	1,275.57
Gross Profit	1,275.57
Expense	
60900 · Business Expenses	
60920 · Business Registration Fees	61.25
Total 60900 · Business Expenses	61.25
62800 · Facilities and Equipment	
62840 · Equip Rental and Maintenance	39.55
62890 · Rent, Parking, Utilities	-167.57
Total 62800 · Facilities and Equipment	-128.02
65000 · Operations	
65050 · Telephone, Telecommunications	9.16
65060 · Merchant Service Fee-PayPal	1.80
Total 65000 · Operations	10.96
65100 · Other Types of Expenses	
65160 · Other Costs	30.18
Total 65100 · Other Types of Expenses	30.18
Total Expense	-25.63
Net Ordinary Income	1,301.20
Net Income	**1,301.20**

Friends of St. Sebastian River
Balance Sheet
As of February 28, 2023

	Feb 28, 23
ASSETS	
Current Assets	
Checking/Savings	
10000 · Checking	
10020 · Without Donor Restrictions	9,110.41
10030 · With Donor Restirctions	
10031 · Geo Schum Memorial Fd	500.00
10033 · Archie Laird Memorial	585.00
10034 · Grants	422.54
Total 10030 · With Donor Restirctions	1,507.54
Total 10000 · Checking	10,617.95
10100 · Petty Cash	45.00
10200 · PayPal	620.41
Total Checking/Savings	11,283.36
Other Current Assets	
10300 · Gift Card	26.26
12000 · Undeposited Funds	280.00
12100 · Inventory Asset	
12110 · Puppets	284.50
12120 · Clothing	137.05
12130 · Miscellanoous Inventory	4.82
12140 · Hats	116.64
12100 · Inventory Asset - Other	974.01
Total 12100 · Inventory Asset	1,517.02
Total Other Current Assets	1,823.28
Total Current Assets	13,106.64
TOTAL ASSETS	**13,106.64**
LIABILITIES & EQUITY	
Liabilities	
Current Liabilities	
Accounts Payable	
20000 · Accounts Payable	-420.44
Total Accounts Payable	-420.44
Total Current Liabilities	-420.44
Total Liabilities	-420.44
Equity	
30000 · Opening Balance Equity	316.73
32000 · Unrestricted Net Assets	11,674.89
Net Income	1,535.46
Total Equity	13,527.08
TOTAL LIABILITIES & EQUITY	**13,106.64**

Friends of St. Sebastian River
Reconciliation Detail
10000 · Checking, Period Ending 02/28/2023

Type	Date	Num	Name	Clr	Amount	Balance
Beginning Balance						10,308.71
Cleared Transactions						
Checks and Payments - 8 items						
Check	1/20/2023	1034	Indian River North ...	X	-120.00	-120.00
Check	2/2/2023	DC	Google	X	-3.00	-123.00
Check	2/10/2023	DC	FPL	X	-33.12	-156.12
Check	2/11/2023	DC	Ooma	X	-6.16	-162.28
Check	2/17/2023	DC	Earth Day Shirts	X	-219.75	-382.03
Check	2/20/2023	DC	Home Depot	X	-39.55	-421.58
Check	2/21/2023	DC	FL Dep State	X	-61.25	-482.83
Check	2/22/2023			X	-12.00	-494.83
Total Checks and Payments					-494.83	-494.83
Deposits and Credits - 2 items						
Sales Receipt	2/10/2023	906	AmazonSmile	X	6.56	6.56
Deposit	2/17/2023			X	805.00	811.56
Total Deposits and Credits					811.56	811.56
Total Cleared Transactions					316.73	316.73
Cleared Balance					316.73	10,625.44
Uncleared Transactions						
Checks and Payments - 1 item						
Check	1/20/2023	1033	Carol-Lynn Peterson		-7.49	-7.49
Total Checks and Payments					-7.49	-7.49
Total Uncleared Transactions					-7.49	-7.49
Register Balance as of 02/28/2023					309.24	10,617.95
New Transactions						
Checks and Payments - 1 item						
Check	3/2/2023	DC	Google		-3.00	-3.00
Total Checks and Payments					-3.00	-3.00
Total New Transactions					-3.00	-3.00
Ending Balance					**306.24**	**10,614.95**

Initiate Business Checking SM

FRIENDS OF ST. SEBASTIAN RIVER, INC.
SEBASTIAN RIVER INC
PO BOX 284
ROSELAND FL 32957-0284

Questions?

Available by phone Mon-Sat 7:00am-11:00pm Eastern Time, Sun 9:00am-10:00pm Eastern Time:
We accept all relay calls, including 711
1-800-CALL-WELLS (1-800-225-5935)

En español: 1-877-337-7454

Online: wellsfargo.com/biz

Write: Wells Fargo Bank, N.A. (287)
P.O. Box 6995
Portland, OR 97228-6995

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Visit wellsfargo.com/digitalbusinessresources to explore tours, articles, infographics, and other resources on the topics of money movement, account management and monitoring, security and fraud prevention, and more.

Account options

A check mark in the box indicates you have these convenient services with your account(s). Go to wellsfargo.com/biz or call the number above if you have questions or if you would like to add new services.

Business Online Banking	☑
Online Statements	☑
Business Bill Pay	☐
Business Spending Report	☑
Overdraft Protection	☐

Statement period activity summary

Beginning balance on 2/1	$10,308.71
Deposits/Credits	1,061.56
Withdrawals/Debits	- 744.83
Ending balance on 2/28	**$10,625.44**

Account number: [redacted]

FRIENDS OF ST. SEBASTIAN RIVER, INC.
SEBASTIAN RIVER INC

Florida account terms and conditions apply

For Direct Deposit use
Routing Number (RTN): 063107513

For Wire Transfers use
Routing Number (RTN): 121000248

Overdraft Protection

This account is not currently covered by Overdraft Protection. If you would like more information regarding Overdraft Protection and eligibility requirements please call the number listed on your statement or visit your Wells Fargo branch.

Transaction history

Date	Check Number	Description	Deposits/ Credits	Withdrawals/ Debits	Ending daily balance
2/1	1034	Check		120.00	10,188.71
2/2		Recurring Payment authorized on 02/01 Google LLC Gsuite_ 650-2530000 CA S383032497684829 Card [redacted]		3.00	10,185.71
2/9		Fpl Direct Debit Elec Pymt 02/23 1232872117 Ppda Friends of St. Sebasti		33.12	10,152.59
2/10		Amznaa7lvoja Amazonsmil 230210 4Kv4Y7LIcl4Fe4G Payments.Amazon.Com ID#4Kv4Y7LIcl4Fe4G	6.56		10,159.15
2/13		Recurring Payment authorized on 02/10 Ooma,Inc 888-711-6662 CA S583041709018197 Card [redacted]		6.16	10,152.99
2/17		Deposit Made In A Branch/Store	1,055.00		
2/17		Purchase authorized on 02/16 Earthdayshirts 877-6771837 KY S463048135793772 Card [redacted]		211.80	10,996.19
2/21		Purchase authorized on 02/20 The Home Depot #8545 Sebastian FL P463051735535151 Card [redacted]		39.55	10,956.64
2/22		Cashed/Deposited Item Retn Unpaid Fee		12.00	
2/22		Deposited Item Retn Unpaid - Paper 230222		250.00	
2/22		Purchase authorized on 02/21 Nic*-FL Sunbiz.Org Egov.Com FL S303052599372476 Card [redacted]		61.25	10,633.39
2/24		Purchase authorized on 02/22 Earthdayshirts 877-6771837 KY S463053578017941 Card [redacted]		7.95	10,625.44
Ending balance on 2/28					**10,625.44**
Totals			**$1,061.56**	**$744.83**	

The Ending Daily Balance does not reflect any pending withdrawals or holds on deposited funds that may have been outstanding on your account when your transactions posted. If you had insufficient available funds when a transaction posted, fees may have been assessed.

Summary of checks written *(checks listed are also displayed in the preceding Transaction history)*

Number	Date	Amount
1034	2/1	120.00

Monthly service fee summary

For a complete list of fees and detailed account information, see the disclosures applicable to your account or talk to a banker. Go to wellsfargo.com/feefaq for a link to these documents, and answers to common monthly service fee questions.

Fee period 02/01/2023 - 02/28/2023	Standard monthly service fee $10.00	You paid $0.00

The bank has waived the fee for this fee period.

How to avoid the monthly service fee	Minimum required	This fee period
Have any **ONE** of the following account requirements		
• Average ledger balance	$1,000.00	$10,431.00 ÷
• Minimum daily balance	$500.00	$10,152.59 ÷

C1/C1

Account transaction fees summary

Service charge description	*Units used*	*Units included*	*Excess units*	*Service charge per excess units ($)*	*Total service charge ($)*
Cash Deposited ($)	0	5,000	0	0.0030	0.00
Transactions	26	100	0	0.50	0.00
Total service charges					**$0.00**

IMPORTANT ACCOUNT INFORMATION

NEW YORK CITY CUSTOMERS ONLY -- Pursuant to New York City regulations, we request that you contact us at 1-800-TO WELLS (1-800-869-3557) to share your language preference.

The new year is a great time to make sure your security settings are up to date. Take a few minutes now to update your passwords, ensure we have your current contact information (mobile phone number, email), set up account alerts, and enable biometric sign on for the Wells Fargo Mobile® app. Learn more at www.wellsfargo.com/securitytools.

Statement for February 2023

Friends of St. Sebastian River, Inc.
PO Box 284
32957 Roseland

Balance Summary (2/1/23 - 2/28/23)

	Available beginning	Available ending	Withheld beginning	Withheld ending
USD	431.20	620.41	0.00	0.00

Activity Summary (2/1/23 - 2/28/23)

	USD
Beginning Available Balance	**431.20**
Payments received	191.01
Payments sent	0.00
Withdrawals and Debits	0.00
Deposits and Credits	0.00
Fees	-1.80
Ending Available Balance	**620.41**

The art of rivers

From Aretha Franklin to American Rivers, we talk with Allison Fisher, designer and manager of the Globe Collection and Press at MICA about the rock-n-roll history and grassroots spirit of Baltimore's iconic, nearly 90-year-old music poster press.

By Katy Neusteter | February 6, 2023
Share Share

Art can inspire action! For our 50th anniversary, American Rivers is teaming up with five artists on original works that explore how important healthy rivers are to the future of humanity and nature.

The nation's most iconic poster press Globe Collection and Press at MICA helps us kick off our five-part limited-edition art collection.

Learn more about Globe and visit **AMERICANRIVERS.ORG/STORE** to buy T-shirts, totes, posters, and more featuring this artwork and more from our 50th anniversary collection.

Globe has an incredibly cool history. Tell us about it.

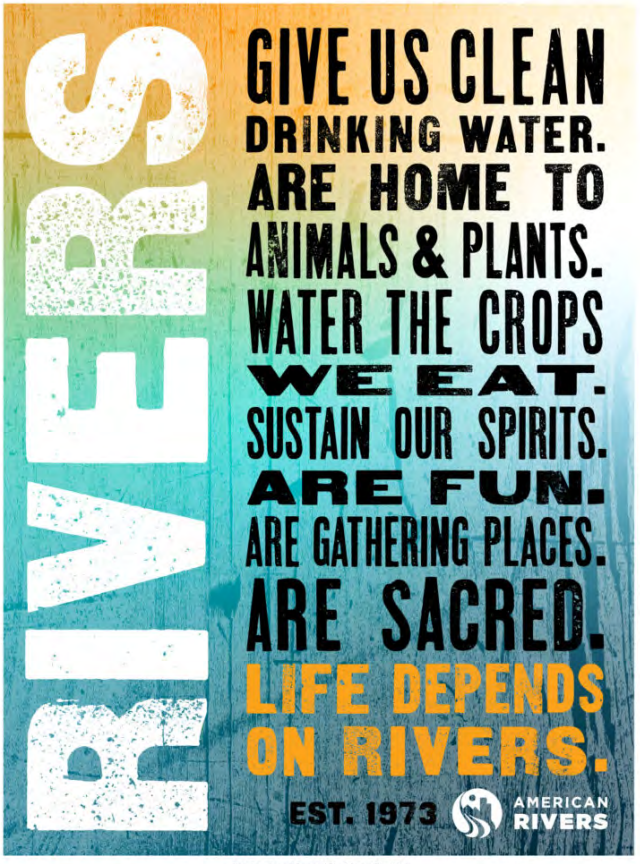
Globe was founded in Baltimore 1929 and started out printing inexpensive posters for everyday people — so fairs, carnivals, boxing, racing, wrestling, big band. But it's real claim to fame was in the 1950s and '60s with R&B and rock-and-roll posters for the likes of James

Brown, Marvin Gaye, Aretha Franklin, Ike and Tina Turner, and B.B. King.

It was using a mixed-media process to produce these super-vibrant posters. Fluorescent backgrounds and bold black type became Globe's trademark style. And its footprint wasn't just Baltimore, it was sending posters everywhere from upstate New York down the Eastern Seaboard and along the Gulf into Texas.

Share

That carried forward into the late '70s to early '80s with go-go music and early rap and hip hop. And it held on until about 2011. When Globe finally closed, there was a community movement of artists and designers, historians, and students that activated to find Globe a new home and keep it in Baltimore, where it's always been. The Maryland Institute College of Art, MICA, stepped up and purchased it when the press was 81 years old. It is one of the largest intact collections of letter-press printing materials of its kind in the country, if not in the world.



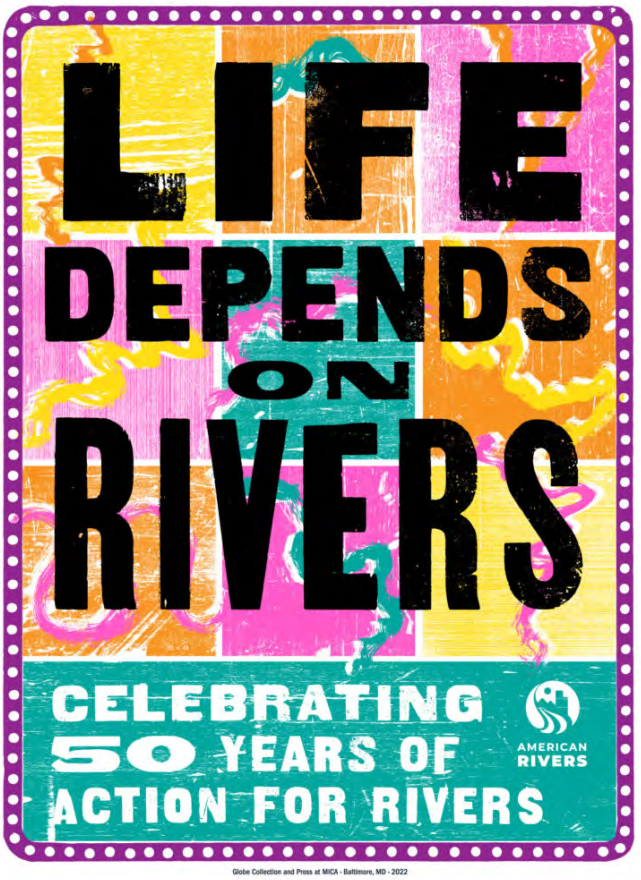
Globe Collection and Press at MICA - Baltimore, MD - 2022

What is Globe up to now?

Now Globe is what we call a working collection. It has three jobs at MICA. We teach with it and pass on the tradition of the letter-press craft. We're also slowly working on archiving the collection so it can be used for research and scholarship. And we also make new work with it. We're using all of the great type and tools and stylings that made Globe famous. MICA has given us a lot of freedom to try a lot of different things. The collection has a really nice balance of commercial work, but we also do a lot of nonpartisan voter civic participation stuff and community-based projects.

Can you describe the process that Globe used to create the posters for American Rivers?

With any project, we always look to our archive materials as a place to start, whether it's posters or wood blocks in our collection. This project with American Rivers was a little bit different because most of the time we design posters that need to be screen printed and letter pressed one at a time. This was a fun one because we didn't have those same constraints. It gave us a lot of room to play with the wood type and the texturings from the collection to build up different layers.



For example, take the poster that says, "Life Depends on Rivers." That is the one that is most classically Globe, with a colored background and black wood-type text on top. We pulled the idea of the background from American Rivers' annual list of America's Most Endangered Rivers®. The background for that poster is made up of wood-type textured graphics of our loose interpretation of what the shape of those endangered rivers look like.

What inspired you about this project?

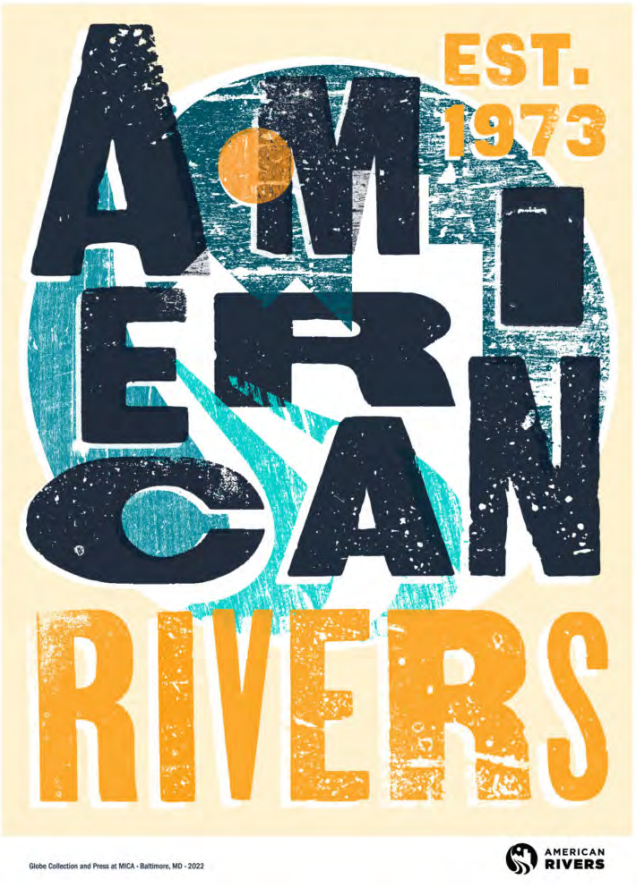
There's a really nice symbiosis of using wood type as the base of these graphics. Because without rivers, trees don't grow. We are kind of coming full circle in the materials that we're using to do this design work — because it wouldn't exist without water in rivers.

I really like design where you are constantly finding more information about it, whether it's subtle moments where two pieces of type

overlap or a color hits or something shifts just a little bit. I like those really quiet moments in design where things sync nicely or in a way you don't necessarily expect them to.

To learn more about our Globe collection, please visit the American Rivers' store.

Share



Volunteer Opportunities

Adopt-A-Road Program

The Adopt-A-Road Program is a litter-reduction campaign designed to remove litter from county roads and improve the quality of the environment. The program establishes a partnership between volunteer groups and the County's Traffic Engineering Division. The program's success has improved the appearance of local roadways throughout the County while reducing the cost of litter removal. The County provides guidance and equipment to foster safe and effective cleanups and the volunteers do the work of gathering the litter along County-designated roads (residential and private roadways are not adoptable). County maintenance crews follow-up by picking up and disposing the collected trash. Volunteer groups contract to "adopt" a one mile stretch of road and commit to performing 4 clean-ups per year within that 1-mile segment. For more information contact the IRC Traffic Engineering (772) 226-1637 or traffic@ircgov.com.

Source:
https://ircgov.com/publicworks/stormwater/volunteer.htm#:~:text=The%20Adopt%2DA%2DRoad%20Program,the%20quality%20of%20the%20environment

Head scientist at Smithsonian in Fort Pierce explains blue-green algae growing in Blue Cypress Lake

Dr. Valerie Paul says growth likely caused by summer temperatures Florida has been experiencing

Health officials in Indian River County have issued a blue-green algae alert for Blue Cypress Lake in Indian River County. Dr. Valerie Paul says there's a reason for it.

By: Kate Hussey

Posted at 7:03 PM, Mar 03, 2023 and last updated 7:03 PM, Mar 03, 2023

VERO BEACH, Fla. — Health officials in Indian River County have issued a **blue-green algae alert for Blue Cypress Lake** in Indian River County. Dr. Valerie Paul, the head scientist at the Smithsonian Marine Station at Fort Pierce, said there's a reason for it.

Paul said blue-green algae is a type of bacteria that comes in many forms. It commonly grows in fresh water across the state of Florida.

"They can produce all sorts of toxins, and one of the more common ones is a whole group of toxins call microcystins," Paul said. "This time of year is normally a little early for them, but look at how warm it's been. Blue-green algae like nice warm temperatures, and we've had a nice warm February."

The sample level collected by the Florida Department of Environmental Protection Monday showed a microcystin level of 0.25. The EPA said microcystin levels above 8 micrograms per liter (Parts Per Billion) and cylindrospermopsin above 15 micrograms per liter can be harmful to people swimming or participating in other activities in or on the water, yet Paul said it's still dangerous.

"I would say if there's a level there, there's a concern," Paul said, adding that the level will likely only increase. "If they're just starting to detect the bloom, then it's probably only on the upswing."

John Bryja/WPTV

The summer-like temperatures have contributed to the blue-green algae found in Blue Cypress Lake, March 3, 2023, in Indian River County, Fla.

Paul said it's hard to say what the outlook for summer would be, but with algae blooming so early in the year, the outlook could be grim for boaters, fishermen and participants of outdoor recreation.

Section A:
General Information for All Activities

Part 1: Name, Application Type, Location, and Description of Activity

A. Name of project, including phase if applicable: **City of Sebastian - Public Works Complex**

B. This is for (check all that apply):

☒ Construction or operation of **new** works, activities and/ or a stormwater management system

☐ **Conceptual Approval** of proposed works, activities and/ or a stormwater management system

☐ Modification or Alteration of **existing** works activities and / or a stormwater management system. Provide the existing DEP or WMD permit #, if known: _____ Note: Minor modifications do not require completion of this form, and may instead be requested by letter in accordance with section 6.2 of Applicant's Handbook Volume I.

☐ **Maintenance or repair** of works, activities and/ or stormwater management system previously permitted by the DEP or WMD. Provide existing permit #, if known: _____

☐ Abandonment or removal of works, activities and/ or stormwater management system
Provide existing DEP or WMD permit #, if known: _____

☐ Operation of an **existing unpermitted** work, activity, and/or stormwater management system.

☐ Construction of additional phases of a permitted work, activity, or system.

Provide the existing DEP or WMD permit #, if known: _____

☒ A State 404 Program authorization:

☐ Exemption ☐ General Permit ☒ Individual Permit

If requesting an Exemption or General Permit provide Rule #, if known:

☐ **By checking this box**, I hereby voluntarily waive, in accordance with Rule 62-330.090(8), F.A.C., the agency action deadlines in section 5.5.3 of Volume I in the event my project also requires a State 404 Program authorization (other than an exemption) under Chapter 62-331, F.A.C., and request that the agency actions for the ERP and State 404 Program authorizations be issued at the same time. (This is strongly recommended to ensure consistency, and to reduce the potential need for project modifications to resolve inconsistencies that may occur when the agency actions are issued at different times.) If this box is checked and the Agency(ies) determines that no State 404 Program authorization is required, the Agency will continue to abide by section 5.5.3 of Volume I.

C. **List the type of activities proposed. Check all that apply**, **and provide the supplemental information requested in each of the referenced application sections.** Please also reference Applicant's Handbooks I and II for the type of information that may be needed.

☐ Activities associated with one single-family residence, duplex, triplex, or quadruplex that do not qualify for an exemption or a Noticed General Permit: **Provide the information requested in Section B. Do not complete Section C.**

☒ Activities within wetlands or surface waters, or within 25 feet of a wetland or surface water, (not including the activities associated with an individual single-family residence). *Examples include dredging, filling, outfall structures, docks, piers, over-water structures, shoreline stabilization, mitigation, reclamation, restoration/ enhancement.* **Provide the information requested in Section C.**

☐ Activities within navigable or flowing surface waters such as a multi-slip dock or marina, dry storage facility, dredging, bridge, breakwaters, reefs, or other offshore structures: **In addition to Section C, also provide the information requested in Section D.**

☐ Activities that are (or may be) located within, on or over state-owned submerged lands (See Chapter 18-21, F.A.C. https://www.flrules.org/gateway/ChapterHome.asp?Chapter=18-21): **In addition to Section B or C, also provide the information requested in Section F**

☒ Construction or alteration of a stormwater management system serving residential, commercial, transportation, industrial, agricultural, or other land uses, or a solid waste facility (excluding mines that are regulated by DEP). **Provide the information requested in Section E.**

☐ Creation or modification of Mitigation Bank (refer to Chapter 62-342, F.A.C. https://www.flrules.org/gateway/ChapterHome.asp?Chapter=62-342): **Provide the information requested in Section G.**

☐ Mines (as defined by in Section 2.0 of Applicant's Handbook Volume I) that are regulated by the DEP: **Provide the information requested in Section H.**

☐ Other, describe: _____ Please contact the Agency to determine which additional sections of the application are needed. See Attachment 2 for Agency contacts.

D. Describe in general terms the proposed project, system, works, or other activities. For permit modifications, please briefly describe the changes requested to the permit: **This project proposes to develop 8.70 acres of property at the Sebastian Municipal Airport for use as a 24,273 sf Public Works Complex for the City of Sebastian. The facility's primary uses will be as office space for staff, workshop area, maintenance areas for the City's fleet vehicles, and storage areas for the City's equipment. Runoff from the development will be captured and treated in dry retention areas and will ultimately be discharged to an onsite collector ditch which ultimately outfalls into the Sebastian River.**

E. Project/Activity Street/Road Address or other location (if applicable): **505 AIRPORT DR W**
City: **SEBASTIAN** County(ies)**Indian River** Zip: **32958**
Note: For utility, road, or ditch/canal activities, provide a starting and ending point using street names and nearest house numbers or provide length of project in miles along named streets or highways.

F. Project location map and Section, Township, and Range information (use additional sheets if needed):
Please attach a location map showing the location and boundaries of the proposed activity in relation to major intersections or other landmarks. The map should also contain a north arrow and a graphic scale; show Section(s), Township(s), and Range(s); and must be of sufficient detail to allow a person unfamiliar with the site to find it.
Land Grant name, if applicable:

Section(s):	0	Township:	31S	Range:	38E
Section(s):	22	Township:	30S	Range:	38E

G. Latitude (DMS) Longitude (DMS) (Taken from central location of the activity). Explain source for obtaining latitude and longitude (i.e. U.S.G.S. Quadrangle Map, GPS, online resource):

H. Tax Parcel Identification Number(s): **3038220000100000000.1, 3038220000100000009.0**

[Number may be obtained from property tax bill or from the county property appraiser's office; if on multiple parcels, provide multiple Tax Parcel Identification Numbers]

I. Directions to Site (from major roads; include distances and landmarks as applicable): **From the intersection of US-1 and Roseland Road, proceed south/west approximately 2 miles to Corporate Park Drive. Turn east and the project is on the south side of the road.**

J. Project area or phase area: **8.70** acres

K. Name of waterbody(ies) (if known) in which activities will occur or into which the system will discharge:

Receiving Waterbody	Class Type	Outstanding Florida Water	Aquatic Preserve
Saint Sebastian River	III Fresh	no	no

The following questions (L-N) are not applicable to activities related to a single-family residence, including private single-family residential docks, piers, seawalls or boat ramps.

L. Is it part of a larger plan of development or sale? ☒ yes ☐ no

M. Impervious or semi-impervious area excluding wetlands and other surface waters (if applicable):
acres or 188784 square feet

N. Volume of water the system is capable of impounding (if applicable):

Normal Pool: acre-feet. Depth ft.
Maximum Pool: 3 acre-feet. Depth 3 ft.

Part 2: Supplemental Information, and Permit History

A. Is this an application to modify an existing Environmental Resource Permit, or to construct or implement part of a multi-phase project, such as a project with a Conceptual Approval permit? ☐ Yes ☒ No *If you answered "yes", please provide permit numbers below:*

AGENCY	DATE	PERMIT/ APPLICATION NO.	PROJECT NAME

B. Indicate if there have been any **pre-application meeting(s)** with the DEP, WMD, or delegated local government, or other discussions, meetings, or coordination with other stakeholders or agencies about the proposed project, system or activity. If so, please provide the date(s), location(s) of the meeting, and the name(s) of Agency staff that attended the meeting(s):

AGENCY	DATE	LOCATION	MEETING ATTENDEES
SJR	05-JAN-21	Email correspondence	Mark Crosby, Clinton Rahjes
SJR	16-FEB-21	Email and Phone Correspondence	Mark Crosby, Clinton Rahjes
SJR	19-JAN-21	On Site	Jon Shepherd, Hosanna Loreaux, Kris Hebert

C. **Attach a depiction (plan and section views), which clearly shows the works or other activities proposed to be constructed.** Use multiple sheets, if necessary, a scale sufficient to show the location and type of works, and include a north arrow and a key to any symbols used. **Specific information to be included in the plans is based on the activities proposed and is further described in Sections B-H**. However, supplemental information may be required based on the specific circumstances or location of the proposed works or other activities.

D. Processing Fee: **Please submit the application processing fee along with this application form and supplemental information.** Processing fees vary based on the size of the activity, the type of permit applied for, and the reviewing Agency. Please reference Appendix D of Applicant's Handbook Volume 1 to determine the appropriate fee.

Part 3: Applicant and Associated Parties Information

Instructions: Please complete the following sections. For corporations, list a person who is a registered agent or officer of the corporation who has the legal authority to bind the corporation.

A. Applicant (Entity Must Have Sufficient Real Property Interest) ☐ **This is a Contact Person for Additional Information**		
Name: Last: **Baker**	First: **Scott**	Middle:
Title: **Public Facilities and Airport Director**	Company: **City of**	

Address: **1225 Main Street**		
City: **Sebastian**	State: **FL**	Zip: **32958**
Home Telephone:	Work Telephone: **772-228-7001**	
Cell Phone:		
E-mail Address: **RBaker@CityofSebastian.org**		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

B. Land Owner(S) (If Different or in Addition to Applicant)
☐ **Check here if land owner is also a co-applicant**

Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:	Work Telephone:	
Cell Phone:		
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

C. Operation and Maintenance Entity **(see Applicant's Handbook I, Section 12.3)**

Entity Name:	Contact: Last:	First:	Middle:
Title:	Company:		
Address:			
City:	State:	Zip:	
Home Telephone:	Work Telephone:		
Cell Phone:			
E-mail Address:			
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐			

D. Co-Applicant (If Different or In Addition to Applicant and Owner)

Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:	Work Telephone:	
Cell Phone:		
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

E. Registered Professional Consultant ☒ **This is a contact person for additional information**

Name: Last: **Blum**	First: **John**	Middle:
Title:	Company: **Carter Associates, Inc**	
Address: **1708 21st Street, Carter Associates, Inc.**		
City: **Vero Beach**	State: **FL**	Zip: **32960**
Home Telephone:	Work Telephone: **7725624191**	
Cell Phone:		
E-mail Address: **johnb@carterassoc.com**		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		
F. Environmental Consultant ☒ **This is a contact person for additional information**		
Name: Last: **Shepherd**	First: **Jon**	Middle:
Title:	Company: **Atlantic Environmental of Florida, LLC**	
Address: **657 Montreal Avenue**		
City: **Melbourne**	State: **FL**	Zip: **32935**
Home Telephone:	Work Telephone: **3216761505**	
Cell Phone:		
E-mail Address: **jon@atlantices.com**		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		
G. Agent Authorized to Secure Permit (If Different from Consultant) ☐ **This is a contact person for additional information**		
Name: Last:	First:	Middle:
Title:	Company:	
Address:		
City:	State:	Zip:
Home Telephone:	Work Telephone:	
Cell Phone:		
E-mail Address:		
Correspondence will be sent via email. Check here to receive correspondence via US Mail: ☐		

If necessary, please add additional pages for other contacts and property owners related to this project.

H. Real Property Interest

a. Permits are only issued to entities having sufficient real property interest as described in Section 4.2.3(d) of Applicant's Handbook Volume I**. Please attach evidence of the applicant's real property interest over the land upon which the activities subject to the application will be conducted, including mitigation areas (if applicable).** Refer to Sections 4.2.3(d)-(e) for sufficient real property interest documentation.

b. For activities that require a recorded notice in accordance with rule 62-330.090(7), F.A.C., please provide either the complete legal description of the property or a copy of the pages of the document recorded in the public records that contains the complete legal description. If the land upon which the proposed activities are to occur is not owned by the applicant, the applicant must also provide copies of any right-

STORMWATER MANAGEMENT PLAN CALCULATIONS
FOR
THE CITY OF SEBASTIAN
PUBLIC WORKS COMPLEX
AIRPORT DRIVE
SEBASTIAN, FLORIDA
FEBRUARY 17, 2021

PREPARED BY

CARTER ASSOCIATES, INC.
CONSULTING ENGINEERS AND LAND SURVEYORS
C.O.A. #205
1708 21st Street
Vero Beach, FL 32960
(772) 562-4191

TABLE OF CONTENTS

TITLE **PAGE**

Clinton J Rahjes, P.E.
Florida Reg. No. 70170

I. INTRODUCTION

The proposed project, located at the southeast corner of the intersection of Airport Drive and Roseland Road in Sebastian, FL. Currently the site is undeveloped land that has been disturbed and utilized for stockpiling of mulch and other landscaping debris. The existing topography of the site generally slopes from east to west with a minor slope form north to south. All existing runoff appears to flow towards the Roseland road right of way which appears to flow into the ditch crossing the airport property with no significant impediments.

II. OBJECTIVE / METHODOLOGY

This report has been prepared to demonstrate that the project as designed meets all required criteria. In order to prepare this report, models were created in ICPR 4 for both the pre and post developed conditions and the recovery was modeled utilizing MODRET. Nutrient loading criteria was calculated using BMPtrains software.

The proposed project, consists of the construction of a Public Works facility which will consist of one primary building with a significant outdoor equipment storage area. This drainage study is limited to the developed portion of the site that will be contributing to the treatment system, a total of 7.42 Ac. This limit has been shown on the accompanying plans and maps. Stormwater will be collected through inlets in a crowned collection system along the edges of the parking areas and center islands and routed to three dry retention areas. Dry Retention Area 1 (D1) is connected via pips to Dry Retention Area 3 and may have an overflow connection to the existing wetlands to be preserved if required by ecological staff. Note that this connection is not included in the stormwater quantity calculations and would only serve to reduce runoff if it is added. Dry Retention Area 2 (D2) is connected to Dry Retention Area 3 (D3) at the southern end of the system. Dry Retention 3 includes the direct connection to the unnamed ditch which crosses the airport property. This ditch serves as the primary connection from this property off of the site ultimately crossing Roseland Road and continuing to the Sebastian River.

The system has been designed with the standard stormwater calculations for stormwater quantity purposes as well as utilizing BMPtrains for nutrient removal criteria. The results of the nutrient removal analysis are included in Appendix C of the report.

The calculations in this report demonstrate that the proposed stormwater management system limits the post development peak discharge rate to less than the predevelopment. The results are included in Appendix A and are summarized as follows with the post development combining the discharge rates at maximum to both Roseland Rd and Airport Drive:

Storm Event	Peak Outflow (CFS)
Pre-Dev. Mean Annual	8.97
Post-Dev. Mean Annual	4.79
Pre-Dev. 25-Year/24-Hour	23.92
Post-Dev. 25-Year/24-Hour	17.87

III. TAILWATER ESTIMATION

The proposed system outfalls into the existing drainage ditch which crosses the property and ultimately passes below Roseland Road and continues on to the Sebastian River. For purposes of calculation it was assumed that the tailwater would stage to the top of bank of the defined channel in the mean annual event and flow outside the bank to an elevation approximately 1' higher during the 25year event.

IV. PRE-DEVELOPMENT SYSTEM CALCULATIONS

Curve Number Calculation

Basin "Existing" (Sheet flow into the Roseland Road Right-of-Way):

				Curve Number (CN)
Basin Area:		7.417 Acres		75
Impervious Area:		0.455 Acres	6.1%	98
Concrete	0.022 Acres			
Millings	0.433 Acres			
		6.9617 Acres	93.9%	73

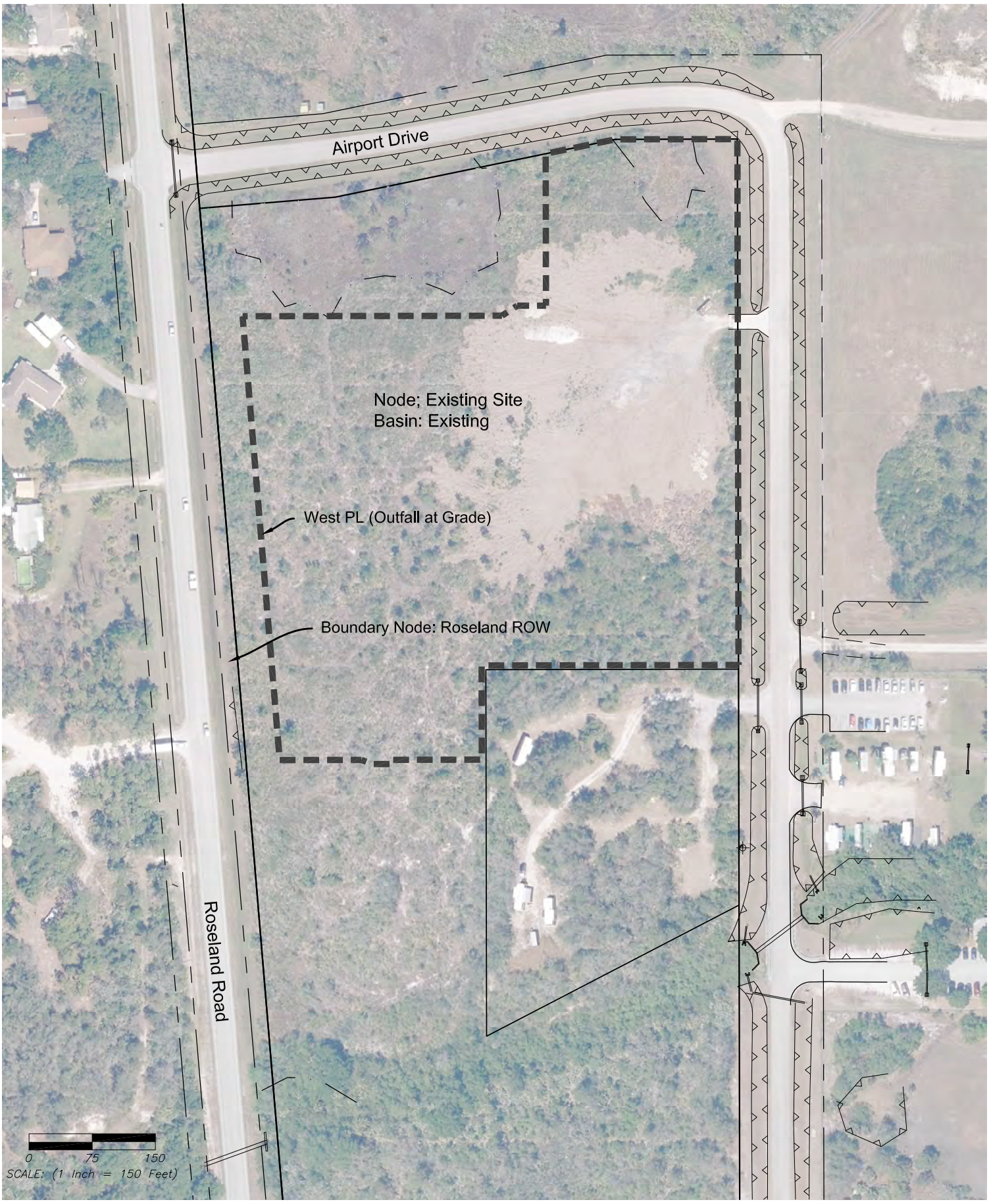
Note: Soils Type D (Unimproved) - Tr-55 Table 2-2a. - Brush (Good Cond.)
Primary Soils: 5-Myakka (B/D) and 4-Immokalee (B/D)

Treatment Volume

Node "Existing Site":

Description	Stage (feet)	Area (Ft^2)	Area (Acres)	Cumulative Storage (Ac-Ft)
Lowest Existing Ground	13.50	401	0.009	0.000
	14.00	9794	0.225	0.059
	14.50	37362	0.858	0.535
	15.00	100724	2.312	1.327
	15.50	196090	4.502	3.214
	16.00	239761	5.504	5.716

Note: Time of concentration assumed to be a minimum of 10 min.



P:\19-042 Wright Construction\dwg\19-042E.dwg, Pre-Dev Node map
Feb. 15, 21, 11:05 AM

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1708 21st STREET, VERO BEACH, FL 32960
TEL: (772) 562-4191 FAX: (772) 562-7180

DATE	: 9/21/20
PROJ. #	: 19-042E
DRAWN BY:	CJR
APPD. BY	: CJR
PLOT BY	: Clint Rahjes
REF. #	: 19-042E
F.B. & PG.	:

City of Sebastian
Public Works Complex

Pre-Development Node Map

SHEET 5

Dwg. #:

V. POST-DEVELOPMENT SYSTEM CALCULATIONS

Curve Number Calculation

Basin 1:

				Curve Number (CN)
Basin Area:	1.968 Acres			81
Impervious Area:	1.051 Acres	53.4%		98
Building Area	0.32 Acres			
Covered Concrete	0.07 Acres			
Concrete Pavement	0.07 Acres			
Asphalt Pavement	0.60 Acres			
Stabilized Pavement	0.00 Acres			
Allowance	0.00 Acres			
	0.9168 Acres	46.6%		61

Note: Soils Type B (Improved) - Tr-55 Table 2-2a. - Lawns (Good)
Primary Soils: 5-Myakka (B/D) and 4-Immokalee (B/D)

Basin 2:

				Curve Number (CN)
Basin Area:	2.476 Acres			83
Impervious Area:	1.444 Acres	58.3%		98
Building Area	0.11 Acres			
Covered Concrete	0.16 Acres			
Concrete Pavement	0.14 Acres			
Asphalt Pavement	0.69 Acres			
Stabilized Pavement	0.35 Acres			
Allowance	0.00 Acres			
	1.0317 Acres	41.7%		61

Note: Soils Type B (Improved) - Tr-55 Table 2-2a. - Lawns (Good)
Primary Soils: 5-Myakka (B/D) and 4-Immokalee (B/D)

Basin 3:

				Curve Number (CN)
Basin Area:		2.972 Acres		80
Impervious Area:		1.497 Acres	50.4%	98
Building Area	0.13 Acres			
Covered Concrete	0.05 Acres			
Concrete Pavement	0.07 Acres			
Asphalt Pavement	0.80 Acres			
Stabilized Pavement	0.45 Acres			
Allowance	0.00 Acres			
		1.4757 Acres	49.6%	61

Note: Soils Type B (Improved) - Tr-55 Table 2-2a. - Lawns (Good)
Primary Soils: 5-Myakka (B/D) and 4-Immokalee (B/D)

Stormwater Storage Volume Provided

Node "Dry Retention 1":

Description	Stage (feet)	Area (Ft^2)	Area (Acres)	Cumulative Storage (Ac-Ft)
Bottom Elevation	14.25	26,944	0.62	0.000
	14.50	30,137	0.69	0.164
	15.00	31,458	0.72	0.517
	15.50	32,804	0.75	0.886
Top of Bank	16.00	34,175	0.78	1.271

Node "Dry Retention 2":

Description	Stage (feet)	Area (Ft^2)	Area (Acres)	Cumulative Storage (Ac-Ft)
Bottom Elevation	13.00	12,159	0.28	0.000
	13.50	14,351	0.33	0.152
	14.00	16,687	0.38	0.330
	14.25	18,839	0.43	0.432
	14.50	19,327	0.44	0.542
	15.00	22,015	0.51	0.779
Top of Bank	15.50	24,752	0.57	1.047

Node "Dry Retention 3":

Description	Stage (feet)	Area (Ft^2)	Area (Acres)	Cumulative Storage (Ac-Ft)
Bottom Elevation	13.50	4,998	0.11	0.00
	14.00	8,015	0.18	0.07
	14.25	10,024	0.23	0.13
	14.50	11,191	0.26	0.19
	15.00	14,392	0.33	0.33
	15.50	23,122	0.53	0.55
Top of Bank	16.00	30,051	0.69	0.85

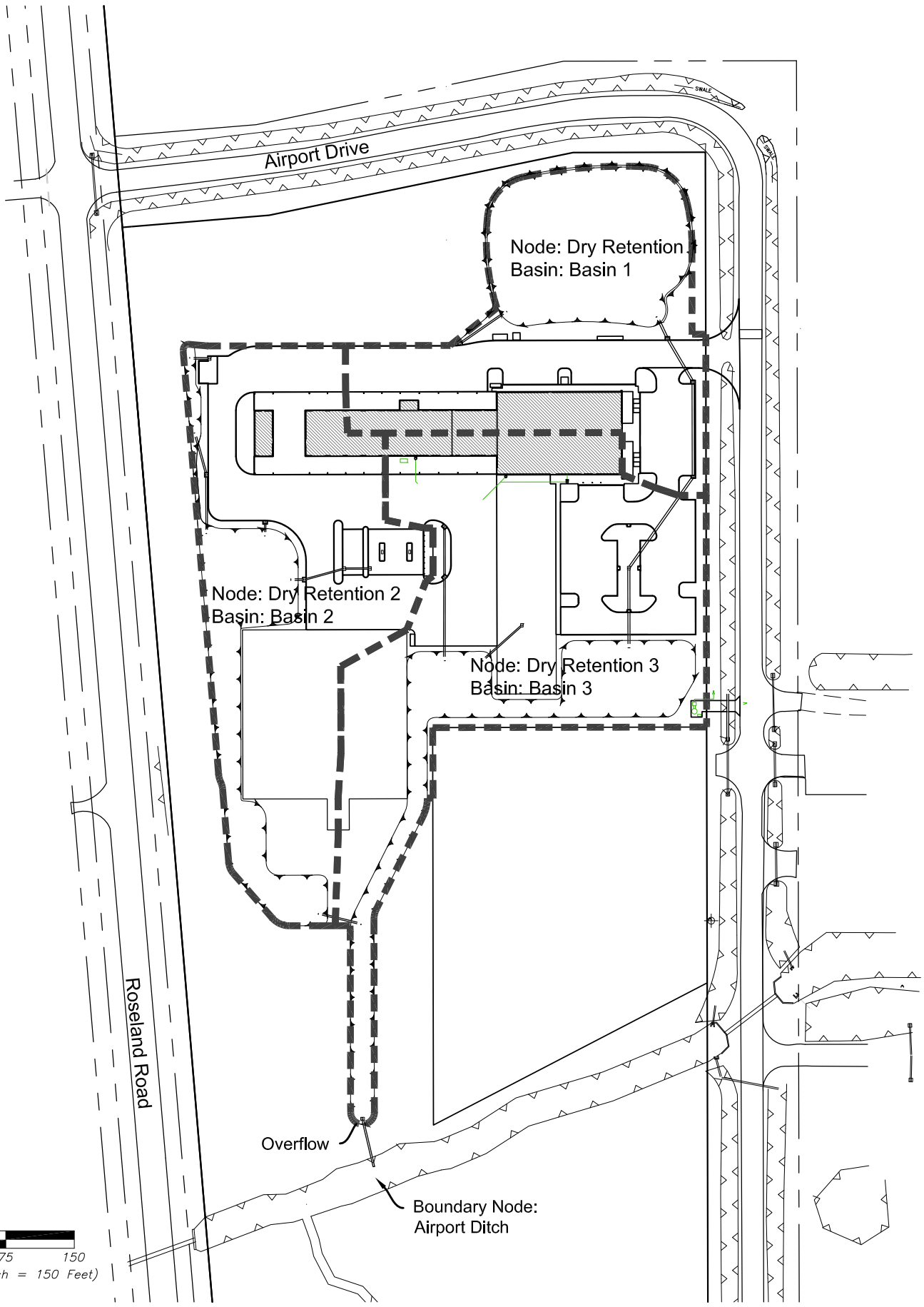
Combined Storage in Dry Retentions 2 and 3 for Use in treatment volume calculation:

Description	Stage (feet)	Area (Ft^2)	Area (Acres)	Cumulative Storage (Ac-Ft)
Bottom Elevation	13.00	12,159	0.28	0.00
	13.50	19,349	0.44	0.18
	14.00	24,702	0.57	0.43
	14.25	55,807	1.28	0.66
	14.50	60,655	1.39	1.00
Overflow Elevation	14.60	63,573	1.46	1.20
	15.00	67,865	1.56	1.74
	15.50	80,678	1.85	2.59
	16.00	86,898	1.99	3.55

Stormwater Treatment Volume

The required treatment volume for the system as-modeled was determined using the analysis performed with BMP trains and using standard calculations for dry retention systems. These treatment calculations show that with the proposed system the following criteria are met:

1.0 inches of runoff over the entire basin:	1.0 in *	7.417 Ac =	0.618	Ac-Ft
1.25 inches of runoff over the impervious:	1.25 in *	3.992 Ac =	0.416	Ac-Ft
plus 0.5 inches over the entire basin:	0.5 in *	7.417 Ac =	0.309	Ac-Ft
		Total =	0.725	Ac-Ft
Dry Retention Treatment Required in BMP Trains:				
1.2 inches of runoff over the entire basin:	1.9 in *	7.417 Ac =	1.199	Ac-Ft
Therefore the minimum required treatment volume is:			1.199	Ac-Ft
The provided treatment volume is:			1.200	Ac-Ft



P:\19-042 Wright Construction\dwg\19-042E.dwg, Post-Dev Node map

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DATE	: 2/15/20
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DRAWN BY	: CJR
APPD. BY	: CJR
PLOT BY	: Clint Rahjes
REF. #	: 19-042E
F.B. & PG.	:

City of Sebastian
Public Works Complex

Post-Development Node Map

SHEET 9

Dwg. #:

VI. CONCLUSION

The requirements for a stormwater treatment system have been met by the dry retention design. As shown in the ICPR analysis included in appendices A and B, the Post-Development Runoff is less than the Pre-Development Runoff and the water quality treatment meets requirements per the BMPtrains analysis in Appendix C.

PRE vs. POST DEVELOPMENT RUNOFF

STORM	PRE (cfs)	POST (cfs)
Mean Annual	8.97	4.79
25 Year / 24 Hr	23.92	17.87

POST DEVELOPMENT STAGE ELEVATIONS

NODE	STORM	POST
Basin 1	25 Year / 24 Hr	15.61 (NAVD 88')
Basin 2	25 Year / 24 Hr	15.45 (NAVD 88')
Basin 3	25 Year / 24 Hr	15.28 (NAVD 88')

SUBSURFACE SOIL EXPLORATION AND
GEOTECHNICAL ENGINEERING CONSULTING
CITY OF SEBASTIAN
PROPOSED PUBLIC WORKS COMPOUND
SEBASTIAN, INDIAN RIVER COUNTY, FLORIDA

AACE FILE NO. 19-210

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.

834 SW Swan Avenue
Port St. Lucie, Florida 34983
Ph: 772-807-9191 Fax: 772-807-9192
www.aaceinc.com

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SUBSURFACE SOIL EXPLORATION AND GEOTECHNICAL ENGINEERING CONSULTING CITY OF SEBASTIAN PROPOSED PUBLIC WORKS COMPOUND SEBASTIAN, INDIAN RIVER COUNTY, FLORIDA

AACE FILE NO. 19-210

ANDERSEN ANDRE CONSULTING ENGINEERS, INC.
Geotechnical Engineering
Construction Materials Testing
Environmental Consulting

AACE File No. 19-210
August 23, 2019

Carter Associates, Inc.
1708 21st Street
Vero Beach, FL 32960

Attention: Mr. John Blum, P.E.

SUBSURFACE SOIL EXPLORATION AND
GEOTECHNICAL ENGINEERING CONSULTING
CITY OF SEBASTIAN
PROPOSED PUBLIC WORKS COMPOUND
SEBASTIAN, INDIAN RIVER COUNTY, FLORIDA

1.0 INTRODUCTION

In accordance with your request and authorization, Andersen Andre Consulting Engineers, Inc. (AACE) has completed a subsurface exploration and geotechnical engineering analyses for the above referenced project. The purpose of performing this exploration was to explore shallow soil types and groundwater levels as they relate to the proposed low-rise construction, and restrictions which these soil and groundwater conditions may place on the proposed site development. Our work included Standard Penetration Test (SPT) borings, auger borings, soil hydraulic conductivity testing, laboratory testing, and engineering analyses. This report documents our explorations and tests, presents our findings, and summarizes our conclusions and recommendations.

2.0 EXECUTIVE SUMMARY

The following summary is intended to provide a brief overview of our findings and recommendations; however, the report should be read in its entirety by the project design team members.

- The proposed building site, at the locations explored, was found to be underlain by soils which are generally satisfactory to support the proposed single-story construction on conventional spread foundations. A maximum design foundation bearing pressure of 2,500 pounds per square foot (psf) is recommended for the proposed structures.

- Typical pavement sections consisting of an asphaltic or rigid concrete wearing surface atop a calcareous base, followed by a stabilized subgrade on compacted natural soils is considered appropriate for the project.

- Site preparation procedures will include clearing, stripping and grubbing of all surface vegetation, organic topsoil, and other surface materials (as discussed herein), followed by proofrolling of building and pavement areas.

- The groundwater table was encountered at depths of about 2.5 to 5.0 feet below the existing grades, with this range likely associated with similar variations in site topography.

3.0 SITE INFORMATION AND PROJECT UNDERSTANDING

3.1 Site Location and Description

The proposed City of Sebastian Public Works Compound project (i.e. the site) is located within City-owned property situated on the southeast corner of Roseland Road and Airport Drive West in Sebastian, Indian River County, Florida. The location of the subject site is graphically depicted on the Site Vicinity Map (2018 aerial photograph) as well as on a reproduction of the 1992 USGS Quadrangle Map of "Fellsmere, Florida", both presented on our Figure No. 1.

The USGS Quadrangle Map depicts the overall property as being relatively level with an average surface elevation of about 15 feet relative to the National Geodetic Vertical Datum of 1929. However, per the USGS map, the southern end of the site (where a proposed roadway will be constructed), is noted to be lower in elevation (tapering from about EL 15 to about EL 10) and an east-west creek or minor waterway is depicted on the map. Finally, a wetland-type feature is noted to be present directly to the north of the site.

The site is currently overgrown for the most part, with the exception of an approximately 2-acre cleared section at the site entrance off Airport Drive West. This cleared section has an area near the entrance where asphalt millings are spread out, and various stockpiles of concrete, asphalt, mulch, etc. are present.

3.2 Review of USDA Soil Survey

According to the USDA NRCS Web Soil Survey, the predominant surficial soil type in the area where the site is located is the Immokalee fine sand (USDA Map Unit 4), with the Myakka-Myakka, wet, fine sands, 0 to 2 percent slopes (USDA Map Unit 5) and the Orsino fine sand, 0 to 5 percent slopes (USDA Map Unit 46) present in smaller areas within the southern portion of the site.

In their natural states, these three soil types are all noted by the USDA NRCS to consist of sandy (or eolian) marine deposits originating from within flatwoods, ridges and knolls on historic marine terraces, with fine sands present to depths in excess of 80 inches below grade.

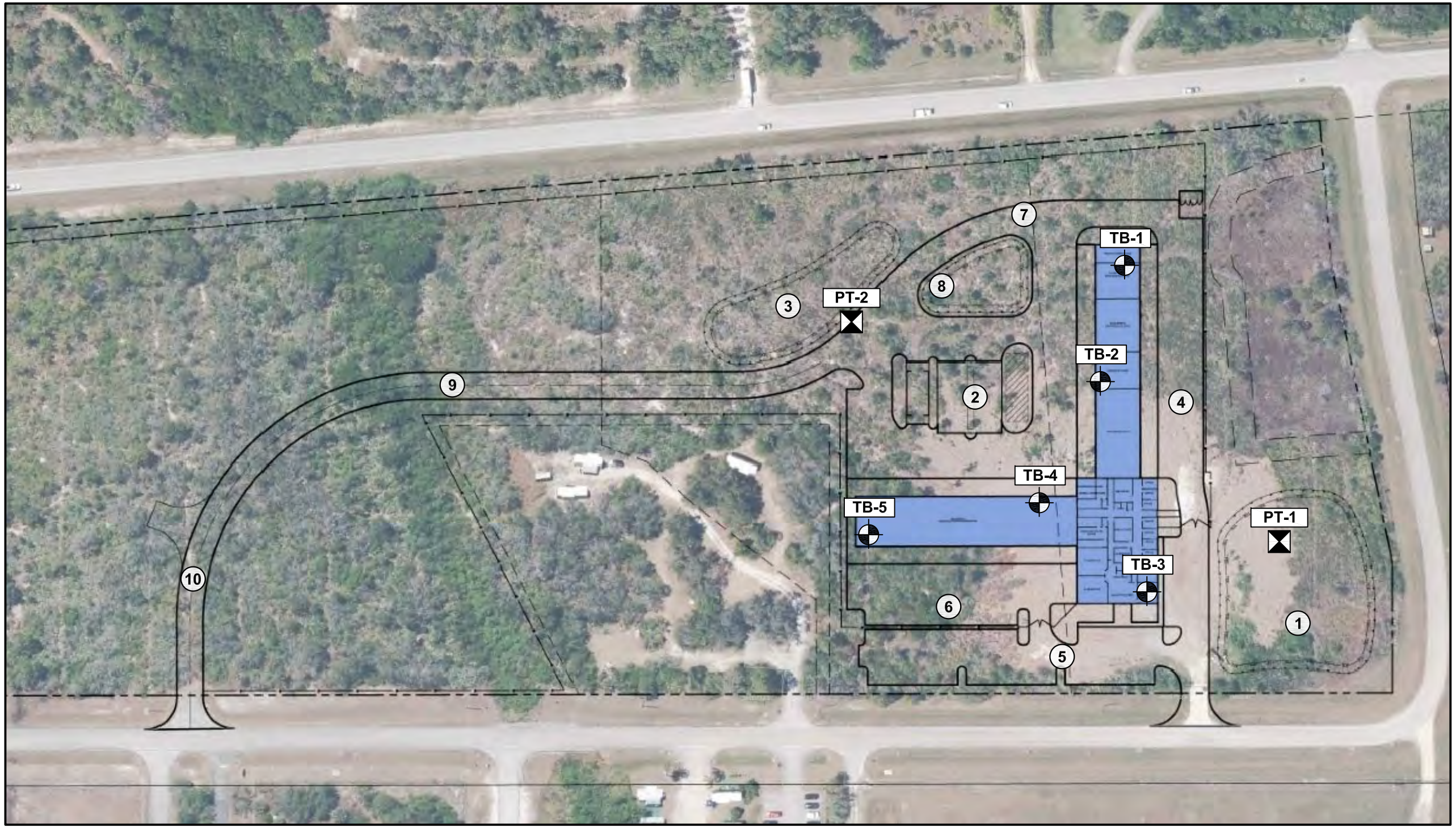
The location of the subject site is superimposed on an aerial photograph obtained from the USDA NCRS Web Soil Survey and is shown on Figure No. 1. Further, excerpts from the USDA Web Soil Survey summary report are included in Appendix I.

3.3 Project Understanding

Based on our conversations and review of the forwarded site plan, we understand that the project includes the construction of an approximately 12,000SF single-story main office building with two approximately 13,000SF wings (garages, maintenance, warehouse, shops, etc).

We have not been provided with any specific structural information relative to the type of construction, however, we expect that it will be constructed with load-bearing masonry walls and possibly individual columns. For construction of this type we expect maximum wall loads of 1-2 kips per lineal foot and maximum column loads of 75 kips (if any).

Additional site development will include paved drive aisles, surface parking, a fuel farm, dumpster enclosure, and shallow dry retention areas.



LEGEND AND NOTES

TB-# Standard Penetration Test Boring

PT-# Field Permeability Test

(#) Hand Auger Boring

NORTH

NOT TO SCALE

Shown and noted field work locations are approximate. SPT borings were field-located by Carter Associates, Inc. Remaining field work locations were field-located by AACE using the provided site plan, aerial photographs, existing site features, and a combination of a WAAS-enabled handheld GPS instrument and tape/wheel measurements. The shown field work locations should be considered accurate only to the degree implied by the method of measurement used.

Figure No. 2 Source: Conceptual Site Plan - Option 2 (by Carter Associates, Inc.)

AACE
ANDERSEN ANDRE CONSULTING ENGINEERS, INC.
834 SW Swan Avenue, Port St. Lucie, FL 34983 772-807-9191 www.AACEinc.com
Certificate of Authorization No. 26794

FIELD WORK LOCATION PLAN

SUBSURFACE SOIL EXPLORATION AND
GEOTECHNICAL ENGINEERING EVALUATION
CITY OF SEBASTIAN
PROPOSED PUBLIC WORKS COMPOUND
SEBASTIAN, INDIAN RIVER COUNTY, FLORIDA

Drawn by: PGA	Date: August 2019
Checked by: DPA	Date: August 2019
AACE File No: 19-210	**Figure No. 2**

APPENDIX I

USDA Soil Survey Information

United States Department of Agriculture

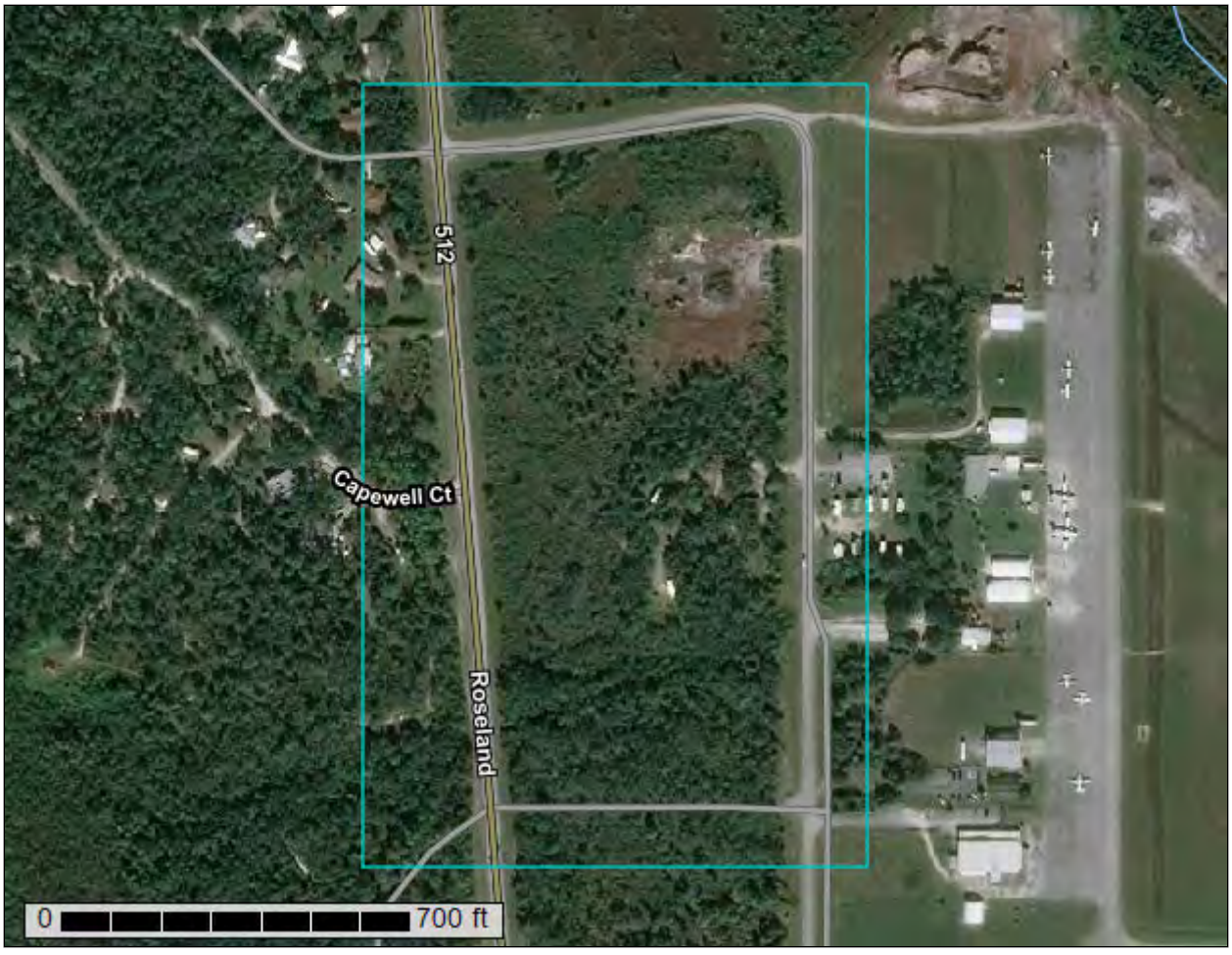
NRCS

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Indian River County, Florida

City of Sebastian Public Works Compound



Custom Soil Resource Report
Soil Map (City of Sebastian Public Works Compound)

Map Scale: 1:2,800 if printed on A portrait (8.5" x 11") sheet.

N

Meters: 0 40 80 160 240

Feet: 0 100 200 400 600

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

MAP LEGEND

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

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

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

Water Features
- Streams and Canals

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

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

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

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

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

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

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

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

Soil Survey Area: Indian River County, Florida
Survey Area Data: Version 17, Sep 13, 2018

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

Date(s) aerial images were photographed: Nov 21, 2018—Dec 23, 2018

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

Map Unit Legend (City of Sebastian Public Works Compound)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
4	Immokalee fine sand	17.2	47.2%
5	Myakka-Myakka, wet, fine sands, 0 to 2 percent slopes	8.0	22.1%
46	Orsino fine sand, 0 to 5 percent slopes	11.2	30.7%
Totals for Area of Interest		**36.4**	**100.0%**

Map Unit Descriptions (City of Sebastian Public Works Compound)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

ENVIRONMENTAL ASSESSMENT

On the

Sebastian Creek Facilities Compound
Property ID No.'s 10797 and Portion of 10787
Sebastian, Florida

Conducted for:

Mr. John Blum, PE
Carter Associates, Inc.
1708 21st Street
Vero Beach, Florida 32960

Conducted by:

Atlantic Environmental of Florida, LLC
657 Montreal Avenue
Melbourne, Florida 32935

November 5, 2020

November 5, 2020

Mr. John Blum, PE
Carter Associates, Inc.
1708 21st Street
Vero Beach, Florida 32960

Re: Environmental Assessment
Sebastian Creek Facilities Compound
Property ID No.'s 10797 and Portion of 10787
Sebastian, Florida
Atlantic Environmental File No. 201295

Dear Mr. Blum:

Atlantic Environmental of Florida, LLC (Atlantic Environmental) has completed an environmental assessment and feasibility study of the above-referenced property, an approximately 11.58-acre tract of land located on the southeast corner of the Corporate Park Drive – Roseland Road intersection on Sebastian Municipal Airport land in Sebastian, Florida (Figures 1 and 2). The field assessment of this parcel, hereinafter referred to as "the Property", occurred on November 4, 2020. This study is intended to assess any reasonably ascertainable environmental issues that might influence the developability of the subject property. Following are the results of our study.

Topography and Soils

Figure 3 shows the USGS Topographical Map for the Property and surrounding areas. According to this map, the Property is relatively flat until the southern one-third at which point it slopes from approximately 15 feet NGVD down more than 5-feet to a ditch that flows west into the Sebastian River. The U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) map for Indian River County (Figure 4) depicts two soil types underlying the Property. Following is a description for these mapped soil types as they occur in a natural environment.

Immokalee fine sand (4)
The Immokalee, non-hydric component makes up 80 percent of the map unit. Slopes are 0 to 2 percent. This component is on flatwoods on marine terraces on coastal plains. The parent material consists of sandy marine deposits. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during June, July, August, September, October, November. This soil does not meet hydric criteria.

Orsino fine sand, 0 to 5 percent slopes (46)
The Orsino component makes up 82 percent of the map unit. Slopes are 0 to 5 percent. This component is on ridges on marine terraces on coastal plains. The parent material consists of sandy marine deposits and/or eolian deposits. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 50 inches during June, July, August, September, and October. This soil does not meet hydric criteria.

Past development and human activity surrounding and within the Property appears to have altered some of the characteristics possessed by the underlying soils. However, in general, the soils underlying the Property appear consistent with the above descriptions.

Vegetation and Community Types

Different combinations of natural and human-influenced factors, such as surface elevation, hydrology, vegetative species and structure, soil characteristics, and degree and type of historical disturbance, will give rise to a variety of distinct ecological systems and functions, known as communities and land uses. The Florida Land Use, Cover, and Forms Classification System (FLUCFCS) organizes most of the major categories of communities and land uses into particular descriptions, each corresponding to a different code number. Using our field observations and the FLUCFCS system as a guideline, Atlantic Environmental has identified four on-site communities as they currently exist on the Property. Figure 5 depicts the location and associated code number of the on-site FLUCFCS categories; specifically, Upland Scrub, Pine and Hardwoods (FLUCFCS Code number 436), Streams and Waterways (510), Freshwater Marsh (641), and Disturbed Land (740).

Following is a description of these classifications, as they exist on the Property, along with an assessment of the jurisdictional wetland status based on the rules and regulations of the St. Johns River Water Management District (SJRWMD) and the U.S. Army Corps of Engineers (USACE).

Upland Scrub, Pine and Hardwoods (436)
The majority (±8.42 acres) of the Property supports an Upland Scrub, Pine and Hardwoods community. Vegetation in this area is dominated by scattered sand pine, slash pine, and lesser amounts of cabbage palm that shade scrub oaks, saw palmetto, rusty lyonia, shiny lyonia, gallberry, musky mint, shiny blueberry, gopher apple, hog plum, southern fox grape, bracken fern, runner oak, winged sumac, and catbriar. This community is an upland and will require no wetland permitting or mitigation for direct impacts.

Streams and Waterways (510)
Although not currently in the site design area, for the sake of this report covering all areas that could potentially be located in the ultimate Property boundary, the surface water conveyance along the southern edge of the Property has been included here. This tributary of the Sebastian River has been channelized for stormwater purposes and can now be termed a ditch. This area encompasses approximately 0.15 acres and will be considered a surface water by the regulatory agencies.

Freshwater Marsh (641)
Two Freshwater Marshes exist on the northern edge of the Property. The larger of the two systems incorporates approximately 0.87-acres while the smaller system encompasses ±0.19 acres. Vegetation in these areas is dominated by blue maidencane, beakrush, yellow-eyed grass, swamp fern, redroot, and broomgrass, with scattered slash pine, Melaleuca, wax myrtle, and Brazilian pepper. The smaller eastern wetland also supports primrose willow, blackberry, and saltbush due to the higher level of disturbance here. Both of these systems will be considered jurisdictional wetlands by SJRWMD. Alternatively, due to their isolation, USACE should not assert jurisdiction over these wetlands. SJRWMD will require the acquisition of permits for impacts to

either system and the provision of mitigation for any proposed impacts to only the larger wetland system.

Disturbed Land (740)
An approximately 1.95-acre area of land along the eastern property boundary appears to be used for storage and, as the community's name suggests, is heavily disturbed. This partially cleared area that houses open dirt areas and asphalt millings is dominated by creeping oxeye, Brazilian pepper, Spanish needles, castor bean, rain tree, Johnson grass, and bermudagrass. This community is an upland and will require no wetland permitting or mitigation for impacts.

Habitat Potential for Protected Wildlife Species

A preliminary survey for listed species and suitable listed species habitats was completed on the Property. This survey resulted in the determination that the Property provides suitable foraging habitat to support the below listed species found in the treasure coast of Florida.

Gopher Tortoise
Gopher tortoises are state listed as a Threatened species. These species require three environmental conditions: well drained loose soil in which to burrow, adequate low-growing herbs for food, and open sunlit sites for nesting. The majority of the on-site uplands meet these criteria, at least to some extent.

Wading Birds
Listed wading birds, including little blue herons, tricolored herons, sandhill cranes, and wood storks depend on freshwater marshes and shorelines for foraging and typically roost in forested wetland systems. Although no evidence of these species was noted during the preliminary survey, it is possible that any or all of these birds use the on-site wetlands and/or surface waters from time to time on an opportunistic foraging basis.

Florida Scrub-Jay
Typically, scrub-jays prefer a habitat which consists of oak shrubs between three (3) and 10 feet tall, covering 50-75 percent of the area. Also, critical to Florida scrub-jays, the oak cover must be interspersed with bare ground or vegetation less than six (6) inches tall covering 10-30 percent of the area, and no more than 20 percent canopy cover (Status and Distribution of the Florida Scrub Jay, Florida Ornithological Society Special Publication No. 3, 1987).

Habitat fairly consistent with the above description exists within portions of the Upland Scrub, Pine and Hardwoods communities. While on-site, no scrub–jays were seen or heard on or in the vicinity of the Property. Although it is possible that this species is utilizing the Property, please see the Summary section below for more details on past permitting efforts for this species.

Summary

The results of our survey indicate that the ±11.58-acre Property contains ±1.06 acres of wetlands and approximately 10.52 acres of uplands. In addition, habitat types exist on the site that could potentially house listed species. Following is a discussion of each protected natural resource on the site, along with any permitting and mitigation requirements that may need to be addressed prior to

site development.

Wetlands

Wetlands, including those located on the Property, are protected by state, federal, and/or local government rules against impacts from development. Should development be proposed which would affect these natural resources, permits authorizing these impacts would be needed, and mitigation for alterations to these wetlands can be required. Following is a general discussion of mitigation alternatives that may be applicable to the wetlands proposed to be impacted by development of the Property.

Prior to impacting a wetland on a particular piece of property it is required that all efforts have been made to eliminate wetland impacts. If elimination of wetland impacts is not practicable, it is then required that site development alternatives are considered that reduce wetland impacts. This elimination and reduction exercise will be required should impacts to wetlands be proposed on the Property.

Once it has been determined that all reasonable efforts have been made to reduce wetland impacts, the wetland regulatory agencies will consider compensation for wetland impacts through compensatory mitigation. Although mitigation can take on many forms, mitigation usually consists of restoration, enhancement, creation, or preservation of wetlands, other surface waters, or uplands. However, the federal government (i.e. USACE) will not accept straight preservation (of wetlands or uplands) as a valid form of mitigation; some form of wetland improvement (enhancement, restoration, or creation) must be provided. Furthermore, USACE will not typically accept invasive species eradication as the sole form of compensatory mitigation.

The amount of compensatory mitigation required is determined by the amount of biological lift needed to offset the proposed impacts. The quantity of biological lift required is dependent on the acreage of proposed wetland impact, the location and landscape support of the proposed impact site, the habitat value of the proposed impact site, the functionality of the proposed impact site, as well as the vegetative and hydrologic quality of wetlands proposed for impact.

To determine the amount of biological lift provided by a mitigation site, an applicant must take into account all of the above criteria, as the mitigation site exists prior to mitigation action, and determine how the proposed mitigation action will biologically improve the mitigation site. If the biological lift provided by completing the mitigation action outweighs the biological loss incurred by the proposed impact, the regulatory agencies are expected to permit the proposed project.

As for this particular site, SJRWMD will require that efforts be made to reduce wetland impacts to the greatest extent possible. However, if an applicant were to employ one of the SJRWMD out-provisions in which mitigation was offered that has a greater long-term ecological value than that of the wetlands proposed for impact and mitigation that implements all or part of a plan that provides regional ecological value, one could bypass SJRWMD's elimination and reduction criteria. Currently, one mitigation banks fall within the basin of this project and could provide such mitigation. If one should choose to purchase mitigation credits from this available mitigation bank (i.e. Basin 22 Mitigation Bank) to allow the impact of the entire larger on-site wetland, Atlantic Environmental recommends budgeting approximately $95,000.00 to $112,000.00. The smaller, more eastern

wetland could be impacted without the need for mitigation. Lastly, should you avoid these wetlands and maintain an on-average 25-foot, minimum 15-foot, upland buffer in a post-construction condition, no mitigation should be required from SJRWMD.

Wildlife

Wading Birds

Although no evidence of these species was noted during our survey, it is possible that any or all of these birds use the on-site wetlands or ditch from time to time on an opportunistic foraging basis. However, this opportunistic usage should not trip a threshold to require compensatory mitigation for any of these species.

Florida Scrub-Jay

Florida scrub-jays are federally classified as a threatened species (50 CFR 17.11) and are protected by the USFWS in accordance with the Endangered Species Act of 1973 (ESA), and are further protected by the Federal Migratory Bird Treaty Act. This species is also protected by the FWC in accordance with the Wildlife Code of the State of Florida (Chapter 39, F.A.C.), where it also is classified as a threatened species. Collectively, these laws prohibit the "taking" of a protected species, their eggs, nests, young, or habitat. "Take" is defined as harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in any such conduct (Section 3, (18), ESA).

Although it is not currently known if scrub-jays are utilizing the Property, it has been determined that the Sebastian Area-Wide Florida Scrub-jay Habitat Conservation Plan and the associated Incidental Take Permit (ITP) covers the subject Property in a fashion that should not require the need for additional surveying. Mitigation for impacts to this species within areas of Sebastian, including the subject Property, have been completed in the past and therefore no further mitigation measures should be needed. This fact was confirmed by both Ms. Lisa Frazier and Ms. Kim Haigler of the City of Sebastian. It is Atlantic Environmental's recommendation that prior to clearing the Property the USFWS be provided notice and should such clearing occur during the nesting season (i.e. March to June of any given year) that a survey be completed to ensure no active nests with eggs or flightless young are present.

Gopher Tortoises

Atlantic Environmental observed sings of tortoise occupation on the Property. When a site is occupied by gopher tortoises and proposed development of the property is likely to disturb or destroy tortoise burrows, a permit is required to be obtained from the Florida Fish and Wildlife Conservation Commission (FWC) to relocate on-site resident tortoises prior to the initiation of site development.

Based on the current regulations, an applicant has the below options:

1. Avoidance: Avoid individual burrows by a sufficient distance (recommended to be 25 feet) to assure that the entire burrow is protected. FWC will prohibit such avoidance should the 25-foot buffer result in "crop circles" around the burrows isolating them from other suitable areas.

2. On-site Relocation: In cases where ten or fewer tortoise burrows are affected, a relocation permit can be obtained from FWC to relocate the tortoises on-site. For on-site relocations, adequate habitat must exist on-site following construction, upon which tortoises may be captured and released back onto the site in an area where they can move freely. A mitigation contribution of $222.10

payable to the state is required by the FWC under this permit type. Just prior to construction, a trenched silt fence is required to be installed around the construction area at the time of the relocation to prevent any tortoises from getting in harm's way.

3. Off-site Relocation: If inadequate or no tortoise habitat will exist following construction, the landowner or his agents may only pursue an off-site relocation permit with an application fee of $222.10, and an additional $319.00 for every tortoise estimated for relocation after the first 5 tortoises. Also, FWC requires tortoises to be relocated to a long-term protected recipient site. The recipient site landowner's collect a fee per tortoise from the permittee to receive tortoises on their property, to employ soft release methods, and to manage tortoise habitat in perpetuity. The lowest price recipient site in this area currently charges $1,400.00 per tortoise. The total cost of the off-site relocation will ultimately come down to how many tortoises are relocated.

Because signs of tortoise occupation were noted on-site, we recommend having a formal 100% gopher tortoise survey completed prior to development of the Property. The cost of relocating the tortoises can be discussed after a survey is completed and the number of potential tortoises is found.

Conclusions

Atlantic Environmental determined that the Property supports approximately 10.52 acres of uplands and ±1.06 acres of wetlands. The Property also has the potential to support protected wildlife that may require listed species permitting. These natural resources must be addressed in the development process, through permitting, avoidance, mitigation, or some combination thereof.

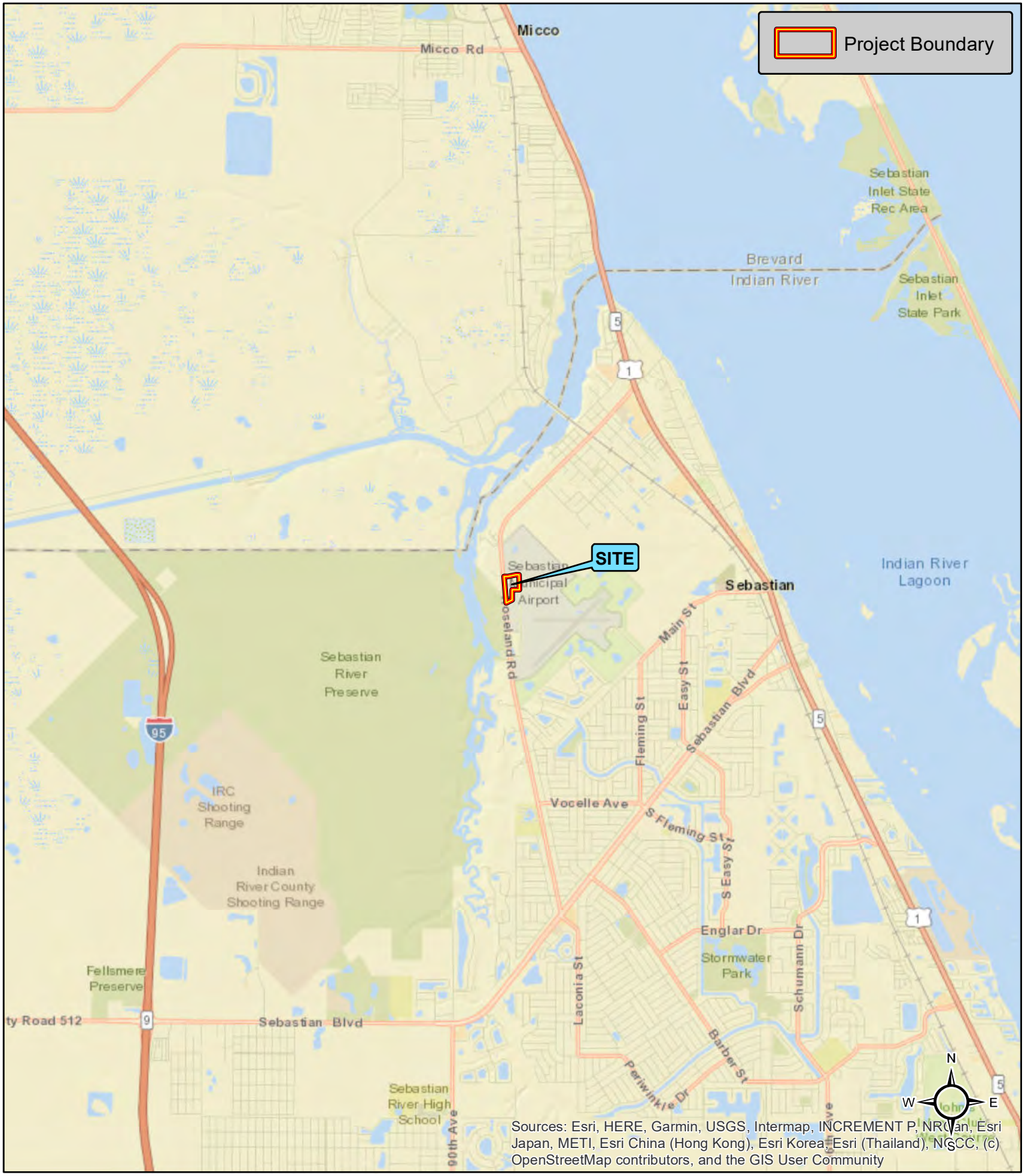
As the next step in the development process as it relates to environmental issues, Atlantic Environmental recommends delineating the on-site wetlands. Subsequent to the completion of this procedure, Atlantic Environmental can assist in the wetland permitting process and coordinate with the respective regulatory agencies to secure approved mitigation, if needed. In addition to the above task, we recommend conducting a formal gopher tortoise survey to determine the number of resident tortoises and location of any on-site potentially occupied tortoise burrows.

Should you have any questions or need additional information, please do not hesitate to contact our office.

Sincerely,

David G. Purkerson, MS, PWS
Senior Ecologist

Jon H. Shepherd, MS, PWS
President/Ecologist



Project: Sebastian Creek Facilities Compound

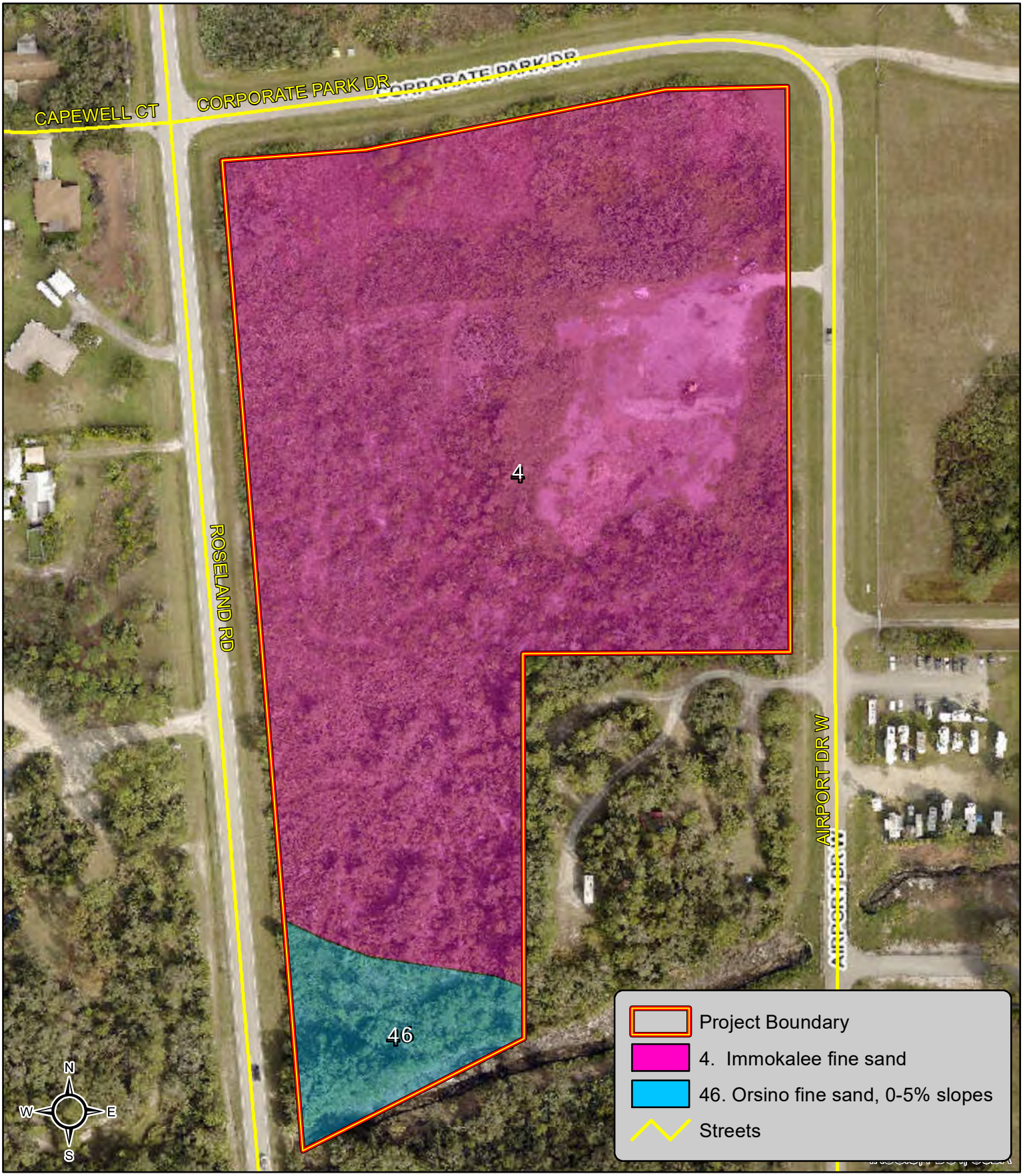
Figure 1: Location Map

0 0.5 1 2 Miles

Indian River County, Florida

ATLANTIC ENVIRONMENTAL
ENVIRONMENTAL PERMITTING & MITIGATION

AE Proj #: 201295



Project: Sebastian Creek Facilities Compound

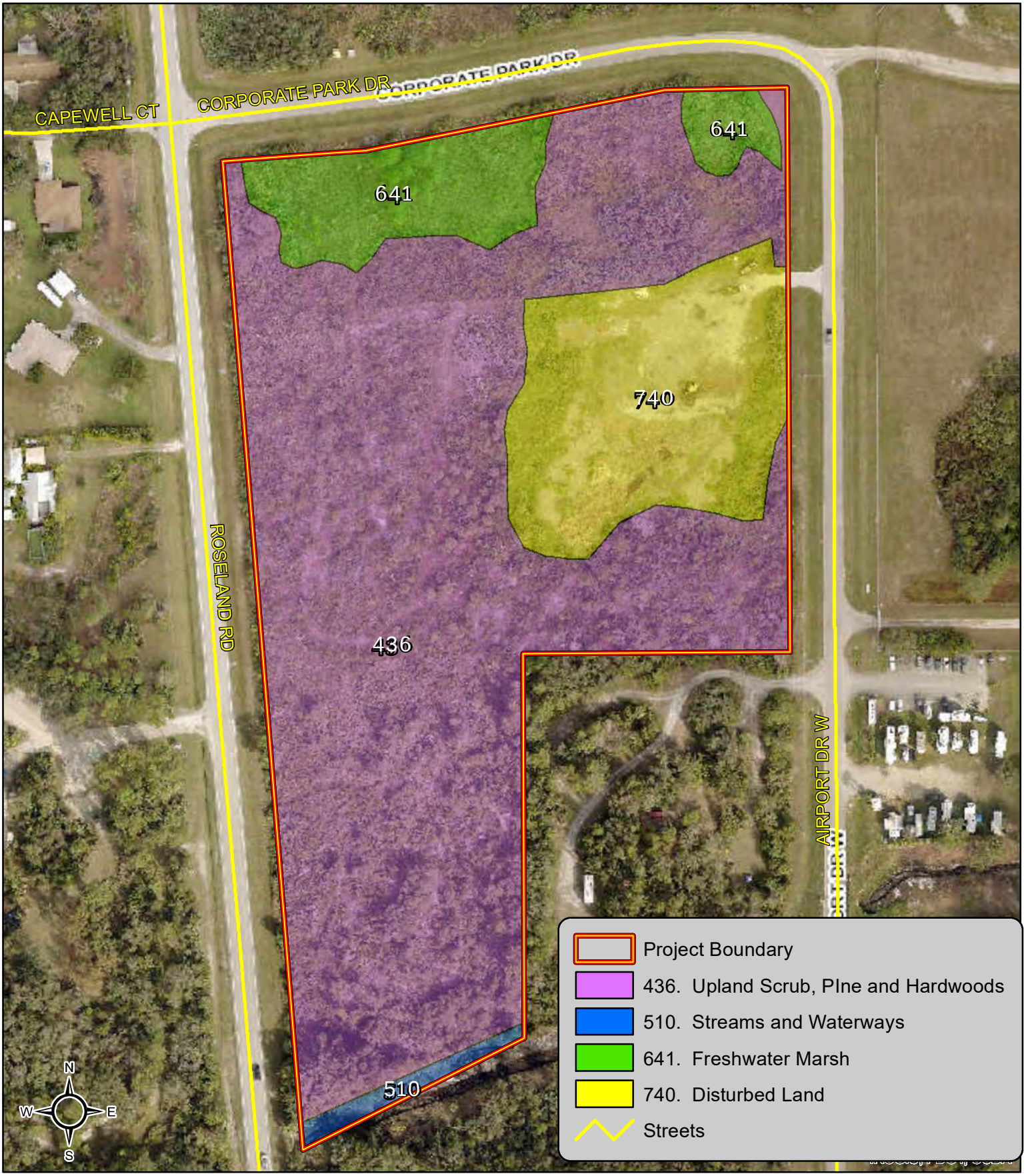
Figure 4: NRCS Soils Map

0 100 200 400 Feet

2019 Aerial, Indian River County, Florida

ATLANTIC ENVIRONMENTAL
ENVIRONMENTAL PERMITTING & MITIGATION

AE Proj #: 201295



Project: Sebastian Creek Facilities Compound

Figure 5: Land Use (FLUCFCS) Map

0 100 200 400 Feet

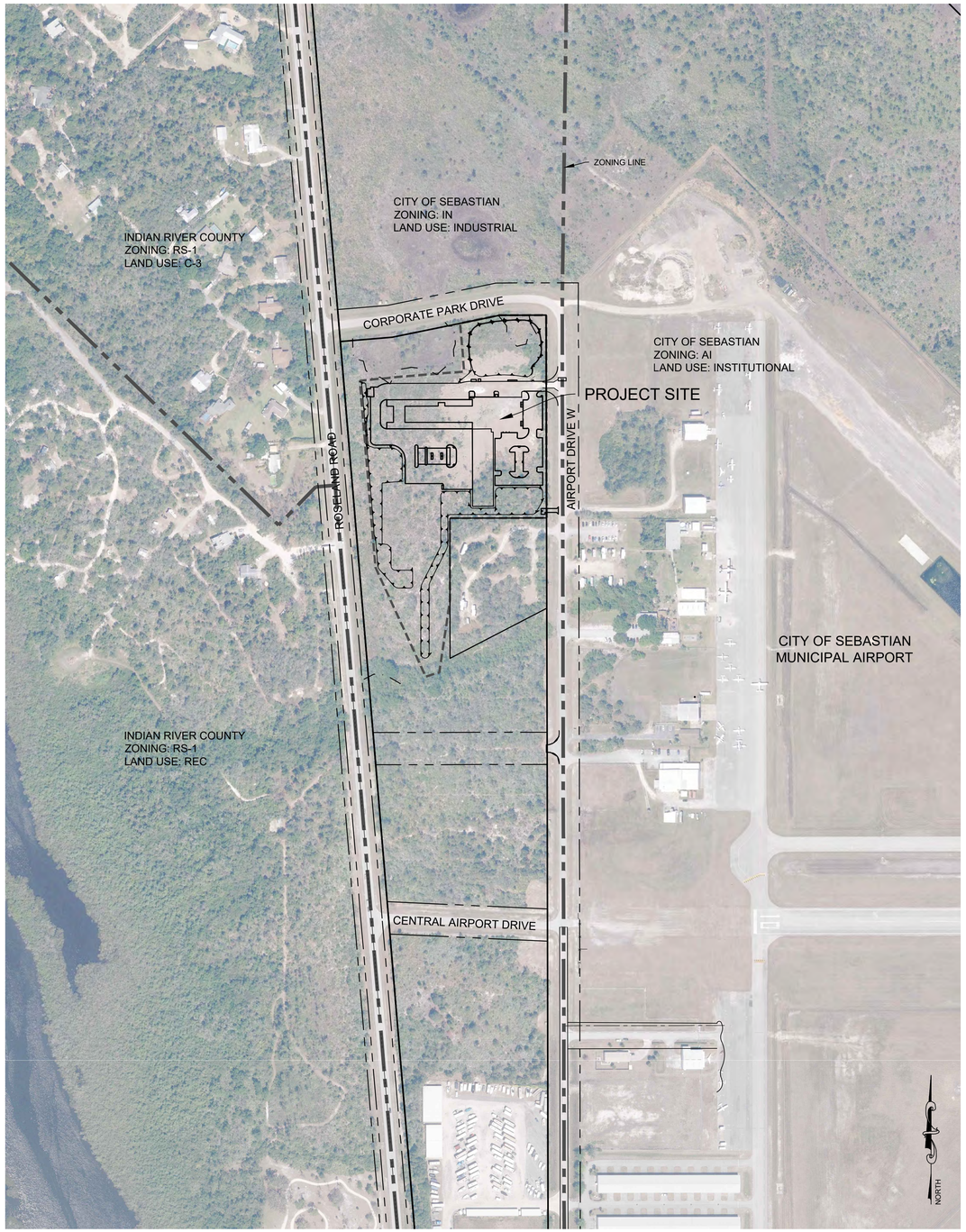
2019 Aerial, Indian River County, Florida

ATLANTIC ENVIRONMENTAL
ENVIRONMENTAL PERMITTING & MITIGATION

AE Proj #: 201295

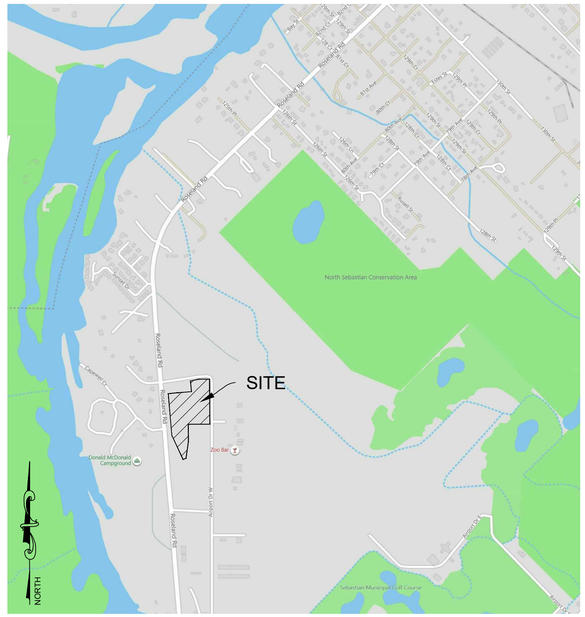
City of Sebastian
Public Works Complex

505 Airport Drive West
Sebastian, FL 32958
100% Construction Documents



AERIAL PHOTOGRAPH / VICINITY MAP
SCALE: 1" = 200'

Project Narrative: The proposed project will be developed at a currently vacant parcel within the Sebastian Municipal Airport to construct a Public Works facility for the City. The project will allow for storage of vehicles and equipment, provide space for maintenance tasks, and office space for City personnel as well as meeting space for City purposes.



LOCATION MAP
1" = 1,000'

SHEET INDEX

CAI
CARTER ASSOCIATES, INC.
SERVING FLORIDA SINCE 1911
CONSULTING ENGINEERS AND LAND SURVEYORS
1708 21ST STREET
VERO BEACH, FL 32960
TEL: (772) 562-4191
EMAIL: JohnB@CarterAssoc.com

The City of Sebastian
1225 Main Street
Sebastian, FL 32958
TEL: (772) 589-5330 EMAIL: ----

NO.	REVISION	DATE
1	Revised per City Staff comments, and for updated wetland line envidance.	2/11/21
2	Revised for Site Plan Resubmittal.	1/13/21

City of Sebastian Public Works Complex
505 Airport Drive West
Sebastian, FL 32958
100% Construction Documents

DATE

JOHN H. BLUM, P.E.
FL. LIC. NO. 45813
CARTER ASSOCIATES, INC.
COA 205 / LB 205

ISSUE DATE: 11/24/20
PROJ. # : 19-042E
DRAWN BY : CJR
DATUM : SEE SURVEY
REF. # :
F.B. & PG. : ----

SHEET TITLE:
Cover

SHEET
C-0
DWG. NO:

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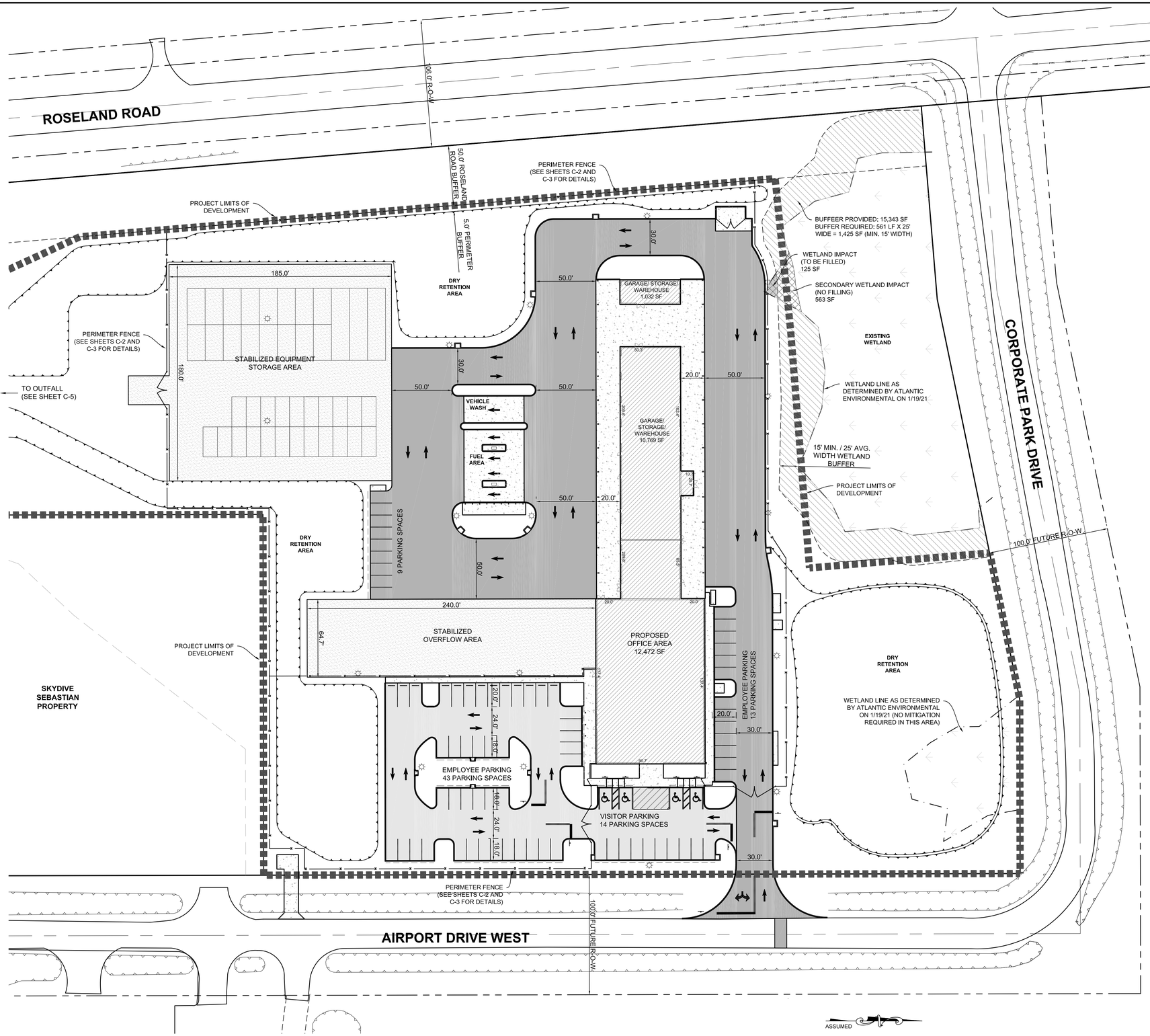

SITE DATA

PROJECT NAME: City of Sebastian Public Works Complex

APPLICANT: The City of Sebastian
1225 Main Street
Sebastian, FL 32958
(772) 589-5330

ENGINEER/SURVEYOR: Carter Associates, Inc.
Attn: John H. Blum, P.E.
1708 21st Street
Vero Beach, Florida 32960
(772) 562-4191

SITE ADDRESS: 505 Airport Drive West

OVERALL PROPERTY: 20.96 Ac.

LIMITS OF DEVELOPMENT: 8.70 Ac. (379,068 SF)

TAX ID NUMBER: 30382200001000000009.0 & 30382200001000000000.1

100-YR FLOOD ZONE: Zone 'X' Per Flood Insurance Rate Map (FIRM) No. 12061C0085H Community Number 120123, Panel 0085 Suffix H, Map Revised Date December 4, 2012

CURRENT ZONING: IN - Industrial

CURRENT LAND USE: Industrial

BUILDING USE:

	PROPOSED
Office	12,472 SF
Warehouse / Storage*	11,801 SF
Total	24,273 SF

*Includes Only Enclosed Portions of Structure.

LOT COVER:

	PROPOSED	
Building (Enclosed)	24,273 SF	(6.4%)
Covered Concrete	12,155 SF	(3.2%)
Concrete	12,060 SF	(3.2%)
Asphalt	90,711 SF	(23.9%)
Stabilized	49,585 SF	(13.1%)
Total	188,784 SF	(49.8%)

OPEN SPACE: PROPOSED
190,284 SF (50.2%)

SETBACKS: Front: 20 Feet
Side: None
Rear: 10 Feet

START / FINISH DATE: Summer 2021 - Fall 2022

PARKING REQUIRED:

Office:	12,472 SF @ 1 Space / 200 SF =	62.4 Spaces
Warehouse:	First 10,000 SF @ 1 Space / 1,000 SF =	10.0 Spaces
Warehouse:	Remaining 1,801 SF @ 1 Space / 2,000 SF =	0.9 Spaces
Total Required Parking:		73.3 Spaces

PARKING PROVIDED: Standard - 75
Handicap - 4
Total - 79

DAILY TRIPS:

Proposed Use:		
Government Office (ITE 730) :	12,472 SF @ 22.59 Trips / 1,000 SF =	281.8 Trips
Warehouse (ITE 150):	11,801 SF @ 1.74 Trips / 1,000 SF =	20.6 Trips
Total Proposed ADTs:		302.4 Trips

REQUIRED PERMITS:

City of Sebastian:
- Major Site Plan
- Engineering Review (Stormwater)
- Land Clearing Permit
- Tree Removal Permit
- Right-of-Way Permit

Indian River County:
- Utility Construction Permit
- Concurrency Certificate

S.J.R.W.M.D.:
- Environmental Resource Permit

F.D.E.P.:
- NPDES NOI
- Water Distribution Construction Permit
- Wastewater Collection Permit
- Fuel Tank Construction Permit
- Vehicle Wash / Industrial Waste

LEGEND

- LIGHT DUTY ASPHALT PAVEMENT (25,448 SF)
- HEAVY DUTY ASPHALT PAVEMENT (65,263 SF)
- STABILIZED UNPAVED AREA (49,585 SF)
- CONCRETE PAVEMENT (24,215 SF)
- PROPOSED ENCLOSED BUILDING
- SITE LIGHTING - TYPE AND SIZE AS INDICATED ON PHOTOMETRIC PLANS. ALL FIXTURES TO BE SHIELDED FROM ADJACENT PROPERTIES

CAI
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2	Revised for Site Plan Resubmittal.	1/13/21

City of Sebastian Public Works Complex
505 Airport Drive West
Sebastian, FL 32958

100% Construction Documents

DATE

JOHN H. BLUM LICENSE No. 45813 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOHN H. BLUM, P.E.
FL. LIC. NO. 45813
CARTER ASSOCIATES, INC.
COA 205 / LB 205

ISSUE DATE: 11/24/20
PROJ. # : 19-042E
DRAWN BY : CJR
DATUM : SEE SURVEY
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F.B. & PG. : ----

SHEET TITLE:
Overall Site Plan

SHEET
C-1
DWG. NO:

P:\19-042 Wright Construction\dwg\19-042E.dwg, C-1 Overall Site Plan, Clint Kohles
Feb. 12, 21, 12:25 PM

MATCH LINE - SEE SHEET C-3

DRY RETENTION AREA #3

PAD OVER FUEL STORAGE TANK

50.0'

18.0'

50.0'

188.4'

36.6'

240.0'

64.7'

STABILIZED OVERFLOW AREA

5.0' SIDEWALK

SIDEWALK FLUSH WITH ASPHALT

2.0' OVHG.

FENCE ALONG BACK OF SIDEWALK

SIDEWALK FLUSH WITH ASPHALT

36.6'

WHEELSTOP (TYP.)

6' HIGH BLACK VINYL COATED CHAIN LINK SECURITY FENCE

DRY RETENTION AREA #3

TYPE 'D' CURB

FLUME (SEE DETAIL)

PROPOSED LIFT STATION (TO BE CONSTRUCTED UNDER SEPARATE PERMIT)

6' HIGH BLACK VINYL COATED CHAIN LINK SECURITY FENCE

BOLLARD (TYP. - SEE ARCHITECTURAL PLAN)

20.0'

20.0'

50.0'

COLUMN (TYP. - SEE ARCHITECTURAL PLAN)

R100.0'

HVAC CONDENSERS

R129.8'

16'x6.5' GENERATOR PAD

R50.0'

8'x8' TRANSFORMER PAD

6' HIGH BLACK VINYL COATED CHAIN LINK SECURITY FENCE

PROPOSED OFFICE AREA 12,472 SF

SIDEWALK CURB (SEE DETAIL)

HVAC CONDENSER

10.4' SDWK.

12.0' SDWK.

EV CHARGING STATION AT THREE SPACES (SEE DETAIL)

RAISED SIDEWALK (SEE DETAIL)

HANDICAP ACCESS RAMP (SEE DETAIL)

RAISED SIDEWALK (SEE DETAIL)

TYPE 'D' CURB

GATE

30.0' LOADING ZONE

HANDICAP STRIPING AND SIGNAGE DETAILS ON SHEET C-7

GATE

R1-1 STOP SIGN W/ 24" WIDE STOP BAR AND 20' DOUBLE YELLOW LANE SPLIT

TYPE 'D' CURB

R1-1 STOP SIGN W/ 24" WIDE STOP BAR AND 30' DOUBLE YELLOW LANE SPLIT

TYPE 'D' CURB

R45.0'

R45.0'

MATCH LINE - SEE SHEET C-3

WETLAND LINE AS DETERMINED BY ATLANTIC ENVIRONMENTAL ON 1/19/21

15' MIN. \25' AVG. WETLAND BUFFER

AIRPORT DR. 100' R-O-W POSTED SPEED LIMIT: 30 MPH

239.7'

DRY RETENTION AREA #1

TYPE 'D' CURB

6.0'

20.0'

30.0'

WETLAND LINE AS DETERMINED BY ATLANTIC ENVIRONMENTAL ON 1/19/21 (NO MITIGATION REQUIRED IN THIS AREA)

268.1'

R1-1 STOP SIGN W/ 24" WIDE STOP BAR AND 20' DOUBLE YELLOW LANE SPLIT

TYPE 'D' CURB

R1-1 STOP SIGN W/ 24" WIDE STOP BAR AND 20' DOUBLE YELLOW LANE SPLIT

15.0'

15.0'

AIRPORT DRIVE W

100' R-O-W

POSTED SPEED LIMIT: 30 MPH

100.0' R-O-W

LEGEND

- LIGHT DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- STABILIZED UNPAVED AREA
- CONCRETE PAVEMENT
- PROPOSED ENCLOSED BUILDING
- SITE LIGHTING - TYPE AND SIZE AS INDICATED ON PHOTOMETRIC PLANS. ALL FIXTURES TO BE SHIELDED FROM ADJACENT PROPERTIES

ASSUMED

GRAPHIC SCALE

20 0 20 40 60

SCALE: (1 Inch = 20 Feet)

CAI

CARTER ASSOCIATES, INC.
SERVING FLORIDA SINCE 1911

CONSULTING ENGINEERS AND LAND SURVEYORS

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EMAIL: JohnB@CarterAssoc.com

The City of Sebastian
1225 Main Street
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NO.	REVISION	DATE
1	Revised for Site Plan Resubmittal.	1/13/21
2	Revised per City Staff comments, and for updated wetland line envidance.	2/11/21

City of Sebastian Public Works Complex
505 Airport Drive West
Sebastian, FL 32958

100% Construction Documents

DATE

JOHN H. BLUM LICENSE No. 45813 STATE OF FLORIDA PROFESSIONAL ENGINEER

JOHN H. BLUM, P.E.
FL. LIC. NO. 45813
CARTER ASSOCIATES, INC.
COA 205 / LB 205

ISSUE DATE: 11/24/20
PROJ. # : 19-042E
DRAWN BY : CJR
DATUM : SEE SURVEY
REF. # :
F.B. & PG. : ----

SHEET TITLE:
Site Plan (East)

SHEET
C-2

DWG. NO:

P:\19-042 Wright Construction\dwg\19-042E dwg, C-2 Site Plan (East), Clint Rahes
Feb. 12, 21, 11:48 AM

ASSUMED

GRAPHIC SCALE

20 0 20 40 60

SCALE: (1 Inch = 20 Feet)

LEGEND

- LIGHT DUTY ASPHALT PAVEMENT
- HEAVY DUTY ASPHALT PAVEMENT
- STABILIZED UNPAVED AREA
- CONCRETE PAVEMENT
- PROPOSED ENCLOSED BUILDING
- SITE LIGHTING - TYPE AND SIZE AS INDICATED ON PHOTOMETRIC PLANS. ALL FIXTURES TO BE SHIELDED FROM ADJACENT PROPERTIES

ROSELAND ROAD
106' R-O-W
POSTED SPEED LIMIT: 45 MPH

106.0' R-O-W

50.0' ROSELAND ROAD BUFFER

5.0' PERIMETER BUFFER

6' HIGH BLACK VINYL COATED CHAIN LINK SECURITY FENCE

79.2'

94.3'

68.4'

122.5'

69.6'

127.2'

35.0' WETLAND BUFFER

PROPOSED DUMPSTER ENCLOSURE

10.7'

10.0'

30.0'

R15.0'

TYPE 'D' CURB

R20.0'

R20.0'

TYPE 'D' CURB

15' MIN. WETLAND BUFFER

211.5'

185.0'

DRY RETENTION AREA #2

70.0'

50.0'

GARAGE/ STORAGE/ WAREHOUSE 1,032 SF

SECONDARY WETLAND IMPACT (NO FILLING) 563 SF

WETLAND IMPACT (TO BE FILLED) 125 SF

WETLAND AREA

WETLAND LINE AS DETERMINED BY ATLANTIC ENVIRONMENTAL ON 1/19/21

R45.0'

30.0'

35.1'

50.3'

20.0'

50.0'

WETLAND BUFFER 15' MIN. / 25' AVG. WIDTH

SPACES SHOWN ARE FOR DIMENSIONAL PURPOSES AND ARE NOT TO BE STRIPED DURING CONSTRUCTION

STABILIZED EQUIPMENT STORAGE AREA

180.0'

GATE

24.0'

34.0'

TYPE 'D' CURB

R5.0'

R5.0'

50.0'

50.0'

20.0'

VEHICLE WASH

22.0'

COLUMN (TYP. - SEE ARCHITECTURAL PLAN)

COLUMN (TYP. - SEE ARCHITECTURAL PLAN)

110.0'

R3.0'

57.0'

R3.0'

50.0'

60.0'

60.0'

20.0'

TWO SIDED FUEL PUMP

BUFFEER PROVIDED: 15,343 SF
BUFFER REQUIRED: 561 LF X 25' WIDE = 1,425 SF (MIN. 15' WIDTH)

6' HIGH BLACK VINYL COATED CHAIN LINK SECURITY FENCE

15.6' WETLAND BUFFER

13.0'

5.0'

DRY RETENTION AREA #3

CAR VACUUM

BOLLARD (TYP.)

R10.0'

R10.0'

PAD OVER FUEL STORAGE TANK

50.0'

50.0'

GARAGE/ STORAGE/ WAREHOUSE 10,769 SF

10.7'

30.0'

TYPE 'D' CURB

MATCH LINE - SEE SHEET C-2

MATCH LINE - SEE SHEET C-2

CAI

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DRAWN BY : CJR
DATUM : SEE SURVEY
REF. # :
F.B. & PG. : ----

SHEET TITLE:
Site Plan (West)

SHEET
C-3

DWG. NO:

P:\19-042 Wright Construction\dwg\19-042E dwg, C-3 Site Plan (West), Cori Rahyes
Feb. 12, 21, 11:46 AM

GRAPHIC SCALE

30 0 30 60 90

SCALE: (1 Inch = 30 Feet)

ASSUMED

CORPORATE PARK DRIVE

ROSELAND ROAD

AIRPORT DRIVE WEST

2"wm

12"wm

35.0' WETLAND BUFFER

50.0' ROSELAND ROAD BUFFER

WETLAND LINE AS DETERMINED BY ATLANTIC ENVIRONMENTAL ON 1/19/21

WETLAND LINE AS DETERMINED BY ATLANTIC ENVIRONMENTAL ON 1/19/21 (NO MITIGATION REQUIRED IN THIS AREA) 6,750 SF

DRY RETENTION AREA #1
0.74 Ac. @ TOB

DRY RETENTION AREA #2
0.54 Ac. @ TOB

SECONDARY WETLAND IMPACT (NO FILLING) 563 SF

WETLAND IMPACT (TO BE FILLED) 125 SF

WETLAND BUFFER 15' MIN. / 25' AVG. WIDTH

15' WETLAND BUFFER

15.6' WETLAND BUFFER

TOE OF FILL

LIMITS OF DRAINAGE STUDY

PROPOSED BUILDING
F.F. EL. = 18.25

MITERED END SECTION
INV. = 14.25

MITERED END SECTION
INV. = 14.00

MITERED END SECTION
INV. = 13.00

D-5
INSTALL TYPE 'C' STRUCTURE
RIM: 16.45
SUMP: 12.20
SE INV: 13.00 - 24" Ø
NW INV: 13.00 - 24" Ø

D-6
INSTALL TYPE 'C' STRUCTURE
RIM: 16.45
SUMP: 12.20
NE INV: 13.25 - 18" Ø

D-17
INSTALL TYPE 'C' STRUCTURE
RIM: 16.20
SUMP: 12.25
W INV: 13.25 - 18" Ø

D-15
INSTALL TYPE 'C' STRUCTURE
RIM: 16.75
SUMP: 12.50
N INV: 13.50 - 18" Ø
S INV: 13.50 - 18" Ø

D-14
INSTALL TYPE 'C' STRUCTURE
RIM: 16.70
SUMP: 12.45
S INV: 13.50 - 15" Ø

D-8
INSTALL TYPE 'C' STRUCTURE
RIM: 16.70
SUMP: 12.45
S INV: 13.50 - 18" Ø

D-11
INSTALL TYPE 'C' STRUCTURE
RIM: 16.45
SUMP: 12.05
N INV: 13.10 - 18" Ø
S INV: 13.10 - 18" Ø

D-35
INSTALL TYPE 'C' STRUCTURE
RIM: 16.55
SUMP: 13.35
W INV: 13.40 - 15" Ø

D-36
INSTALL TYPE 'C' STRUCTURE
RIM: 16.50
SUMP: 13.15
E INV: 13.25 - 15" Ø
W INV: 13.20 - 15" Ø

D-7
INSTALL TYPE 'C' STRUCTURE
RIM: 15.95
SUMP: 11.65
E INV: 12.70 - 15" Ø
W INV: 12.70 - 18" Ø

D-31
INSTALL TYPE 'C' STRUCTURE
RIM: 16.50
SUMP: 12.25
SW INV: 13.25 - 15" Ø

D-4
INSTALL TYPE 'C' STRUCTURE
RIM: 16.45
SUMP: 10.95
E INV: 12.00 - 24" Ø
SW INV: 12.00 - 24" Ø

D-2
INSTALL TYPE 'C' STRUCTURE
RIM: 16.55
SUMP: 10.95
N INV: 12.00 - 24" Ø
SW INV: 12.00 - 24" Ø

D-32
INSTALL TYPE 'C' STRUCTURE
RIM: 15.95
SUMP: 12.20
NE INV: 12.25 - 24" Ø
S INV: 12.25 - 24" Ø

21LF of 18" ∅ ADS HP PIPE

46LF of 18" ∅ ADS HP PIPE

63LF of 18" ∅ ADS HP PIPE

14LF of 15" ∅ ADS HP PIPE

27LF of 15" ∅ ADS HP PIPE

14LF of 18" ∅ ADS HP PIPE

44LF of 15" ∅ ADS HP PIPE

60LF of 18" ∅ ADS HP PIPE

25LF of 24" ∅ ADS HP PIPE

54LF of 24" ∅ ADS HP PIPE

102LF of 24" ∅ ADS HP PIPE

120LF of 24" ∅ ADS HP PIPE

53LF of 18" ∅ ADS HP PIPE

90LF of 18" ∅ ADS HP PIPE

56LF of 15" ∅ ADS HP PIPE

68LF of 24" ∅ ADS HP PIPE

REMOVE EXISTING CONCRETE APRON

REMOVE EXISTING MILLINGS

RAISED SIDEWALK

SIDEWALK FLUSH WITH ASPHALT

MATCH LINE - SEE SHEET C-5

MATCH LINE - SEE SHEET C-5

P:\19-042 Wyatt Construction\dwg\19-042E.dwg, C-4 Grading and Drainage Plan (North), Clint Raines
Feb. 17, 21 - 2:23 PM

CAI
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DATUM : SEE SURVEY
REF. # :
F.B. & PG. : ----

SHEET TITLE:
Grading and Drainage Plan (North)

SHEET
C-4

DWG. NO:

MATCH LINE - SEE SHEET C-4

MATCH LINE - SEE SHEET C-4

LIMITS OF DRAINAGE STUDY

DRY RETENTION AREA #3
0.70 Ac. @ TOB

MITERED END SECTION
INV. = 13.50

MITERED END SECTION
INV. = 13.5

MITERED END SECTION
INV. 14.00

MITERED END SECTION
INV. 15.35

56LF of 18" ∅ ADS HP PIPE
(TO BE CONSTRUCTED
WITH LIFT STATION PROJECT)

LIMITS OF DRAINAGE STUDY

REMOVE EXISTING MITERED END SECTION AND CONNECT TO EXISTING 18"X12" ERCP INV. EL. = 14.5

PERIMETER CHAIN LINK FENCE

DRY RETENTION AREA #2
0.54 Ac. @ TOB

LIMITS OF DRAINAGE STUDY

SKYDIVE SEBASTIAN PROPERTY

INV. EL. = 13.00

INV. EL. = 13.00

LIMITS OF DRAINAGE STUDY

47LF of 18" ∅ ADS HP PIPE
CONSTRUCT CROSSING OVER PIPE
WITH SLOPES SUITABLE FOR VEHICULAR
TRAFFIC. MIN. 18" COVER OVER PIPE

ROSELAND ROAD

AIRPORT DR. WEST

12" wm

24" wm

ugt

CS-1
INSTALL CONTROL STRUCTURE
RIM: 14.75
SUMP: 9.00
S INV: 10.00 - 24" Ø

53LF of 24" ∅ ADS HP PIPE

INV. EL. = 7.50

WETLAND LINE AS DETERMINED
BY ATLANTIC ENVIRONMENTAL
ON 1/19/21

ASSUMED

GRAPHIC SCALE

30 0 30 60 90

SCALE: (1 Inch = 30 Feet)

TOP EL. = 14.6

OVERFLOW GRATE

24"Ø DISCHARGE
PIPE INV. = 10.0

MODIFIED TYPE 'C'
STRUCTURE

CONTROL STRUCTURE 1 (CS-1) DETAIL

1" = 2'

Feb. 17, 21 - 2:33 PM P:\19-042 Wright Construction\dwg\19-042E.dwg, C-5 Grading and Drainage Plan (South), Clint Rahlfs

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SHEET TITLE:
Grading and Drainage Plan (South)

SHEET
C-5

DWG. NO: