C I T Y O F F O R T P I E R C E

CITY COMMISSION AGENDA

Regular Meeting - Monday, April 15, 2019 - 6:30 p.m.
City Hall - City Commission Chambers, 100 North U.S. #1, Fort Pierce, Florida

1. **CALL TO ORDER**

2. **OPENING PRAYER**

3. **PLEDGE OF ALLEGIANCE**

4. **ROLL CALL**

5. **APPROVAL OF MINUTES**

   a. Approval of the Meeting Minutes of the April 1, 2019 Regular Meeting.

6. **PROCLAMATIONS**

   a. CASTLE Child Abuse Prevention Month

   b. 19th Circuit Guardian ad Litem in recognition of National Child Abuse and Prevention Month and National Volunteer Appreciation Week

7. **LETTERS TO COMMISSION**

   a. Letter from Reverend Patricia S. Wallace thanking Paul Bertram, Parks Division Manager and the entire Parks Division for their hard work in the preservation of beautiful Northwest Pioneer Park.

   b. Letter from Bill Harned in recognition of the impressive impact of Sgt. Don Christman's presence and actions at Lawnwood Hospital's Emergency Room where he personally witnessed Sgt. Christman going above and beyond.

   c. Letter from Sheila and Bob Clancy expressing their appreciation for the efforts of Miriam Garcia, Deputy City Clerk, in resolving their issue with securing a refund for tickets purchased for a show that was subsequently cancelled.

8. **COMMENTS FROM THE PUBLIC ON AGENDA ITEMS NOT REQUIRING PUBLIC HEARINGS**

Any person who wishes to comment on an agenda item which is not under Public Hearings on the Agenda may be heard at this time and must sign up to speak in advance. Please limit your comments to three (3) minutes or less, as directed by the Mayor, as this section of the Agenda is limited to thirty minutes. The City Commission will not be able to take any official actions under Comments from the Public. Speakers will address the Mayor, Commissioners, and the Public with respect. Inappropriate language will not be tolerated.

9. **ADDITIONS OR DELETIONS TO AGENDA AND APPROVAL OF AGENDA**

10. **MISCELLANEOUS REPORTS**

a. Presentation of proposed South Bridge reconfiguration by Peter Buchwald, Executive Director, St. Lucie Transportation Planning Organization.

b. Final Feasibility Report for SUN Trail projects, Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail Gap

c. Fair Housing Presentation

d. Monthly Financial Report for the Month Ending February 28, 2019

11. **CONSENT AGENDA**

a. Approve waiver of fees in the amount of $10,875.61 associated with the demolition lien against 108 N 16th Street, Fort Pierce, FL 34950, Parcel No. 2409-510-0021-000-0 owned by Juan Antonio Esquivel, 1605 Pine Hollow Drive, Fort Pierce, FL contingent upon payment of $7,200.00 payable in 30 days.

b. Approval of a $45,000.00 change order to Johnson-Davis, Inc. to compensate for additional Edwards Road Canal (Canal No. 9) construction services.

c. Approval of Specific Authorization No. 4 in an amount not to exceed $86,414.00 for construction engineering inspection (CEI) services relating to the Ohio Avenue Roadway Improvements construction project.

d. Approval of Florida Boating Improvement Grant No. 18069 for Moore's Creek Boat Ramp Improvements in the amount of $72,500.00.

e. Approve award of the Ohio Avenue Roadway Improvements construction contract to the low bidder, C.W.Roberts Contracting, Inc. (FKA as Lynch Paving and Construction Co., Inc.), in an amount not to exceed $1,015,147.20

f. Approve the following contributions from the Fort Pierce Police Department (FPPD) Law Enforcement Trust Fund: $1,000 to Parents of Murdered Children, Incorporated, $2,500 to the Boys and Girls Clubs of Saint Lucie County, and $2,000 to the Florida Office of Attorney General National Conference on Preventing Crime through the Derrick Brooks Charities.

g. Approval of Supplemental Revocable Encroachment Permit between the City of Fort Pierce and Kraaz & Kraaz Finance, LLC to provide for the installation of a storage silo for the benefit of Sailfish Brewery adjacent to the existing loading dock along with application to Historic Preservation Board.

h.

Approve purchase of one (1) 2019 Peterbilt refuse collection trucks, piggybacking the Florida Sheriff's Association Cooperative Purchasing Agreement FSA18-VEH18-VEL 26.0 for the Solid Waste Division in an amount not to exceed $273,974.00.

12. **PUBLIC HEARINGS**

a. Resolution No.19-R16 and Quasi-Judicial Hearing – A hearing to allow the owners and/or parties of interest in the property identified as 608 S 6th Street to show cause why the structure located on the premises should not be condemned and demolished.

b. Legislative Hearing - Ordinance 19-013 amending Chapter 22 of the Code of Ordinances amending the Use Table for certain commercial and industrial uses. SECOND READING

c. Legislative Hearing - Ordinance 19-015 amending Section 22-143(c) creating size, placement, responsibilities, and procedures for required signage for public hearings. SECOND READING

13. **CITY COMMISSION**

a. Resolution No. 19-R15 - Adopting Revised City of Fort Pierce Board of Examiners of Contractors Rules of Procedure.

b. Resolution 19-R17 appointing members to serve on the Fort Pierce Infrastructure Surtax Citizen Oversight Committee.

c. Approval of Letter of Congratulations to IRSC for winning the 2019 Aspen Prize for Community College Excellence.

14. **COMMENTS FROM THE PUBLIC**

Any person who wishes to comment on any subject may be heard at this time. Please limit your comments to three (3) minutes or less, as directed by the Mayor, as this section of the Agenda is limited to thirty minutes. The City Commission will not be able to take any official actions under Comments from the Public. Speakers will address the Mayor, Commissioners, and the Public with respect. Inappropriate language will not be tolerated.

15. **COMMENTS FROM THE CITY MANAGER**

16. **COMMENTS FROM THE COMMISSION**

17. **ADJOURNMENT**

Pursuant to Section 286.0105, Florida Statutes, the City hereby advises you that if you or another person decide to appeal any decision made by the City Commission with respect to any matter considered at its meeting or hearing, that you or said person will need a record of the proceedings, and that for such purpose, affected persons may need to insure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based. This notice does not constitute consent by the City for the introduction or admission into evidence of otherwise inadmissible or irrelevant evidence, nor does it authorize challenges or appeals not otherwise allowed by law.

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons with disabilities needing special accommodation to participate in this meeting should contact the City Clerk's Office at (772) 467-3065 at least 48 hours prior to the meeting.

City Commission Regular Meeting **5.a.**

Meeting Date: 04/15/2019

Re: Approval of the Regular Meeting Minutes of 04.01.2019

Submitted For: Linda Cox, City Clerk, City Clerk

SUBJECT:

Approval of the Meeting Minutes of the April 1, 2019 Regular Meeting.

SUMMARY:

Approval of the Meeting Minutes of the April 1, 2019 Regular Meeting.

RECOMMENDATION:

ALTERNATIVES:

RESPONSIBLE STAFF:

COORDINATED WITH:

Attachments

Reg Mtg Mins_04.01.2019

Form Review

Form Started By: Noemi Rios Started On: 04/09/2019 02:52 PM

Final Approval Date: 04/09/2019

MINUTES OF A REGULAR MEETING OF THE CITY COMMISSION OF THE CITY OF FORT PIERCE, FLORIDA, HELD IN THE CITY HALL COMMISSION CHAMBERS, 100 NORTH U.S. #1, FORT PIERCE, FLORIDA, AT 6:30 P.M. ON MONDAY, **APRIL 1, 2019**.

1. CALL TO ORDER

The meeting was called to order at 6:30 p.m.

2. OPENING PRAYER - Pastor Walter Barron, Neighborhood Bibleway Revival Center

3. PLEDGE OF ALLEGIANCE

4. ROLL CALL

Present: Mayor Pro Tem Rufus Alexander; Commissioner Jeremiah Johnson; Commissioner Thomas Perona; Commissioner Reginald Sessions

Absent: Mayor Linda Hudson

Staff Present: City Clerk Linda Cox
City Manager Nicholas Mimms
City Attorney Peter Sweeney

City Clerk, Linda Cox, indicated Mayor Linda Hudson had a family situation that prevented her from being present.

Motion was made by Commissioner Thomas Perona, seconded by Commissioner Reginald Sessions to excuse Mayor Linda Hudson.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

5. APPROVAL OF THE MINUTES

a. Approval of the Meeting Minutes of the March 18, 2019 Regular Meeting.

Motion was made by Commissioner Jeremiah Johnson, seconded by Commissioner Thomas Perona to approve item 5 a.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

6. PROCLAMATIONS

Mayor Pro Tem Alexander issued the Proclamations.

a. Proclamation recognizing Fair Housing Month

b. Proclamation recognizing Sexual Assault Awareness Month

c. Proclamation recognizing National Crime Victims' Rights Week

7. **LETTERS TO COMMISSION**

The following letters will be kept on file in the City Clerk's Office.

a. Letter from Dr. Pinkie W. Hendley, Pastor of New Life Christian Fellowship Church, thanking Chief Hobley-Burney for the opportunity to participate in the Citizen Police Academy and for meeting the fine employees of the Fort Pierce Police Department.

b. Letter from Christine Kesl thanking Chad Dawson, Code Enforcement Officer, for his assistance related to the trash cans on 2nd Street behind her property.

8. **COMMENTS FROM THE PUBLIC ON AGENDA ITEMS NOT REQUIRING PUBLIC HEARINGS**

There were no comments from the public.

9. **ADDITIONS OR DELETIONS TO AGENDA AND APPROVAL OF AGENDA**

The applicant of item 12 b requested it be pulled.

Motion was made by Commissioner Thomas Perona, seconded by Commissioner Reginald Sessions to approve item 12 b being pulled and the agenda as amended.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

10. MISCELLANEOUS REPORTS

a. Fort Pierce Lions Club check presentation to Commission

Crystal Samuel with the Fort Pierce Lion's Club presented the City of Fort Pierce for a check in the amount of $2,929.75 to provide a beach access mat at South Causeway Park for the handicap pavillion. It will also help the blind and vision imparied have a safer walk to the water because of the contrast between the blue mat, the sand and the level surface.

11. CONSENT AGENDA

a. Approval of RFP No. 2018-004 Change Order No.2 to Gator Dredging, LLC in the amount of $1,627.60.

b. Approval of Specific Authorization No.3 to RFQ 2016-014 for Tetra Tech Inc. in the amount of $64,869.00 pending approval by City Attorney as to form and correctness.

c. Approve request to reduce Building Department lien in the amount of $59870.00, against 2801 Oleander Avenue, Ft. Pierce, FL 34982 - Parcel ID Number - 2421-506-0079-000/6, owned by Lemaire and Rosemarie Charlestin, of the same address, to $750.00 payable in 1 year.

Motion was made by Commissioner Jeremiah Johnson, seconded by Commissioner Thomas Perona to approve items 11 a through 11 c.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

12. PUBLIC HEARINGS

a. Quasi-Judicial Hearing on Resolution No. 19-R12 - A hearing to allow the owners and/or parties of interest in the property identified as 1710 Seaway Drive to show cause why the structure located on the premises should not be condemned and demolished.

City Clerk Linda Cox introduced the resolution, read by title only, into the record.

RESOLUTION 19-R12 - A RESOLUTION DETERMINING THAT A CERTAIN BUILDING OR STRUCTURE LOCATED AT 1710 SEAWAY DR IN FORT PIERCE, FLORIDA 34949 IS UNSAFE AND A NUISANCE THAT CONSTITUTES A MENACE TO THE BUSINESS, HEALTH AND SAFETY OF THE COMMUNITY; AND THAT SAID BUILDING OR STRUCTURE SHALL BE CONDEMNED AND DEMOLISHED; DECLARING THE PARTIES OF INTEREST WERE PROVIDED THE OPPORTUNITY TO BE HEARD AND ARE RESPONSIBLE FOR THE REMOVAL OF THE BUILDING OR STRUCTURE; AND ORDERING THE CITY OF FORT PIERCE TO PROCEED WITH SUCH REMOVAL AND PLACE A LIEN UPON THE PROPERTY IDENTIFIED IF COMPLETED BY THE CITY OF FORT PIERCE; PROVIDING FOR APPEAL; PROVIDING FOR NOTICE TO ALL PARTIES; AND PROVIDING FOR AN EFFECTIVE DATE

Before commencing this Quasi-Judicial Hearing, Peter Sweeney, City Attorney, reminded the Commission when acting as a Quasi-Judicial Body they apply the laws and policies established and are held to stricter procedural requirements, following basic standards established and are held to stricter procedural requirements, following basic standards of notice and due process based on substantial evidence. As such, they conduct these

proceedings as judges instead of legislators. There are no party interveners in this matter. That means that the only other individuals that may be heard are people who might have relevant information and their comments are limited to three (3) minutes each. Members of the public may be permitted to present their non-expert opinions, but the Commission must know that public sentiment is not relevant to the decision which must be based on competent, substantial evidence.

Mayor Pro Tem Alexander called the proceeding to order.

City Clerk, Linda Cox, confirmed the City complied with advertisement and notice requirements.

Mayor Pro Tem Alexander inquired with the City Commission about ex-parte communications. Both Commissioner Jeremiah and Commissioner Sessions engaged in ex-parte communications.

City Clerk, Linda Cox, was asked to swear in those wanting to speak during this Quasi-Judicial hearing. Individuals in the audience intending to speak on this item were asked to stand, raise their right hand, and administered an oath to tell the truth, the whole truth and nothing but the truth. Those that were sworn in were asked to clearly state their name for the record and confirm they were sworn in at such time as they were asked to come forward to testify.

Peggy Arraiz, Code Enforcement Manager, indicated this is a hearing to allow the owners and/or parties of interest in the property identified as 1710 Seaway Drive to show cause why the structure located on the premises should not be condemned and demolished. The structure caught fire in August 2017. Ms. Arraiz showed a few photos of the damage incurred. At that time the building was determined to be damaged in excess of 50%, which would require the building to be rehabilitated to the current code or be demolished. The tenant Mr. Zachary Williams indicated that he would obtain an engineer's opinion that the structure was not damaged at 50%. No report was forwarded to the Building Department. After allowing sufficient time for either the owner, tenant or both to take action and no action being taken, an Affidavit of Unsafe Building was issued in July 2018 to initiate the condemnation with demolition process. Mr. Zachary Williams contacted the City once more and indicated that he would provide an engineer's opinion that the structure was not damaged at 50%, triggering the updated code requirements. Due to continued no action by the owner or previous tenant, staff has brought this matter to the City Commission for resolution. Staff recommends the City Commission approve this resolution declaring this structure be condemned and demolished in accordance with the Rules of Procedure for Condemnation and Demolition as adopted by the City Commission.

Shaun Coss, Building Department Coordinator, confirmed he was sworn in. As an ICC Certified Housing Inspector, Mr. Coss does believe this structure can be rehabilitated. This would require signed and sealed engineering drawings, as well as an engineer’s evaluation. It is not standard practice for the Building Department to pull a Certificate of Occupancy when a structure is condemned. Once a building is condemned it is prohibited to be occupied.

Ms. Arraiz went on to say if the Commission thought it best to not demolish at this time, that it was recommended the City Commission set a specific time period to make sure there had been action taken to provide what was necessary to rehabilitate the property.

Mayor Pro Tem Alexander opened the Public Hearing.

Zachary Williams, resident care-taker and owner-representative of the property stepped forward. He would like to get a fair evaluation of the home within 90 days to show good faith effort. He submitted a copy of the repair estimates to the Clerk as evidence.

Marcia Baker confirmed being sworn in. She was in opposition of the demolition.

Blades Robinson confirmed he was sworn in. He was in opposition of the demolition.

Krista Stone confirmed she was sworn in. She was in opposition of the demolition.

Michael Eisenberg confirmed he was sworn in. He was in opposition of the demolition.

Christina Fortunado confirmed she was sworn in. She was in opposition of the demolition.

Seeing no one else, Mayor Pro Tem Alexander closed the Public Hearing.

Commissioner Perona was of the opinion that staff should work to assist Mr. Williams to achieve a positive outcome in 90 days.

Motion was made by Commissioner Reginald Sessions, seconded by Commissioner Thomas Perona to revisit this item in 90 days due to staff failing to provide sufficient evidence.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

b. Quasi Judicial Hearing - Review and approval of an application for Subdivision (Minor Replat), submitted by property owner, Harbour Isle Development Commercial, LLC & applicant Mason Development & Construction, to replat 3.1 acres of land (2 Parcels) at or near 825 Seaway Drive in front of the Harbour Isle Development in Fort Pierce, FL. The property is zoned Planned Development (PD). Parcel ID: 2402-501-0001-000-5 & 2402-501-0001-010-8.

This item was pulled from the agenda at the request of the applicant.

c. Quasi-Judicial Hearing - Review and approval of an application for Subdivision (Final Plat), submitted by property owner, Structured Rea Ft Pierce, LLC & applicant Engineering Design & Construction, to subdivide 44.97 acres of land (5 Parcels) into 3 parcels at or near 2121 & 2123 S. Jenkins Road in Fort Pierce, FL. The property is zoned General Commercial (C-3). Parcel ID: 2313-431-0000-000-1, 2313-441-0000-000-2, 2313-434-0001-000-7, 2313-443-0000-000-8, & 2313-443-0000-000-8.

Mayor Pro Tem Alexander indicated City Attorney, Peter Sweeney, had already read the rules of the Quasi-Judicial Proceeding and called the proceeding to order.

City Clerk, Linda Cox, confirmed the City complied with advertisement and notice requirements.

Mayor Pro Tem Alexander inquired with the City Commission about ex-parte communications. Commissioner Perona and Commissioner Johnson indicated they'd spoken to the applicant a long time ago.

City Clerk, Linda Cox, was asked to swear in those wanting to speak during this Quasi-Judicial hearing. Individuals in the audience intending to speak on this item were asked to stand, raise their right hand, and administered an oath to tell the truth, the whole truth and nothing but the truth. Those that were sworn in were asked to clearly state their name for the record and confirm they were sworn in at such time as they were asked to come forward to testify.

Brandon Creagan, Planner, indicated the applicant is requesting a Final Plat for 44.97 acres of land for the Camping World & Gander Outdoors Development. This Final Plat will allow the developers to commence vertical construction on the project. Two of the parcels will be designated for future commercial developments and a fourth parcel will be dedicated to the County for Right-Of-Way. There will also be a road tract that leads into the development and a water management tract. All affected departments have reviewed the proposed Final Plat, and have provided conditional approval based upon requirements of the City Code, and other applicable regulations. The applicant has worked with the City of Fort Pierce Engineering Department and Northstar Geomatics to ensure that the plat conforms with the rules and regulations regarding the platting of land in the State of Florida. The Final Plat meets the above standards of the City's land development code and Comprehensive Plan; therefore, staff recommends the City Commission approve the request with the following condition:

1. The applicant will supply two (2) Mylar's before the City Commission meeting for appropriate signatures and then the plat is recorded with St. Lucie County Clerk of Courts in accordance with Florida State Statute 177.111.

Mayor Pro Tem Alexander opened the Public Hearing.

Brad Currie, the applicant's representative, confirmed he was sworn in and was available to answer questions.

Seeing no one else, Mayor Pro Tem Alexander closed the Public Hearing.

Motion was made by Commissioner Reginald Sessions, seconded by Commissioner Thomas Perona to approve item 12 c with staff conditions.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

d. Legislative Hearing - Ordinance 19-013 amending Chapter 22 of the Code of Ordinances amending the Use Table for certain commercial and industrial uses. FIRST READING

City Clerk Linda Cox introduced the ordinance, read by title only, into the record.

ORDINANCE NO. 19-013 - AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA CHAPTER 22, ARTICLE III, SECTION 22-22, AMENDING THE USE TABLE TO ALLOW CERTAIN COMMERCIAL AND INDUSTRIAL USES TO BE ALLOWED BY RIGHT IN LIEU OF REQUIRING A CONDITIONAL USE APPROVAL; AMENDING THE USE TABLE TO ALLOW CERTAIN COMMERCIAL AND INDUSTRIAL USES TO BE ALLOWED WITH A CONDITIONAL USE APPROVAL IN LIEU OF BEING PROHIBITED OUTRIGHT; AMENDING THE USE TABLE BY CREATING A NEW USE CATEGORY "SERVICE OF HEAVY EQUIPMENT" AND PROVIDING FOR ITS ALLOWANCE IN CERTAIN ZONING DISTRICTS; ESTABLISHING HOW PERMITTED AND CONDITIONAL USES ARE DETERMINED FOR PROPERTIES IN THE EDGARTOWN SETTLEMENT ZONING DISTRICT, THE PLANNED DEVELOPMENT ZONE, AND THE PLANNED UNIT REDEVELOPMENT ZONE; PROVIDING FOR A SEVERABILITY CLAUSE; REPEALING ALL ORDINANCES OR PARTS THEREOF IN CONFLICT; PROVIDING FOR AN EFFECTIVE DATE.

Rebeca Guerra, Assistant Planning Director, indicated the Planning Department is proposing a Zoning Text Amendment to Article III – Basic Zoning Districts, Section 22-22, Allowed Uses, of the City of Fort Pierce Code of Ordinances to allow some uses identified in the Use Table to be allowed by right, in lieu of needing a Conditional Use approval from City Commission. The Text Amendment would also allow some uses to be allowed with Conditional Use approval instead of being prohibited outright in certain zoning districts. The purpose of the Text Amendment is to streamline the development process by providing for a broader range of uses to be allowed outright in certain zoning districts where the use itself is appropriate given the characteristics of each district and its location in the City. In particular, commercial and industrial uses have been expanded in such a manner so as to allow for a more streamlined review and development approval process. To this end, there are 44 instances where uses, which are now only allowed with a Conditional Use, or were prohibited outright, are now being proposed to be deemed permitted by right. In addition, there are 14 instances where uses which are now prohibited outright are now being proposed to be allowed with Conditional Use approval. In addition to the above changes, the Text Amendment also serves to clarify how permitted and conditional uses are determined for properties in the Edgartown Settlement (ES) Zoning District, the Planned Development Zone (PD), and the Planned Unit Redevelopment Zone (PUR). These proposed changes have been recommended by the Development Review Task Force, as well as the Saint Lucie County Chamber of Commerce. The Planning Board recommended approval of the proposed Text Amendment. Staff recommends that the City Commission approve the proposed Text Amendment to Section 22-22, Allowed Uses.

Commissioner Perona inquired about the accuracy of the graphs, with the exception of the amendments, so as to avoid repeating past mistakes and assuring they reflect what the city's rules and regulations are. Ms. Guerra explained the commercial and industrial uses were looked at in a very limited sphere on the use table. Things like Residential Uses were not looked at this time around. This is being done in a phased format. The broader range of uses makes it easier for the public to get through their applications, as well as streamlines the process. Going forward, however, they would still need to go before the City Commission to determine their appropriateness and scale.

Mayor Pro Tem Alexander opened the Public Hearing.

Frank Fee, the applicant's representative, proposed that the process for bed and breakfasts stay as it currently is, that is requesting a Conditional Use be approved by the City Commission in the C1 zoning district.

Seeing no one else, Mayor Pro Tem Alexander closed the Public Hearing.

Commissioner Perona indicated he'd like to have a workshop indicating the differences between a bed and breakfast versus short-term rentals. Ms. Guerra indicated, indeed, they may seem very similar but they are very different in functions. Approving this tonight does not mean it's set in stone. City Attorney, Peter Sweeney, explained legal implications.

Motion was made by Commissioner Jeremiah Johnson, seconded by Commissioner Thomas Perona to approve item 12 as submitted while removing the bed and breakfast proposed change.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

e. Legislative Hearing - Ordinance 19-015 amending Section 22-143(c) creating size, placement, responsibilities, and procedures for required signage for public hearings. FIRST READING

City Clerk Linda Cox introduced the ordinance, read by title only, into the record.

ORDINANCE NO. 19-015 - AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA, TO REPEAL CHAPTER 22, ARTICLE X, SECTION 22-143(C) “NOTICE BY SIGNS,” TO ADOPT A NEW CHAPTER 22, ARTICLE X, SECTION 22-143(C) “NOTICE BY SIGNS,” CREATING SIZE, PLACEMENT, RESPONSIBILITIES, AND PROCEDURES FOR POSTING OF REQUIRED SIGNAGE FOR PUBLIC HEARINGS; PROVIDING FOR A SEVERABILITY CLAUSE; REPEALING ALL ORDINANCES OR PARTS THEREOF IN CONFLICT; PROVIDING FOR AN EFFECTIVE DATE.

Rebeca Guerra, Assistant Planning Director, indicated the proposed Text Amendment seeks to modify Section 22-143 regarding the posting of signage on any property seeking an amendment of the Zoning Atlas or an application for Conditional Use. Specifically, it is proposing to simplify the information listed on the sign itself so as to provide the basic information necessary to the public in order to give notice of a pending application. Additionally, the Text Amendment looks to shift the responsibility of posting the required signage from City Staff to the applicant. The timing requirements for notice by signage set forth in Section 22-143 of City Code are not being changed as part of this amendment. The signs themselves have been modified as well, changing from metal signs to corrugated plastic signage similarly used by the Code Enforcement Department. This will enable the applicant to post a sign easily by a variety of means so that it may be readily seen by the public from the right-of-way. The goal of the change is to streamline the sign installation process. The Planning Board recommended approval of the proposed Text Amendment. Staff recommends that the City Commission approve the proposed Text Amendment to Section 22-143, Public Hearings.

Commissioner Johnson indicated he’d like for a fluorescent color to be considered in order to bring attention to the sign rather than have it blend in with other signs in the vecinity. Commissioner Sessions felt somewhere on the sign the words Public Hearing should be added. Ms. Guerra took these things into consideration and said she’d provide revised versions for the City Commission to see during the Second Reading.

Mayor Pro Tem Alexander opened the Public Hearing.

Lisa Potter indicated she thought it would be appropriate to add some form of identification to the sign so as to identify it when the public calls for information since it’s a vacant piece of property with no address.

Seeing no one else, Mayor Pro Tem Alexander closed the Public Hearing.

In answer to Ms. Potter’s suggestion, Ms. Guerra indicated given the number of applications they have monthly it’s very easy to identify which property the caller is referencing just by letting them know the street they’re on.

Motion was made by Commissioner Thomas Perona, seconded by Commissioner Reginald Sessions to approve item 12 e.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

f. Legislative Hearing - Ordinance 19-016 amending Chapter 22 of the Code of Ordinances for site plan reviews. FIRST READING

City Clerk Linda Cox introduced the ordinance, read by title only, into the record.

ORDINANCE NO. 19-016 - AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA TO REPEAL CHAPTER 22, ARTICLE IV, SECTION 22-58 “SITE PLAN REVIEW;” TO ADOPT A NEW CHAPTER 22, ARTICLE IV, SECTION 22-58 “MAJOR AND MINOR SITE PLAN APPLICATION,” ESTABLISHING NEW THRESHOLDS FOR SITE PLAN REVIEWS, CREATING MAJOR AND MINOR SITE PLAN REVIEW CLASSIFICATIONS, ESTABLISHING APPLICATION SUBMITTAL

REQUIREMENTS FOR MAJOR SITE PLANS, CLARIFYING REVIEW PROCESSES BY THE TECHNICAL REVIEW COMMITTEE, PLANNING, BOARD AND CITY COMMISSION FOR MAJOR SITE PLANS, AND CREATING A NEW MINOR SITE PLAN REVIEW PROCESS AND ASSOCIATED APPLICATION REQUIREMENTS; TO AMEND THE FOLLOWING SUBSECTIONS OF CHAPTER 22, ARTICLE III, FOR CONSISTENCY WITH NEW THRESHOLDS OF SITE PLAN REVIEWS: SUBSECTION 22-27(C)(1) "MEDIUM DENSITY RESIDENTIAL ZONE (R-4)," SUBSECTION 22-27.1(C)(1) "HUTCHINSON ISLAND MEDIUM DENSITY RESIDENTIAL ZONE (R-4A)," SUBSECTION 22-28(C)(1) "HIGH DENSITY RESIDENTIAL ZONE (R-5)," SUBSECTION 22-29(C)(1) "OFFICE COMMERCIAL ZONE (C-1)," SUBSECTION 22-30(C)(1) "NEIGHBORHOOD COMMERCIAL ZONE (C-2)," SUBSECTION 22-31(C)(1) "GENERAL COMMERCIAL ZONE (C-3)," SUBSECTION 22-32(C)(2) "CENTRAL COMMERCIAL ZONE (C-4)," SUBSECTION 22-33(C)(1) "TOURIST COMMERCIAL ZONE (C-5)," SUBSECTION 22-33.1(C)(1) "MARINE COMMERCIAL ZONE (C-6)," SUBSECTION 22-34(C)(1) "LIGHT INDUSTRIAL ZONE (I-1)," SUBSECTION 22-34.1(C)(1) "HEAVY INDUSTRIAL ZONE (I-3)," SUBSECTION 22-35(D)(1) "MARINE INDUSTRIAL ZONE (I-2)," SUBSECTION 22-35.1(E)(1) "COMMERCIAL PARKWAY ZONE (CP-1)," SUBSECTION 22-36(C)(1) "GENERAL AND RECREATIONAL OPEN SPACE ZONE (OS-1);" PROVIDING FOR A SEVERABILITY CLAUSE; REPEALING ALL ORDINANCES OR PARTS THEREOF IN CONFLICT; PROVIDING FOR AN EFFECTIVE DATE.

Rebeca Guerra, Assistant Planning Director, indicated this is a Zoning Text Amendment to Article IV – Supplementary Regulations, Section 22-58 Major & Minor Site Plan Applications, of the City of Fort Pierce Code of Ordinances to increase the square foot thresholds for administrative review and approval of commercial and industrial site plans from 4,000 square feet to 50,000 square feet. The Text Amendment would also increase the administrative review threshold for multi-family residential projects from 20 to 50 units, as well as establishing the same minimum thresholds for other residential projects. Public or private institutional developments which do not exceed one acre in land are also proposed to be eligible for administrative review. To this end, site plan reviews will be subject to approval from either a Major or Minor Site Plan Application. The proposed Text Amendment also seeks to clarify the minimum submittal requirements for Major or Minor Site Plan Applications and delineate the process through which these applications are reviewed by the Technical Review Committee, Planning Board, and City Commission. In brief, all Site Plan applications will be reviewed by the Technical Review Committee. The distinction between both types of applications, however, is that Major Site Plans will require Planning Board review and City Commission approval, while Minor Site Plans may be ultimately approved by the Planning Director after it has been determined that the application is in compliance with City Code and no outstanding documents, actions, or information are needed. These new thresholds were proposed by the Development Review Task Force in June of 2018 as part of an evaluation of the City's regulatory/permitting process. Their recommendations have been discussed with the City Commission and this Text Amendment now seeks to formally adopt the previous consensus.

The Planning Board recommended denial of the proposed Text Amendment, 5-1. Staff recommends that the City Commission approve a Text Amendment to Section 22- 58, Major & Minor Site Plan Applications.

Commissioner Johnson asked how concerns regarding traffic lights, traffic, etc. are addressed with concerned citizens. Brandon Creagan, Planning Analyst, indicated they took the time to go over the City Code with the concerned citizens and then broached those concerns with the applicant because, at the end of the day, they ultimately want to come to an agreement with both parties and/or at least a happy medium. Commissioner Johnson also inquired if the public would know about an application because of the signs that were approved. Ms. Guerra indicated those were only for Conditional Uses and Rezonings. These properties are not posted for site plans.

Commissioner Perona wanted to know how much time an applicant would save for anything under 50,000 square feet. Ms. Guerra explained it was difficult to gauge since each project is unique and it would be dependent on what they need specifically. If you have a perfect project not requiring any plotting, variances, and is just good to go then they'd save approximately 90 days, but it is unusual for any given project to not require any one thing at least.

Mayor Pro Tem Alexander opened the Public Hearing.

Brad Currie explained the majority of applicants did not want to spend that money until they know they have the approval they need. He asks the applicants he represents to have their applications thoroughly and correctly filled out so as to not miss the Planning Board deadlines. The Task Force modeled this proposal after the county. The threshold could be anything, right now it's 4,000 and he believes anything more than 4,000 would be better.

Tod Mowery indicated many applicants, including WaWa, who has a current application in with the City, are concerned with the thresholds. National tenants are downsizing in order to come in under our thresholds. He said the only thing holding the city back is their thresholds.

Bruce Murray was in opposition.

Rick Ross was unsure.

Seeing no one else, Mayor Pro Tem Alexander closed the Public Hearing.

Commissioner Perona indicated he didn't feel he'd seen anything tonight indicating that they should change things.

Commissioner Sessions felt that a step in this direction would take away from the quaint town we have and moving toward a city like Miami. While he's always been an advocate for growth he questions at what rate he's willing to do this. Fifty thousand is a bit too much for him but he is unsure if he'd like to go as low as 5,000.

The City Commission discussed in length their concerns, the potential challenges they'd encounter, what options they could consider, etc.

The City Manager, Nicholas Mimms, said an option to consider is sending this item back the Planning Board to review and look at it with specificity and come up with a recommendation that would work for the City Commission as well as the community.

Motion was made by Commissioner Thomas Perona, seconded by Commissioner Jeremiah Johnson to send item 12 f to the Planning Board for reconsideration and recommendations.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

13. CITY COMMISSION

a. Consideration of FPUA's FY 2018 Final Budget Amendment

John Tompeck, FPUA Director of Utilities and Nina Penick, FPUA Director of Financial Services presented the City Commission with the 2018 Fiscal Year Final Budget Amendment and the Comprehensive Annual Financial Report (CAFR). As required by the charter, FPUA needs City Commission approval of the audit of the CAFR, which triggers payment of the distribution to the City within 60 days. The final budget amendment is essentially a true up of the July 2018 Amended Budget and reflects actual values that are contained in the CAFR. The Final Budget Amendment was adopted by resolution 2019-01 by the FPUA Board. Ms. Penick indicated the decrease in the Operating Income to $1,746,000 is because of lower water and electric unit sales and lower wastewater units billed. There was an increase of $434,000 in Investment and Other Income due to recoveries in excess of cost of St. Croix mutual aid assistance and higher interest rates. Additionally, there was also an increase in Capital Contributions due to improvement in the local real estate market. Since there were no storms in 2018, storm expenses were down $278,000. While the Net Position decreased, it was still $2.7 million. Ms. Penick proceeded to show a 10-year history of FPUA's various expenses ranging from Electric, Wastewater, Natural Gas, Operations and Maintenance, and Operating Income and Debt Service. FPUA is requesting approval of the Fiscal Year 2018 Final Budget Amendment. If the City Commission chooses to accept the audit, FPUA would transfer $6,125,454 to the City of Fort Pierce.

Motion was made by Commissioner Thomas Perona, seconded by Commissioner Jeremiah Johnson to approve the Fiscal Year 2018 Final Budget Amendment.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

b. Consider acceptance of the FPUA Comprehensive Annual Financial Report (CAFR) for FY 2018.

John Tompeck, FPUA Director and Nina Penick, FPUA Director of Financial Services indicated FPUA is requesting that the City Commission approve the audit as being the unqualified opinion of the auditors that FPUA's financial statements for the fiscal year ending September 30, 2018 were fairly presented in accordance with accounting principles generally accepted in the United States of America, and thereby, accept the filing of such audit with the City of Fort Pierce. It will be kept together with the FPUA CAFR, on file with the City Clerk's office pursuant to the City Charter.

Motion was made by Commissioner Jeremiah Johnson, seconded by Commissioner Reginald Sessions to approve item 13 b.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

c. Presentation and acceptance of City Audit on all funds for fiscal year ended September 30, 2018, as prepared by DiBartolomeo,McBee, Hartley & Barnes, P.A.

Mark Barnes with DiBartolomeo,McBee, Hartley & Barnes, P.A. presented the City Commission with the City's CAFR. The audit went smoothly and it did not report any significant findings. Mr. Barnes indicated cash and investments are up by $3.7 million. The City has been able to pay down its long-term liabilities to $2.5 million. There was a $3.2 million dollar increase in the city's Net Position. Taxes are up $1.5 million. There was also an increase in intergovernmental revenues and governmental expenditures were kept under control. Mr. Barnes went through all the city funds one by one. The Golf Course improved by decreasing their loss by $268,588. The Sunrise Theatre's Net Cash Flows from operations was down to $871,376.

Motion was made by Commissioner Thomas Perona, seconded by Commissioner Jeremiah Johnson to approve the report as submitted.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

d. Resolution No. 19-R13 determining that the structure located at 2808 Avenue B is unsafe and should be condemned and demolished. A hearing to determine this matter is scheduled before the City Commission on May 6, 2019.

City Clerk Linda Cox introduced the resolution, read by title only, into the record.

RESOLUTION NO. 19-R13 - RESOLUTION NO. 19-R14 - A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF FORT PIERCE, FLORIDA, IN SUPPORT OF HOUSE BILL 219 AND SENATE BILL 370, AMENDING FLORIDA STATUTE, SECTION 796.07 REQUIRING A MANDATORY MINIMUM TERM OF INCARCERATINON FOR PROSTITUTION OFFENCES INVOLIVING VICTIMS OF "HUMAN TRAFFICKING"; PROVIDING AN EFFECTIVE DATE.

Motion was made by Commissioner Jeremiah Johnson, seconded by Commissioner Thomas Perona to approve item 13 d.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

h. Resolution 19-R14 Supporting House Bill 219 and Senate Bill 370, requiring mandatory minimum incarceration for prostitution offences involving victims of human trafficking.

Motion was made by Commissioner Thomas Perona, seconded by Commissioner Jeremiah Johnson to approve item 13 h.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

i. Submittal of Applications for consideration to serve on the Fort Pierce Infrastructure Surtax Citizen Oversight Committee.

City Clerk, Linda Cox, indicated there had been some applications that have come in. If the City Commission has anyone in particular they want to appoint Ms. Cox will need those applications so that she may add them to the next agenda for their vote.

Motion was made by Commissioner Thomas Perona, seconded by Commissioner Jeremiah Johnson to approve item 13 i.

AYE: Mayor Pro Tem Rufus Alexander, Commissioner Jeremiah Johnson, Commissioner Thomas Perona, Commissioner Reginald Sessions

Passed

14. COMMENTS FROM THE PUBLIC

Lisa Potter
Ron Hoben
Phil Schiebler

15. COMMENTS FROM THE CITY MANAGER

a. City Manager's Report and Purchase Order Report

Nicholas Mimms, City Manager, indicated the Transportation Planning Organization will be hosting a Public Input meeting in City Hall on April 4, 2019 discussing the reconfiguration of the South Bridge. Among various items, the City Commission will have an opportunity to discuss the Building Department's employee recruiting and retention, there will be a Quarterly Capital Improvement Projects Report and a report from Public Works as it relates to Old City Hall at the April 8th Conference Agenda. He thanked Deputy Chief Norris for stepping up as the basketball coach at the Recreation Program Expansion. Mr. Mimms met with the Sunrise Theatre consultant on March 29, 2019. He will send an assessment of the Sunrise Theatre to the city on April 15, 2019. Mr. Mimms met with Rebeca Guerra, Assistant Planning Director, in relations to annexations and have identified at least 20 commercial and industrially zoned parcels.

16. COMMENTS FROM THE COMMISSION

Commissioner Johnson spoke about the jet skis, boats and other competing uses at Jaycee Park, as well as challenges and what could potentially be done. He also spoke about annexations, which are 90% residential. They are also looking at commercially zoned properties and continuity. Mr. Mimms indicated they are going to have to work closely with FPUA to make sure that they have all the necessary annexation agreements to ensure we are not skipping and creating enclaves. Commissioner Johnson also spoke about the sales tax prioritization and would like a list put together and distributed to the City Commission so that they are aware for which projects the City of Fort Pierce is using the funds. To this end, Jack Andrews, City Engineer, is preparing a presentation for the City Commission for Monday, April 8th's Conference Agenda.

Commissioner Sessions was concerned about 17th Street and finding the necessary funds to address the issues. As to the Sunrise Theatre, he would like for the managing company coming in to have access to the public meeting we had with the public. He wanted to see how the City Commission could come up with a solution for Jaycee Park to be utilized to its fullest potential without jeopardizing anyone's safety.

Mayor Pro Tem Alexander was concerned about our Fort Pierce Police Department resources and felt they needed new vehicles, as well as raises. He was under the impression that staff had requested $300,000 from FPUA and they'd refused. Mr. Mimms clarified staff had not asked for anything, however, FPUA Director came up with an idea which he pitched to the FPUA Board and they were trying to identify methods and means to transfer funds with the understanding that it would be used for certain purposes. As to the Sunrise Theatre, Mayor Pro Tem Alexander felt we spend almost $1million every year and he was offended that he was being questioned about overspending money from the City Commission budget when he pays a lot more money out of pocket.

17. ADJOURNMENT

The meeting adjourned at 11:07 p.m.

ATTEST:

CITY CLERK

MAYOR COMMISSIONER

City Commission Regular Meeting **6.a.**

Meeting Date: 04/15/2019

Re: CASTLE Child Abuse Prevention Month

Submitted For: Linda Cox, City Clerk, City Clerk

SUBJECT:

CASTLE Child Abuse Prevention Month

SUMMARY:

RECOMMENDATION:

ALTERNATIVES:

RESPONSIBLE STAFF:

COORDINATED WITH:

Attachments

Castle Child Abuse

Form Review

Form Started By: Miriam Garcia Started On: 04/04/2019 09:10 AM

Final Approval Date: 04/04/2019

WHEREAS, for more than three decades, CASTLE has upheld their legacy of protecting the lives of abused children and families; and

WHEREAS, CASTLE, works diligently with Communities Connected for Kids and the Florida Department of Children and Families to ensure that every child suffering from abuse has a brighter future and hope for a safe life; and

WHEREAS, Greater than half of the children who have suffered abuse or neglect are more likely to experience problems such as delinquency, teen pregnancy, low academic achievement, drug use, and mental health problems; and

WHEREAS, CASTLE, along with its community partners, embraces opportunities that can potentially change the way society cares for children and youth. Act now to protect children in Fort Pierce, Florida.

NOW, THEREFORE, I, Linda Hudson, Mayor of the City of Fort Pierce, Florida, do hereby proclaim the month of April as:

Child Abuse Prevention Month

in the City of Fort Pierce. Further, the City Commission encourages community agencies, religious organizations, businesses, and others to celebrate adoption, honor families that grow through adoption, further an awareness of the changes and issues in adoption, and focus attention on those children who live in the shadow of an uncertain future while they await forever families.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Official Seal of the City of Fort Pierce, Florida, to be affixed this 15th day of April, 2019.

MAYOR/COMMISSIONER

City Commission Regular Meeting **6.b.**

Meeting Date: 04/15/2019

Re: 19th Circuit Guardian ad Litem in recognition of National Child Abuse and Prevention Month and National Volunteer Appreciation Week

Submitted For: Linda Cox, City Clerk, City Clerk

SUBJECT:

19th Circuit Guardian ad Litem in recognition of National Child Abuse and Prevention Month and National Volunteer Appreciation Week

SUMMARY:

RECOMMENDATION:

ALTERNATIVES:

RESPONSIBLE STAFF:

COORDINATED WITH:

Attachments

Guardian ad Litem

Form Review

Form Started By: Miriam Garcia Started On: 04/04/2019 09:24 AM

Final Approval Date: 04/04/2019

WHEREAS, the Guardian ad Litem Program speaks for the best interests of abused, abandoned and neglected children who are involved in the court system; and

WHEREAS, volunteers from our community not only advocate for a child's best interest, but also serve as educational advocates and mentors; and

WHEREAS, currently, more than 450 children in our community are victims who have endured abuse and are in need of a Guardian ad Litem to speak for their best interest; and

WHEREAS, members of the Fort Pierce community are encouraged to join together throughout the month of April to raise awareness for those children who have fallen victim to abuse, neglect and abandonment; and

WHEREAS, the Guardian ad Litem Program allows individuals from our community to join hands with government in order to give a representation to innocent children who are suffering through no fault of their own.

NOW, THEREFORE, I, Linda Hudson, Mayor of the City of Fort Pierce, Florida, do hereby proclaim the month of April, 2019, as:

Guardian ad Litem Month

and urge all citizens to give of their time to make a difference in the lives of our most vulnerable children by volunteering with the Guardian ad Litem Program.

IN WITNESS WHEREOF, I have hereunto set my hand and caused the Official Seal of the City of Fort Pierce, Florida, to be affixed this 15th day of April, 2019.

_____

MAYOR COMMISSIONER

City Commission Regular Meeting **7.a.**

Meeting Date: 04/15/2019

Re: Letter from Rev. Patricia S. Wallace

Submitted For: Nick Mimms, City Manager, City Manager

SUBJECT:

Letter from Reverend Patricia S. Wallace thanking Paul Bertram, Parks Division Manager and the entire Parks Division for their hard work in the preservation of beautiful Northwest Pioneer Park.

Attachments

Letter from Rev. Wallace

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	04/09/2019 05:45 PM
City Manager	Nick Mimms	04/09/2019 05:45 PM

Form Started By: Jennifer Robinson Started On: 04/04/2019 09:42 AM

Final Approval Date: 04/09/2019

SAINT
PAUL
A . M . E CHURCH

"Where we love on purpose, Praise with power, and Stand on the promise's of God"
Founded - 1890

Mr. Paul Bertram
City of Ft. Pierce
Ref: Adoption of Northwest Pioneer Park
2900 Avenue M.
Ft. Pierce, Fl.

Dear Mr. Bertram

On behalf of myself, officers and members of St. Paul AMEC, special thanks to your department. The Mayor and Commissioners for daring to make dreams become realities. My dream to connect the "C's" has become a reality with St. Paul's adoption of N W Pioneer Park.

I believe when we partner together, The Church and Community, our Children will be the center of our thoughts, our planning and joy. It certainly takes all of us working together to ensure the future of our City. When our Churches, Children and Community, are connected we become one. We propose to partner with other Churches, Community Leaders and our Children to utilize the park to its fullest potential with monthly activities and offering community service for our young people.

Please thank your staff for their hard work in preservation of such a beautiful park.

Under His Protection

Rev. Patricia S. Wallace, M.Div

PS. Those present today for sign installation were :Rev. Patricia Wallace, Tya Fuller,Cynthia Poole, Clarence J. Brown, Mazella Smith, Jacqui Lewis, Commissioner Rufus Alexander, Charlie Frank Matthews, Irma Crumbley, George Collins, Terry Martin, Willie Boston, Alice Jackson, Jerome Gayman, Jere Cruickshank, Paul Bertram, and Keith Roberts.

1405 N. 27th Street, Ft. Pierce, Florida 34947 772-242-1327 stpaulamec.ftpierce@gmail.com

City Commission Regular Meeting **7.b.**

Meeting Date: 04/15/2019

Re: Letter from Bill Harned

Submitted For: Nick Mimms, City Manager, City Manager

SUBJECT:

Letter from Bill Harned in recognition of the impressive impact of Sgt. Don Christman's presence and actions at Lawnwood Hospital's Emergency Room where he personally witnessed Sgt. Christman going above and beyond.

Attachments

Letter from Bill Harned

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	04/09/2019 05:45 PM
City Manager	Nick Mimms	04/09/2019 05:45 PM

Form Started By: Jennifer Robinson Started On: 04/04/2019 10:07 AM

Final Approval Date: 04/09/2019

Friday March 15th, 2019

To: Police Chief of Ft. Pierce
Re: Outstanding Police Officer and Human Being
Sgt. Don Christman.

During the last week of February 2019 at Lawnwood Hospital I had the privilege of meeting and observing Sgt Don Christman in action while he was working at Lawnwood Hospital Emergency Room.

I was so impressed I felt a need to acknowledge the impact of his presence and actions. We where there for several hours and in that time we witnessed Sgt. Don go above and beyond and here are a few examples:

1. Greeted everyone with dignity upon entry and was observant of the individuals and their needs, including us.
2. He was kind, calm and knowledgeable, directing accordingly.
3. Defused and deescalated several situations.
4. Inspired several kids engaging in conversation about school, their life and career paths, planting seeds of hope and potential.
5. Created an atmosphere of order and security.
6. Very aware and approachable.
7. Ft. Pierce has a great ambassador in Sgt. Don.
8. At least two young boys expressed interest in Law enforcement after his encouragement.
9. Was very quick to supply a wheel chair for the elderly or injured.
10. Brought smiles to children or people in disarray.
11. Knows the hospital very well - the locations of departments, elevators, bathrooms, vending machines etc.
12. Sgt. Don makes Lawnwood , Ft. Pierce and our Country a better place.

Fort Pierce is a great town and it is because of dedicated people like Officer Don, our diversity, and the beauty of our natural resources.

Thank you,

Bill Harned

RECEIVED

MAR 21 2019

CHIEFS OFFICE/FPPD

City Commission Regular Meeting **7.c.**

Meeting Date: 04/15/2019

Re: Miriam thank you

SUBJECT:

Letter from Sheila and Bob Clancy expressing their appreciation for the efforts of Miriam Garcia, Deputy City Clerk, in resolving their issue with securing a refund for tickets purchased for a show that was subsequently cancelled.

Attachments

Thank You

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	04/09/2019 05:42 PM

Form Started By: Linda Cox Started On: 03/26/2019 08:51 AM

Final Approval Date: 04/09/2019

Linda Cox, City Clerk

19 March 2019

Fort Pierce City Hall

100 N.US Hwy 1

Fort Pierce, Fl. 34960

Dear Ms. Cox:

On Feb. 15, 2019 I was notified that Darlene Love's performance at the Sunrise Theater was cancelled. This was a show for which I had purchased seven tickets on Sep. 6, 2018. In an attempt to return the tickets for credit to my charge card, I contacted the Sunrise Theater. The Interim Executive Director and the Theater Manager both informed me that because my tickets were purchased more than 120 days prior to the scheduled performance, the City's Credit Card Company would not authorize a credit to my charge card.

Needless to say, I was very distressed as I had purchased the seven tickets for myself, my husband and five friends at a cost of $406. I was terribly worried that none of us would be able to have our money returned. And despite numerous phone calls which I made to the theater for nearly three weeks, I was receiving no further clarification of the matter or any assurance that the money would be returned.

At this point, my husband and I decided to contact the office of Mayor Linda Hudson where my call was answered by Miriam Garcia. Ms. Garcia was a polite, knowledgeable young woman who listened to me, asked questions and analyzed the situation before telling me that she would be making a couple of phone calls and would be back in touch with me as soon as possible. She promptly called me, told me that she had spoken with the Theater Director and that I would be hearing from someone at City Hall about the problem. She offered that I could call her if I had any other concerns.

Shortly thereafter, I received a call from Karen Logue, Chief Financial Accountant. She was also of great help and was excellent to work with. Because the City's credit card company would not credit my charge card for these ticket charges, Ms. Logue was able to work out a plan for me and other customers in the same predicament. She arranged for the City to reimburse us would be issued a check from the City to reimburse us for our tickets. This matter was finally fully resolved last Friday, March 15th.

I want to take this opportunity to thank Miriam Garcia for taking the time to help me and to initiate some phone calls which were instrumental in the ultimate positive resolution of this problem.

I wish to express my appreciation to Ms. Garcia, to you and the Fort Pierce's Clerk's Office.

Sheila and Bob Clancy

Sheila and Bob Clancy

300 Cathedral Oaks Dr.

Vero Beach, Fl. 32963

Cc: Miriam Garcia

City Commission Regular Meeting **10.a.**

Meeting Date: 04/15/2019

Re: TPO South Bridge Presentation

Submitted For: Nick Mimms, City Manager, City Manager

SUBJECT:

Presentation of proposed South Bridge reconfiguration by Peter Buchwald, Executive Director, St. Lucie Transportation Planning Organization.

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	04/10/2019 12:31 PM
City Manager	Nick Mimms	04/10/2019 12:31 PM

Form Started By: Jennifer Robinson Started On: 02/28/2019 12:21 PM

Final Approval Date: 04/10/2019

City Commission Regular Meeting **10.b.**

Meeting Date: 04/15/2019

Re: SUN Trail - Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail Gap - FINAL Feasibility Reports

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SUBJECT:

Final Feasibility Report for SUN Trail projects, Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail Gap

SUMMARY:

Ms. Reshawn Fields of Atkins, will be presenting the final report of the feasibility study of two SUN Trail projects, the Historic Downtown Fort Pierce Retrofit Trail and the Historic Highwayman Trail Gap. The proposed projects will extend the East Coast Greenways and Trail system through the City of Fort Pierce. The focus of these two studies commences at the northern end of the existing Indian Hills Recreation Area trail and continues north to North Causeway. The feasibility studies examine the proposed route, alternatives for the trail segment and the associated physical and natural setbacks for each alternative.

RECOMMENDATION:

Acceptance of Feasibility Report

ALTERNATIVES:

Continue to review different alternative routes

RESPONSIBLE STAFF:

Jack Andrews, City Engineer

COORDINATED WITH:

Mike Middlebrook, St. Lucie County Environmental Resources
FDOT

Fiscal Impact

Budgeted Y/N:	N/A
Fiscal Year:	N/A
Account:	N/A
Amount:	N/A

OTHER INFORMATION:

No fiscal impact at this time

Attachments

Highwayman Trail Gap

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	04/09/2019 05:44 PM

Form Started By: John Andrews
Started On: 04/01/2019 11:39 AM
Final Approval Date: 04/09/2019

FINAL FEASIBILITY STUDY

Historic Highwayman Trail Gap SUN Trail

St. Lucie County, Florida

Financial Project ID:

440034-1

Prepared for:



Florida Department of Transportation

District Four

3400 West Commercial Boulevard

Fort Lauderdale, Florida 33309

December 2018

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Appendix H USFWS's Species Conservation Guidelines for the Florida Scrub-jay
Appendix I USFWS Standard Protection Measures for The Eastern Indigo Snake
Appendix J Preliminary Long-Range Estimates (LRE)

Section 1.0 Introduction

St. Lucie County applied for and received funding through the Florida Greenways and Trails System (FGTS) Shared-Use Nonmotorized (SUN) Trails program for the feasibility study of the Historic Highwayman Trail Gap from Indian Hills Drive to Georgia Avenue in Fort Pierce, Florida. The Florida Department of Transportation (FDOT), in conjunction with St. Lucie County and the City of Fort Pierce, is conducting this Feasibility Study for the proposed trail. A Feasibility Study represents a definition of a problem or opportunity to be studied, an analysis of the current mode of operation, a definition of requirements, an evaluation of alternatives, and an agreed upon course of action. This report examines proposed alternatives for the trail segment and the associated physical and natural considerations for each alternative. The trail will connect to the larger East Coast Greenway (ECG) footprint, with the proposed Historic Downtown Fort Pierce Retrofit Trail to the north and the Indian Hills Recreational Area to the south. See **Appendix A** for the SUN Trail Application with the potential trail locations.

The scope of this feasibility study included database and in-person field reviews of the alternatives provided in the SUN Trail Application submitted by St. Lucie County. Additionally, meetings were held with stakeholders and the public to discuss the alternatives (**Appendix B**). Where applicable, changes to the alternatives were identified and analyzed to minimize impacts.

Section 2.0 Background and History

The State of Florida created the SUN Trail program in 2015 to provide bicycle and pedestrian ways along state roads and transportation facilities. The State of Florida allots $25 million annually for the development of regionally significant greenways and trails projects (FDOT, 2018). The criteria required for projects to be eligible for funding through the SUN Trails program includes the following:

- Must be located on the SUN Trail Network (FGTS Land Trails Priority Map);
- Priority of the Metropolitan Planning Organization (MPO);
- Must be identified as to who will operate and maintain the constructed trail; and
- Ready to be programmed and to begin the first/next phase of work (Birdsong).

The St. Lucie Transportation Planning Organization (TPO) conducted studies evaluating the need for bicycle and pedestrian facilities within the County including the *Bicycle and Pedestrian Systems Analysis* (St. Lucie County Urban Area MPO, 2007) and *St. Lucie Bicycle/Pedestrian Corridor Study Area of Interest Analysis* (St. Lucie TPO, 2012). The TPO also conducted a study on how to best implement ECG trails throughout the County. The ECG is an initiative focused on providing a connection along Florida's Atlantic Coast from the Georgia border to the Florida Keys. The main goal of the ECG is to "establish a safe, traffic free pathway for muscle-powered users as a connection between our eastern seaboards cities," as stated in the *East Coast Greenway Implementation Plan* (St. Lucie

TPO, 2012). The highest priority for the ECG is to construct trails that are off of the roadways.

The Historic Highwayman Trail Gap would be considered a critical piece of the ECG network and would connect to the Indian Hills Recreational Area and the proposed Historic Downtown Fort Pierce Retrofit Trail. The trail segment is included in the Go2040 Long Range Transportation Plan (LRTP) (St. Lucie TPO, 2016) for St. Lucie County.

Section 3.0 Purpose

This report includes an analysis of alternatives that are technically sound, environmentally sensitive, economically feasible, and socially acceptable that can be further evaluated in future development phases. Specifically, this study evaluates:

- Design: does or does not meet SUN Trail Program criteria
- Social Features: Land Use, Community Cohesion, Relocations, Right-of-Way (ROW) or Easements Required, Community Services, Potential User Conflicts
- Cultural: Archaeological/ Historical Resource, Section 4(f)
- Natural: Threatened and Endangered Species, Wetlands/Surface Waters and Essential Fish Habitat, Upland Habitat, Outstanding Florida Waters/Aquatic Preserves, Floodplains
- Physical: Noise, Air Quality, Contamination

The purpose of this study is to conduct a fatal flaw analysis to determine which alternative and typical section(s) will best adhere to the SUN Trail program criteria as well as being cost feasible. The Environmental Opportunities and ROW Constraint Map (**Appendix C**) includes additional information.

3.1 Sun Trail Funding and Design Criteria

In order to be funded under the SUN Trail Program, the alternatives must meet the following SUN Trail Program Design Criteria:

- 10 to 14 feet in width (eight feet is allowed in rare cases)
- Multi-use (bicyclists, pedestrians, runners, skaters)
- Paved
- Separated from roadway (by at least five feet or by a physical barrier/railing)
- No significant amount of private property ROW or easements can be required

The alternatives that do not meet the design criteria, must consider other funding and design options. Additional details are provided in Section 5 - Preliminary Engineering Analysis.

Section 4.0 Project Description

The Historic Highwayman Trail Gap Segment includes constructing an approximately 1.3-mile long multi-use paved trail from North Indian Hills Drive to Georgia Avenue in St. Lucie County, Florida, as shown in **Figure 1**. The starting point of this segment is at the northern terminus of the Indian Hills Recreation Area, which is south of the Indian Hills Golf Course. The ending point of this segment is at Georgia Avenue, which is the southern terminus for the proposed Historic Downtown Fort Pierce Retrofit Trail and the northern limit of the Indian Hills Golf Course.

The proposed project will consist of constructing a 10 to 14-foot wide paved trail. Either asphalt or concrete could be used in sections of the trail. The study area for this project includes the proposed alternatives; a 20-foot buffer, which includes 10 feet on either side of the proposed trail centerline, to evaluate potential effects to listed species and for evaluating direct and secondary impacts to other resources including wetlands, social resources, and other natural resources; and a 500-foot buffer on each side of each alternative centerline for contamination analysis.

The alternatives developed by St. Lucie County and examined within this Feasibility Report include the Primary Alternative, East Alternative 1, and East Alternative 2. Details of each of the alternatives are provided in Section 5 - Preliminary Engineering Analysis.

Figure 1: Project Location Map



Section 5.0 Preliminary Engineering Analysis

5.1 Historic Highwayman Trail Gap

St. Lucie County defined the Primary Alternative and an East Alternative, see Appendix A for the map from the SUN Trails Application. For the purpose of this Feasibility Study and as a comparison of impacts, three alternatives were developed and are described below. In addition, based on stakeholder input and data collection conducted, changes in alternatives were developed and described below.

5.1.1 Primary Alternative

The Primary Alternative was identified in the SUN Trail Application submitted by St. Lucie County. This alternative originates at the southern end of the Indian Hills Golf Course, north of the Indian Hills Recreation Area and terminates at Georgia Avenue. This alternative would start south of the Indian Hills Golf Course, run parallel to Indian Hills Drive, and continue north along the edge of the Indian Hills Golf Course and Hills Ct. This alternative would then continue to follow the south western edge of the Indian Hills Golf Course to 3rd Street; then continue north along the eastern side of 3rd Street to Georgia Avenue. Based on this study, minor shifts were developed for this alternative. The final Primary Alternative is shown in **Figure 2.**

5.1.2 East Alternative 1

The East Alternative 1 was identified in the SUN Trail Application submitted by St. Lucie County. This alternative originates at the southern end of the Indian Hills Golf Course, north of the Indian Hills Recreation Area, and terminates at Georgia Avenue.

This alternative would start south of the Indian Hills Golf Course, head in an easterly direction just north of the Indian Hills Recreational area parallel to Indian Hills Drive before heading north across the existing train tracks to the edge of the Indian Hills Golf Course. The alternative would then follow an unpaved access road to the east of the Indian Hills Golf Course and continue north along the eastern edge of the Indian Hills Golf Course to Georgia Avenue. This alternative would require ROW from the Florida East Coast (FEC) railroad. Based on this study, minor shifts were developed for this alternative. The final East Alternative is shown in Figure 2.

5.1.3 East Alternative 2

The East Alternative 2 was identified after the SUN Trail Application by City and County Officials. This alternative originates at the southern end of the Indian Hills Golf Course, north of the Indian Hills Recreation Area, and terminates at Georgia Avenue (Figure 2).

The difference between Primary Alternative and East Alternative 2 is that East Alternative 2 would go east at the southern property line of the Fort Pierce Police Station and then parallel the Fort Pierce Police Station property to the south and east. The alternative would then continue to hug the private property line until it reaches Georgia Avenue,

where the alternative would head back west and end at the intersection of South 3rd Street and Georgia Avenue.

Figure 2: Downtown Fort Pierce Retrofit Alternatives Map



5.2 Considerations to Minimize Impacts

Changes to these alternatives were considered in order to reduce impacts to the natural and physical environments. Other impacts considered were confirming that the SUN Trail design criteria was and could be met in all areas. The design criteria included no private ROW acquisition, a minimum multi-use path width of 10 to 14-feet (eight-foot paths can also be used if necessary, not preferred), and a five-foot separation from the any roadway unless a railing or physical barrier is installed.

In addition, coordination with the City of Fort Pierce's Indian Hill Golf Course Staff during the construction of the Trail will allow locational adjustments to further reduce these impacts.

5.3 Typical Sections

Two typical sections were developed for this study; as described below.

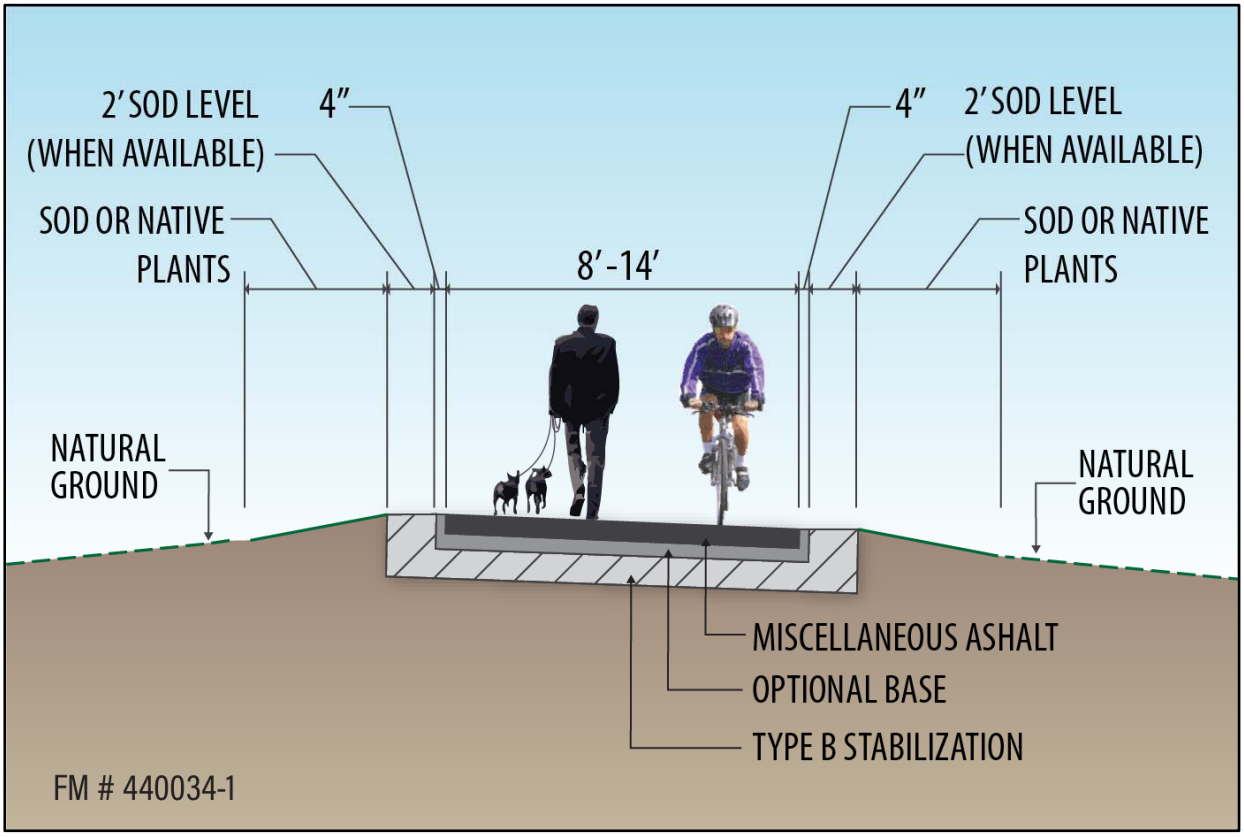
5.3.1 At-Grade Typical Section – Proposed Multi-use Path Option

This typical section includes an eight to 14-foot multi-use trail, two-foot on either side of the trail will be graded and sodded level when available and should be recoverable in all weather conditions (see **Figure 3**). On the outside of the two-foot recoverable area a 1V:6H slope max is allowed to tie back into existing ground.

5.3.2 At-Grade Typical Section – Proposed Multi-use Path with Wall Option

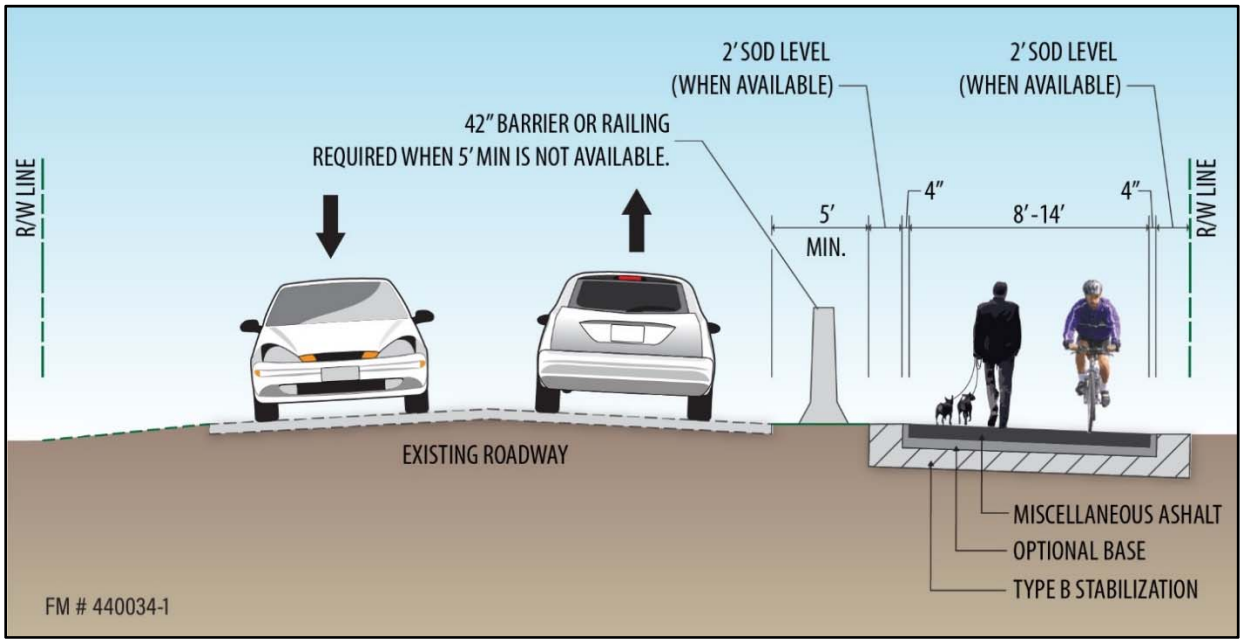
This typical section includes an eight to 14-foot multi-use trail, two-foot on either side of the trail will be graded and sodded level when available and should be recoverable in all weather conditions. On the side of the typical that is adjacent to the roadway and is less than five feet away a physical barrier or railing will be provided between the path and the roadway. Such barriers or railings serve both to prevent path users from making undesirable or unintended movements from the path to the roadway and reinforce the path is an independent facility. The barrier or railing should be a minimum of 42 inches high. Other treatments such as rumble strips can be considered as alternatives to physical barriers or railings, where the separation is less than five feet (see **Figure 4**).

Figure 3: Proposed Multi-use Path Option



*will be explored by local agencies for further development and funding

Figure 4: Proposed Multi-use Path with Wall Option



*will be explored by local agencies for further development and funding

Section 6.0 Environmental Effects

Each of the alternatives described under Section 5 were evaluated using the following criteria:

- Design: does or does not meet SUN Trail Program criteria
- Social Features: Land Use, Community Cohesion, Relocations, ROW or Easements Required, Community Services, Potential User Conflicts
- Cultural: Archaeological/ Historical Resource, Section 4(f)
- Natural: Threatened and Endangered Species, Wetlands/Surface Waters and Essential Fish Habitat, Upland Habitat, Outstanding Florida Waters/Aquatic Preserves, Floodplains
- Physical: Noise, Air Quality, Contamination

Details are provided in this section and summarized in the Alternatives Comparison Matrix in Section 9.

6.1 Social Features

Several social features surrounding the proposed Historic Highwayman Trail Gap alternatives were analyzed to identify any potential impacts to existing features and to determine the trail's compatibility with future planned features. Social features surrounding the alternatives for analysis included existing land use, future land use, community cohesion, relocations, ROW or easements which may be required, existing community services, and other potential user conflicts.

6.1.1 Existing Land Use

Existing land use within the study area was determined through the interpretation of 1" = 100' scale aerial photography, review of land cover Geographic Information Systems (GIS) data obtained from the South Florida Water Management District (SFWMD). Existing land use was mapped based on the Florida Land Use, Cover and Forms Classification System (FLUCFCS) (FDOT, 1999) for the proposed trail locations. The Highwayman Gap Trail Primary Alternative project area is depicted in **Appendix D.**

The existing land use for the Highwayman Gap Trail Primary Alternative can generally be characterized by existing roadways, fixed single-family units, commercial and services, golf course, open land, reservoirs, and railroads/rail yards.

The existing land use for the Highwayman Gap Trail East Alternative 1 alternative can generally be characterized by existing roadways, golf course, open land, upland scrub and brushland, and railroads/rail yards.

The existing land use for the Highwayman Gap Trail East Alternative 2 alternative can generally be characterized by existing roadways, commercial and services, golf course, and railroads/rail yards.

No adverse effects to existing land use are anticipated as a result of this project with any of the proposed alternative alternatives.

6.1.2 Future Land Use

Future land use was determined based on a review of the Fort Pierce Future Land Use Map (FLUM) and the St. Lucie County Future Land Use, included as Appendix D.

The future land use of the Highwayman Gap Trail Primary and East Alternative 2 alternatives include general commercial, conservation and open space, and low density residential; these future land uses are consistent with existing land uses. The future land use of the Highwayman Gap Trail East Alternative 1 includes conservation and open space, low density residential, industrial, and general commercial; these future land uses are consistent with existing land uses.

No adverse effects to future land use are anticipated as a result of this project with any of the proposed alternatives.

6.1.3 Community Cohesion

The project consists of adding missing links of the ECG trail systems through Fort Pierce. The project would not divide neighborhoods or increase social isolation. The project is expected to enhance community cohesion by adding a multi-use trail facility for pedestrians and bicyclists. The trails will promote recreational use and the potential Historic Downtown Fort Pierce Retrofit Trail to the north will promote travel and tourism in Downtown Fort Pierce. These trails will provide connectivity between nearby neighborhoods and Downtown Fort Pierce.

The southern end of the Historic Highwayman Trail Gap Primary Alternative would place the trail behind existing homes in the Indian Hills and Pleasant View communities. The trail would not encroach on any resident's home or property; however, the trail will be close to some residents' backyards along Indian Hills Drive and Southern Avenue. The Primary Alternative would be separated from the homes on Hills Court by the existing roadway. The East Alternative 2 alternative would have the same impacts as the Primary Alternative with the exception of the northern portion where the alternative would follow along the outer perimeter of the police station, Indian Hills Golf Course, and other commercial parcels just north of Pinewood Drive to Georgia Avenue along South 3rd Street. The East Alternative 1 option would avoid all residential areas.

6.1.4 Relocation Potential

As noted in Section 5.3.3, an alternative requiring an easement or ROW acquisition for a significant amount of land from a private landowner or the FEC railroad company does

not meet the SUN Trail Program Design Criteria. The anticipated private/FEC ROW or easements that will be required for each of the alternatives is shown in **Table 1**.

Table 1: Right-of-Way or Easements Required

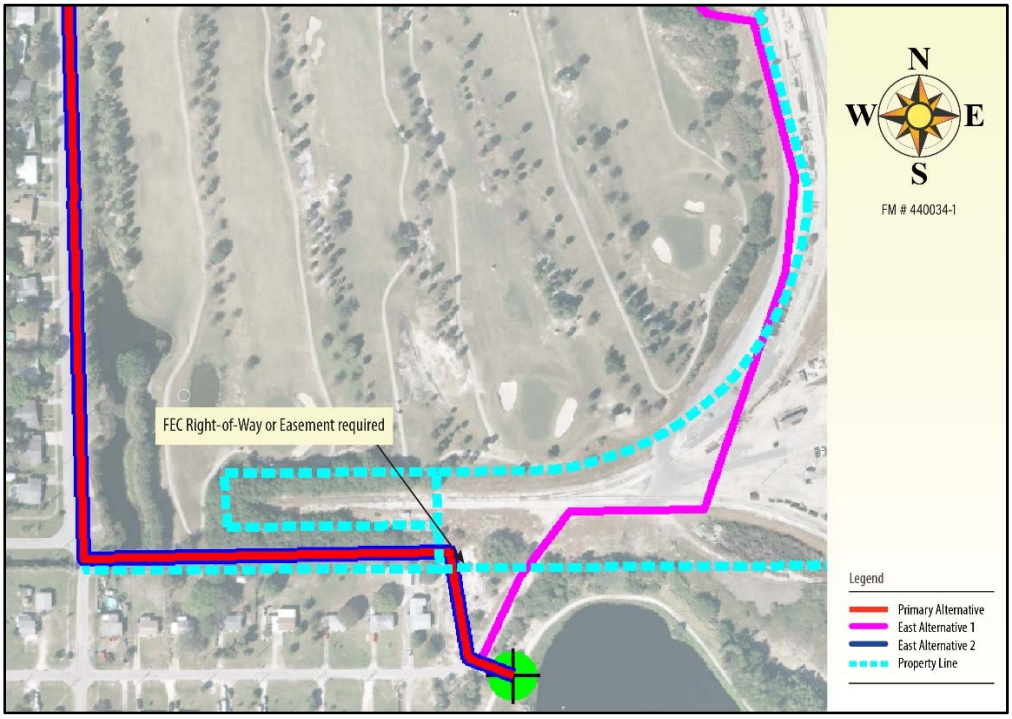
Alternative	Right-of-Way or Easement Required (in acres)
Primary Alternative	0.01
East Alternative 1	0.20
East Alternative 2	0.03

All alternatives: ROW agreement will be needed with Indian Hills Golf Course to add proposed multi-use path onto the southern and western edge of the property. Discussions with the City of Fort Pierce and Indian Hills Golf Course would continue through the design phase.

East Alternative 1: 0.20 acres of ROW would be required from the FEC Railroad. An easement would be needed from the FEC to get the multi-use path from the southern start point on to the golf course (Figure 5).

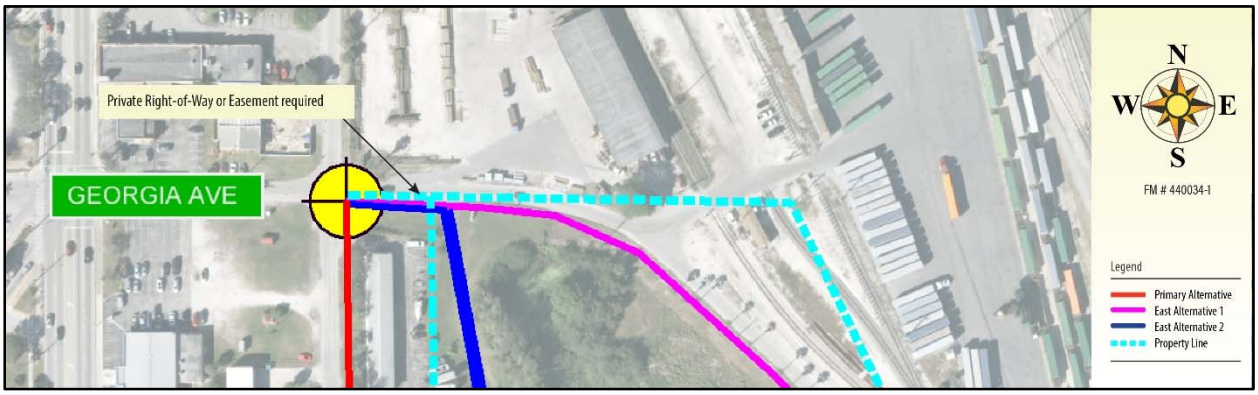
Primary Alternative and East Alternative 2: There are two locations that would require ROW or an easement acquisition. The first is located at the southern terminus and was discussed at a stakeholder coordination meeting on May 9, 2018. There is an existing drainage project [Financial Project Identification (FPID): 441715-1] that will run along Virginia Avenue and continue behind the existing homes and that project was coordinating with FEC about acquiring the corner in question and if acquired it would leave adequate space for the SUN Trail multi-use path to continue through (**Figure 5**).

Figure 5: ROW Issues at Southern Terminus of Project



The second issue is located at the northern terminus and was also discussed at the stakeholder coordination meeting on May 9, 2018. Where the multi-use path is proposed there is an existing City of Fort Pierce drainage easement that may fit an eight-foot multi-use path. It was decided at the stakeholder meeting that if a solution could not be found before construction, the trail would end at Georgia Avenue with signs on where to continue on the SUN Trail network (**Figure 6**).

Figure 6: ROW Issues at Northern Terminus of Project



6.1.5 Community Services

Community facilities are shown in **Figure 7**. The Highwayman Gap Trail Primary Alternative has the following social resources: City of Ft. Pierce EOC and Ft. Pierce Police Department (920 US Highway 1).

There are no direct impacts to any community services. The proposed trails will provide bicycle and pedestrian facilities available for public use. The purpose of the project is to connect existing ECG trails; therefore, no negative impacts will occur to these trails.

Temporary access and noise impacts could occur during construction but are expected to be short-term. The study corridor is situated in a low residential populated area, with the majority of the noise sensitive locations being neighborhoods adjacent to the proposed trails.

Potential User Conflicts

A concern for the proposed trails being located on a golf course is the potential for trails users to be hit by golf balls. Continued coordination with the Indian Hills Golf Course would be required to minimize any impacts.

Another concern may be the proximity of the trails to residential locations. Native vegetation plantings could provide a buffer between the trails and residential lots, should this become an issue. The plant species should be coordinated with the Indian Hills Golf Course.

Figure 7: Historic Highwayman Trail Gap Community Services



6.1.6 Archaeological/Historical Resources

A search of the Florida Master Site File (FMSF) GIS data, identified the following Archaeological/Historical Resources. Locations of the resources are shown in the Environmental Constraints Map (**Appendix C**) and the FMSF data (**Appendix E**).

Primary Alternative

The search of the FMSF GIS data did not identify any previously recorded archaeological sites or historic resources within and adjacent to the Primary Route. The Primary Route is not located within any locally-designated districts. However, a historic golf course, Indian Hills Golf Course, is adjacent and this resource will need to be evaluated further to determine its significance.

East Alternative 1

The search of the FMSF GIS data identified one National Register–eligible resource, FEC Railroad-Lake Harbor Branch (8SL3014), adjacent to the East Alternate 1. The East Alternative 1 is not located within any locally-designated districts. However, a historic golf course, Indian Hills Golf Course, is adjacent and this resource will need to be evaluated further to determine its significance..

East Alternative 2

The search of the FMSF GIS data did not identify any National Register–listed or eligible resources within or adjacent to the East Alternative 2. The East Alternative 2 is not located within any locally-designated districts. However, a historic golf course, Indian Hills Golf Course, is adjacent and this resource will need to be evaluated further to determine its significance.

6.1.7 Section 4(f) Resources

Cultural resources that are listed in or determined eligible for listing in the National Register of Historic Places fall under the mandate of Section 4(f). The SUN Trails program is state funded and Section 4(f) would not apply, however coordination with the City of Fort Pierce will continue. If federal funds are applied to future phases of the proposed trail, Section 4(f) would apply and coordination with Central Office - Office of Environmental Management (OEM) will be necessary for the National Register -eligible FEC Railroad-Lake Harbor Branch (8SL3014) and potentially the Indian Hills Golf Course.

6.2 Natural Features

The following data were reviewed to determine potential impacts to threatened and endangered species, essential fish habitat, wetlands and essential fish habitat, uplands, floodplains, and other natural features within the vicinity of the project study area:

- Historical aerial photography from Google Earth and MapWise

- Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST) (FDOT, 2018)
- Florida Natural Areas Inventory (FNAI) Standard Data Report for the project study area included in **Appendix F**
- U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) Trust Resources Report included in **Appendix G**
- Habitat and species-specific information obtained from the USFWS, the Florida Fish and Wildlife Conservation Commission (FWC), Florida Fish and Wildlife Research Institute (FWRI), Florida Geographic Data Library (FGDL), and FNAI
- FWC Eagle Nest Locator database (FWC, 2018)
- Species status assessments, species recovery plans, and other technical documents and reports for each of the listed species evaluated in this document
- The USFWS National Wetland Inventory (NWI) maps and GIS data (USFWS, 2018)
- The US Geological Survey (USGS) 7.5-Minute Quadrangle maps
- Natural Resources Conservation Service (NRCS) Soil Survey data
- National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) Essential Fish Habitat (EFH) Mapper (NOAA, 2018)
- The Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM) (FEMA, 2018)

In addition to the review of the above-listed databases and resources, an environmental field review was conducted on April 19, 2018 to identify sensitive habitats and protected species within the proposed trail alternatives. During the environmental field review, biologists investigated the proposed Primary Alternative, East Alternative 1, and East Alternative 2. In areas where a proposed new trail could potentially be constructed, the biologists assessed a 20-foot-wide area along the potential new trail alternatives (i.e., 10 feet on either side of the proposed trail centerline). This width was determined to be appropriate since the proposed trail would have a maximum width of 14 feet under the SUN Trail Program and will not require any shoulder construction. The portion of the Primary Alternative and East Alternative 2 that runs adjacent to Hills Court is the only portion of these trail alternatives that will utilize existing pavement for the proposed trail. The entirety of the East Alternative 1 will require construction of a new trail.

6.2.1 Threatened and Endangered Species

Information on the potential occurrence of Federally- and State-listed species within the project study area was reviewed using available literature and databases. In addition, during the environmental field review, biologists investigated those areas of potential new trail construction for the presence of listed species and/or potential impacts to habitat that support protected species.

The results of the federal and state database and GIS reviews are summarized below. It should be noted that because there is no marine or estuarine habitat present within the project study area, the following marine and estuarine species that were identified in the FNAI and USFWS database reports have no likelihood of occurrence within the project study area and are not discussed further in this document: West Indian manatee (*Trichechus manatus*), opossum pipefish (*Microphys brachyurus*), Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), mangrove rivulus (*Rivulus marmoratus*), hawksbill sea turtle (*Eretmochelys imbricata*), leatherback sea turtle (*Dermochelys coriacea*), loggerhead sea turtle (*Caretta caretta*), and Johnson's seagrass (*Holophila johnsonii*). The proposed project is anticipated to have ***no effect*** on these species.

Furthermore, the following species were identified in the FNAI and USFWS database reports that have no likelihood of occurrence in the project study area based on the lack of suitable habitat and/or the current level of development within the project study area: Florida panther (*Puma concolor coryi*), southeastern beach mouse (*Peromyscus polionotus niveiventris*), Audubon's crested caracara (*Polyborus plancus audubonii*), ivory-billed woodpecker (*Campephilus principalis*), Kirtland's warbler (*Setophaga kirtlandii*), piping plover (*Charadrius melodus*), red knot (*Calidris cantus rufa*), red-cockaded woodpecker (*Picoides borealis*), whooping crane (*Grus americana*), Miami blue butterfly (*Cyclargus thomasi bethunebakeri*), sand-dune spurge (*Chamaesyce cumulicola*), and Small's flax (*Linum carteri* var. *smalii*). Thus, these species are not discussed further in the document. The proposed project is anticipated to have ***no effect*** on these species.

FNAI Standard Data Report

The FNAI Standard Data Report documents rare species habitat in the very southern extent of the Primary Alternative, East Alternative 1, and East Alternative 2. During the environmental field survey, in this general area, biologists observed scrub habitat which included areas with low-lying scrub vegetation and open sand areas, as well as more densely vegetated areas of scrub habitat with trees, shrubs, and a thick understory (**Figure 8**). The scrub habitat is described in additional detail in Section 6.2.3 of this document.

Figure 8: Mangroves located along the Alternatives



Photographs of the area of the area of scrub habitat observed in the very southern portion of the Primary Alternative, East Alternative 1, and East Alternative 2.

According to the FNAI Element Occurrence Report, mangrove swamp habitat and a manatee aggregation site have been documented within two miles of the project study area, but not within the project study area. Biologists confirmed during the environmental field review that there is no mangrove habitat present within the project study area. The documented manatee aggregation site is located approximately one mile north of proposed project study area within the Indian River Lagoon. Because the proposed project does not have any components that will impact the Indian River Lagoon and because no in-water work is required for the proposed project, no impact to the manatee aggregation site is anticipated from the proposed project.

According to the FNAI Element Occurrence Report, the following listed species have been documented within two miles of the project study area, but not within the project study area itself: Florida scrub-jay (*Aphelcoma coerulescens*), nodding pinweed (*Lechea cernua*), and osprey (*Pandion haliaetus*). The likelihood of occurrence of these species is addressed in **Table 2**.

The FNAI Standard Data Report also provides a Biodiversity Matrix Report which identifies rare species and natural communities that may be present based on habitat models and species range models. The Biodiversity Matrix Report identified scrub habitat as a documented natural community within the vicinity of the project study area and also identified the Florida scrub-jay and the wood stork (*Mycteria americana*) as likely to occur within the vicinity of the project study area. The Biodiversity Matrix Report also identified the following Federally and State-listed species as having the potential to occur within the vicinity of the project study area: Sherman's fox squirrel (*Sciurus niger shermani*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), Florida burrowing owl (*Athene cunicularia floridana*), Eastern indigo snake (*Drymarchon corais couperi*), gopher tortoise (*Gopherus polyphemus*), fragrant prickly apple (*Harrisia fragrans*), Lakela's mint

(*Dicerandara immaculata*), tiny polygala (*Polygala smallii*), four-petal pawpaw (*Asimina tetramera*), perforate reindeer lichen (*Cladonia perforata*), coastal vervain (*Glandularia maritima*), scrub bluestem (*Schizachyrium niveum*), Piedmont jointgrass (*Coelorachis tuberculosa*), large-flowered rosemary (*Conradina grandiflora*), nodding pinweed (*Lechea cernua*), pine pinweed (*Lechea divaricata*), and giant orchid (*Pteroglossaspis ecristata*). The likelihood of occurrence of these species is addressed in Table 2.

Table 2: Potential Federally- and State-Listed Fauna and Flora that May Occur within the Project Area

Common Name	Scientific Name	Federal Status	State Status[1]	Likelihood of Occurrence	Effect Determination
Mammals					
Sherman's fox squirrel	*Sciurus niger shermani*	NL	SSC	Low	--
Birds					
Everglade snail kite	*Rostrhamus sociabilis plumbeus*	FE	FE	Low	**No effect**
Wood stork	*Mycteria americana*	FT	FT	Low	**Not Likely to Adversely Affect**
Florida scrub-jay	*Aphelocoma coerulescens*	FT	FT	Low	**May Affect[2]**
Florida burrowing owl	*Athene cunicularia floridana*	NL	ST	Low	--
Least tern	*Sternula antillarum*	NL	ST	Low	--
Black skimmer	*Rynchops niger*	NL	ST	Low	--
Osprey*	*Pandion haliaetus*	NL	SSC*	High	--
Reptiles					
Eastern indigo snake	*Drymarchon corais couperi*	FT	FT	Low	**Not Likely to Adversely Affect**
Gopher tortoise	*Gopherus polyphemus*	C	ST	Low	--

Common Name	Scientific Name	Federal Status	State Status[1]	Likelihood of Occurrence	Effect Determination
Plants					
Fragrant prickly apple	*Harrisia fragrans*	FE	FE	Low	**Not Likely to Adversely Affect**
Lakela's mint	*Dicerandra immaculata*	FE	FE	Low	**Not Likely to Adversely Affect**
Tiny polygala	*Polygala smallii*	FE	FE	Low	**No effect**
Four-petal pawpaw	*Asimina tetramera*	FE	FE	Moderate	**Not Likely to Adversely Affect**
Perforate reindeer lichen	*Caldonia perforata*	FE	FE	Moderate	**No effect**
Coastal vervain	*Glandularia maritima*	NL	SE	Low	--
Scrub bluestem	*Schizachyruim niveum*	NL	SE	Moderate	--
Piedmont jointgrass	*Coelorachis tuberculosa*	NL	ST	Low	--
Large-flowered rosemary	*Conradina grandiflora*	NL	ST	Low	--
Nodding pinweed	*Lechea cernua*	NL	ST	Low	--
Pine pinweed	*Lechea divaricata*	NL	ST	Moderate	--
Giant orchid	*Pteroglossaspis ecristata*	NL	ST	Low	--

[1]Based on *Florida's Endangered and Threatened Species* updated January 2017 available on http://myfwc.com/wildlifehabitats/imperiled/

[2]A Florida scrub-jay survey is required to determine whether the determination of effect for the project is "may affect" or "may affect, but is not likely to adversely affect."

Federal Status: FE = Endangered, FT = Threatened, T(S/A) = Threatened due to similarity of appearance, SSC = Species of Special Concern, C = Candidate species, NL = Not Listed

State Status: FE= Federally Endangered, FT = Federally Threatened, FT(S/A) = Federally Threatened due to similarity of appearance, ST = State Threatened; Note: Coordination is not required with FWC for Federally-listed species

*Osprey nests are protected by FWC under Chapter 68A of the Florida Administrative Code (FAC) and under the Migratory Bird Treaty Act of 1918, as amended. The osprey is listed as a SSC only in Monroe County, Florida.

USFWS Data

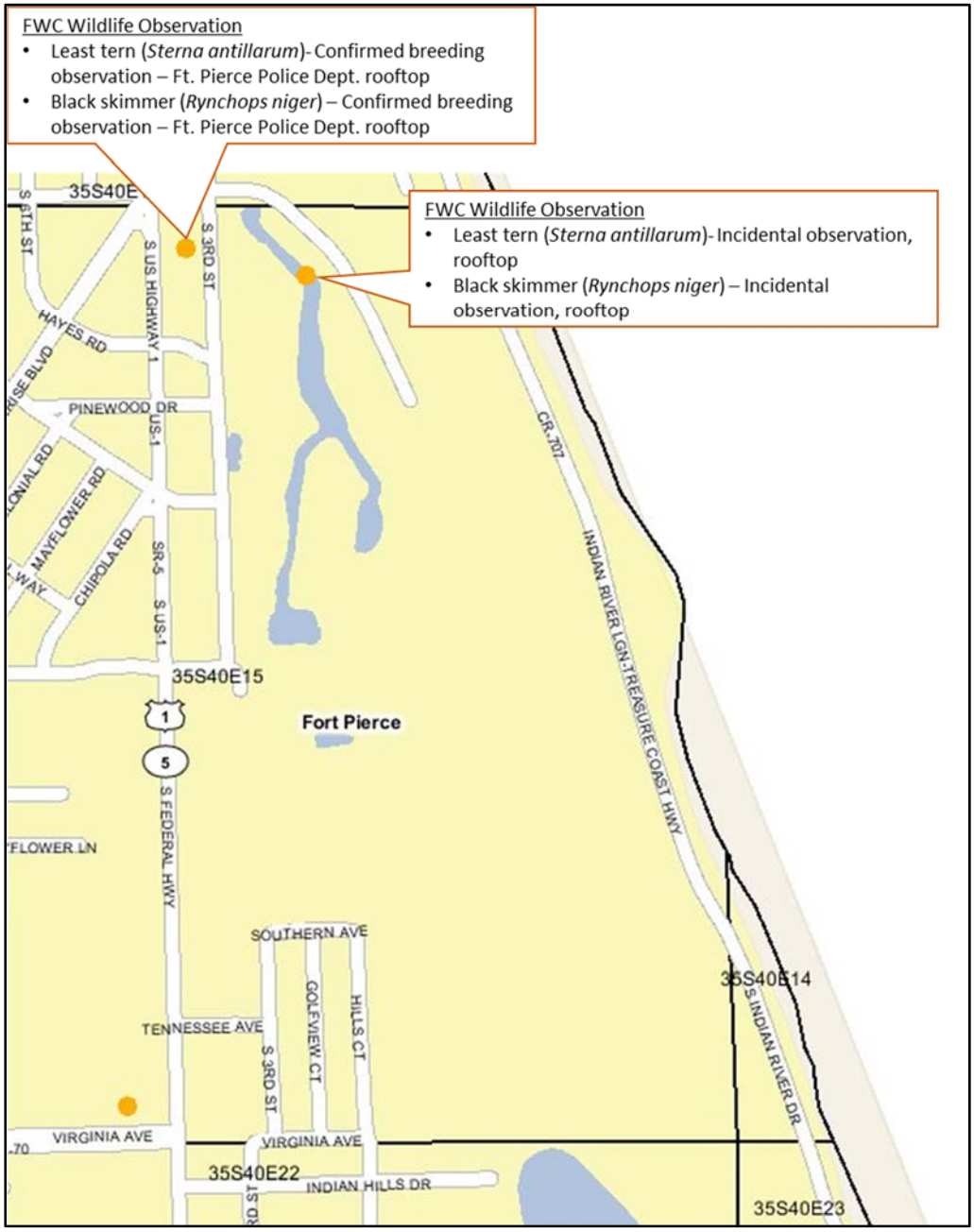
The project study area, including all three alternatives, is located within the USFWS's Consultation Areas for the Florida scrub-jay, Everglade snail kite, piping plover,

Audubon's crested caracara, manatee, and Atlantic coast plants. In addition, the project study area is located within the 18.6-mile core foraging area of two wood stork colonies (i.e., North Fork St. Lucie River colony and Sewal Point MC2-Bird Island colony). No USFWS-designated critical habitat for any protected species occurs within the project site. The USFWS's IPaC Trust Resources Report (**Appendix G**) provided by the USFWS identified 21 Federally- and State-listed species that may be present in the project study area. The likelihood of occurrence of those species is addressed in Table 2.

FWC Wildlife Observations Data

A review of the FWC Wildlife Observations data available on the ETDM EST revealed that nesting of least terns (*Sterna antillarum*) and black skimmers (*Rynchops niger*) has been previously documented in the northern portion of the project study area (**Figure 9**). Nesting was previously documented on the rooftop of the Ft. Pierce Police Department building, which is located adjacent to the Primary Alternative and the East Alternative 2 Alternatives.

Figure 9: FWC Wildlife Observations



FM# 440034-1. FWC Wildlife Observations data within the project study area. Image from the ETDM EST.

FWC Eagle Nest Locator Database

The bald eagle (*Haliaeetus leucocephalus*) is not a Federally- or State-listed species; however, it is protected under the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and FWC Management Plan regulations. According to the FWC's Eagle Nest Locator database, the closest documented bald eagle nest (SL014 – last known active in 2016) is located more than 3.5 miles northeast of the project study area. The proposed

project is located well outside of the 200-meter (660-foot) nest protection zone. No impacts are anticipated to bald eagles or their nests from the proposed project.

Species Likelihood of Occurrence and Effect Determinations

Based on the Federal and State database and GIS reviews, as well as with the environmental field survey, those Federally- and State-listed species that may occur in the project study area are identified in Table 2, along with their likelihood of occurrence within the project study area. Table 2 also includes a determination of effect for Federally-listed species. Additional detail for each of these Federally-listed and State-listed species is provided in Table 2.

Federally-listed Fauna

Birds

Everglade snail kite

The Everglade snail kite (snail kite) is a medium-sized, gray or black raptor with broad, paddle-shaped wings, a square-tipped tail with a white base, and a long, hooked bill. This bird feeds almost exclusively on the apple snail (*Pomacea paludosa*). Snail kites inhabit large, relatively clear and open freshwater marshes and the shallow vegetated edges of lakes where apple snails occur. Snail kites typically nest in small trees or shrubs (usually < 10 meters in height). The project study area falls within the USFWS consultation area for the snail kite; however, there is no designated USFWS critical habitat for this species within the project study area. During the environmental field survey, no snail kites or evidence of apple snails were observed. Due to lack of suitable habitat for the snail kite within the project study area, a determination of ***no effect*** has been made for the snail kite.

Wood Stork

The wood stork is a large, white wading bird with a dark gray head and neck, standing more than three feet tall with a five-foot wing span. It nests in inundated wetlands (typically marshes, cypress swamps, and mangrove swamps) and forages in shallow waters (two to 15 inches deep). Suitable foraging habitat for the wood stork includes freshwater marshes, swamps, lagoons, tidal creeks, flooded pastures, artificial ponds, managed impoundments, and seasonally flooded roadside or agricultural ditches. The project study area is located within the 18.6-mile core foraging area of two wood stork colonies (i.e., North Fork St. Lucie River colony and Sewal Point MC2-Bird Island colony). The closest documented wood stork colony (North Fork St. Lucie River colony) is located approximately 11 miles south of the project study area. As discussed in Section 6.2.2 of this document, the Primary Alternative and East Alternative 2 alternatives will result in minor impacts (~ 0.02 acres) to the freshwater pond located just southeast of the intersection of Hills Court and Virginia Avenue. This wetland contains suitable wood stork foraging habitat. Incorporation of a reduced typical section in this area, or a shift of the

proposed trail alternative further to the south in the vicinity of this wetland, would minimize and/or avoid impacts to this wetland. Based on a review of the USFWS's Wood Stork Effect Determination Key, the proposed project ***may affect, but is not likely to adversely affect*** the wood stork.

Florida scrub-jay

The Florida scrub-jay (scrub-jay) has blue head, nape, wings, and tail with a pale gray on the back and belly. This species is endemic to Florida and is extremely habitat-restricted. It inhabits the low-growing oak scrub habitat (e.g., sand pine, xeric oak scrub, and scrubby flatwoods) that occurs on well-drained, sandy ridges on the central Florida peninsula. Optimal habitat includes scrub oak with oaks and other low-lying shrubs that are interspersed with numerous small patches of bare sand. Scrub-jays live in family groups that consist of a breeding pair and their offspring and they typically do not travel long distances. During the environmental field survey, no visual or audible evidence of scrub-jays was observed. Because the project study area is located within the USFWS's Consultation Areas for the Florida scrub-jay and based on the presence of scrub habitat within the southern portions of the Primary Alternative, East Alternative 1, and East Alternative 2 alternatives, the proposed project ***may affect*** the Florida scrub-jay. Coordination with the USFWS will be required during the design and permitting phases of the project. According to the USFWS's *Species Conservation Guidelines for the Florida Scrub-jay* (May 28, 2004, **Appendix H**), ***a scrub-jay survey should be conducted within suitable habitat***, in accordance with the *Florida Scrub-jay Survey Protocol* (June 28, 2014), included in Appendix H. If no scrub-jays are detected by survey in the project and associated project buffer area, then the scrub-jay is not likely to be adversely affected. If scrub-jays are detected by the survey, or are known to be present on the property, then the project may affect the scrub-jay. The results of the survey should be submitted to the USFWS.

Reptiles

Eastern indigo snake

The eastern indigo snake is a glossy, iridescent, blue-black snake that is the longest snake in North America, reaching lengths of 8.5 feet (2.6 m). This species can be found in almost any habitat in Florida, including pine flatwoods, scrubby flatwoods, high pine, dry prairie, tropical hardwood hammocks, edges of freshwater marshes, agricultural fields, coastal dunes, and human-altered habitats. They are known to inhabit the burrows of other animals (e.g., armadillos, cotton rats, and land crabs) and particularly gopher tortoise burrows, though this is more prevalent where temperatures drop to below 50 degrees regularly in the winter. These snakes require large tracts of land for survival. Suitable habitat for this species is present within the project study area. No indigo snakes and no burrows were observed during environmental field survey. According to the *USFWS's July 2017 Eastern Indigo Snake Programmatic Effect Determination Key*, with the implementation of the *USFWS Standard Protection Measures for the Eastern Indigo*

Snake (August 12, 2013; See **Appendix I**) during construction, a determination of ***may affect, not likely to adversely affect*** can been made for the proposed project.

State-Listed Fauna

Mammals

Sherman's fox squirrel

This large tree squirrel can reach a length of up to 27.6 inches (70 cm) and weighs from one to three pounds. This species varies in color from black to brown and has a black head, white ears, and a white snout with a long bush tail. Its diet consists of mostly longleaf pine seeds and turkey oak acorns, but they also consume fungi, fruit, and buds. This species inhabits open, fire-maintained longleaf pine, turkey oak, sandhill, and pine flatwood habitats. Other habitat types that might be utilized by this species include mixed hardwood pine, mature pine forests, cypress domes, pastures, the ecotone between bayheads and pine flatwoods, and other open habitats with pine and oaks. No fox squirrels or their nests were observed during environmental field survey. Suitable habitat for the Sherman's fox squirrel was not observed within the project study area and no adverse effects to this species are anticipated from the proposed project.

Birds

Florida burrowing owl

This small, ground-dwelling owl averages nine inches in height with a mean wingspan of approximately 21 inches. Burrowing owls have sandy brown plumage and are spotted and barred with brown and white. They typically dig burrows that are six to nine feet in length and up to three feet deep; however, they may also utilize gopher tortoise burrows or armadillo burrows. Burrowing owls inhabit open habitats with short groundcover and suitable habitats includes dry prairie, pasture land, agricultural fields, golf courses, airports, schools, and vacant residential lots. No burrowing owls or burrows were observed during the environmental field survey. However, all three proposed trail alternatives pass through areas that contain suitable habitat for this species. ***A burrowing owl survey should be conducted during design and permitting of the project*** to determine the location of any burrows within the proposed project study area. In the event that any project activities are to occur within 50 feet of a burrowing owl burrow, a FWC Incidental Take Permit would be required.

Least tern

The smallest tern in North America, the least tern has long pointed wings and a deeply forked tail with a yellow beach, gray back, white belly, and black cap. This species inhabits the coastal areas of Florida, including estuaries and bays. Breeding habitat includes sparsely vegetated beaches, spoil islands, and gravel rooftops. Least terns forage in shallow waters immediately offshore and within estuaries, lagoons, impoundments, and bodies of fresh water. Gravel rooftop nesting is estimated to support over 80% of the Florida breeding population of this species. According to the ETDM EST, rooftop nesting

of least terns has been previously documented on the Ft. Pierce Police Department building, which is located adjacent to the Primary Alternative and the East Alternative 2 alternatives. The proposed trail project will have no impact to the Ft. Pierce Police Department building or any other building rooftop. No least terns were observed during the environmental field survey and no adverse effects to this species are anticipated from the proposed project.

Black skimmer

The black skimmer is a seabird with a black back, black wings with white edging, a white belly and head, and a large, red and black bill. Breeding habitat includes sparsely vegetated beaches, spoil islands, and gravel rooftops. Black skimmers forage in shallow waters immediately offshore and within estuaries, lagoons, impoundments, and bodies of fresh water. According to the ETDM EST, rooftop nesting of black skimmers has been previously documented on the rooftop of the Ft. Pierce Police Department building, which is located adjacent to the Primary Alternative and the East Alternative 2 alternatives. The proposed trail project will have no impact to the Ft. Pierce Police Department building or any other building rooftop. No black skimmers were observed during the environmental field survey and no adverse effects to this species are anticipated from the proposed project.

Reptiles

Gopher tortoise

This terrestrial tortoise averages nine to 11 inches in length with an oblong shell that is generally tan, brown, or gray. It can be identified by its stumpy, elephantine hind feet and flattened, shovel-like forelimbs adapted for digging. Gopher tortoises typically inhabit upland habitats that have the following general characteristics: well drained, sandy soils; abundant groundcover; relatively open canopy and sparse shrub cover. These habitat characteristics occur in a variety of Florida's native upland communities, including scrub communities, coastal strand, and pine flatwoods. Gopher tortoises dig extensive burrows for shelter and forage on low-growing plants. Gopher tortoises share their burrows with more than 350 other species, including the Eastern indigo snake, gopher frog, and Florida mouse, and are therefore referred to as a keystone species. Development pressures on many of the upland communities in Florida have been increasing. Thus, more disturbed habitats, such as fence rows, old fields, range lands, and canal banks have become important to gopher tortoises. Suitable habitat for this species can be found throughout the project study area. No gopher tortoises or burrows were observed during the environmental field survey. ***A gopher tortoise survey should be conducted during design and permitting of the project*** and FWC gopher tortoise permitting guidelines should be implemented. If a 25-foot buffer around a burrow cannot be maintained during construction, then the gopher tortoise must be relocated.

Other species

Osprey

The osprey is a raptor with a white underside and head, a brownish back, a dark brown streak that extends through their eye towards the back of the head, and streaks across the top of their head and breast. The osprey is listed as a species of special concern by FWC only within Monroe County, but the nests are protected by FWC in other parts of the state and under the Migratory Bird Treaty Act. In Florida, osprey habitat includes coasts, lakes, rivers, and swamps containing suitable nesting sites. Nesting typically occurs in large trees and on man-made structures/platforms. Osprey also nest in low lying sites, such as those found in mangrove swamps. Suitable habitat for the osprey be found within the project study area; however, no osprey or osprey nests were observed during the environmental field survey. No adverse effects to this species are anticipated from the proposed project.

Listed Plant Species

Federally-Listed Plants

Fragrant prickly apple

The fragrant prickly apple is rare, slender, columnar, solitary tree cactus with one to eight spiny, cane-like, stout, and succulent stems. The stems are up to 0.20 inches in diameter and have 10 or 12 ridges, with alternating deep, sharp, grooves. The flowers are showy, solitary, five to eight inches long, with a long, scaly floral tube. Petals are numerous, long and narrow, fragrant, white when open at night and turn pink the next morning. Typically, the fragrant prickly-apple also has one round, red, fruit, with wooly spines. Three populations of this species are known and these are restricted to 11 small disjunct sites along the Atlantic Coastal Ridge in eastern St. Lucie County. One of the three known populations occur on private land in residential areas and the other two occur in Florida's Savannas State Preserve, located south of the project study area. This species prefers early-successional sand pine scrub habitat and known sites are limited to the St. Lucie sand soil which is excessively well drained where water capacity, fertility, and organic matter content are all very low. No fragrant prickly apple was observed during the environmental field survey; however, scrub habitat does exist within the project study area. Therefore, the proposed project ***may affect, but is not likely to adversely affect*** the fragrant prickly apple.

Lakela's mint

Lakela's mint is a small (up to 1.3 feet tall), fragrant shrub that has one-inch long, narrowly oval, opposite leaves, with rounded tips that have inrolled margins and are covered in glands. Flowers are less than 0.8 inches long, one to three per whorl, and rose-purple in color, with no spots or lines. Its growth is bushy in open sun and lax in shade and it forms small mats or domes of ascending to spreading or sprawling branches. The range of this

species is extremely small and it is known for a single population that occurs in six isolated sites in southern Indian River and northern St. Lucie counties. It found in light shade or clearings in scrub along the Atlantic coastal ridge. No Lakela's mint was observed during the environmental field survey; however, scrub habitat does exist within the project study area. Therefore, the proposed project ***may affect, but is not likely to adversely affect*** Lakela's mint.

Tiny polygala

The tiny polygala is an erect, relatively short-lived (germinating and dying within one year) herbaceous species that grows to a height of approximately four inches tall, has one to four unbranched stems, and a fragrant tap root. The plant is also characterized by two-inch long, lance-shaped leaves that extend radially from the base. The corolla is a greenish-yellow color with three petals. This species requires high light levels and open sand with little to no organic litter accumulation. The documented St. Lucie County population of this species occurs on a scrubby flatwoods knoll in Hobe Sand soils with sand pine, slash pine, and scrub live oak canopy trees. According to the US Department of Agriculture (USDA) NRCS Web Soil Survey, there are no Hobe Sand soils located within the project study area. No tiny polygala was observed during the environmental field survey and there is no scrubby flatwoods habitat within the project study area. Therefore, a determination of ***no effect*** has been made for the tiny polygala.

Four-petal pawpaw

The four-petal pawpaw is an aromatic shrub that is 3.3-9.8 feet tall with one to several stems arising from a deep taproot. Leaves are oblong to oblanceolate, two to four inches long, arranged Alternatively on the stem, and are yellow-green to deep green. The flowers are maroon and fetid and the petals usually form whorls. This species is only found in sand pine scrub vegetation on old, coastal dunes and grows in excessively-drained, quartz sand of both the Paola and the St. Lucie soil series. No four-petal pawpaw was observed during the environmental field survey; however, scrub habitat does exist within the project study area. Therefore, the proposed project ***may affect, but is not likely to adversely affect*** four-petal pawpaw.

Perforate reindeer lichen

The perforate reindeer lichen is easily recognized by its conspicuous perforations below each dichotomous branch point and its wide, smooth, yellowish gray-green branches. Specific habitat for this plant species include high, well-drained sands of rosemary scrub in Florida. Such rosemary scrubs, frequently referred to as "rosemary balds," are particularly well-drained and structurally open. This species typically occurs in open patches of sand between shrubs in areas with sparse or no herbaceous cover. The perforate reindeer lichen has not been documented to occur in St. Lucie County and this species was not observed during the environmental field survey. Thus, a determination of ***no effect*** has been made for the perforate reindeer lichen.

State-Listed Plants

Coastal vervain

Coastal vervain is a perennial herb with sprawling stems up to two feet long. Leaves are succulent and irregularly lobed and toothed. Its calyx has stalked glands and pointed lobes. The flowers are lavender in color with an orange throat, five-lobed, and tubular with each lobe approximately 0.5 inches long. This species occurs in disturbed, sandy areas on back dunes, dune swales, and coastal hammocks. No coastal vervain was observed during the environmental field survey and there is no suitable habitat for this species within the project study area. No adverse effects to this species are anticipated from the proposed project.

Scrub bluestem

The scrub bluestem is a small, tufted grass with hairless leaves approximately 2.5 to four inches long. The flowering stalk is erect and loosely branched at the top with only one inflorescence at the branch tips. This species is known to occur in white sand patches in rosemary scrub and also in sand pine scrub and oak scrub. While scrub habitat does exist within the project study area, no scrub bluestem was observed during the environmental field survey. No adverse effects to this species are anticipated from the proposed project.

Piedmont jointgrass

Piedmont jointgrass is a tall, tufted, perennial grass with erect or ascending culms in solitary or in small tufts. This particular jointgrass has three spikelets (0.05-0.08 inches wide) and the first glume has scattered small, or no, transverse ridges. Habitat includes depressional marshes, flatwoods, swamps, savannas, ponds, roadway ROW, and ditches. While suitable habitat does exist within the project study area, no Piedmont jointgrass was observed during the environmental field survey. No adverse effects to this species are anticipated from the proposed project.

Large-flowered rosemary

Large-flowered rosemary is a perennial, evergreen, aromatic shrub that reaches a height of three to four feet and a width of one to two feet, with purple to lavender flowers. This species has hairy, glandular, needle-like, opposite leaves. It flowers year-round and the large, two-lipped, bright-blue-to-lavender colored flowers with dark spots on the lower lip. This species inhabits coastal scrub, pine scrub, dunes, and sandhill habitats with fine, deep soils. While scrub habitat does exist within the project study area, no large-flowered rosemary was observed during the environmental field survey. No adverse effects to this species are anticipated from the proposed project.

Nodding pinweed

Nodding pinweed is a perennial herb that has slender, erect, flowering stems, rising from a dense mat of spreading, older stems. It has short leaves (less than 0.4 inches) that are Alternative and narrowly oval with pointed tips. The flowers of this species occur in tight

clusters at the ends of short branches, with three tiny, purple or green petals and five sepals. The entire plant is covered with spreading, gray hairs. Habitat includes scrub and scrubby flatwoods. While scrub habitat does exist within the project study area, no nodding pinweed was observed during the environmental field survey. No adverse effects to this species are anticipated from the proposed project.

Pine pinweed

Pine pinweed has the same general description as that of nodding pinweed (above). This species is typically found in scrub, scrubby flatwoods, and even disturbed uplands. While scrub habitat does exist within the project study area, no pine pinweed was observed during the environmental field survey. No adverse effects to this species are anticipated from the proposed project.

Giant orchid

The giant orchid is a perennial herb that has two to four erect, pleated, veined, basal leaves (six to 28 inches long and 0.5 to 1.5 inches wide). The flower stalk is 1.0 to 5.5 feet tall and leafless with a terminal spike of five to 30 flowers with a stiff floral bract beneath each flower. The sepals and petals are yellow-green and folded forward over the three-lobed lip. The prominent central lobe is maroon with green margins. This species is known to occur in sandhill, scrub, pine flatwood, and pine rockland habitats. While scrub habitat does exist within the project study area, no giant orchids were observed during the environmental field survey. No adverse effects to this species are anticipated from the proposed project.

Because the project area contains scrub habitat that is suitable for several listed plant species, ***a survey for listed plant species should be conducted during design and permitting of the project*** and coordination with USFWS and/or FWC should be conducted, as required.

6.2.2 Wetlands and Essential Fish Habitat

The USFWS' NWI data were reviewed to determine the presence of wetlands and other surface waters within the project study area. The findings below are based on the NWI data, as well as the environmental field review conducted on April 19, 2018. Wetland and surface water impacts were calculated only in areas where a proposed new trail could potentially be constructed and do not include areas where the proposed trail alternative would utilize an existing paved surface.

Riverine Wetland

The NWI data identified a single riverine wetland (R5UBH – riverine, unknown perennial, unconsolidated bottom, permanently flooded) that is crossed by the Primary Alternative and East Alternative 2 alternatives at two locations: (1) across from the house at address

2101 Hills Court, approximately 350 feet south of Southern Avenue; and (2) approximately 140 feet north of Southern Avenue, north of the house at address 206 Southern Avenue. **Figure 10** shows the location of this riverine wetland in relation to the Primary Alternative and East Alternative 2 alternatives. During the environmental field review, it was determined that this riverine wetland is not currently present, since these locations consisted of upland, developed habitat. Thus, this riverine wetland was not included in the wetland impact calculations for this project.

Freshwater Pond Wetland

The NWI data identified a single freshwater pond wetland (PUBHx – palustrine, unconsolidated bottom, permanently flooded, excavated) that is crossed by the Primary Alternative and East Alternative 2 alternatives just southeast of the intersection of Hills Court and Virginia Avenue. The environmental field review verified the presence of this wetland. During the field review, biologists noted that the NWI wetland polygon did not include the full extent of this wetland; thus, the boundary of this wetland polygon was adjusted via aerial interpretation and the wetland impact calculations were adjusted to reflect the revised wetland polygon (Figure 10). Both the Primary Alternative and East Alternative 2 alternatives would each result in an impact of 0.02 acres of impact to this wetland.

Avoidance and Minimization

The opportunity exists to avoid or minimize impacts to this freshwater pond wetland. Options include a reduced typical section or a shift of the proposed trail alternative further south in the potential impact area. Doing so would minimize and/or avoid impacts to this wetland from the proposed trail.

Other Surface Waters (Surface Water Management System)

During the environmental field review, an existing surface water management system was identified along the East Alternative 2, northeast of the Ft. Pierce Police Department building (see **Figure 11** and **Figure 12**). The proposed East Alternative 2 was determined to pass through a very small portion of the western edge this surface water management system, which would fall under the classification of Other Surface Waters (Figure 12). The surface water management system should be a previously-permitted feature and any modification to the existing surface water management system resulting from the proposed project would require a modification to the existing Surface Water Management permit. The East Alternative 2 would result in an impact of 0.0003 acres of impact to this Other Surface Water. **Table 3** shows the estimated impacts to up wetlands and other surface waters for each trail alternative.

Figure 10: Wetlands



Figure 11: Existing Surface Water Management System



Photos of the existing surface water management system identified northeast of the Ft. Pierce Police Department building. Left photo (looking southwest) shows the depressional area with wetland vegetation and outfall headwall. Right photo shows the storm drain inlet and outfall headwall.

Figure 12: Existing Surface Water Management System Aerial



FM# 443334-1. Aerial view of the existing surface water management system (Other Surface Waters) identified along the East Alternative 2 alternative. The impact area is represented by the portion of the blue polygon falling within the extent of the 20-foot-wide analysis area (green lines).

Table 3: Wetland and Surface Water Impacts (Acres)

Wetland Type	Primary Alternative	East Alternative 1	East Alternative 2
Wetlands	0.02	0.00	0.02
Other Surface Waters	0.00	0.00	0.0003
Total	0.02	0.00	0.0203

Note: Impact calculations are based on a 20-foot-wide trail alternative (which includes 10 feet on either side of the proposed trail centerline) only in areas where a proposed new trail could potentially be constructed.

Essential Fish Habitat (EFH)

The NMFS EFH Mapper was reviewed to identify EFH within and adjacent to the project study area. As there are no marine or estuarine water bodies within the project study area and no EFH within the project study area. Thus, no impacts to EFH are anticipated from the Primary Alternative, East Alternative 1, or East Alternative 2.

6.2.3 Upland Habitat

The FLUCFCS data were reviewed to identify the natural upland habitat types within and adjacent to the project study area. Based upon the FLUCFCS maps there are two natural, undeveloped upland communities located along the proposed trail alternatives: “Open Land” (FLUCFCS 190) and “Upland Shrub and Brushland” (FLUCFCS 320), both of which are located in the very southern portion of the project study area (**Figure 13**). It should be noted that the FNAI Standard Data Report (documented under the *Threatened and Endangered Species* section above) also identified scrub habitat in this general area.

Open Land

The southernmost portions of the Primary Alternative and East Alternative 1 pass through the “Open Land” category (Figure 13). The FLUCFCS Handbook (FDOT, 1999) states that the Open Land category “includes undeveloped land within urban areas and inactive land with street patterns but without structures. Open Land normally does not exhibit any structures or any indication of intended use. Often, urban inactive land may be in a transitional state and ultimately will be developed into one of the typical urban land uses.” During the environmental field review, biologists observed that the area classified as Open Land consisted of a combination of:

1. A previously disturbed/cleared land adjacent to the east of the existing residential neighborhood. This area contained sandy soils and low-lying scrub vegetation (i.e., grasses and few shrubs) with areas of open sand (**Figure 14**); and

2. An area of vegetated land located along the north side of the residential neighborhood. This area contained sandy soils with oaks, saw palmettos, and other small scrub plants (Figure 14).

Figure 13: Upland Habitat

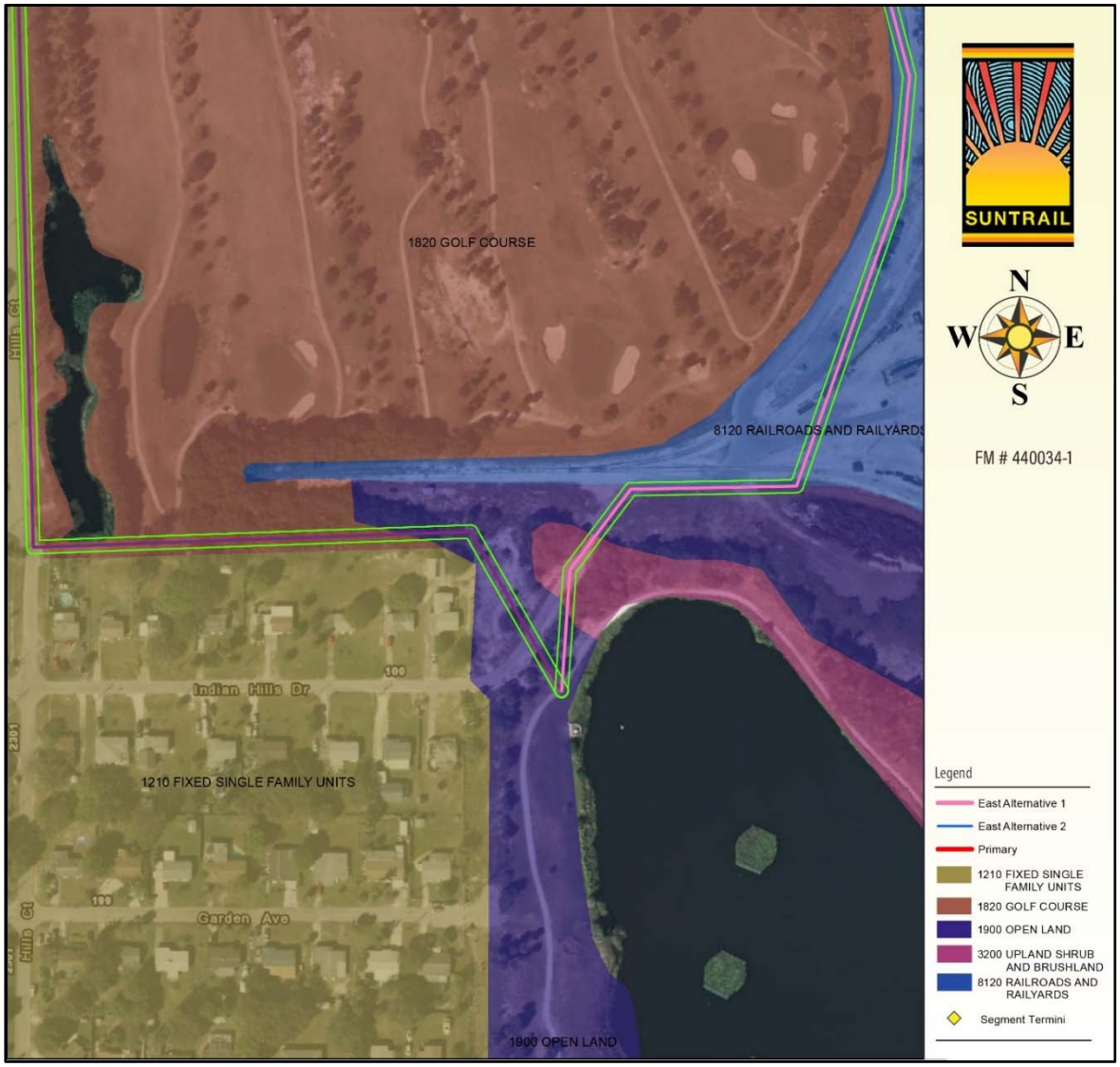


Figure 14: Open Land (Scrub Habitat)




Left photo (looking northwest from Indian Hills Drive) shows the area of Open Land (scrub habitat) located adjacent to the east of the residential neighborhood. Right photo (looking southwest from the train tracks) shows the more densely vegetated scrub area located along the north side of the residential neighborhood.

Upland Shrub and Brushland

The southernmost portion of the East Alternative 1 alternative passes through the "Upland Shrub and Brushland" land category (Figure 13). The FLUCFCS Handbook (FDOT, 1999) states that the Upland Shrub and Brushland category "includes saw palmettos, gallberry, wax myrtle, coastal scrub and other shrubs and brush. Generally, saw palmetto is the most prevalent plant cover intermixed with a wide variety of other woody scrub plant species as well as various types of short herbs and grasses. Coastal scrub vegetation would include pioneer herbs and shrubs composed of such typical plants as sea purslane, sea grapes and sea oats without any one of these types being dominant." During the environmental field review on April 19, 2018, biologists observed that this area contained scrub habitat that is more densely vegetated with trees and shrubs and containing a thick understory. Trees present in this area included saw palmettos, palms, and pines. Biologists did not observe an abundance of oaks or substantial areas of open sand or small scrub plants in this area.

Upland habitat impacts are calculated only in areas where a proposed new trail could potentially be constructed and do not include areas where the proposed trail alternative would utilize an existing paved surface. **Table 4** shows the estimated impacts to upland habitat for each Alternative.

Table 4: Estimated Impacts to Upland Habitat (Acres)

FLUCFCS Designation	Primary Alternative	East Alternative 1	East Alternative 2
FLUCFCS 190 – Open Land	0.18	0.19	0.18
FLUCFCS 320 – Upland Shrub and Brushland	0.00	0.06	0.00
Total	0.18	0.25	0.18

Note: Impact calculations are based on a 20-foot-wide trail alternative (which includes 10 feet on either side of the proposed trail centerline) only in areas where a proposed new trail could potentially be constructed.

Avoidance and Minimization

All three potential trail alternatives (Primary Alternative, East Alternative 1, and East Alternative 2) would result in impacts to upland scrub habitat. Potential options to avoid or minimize impacts to this habitat include a reduced typical section through scrub habitat and/or shifting/meandering of the proposed trail alternative through this area in a way that minimizes impacts to the higher quality areas of scrub habitat.

6.2.4 Outstanding Florida Waters/Aquatic Preserves

Section 403.061(27), Florida Statutes, grants the Florida Department of Environmental Protection (FDEP) the power to establish rules that provide for Outstanding Florida Waters (OFW) that are worthy of special protection based on their natural attributes. The list of designated OFW provided in Rule 62-302.700 (9), Florida Administrative Code, was reviewed. There are no OFW or aquatic preserves identified within or adjacent to the project study area.

6.2.5 Floodplains

The FEMA floodplain data were reviewed. These data are based on the FEMA FIRM. Floodplain impacts are calculated only in areas where a proposed new trail could potentially be constructed and do not include areas where the proposed trail alternative would utilize an existing paved surface. The northern half of the Primary Alternative and East Alternative 2 and the northern portion of the East Alternative 1 are located within the 100-year floodplain (Flood Zone AH). **Figure 15** shows the FEMA flood zones within the project study area. **Table 5** shows the estimated floodplain impacts for each alternative.

Figure 15: Flood Zones

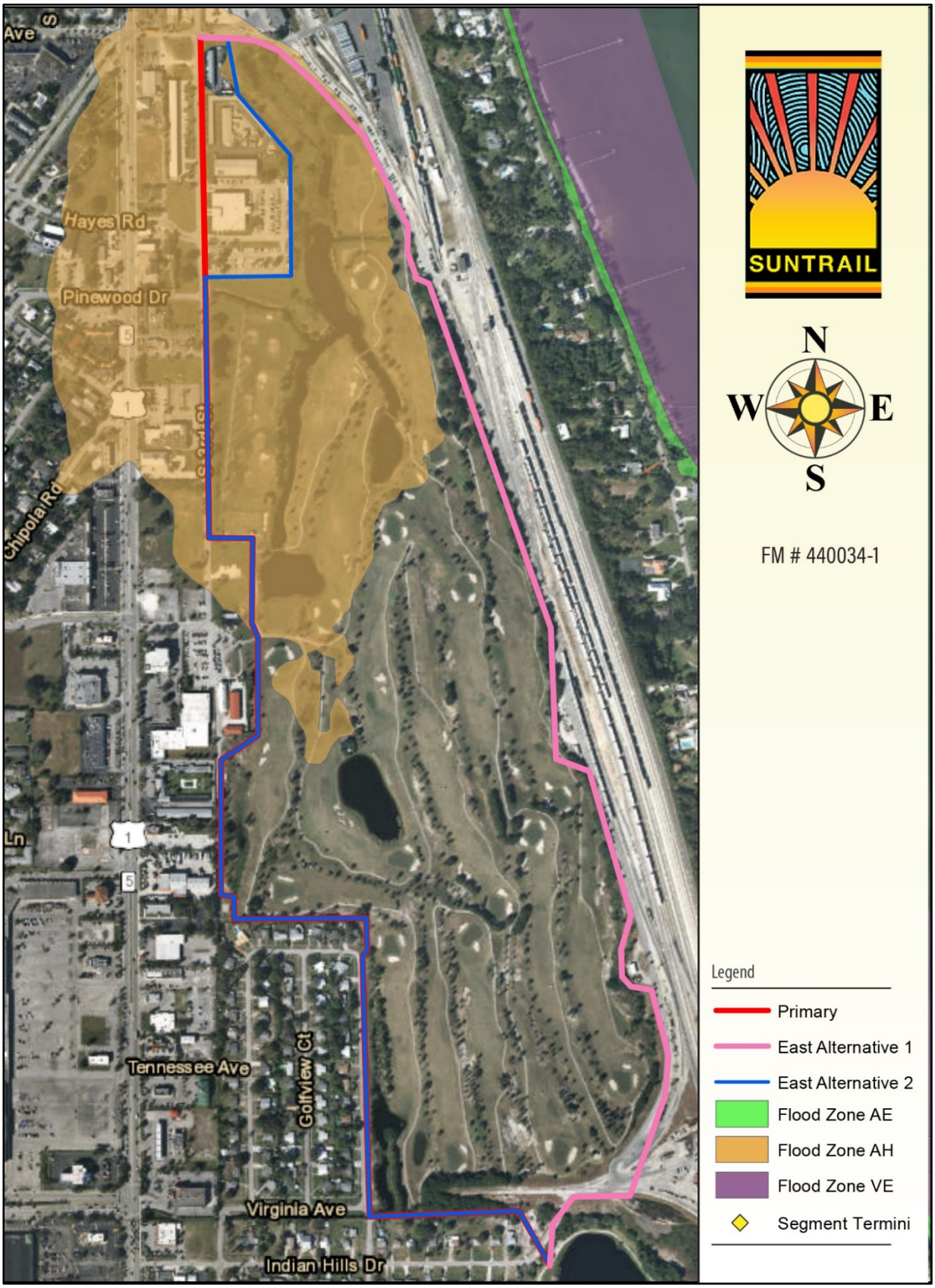


Table 5: Floodplain Impacts (Acres)

FEMA Flood Zone	Primary Alternative	East Alternative 1	East Alternative 2
Flood Zone (AH)	1.32	0.49	1.58
Total	1.32	0.49	1.58

Note: Impact calculations are based on a 20-foot-wide trail alternative (which includes 10 feet on either side of the proposed trail centerline) only in areas where a proposed new trail could potentially be constructed.

6.3 Physical Features

The proposed project's impact to nearby physical features, such as noise, air quality and potential contamination sites, were identified and evaluated.

6.3.1 Noise

The referenced project does not meet the criteria for a Type I project established in 23 CFR 772 and Chapter 18 of Part 2 of the FDOT *PD&E Manual*. Therefore, the project requires no analysis for highway traffic noise impacts. Because it is a trail project, no long-term noise impacts are anticipated.

6.3.2 Air Quality

The project is in an area that is designated as attainment for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, the Clean Air Act conformity requirements do not apply to the project. The project will have no effect on area-wide air quality levels and no screening analyses was required.

6.3.3 Contamination

A preliminary evaluation of the project area was conducted to determine if potential contamination sources occur and if the project would be affected by any known contaminants. This analysis included a review of FDEP's on-line data and aerial review. According to online FDEP's on-line data and the Contamination Locator Map (FDEP, 2018), there are known contamination sites occurring within 500 feet of the proposed alternatives centerlines as shown in **Table 6**. Based on this limited review, it is unlikely that a contamination source would be impacted by the current project scope; however, this final determination is made by the FDOT District Contamination Impacts Coordinator (DCIC).

Table 6: Potential Contamination Sites

Site Description (Type, Facility ID, Address, Status)	Primary Alternative	East Alternative 1	East Alternative 2
Brownfields:			
• BF560702001 – 1150 US Highway 1 (Active Brownfield Cleanup)	X		X
Petroleum / Storage Tank Contamination Monitoring (STCM):			
• 8631077 – Culligan Water Conditioning, 302 Georgia Avenue (Active Petroleum Cleanup)	X	X	X
• 8631088 – Giant #206, 1203 US Highway 1 (Active Petroleum Cleanup)	X		X
• 8516135 – Vak Express, 701 US Highway 1 (Active Petroleum Cleanup)	X	X	X
• 8516179 – A&M Discount Beverage #11, 901 South 4th Street (Pending Petroleum Cleanup)	X		X
• 8516111 – FL East Coast Railway Co, 353 Florida Avenue (Pending Petroleum Cleanup)		X	
• 53967603 – CONCHEM, 250 Florida Avenue (Pending Petroleum Cleanup)		X	X
Other Waste Cleanup:			
• COM_354704 – 1412 & 1150 US Highway 1 (Active Other Cleanup)	X		X
• COM_295069 – S&S Land Company, 1150 South US Highway 1 (Active Other Cleanup / polluted soils and groundwater)	X		X
• ERIC_3834 – Qual-Krom, 301 Florida Avenue (Pending Other Cleanup / polluted soils and groundwater)	X	X	X
Total Potential Contamination Sites	**8**	**5**	**9**

Note: Any '**X**' indicates potential contamination site is adjacent (within approximately 100 feet of centerline.) to proposed alternative.

Section 7.0 Permit Requirements

The following permits are anticipated to be required for the proposed project:

- FDEP National Pollutant Discharge Elimination System (NPDES) General Permit
- SFWMD Environmental Resource Permit

- SFWMD Surface Water Management Environmental Resource Permit Modification (for impacts to the existing surface water management system located northeast of the Ft. Pierce Police Department building)
- Stormwater Permit may be required for additional impervious

Section 8.0 Coordination

Numerous meetings were held with agency stakeholders to discuss the proposed project.

Table 7: Agency Stakeholders Meetings

Date	Meeting	Attendees	Comments
January 18, 2017	Pre-Project Kick-Off Meeting	FDOT, Atkins, St. Lucie County, City of Fort Pierce, St. Lucie TPO, and Treasure Coast Regional Planning Council (RPC)	Provided a general overview of the SUN Trail projects, potential locations, and any foreseen concerns or challenges
April 25, 2017	Local Agency Kick-Off Meeting	FDOT, Atkins, St. Lucie County, City of Fort Pierce, Janus Research, and Treasure Coast RPC	Discussed preliminary alternatives that were developed by Fort Pierce, Saint Lucie County, St. Lucie TPO, and the Treasure Coast RPC
September 20, 2017	City of Fort Pierce Design Coordination Meeting	FDOT, Atkins, St. Lucie County, City of Fort Pierce, St. Lucie TPO	General discussion of alternatives and issues that may arise; new potential alternatives were proposed
March 30, 2018	Design Coordination Meeting	FDOT, St. Lucie TPO	General discussion of alternatives and issues that may arise; new potential alternatives were proposed
May 9, 2018	Design Coordination Meeting	FDOT, Atkins, St. Lucie County, City of Fort Pierce, St. Lucie TPO	Decided on final alternatives to be evaluated

8.1 Public Kick-Off Meeting

A Public Kick-Off Meeting was held on October 10, 2017 at the Old City Hall, 315 Avenue A in Fort Pierce from 5 p.m. to 7 p.m. Notification of the meeting was sent to all land owners and residents within 300-feet of each alternative. A total of 24 members of the public attended the meeting. A brief presentation including the alternatives and potential environmental and user conflicts was presented during the meeting. Handouts and displays were provided detailing the Feasibility Study process and helping the public become familiar with the SUN Trails and study process.

A total of six comments were received from the public. The comments included questions, a suggestion of the trail placement, a suggestion of the material used to construct the trail, a suggestion of adding historical significance placement markers along the trail, and two letters of non-support of the trail.

8.2 Public Alternatives Analysis Meeting

A Public Alternatives Analysis Meeting was held on June 5, 2018 at the Old City Hall, 315 Avenue A in Fort Pierce from 5 p.m. to 7 p.m. Notification of the meeting was sent to all land owners and residents within 300-feet of each alternative. A total of 23 members of the public attended the meeting. A brief presentation including the alternatives and potential environmental and user conflicts was presented during the meeting and attendees were given the opportunity to ask questions and provide comments. Workshop stations and handouts for the Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail Gap provided details of the alternatives that were developed and studied during the Feasibility Study process. No written public comments were received.

Section 9.0 Alternatives Comparison

This Section summarizes and compares the anticipated impacts for each of the Alternatives included in this study.

Table 8: Historic Highwayman Trail Gap Alternatives Comparison Matrix

	No Build	Primary Alternative	East Alternative 1	East Alternative 2
Meets SUN Trail Program Design Criteria	N/A	Yes	No (significant amount of FEC ROW/easement would be required)	Yes
Social Features				
Existing Land Use	No adverse effects	No adverse effects	No adverse effects	No adverse effects
Future Land Use	No effect	No effect	No effect	No effect
Community Cohesion	No adverse effects; but does not enhance connectivity in the area and does not meet the intended purpose of the SUN Trail Program	Enhanced connectivity.	Enhanced connectivity.	Enhanced connectivity.
Relocations	None	No potential relocations.	No potential relocations.	No potential relocations.
ROW or Easements Required	None	• ROW agreement will be needed with Indian Hills Golf Course to add proposed multi-use path onto the Southern and Western edge of the property. • A minor easement will also be needed from the FEC railroad company to get the multi-use path from the Southern start point on to the golf course.	• ROW agreement will be needed with Indian Hills Golf Course to add proposed multi-use path onto the Southern and Eastern edge of the property. • Approximately 0.2 acres of FEC ROW will be impacted. An easement will also be needed from the FEC railroad company to get the multi-use path from the Southern start point on to the golf course. • A minor easement will be required from a private landowner to connect the path back to South 3rd Street. Georgia Avenue is a private drive East of South 3rd Avenue.	• ROW agreement will be needed with Indian Hills Golf Course to add proposed multi-use path behind the Police Station and businesses on South 3rd Street. • A minor easement will also be needed from the FEC railroad company to get the path from the Southern start point on to the golf course. • A minor easement will be required from a private landowner to connect the path back to South 3rd Street. Georgia Avenue is a private drive East of South 3rd Avenue.

	No Build	Primary Alternative	East Alternative 1	East Alternative 2
Community Services	No adverse effects	No effect	No effect	No effect
Potential User Conflicts	None	• Golf ball and golf cart hazards. Minimize conflict with signage. • Riders taking golf cart paths instead of the bike path. Minimize conflict with signage and paint markings. • Proximity to golf course lake. Minimize conflict with fencing and signage. • Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage.	• Golf ball and golf cart hazards. Minimize conflict with signage. • Riders taking golf cart paths instead of the bike path. Minimize conflict with signage and paint markings. • Trains and path users in close quarters. Minimize conflicts with fencing.	• Golf ball and golf cart hazards. Minimize conflict with signage. • Riders taking golf cart paths instead of the bike path. Minimize conflict with signage and paint markings. • Proximity to golf course lake. Minimize conflict with fencing and signage.
Cultural				
Archaeological/ Historical Resources	None	None	1 National Register-Eligible railroad	None
Section 4(f)	N/A	N/A	N/A	N/A
Natural				
Threatened and Endangered Species	No effect	No adverse effects	No adverse effects	No adverse effects
Wetlands/Other Surface Waters (acres)	None	0.02 acres wetlands 0.00 acres other surface waters Impacts can be avoided/minimized by shifting the proposed trail alternative south adjacent to the existing freshwater wetland pond.	0.00 acres wetlands 0.00 acres other surface waters	0.02 acres wetlands 0.0003 acres other surface waters
Upland Habitat (acres)	None	0.18 acres	0.25 acres	0.18 acres
Outstanding Florida Waters/Aquatic Preserves	None	None	None	None
Floodplains (acres)	No effect	1.32 acres	0.49 acres	1.58 acres
Physical				
Noise	None	No effect	No effect	No effect
Air Quality	None	No effect	No effect	No effect
Contamination	None	See “Contamination Summary” table in Section 6 for sites identified. (Contamination Impacts to be determined by FDOT DCIC)	See “Contamination Summary” table in Section 6 for sites identified. (Contamination Impacts to be determined by FDOT DCIC)	See “Contamination Summary” table in Section 6 for sites identified. (Contamination Impacts to be determined by FDOT DCIC)

Section 10.0 Conclusions and Recommendations

Based on the analysis conducted and summarized in this report, the Recommended Alternative is East Alternative 2 (**Figure 16**). In addition to the summary provided below, there was a consensus for this alternative among the project partners, St. Lucie TPO, St. Lucie County, and the City of Fort Pierce. The following is a summary of impacts for the Recommended Alternative:

SUN Trail Design Criteria

East Alternative 2 does meet the SUN Trail Design Criteria; therefore, a 10 to 14-foot multi-use path is recommended the full length of the project.

Social Features

- ROW agreement will be needed with the City of Fort Pierce, the owner of the Indian Hills Golf Course to add proposed multi-use path behind the Police Station and businesses on South 3rd Street. A minor easement will also be needed from the FEC railroad company to connect the Southern start point to the rest of the path on the golf course. A minor easement will be required from a private landowner to connect the path back to South 3rd Street. because Georgia Avenue is a private drive East of South 3rd Avenue (See Figures 5 and 6).
- Community Services: This alternative will not affect community cohesion or adversely impact community facilities. The project instead is an enhancement for the community as it provides recreational opportunities and multi-modal opportunities for the surrounding communities
- Potential User Conflicts include golf ball hazards, riders taking golf cart paths instead of the bike path, and proximity to golf course lake. These conflicts could be minimized with the usage of signage.

Natural Resources

- Threatened & Endangered Species: Additional environmental surveys and coordination with USFWS and FWC will likely be required during design and permitting of the project. The project area contains suitable habitat for Florida scrub-jays, Florida burrowing owls, gopher tortoises, and listed plant species. A Florida scrub-jay survey should be conducted within suitable habitat and coordination with the USFWS will be required. Surveys for Florida burrowing owls and gopher tortoises should also be conducted and coordination and permitting with FWC should be completed, as required. In addition, surveys for listed plant species should be conducted along with coordination with USFWS and/or FWC, as required. With appropriate avoidance or mitigation measures, no adverse impacts are anticipated for State- or Federally-listed threatened and endangered species.
- Wetland Direct Impacts: This alternative would result in a total of 0.02 acres of direct impacts to the freshwater pond wetland located just southeast of the intersection of Hills Court and Virginia Avenue. Options to avoid or minimize

impacts to this wetland include a reduced typical section or a shift of the proposed trail alternative further south in the potential impact area.

- Direct Impacts to Other Surface Waters: This alternative would result in a total of 0.0003 acres of direct impact to the existing surface water management system located northeast of the Ft. Pierce Police Department building.
- Upland Habitat Direct Impacts: This alternative would result in 0.18 acres of impacts to upland scrub habitat. Potential options to avoid or minimize impacts to this habitat include a reduced typical section through scrub habitat and/or shifting/meandering of the proposed trail alternative through this area in a way that minimizes impacts to the higher quality areas of scrub habitat.

Figure 16: Recommended Alternative



Wayfinding

The Historic Highway Trail Gap is considered a critical piece of the ECG network and could also provide connectivity between nearby neighborhoods and Downtown Fort Pierce. To ensure easy navigation and cohesion throughout the corridor, wayfinding signage and pavement markings are recommended to be placed throughout the corridor. The use of signage will also assist with minimizing potential user conflicts. All wayfinding signage design must follow MUTCD standards and would be coordinated during the project design phase.

Cost Analysis

Based on discussions with FDOT a Preliminary Long-Range Estimate (LRE) was prepared for East Alternative 2. The LRE was created using an average multi-use path width of 10-feet since not all areas can support the recommended width of 14-feet. The overall length of East Alternative 2 is 1.33 miles and will require two different ROW agreements/easements to make it feasible. The cost of acquiring those ROW/easements were not included in the LRE (**Appendix J**). The first ROW agreement/easement issue is at the southern terminus of East Alternative 2 and was discussed at the stakeholders meeting on May 9, 2018. The issue area is within an existing drainage project (FPID: 441715-1) that is along Virginia Avenue and continues behind the existing homes (See Figure 5). The second ROW/easement issue is located at the northern terminus of East Alternative 2 and there is an existing drainage easement in place that may be able to fit an eight-foot multi-use trail (See Figure 6).

Section 11.0 References

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St. Lucie Transportation Planning Organization. (2012). *St. Lucie TPO East Coast Greenway Implmentation Plan.* Kimley-Horn and Associates, Inc.

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Appendix A

St. Lucie County SUN Trail Application

Florida Department of Transportation
Shared-Use Nonmotorized (SUN) Trail Network Program
Individual Trail Application

PART I – ELIGIBILITY CRITERIA

Projects **must meet all** of the **eligibility criteria** to receive consideration for SUN Trail funding. SUN Trail will only fund paved multi-use trails.

1. **Will the project be developed as a paved multi-use trail within the Florida Department of Environmental Protection, Florida Greenways and Trails System (FGTS) Priority Land Trail Network and the SUN Trail Network?**

   ☒ **Yes** ☐ **No**

2. **Is the project identified as a priority by the applicable jurisdiction(s)?** If the project is within a boundary of a Metropolitan/Transportation Planning Organization (MPO), it must be a MPO priority. Projects outside of an MPO boundary must be identified as a priority of the county (inclusive of their municipalities), tribal government, and federal or state-managing agency. **Attach the prioritization list and complete Part V.**

   ☒ **Yes** ☐ **No**

   Indicate the priority number of the project: St. Lucie TPO: Priority 4

3. **Has an entity formally committed to operation and maintenance of the project? Complete and sign Part VI (CERTIFICATION OF WILLING MANGER).**

   ☒ **Yes** ☐ **No**

4. **Is the project consistent with the applicable comprehensive plan(s) or the long-term management plan(s)?**

   ☒ **Yes** ☐ **No**

   Indicate the type of plan(s) and date(s) of adoption. SLC GW&T Master Plan (2001); SLC Comp Plan (2010); ECG Plan (2016); Go2040 St Lucie TPO LRTP (2016)

Do not proceed to Part II if the project resulted in a "no" response in Part I.

PART II – PROJECT INFORMATION

Project Name: Historic Highwayman Gap: Indian Hills Golf Course to Dowtown

Project Location (attach a labeled location map with aerial view, optional: submit shape files)

Municipality: Ft. Pierce, FL

County: St. Lucie County

Florida Department of Transportation
Shared-Use Nonmotorized Trail
Individual Trail Application

FDOT District Number: 4

Termini Begin: Indian Hills Drive at Indian Hills Rec Area

Termini End: Citrus Ave at 3rd Street

Total Length: +/- 2 Miles

Briefly describe the scope of the project: Construct a 10' wide paved multi-use trail to connect Indian Hills Rec Area to the Downtown Ft. Pierce ECG segment. Segment may possibly run east or west of the Indian Hills Golf Course. The western alternate would run on the golf course property owned by the City of Ft. Pierce, where as the eastern alternate would require a FEC easement or ROW acquisition.

PART III – PROJECT COSTS

Florida Statue requires a reasonable estimate of the project cost prior to adoption in the Department's Five Year Work Program. Use **Present Day Cost** values. Projects must follow appropriate design criteria and meet Americans with Disabilities Act requirements. If necessary, attach a separate spreadsheet.

Funding Phase(s) requested:

- ☒ **Feasibility Study (FS)**
- ☒ **Project Development & Environment (PD&E)**
- ☒ **Preliminary Engineering/Design (PE)**
- ☒ **Acquisition of right-of-way (ROW)**
- ☒ **Construction (CON)**
- ☐ **Construction Engineering & Inspection Activities (CEI)**

Briefly describe any project work phases that are underway or completed.
Segments to the south, such as Indian Hills Rec Area have some phases already complete.

Proposed timeline and funding needs:

Phase	Proposed Year(s)	Amount(s) Requested	Matching Funds	Total Project Costs	Source(s) of Match
FS	1	25,000.00	0.00	25,000.00	
PD&E	1,2	37,500.00	0.00	37,500.00	
PE	1	50,000.00	0.00	50,000.00	
ROW	2	250,000.00	0.00	250,000.00	
CON	2	250,000.00	0.00	250,000.00	
CEI			0.00	0.00	
TOTAL	2	0.00	0.00	612,500.00	

PART IV – SELECTION CRITERIA

Projects may not meet all of the following selection criteria, a numerical ranking will not be calculated, and Individual Trail Projects with the greatest strengths will advance more quickly. **Optional**: provide attachments if additional space is needed.

1. **Does the project enhance the safety of bicyclists, pedestrians and motorists?**
   ■ **Yes** ☐ **No**
   If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

   ■ Project includes a safety component.

   ☐ Project is located in an area identified as a hazardous biking/walking zone or in an area with significant numbers of safety concerns.

   ■ Project implements a bicycle and pedestrian safety action plan. Provide the name of the plan and date of adoption. Go2040 Long Range Transportation Plan (2/3/16)

   ■ Other (list).
   Provides a safe corridor away from urban streets/roads.

2. **Is the project recognized as having regional, state or national importance?**
   ■ **Yes** ☐ **No**
   If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

   ■ Project is a component of a Regional Trail System prioritized by the Florida Greenways and Trails Council. List the Regional Trail System(s).
   East Coast Greenway (ECG) Southeast Region & the Florida GWT System Plan

   ■ Project is a component of a National Recreational Trail, East Coast Greenway or a trail that has other national importance. List the national recognitions.
   East Coast Greenway

   ■ Project implements an adopted regional bicycle, pedestrian or trail master plan. Provide the name of the regional plan(s). St. Lucie County Master Greenway Trail Plan; Southeast Florida Regional Greenways & Trails Master Plan; Go2040 LRTP

   ■ Other (list) A focal point in the St. Lucie Bicycle/Pedestrian Corridor Study Area of Interest Analysis by the St. Lucie Transportation Planning Organization.

3. **Is there an additional financial contribution committed to the project?**
Select the most appropriate response.

☐ Yes, funds are leveraged by multiple public/private sources of investments dedicated to this specific trail segment (i.e. federal, state, local, non-profit, private landowner contributions). If yes, what are the sources? _____

_____

What is the total percentage of match? _____

☐ Yes, funds are leveraged by at least one additional public/private source of investment dedicated to this specific trail segment.
If yes, what is the source? _____

What is the total percentage of match? _____

■ No, funds are not leveraged by public/private sources of investments dedicated to this specific trail segment.

4. **Does the project blend transportation modes by completing, improving or enhancing existing facilities?**

■ **Yes** ☐ **No**

If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

☐ Project implements Complete Streets objectives and initiatives.
☐ Project implements Safe Routes to Schools objectives and initiatives.
☐ Project provides a direct connection to regional transit systems (i.e. rail stations, express or local bus routes).
■ Project is located in a designated multi-modal district.
■ Project has the potential to reduce vehicular congestion.
☐ Project improves access in a Bicycle Friendly Community or Bicycle Friendly University, as designated by the League of American Bicyclists. If yes, indicate the name of the designated community or university. _____

_____

☐ Project improves access in a Walk Friendly Community, as designated by the Pedestrian and Bicycle Information Center. If yes, indicate the name of the designated community. _____

■ Other (list) Connects two completed phases of ECG segments in St. Lucie County.

5. **Is the project ready for construction?** Select the most appropriate response.

Project is ready for immediate construction and all pre-construction phases are complete.

☐ **Yes** ■ **No**

Project is capable of near term development. The design is nearly complete and permitting is underway. This project includes pre-construction phases. If yes, include the schedule.

☐ **Yes** ■ **No**

Project proposal is feasible but still needs to be designed. Construction will occur in the future.

■ **Yes** ☐ **No**

6. **Does the project have a high level of documented public support?**

■ **Yes** ☐ **No**

If yes, select from the following and briefly explain how the project meets the selection criteria.

■ The greater community supports the project as demonstrated by recently adopted proclamations or resolutions expressing commitment. Provide the resolution number, adopted date and participating parties. Go2040 LRTP (Adopted 2/3/16) SLC Greenways and Trails Master Plan (Resolution 01-123), City of Port St. Lucie, St. Lucie Village and the unincorporated areas of St. Lucie County.

■ Demonstration of public support is consistent across multiple entities representing the greater community, rather than a select few interest groups. Briefly explain. The St. Lucie TPO support represents the planning efforts for the City of Fort Pierce, City of Port St. Lucie, St. Lucie Village and the unincorporated areas of St. Lucie County.

■ Recent community surveys provide an indication of need and support. Briefly explain. Unified Planning Work Program FY 2016/17-17/18 Call for Projects Summary of Comments included specific public request (dated 1/20/16) for a multi-use trail system

☐ An advertised public meeting for discussing the project occurred. Provide the date and type of meeting. _____

■ Other (list) Community support from nearby neighborhoods already using Indian Hills Rec Area.

7. **Does the project have a significant immediate impact to the quality of life by enhancing economic opportunities and providing connectivity to destinations?**

☒ **Yes** ☐ **No**

If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

☒ The project connects to or through federal, state or local conservation/recreation areas. List the conservation/recreation areas. Directly: Indian Hills Rec Area, Savannas Rec Area, and Savannas Preserve State Park. In the future: Indian River Lagoon Aquatic Preserve, Ft. Pierce Inlet State Park, Hope Sound National Wildlife Refuge, and JD State Park (nearest).

☐ The project connects people to jobs, businesses or civic resources.

☒ The project is located along or connects to a Florida Scenic Highway. List the Scenic Highway(s). Future segments will lead to SR A1A, Indian River Drive, and Old Dixie Highway. Segments will lead to Indian River Lagoon - Treasure Coast Scenic Highway.

☐ The project is part of a public/private partnership where developers, linear corridor owners, small businesses, corporations, foundations or private sector partners are directly supporting the project.

☐ The project is located within a Rural Economic Development Initiative (REDI) Community defined pursuant to Section 288.0656, Florida Statutes. List the REDI area. _____

☐ The project is located within a Rural Area of Opportunity (RAO) defined pursuant to Section 288.0656, Florida Statutes. List the RAO area. _____

☐ Other (list) _____

8. **Does the project enhance or preserve environmental resources?**

☒ Yes ☐ No

If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

☐ The project ensures the Florida Ecological Greenway Network (FEGN) maximizes protection of high priority linkages; the project is within a Priority 1 or 2 Critical Linkage as identified by the FEGN.
☒ The project restores or mitigates impacts of environmental degradation.
☒ The project incorporates water quality or drainage improvements.
☐ The project incorporates conservation initiatives to restore/maintain connectivity by reducing vehicle-caused wildlife mortality.
☐ The project's environmental impact assessment or statement does not identify specific issues.
☐ The project's environmental approval and permitting process is complete.

The project brings users through a unique SLC ecosystem and will allow for increased awareness, and environmental education and interpretation. Earlier phases were implemented from mitigation for the future/planned Crosstown Parkway bridge in Port St. Lucie.

9. **Does the project facilitate a system of interconnected trails by closing a gap in the SUN Trail Network?**

☒ Yes ☐ No

If yes, how many miles of trail will be available once this gap is complete? +/- 1.5 miles
List the trail names. Indian Hills Rec Area Segment

10. **The project includes cost-saving elements.**

☒ Yes ☐ No

If yes, briefly describe the potential for overall cost savings for completing this project in conjunction with another project (i.e. new/resurfacing roadway, redevelopment/new development project, trail phase/extending trail project). Remember to provide the other project(s) scope and schedule, the funding source, the funding year, and if funding is through FDOT, provide the Financial Management Number.
Lists two alternate routes. Potential for utilization of asphalt as a trail surface vs concrete.

PART V – CERTIFICATION OF PROJECT PRIORITZATION

1. **For projects within a MPO/TPO boundary, complete the following information. If the project is outside of a MPO/TPO boundary, proceed to Part V – question #2.**

St Lucie Transportation Planning Organization

Name of Metropolitan/Transportation Planning Organization

Peter Buchwald, Executive Director

Name of Contact

466 SW Port St. Lucie Boulevard, Suite 111

Address

Port St. Lucie, Florida 34953

City, State and Zip Code

buchwaldp@stlucieco.org

Contact email

772-462-1593

Telephone Number

Signature: Peter Buchwald

Print Name: Peter Buchwald

Title: Executive Director

DATE: 06/20/2016

Signature confirms the requested project is consistent with MPO/TPO plans and documents, it is an eligible priority, the MPO/TPO supports the project and you possess authorization to submit the funding request.

2. For projects outside of a MPO/TPO boundary, complete the following information.

Intentionally Left Blank N/A

Name of County

Name of Contact

Address

City, State and Zip Code

Contact email

Telephone Number

Signature: _____

Print Name: _____

Title: _____

DATE: _____

Your signature confirms the requested project is consistent with applicable comprehensive plan(s) and/or the long-term management plan(s), it is an eligible priority, the County (tribal government, federal or state-managing agency) supports the project, and you possess authorization to submit the funding request.

PART VI – CERTIFICATION OF WILLING MANAGER(S)

The managing entity will provide routine regular maintenance, is responsible for the daily upkeep and operation of the trail to protect users, will reduce safety hazards that occur, and will ensure a quality level of service is maintained on the facility. Projects traversing multiple jurisdictional boundaries may have multiple managers. Submit the Certification of Willing Manager(s) for all proposed trail segments.

Routine Maintenance: Involves the day-to-day upkeep of a trail. Activities may consist of litter pick-up, trash removal, debris removal, soil and weed control, maintenance of drainage, graffiti removal, mowing, sweeping, sign replacement, shrub trimming and other regularly scheduled maintenance activities.

- For FDOT Constructed Trails Inside of FDOT ROW – FDOT will maintain the pavement and any bridge structures for a trail in its ROW, and will apply normal roadway maintenance standards such as mowing and litter control to the entire ROW inclusive of the trail. Beyond this, a local sponsor/agency will enter into a maintenance agreement with the department to undertake all other trail maintenance. The area of responsibility will be the footprint of the trail within FDOT ROW as defined by the District. The local agency/sponsor will be responsible for any mowing and litter control above FDOT roadway standards and maintenance of trail specific facilities, drainage, and features such as ornamental landscaping, wayside areas, benches, litter receptacles, and restrooms. The local sponsor/agency will be identified prior to programming the PD&E phase. The maintenance agreement detailing the full maintenance requirements of that entity must be executed prior to letting for construction.

- For FDOT Constructed Trails Outside of FDOT ROW – Trails that are constructed outside of FDOT ROW shall be maintained by an entity other than FDOT. The department will enter into an agreement or other form of documented commitment to ensure that a local sponsor/agency is committed to long-term trail maintenance. The local sponsor/agency will be responsible for all trail operation and maintenance needs which includes routine pavement and bridge structure repair, drainage, litter control, sweeping, vegetation management, and the maintenance of trail specific facilities and features such as ornamental landscaping, wayside areas, benches, litter receptacles, and restrooms.

RE: _____

Name of Project

_____

Address or Location of Project

FROM: St. Lucie County and City of Ft. Pierce

_____

Name of Managing Entity

Florida Department of Transportation
Shared-Use Nonmotorized Trail
Individual Trail Application

Mike Middlebrook

Name of Contact

2300 Virginia Ave

Address of Managing Entity

Ft. Pierce, FL 34982

City, State and Zip Code

middlebrookm@stlucieco.org

Contact email

772-462-2897

Telephone Number

Signature: Mike Middlebrook Digitally signed by Mike Middlebrook Date: 2016.06.20 13:51:32 -04'00'

Print Name: Mike Middlebrook

Title: Natural Resources Management Coordinator

DATE: 06/20/2016

Your signature serves as certification of (1) a commitment from your agency to maintain the facility requested and that your agency will enter into a Maintenance Memorandum of Agreement with the Department for the Project prior to the completion of design, or prior to the letting/advertisement for construction for any project proposed for a later phase; (2) the information in this application is true and accurate; (3) to comply with the Federal Uniform Relocation Assistance and Acquisition Policies Act (The Uniform Act) for any right-of-way actions required for the project; (4) lands developed with SUN Trail funds will be available for public use for the lifespan of the improvement; and (5) support of other actions necessary to fully implement the proposed project.

A separate application must be used for each project proposal that meets the minimum Individual Trail Eligibility Criteria. The applicable jurisdiction must p**rioritize and submit completed application(s) to your District Trail Coordinator no later than 5:00 p.m. on June 20, 2016.**

FOR FDOT USE ONLY

Application Complete ☐ **Yes** ☐ **No**

Project Eligible ☐ **Yes** ☐ **No**

Implementation Feasible ☐ **Yes** ☐ **No**

District Prioritization Number _____

Central Office Prioritization Number _____

Final Determination for inclusion in the Work Program ☐ **Yes** ☐ **No**

Indian Hills Historic Highwayman Segment



Environmental Resources Department

2014 Ortho - Aerial

Legend

- Termini Begin
- Termini End
- Primary Route
- Alt Route
- Major Road
- Break
- Crosswalk

N

Disclaimer:

This map is intenteded for reference only. Most information contained within is conceptual. For more information about this map please contact the Environmental Resources Department Lands Division at 772-462-2897.

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MiddlebrookM | 6/20/2016 | V:\Project Files\ERD Lands\Grants\FDOT_SUN_Trail\Indian Hills Historic Highwayman Segment.mxd

St. Lucie County
Board of County Commissioners
Environmental Resources Department

Appendix B
Stakeholder Coordination and Public Meetings

Pre-Project Kick-Off Meeting

January 18, 2017

ST. LUCIE COUNTY ~ SUN TRAIL PROJECTS

General Meeting Notes

Project Kickoff Meeting with St. Lucie County, Florida Department of Transportation, Project Design Team & Agency Partners

WEDNESDAY, JANUARY 18, 2017
1:00 PM

Ecoheritage House at the Richard E. Becker Preserve
3398 Selvitz Road, Fort Pierce, FL 34981

Meeting arranged by the Florida Department of Transportation, District IV

NOTE TO READERS: This document reflects general meeting notes and key points of discussion raised during the project kickoff meeting with for the St. Lucie County SUN Trail projects funded by the Florida Department of Transportation. Meeting logistics were provided by St. Lucie County and the Treasure Coast Regional Planning Council. The meeting occurred on Wednesday, January 18, 2017 and was attended by various partner agencies and the project team. General meeting notes were prepared by Dr. Kim DeLaney, TCRPC.

Attendees

The meeting was attended by representatives of the following agencies:

- City of Fort Pierce (City)
- East Coast Greenway (ECG)
- Florida Department of Environmental Protection (FDEP) – Savannas State Park
- Florida Department of Transportation, District IV (FDOT)
- St. Lucie County – Environmental Resources Department (SLC ERD)
- St. Lucie Transportation Planning Organization (SL TPO)
- Treasure Coast Regional Planning Council (TCRPC)

Copies of sign-in sheets and meeting photos included as Attachment 1.

General Meeting Notes

- Participants welcomed and provided self-introductions.
- DeLaney (TCRPC) indicated of meeting to provide an overview of the SUN Trails program, recent funding allocations to projects in St. Lucie County, introduce the FDOT project team and process to local agency representatives, and identify initial implementation opportunities and challenges.

  Copy of meeting presentation is included as Attachment 2.

- DeLaney (TCRPC) provided overview of East Coast Greenway (ECG) project, which is a 3,000-mile trail project proposed along the east coast of the United States from Calais, Maine to Key West, Florida. Roughly 500 miles of the Greenway will be located along Florida's east coast, including St. Lucie County's segments. ECG is a centerpiece of the recently adopted Southeast Florida Regional Greenways and Trails Plan, and it is the only facility that traverses all seven counties in Southeast Florida.

- Maack (FDOT) provided overview of SUN Trails program; enacted by the Florida Legislature in 2014. Goal of program is to develop a statewide system of paved non-motorized trails as a component of the state-wide Florida Greenways and Trails System. Funding awards for the program's initial authorization of $25 million annually announced in October 2016. Per selection by the Florida Greenways and Trails Council, two-thirds of total funding awarded to Coast-to-Coast Connector and St. Johns River to the Sea Loop (identified as the top two regional trail systems in the state). Remaining third awarded to individual trails on the network selected and prioritized by FDOT. Overview of criteria used for selection and funding process for individual trails. Phases of project programming include: (1) Feasibility Study, (2) Project Development and Environment Study/Predesign Feasibility, (3) Preliminary Engineering/Design, and (4) Construction. Noted that SUN Trails funding could not be utilized for amenities associated with trail facilities, but rather, funding was exclusive for the ultimate development of the trails themselves.

- Broadwell (FDOT) indicated feasibility studies were focused on fatal flaws, and if none were identified, projects could advance to design if funding was available. Prior studies addressing alignment and feasibility to be utilized as a starting point, focused on avoidance and minimization in the layout of trails. Goal is to evaluate from federal National Environmental Policy Act (NEPA) perspective. It is also desirable for projects to adhere to Local Agency Program (LAP) criteria.

- Maack reviewed the funding awards for the five SLC projects including phase, amount of funding, and budget year. She noted the trail dimensions would ideally be twelve feet, but the program allows for trails as narrow as eight feet where there are constraints. Indicated there were no plans for a 2017 SUN Trails funding cycle, although additional funding could become available in a future year.

- Middlebrook (SLC ERD) provided overview of individual trail segments (images of project boards included as Attachment 3). SLC has divided the ECG into 18 miles of segments from Walton Road in Port St. Lucie to downtown Fort Pierce and the causeway. The funded segments were described as follows:

  (1) Savannas Preserve State Park segment is +/-12 miles; includes a connection to the existing trail within the Savannas Recreation Area. Facility proposed to be concrete not asphalt and will require trail bridges to cross wetlands and marshes on the alignment. Facility will also require amendments to the park management plan.
  (2) FEC Railroad Overpass segment is a +/-300 LF connection between the Savannas Recreation Area and Indian Hills Recreation Area. An easement from FEC will be required for the facility.
  (3) Indian Hills Recreation Area segment is +/-1.5 miles; will improve existing trail with paving to meet SUN Trails/ECG standards (rock surface to be widened and hardened). Funding is for the north/south segment on the western side of the property but SUN Trails funding cannot be

used for the loop portion. JPA between the City of Fort Pierce and FDOT to be executed to enable the transfer of funds. (this was done on March 2)

(4) Historic Highwayman segment is +/-2 miles; connects from the Indian Hills Golf Course to downtown Fort Pierce. Segment includes the consideration of industrial arts concepts, not to be funded with SUNTrail funds. Preliminary reviews suggest the western alignment may have fewer conflicts with ROW and golfers utilizing the golf course.

(5) Historic Downtown Retrofit segment is 2.5 miles along narrow ROW and historic infrastructure. The goal of facility is to tie in downtown features such as museums, marina, and art features with a connection to the North Causeway Bridge.

- Participants broke into groups arranged by project and reviewed conditions, project concepts, and initial opportunities and challenges. General and specific project summaries below. Comments are based on the discussion and are conceptual for consideration.

Savannas Preserve State Park segment:

- Walton Road includes an equestrian parking lot with potential wetland conflict.
- Suggested alignment for facility is through park, avoiding wetland, to connect to parking lot along pre-established trail (Gopher Tortoise Trail) running north of wetland.
- Consider a pedestrian signal at the park entrance, Walton Road is a county road
- Consider alignment's existing trails and adjacency to private back yards
- Uses to west of parking lot include Sandhill Crane Park and Port St. Lucie High School.
- Alignment could run north along existing firebreak; wooden boardwalk likely needed.
- SLD ERD/FDEP can provide GIS and LIDAR data to Kimley-Horn (FDOT project manager).
- Considereration of temporary closures for prescribed burns. Boardwalks present conflict issues with burns also.
- Need confirmation of SUN Trail criteria for access as park has dawn/dusk access restrictions.
- From PSL HS to Lennard Road, park contains significant wetlands and a new eagle's nest. Several alignment alternatives could be explored, including Lennard Road (ultimate 4-lane facility with county-owned ROW that could accommodate the trail segment), Hog Pen Ditch berm, fire breaks, McQuillen Road, FPL easement.
- Consideration of the FPL easement will be needed as well as SFWMD.
- Park management plan update underway; trail details to be added as a future amendment.
- Additional parties to include in project discussions: City of Port St. Lucie, HOAs for Savannas Club and Indian River Estates, School Board and principals of adjacent schools (Port St. Lucie High School, Savannas Elementary), St. Lucie County Conservation Alliance, Audubon, SFWMD, FPL.

Historic Highwayman segment:

- Consider Citrus Road overpass and connection to Depot Drive at northern end alignment
- Consider traveling under Citrus (N) thru FEC
- Consider easement through residential on southern connection
- Police station and park identified south of Georgia Street
- Indian Hills Golf Course is owned by the City of Fort Pierce

Historic Downtown Retrofit Segment:

- City of Fort Pierce may purchase Depot Drive (adjacent to port)
- Kayak ramp to be located at Citrus Avenue
- Alignment may require reconfiguration of bridge lanes by Citrus Avenue
- FDOT has made design changes to allow connection to the new North Causeway bridge a Dixie Hwy.

- Future meetings to be arranged as project components are advanced.

Next Steps

Distribution of Meeting Notes and Materials	FDOT lead with TCRPC support
Follow-Up Individual Project Team Meetings	FDOT Project Consultants lead
Determination of noted SUN Trails criteria (e.g., concrete versus asphalt construction; temporary closures for prescribed burns)	FDOT lead
Update Presentations to SLC, SL TPO, City of Fort Pierce, Other Agencies & Organizations	SLC lead with FDOT support

Attachments:

1 – Meeting Agenda, Sign in & Photos
2 – Meeting Presentation
3 – Project Boards prepared by SLC

ST LUCIE COUNTY SUN TRAILS

Project Kickoff Meeting

January 18, 2017

AGENDA

1. Welcome, Introductions & Purpose ..... Kim DeLaney, TCRPC
2. Overview of SUN Trails Program & Project Implementation ..... Lisa Maack, FDOT
3. Overview of Individual Projects ..... Mike Middlebrook, St Lucie County

PROJECT NAME	FUNDED ACTIVITY	FUNDING (YEAR)	LOCAL LEAD	CONSULTANT/FDOT LEAD
Savannas Preserve State Park	PreDesign Feasibility & Design	$500,000 (FY 2017) $750,000 (FY 2019)	**Chris Vandello (Park Manager)** 772-919-1760 Christopher.Vandello@dep.state.fl.us	**Lynn Kiefer (Kimley-Horn)** Direct: 772.794.4075 Main: 772.794.4100 Lynn.kiefer@kimley-horn.com
FEC RR Overpass	PreDesign Feasibility & Design	$275,000 (FY 2017) $305,885 (FY 2020)	**Mike Middlebrook (SLC)** 772-462-2897 middlebrookm@stlucieco.org **Jack Andrews (City of FP)** 772-467-3773 JAndrews@City-FtPierce.Com	**Lynn Kiefer (Kimley-Horn)** Direct: 772.794.4075 Main: 772.794.4100 Lynn.kiefer@kimley-horn.com
Indian Hills Recreation Area Trail Retrofit	Design & Construction	$80,000 (FY 2017) $408,434 (FY 2019)	**Jack Andrews (City of FP)** 772-467-3773 JAndrews@City-FtPierce.Com	**Lisa Maack (FDOT)** 954-717-2253 Lisa.Maack@dot.state.fl.us
Historic Highwayman Trail Gap	PreDesign Feasibility & Design	$100,000 (FY 2017) $ 100,000 (FY 2019)	**Jack Andrews (City of FP)** 772-467-3773 JAndrews@City-FtPierce.Com **Kori Benton (City of FP)** 772-467-3739 KBenton@City-FtPierce.Com	**Rudy Westerman/Ken Hardin (Janus)** (813) 636-8200 ken_hardin@janus-research.com **Beth Zimmer (Atkins)** (305) 514-3254 Beth.Zimmer@atkinsglobal.com
Historic Downtown Retrofit	PreDesign Feasibility	$275,000 (FY 2017)	**Jack Andrews (City of FP)** 772-467-3773 JAndrews@City-FtPierce.Com **Mike Middlebrook (SLC)** 772-462-2897 middlebrookm@stlucieco.org **Don West (SLC)** 772-462-1659 westd@stlucieco.org	**Rudy Westerman/Ken Hardin (Janus)** (813) 636-8200 ken_hardin@janus-research.com **Beth Zimmer (Atkins)** (305) 514-3254 Beth.Zimmer@atkinsglobal.com

4. Project Breakout ..... Project Managers
5. Regroup for Follow-Up Items & Next Steps ..... Kim DeLaney, TCRPC
    - Other Individuals to be Included Projects
    - Other Items

ST LUCIE COUNTY SUN TRAILS

PROJECT KICKOFF MEETING - JANUARY 18, 2017

SIGN-IN SHEET

NAME	ORGANIZATION	EMAIL
Jolly Jimenez	FDOT.	Jolly.Jimenez@dot.state.fl.us
Jack Andrews	City of Fort Pierce	JAndrews@city-FtPierce.com
Mike Forman	Kimley-Horn	Mike.Forman@kimley-horn.com
Tori O'Malley	Kimley-Horn	Tori.O'Malley@kimley-horn.com
Rudy Westerman	Janus Research	rudy_westerman@janus-research.com
Lynn Kiefer	Kimley-Horn	lynn.kiefer@kimley-horn.com
Beth Zimmer	Atkins	beth.zimmer@atkinsglobal.com
Chuck Broadbent	Fort Pierce Greenway	Chbroadbent@comcast.net
DON WEST	SLC Public Works	dwest@stlucie co. org
Wren Underwood	SLC ERD	underwoodw@stlucreco.org
Kori Benton	LOFP - Planning	KBenton@cityoftpierce.com
John Mach	DEP	john.mach@dep.state.fl.us
Doug Rogers	DEP - FPS	doug.t.rogers@dep.state.fl.us
Tris VANDELLO	DEP	Christopher.Vandello@dep.State.Fl.us
Lisa Maack	FDOT	Lisa.Maack@dot.State.fl.us
Peter Buchwald	St. Lucie TPO	buchwaldp@stlucieco.org ~~stlucietpo~~

ST LUCIE COUNTY SUN TRAILS

PROJECT KICKOFF MEETING - JANUARY 18, 2017

SIGN-IN SHEET

NAME	ORGANIZATION	EMAIL
Ann Broadwell	FDOT	ann.broadwell@dot.state.fl.us
Lynn Kelley	FDOT	Lynn.Kelley@dot.state.fl.us
Jenn McGee	SLC ERD	mcgeej@stlucieco.org
Kim DeLaney	TCRPC	KDELANEY@TCRPC.ORG

1-18-2017

Attachment 2

St Lucie County
East Coast Greenway Kickoff Meeting

January 18, 2017





Today's Agenda

1. Welcome, Introductions & Purpose
2. Overview of SUN Trails Program & Project Implementation
3. Overview of Individual Projects
   - Savannas Preserve State Park
   - FEC RR Overpass
   - Indian Hills Recreation Area Trail Retrofit
   - Historic Highwayman Trail Gap
   - Historic Downtown Retrofit
4. Project Breakout
5. Regroup for Follow-Up Items & Next Steps

East Coast Greenway – Treasure Coast Region





East Coast Greenway ALLIANCE

FDOT Florida Department of TRANSPORTATION

Shared-Use Nonmotorized (SUN) Trail Network Program

Lisa Maack, District 4 SUN Trail Program Coordinator
Florida Department of Transportation

4

1-18-2017

Shared-Use Nonmotorized (SUN) Trail Network

SUNTRAIL

- **Created under 339.81, F.S.**
- **To develop a statewide system of paved non-motorized trails as a component of the Florida Greenways and Trails System (FGTS)**
- **$25 million annually funded from new vehicle tag revenues**
- **Individual Trail Application period closed June 20, 2016**
- **FY 2017 Awards announced October 2016**

Framework for SUN Trail Funding Selection

SUN Trail Eligible (Priority Land Trails Network)

Top Regional Trail System

Coast-to-Coast Connector

Selected at December 2015 meeting

Second Regional Trail System

St. Johns River to the Sea Loop

Selected at March 2016 meeting

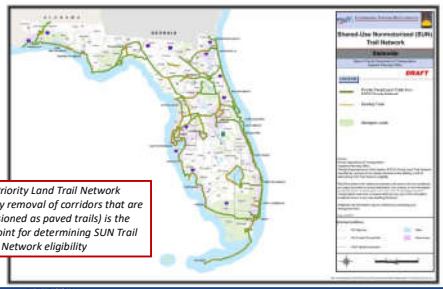
Selected by Florida Greenways and Trails Council (FDEP)

Individual Trail Category

Selected Summer 2016

Selected by FDOT

SUN Trail Network Map

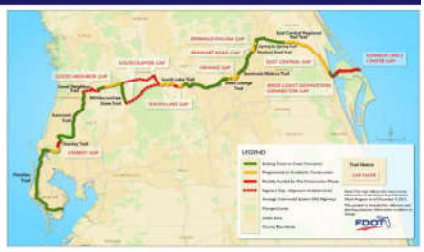


FGTS Priority Land Trail Network (modified by removal of corridors that are not envisioned as paved trails) is the starting point for determining SUN Trail Network eligibility

Top Regional Trail System

SUN Trail Eligible (Priority Land Trails Network)

Coast to Coast Connector



Selected by the Florida Greenways and Trails Council December 2015

Second Regional Trail System

SUN Trail Eligible
(Priority Land Trails Network)

St. Johns River to the Sea Loop



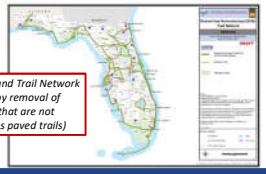


Selected by the Florida Greenways and Trails Council March 2016

Eligibility Criteria for Individual Trails

*There are four **eligibility criteria** a project **must meet** to receive consideration for SUN Trail funding. The applicable entity will transmit a priority list and project details to the respective FDOT District Trail Coordinator.*

1. Is the project a paved component of the Florida Greenways and Trails System (FGTS) Priority Land Trail Network, and therefore the SUN Trail Network?



FGTS Priority Land Trail Network (modified by removal of corridors that are not envisioned as paved trails)

Eligibility Criteria for Individual Trails

*There are four **eligibility criteria** a project **must meet** to receive consideration for SUN Trail funding. The applicable entity will transmit a priority list and project details to the respective FDOT District Trail Coordinator.*

2. Is the project identified as a priority by the applicable jurisdiction?

- If the project is within a boundary of the Metropolitan Planning Organization (MPO), it must be a MPO priority;
- For areas outside of a MPO boundary, the project must be identified as a priority of the county (inclusive of their municipalities), a tribal government, federal or state managing agency.

Eligibility Criteria for Individual Trails

*There are four **eligibility criteria** a project **must meet** to receive consideration for SUN Trail funding. The applicable entity will transmit a priority list and project details to the respective FDOT District Trail Coordinator.*

3. Has an entity formally committed to operation and maintenance of the project?



Suwannee River Greenway at Branford



Good Neighbor Trail, Brooksville



Little Econ Greenway, Orange County

Eligibility Criteria for Individual Trails

*There are four **eligibility criteria** a project **must meet** to receive consideration for SUN Trail funding. The applicable entity will transmit a priority list and project details to the respective FDOT District Trail Coordinator.*

4. Is the project consistent with the applicable comprehensive plan or the long-term management plan?



FDOT

October 11, 2016

Dick Kane, (850) 414-4590
dick.kane@dot.state.fl.us

Florida Department of Transportation Awards $44.4 Million for Bicycle and Pedestrian Trail Expansion in Florida

TALLAHASSEE – The Florida Department of Transportation (FDOT) announced today the selection of the first year of projects to receive funding under the Shared Use Nonmotorized (SUN) Trail program. A total of $44,434,543 million was awarded to 45 separate projects located across 21 counties throughout Florida. (See attached map and project list)

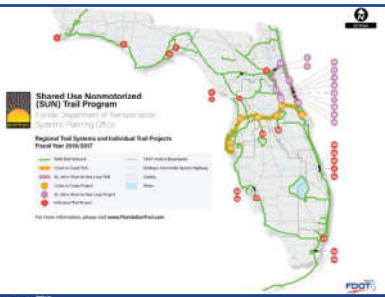
The projects include the construction of 11 separate trail segments, which will add or improve approximately 20 miles of trail to Florida's trail system. Another 34 projects will be in various preconstruction phases of work such as feasibility study, environmental review and design. The funds are for the current fiscal year (2016-17) and are immediately available to begin work.

SUNTRAIL

Process for Funding Individual Trails

Project Identification	•Identification of purpose, location and goals of the project; •Consistent with the community's vision, plans, and policies; •Consistent with transparent public involvement procedures.
Project Prioritization	•Identified priority of Metropolitan Planning Organization (MPO); •Identified priority of the county (inclusive of their citizens), tribal government, federal or state managing agency.
Project Selection & Programming	•Priority List and project details submitted to FDOT District by applicable entity; •District project evaluation and development of draft funding scenario; •Development of Statewide draft prioritization scenario; •Upon approval, projects are programmed into appropriate fiscal year of the five year Tentative Work Program.

Current Work Program Year (Fiscal Year 2016/2017)



Project Programming

Project Phases Include:

- **Feasibility Study (FS)** if necessary
- **Project Development and Environment Study (PD&E)**
- **Preliminary Engineering/Design (PE)**
- **Acquisition of Right-of-Way (ROW)** if necessary (will not be funded by SUNtrail funds)
- **Construction (CON)**

Maintenance

For FDOT Constructed Trails Inside of FDOT ROW – FDOT will maintain the pavement and any bridge structures for a trail in its ROW, and will apply normal roadway maintenance standards such as mowing and litter control to the entire ROW inclusive of the trail. Beyond this, a local sponsor/agency will enter into a maintenance agreement with the department to undertake all other trail maintenance. The area of responsibility will be the footprint of the trail within FDOT ROW as defined by the district. **The local agency/sponsor will be responsible for any mowing and litter control above FDOT roadway standards and maintenance of drainage and trail specific facilities and features such as ornamental landscaping, wayside areas, benches, litter receptacles, and restrooms.** The local sponsor/agency will be identified prior to programming the PD&E phase. The maintenance agreement detailing the full maintenance requirements of that entity must be executed prior to letting for construction.

For FDOT Constructed Trails Outside of FDOT ROW – Trails that are constructed outside of FDOT ROW shall be maintained by an entity other than FDOT. The department will enter into an agreement or other form of documented commitment to ensure that a local sponsor/agency is committed to long term trail maintenance. **The local sponsor/agency will be responsible for all trail operation and maintenance needs which includes routine pavement and bridge structure repair, litter control, sweeping, vegetation management, and the maintenance of drainage and trail specific facilities and features such as ornamental landscaping, wayside areas, benches, litter receptacles, and restrooms.** The local sponsor/agency will be identified prior to programming the PD&E phase. Each district will determine the appropriate form of commitment or agreement that will need to be executed prior to letting for construction.

Strategic, Effective and Efficient Investments

SUN Trail will not fund development of amenities associated with trail projects.

These amenities include but are not limited to:

- **Benches, trail furniture or seating areas;**
- **Bicycle racks, air stations or lockers;**
- **Buildings, restrooms, wayside structures or overlooks, shelters or picnic pavilions;**
- **Kiosks (regulatory and safety signage permitted);**
- **Landscaping (trail stabilization permitted);**
- **Litter or recycle receptacles;**
- **Parking areas or trailheads;**
- **Playgrounds, fitness equipment or structures;**
- **Promotional or educational materials;**
- **Sculptures, fountains or art; and**
- **Water fountains, spigots or showers.**

FDOT Florida Department of TRANSPORTATION

Questions or Comments?

SUN Trail Contact:

Lisa Maack
District 4 SUN Trail Program Coordinator
954-717-2253
Lisa.Maack@dot.state.fl.us
www.FloridaSunTrail.com

SUNTRAIL

Overview of Individual Projects









Indian Hills Rec Area



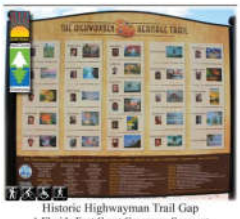
- Distance: 1.5 mi
- Improving Existing Infrastructure
- Underway
- Joint Agreement
- City or Ft Pierce
- FDOT JPA
- $80,000 FY17
- $408,434 FY19
- Design & Construction

FEC Railroad Overpass

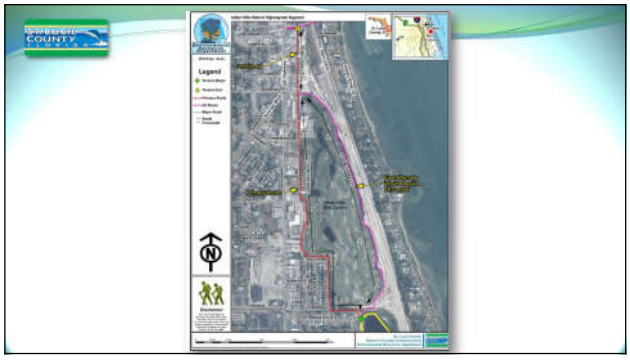


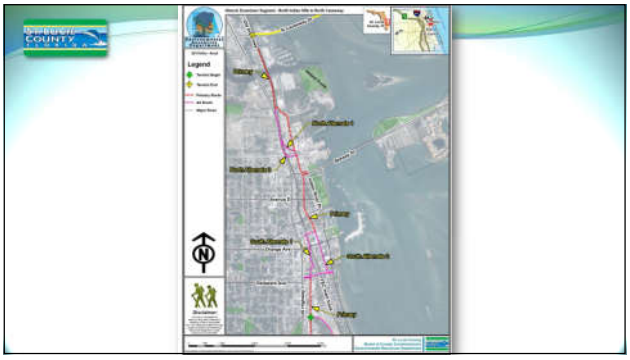
- Distance: 300 LF
- FEC Coordination
- Aerial Rights
- Cost
- Design
- Limited Options
- $275,000 FY17
- $305,885 FY20
- Feasibility & Predesign

Historic Highwaymen



- Distance: 2 mi
- Alignments
- Narrow ROW
- Old FEC ROW
- IH Golf Course Component
- Industrial/Art Component
- $100,000 FY17
- $100,000 FY19
- Feasibility & Predesign





Historic Downtown



- Distance: 2.5 mi
- Narrow ROW
- Historic Infrastructure
- City of Ft. Pierce & County Port Projects
- Edgar Town
- N. Causeway Bridge
- Traffic Congestion
- FEC Coordination
- Sharrows?
- $275,000 FY17
- Feasibility & Predesign

Discussion & Next Steps

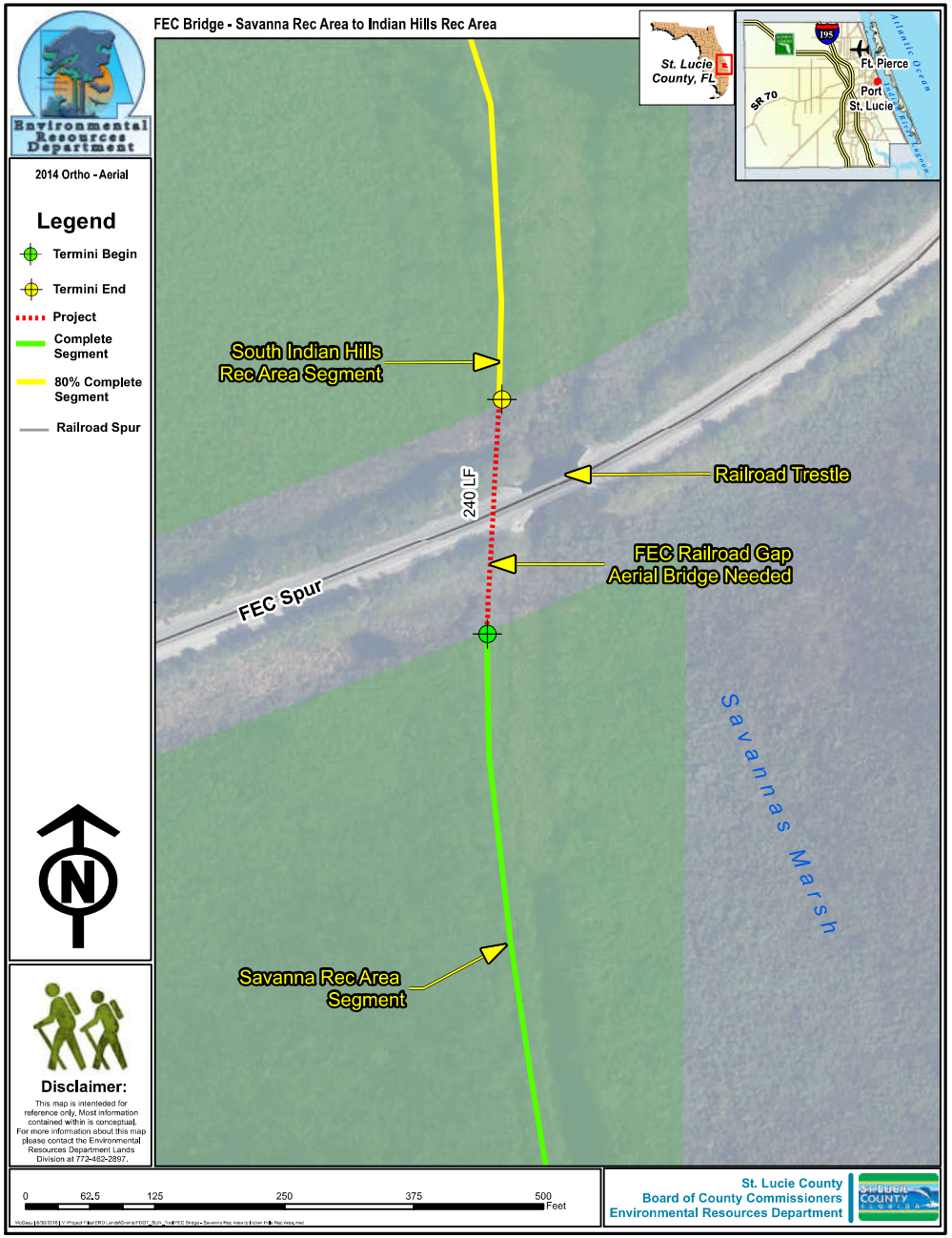
- Individual Project Summaries
- Other Individuals to be Included
- Timing for Follow-Up Activities
- Other Items

Thanks for Coming!

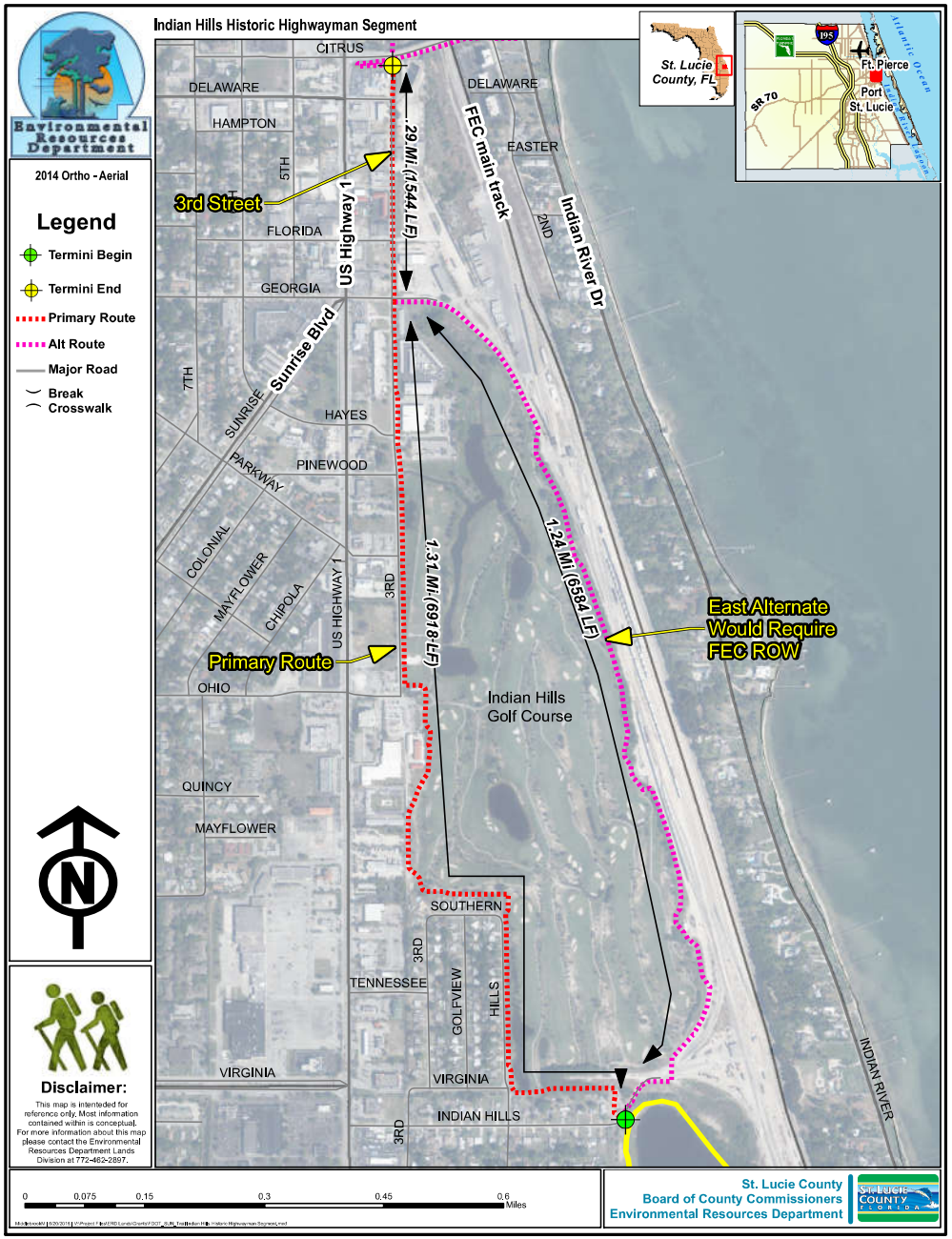







FEC Bridge - Savanna Rec Area to Indian Hills Rec Area
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Project
Complete Segment
80% Complete Segment
Railroad Spur
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
195
Atlantic Ocean
South Indian Hills Rec Area Segment
Railroad Trestle
240 LF
FEC Railroad Gap Aerial Bridge Needed
FEC Spur
Savannas Marsh
Savanna Rec Area Segment
N
Disclaimer:
This map is intended for reference only. Most information contained within is conceptual. For more information about this map please contact the Environmental Resources Department Lands Division at 772-462-2897.
0 62.5 125 250 375 500 Feet
St. Lucie County Board of County Commissioners Environmental Resources Department


Savannas State Park to Savanna Rec Area
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
195
Atlantic Ocean
1.25 Mi
Savanna Rec Area
Weatherbee
Midway Rd
Indian River Lagoon
S. Ocean Dr
Savannas Preserve State Park
2.90 Mi
Indian River Estates
North Alternate
FPL Easement
Indian River Dr
Kitterman
10.6 Mi
Primary
Savannas Preserve State Park
South Alternate
US Highway 1
1.93 Mi
Savanna Club
FEC main track
Walton Rd
Green River Parkway
N
Disclaimer:
This map is intended for reference only. Most information contained within is conceptual. For more information about this map please contact the Environmental Resources Department Lands Division at 772-462-2897.
0 0.375 0.75 1.5 2.25 3 Miles
St. Lucie County Board of County Commissioners Environmental Resources Department


Indian Hills Historic Highwayman Segment
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
Break
Crosswalk
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
195
Atlantic Ocean
Indian River Lagoon
3rd Street
.29 Mi (1544 LF)
US Highway 1
FEC main track
Indian River Dr
1.24 Mi (6584 LF)
1.31 Mi (6918 LF)
East Alternate Would Require FEC ROW
Primary Route
Indian Hills Golf Course
CITRUS
DELAWARE
HAMPTON
FLORIDA
GEORGIA
EASTER
HAYES
PINEWOOD
SUNRISE
Sunrise Blvd
PARKWAY
COLONIAL
MAYFLOWER
CHIPOLA
OHIO
QUINCY
SOUTHERN
TENNESSEE
GOLFVIEW
HILLS
VIRGINIA
INDIAN HILLS
INDIAN RIVER
1ST
2ND
3RD
5TH
7TH
Disclaimer:
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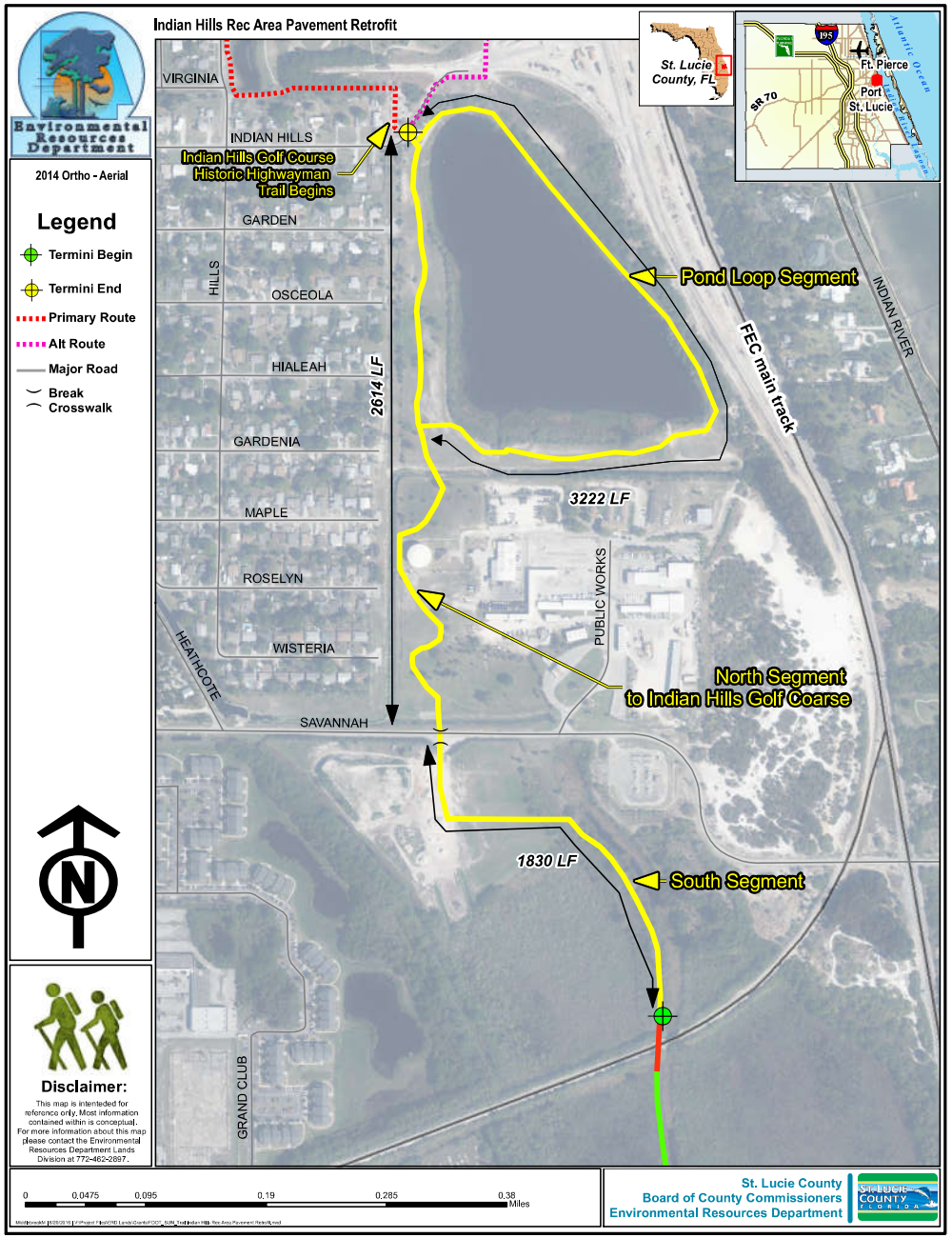
St. Lucie County
Board of County Commissioners
Environmental Resources Department


Indian Hills Rec Area Pavement Retrofit
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
Break
Crosswalk
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
195
Atlantic Ocean
Indian River Lagoon
Indian Hills Golf Course Historic Highwayman Trail Begins
Pond Loop Segment
FEC main track
INDIAN RIVER
2614 LF
3222 LF
1830 LF
South Segment
North Segment to Indian Hills Golf Coarse
PUBLIC WORKS
VIRGINIA
INDIAN HILLS
GARDEN
OSCEOLA
HIALEAH
GARDENIA
MAPLE
ROSELYN
WISTERIA
SAVANNAH
HEATHCOTE
GRAND CLUB
HILLS
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St. Lucie County
Board of County Commissioners
Environmental Resources Department


Historic Downtown Segment - North Indian Hills to North Causeway
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
Disclaimer:
This map is intenteded for reference only. Most information contained within is conceptual. For more information about this map please contact the Environmental Resources Department Lands Division at 772-462-2897.
N Causeway Dr
Old Dixie Hwy
Primary
Harbour Pointe
North Alternate 1
North Alternate 2
Seaway Dr
Indian River Dr
Avenue D
Primary
South Alternate 1
Orange Ave
South Alternate 2
Delaware Ave
US Highway 1
FEC main track
Primary
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
I-95
Atlantic Ocean
Indian River Lagoon
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650
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Feet
St. Lucie County
Board of County Commissioners
Environmental Resources Department


Historic Downtown Segment - North Indian Hills to North Causeway
Environmental Resources Department
2014 Ortho - Aerial
Legend
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Primary Route
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South Alternate 2
Delaware Ave
FEC main track
US Highway 1
Primary
Disclaimer:
St. Lucie County
Board of County Commissioners
Environmental Resources Department


Indian Hills Historic Highwayman Segment
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
Break
Crosswalk
3rd Street
DELAWARE
HAMPTON
FLORIDA
GEORGIA
US Highway 1
FEC main track
Sunrise Blvd
PINEWOOD
Primary Route
East Alternate
Would Require
FEC ROW
Indian Hills
Golf Course
QUINCY
MAYFLOWER
SOUTHERN
TENNESSEE
VIRGINIA
INDIAN HILLS
Disclaimer:
St. Lucie County
Board of County Commissioners
Environmental Resources Department

Local Agency Kick-Off Meeting

April 25, 2017

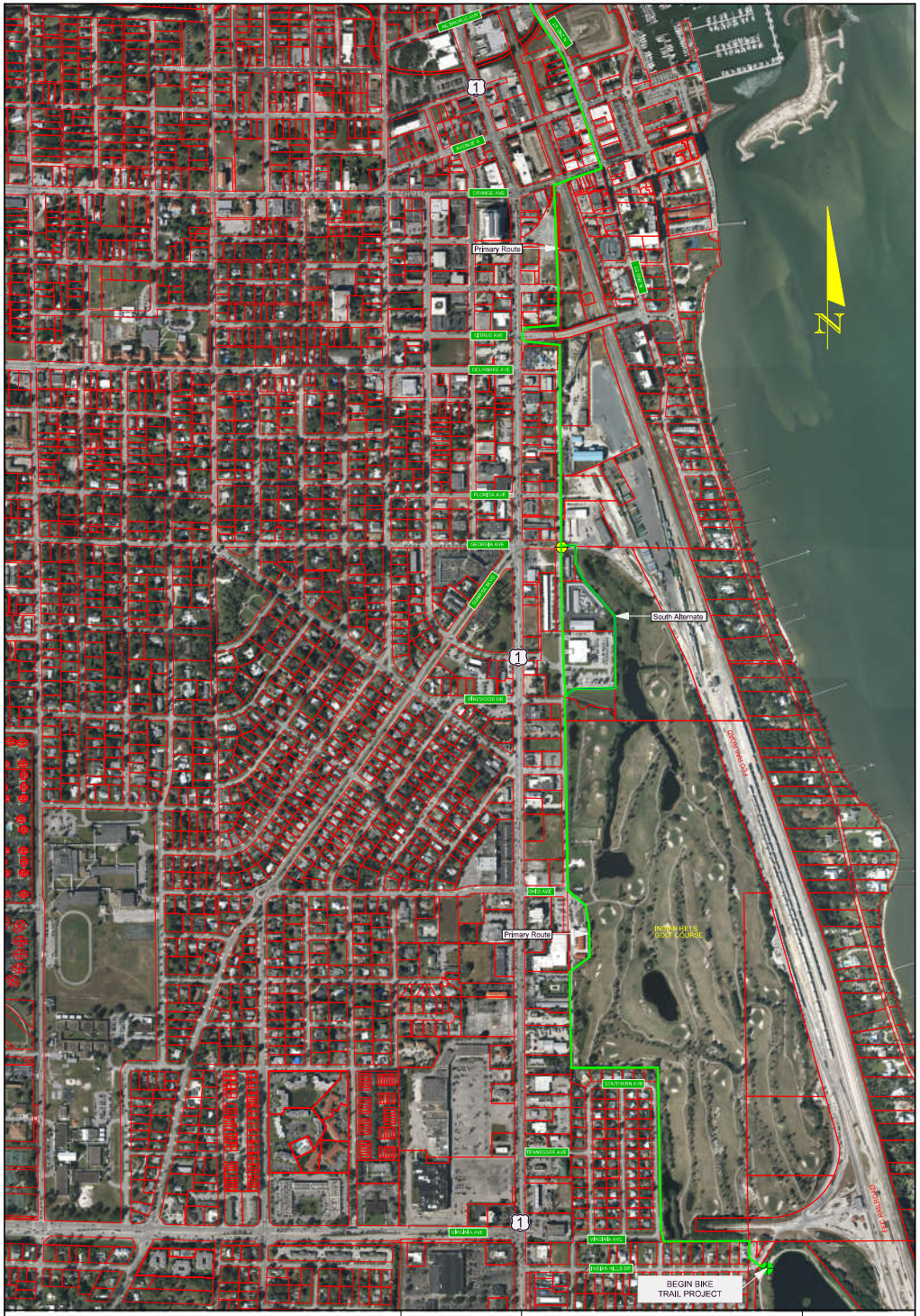
SUN Trail Feasibility Study
(Historic Highwayman and Historic Downtown)
Kickoff Meeting
Meeting Summary

Date/Time: April 25, 2017
1:30 PM
Location: City of Fort Pierce Town Hall
Engineering Conference Room
Subject: SUN Trail Feasibility Study Kickoff Meeting

- Introductions: Participants included:
  - FDOT: Lynn Kelley (FDOT PM), Lisa Maack
  - Saint Lucie County: Amy Griffin, Mike Middlebrook, Jennifer McGee
  - City of Fort Pierce: Jack Andrews, Kori Benton
  - Treasure Coast Regional Planning Council: Kim Delaney by phone
  - Consultants: Lance Decuir (Atkins), Rudy Westerman (Janus)
- Overview:
  - FDOT is conducting a feasibility study for the Historic Downtown Fort Pierce Retrofit (440033-1) from Georgia Avenue to North Causeway Drive and the Historic Highwayman Trail Gap (440034-1) from Indian Hills Drive to Georgia Avenue. These are both portions of the statewide SUN Trail system. This meeting was to discuss preliminary alignments that were developed by Fort Pierce, Saint Lucie County, Treasure Coast TPO, and the Treasure Coast Regional Planning Council. It was noted that the study was generally following the Type I environmental process so that federal funds would not be precluded in the future.
- Historic Highwayman Trail Gap
  - Eastern alternative of this portion along the golf course would use the FEC ROW and this is not ideal. It was noted that FEC is historically difficult to coordinate with.
  - The western route along the City owned Indian Hills Golf Course is ideal, but it was noted that special attention should be given to potential Section 4(f) impacts. Lynn mentioned that FDOT would write a letter for the City to sign, which states that the project would not impact the features or function of the golf course. The City stated that the trail would not modify the course and would be along the area that is generally out of bounds to the golf course play. This documentation is important in case federal funds become available.
  - Rudy mentioned that the golf course is over 50 years old, so it will need to be documented and evaluated for National Register of Historic Places (National Register) eligibility. Results of the evaluation will be coordinated with the Division of Historical Resources or State Historic Preservation Office (SHPO). The City mentioned that although the course dates to the 1930s, it has undergone major reconstruction.
- Historic Downtown – It was discussed that the Historic Downtown Retrofit portion of the SUN Trail has considerably more issues to incorporate a multi-use trail.
  - Starting from south to north, the first challenge will be to cross the FEC tracks near Citrus Avenue. There is currently a bridge at Citrus Avenue over the FEC tracks. The bridge has a sidewalk on the south side so this is one option for getting pedestrians/bicyclists over the bridge. Issues/challenges with this approach are that:
    - This would not be a 10' trail. Kim Delaney with TCRPC mentioned that it was ok if small sections of the trail were not 10' if they were considered necessary for connection and if substantial costs and impacts prohibited the 10' trail.
    - Another challenge with the Citrus Avenue is the Roundabout at S Indian River Drive. Later in the meeting, the group discussed that Indian River Drive would possibly be a good alternative for a trail. The trail would need to cross Citrus Avenue either at the signalized S 2nd street or at the roundabout at S Indian River Drive.

- Another option to cross the FEC tracks near Citrus Avenue would be to extend the trail north beyond Citrus Avenue and to cross the FEC at grade at Avenue A. This route will likely involve coordination with FEC.
- It was discussed that US 1 was previously the preferred alternative coming from the N Causeway (north side of Historic Downtown segment), but current preference is to bring the trail along Old Dixie Highway. This is a less traveled corridor and more desirable for a multi-use trail. Additionally, the North Causeway is currently in the final PD&E stage and accommodations have been made to bring the connecting sidewalk from the bridge to meet up with Old Dixie Highway.
- A challenge in the northern segment will be to get from N 2nd Street to Old Dixie Highway. There are currently two inactive rail spurs that are the preliminarily preferred areas for this crossing. Further exploration of the right-of-way in this area needs to be explored.
- It was also mentioned that the study team should coordinate with the Port and All Aboard Florida to determine how this might impact alignments.
- The group also discussed the potential of exploring an alternative along Indian River Drive since this a scenic route and is adjacent to the boat launch (potential weekday parking), the River Walk Center, and Veterans Memorial Park. Connecting roads to and from Indian River Drive could be Avenue H and Avenue D.
- Lynn mentioned that the downtown area is very historic and would potentially have many historic resources to assess for impacts depending on which route was determined. Old Dixie Highway is a historic roadway and the area of Old Dixie proposed for the primary alignment has been determined eligible for listing in the National Register. It is best for the alternatives to be preliminary developed before cultural resource assessments are conducted by Janus.

- Next Steps
  - Atkins will develop preliminary alternatives and assess based on engineering standards, right-of-way impacts, natural resources impacts and develop a matrix with these impacts as well as pros and cons of alternatives.
  - It was discussed at the meeting that a public kickoff meeting would be ideal to get feedback from stakeholders on the trail and the potential alignments. It would be best if this were held in early summer. ***(UPDATE: following the meeting, it was decided that additional stakeholder coordination and data collection should occur before the public kickoff meeting would be scheduled. The public kickoff meeting is now anticipated late summer/early fall.)***



ATKINS
482 S. Keller Road, Orlando, FL 32810

Indian Hills Historic
Highwayman Segment

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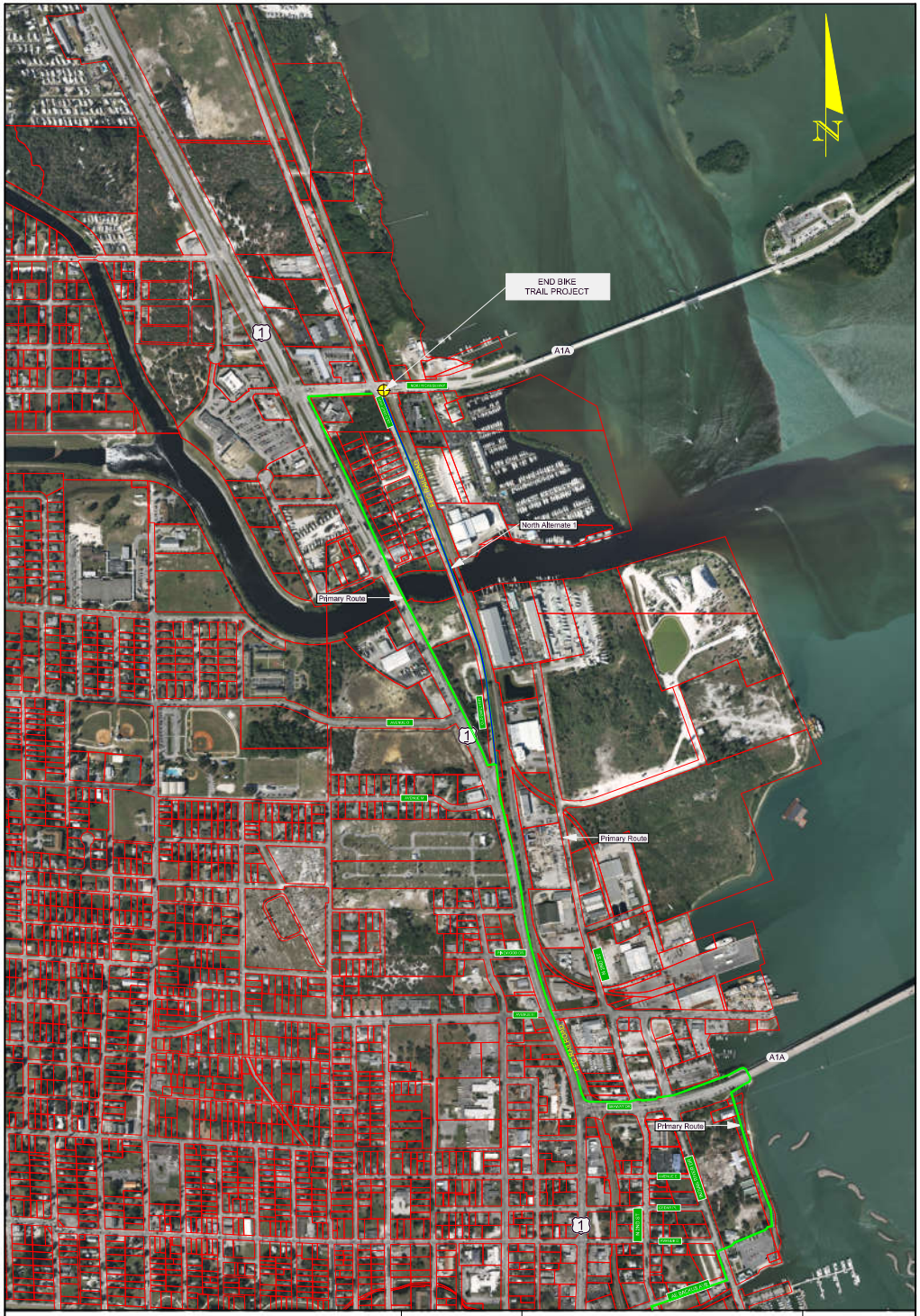

ATKINS
482 S. Keller Road, Orlando, FL 32810

Historic Downtown Segment
North Indian Hills to North Wauseway

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City of Fort Pierce Design Coordination Meeting

September 20, 2017

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

MIKE DEW
SECRETARY

Meeting Minutes

Date and Time:	September 20, 2017 1:00 p.m.
Location:	City Hall Fort Pierce, Florida
Subject:	D4 SUN Trails Project Coordination Meeting
Attendees:	Jack Andrews (City of Fort Pierce) Kori Benton (City of Fort Pierce) Edward Defini (TPO) Peter Buchwald (TPO – phone) Mike Middlebrook (St. Lucie County) Lynn Kelley (FDOT – phone) Lisa Maack (FDOT – phone) Reshawn Fields (Atkins) Brooke Feagle (Atkins) Gary Giaotti (Atkins)
Copies to:	File

The meeting began with introductions of the City of Fort Pierce, St. Lucie County, St. Lucie County Transportation Planning Organization (TPO), FDOT, and Atkins staff. Reshawn Fields provided an overview of the project development to present date. Reshawn described the project overview and potential alternatives, and mentioned the projected Type 1 Categorical Exclusion (CE) environmental document for the project. Per the schedule, Reshawn advised there will be a Public Kick-Off Meeting on October 10, 2017, followed by an Alternatives Workshop in February of 2018; afterwards, the final alternative will be selected and the documents will be finished by summer of 2018. The project is currently in the scoping phase and the purpose of the coordination meeting was to further the design concepts, starting with the original alignments proposed.

Mike Middlebrook started with an explanation of the alternatives and alignments that St. Lucie County chose; first was the Indian Hills Highwayman Segment. Mike mentioned that the east route of the alignment, on the FEC property, was ruled out through previous meetings. Jack Andrews spoke up and mentioned that things may have changed. He stated that the City of Fort

Pierce had a meeting with FEC about a month ago and they had a discussion regarding the 90 acres of golf course that the City leases from FEC. He mentioned that FEC may sell the property to the City of Fort Pierce since FEC is considering moving their rail yard close to the Wal-Mart Distribution Center. Since the FEC property would become City property, it would make the east alignment preferable with less obstacles, however Jack stated he is unsure of anything regarding the transfer of the property at this point. Reshawn asked Lisa Maack and Lynn Kelley what their thoughts were regarding the potential of acquiring the property. Reshawn reminded everyone that the environmental document must be based on current conditions, not the assumption that the City will obtain the property. The general consensus was to move forward with the alternatives and keep collecting data. Lisa mentioned that the best plan would be see which alternatives move forward for development and when the funding will be available.

To return to the proposed alignments, Mike mentioned that the Indian Hills Highwayman Segment would definitely begin at the Indian Hills recreational area south of the golf course. He mentioned the best alternative was to keep the trail in the green spaces instead of a street route. Mike stressed keeping the trail close to the golf course and off of the nearby roads. At this point, Gary Giaotti mentioned the numerous obstacles that are present along the western alignment. Kori Benton provided an explanation of the golf course placement and where the City of Fort Pierce sees the trail being placed. Gary raised concerns about Hole #9 on the golf course and Kori replied that the City owns the golf course and had looked at changing the course to accommodate the trail. Reshawn brought up the fact that the golf course may be Section 4(f) eligible, to which Kori replied that it was, however there is a ten-foot wide drainage easement along Virginia Avenue. Mike summed up the placement of the Indian Hills Highwayman segment as to keep the trail off of US 1 and in the green spaces.

The next trail to be discussed was the Historic Downtown Retrofit Segment. Mike stated the main issue with the Downtown trail was getting the trail over FEC at either 2nd Street or Indian River Drive, and the numerous obstacles that are within the boundaries of the trail. Reshawn mentioned the big question is the design standards, since most of the Downtown segment would need variations or meet different design criteria to fit. Reshawn asked if the design standards set forth must be followed perfectly. Lisa stated that this trail segment is completely different from any others since it is in an urban setting. Lisa said she has an ongoing conversation with FDOT Central Office regarding the design standards, but no answer has been forthcoming.

Gary stated that he and another designer from Atkins rode bicycles along the proposed alternatives and they determined an alternative to the west would be the best route from a safety standpoint. There are numerous issues with downtown Fort Pierce and US 1, therefore 7th Street is a safer alternative. 7th Street is less crowded and has existing bike traffic. If the SUN Trails were to take the 7th Street alignment, the SUN Trail could connect to the existing park and trail system owned by the City of Fort Pierce. Gary gave an explanation of the alternative route along 7th Street

and advised against using 2nd Street or allowing bicycles on the sidewalks. Kori stated that Primary Option 2 may be feasible since the City may acquire ten feet of right-of-way along the football fields. Kori mentioned that 7th Street has a positive in that it could bring people into the corridor and breathe life into it. He stated there is a new art district that will be along 7th Street, so the City would want an agreement to put in routes to get people from the arts district to downtown. Mike stated that the County would like to keep the routes towards the east. Gary brought up the Share Ride program coming to Fort Pierce and asked where the stations would be so that the SUN Trail could tie into them; the response was downtown Fort Pierce.

According to Mike, the area around the port is redeveloping and may be on board with a multi-use path in the port area. The issue with that would be getting the trail over the FEC. Mike expressed concerns with using the 7th Street alignment since that area of town can be a bit rough. Kori stated that the alignment may want to start on 7th Street at 10th Street and north to get people off of the main corridor. If it can be assumed that the FEC would transfer their property to the City, then the trail would could come back to the west at either Georgia Avenue, Delaware Avenue, or Orange Avenue and continue north. Kori also mentioned there is a Police Memorial Park at 3rd Street that would be nice to tie into. Gary stated that if the golf course can be used, it would eliminate all southern alternatives and connect further north. Kori mentioned that there is a RFQ for a HD site downtown that would connect to Moor's Linear Creek Park. With that trail, the 7th Street alignment would connect to downtown at Avenue C. Mike asked if the FEC would move everything to the north, to which Jack replied yes; therefore, that opens up more area to get the trail to 2nd Street. Jack agreed that the trail could go from Georgia Avenue to 7th Street, to Backus Avenue, and then downtown to tie in since there is a bridge at Backus Avenue.

Peter Buchwald asked why the 7th Street alignment was developed. Gary provided the explanation of the development of that alternative and mentioned the safety aspect. Peter asked for the differences in volume between 2nd Street and 7th Street. Gary replied that no true numbers are known, however the 7th Street alignment felt safer from a bicyclist standpoint. Peter asked what would be shown at the Public Kick-Off Meeting, to which Reshawn replied the alternatives in the application. Peter stated the alignments in the application went through the public involvement phase and vetting. He mentioned that it was important to keep the trail on 2nd Street in order to get people into the shops and amenities downtown. According to Peter, 2nd Street is a relatively low-speed street; therefore, the trail would be safe. Since 7th Street is a new alternative, Peter questioned if the alignment would meet the goals of the project and that if it doesn't, it may have to be pulled from the TIP and may not proceed forward. Reshawn reminded that this phase of the project is simply a feasibility study to develop the alternatives. Peter mentioned that he would like more information behind developing new alternatives. Reshawn stated that it is still early in the project schedule and the public comments received at the Kick-Off Meeting will help with the design and preferred alternative, which is still months out.

Peter questioned the validity of having a Kick-Off Meeting if the alternatives will be changed since the information presented would no longer be valid. Lynn mentioned that the point of the Kick-Off Meeting is to give the public a heads up so that if consultants or anyone show up looking around, the public doesn't become concerned. Lynn stated that the alternatives presented in February of 2018 would be more precise and definite. Peter asked how the public would be notified and which alignments would be notified. According to Lynn, the target audience has been identified along the two previously approved alternatives. She assured that the 7th Street alignment will not be presented at the Kick-Off Meeting.

Jack stated that there is value to the 7th Street alignment; the trail could come back downtown at Backus Avenue to tie into the downtown area. Jack raised a question about taking 7th Street all the way to Avenue M, since that would completely miss the downtown area. He stated that Avenue O at US 1 should be signalized to get onto the bridge. Lisa stated her concerns about getting the trail to connect to the new bridge at the north end of the project. Reshawn mentioned she would follow up with Lisa and Lynn regarding the design around the bridges at the north end. Mike mentioned that there is talk of making Old Dixie Highway one-way, which would potentially give the SUN Trail a lane of the bridge. There are right-of-way issues, according to Peter, at the new bridge. He advised to go north and east to Old Dixie Highway and then connect to the new Sunny Lane to avoid the necessity of right-of-way, which may be the case with Avenue O. Kori stated that there will be a commercial plaza on Avenue O that would require the intersection to be signalized.

The SUN Trail system will be a game-changer for Fort Pierce and St. Lucie County, according to Peter. Lisa agreed that the trails are special since they are in urban areas. Mike asked if the grant process and application to receive SUN Trail funds would be covered at the Kick-Off Meeting. Reshawn stated the background would be pulled and added to the presentation. Lisa agreed it was a good idea to add the background and how the project has developed to this stage. Peter suggested that other resources such as parks and amenities should be added to the display maps. With no further questions or comments, the meeting was concluded.

<u>Action Items:</u>

1. Send a meeting invite for the Public Kick-Off Meeting to the team (Reshawn Fields). *Completed.*
2. Identify resources, such as parks, on the alignment maps (Atkins).



Indian Hills Historic Highwayman Segment



Historic Downtown Segment
North Indian Hills to North Wauseway

Design Coordination Meeting

March 30, 2018



SUNTRAIL

Indian Hills Historic Highwayman Segment

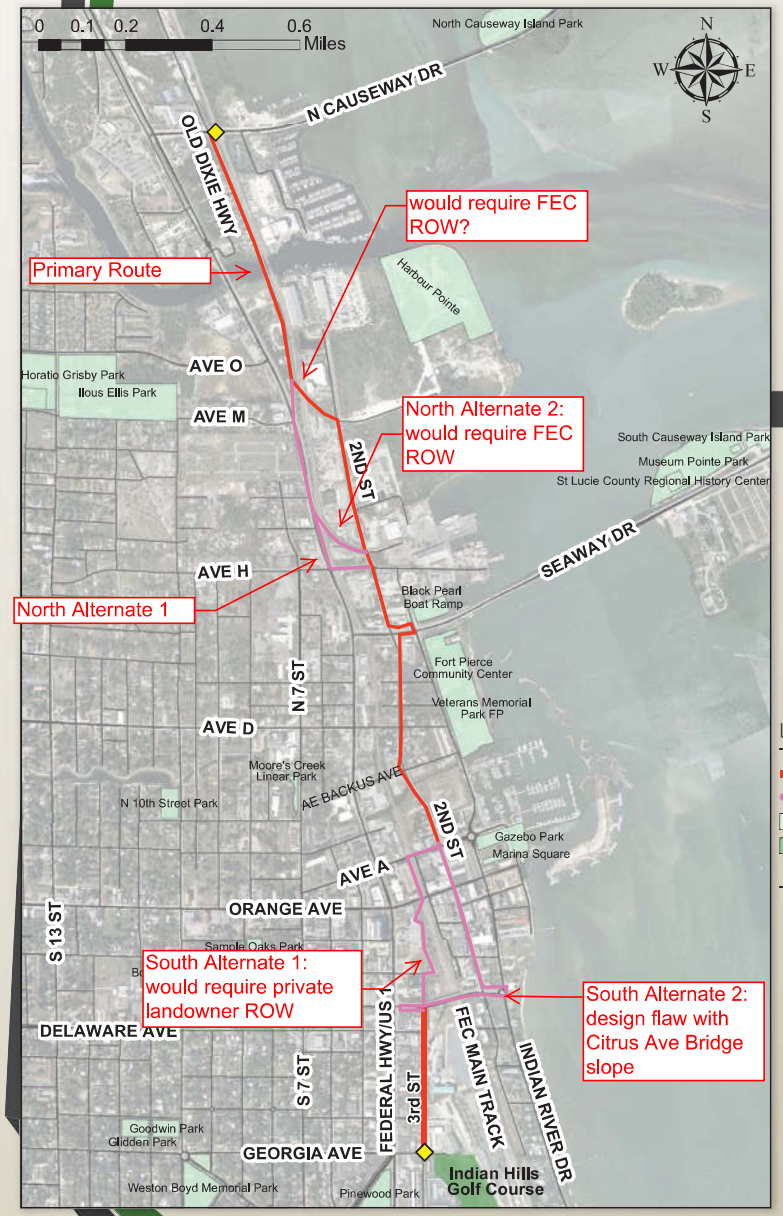
Location Map

Legend

- Primary Route
- Alternative Route
- St. Lucie County Parks
- Golf Course
- Segment Termini

Disclaimer:
This map is intended for reference only. Most information contained within is conceptual.

FDOT



SUNTRAIL

Historic Downtown Segment

Location Map



Legend

- Primary Route
- Alternative Route
- St. Lucie County Parks
- Golf Course
- Segment Termini

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FDOT

SUN Trail: Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail Gap Project Milestone Schedule	
DEADLINE	**TASK**
Alternatives Analysis	
04/27/18	Submit Draft Alternatives Analysis Comparison Matrix for D4 review
Week of 4/30	Design Coordination Meeting with City
Stakeholder Presentations	
05/08/18	City of Fort Pierce Planning Board Meeting
05/15/18	St. Lucie County TPO Meeting
05/18/18	Treasure Coast RPC Meeting
Alternatives Analysis Workshop	
04/27/18	Submit Draft PPT to D4 for review
05/18/18	(3 weeks) D4 Review and Provide Comments
06/01/18	Finalize Presentation/Meeting Materials (will also include City/County/RPC comments)
06/05/18	**Alternatives Analysis Workshop**
Draft Feasibility Report	
06/29/18	*Submit Draft Feasibility Report for D4 Review*
07/29/18	(30 days) D4 review and provide comments
Final Feasibility Report	
08/28/18	Revise Report to address D4 comments and submit Final to D4

Design Coordination Meeting

May 9, 2018

SUN Trail Feasibility Study
(Historic Highwayman Trail and Historic Downtown Ft. Pierce Retrofit Trail)
Design Coordination
Meeting Summary

Date/Time: May 9, 2018
10:30 a.m.

Location: St. Lucie County TPO

Subject: SUN Trail Feasibility Study Design Coordination Meeting

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Introductions

- Florida Department of Transportation (FDOT): Lauren Rand (Project Manager)
- Saint Lucie County: Mike Middlebrook, Jennifer McGee, Kori Benton
- City of Fort Pierce: Jack Andrews
- St. Lucie County Transportation Planning Organization (TPO): Peter Buchwald, Ed Defini
- Atkins: Reshawn Fields, Brooke Feagle, Ryan Jensen

Overview

- FDOT is conducting a feasibility study for the Historic Downtown Fort Pierce Retrofit (440033-1) from Georgia Avenue to North Causeway Drive and the Historic Highwayman Trail Gap (440034-1) from Indian Hills Drive to Georgia Avenue. These are both portions of the statewide SUN Trail system. This meeting was to discuss alignments that were developed by the City of Fort Pierce, Saint Lucie County, and St. Lucie County TPO then reviewed by Atkins.

Historic Highwayman Trail Gap

- It was noted that the entire eastern trail alternative is located within FEC right-of-way. The beginning of the trail has a "Y" shape of available right-of-way, but the primary alternative will need a corner clip of right-of-way from either FEC or a homeowner. Concurrence with FEC would be necessary in order to gain an easement. Reshawn Fields mentioned that the report would have language regarding the corner clip options.
    - A FDOT drainage project (FPID: 441715-1) will run along Virginia Avenue and continue behind the homes. The project should have to acquire the necessary right-of-way for the corner clip that the SUN Trail could use. Jack Andrews mentioned that the project will be a canal but should have enough room to fit the trail. Lauren Rand said she would contact the FDOT drainage project manager.
- The issues with the second eastern alignment (at the northern end of the project) were discussed, including the need for a fence or wall by the lake and the lack of right-of-way at the northern end to connect to 3rd Street. The City of Fort Pierce has a drainage easement along Georgia Avenue that could be utilized, depending on the width of the trail. It was stated that the SUN Trail could be shrunk down to eight feet wide with an exception. It was decided that if a solution could not be found before construction, the trail would end at Georgia Avenue with signs on where to continue on the SUN Trail. It was agreed that the second eastern alignment was a good option for the trail.
- It was pointed out that right-of-way issues are a fatal flaw and that relocations should be avoided. The relocations were added by the environmental team as a "just in case" for the alternatives. The right-of-way and relocation sections will be revised to show no effects.
- The historic section was brought into question regarding the golf course and potentially historic residences. It was decided the historical section would not prove a fatal flaw because the residences would not be impacted, but did have to be noted in the report. The golf course was reconfigured in 2004-2005 and no archaeological or historical resources were uncovered; however, monitoring during construction may be necessary. It was mentioned that there has been coordination with the State Historic Preservation Officer (SHPO) regarding the golf course; projects weren't restricted, there was just added coordination.

Historic Downtown Ft. Pierce Retrofit Trail

- The northern terminus of the project was moved from Avenue H back to Causeway Drive; however, the area on US Highway 1 between Avenue H and Old Dixie Highway will be studied under another project as there is no right-of-way.
- A current study by St. Lucie County proposes that the Old Dixie Highway Bridge be changed to include one lane for traffic and one lane for the SUN Trail, along with two other options for the bridge. It was agreed upon that this segment can be labeled as "under study by St. Lucie County."

- Options regarding the gap on US Highway 1 were discussed, but no viable alternatives were decided upon. It was mentioned that FDOT has been trying to redesign the intersection of US Highway 1 and Avenue H, so the portion of the trail could be completed if the intersection is reconfigured at a later date.
- An issue with the Downtown segment of the trail is that large portions of the proposed trail cannot be funded under SUN Trails due to the need for privately owned right-of-way. It was discussed that some of the alternatives in right-of-way constricted areas can include sharrows and bike lanes; neither of which can be funded by the SUN Trail program.
- The bridge on Citrus Avenue would be a fatal flaw if that option were decided upon. The bridge does not meet Americans with Disabilities Act (ADA) criteria. It was discussed that a bike lane could be added to the bridge if no other options were available.
- The southern alternative 1 would be in City-owned right-of-way until just north of the bridge on Citrus Avenue, at which point the right-of-way becomes privately owned. Kori Benton also mentioned that the open area along that route is supposed to become a Brightline railroad station.
    - It was discussed on where this alternative would turn east and connect back to the primary alternative. It was decided upon that the alternative would turn right on Orange Avenue instead of Avenue A and continue east to 2nd Street.
- The northern section of the project was discussed, since there is no right-of-way to construct a full multiuse path. The segments on 2nd Street would have to be sharrows or bike lanes, not a SUN Trail. It was suggested that the City is looking to remove the on-street parking along 2nd Street and adding another parking garage. If this option occurs, then bike lanes could be added to 2nd Street.
- It was briefly discussed if the option exists with placing the trail next to the railroad; however, since the Brightline train will use the railroad, it was determined that would not be a safe option for pedestrians. The trail needs to be kept on 2nd Street.
- The Riverwalk alternative was discussed and determined to be a viable alternative. The issue with that alternative is how to get the pedestrians to the already constructed trail. The existing boat ramp is currently under reconstruction.
- It was determined that the trail will continue on the north side of Avenue H to the railroad tracks, where the SUN Trail segment will end until Old Dixie Highway.

Next Steps

- Atkins and Janus will revise the existing matrices, maps, and reports to reflect the decisions made.
- FDOT will provide information regarding the upcoming drainage project along Virginia Avenue and if it is possible to include the SUN Trail segment within this project area.



Imagery: NAIP 2013



SUN Trail Historic Downtown Fort Pierce Retrofit Trail Potential Routes

Ft. Pierce, St. Lucie County, Florida

Primary Route

South Alternate 1

South Alternate 2

River Walk Alternate

Project Map

1 in = 1,351 feet

Prepared By: Atkins N.A.

Date: May 02, 2018

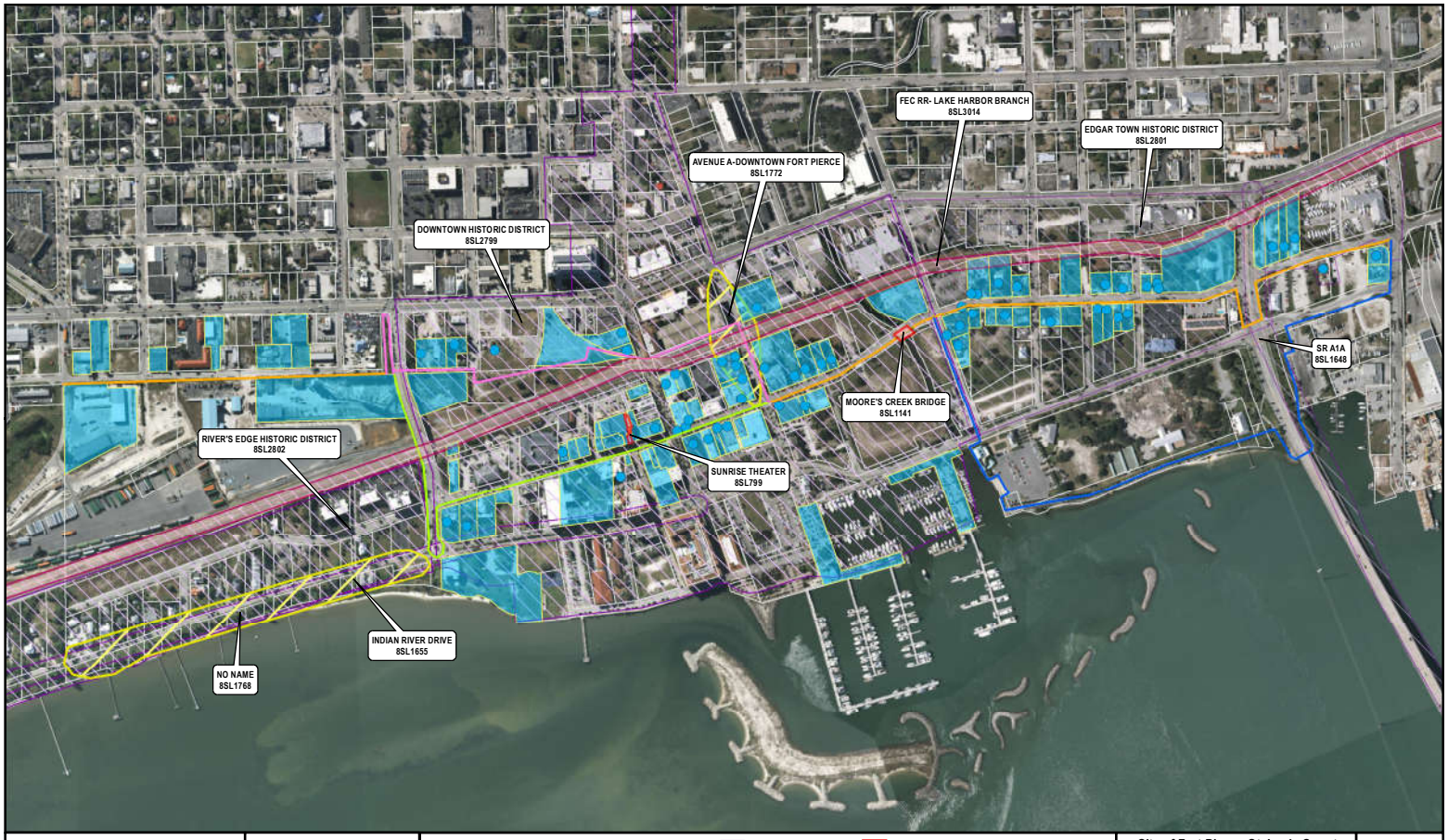
ATKINS

Historic Downtown Fort Pierce Trail Alternates Matrix

for Trails Constructed under the SUN Trail Program

	No Build	Primary Route	South Alternate 1	South Alternate 2	River Walk Alternate
Social Features					
Existing Land Use	No adverse effects	No adverse effects	No adverse effects	No adverse effects	No adverse effects
Future Land Use	No adverse effects	No effect	No effect	No effect	No effect
Community Cohesion	No adverse effects; but does not enhance connectivity in the area and does not meet purpose and need	Enhanced connectivity. Trail traverses through one residential area along North 2nd Street between A E Backus Avenue and Avenue E.	Enhanced connectivity.	Enhanced connectivity.	Enhanced connectivity.
Relocations	None	Unless trail remains within existing ROW, six to seven buildings may require relocation. Five of which are identified as historic along N 2nd Street. One or two buildings located at 514 S 3rd Street at the mineral processing/cement plant may require relocation. Car dealership property just south of bridge uses side alley for parking. Could be avoided if the route was taken West on Delaware Ave.	Potential relocation of a multi-level parking facility located at the corner of US 1 and Orange Avenue unless trail remains within existing ROW	None	Two potential relocations include the Manatee Observation and Education Center (600 N Indian River Dr) and a building located near the boat ramp at Indian River Veterans Memorial Park.
ROW or Easements Required	None	Not enough ROW provided to accommodate multiuse paths of 8'-14' wide. Other options such as sharrows and bike lanes will have to be utilized or different routes selected.	ROW or easement agreement would be needed between Citrus Ave. and Orange Ave. Current route goes through various properties in this area. Bridge would need widening to safely accommodate bicyclists.	Not enough ROW provided to accommodate multiuse paths of 8'-14' wide. Other options such as sharrows and bike lanes will have to be utilized or different routes selected.	Not enough ROW provided to accommodate multiuse paths of 8'-14' wide in all areas. Other options such as sharrows and bike lanes will have to be utilized or different routes selected.
Construct Under the SUN Trail Program	N/A	No	Yes (require private ROW)	No	Yes (portions)
Community Services	No adverse effects	The proposed trail Alternate and/or associated construction would have the potential to impact six historic structures along N 2nd St (200, 518, 522, 524, 532 and 658 N 2nd St).	The proposed trail Alternate and/or associated construction would have the potential to impact three historic structures (301 and 311 Orange Avenue and 208 Avenue A).	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.
Potential User Conflicts	None	Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage. Conflicts with on street parking could be handled with signage or different route selection.	Very steep and narrow bridge on Citrus Ave creates unsafe bicycle terrain. Minimize conflict by not using bridge. Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage. Conflicts with on street parking could be handled with signage or different route selection.	Very steep and narrow bridge on Citrus Ave creates unsafe bicycle terrain. Minimize conflict by not using bridge. Conflicts with on street parking could be handled with signage or different route selection. Traffic Circle conflicts and confusion for novice riders could be handled with signage.	Conflicts with boat ramp users. Minimize conflicts with signage. Conflicts with park users (fishing). Minimize with signage and specific fishing and resting spots. Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage.
Cultural					
Archaeological/ Historical Resources	None	1 National Register-Listed bridge, 1 historic district not evaluated by SHPO, 26 structures not evaluated by SHPO, 13 historic parcels	1 National Register-Eligible railroad, 3 historic structures not evaluated by SHPO, 3 historic parcels, 1 archaeological site not evaluated by SHPO	1 National Register-Listed structure, 1 National Register-Eligible railroad, 1 historic roadway not evaluated by SHPO, 13 historic structures not evaluated by SHPO, 15 historic parcels, 2 archaeological sites not evaluated by SHPO	1 historic district not evaluated by SHPO, 3 historic structures not evaluated by SHPO, 2 historic parcels
Section 4(f)	None	None	None	None	None
Natural					
Threatened and Endangered Species	No effect	No effects	No adverse effects	No effects	No effects
Wetlands/Surface Waters (acres)	None	None	None	None	None
Upland Habitat (acres)	None	None	None	None	None
Outstanding Florida Waters/Aquatic Preserves	None	None	None	None	None
Floodplains (acres)	No effect	None	None	None	None
Physical					
Noise	None	No effect	No effect	No effect	No effect
Air Quality	None	No effect	No effect	No effect	No effect
Contamination	None	See 'CONTAMINATION SUMMARY' table below for sites identified.	See 'CONTAMINATION SUMMARY' table below for sites identified.	See 'CONTAMINATION SUMMARY' table below for sites identified.	See 'CONTAMINATION SUMMARY' table below for sites identified.

Created 5/2/2018



Previously Recorded Cultural Resources and Historic Parcels

Sun Trail - Downtown Fort Pierce Segment

Primary Route
South Alternate 1
South Alternate 2
River Walk Alternative
Archaeological Site
Resource Group
Historic Bridge
Historic Structures
National Register-Listed or Eligible
Historic Parcels

City of Fort Pierce, St. Lucie County

0 250 500 Feet

0 50 100 Meters

Map 1



Imagery: NAIP 2013

Project Map

Prepared By: Atkins N.A.
Date: May 02, 2018

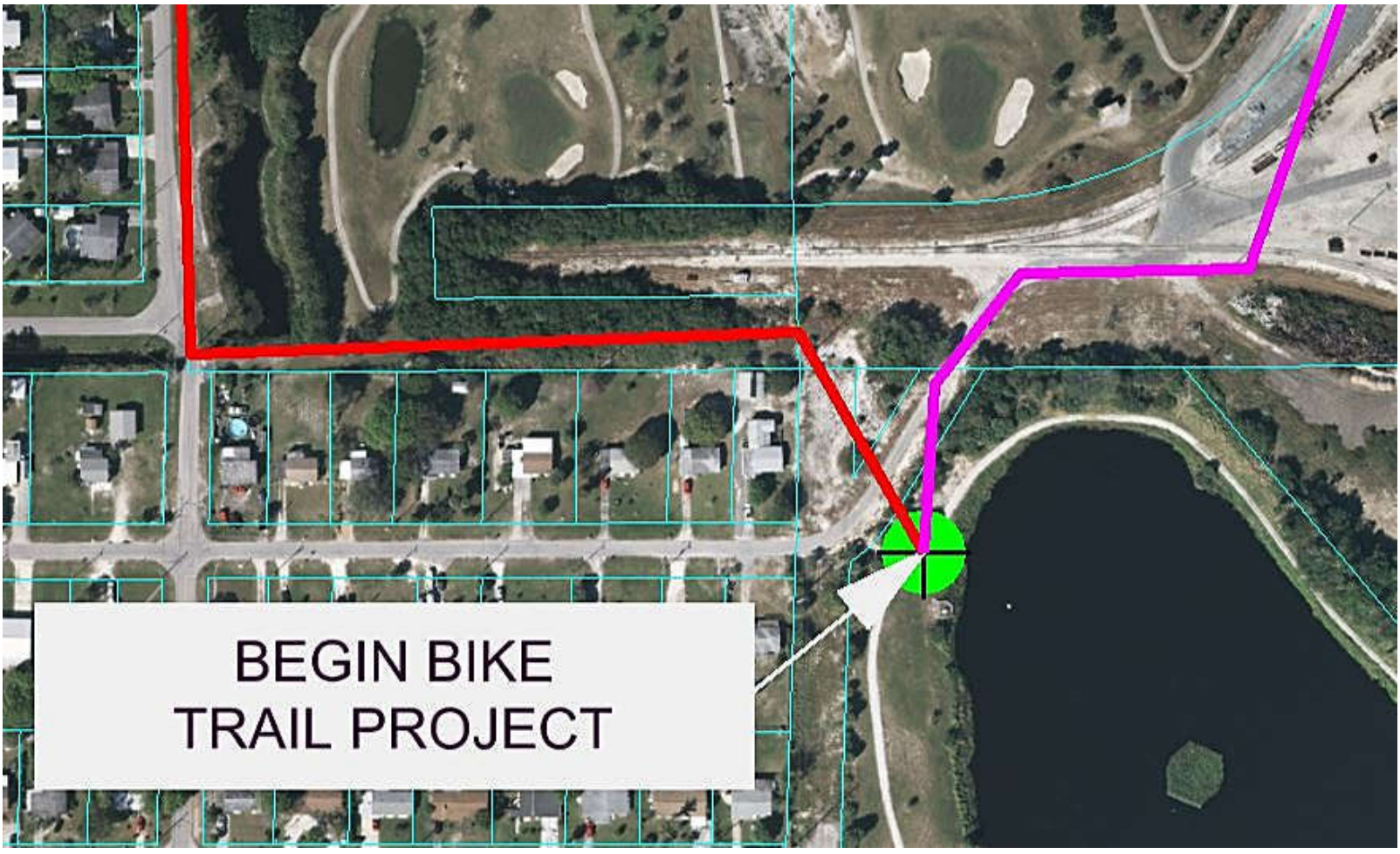
ATKINS

1 in = 673 feet

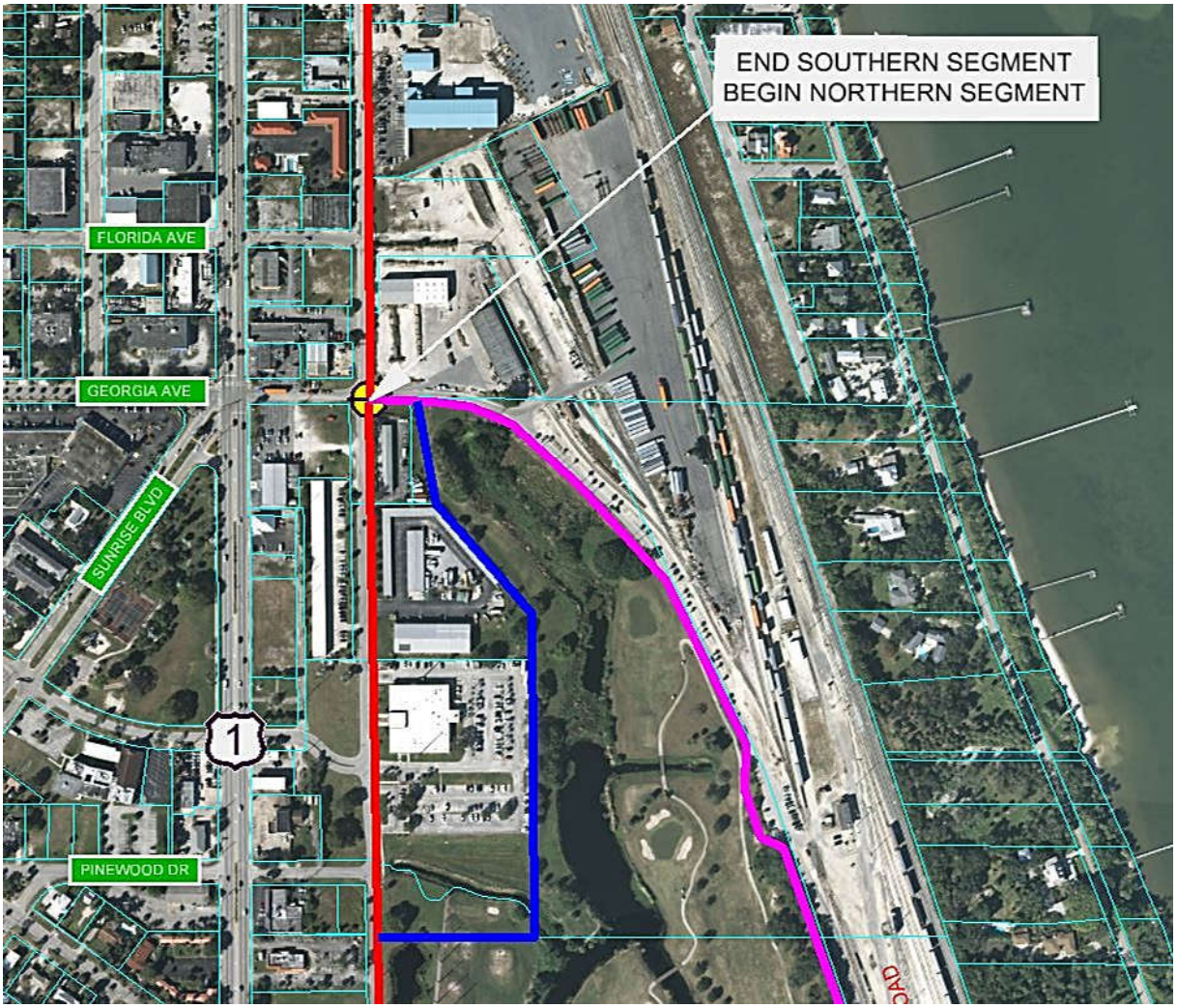
SUN Trail Highwayman Gap Trail
Potential Routes
Ft. Pierce, St. Lucie County, Florida

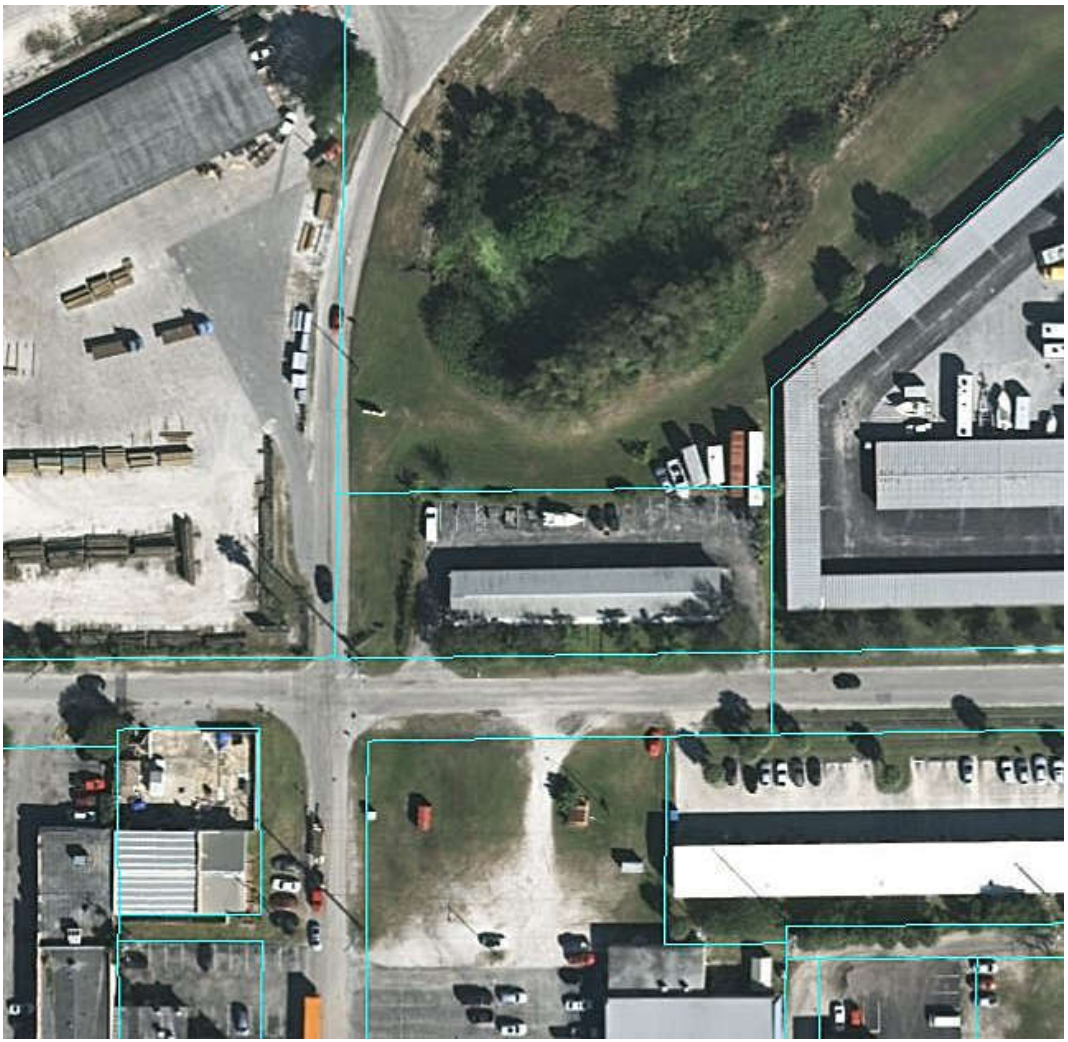
Primary Route
East Alternate 2
East Alternate 1




BEGIN BIKE
TRAIL PROJECT


EGIN BIKE
IL PROJECT


END SOUTHERN SEGMENT
BEGIN NORTHERN SEGMENT
FLORIDA AVE
GEORGIA AVE
SUNRISE BLVD
1
PINEWOOD DR



Historic Highwayman Gap Trail Alternates Matrix

for Trails Constructed under the SUN Trail Program

	No Build	Primary Route	East Alternate 1	East Alternate 2
Social Features				
Existing Land Use	No adverse effects	No adverse effects	No adverse effects	No adverse effects
Future Land Use	No effect	No effect	No effect	No effect
Community Cohesion	No adverse effects; but does not enhance connectivity in the area and does not meet purpose and need	Enhanced connectivity. Trail travels along *Pleasant View* and *Indian Hills Estates* and would enhance connectivity in the area.	Enhanced connectivity.	Enhanced connectivity.
Relocations	None	One potential relocation. Along S 3rd St, one outlying building (and two small covered pavilion structures) of the Indian Hills Golf Course may require relocation. The alignment will also need to be shifted around private properties along the south edge of the golf course.	None	One potential relocation. Warehouse/self-storage building(s) may require relocation if adjoining undeveloped land cannot be utilized for trail.
ROW or Easements Required	None	R/W agreement will be needed with Indian Hills Golf Course to add proposed multiuse path onto the Southern and Western edge of the property. An easement will also be needed from the railroad company to get the multiuse path from the Southern start point on to the golf course. NEED TO DETERMINE OWNERSHIP OF GOLF COURSE	R/W agreement will be needed with Indian Hills Golf Course to add proposed multiuse path onto the Southern and Eastern edge of the property. An easement will also be needed from the railroad company to get the multiuse path from the Southern start point on to the golf course.	R/W agreement will be needed with Indian Hills Golf Course to add proposed multiuse path behind the Police Station and businesses on South 3rd Street. An easement will also be needed from the railroad company to get the path from behind the Police Station and businesses back to South 3rd Street because Georgia Ave. is a private drive East of South 3rd Ave.
Construct under the SUN Trail Program	N/A	Yes	No	Yes
Community Services	No adverse effects	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.
Potential User Conflicts	None	Golf ball and golf cart danger hazards. Minimize conflict with signage. Riders taking golf cart paths	Golf ball and golf cart hazards. Minimize conflict with signage. Riders taking golf cart paths	Golf ball hazards. Minimize conflict with signage. Proximity to golf course

		instead of the bike path. Minimize conflict with signage and paint markings. Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage.	instead of the bike path. Minimize conflict with signage and paint markings. Trains and path users in close quarters. Minimize conflicts with fencing.	lake. Minimize conflict with fencing and signage.
Cultural				
Archaeological/ Historical Resources	None	36 historic parcels	1 National Register eligible railroad; 2 archaeological sites not evaluated by SHPO, 3 historic parcels	1 archaeological site not evaluated by SHPO, 2 historic parcels
Section 4(f)	None	None	None	None
Natural				
Threatened and Endangered Species	No effect	No adverse effects	No adverse effects	No adverse effects
Wetlands/Surface Waters (acres)	None	0.02 acres wetlands 0.00 acres surface waters Impacts can be avoided/minimized by shifting the proposed trail route south adjacent to the existing freshwater wetland pond.	0.00 acres wetlands 0.00 acres surface waters	0.00 acres wetlands 0.01 acres surface waters
Upland Habitat (acres)	None	0.18 acres	0.25 acres	0.00 acres
Outstanding Florida Waters/Aquatic Preserves	None	None	None	None
Floodplains (acres)	No effect	1.32 acres	0.49 acres	0.73 acres
Physical				
Noise	None	No effect	No effect	No effect
Air Quality	None	No effect	No effect	No effect
Contamination	None	See 'CONTAMINATION SUMMARY' table below for sites identified. [Contamination Impacts TBD by FDOT District Contamination Impacts Coordinator (DCIC).]	See 'CONTAMINATION SUMMARY' table below for sites identified. [Contamination Impacts TBD by FDOT District Contamination Impacts Coordinator (DCIC).]	See 'CONTAMINATION SUMMARY' table below for sites identified. [Contamination Impacts TBD by FDOT District Contamination Impacts Coordinator (DCIC).]

Created 5/2/2018



Previously Recorded Cultural Resources and Historic Parcels

Sun Trail - Historic Highwayman Segment

Primary Route
East Alternate
East Alternate 2
Archaeological Site
Linear Resource
National Register-Eligible
Historic Parcel

City of Fort Pierce, St. Lucie County

0 250 500 Feet
0 50 100 Meters

Map 1

Public Kick-Off Meeting

October 10, 2017

FDOT

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

MIKE DEW
SECRETARY

September 29, 2017

Dear Property Owner or Other Interested Stakeholder:

RE: **Public Kick-Off Meeting**
Feasibility Study for Shared-Use Nonmotorized (SUN) Trails:
Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail
St. Lucie County, Florida
Financial Management Numbers: 440033-1 and 440034-1

On behalf of the Florida Department of Transportation (FDOT) District Four, you are invited to a Public Kick-Off Meeting to learn about the Feasibility Study for the above referenced projects. The Study will evaluate alternatives for multi-use recreational pathways.

The Kick-Off Meeting is scheduled for Tuesday, October 10, 2017, with an open house at 5 p.m. and a presentation at 6 p.m. at the Old City Hall located at 315 Avenue A in Fort Pierce. A location map of the meeting site is enclosed.

The study limits for the Historic Downtown Fort Pierce Retrofit segment are from Georgia Avenue to North A1A, a distance of about 2.3 miles. The study limits for the Historic Highwayman Trail segment are from Indian Hills Drive to Georgia Avenue, a distance of about 1.3 mile.

This letter is being sent to all property owners and tenants within at least 300 feet of either side of the proposed project and to public officials, regulatory agencies, and individuals interested in the project. This meeting is being conducted to give interested persons an opportunity to review the project materials and become acquainted with the proposed SUN Trails.

Persons wishing to submit written statements may do so at the meeting or by sending them to Lisa Maack, Project Manager, 3400 W. Commercial Boulevard, Fort Lauderdale, Florida 33309 or by email to Lisa.Maack@dot.state.fl.us. Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who require accommodations under the Americans with Disabilities Act or persons who may require translation services (free of charge) should contact Lisa Maack at (954) 717-2253 at least seven (7) days prior to the meeting.

If you have questions about the project or scheduled public meeting, please contact the Project Manager, Lisa Maack, at the phone number or at the email address listed above. You may also visit the SUN Trails website at www.FloridaSUNTrail.com.

Sincerely,

Lisa Maack
District Four Project Manager

Attachment: Location Map

SUNTRAIL

SUN Trails Location Map

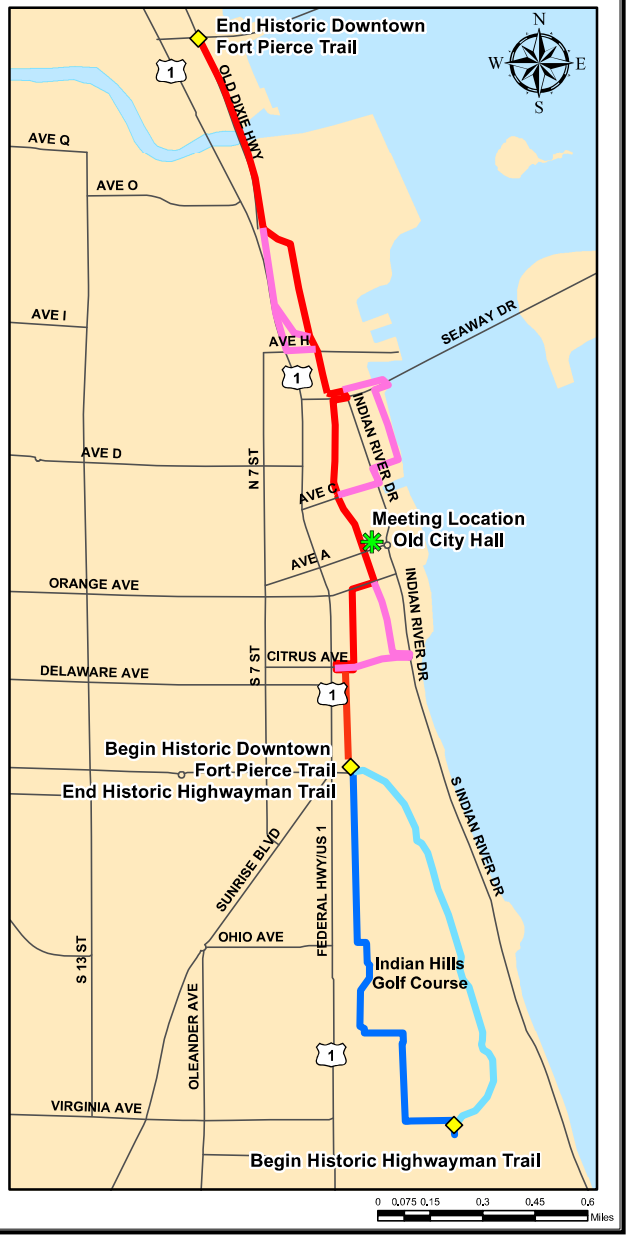
Legend

- Downtown Primary Route
- Downtown Alternative Route
- Historic Highwayman Primary Route
- Historic Highwayman Alternative



Disclaimer:
This map is intended for reference only. Most information contained within is conceptual.

FDOT



Feagle, Brooke

From: Cimini, Randy D
Sent: Wednesday, September 27, 2017 2:50 PM
To: Feagle, Brooke
Subject: FW: Submit Notice in FAR
Attachments: FL Admin Register notice_changes made.doc

Here you go. It will run on Monday, Oct. 2. Also, here is the file. I corrected the line spacing in the Public participation paragraph. It was wider than the other paragraphs.

Randy Cimini
Public Involvement Manager, FL Transportation Planning and PD&E

ATKINS
Find out more about what we do and how we do it - www.atkinsglobal.com

600 North Broadway Avenue, Suite 310, Bartow, Florida 33830 Main Office: +1 (863) 533-7000 | Direct: +1 (863) 800-9543 | Fax: +1 (863) 533-7888 | Cell: +1 (863) 512-2533
Email: randy.cimini@atkinsglobal.com | Web: www.atkinsglobal.com www.atkinsglobal.com/northamerica

-----Original Message-----
From: FL-Rules@dos.state.fl.us [mailto:FL-Rules@dos.state.fl.us]
Sent: Wednesday, September 27, 2017 2:47 PM
To: Cimini, Randy D <Randy.Cimini@atkinsglobal.com>
Subject: Submit Notice in FAR

You have successfully submitted a notice for publication in the Florida Administrative Register on 9/27/2017 2:47:05 PM.

Department: Other Agencies and Organizations

Organization: ATKINS - Bartow

Notice type: Notice of Meeting/Workshop Hearing

Issue: 43/190

Once this notice is published you will be able to view it by clicking the following link:

https://urldefense.proofpoint.com/v2/url?u=http-3A__www.FLRules.org_gateway_View-5FNotice.asp-3Fid-3D19464813&d=DwIFAg&c=cUkzcZGZt-E3UgRE832-4A&r=Jau9xTOVgJhpkpAByd9CJOcaYIHaUxaX59Yqa2woKRg&m=KUNTzKbU5rpdeyN1HZx2DzmMHkW6P14-U_BOsTsAQFc&s=_7g9GDlif9va9KlMceFLQAJpRqR82_GVfrcDR4pSn7M&e=

You may contact the Florida Administrative Register office at (850)245-6270 for additional information.

Notice of Meeting
DEPARTMENT OF TRANSPORTATION

The Florida Department of Transportation (FDOT), District Four, is hosting a Public Kick-off Meeting as part of the Feasibility Study for two segments of Shared-Use Nonmotorized (SUN) Trail Program, the Historic Downtown Fort Pierce Retrofit segment and Historic Highwayman Trail Gap segment in Fort Pierce, St. Lucie County. FDOT invites all members of the public to attend.

DATE AND TIME: Tuesday, October 10, 2017 from 5 p.m. to 7 p.m.
PLACE: Old City Hall, 315 Avenue A, Fort Pierce, FL 34950

GENERAL SUBJECT MATTER TO BE CONSIDERED: This public meeting offers the community the opportunity to express their views about the location, conceptual design, and social, economic, and environmental effects of constructing the trails on both proposed segments. The study limit for the Historic Downtown Fort Pierce Retrofit segment is from Georgia Avenue to North A1A; Financial Project ID 440033-1. The study limit for the Historic Highwayman Gap Trail segment is from Indian Hills Drive to Georgia Avenue; Financial Project ID 440034-1.

FDOT will provide an overview of both project segments, any potential issues of concern, and display information about the potential alternatives to be developed during the Feasibility Study. The meeting will be an open house format where people can ask questions and provide comments to FDOT representatives in a one-on-one setting. Written comments will be accepted.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. People requiring special accommodations under the Americans with Disabilities Act or who require translation services (free of charge) should contact Lisa Maack project manager, at (954) 717-2253 or toll free at 1 (866) 336-8435, or by email to lisa.maack@dot.state.fl.us at least seven (7) days prior to the meeting.

If you are hearing or speech impaired, please contact FDOT using the Florida Relay Service, 1 (800) 955-8771 (TDD) or 1 (800) 955-8770 (Voice).

For more information about the project or the Public Kick-off Meeting, please contact Lisa Maack or visit the SUN Trail website www.FloridaSUNTrail.com.

Treasure Coast Newspapers | TCPALM

Indian River Press Journal
1801 U.S. 1, Vero Beach, FL 32960

AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA
COUNTY OF INDIAN RIVER

Before the undersigned authority personally appeared, Natalie Zollar, who on oath says that she is Classified Inside Sales Manager of the Indian River Press Journal, a daily newspaper published at Vero Beach in Indian River County, Florida: that the attached copy of advertisement was published in the Indian River Press Journal in the following issues below. Affiant further says that the said Indian River Press Journal is a newspaper published in Vero Beach in said Indian River County, Florida, and that said newspaper has heretofore been continuously published in said Indian River County, Florida, daily and distributed in Indian River County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid or promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper. The Indian River Press Journal has been entered as Periodical Matter at the Post Offices in Vero Beach, Indian River County, Florida and has been for a period of one year next preceding the first publication of the attached copy of advertisement.

Customer	Ad Number	Copyline	PO #
930054 - ATKINS NORTH AMERICA	1772025	SUN TRAIL FDOT	

Pub Dates
October 3, 2017
October 3, 2017
October 3, 2017

Sworn to and subscribed before me this day of, October 03, 2017, by

Natalie Zollar, who is
Natalie Zollar
(X) personally known to me or
( ) who has produced _____ as identification.

Karol E Kangas

Karol Kangas — Notary Public

KAROL E KANGAS
Notary Public - State of Florida
Commission # GG 126041
My Comm. Expires Jul 29, 2021
Bonded through National Notary Assn.

Medical pot producer: Regulate edibles

FRANK GLUCK
USA TODAY NETWORK - FLORIDA

Florida voters last year overwhelmingly backed broad medical marijuana legalization, but one popular means of ingesting the drug — eating cannabis-infused candies and baked goods — remains in a regulatory limbo.

Surterra Wellness, one of the first companies to win state approval to grow and dispense medical marijuana in the Sunshine State, is now urging the Florida Department of Health to move more quickly in drafting rules on such products.

"Many patients have been seeking edible products because it is the best format for them to find relief," said Wesley Reynolds, president of Surterra Florida, in a written statement. "The more available options for people, the more likely they will be able to use a cannabis product instead of highly addictive and easily abused opiates."

Florida law defines edibles as "commercially produced food items made with marijuana oil, but no other form of marijuana, that are produced and dispensed by a medical marijuana treatment center."

The law also requires that the state determine the "shapes, forms, and ingredients" of such products discourage use by children.

In states where marijuana is even more tolerated, such as Colorado, edibles closely resemble popular candies.

Mara Gambineri, the spokeswoman for the Department of Health's Office of Medical Marijuana Use, said the office is "working diligently" to implement Amendment 2. But she did not comment when asked when rules on edibles might be written.

Florida voters in November approved Amendment 2, which legalized medical marijuana use for patients with certain "debilitating" medical conditions.

The enabling law that put that measure into effect outlawed smoking marijuana for any purpose. So, for now, dispensaries largely sell cannabis-infused oils, lotions and vaporizer pens.



Edible marijuana products on display at a medical marijuana dispensary in Denver. ED ANDRIESKI, AP

Witness: Menendez 'hostile' on call on behalf of donor

DAVID PORTER
ASSOCIATED PRESS

NEWARK, N.J. - U.S. Sen. Bob Menendez reacted angrily and threatened to use his position on the Senate Finance Committee when his entreaties about changing Medicare reimbursement policy were rejected, a former Medicare official testified Monday at Menendez's bribery trial.

The New Jersey Democrat didn't mention co-defendant Salomon Melgen in either a 2009 phone call or a 2012 meeting about the dispute, former Centers for Medicare and Medicaid Services official Jonathan Blum testified. But Blum said it was clear the Florida eye doctor's billing dispute was the issue.

An indictment charges Menendez with accepting private jet flights and luxury hotel stays from Melgen in exchange for political influence. Both men have denied the charges and say the gifts stem from their longtime friendship.

While Menendez has claimed in court filings that he sought out then-Health and Human Services Secretary Kathleen Sebelius — who attended the 2012 meeting — because of inconsistencies in Medicare billing practices, prosecutors allege he was acting solely on Melgen's behalf.

According to Blum, the 2009 phone call started off cordially, but soon turned icy.

"As I did not yield on his statement that the agency wasn't being consistent, his tone became more hostile," Blum said. "It was definitely a call that stands out to me. The tone was very angry. I could tell he was not happy with my answers."

On cross-examination by Melgen's attorney, Blum added, "I think both of us were frustrated with the call."

After the 2012 meeting with Sebelius, Blum said, Menendez said he "was going to use the authority he had as a member of the Senate finance committee" to continue to press the issue.

Menendez didn't mention Melgen by name either time, Blum testified, though then-Senate Democratic Majority Leader Harry Reid mentioned at the 2012 meeting that he had become familiar with the billing issue after talking to Melgen. Blum added that unlike other queries from members of Congress, no other doctors or other potentially affected stakeholders were mentioned in the conversations.

Last week, former Democratic U.S. Sen. Tom Harkin of Iowa, who led a Senate health committee at the time, testified Menendez set up a meeting between him and Melgen about the Medicare billing issue in 2011 but that he didn't offer assistance.

Melgen paid back $8.9 million to Medicare in the dispute. In a separate case not involving Menendez, Melgen was convicted in Florida in April on multiple counts of health care fraud, submitting false claims and falsifying patients' records. Sentencing was postponed until after the current trial concludes.

RAPCO TRAILER CONNECTION
STIHL Elite Dealer
3025 SE Dixie Hwy., Stuart
Rapcotrailer.com
288-1808

Special Referendum Elections
SAMPLE BALLOTS
Tuesday · November 7, 2017
POLLS OPEN 7 am - 7 pm

City of Stuart Referendum Election

Sale of City-Owned Commercial Lot Fronting Tidally-Influenced Waters	Long-Term Lease of City-Owned Commercial Lot Fronting Tidally-Influenced Waters	Long-Term Lease of City-Owned Commercial Lot Fronting Tidally-Influenced Waters
Shall the City sell the 2.638 acre parcel of property known as the North Point Parcel for at least it's appraised value? This sale would meet the Community Redevelopment Plan and would provide tax relief to the tax payers.	Shall the City seek a long-term lease of the property known as Mulligan's Beach House located at 131 SW Flagler Avenue? This lease would provide that the property would be maintained at no cost to the City and would provide tax relief to the tax payers.	Shall the City seek a long-term lease of the property known as the Pelican Cafe? This lease would provide that the property would be maintained at no cost to the City and would provide tax relief to the tax payers.
○ Yes for approval ○ No for rejection	○ Yes for approval ○ No for rejection	○ Yes for approval ○ No for rejection

Proposed Village of Indiantown Election
Shall the Village of Indiantown be created and its charter adopted?
○ YES ○ NO

Early Voting October 30-November 3 • 8 am to 5 pm Daily
Elections Center: 135 SE Martin Luther King, Jr. Blvd., Stuart, FL 34994
Elisabeth Lahti Library: 15300 SW Adams Ave., Indiantown, FL 34956
For more information visit: MartinVotes.com or call 772.288.5637
October 3 & 17, 2017 ND-1767361

SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit
Historic Highwayman Trail Gap
FDOT
Financial Project Numbers: 440033-1 and 440034-1

PUBLIC KICK-OFF MEETING

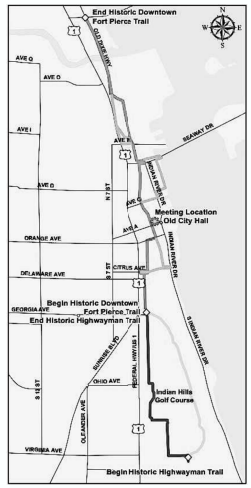
The Florida Department of Transportation (FDOT), District Four, is hosting a Public Kick-off Meeting as part of the Feasibility Study for two segments of Shared-Use Nonmotorized (SUN) Trail Program, the Historic Downtown Fort Pierce Retrofit segment and Historic Highwayman Trail Gap segment in Fort Pierce, St. Lucie County (see aerial photo). The public meeting is from 5 p.m. to 7 p.m., Tuesday, October 10, 2017, at the Old City Hall located at 315 Avenue A in Fort Pierce.

At this public meeting, FDOT will provide an overview of both project segments, any potential issues of concern, and potential trail alternatives. The study limits for the Historic Downtown Fort Pierce Retrofit study are from Georgia Avenue to North A1A. The study limits for the Historic Highwayman Trail Gap are from Indian Hills Drive to Georgia Avenue.

The meeting will be an open house format where people can ask questions and provide comments to FDOT representatives in a one-on-one setting. Written comments will be accepted. Your comments are an important part of this study.

Public participation is solicited without regard to race, color, national origin, age, sex, reli-gion, disability, or family status. People requiring special accommodations under the Americans with Disabilities Act or who require translation services (free of charge) should contact Lisa Maack project manager, at (954) 717-2253 or toll free at 1 (866) 336-8435, or by email to lisa.maack@dot.state.fl.us at least seven (7) days prior to the meeting.

For more information about the SUN Trail Feasibility Study, please contact Lisa Maack or visit the SUN Trail website www.FloridaSUNTrail.com.



October 3, 2017 ND-1772025

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Public Kick-off Meeting
October 10, 2017

Lisa Maack, AICP
FDOT, District 4

Reshawn Fields, AICP
ATKINS North America



SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Agenda

- Overall SUN Trail Program
- Overview of Fort Pierce SUN Trail Projects:
  - Historic Downtown Fort Pierce Retrofit
  - Historic Highwayman Trail Gap
- Anticipated Feasibility Study Process and Schedule
- Public Comments and Next Steps

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Title VI

The Florida Department of Transportation is required to comply with various non-discrimination laws and regulations, including Title VI of the Civil Rights Act of 1964.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status.

Persons wishing to express their concerns about Title VI may do so at the table located at the entrance or by contacting either:

District Four
Florida Department of Transportation
District Four Title VI Coordinator
Shavon Nelson
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309-3421
(954) 777-4389 or
Toll free at (866) 336-8435 ext. 4190
Shavon.Nelson@dot.state.fl.us

Central Office
Florida Department of Transportation
State Title VI Coordinator
Jacqueline Paramore
605 Suwannee Street, MS 65
Tallahassee, Florida 32399-0450
(850) 414-4753
Jacqueline.Paramore@dot.state.fl.us

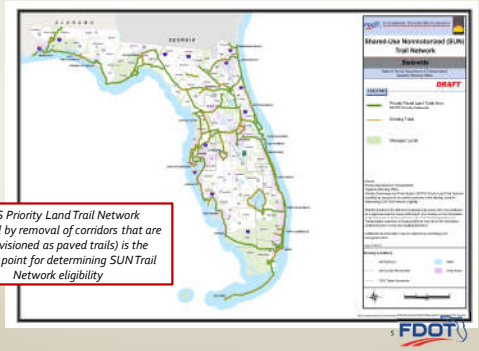
SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

SUN Trail Program

- Created under Florida Statute 339.81
- To develop a statewide system of paved non-motorized trails as a component of the Florida Greenways and Trails System (FGTS)
- $25 million annually funded from new vehicle tag revenues

SUN Trail Network Map



FGTS Priority Land Trail Network (modified by removal of corridors that are not envisioned as paved trails) is the starting point for determining SUN Trail Network eligibility

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Shared-Use Nonmotorized (SUN) Trail Network

FDOT

October 11, 2016

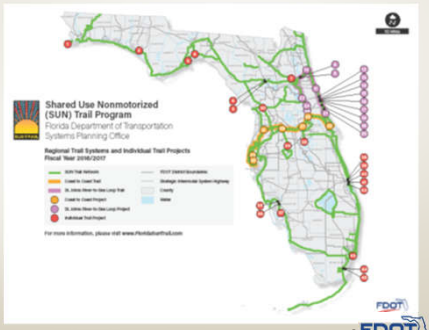
Dick Kane, (850) 414-4590
dick.kane@dot.state.fl.us

Florida Department of Transportation Awards $44.4 Million for Bicycle and Pedestrian Trail Expansion in Florida

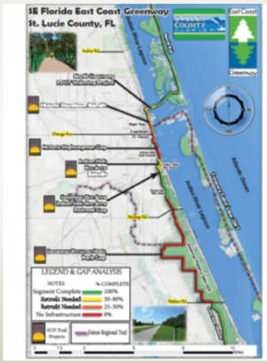
TALLAHASSEE – The Florida Department of Transportation (FDOT) announced today the selection of the first year of projects to receive funding under the Shared Use Nonmotorized (SUN) Trail program. A total of $44,434,543 million was awarded to 45 separate projects located across 21 counties throughout Florida. (See attached map and project list)

The projects include the construction of 11 separate trail segments, which will add or improve approximately 20 miles of trail to Florida's trail system. Another 34 projects will be in various pre-construction phases of work such as feasibility study, environmental review and design. The funds are for the current fiscal year (2016-17) and are immediately available to begin work.

Statewide SUN Trail Network Map with Projects Awarded funding



St. Lucie County East Coast Greenway Network Map



SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit Financial Project Number: 440033-1

Historic Highwayman Trail Financial Project Number: 440034-1

Project Purpose and Need

- A Feasibility Study is being conducted to evaluate two SUN Trail segments:
  - Historic Downtown Fort Pierce Retrofit
  - Historic Highwayman Trail Gap
- Study will evaluate the alternatives identified in the St. Lucie County May 2016 SUN Trail Application
- Trails will provide regional connectivity throughout St. Lucie County and Florida as part of the Greenways Trail System . Will connect to three trails:
  - FEC Overpass from Savanna's Recreation Area to South Savanna's Road
  - Indian Hills Recreation Area south of Savanna Road to Indian Hills Drive
  - Savanna's Preserve State Park from Walton Road to Savanna's Recreation Area

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit Financial Project Number: 440033-1

Historic Highwayman Trail Financial Project Number: 440034-1

Benefits of the Trails

- They make communities more livable and connected
- Improve the economy through tourism and civic improvement
- Preserve and restore open space
- Provide opportunities for physical activity to improve fitness and mental health

Historic Downtown Fort Pierce Retrofit Segment

From Georgia Avenue to North Causeway



Historic Highwayman Trail Segment

From North Indian Hills to Georgia Avenue



SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Feasibility Study Process

- Goal is to develop basic information, including operational necessity, financial benefits and costs, and environmental impact
- Feasibility Study Stages:
  - Data Collection: We need your input!
  - Environmental Surveys and Studies
  - Evaluation of Alternatives
  - Selection of a Preferred Alternative
  - Environmental Report and Conceptual Design

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Feasibility Study Schedule

Project Milestones	2017									2018					
	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July
Begin Study	☆																
Public Involvement		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Data Collection		■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Kick-off Meeting								☆									
Design and Environmental Analysis								■	■	■	■	■	■	■	■	■	
Alternatives Analysis Meeting													☆				
Study Completion																	☆

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Alternative Analysis

- Identify potential alignments and facility types for each alternative.
- The alternatives will be analyzed on the following criteria:
  - System Connectivity – provides a safe, alternative mode of transportation for all users
  - Constructability – ease of implementation based on right-of-way, probable cost, and design constraints
  - Ownership/Agency Support – placed on accessible land and has the support of the agency responsible for its use and maintenance
  - Health/Environmental Benefits – provides conservation values and environmental protection; connects people to natural habitats as a 'green' open space recreational corridor
  - Regional Benefits – economic and tourism potential to link to a network that extends throughout the region
  - Environmental Impacts – historic/ archeological, natural, Section 4(f)

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Next Steps

- Continue Data Collection and Stakeholder Meetings
- Environmental Surveys and Studies
- Alternative Analysis
- Alternatives Public Workshop – targeted Spring 2018
  - Alternative alignments will be presented for public opinion and feedback

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

SUN Trail Overall Project Schedule

Feasibility Study ★ → Preliminary Engineering (PE)/Design → Acquisition of Right of Way (If necessary) → Construction

We are here

Design for both segments will be funded in FY 2019. The goal is to construct the trail within City/County ROW and minimize having to purchase ROW.

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Provide Comments!

- Append post-it notes to display boards
- Write comments on flip charts
- Comment forms: submit tonight or mail in later

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

For more information, please contact

Lisa Maack, District 4 SUNTrail Coordinator

Florida Department of Transportation

3400 West Commercial Boulevard

Fort Lauderdale, Florida 33309

(954) 717-2253

Lisa.Maack@dot.state.fl.us

For more information on the SUNTrail program:

www.FloridaSUNTrail.com

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Thank You for Attending!!

Your input helps us build better trails!

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Project Overview

The Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida (see location maps and pages 2 & 3).

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

Feasibility Study Process

Goal is to develop basic information, including operational necessity, financial benefits and costs, and environmental impact

Feasibility study stages:

- Data Collection: We need your input!
- Environmental Surveys and Studies
- Evaluation of Alternatives
- Selection of a Preferred Alternative
- Environmental Report and Conceptual Design

Contact Us

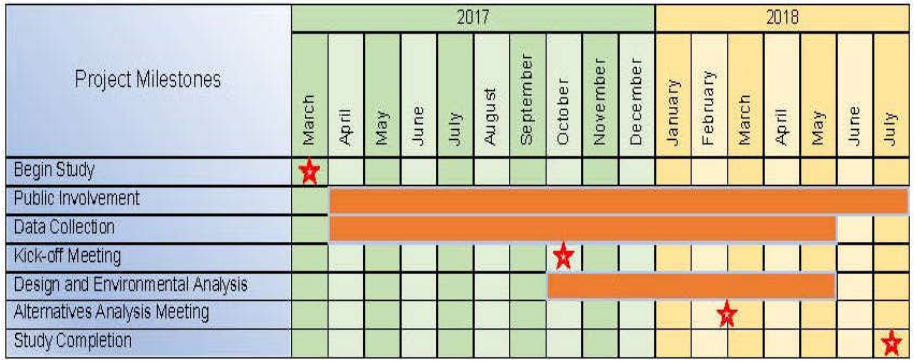
Lisa Maack, Project Manager

Florida Department of Transportation

(954) 717-2253 or Lisa.Maack@dot.state.fl.us

SUN Trails Website—www.FloridaSUNTrail.com

Feasibility Study Schedule



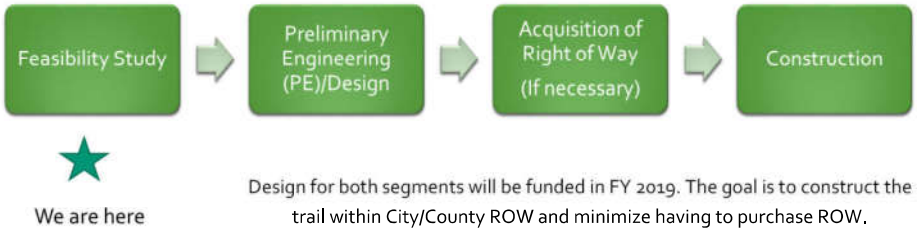




Next Steps

Next steps in the Feasibility Study Process will include additional stakeholder meetings, environmental field review and surveys, and an Alternatives Public Workshop is targeted for Spring 2018 where alternative alignments will be presented for public opinion and feedback.

Following the Feasibility Study, the Florida Department of Transportation will proceed with the project Design in 2019.



Design for both segments will be funded in FY 2019. The goal is to construct the trail within City/County ROW and minimize having to purchase ROW.

It is the policy of the Florida Department of Transportation that no person be denied the benefits of or be subjected to discrimination or retaliation under any program or activity administered by the Department or its sub-recipients on the basis of race, color, national origin, sex, age, disability/handicap, or income status.

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Comment Sheet

Please provide any comments or drawings you may have regarding the Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails. The SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida.

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

Name: _____

Address: _____

_____

NOTE: Please complete and return to the "Comments" Box; mail to Lisa Maack at the address on the back of this sheet; or e-mail comments to Lisa.Maack@dot.state.fl.us by Tuesday, October 31, 2017. All comments are part of the project record and are available for viewing by the public and media.

☐ Please add me to the mailing list for the SUN Trails Feasibility Study.

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Fold

Postage Required Place Stamp Here

Lisa Maack
Project Manager
Florida Department of Transportation
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

Fold

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retro Fit FPID: 440033-1

Historic Highwayman Trail FPID: 440033-1

Project Overview

The Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida.

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Indian Hills Historic Highwayman Segment is from North Indian Hills Drive to Georgia Avenue

Feasibility Process

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Feasibility study stages:

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- Evaluation of Alternatives
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Contact us

Lisa Maack, Project Manager

Florida Department of Transportation

(954) 717-2253 or Lisa.Maack@dot.state.fl.us

SUN Trails Website—www.FloridaSUNTrail.com

Feasibility Study Schedule

Project Milestones	2017										2018						
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Begin Study	☆																
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Data Collection		■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Kick-off Meeting								☆									
Design and Environmental Analysis								■	■	■	■	■	■	■	■		
Alternatives Analysis Meeting												☆					
Study Completion																	☆

Next Steps

Next steps in the Feasibility Study Process will include additional stakeholder meetings, environmental field review and surveys, and an Alternatives Public Workshop is targeted for Spring 2018 where alternative alignments will be presented for public opinion and feedback.

Following the Feasibility Study, the Florida Department of Transportation will proceed with the project Design in 2019.



We are here

Design for both segments will be funded in FY 2019. The goal is to construct the trail within City/County ROW and minimize having to purchase ROW.



SUNTRAIL

Indian Hills Historic Highwayman Segment

Location Map



Legend

- Primary Route
- Alternative Route
- St. Lucie County Parks
- Golf Course
- Segment Termini

Disclaimer:
This map is intended for reference only. Most information contained within is conceptual.

FDOT



SUNTRAIL

Historic Downtown Segment

Location Map



Legend

- Primary Route
- Alternative Route
- St. Lucie County Parks
- Golf Course
- Segment Termini

Disclaimer:
This map is intended for reference only. Most information contained within is conceptual.

FDOT

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Public Kick-Off Meeting — **Please Sign-In** (Sign-in sheets are subject to public record requests) — **October 10, 2017**

Name (Please Print)	Address	E-Mail	Telephone
[illegible]			
CHARLES HAYEK	1111 FERNANDINA ST. F.P., FL 34949	CCHAWK77@AOL.COM	772 828 1080
MICHAEL MCLEOD	822 Atlantic Ave, FP, 34950	MCLAUDIUS2@NETZERO.COM	
Cathy Wassylenko	" "		
PAUL HAYAT	11 WILMONT PLACE PAUL COAST 32164	PAUL@GREENWAY.ORG	386-503-0294
KEN ROBERTS	1001 HARBOR ST. FORT PIERCE 34950		
DAVID ENGEL	ST. LUCIE COUNTY	engeld@stlucieco.org	772-462-5164
Wren Underwood	Jensen Bch, FL	underwoodw@stlucieco.org	772-785-5833
Kerri Jakubczak	2601 Palm Lakes Ave. FP 34981	kerrijakubczak@gmail.com	704-718-0486
Peter Buchwald	St Lucie TPO		
Pamela Carithers	1234 Avenue D Fort Pierce 34950	pecarithers@aol.com	407-257-1678
Cynthia O'Connell	420 N 2nd St Ft Pierce	Cindi@OCRealtyTeam.com	772 924-2911
Holly Theuns	419 N 2nd St Ft Pierce 34950	hollytheuns@gmail.com	772-801-950[illegible]
DONALD E ROOT	4321 So. INDIAN RIVER Dr 34982 Ft Pierce		772-979-2987
Ed DeFini	ST. LUCIE TPO		772-462-1533
Lincoln Park Main Street		lincolnparkmainstreet@live.com	772-462-2481

(14)

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Public Kick-Off Meeting — **Please Sign-In** (Sign-in sheets are subject to public record requests) — **October 10, 2017**

Name (Please Print)	Address	E-Mail	Telephone
Charles Barrowclough	707 SE Pine Oak Terrace Stuart 34997	Charrowclough@comcast.net	772 475 5346
Luke ANDERS	1945 N. OLD DIXIE Hwy FT. P	LEW976@Gmail	772-453-3179
Diane Kimes - Heathcote Botanical Gardens	210 Savannah Rd, 34982	dkimes@heathcotebotanicalgardens.org	772-464-4672
PAUL JAKUBCZAK	2601 PALM LAKES AV	pjakubczak69@gmail.com	772-618-3528
Ed Becht	219 N. 2nd Street FPFL	edbecht@comcast.Net	

(3)

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Public Kick-Off Meeting | **Staff Sign-In** | **October 10, 2017**

Name (Please Print)	Representing	E-Mail	Telephone
Lynn Kelley	FDOT	lynn.Kelley@dot.state.fl.us	x43341
Lisa Maack	FDOT	Lisa.Maack@dot.state.fl.us	954-717-2253
Ryan Jensen	Atkins	Ryan.Jensen@AtkinsGlobal.com	305.989.5230
Mike Middlebrook	SLC ERD	middlebrookm@stlucieco.org	772-828-1661
Jeff Johnson	SLC PLANNING	johnsonja@stlucieco.org	772-462-1580
Amanda Thompson	SLC ERD	Thompsonam@stlucieco.org	772.462.2528
Jack Andrews	City of Ft. Pierce	JAndrews@city-FtPierce.com	772-467-3773
RESHAW FIELDS			

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Comment Sheet

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- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

PLEASE USE BITUMINUS RATHER THAN CONCRETE TO PROVIDE A BETTER EXPERIENCE FOR JOGGERS & WALKERS.

Name: DAVID LENGER

Address: ST. LUCIE CO. BOCC

NOTE: Please complete and return to the "Comments" Box; mail to Lisa Maack at the address on the back of this sheet; or e-mail comments to Lisa.Maack@dot.state.fl.us by Tuesday, October 31, 2017. All comments are part of the project record and are available for viewing by the public and media.

☐ Please add me to the mailing list for the SUN Trails Feasibility Study.

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DOWNTOWN SEGMENT - SHOULD NOT GO UP 2ND ST. UNTIL AVE A TOO CONJESTED BEFORE THEN

INDIAN HILLS SEGMENT - PREFER EAST SIDE ALONG TRACKS MORE SPACE TO WORK WITH

Name: CHARLES HAYEK

Address: 1111 FERNANDINA ST
FORT PIERCE, FL 34949
CCHAWK77@AOL.COM

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Honorable Governor Rick Scott
Mr. Mike Dew, Secretary, Florida Department of Transportation
Lisa Maack, FDOT District Four Project Manager
3400 West Commercial Boulevard, Ft. Lauderdale, Fl 33309

October 10, 2017

Ref: Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail
FDOT: Financial Management Numbers 44033-1 and 440034-1

Honorable Governor Rick Scott and Secretary Mike Dew:

Enclosed is a copy of a letter which we received regarding the above listed projects being proposed by FDOT over properties within the Port of Ft. Pierce and FECI railroad switching yard area which are in most cases private in ownership. Almost all of these properties are currently zoned Marine Industrial or Commercial/Industrial and are used for a variety of commerce related activities. The Port of Ft. Pierce properties have been in use since the early 1920s and the Florida Ports Council has recently funded infrastructure and road improvements within the Port area for the purpose of furthering commerce. The FECI (Flagler) railroad, was built in the late 1800s, and both areas have been the commercial life blood of Ft. Pierce for over 100 years. We support the continued usage of these properties as they are currently used and zoned in the 2015-16 Ft. Pierce, St Lucie County Comprehensive Master Plan and do not believe they should be included in the areas being considered for inclusion in another layer of quasi-government regulations.

There is no overriding public benefit or need for these properties, many privately owned, to be included in the Historic Downtown Retrofit Trail designation and Historic Highwayman Trail. In fact enhanced pedestrian traffic may prove detrimental to continued commercial / industrial uses and future job creation. We believe the citizens tax dollars could be much better utilized in improving the viability of the properties as currently zoned. Your prompt attention to this matter would be appreciated.

Sincerely yours,

Hans Van Zonneveld, Managing Partner
Mollywog, LLC, 1302 North 2nd Street, FT. Pierce, Florida
281 Sabal Palm Lane, Indian River Shores, Florida 32963,
Ph: 772-231-4000, email sunfieldgroup@yahoo.com

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Comment Sheet

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Historic Markers for trail segments that chronicles The history along Indian River Drive (i.e, Grover Mc Carthy's Home site: The Original Hall of Fame Highwaymen Artist that sold their paintings along Indian River Drive). Also the significance of the people that lived there and Once Judge Alto Adams (Federal Courthouse on US Hwy 1) and other prominent families. Downtown Fort Pierce and it's Fishing Tournaments and other notable history facts.

* Also, Florida Humanities Council Story telling smart phone app could be used ~~to~~ tell the stories along ~~the~~ both segments of the Sun Trail, complete with pictures and music.

Name: Pamela Carithers
Address: 1934 Avenue D
Fort Pierce, FL 34950

NOTE: Please complete and return to the "Comments" Box; mail to Lisa Maack at the address on the back of this sheet; or e-mail comments to Lisa.Maack@dot.state.fl.us by Tuesday, October 31, 2017. All comments are part of the project record and are available for viewing by the public and media.

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Mr. Mike Dew, Secretary, Florida Department of Transportation
Lisa Maack, FDOT District Four Project Manager
3400 West Commercial Boulevard, Ft. Lauderdale, Fl 33309 & Lisa.Maack@dot.state.fl.us

October 10, 2017

Ref: Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail
FDOT: Financial Management Numbers 44033-1 and 440034-1

Honorable Governor Rick Scott and Secretary Mike Dew:

We are in receipt of the notice sent on behalf of the FDOT District Four, inviting surrounding property owners to a public kick-off meeting to learn about the feasibility study for the above referenced projects.

It was disturbing to view the Location Map which reflects the projects proposed location of SUN trails north of Seaway Dr. We strongly oppose the proposed trails specifically north of Seaway drive which run thru the port operations area, most of which are privately owned properties and designated for commercial/industrial use. It strikes us that shared-use nonmotorized (SUN) trails to increase pedestrian traffic thru commercial/industrial properties arguably would do more harm than good, is not in the best interest of the state and would be a grave error.

We believe you already know that Florida Department of Transportation (FDOT) engaged in a multiphase endeavor to update the 2002 Port Master Plan for the Port of Fort Pierce, an irreplaceable asset. As a result in September 2015, St. Lucie County Ordinance amended the Comprehensive Port Master Plan. I'd direct your attention to attached Figures 2A-1 and 2A-2 of this St. Lucie County Ordinance. Please note the "port operations area" north of seaway drive along with the future land use of Industrial, both General Industrial and Marine Industrial on the surrounding properties of the proposed Historic Downtown Fort Pierce Trail location. Therefore, the Historic Downtown Trails proposed location conflicts with this ordinance.

Additional factors from the reports prepared for FDOT to consider:

1) It's consensus plan unified market demand and public desires to more clearly define the communities vision to capitalize the port's potential.
2) It identified opportunities of a more streamlined organizational structure and intergovernmental collaboration to allow for active marketing of the port to its highest and best use.
3) It recommended the County and City compose and adopt consistent land use and zoning plans to promote and support the economic development while providing flexibility to meet market demand and desired mixed uses.
4) The Florida Ports Council along with St. Lucie County recently funded $7.4 million in infrastructure improvements including rebuilding 2nd street from Fisherman's Warf north to where the road dead ends: upgrading gas, electric and sewer lines; and storm water retention ponds to promote and encourage economic development.
5) Florida ports have consistently proven to be significant economic drivers, the reason smart urban areas covet seaports which provide industrial, non-local economic base.
6) Ports fit in the footprint of Governor Scotts dream to attract more growth and create jobs.
7) Ports are economic engines that bring better paying sustained jobs and further support strong indirect and induced jobs in the community and region, something other sectors simply do not do.
8) The study reviewed the potential of the Port of Ft. Pierce to be designated a Strategic Intermodal System Facility, which could mean additional economic cargo opportunities available as Florida attracts an expected increase in maritime traffic from the widening of the Panama Canal. The port growth potential in its future is as a niche port serving nearby markets and for feeder services to and from large global vessels docking after or before transitioning the expanded Panama Canal.
9) Fort Pierces intermodal connection possibilities including air, Interstate 95 and the Fl. Turnpike, all within minutes of the port, and FEC rail on port property which offer potential that is much easier to accomplish than is the case at other nearby Fl. Ports.

For these reasons we do not believe the port operations area, north of seaway drive, should be considered as an area to locate the proposed Historic Downtown Ft. Pierce Trail. Instead we support positioning the Port of Fort Pierce for development to its highest and best use as a new economic engine to grow and improve the city.

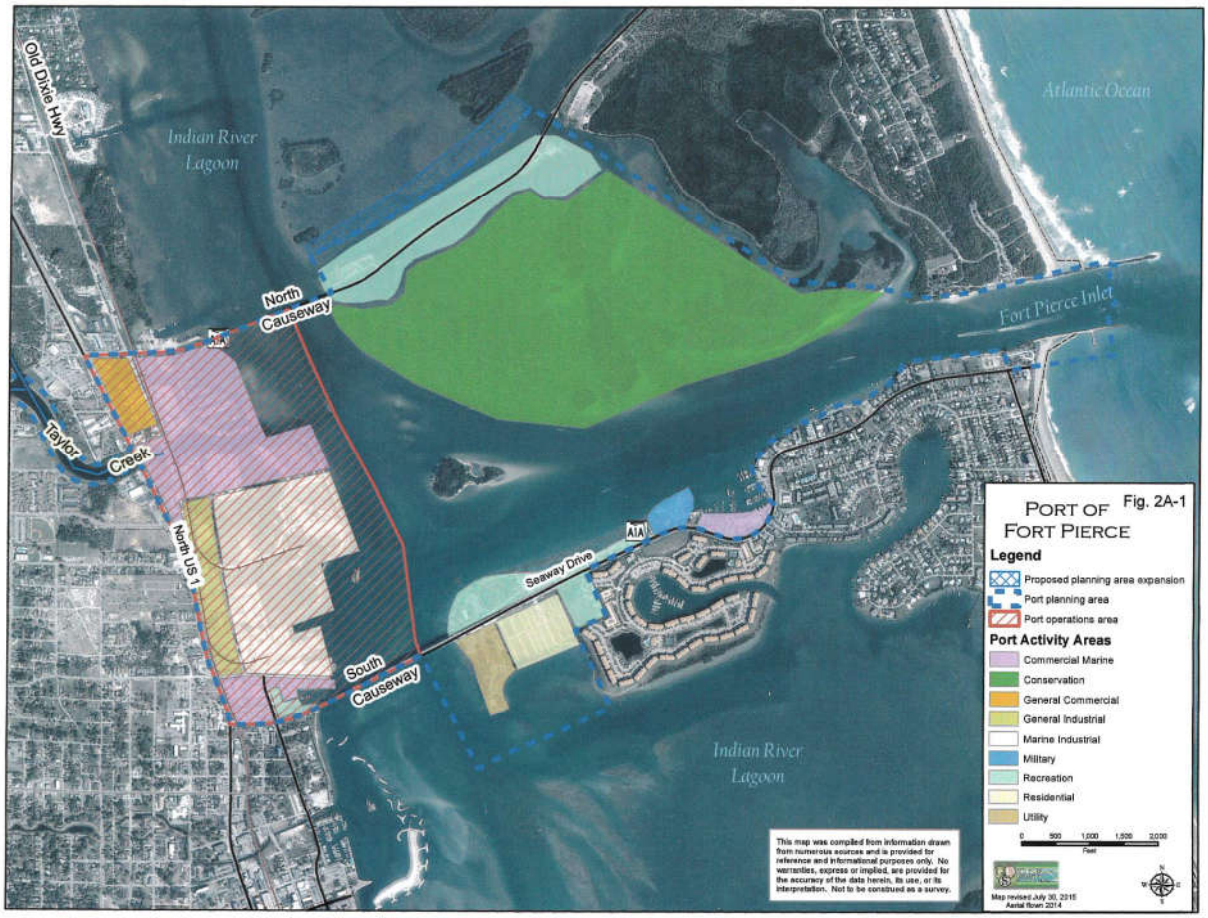
We urge you to consider these factors and appreciate your continued commitment to improving Florida.

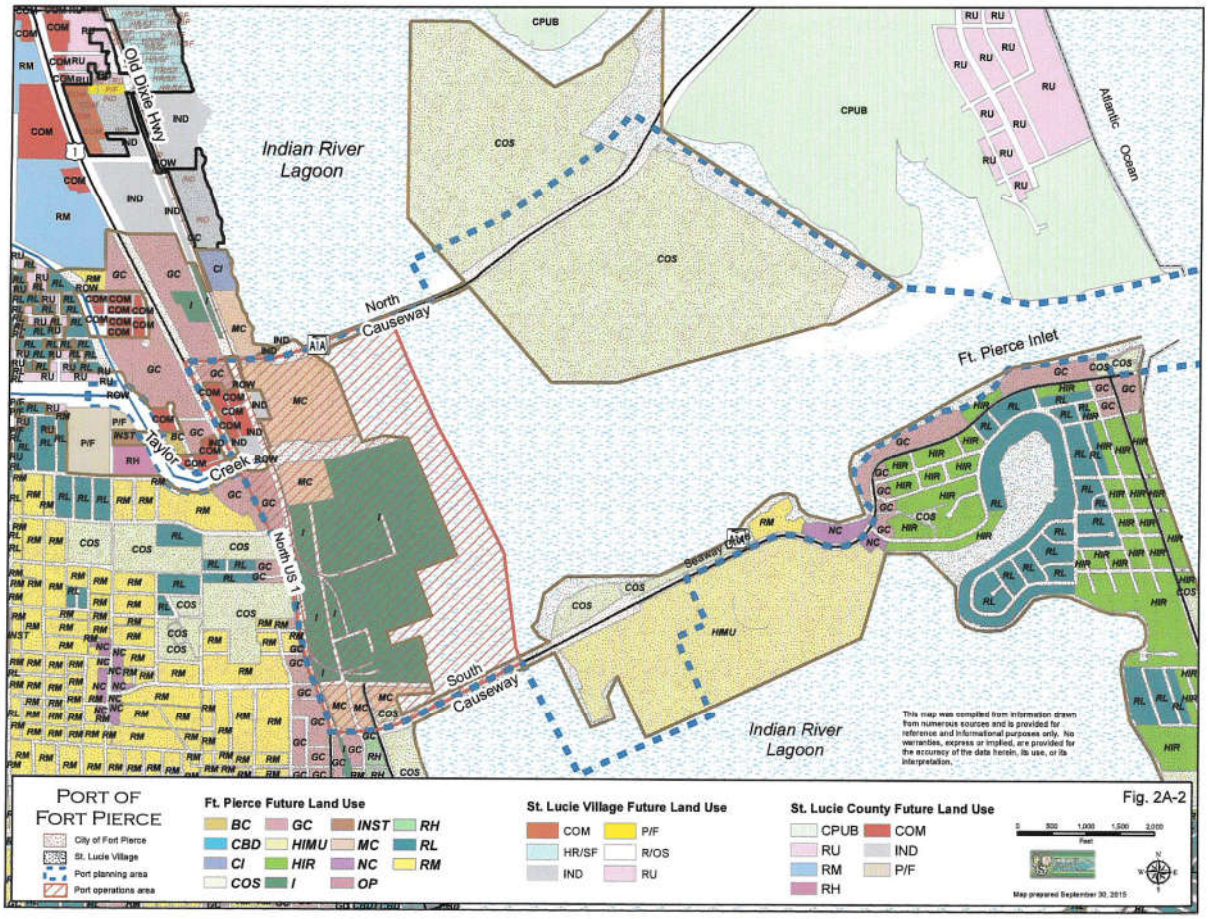
Sincerely,

Carmela Bell Christina R. Bell

Carmela Bell and Christina Bell
Destin Beach Inc., President and Vice President
Property owner of 67 acres - Port of Ft. Pierce
1008 Hwy 98 East Box B, Destin, Fl. 32541
Ph: 850-830-8030, email: cbell712@gmail.com Carmela Bell or Christina Bell crbell0660@gmail.com

Attachment: Figures 2A-1 and 2A-2 to St. Lucie County Ordinance


Old Dixie Hwy
Indian River Lagoon
Atlantic Ocean
North Causeway
Fort Pierce Inlet
Taylor Creek
North US 1
A1A
Seaway Drive
South Causeway
Indian River Lagoon
PORT OF FORT PIERCE
Fig. 2A-1
Legend
Proposed planning area expansion
Port planning area
Port operations area
Port Activity Areas
Commercial Marine
Conservation
General Commercial
General Industrial
Marine Industrial
Military
Recreation
Residential
Utility
This map was compiled from information drawn from numerous sources and is provided for reference and informational purposes only. No warranties, express or implied, are provided for the accuracy of the data herein, its use, or its interpretation. Not to be construed as a survey.
Map revised July 30, 2015
Aerial flown 2014


Old Dixie Hwy
Indian River Lagoon
Atlantic Ocean
North Causeway
Ft. Pierce Inlet
Taylor Creek
North US 1
A1A
Seaway Drive
South Causeway
Indian River Lagoon
PORT OF FORT PIERCE
Fig. 2A-2
City of Fort Pierce
St. Lucie Village
Port planning area
Port operations area
Ft. Pierce Future Land Use
BC GC INST RH
CBD HIMU MC RL
CI HIR NC RM
COS I OP
St. Lucie Village Future Land Use
COM P/F
HR/SF R/OS
IND RU
St. Lucie County Future Land Use
CPUB COM
RU IND
RM P/F
RH
This map was compiled from information drawn from numerous sources and is provided for reference and informational purposes only. No warranties, express or implied, are provided for the accuracy of the data herein, its use, or its interpretation.
Map prepared September 30, 2015

Feagle, Brooke

From: Jensen, Ryan M
Sent: Thursday, October 12, 2017 10:45 AM
To: Fields, Reshawn; Gaiotti, Gary E
Cc: Feagle, Brooke
Subject: RE: Historic Downtown Trail
Attachments: Downtown Comments.pdf

Does the primary route go through the port or is it adjacent to the west side of the port?
The Primary route (currently) is shown along 2nd Street on the Historic Downtown Section which is West of what I believe is the Port.

Also, are all the possible routes on public roadway right-of-ways?
No the routes are sometimes on FEC R/W for example the 2 short curved sections at the North end of the Historic Downtown section. There are also areas where the route goes thru property that is currently undeveloped and we are not sure if that is City, County, FEC or privately owned. Attached image for reference.

Ryan Jensen, E.I.
Engineer II, Transportation Design

ATKINS
800 Waterford Way (NW 62nd Ave), 7th floor, Miami, FL 33126

Tel: +(954) 903-3614 | Fax: 1 (954) 733-1101 | Mob: +(305) 989-5230
Email: Ryan.Jensen@atkinsglobal.com | Web: www.atkinsglobal.com | Careers: www.atkinsglobal.com/careers

From: Fields, Reshawn
Sent: Thursday, October 12, 2017 10:30 AM
To: Gaiotti, Gary E <Gary.Gaiotti@atkinsglobal.com>; Jensen, Ryan M <Ryan.Jensen@atkinsglobal.com>
Cc: Feagle, Brooke <brooke.feagle@atkinsglobal.com>
Subject: FW: Historic Downtown Trail

Ryan/Gary,

Please provide a response to this question, and I'll respond to Lisa.

Reshawn

From: Maack, Lisa [mailto:Lisa.Maack@dot.state.fl.us]
Sent: Thursday, October 12, 2017 10:15 AM
To: Fields, Reshawn <Reshawn.Fields@atkinsglobal.com>
Subject: FW: Historic Downtown Trail

Reshawn,

Could you assist me in responding to this question? See below.

Thanks,
Lisa

Lisa W. Maack, AICP
Multimodal Coordinator
FDOT D4
954-717-2253

From: Merritt, Larry
Sent: Wednesday, October 11, 2017 4:13 PM
To: Maack, Lisa
Cc: Padron, Gaspar; Rand, Lauren; Goddeau, Amie
Subject: RE: Historic Downtown Trail

Lisa,

Does the primary route go through the port or is it adjacent to the west side of the port? Also, are all the possible routes on public roadway right-of-ways?

Thanks.

Larry Merritt |
Passenger Operations Manager
District 4 Modal Development
Florida Department of Transportation
FDOT Only: 884-4683 | Direct: 954-777-4683

From: Maack, Lisa
Sent: Wednesday, October 11, 2017 2:49 PM
To: Goddeau, Amie; Merritt, Larry
Cc: Padron, Gaspar; Rand, Lauren
Subject: FW: Historic Downtown Trail

Amie/Larry,

I received the attached letter to the Governor, Secretary Dew and myself in opposition to the SUN Trail project alignments that are adjacent to the Port of Fort Pierce.

Lisa

Lisa W. Maack, AICP
Multimodal Coordinator
FDOT D4
954-717-2253

From: Bell, Carmela [mailto:Carmela.Bell@resortquest.com]
Sent: Tuesday, October 10, 2017 11:20 AM
To: Maack, Lisa
Cc: crbell0660@gmail.com
Subject: Historic Downtown Trail

We submit the attached. Please confirm your receipt by a return email.

Sincerely,

Carmela Bell
Broker
ResortQuest Real Estate
35000 Emerald Coast Pkwy.
Destin, FL 32541
O: 850-337-5000
C: 850-830-8030
E: cbell@resortquest.com

A Wyndham Worldwide Company, NYSE: WYN
Search Real Estate: www.DestinFLProperties.com

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Public Alternatives Analysis Meeting

June 5, 2018

FDOT

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 W. Commercial Boulevard
Fort Lauderdale, FL 33309

MIKE DEW
SECRETARY

May 24, 2018

Dear Agency Official:

RE: **Alternatives Analysis Meeting Announcement**
Feasibility Study of Two Shared-Use Nonmotorized (SUN) Trails:
Historic Downtown Fort Pierce Retrofit Trail and
Historic Highwayman Trail
Limits: Indian Hills Drive to North Causeway Drive in Fort Pierce
St. Lucie County, Florida
Financial Project ID Numbers: 440033-1 and 440034-1

On behalf of the Florida Department of Transportation (FDOT), District Four, you and your staff are invited to an Alternatives Analysis Public Meeting for the Feasibility Study for the above referenced project. A Feasibility Study is FDOT's process to evaluate the social, economic and environmental impacts associated with a proposed transportation project. This Alternatives Analysis Meeting will provide an overview of both project segments, any potential issues of concern, and display information about the alternatives that were developed during the Feasibility Study.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration (FHWA) and FDOT.

The Alternatives Analysis Public Meeting is scheduled for **Tuesday, June 5, 2018, from 5:00 p.m. to 7:00 p.m. at the Old City Hall located at 315 Avenue A in Fort Pierce, Florida 34950**. The meeting will begin as an open house at 5:00 p.m. with a short presentation at 5:30 p.m., followed by a comment period. Notices are being sent to all property owners and tenants located within at least 300 feet on either side of the proposed alignment and to other public officials, regulatory agencies, organizations, and individuals interested in the project. Attached is a copy of the Public Notice for the Meeting.

If you require further information, please do not hesitate to contact the Project Manager, Ms. Lauren Rand at (954) 777-4499 or toll free at (866) 336-8435, via email at lauren.rand@dot.state.fl.us or visit the project website at www.FloridaSUNTrail.com.

Sincerely,

Lauren Rand

Lauren Rand, MPE, CPM
District Four Multimodal Coordinator

LR:rf

Attachment: Public Notice

ALTERNATIVES ANALYSIS PUBLIC MEETING

Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail Shared-Use Nonmotorized (SUN) Trails
From Indian Hills Drive to North Causeway Drive in Fort Pierce
Feasibility Study
St. Lucie County, Florida
Financial Project ID Numbers: 440033-1 and 440034-1

The Florida Department of Transportation (FDOT), District Four, will hold an Alternatives Analysis Public Meeting for the Feasibility Study for the above referenced projects. The meeting will be held as an informal open house from **5:00 p.m. to 7:00 p.m. with a short presentation at 5:30 p.m. on Tuesday, June 5, 2018 at the Old City Hall located at 315 Avenue A in Fort Pierce, Florida 34950.**

The purpose of the Alternatives Analysis Meeting is to provide an overview of both project segments, any potential issues of concern, and display information about the alternatives that were developed during the Feasibility Study. Project representatives will be available during the meeting to discuss the projects, answer questions, and receive comments.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration (FHWA) and FDOT.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who require special accommodations under the Americans with Disabilities Act (ADA) or persons who require translation services (free of charge) should contact Ms. Lauren Rand, Project Manager, at least seven (7) days prior to the meeting.

Contact Information:
Ms. Lauren Rand, Project Manager
3400 W. Commercial Boulevard, Fort Lauderdale, FL 33309
Telephone: (954) 777-4499 or toll free at (866) 336-8435
Email: lauren.rand@dot.state.fl.us,

You may also visit the project website at
www.FloridaSUNTrail.com.



ALTERNATIVES ANALYSIS PUBLIC

FDOT

DATE: Tuesday, June 5, 2018
TIME: 5:00 p.m. – 7:00 p.m.
PLACE: Old City Hall
315 Avenue A
Fort Pierce, Florida 34950

FLORIDA DEPARTMENT OF TRANSPORTATION

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 W. Commercial Boulevard
Fort Lauderdale, FL 33309

MIKE DEW
SECRETARY

May 23, 2018

SUBJECT: Alternatives Analysis Meeting Announcement
Feasibility Study of Two Shared-Use Nonmotorized (SUN) Trails:
Historic Downtown Fort Pierce Retrofit Trail and
Historic Highwayman Trail
Limits: Indian Hills Drive to North Causeway Drive in Fort Pierce
St. Lucie County, Florida
Financial Project ID Numbers: 440033-1 and 440034-1

Dear Property Owner or Current Resident:

The Florida Department of Transportation (FDOT), District Four, will hold a public Alternatives Analysis Meeting for the two above referenced projects. The Alternatives Analysis Meeting will be held on Tuesday, June 5, 2018 with an open house from 5 p.m. to 7 p.m. at the Old City Hall located at 315 Avenue A in Fort Pierce. A brief presentation will be provided at 5:30 p.m. A location map with the meeting site is provided with this letter.

The study limits for the Historic Downtown Fort Pierce Retrofit study are from Georgia Avenue to North Causeway Drive (with an exception along US Highway 1 from Avenue H to Avenue M), for an overall distance of about 2.5 miles. The study limits for the Historic Highwayman Trail are from Indian Hills Drive to Georgia Avenue, a distance of about 2 miles. The project consists of building multi-use recreational pathways and includes the conceptual development of necessary trail heads, site furnishing details, rest stops and interpretive display recommendations. The trails will be developed to accommodate a range of appropriate non-motorized uses.

This letter is being sent to all property owners and tenants within at least 300 feet of either side of the proposed project and to public officials, regulatory agencies, organizations, and individuals interested in the project. This Alternatives Analysis Meeting will provide an overview of both project segments, any potential issues of concern, and display information about the alternatives that were developed during the Feasibility Study. Your attendance is encouraged and your participation and comments are appreciated. Persons wishing to submit written statements may do so at the meeting or by sending them to Lauren Rand, project manager, 3400 W. Commercial Boulevard, Fort Lauderdale, Florida 33309 or by email to Lauren.Rand@dot.state.fl.us.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who require accommodations under the Americans with Disabilities Act or persons who may require translation services (free of charge) should contact Lauren Rand at (954) 777-4499 at least seven (7) days prior to the meeting.

If you have questions about the project or scheduled Alternatives Analysis Meeting, please contact Project Manager Lauren Rand at the phone number or email address listed above. You may also visit the SUN Trails website at www.FloridaSUNTrail.com.

Sincerely,

Lauren Rand, MPE, CPM
District Four Multimodal Coordinator

LR:rf

Attachment: Location Map

Feagle, Brooke

From: FL-Rules@dos.state.fl.us
Sent: Tuesday, May 29, 2018 2:48 PM
To: Cimini, Randy D
Subject: Submit Notice in FAR

You have successfully submitted a notice for publication in the Florida Administrative Register on 5/29/2018 2:47:09 PM.

Department: Other Agencies and Organizations
Organization: ATKINS - Bartow
Notice type: Notice of Meeting/Workshop Hearing
Issue: 44/105

Once this notice is published you will be able to view it by clicking the following link:
https://urldefense.proofpoint.com/v2/url?u=http-3A__www.FLRules.org_gateway_View-5FNotice.asp-3Fid-3D20472061&d=DwIFAg&c=cUkzcZGZt-E3UgRE832-4A&r=Jau9xTOVgJhpkpAByd9CJOcaYIHaUxaX59Yqa2woKRg&m=GwHIMW0AnRzGwJak-0EzxR2_NgVPAwlSBJABSKrL6xc&s=-csuoQPcbobK0MY79j4KDnyxXkj7VCp5OdO7fhWc39g&e=

You may contact the Florida Administrative Register office at (850)245-6270 for additional information.

Notice of Meeting
DEPARTMENT OF TRANSPORTATION

The Florida Department of Transportation (FDOT), District Four, is hosting an Alternatives Analysis Meeting as part of the Feasibility Study for two segments of the Shared-Use Nonmotorized (SUN) Trail Program, the Historic Downtown Fort Pierce Retrofit segment and Historic Highwayman Trail Gap segment in Fort Pierce, St. Lucie County. FDOT invites all members of the public to attend.

DATE AND TIME: Tuesday, June 5, 2018 from 5 p.m. to 7 p.m.
PLACE: Old City Hall, 315 Avenue A, Fort Pierce, FL 34950

GENERAL SUBJECT MATTER TO BE CONSIDERED: This public meeting offers the community the opportunity to express their views about the location, conceptual design, and social, economic, and environmental effects of constructing the trails on both proposed segments. The study limits for the Historic Downtown Fort Pierce Retrofit segment are from Georgia Avenue to North Causeway Drive, with an exception along US Highway 1 from Avenue H to Avenue M; Financial Project ID 440033-1. The study limits for the Historic Highwayman Gap Trail segment are from Indian Hills Drive to Georgia Avenue; Financial Project ID 440034-1.

FDOT will provide an overview of both project segments, any potential issues of concern, and display information about the alternatives that were developed during the Feasibility Study. The meeting will include a brief presentation at 5:30 p.m. followed by an open house where people can ask questions and provide comments to FDOT representatives in a one-on-one setting. Written comments will be accepted.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. People requiring special accommodations under the Americans with Disabilities Act or who require translation services (free of charge) should contact Lauren Rand, project manager, at (954) 777-4499 or toll free at 1 (866) 336-8435, or by email to Lauren.Rand@dot.state.fl.us at least seven (7) days prior to the meeting.

If you are hearing or speech impaired, please contact FDOT using the Florida Relay Service, 1 (800) 955-8771 (TDD) or 1 (800) 955-8770 (Voice).

For more information about the project or the Alternatives Analysis Meeting, please contact Lauren Rand or visit the SUN Trail website www.FloridaSUNTrail.com.

Hawaii volcano leaves few escape routes

Denise Laitinen
Special to USA TODAY

KEAAU, Hawaii – As the Kilauea volcano spews lava and toxic gas, weary residents are facing the threat of fewer routes to escape – and the possibility of finding themselves stranded.

Three rural highways serve as evacuation routes for roughly 5,000 residents living near the erupting lava fissures. One is completely blocked and another remains open only to local residents – for now.

The biggest concern is the third exit route: Highway 130, a main connector road that runs from north to south through the region.

Several large cracks have formed in the road due to magma disrupting earth as it travels downslope underground. Nine metal plates have been installed over the cracks to maintain access.

But if those fail and the highway becomes impassable, residents in numerous neighborhoods will be stranded.

"We're doing everything humanly possible to keep Highway 130 open," says Don Smith, an engineering program manager for the Hawaii Department of Transportation.

To keep the road passable, transportation officials will reinforce the metal plates, fill in the cracks with aggregate material and use heat-resistant steel reinforced plates if needed.

"We have multiple contingencies in place and we'll go down the list depending on the circumstances," said Tim Sakahara, public information officer for the Hawaii transportation department.

One backup plan includes shoring up a road that runs through the closed Volcanoes National Park for use as a one-way emergency evacuation route.

But that also presents several challenges. While only a small portion of Chain of Craters Road has to be fixed, the route passes close to the Halema'uma'u crater, near the volcano summit, which continues to sporadically spew ash thousands of feet into the air.

Despite the uncertainty, Jean Howell, a Seaview Estates resident who lives a few miles downwind from where the lava is entering the ocean, is staying put.

"My knowing is that I am right here, right now, because this is where I am supposed to be," Howell said. "If I was supposed somewhere else I'd be guided by a higher knowing within me to go somewhere else."



Will Devine takes snapshots Thursday of lava flowing in Leilani Estates. Devine says he lost his home to the Kilauea volcano eruption. ROBERT HANASHIRO/USA TODAY NETWORK

If authorities order an evacuation for her area, Howell said she hasn't decided whether she would leave. "There really aren't a whole lot of places to go," she said.

Fellow Seaview resident Mark Wyatt is in a similar boat. He retired to the Big Island 12 years ago and manages three rental properties in the coastal neighborhood.

While his tenants and about 60 percent of the neighborhood have evacuated, Wyatt is staying as long as possible to watch over the homes.

"Even if they do mandatory evacuations they're going to have to drag me out of here," he said. "I'm going to have to see the lava before I decide to leave. I don't know where else I would go, because I love it here."

Prince Kelī'iho'omalu's family has lived in Kalapana for nearly a century and his father, Robert Kelī'iho'omalu, is the namesake of the internationally known Uncle Robert's Kava Bar and weekly farmers market.

As a member of a road maintenance crew with Hawaii County Department of Public Works, Kelī'iho'omalu relocated out of Kalapana due to his job. He said many of his relatives in Kalapana plan to stay.

"Their view is that they're not going to move unless they really have to," says Kelī'iho'omalu. "The majority of them are retired" and grow their own vegetables and raise pigs and chickens.

"They know they can survive off the land, that's why they feel comfortable staying. Part of it's cultural and part of it is they have nowhere else to go."

He adds younger relatives who have jobs requiring daily travel on Highway 130 will soon face tough choices. "They're going to have to make a decision (to stay or evacuate) sooner or later."

Depending on which way the lava travels and where new fissures erupt, the only way out may be by helicopter.

Officials are formulating plans to conduct mass air evacuations should the region's main roads be compromised.

According to a report in the Honolulu Star Advertiser, Hawaii Army National Guard commander Brig. Gen. Kenneth Hara told county, state and federal officials that two Sikorsky CH-53 Sea Stallion helicopters are available for evacuation purposes.

Hara was recently tasked to spearhead Joint Task Force 5-0, a dual command team comprised of National Guard and active military personnel based in the town of Hilo, roughly 15 miles north of the eruptions on the lower East Rift Zone. According to a Hawaii County spokesperson, the units can evacuate upwards of 500 people within two hours.

Great American Gun Shows
Big Weekend Event, Buy-Sell-Trade



STUART, FL
Martin County Fairgrounds
2616 SE Dixie Highway, Stuart
June 2-3, 2018
Saturday 9-5 - Sunday 10-4
$1.00 OFF Admission 12 and under Free with adult admission
Vendors please call 865-453-0074 or visit www. greatamericanpromotionsllc.com
For info on Concealed Carry Class Please call 561.214.5115

CITY OF PORT ST. LUCIE FLORIDA
PORT ST. LUCIE PARKS & RECREATION

CHANGE OF LOCATION FOR THE
2018 MEMORIAL DAY SERVICE
IN PORT ST. LUCIE

The United Veterans of Port St. Lucie and the City of Port St. Lucie Parks & Recreation's 2018 Memorial Day Service, scheduled for Monday, May 28, 2018, at 10 a.m., at Veteran's Memorial Park, has now been moved and will take place at the PSL Community Center, located at 2195 SE Airoso Blvd in the main ballroom. Weather permitting, the rifle salute will be in the outside plaza of the Community Center. Due to the recent heavy rain, conditions at the park are unconducive for this service.

FOR MORE INFORMATION, PLEASE CONTACT (772) 878-2277

SUNTRAIL
SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit
Historic Highwayman Trail Gap
FDOT
Financial Project Numbers: 440033-1 and 440034-1

ALTERNATIVES ANALYSIS MEETING

The Florida Department of Transportation (FDOT) District Four, is hosting an Alternatives Analysis Meeting as part of the Feasibility Study for two segments of the Shared-Use Non-motorized (SUN) Trail Program, the Historic Down-town Fort Pierce Retrofit segment and Historic Highwayman Trail Gap segment in Fort Pierce, St. Lucie County (see location map). The public meeting is from 5 p.m. to 7 p.m., Tuesday, June 5, 2018 at the Old City Hall located at 315 Avenue in Fort Pierce.



At this public meeting, FDOT will provide an overview of both project segments, any potential issues of concern, and the trail alternatives. The study limits for the Historic Downtown Fort Pierce Retrofit study are from Georgia Avenue to North Causeway Drive, with an exception along US Highway 1 from Avenue H to Avenue M. The study limits for the Historic Highwayman Trail Gap are from Indian Hills Drive to Georgia Avenue.

The meeting will include a brief presentation at 5:30 p.m. followed by an open house where people can ask questions and provide comments to FDOT representatives in a one-on-one setting. Written comments will be accepted. Your comments are an important part of this study.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. People requiring special accommodations under the Americans with Disabilities Act can contact Lauren Rand, project manager, at (954) 777-4499 or toll free at 1 (866) 336-8435, or by email to Lauren.Rand@dot.state.fl.us at least seven (7) days prior to the meeting.

For more information about the SUN Trail Feasibility Study, please contact Lauren Rand or visit the SUN Trail website at www.FloridaSUNTrail.com.

May 27, 2018 TCN-2026275

Treasure Coast Newspapers | **TCPALM**

St. Lucie News-Tribune
1939 SE Federal Highway, Stuart, FL 34994

AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA
COUNTY OF ST. LUCIE

Before the undersigned authority personally appeared, Natalie Zollar, who on oath says that she is Classified Inside Sales Manager of the St. Lucie News-Tribune, a daily newspaper published at Fort Pierce in St. Lucie County, Florida: that the attached copy of advertisement was published in the St. Lucie News-Tribune in the following issues below. Affiant further says that the said St Lucie News-Tribune is a newspaper published in Fort Pierce, in said St. Lucie County, Florida, and that said newspaper has heretofore been continuously published in said St. Lucie County, Florida, daily and distributed in St. Lucie County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid or promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper. The St. Lucie News-Tribune has been entered as Periodical Matter at the Post Offices in Fort Pierce, St. Lucie County, Florida and has been for a period of one year next preceding the first publication of the attached copy of advertisement.

Customer	Ad Number	Copyline	PO #
930054 - ATKINS NORTH AMERICA	2026275	SUN TRAILS NEWS AD	

Pub Dates
May 27, 2018

Sworn to and subscribed before me this day of, May 29, 2018, by

Natalie Zollar, who is

(X) personally known to me or

( ) who has produced _____ as identification.

Karol E Kangas
Karol Kangas **Notary Public**

KAROL E KANGAS
Notary Public - State of Florida
Commission # GG 126041
My Comm. Expires Jul 29, 2021
Bonded through National Notary Assn.

SUN Trail Feasibility Study

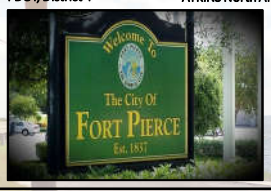
Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Alternatives Analysis Meeting
June 5, 2018

Lauren Rand, MPE, CPM
FDOT, District 4

Reshawn Fields, AICP
ATKINS North America



1

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

- Presentation and Q&A – 5:30pm
  - Overview of Fort Pierce SUN Trail Projects:
    - Historic Downtown Fort Pierce Retrofit
    - Historic Highwayman Trail Gap
  - Feasibility Study Process and Schedule
  - Alternatives and Evaluation
  - Public Comments and Next Steps
- Open House 6:00 pm to 7:00 pm





2

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Title VI of the Civil Rights Act of 1964

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status.

Persons wishing to express their concerns about Title VI may do so at the table located at the entrance or by contacting either:

District Four
Florida Department of Transportation
District Four Title VI Coordinator
Shavon Nelson
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309-3421
(954) 777-4389 or
Toll free at (866) 336-8435 ext. 4190
Shavon.Nelson@dot.state.fl.us

Central Office
Florida Department of Transportation
State Title VI Coordinator
Jacqueline Paramore
605 Suwannee Street, MS 65
Tallahassee, Florida 32399-0450
(850) 414-4753
Jacqueline.Paramore@dot.state.fl.us

3

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Study Partners

The Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN trail studies are being conducted by:

The Florida Department of Transportation in association with -

4

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Studies conducted to evaluate two proposed SUN trail segments

These Alternatives were identified in the St. Lucie County May 2016 SUN Trail Application





5

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Purpose of Study

- Trails will provide regional connectivity throughout St. Lucie County and Florida as part of the Greenways Trail System. Will connect:
  - FEC Overpass
  - Indian Hills Recreation Area
  - Savanna's Preserve State Park
- Trails benefits include:
  - Ability to make a community more livable and cohesive
  - Connect the community to other communities and amenities
  - Improve the economy through tourism and civic improvement
  - Preserve and restore open space
  - Provide opportunities for physical activities that can promote and improve fitness and mental health.

6

SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Purpose of Study

- The feasibility study conducted for both segments is a planning process that will assess:
  - Engineering requirements
  - Impacts and enhancements to the natural, physical, and social environments
  - Costs
  - Public input
- Study will vet options and provide a basis for future phases:
  - Preliminary Engineering Studies
  - Project Development and Environment (PD&E) Studies
  - Final Design
  - Right-of-Way Acquisition (if necessary)
  - Construction

7

SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Feasibility Study Process

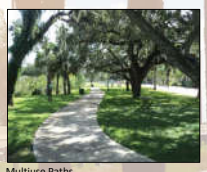
Project Milestones	2017									2018							
	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September
Begin Study	☆																		
Public Involvement		■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Data Collection		■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Kick-off Meeting								☆											
Design and Environmental Analysis								■	■	■	■	■	■	■	■	■			
Alternatives Analysis Meeting																☆			
Draft and Final Feasibility Reports														■	■	■	■	■	■
Study Completion																			☆

8

SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Where we are currently – Alternatives Analysis

- Alternatives developed through stakeholder coordination, design, and environmental analysis are presented tonight for public input
- Identify potential alignments and facility types for each Alternative.


Multiuse Paths




Sharrows


Bike Lanes

9

Historic Downtown Fort Pierce Retrofit

- Limits: From Georgia Avenue north through downtown area close to waterfront, ending at North Causeway Drive.
- NOTE: The "gap" in the trail will not be studied under this Feasibility Study due to future work on Federal Highway/US1 at Avenue H.
- Alternatives:
  - Primary Alternative: Red line indicates proposed trail SUN Trail application
  - River Walk Alternative: Blue line *NEW Alternative*
  - South Alternative 1: Green Line
  - South Alternative 2: Yellow Line

Visit the workshop stations during the meeting tonight for more details!



10

Historic Highwayman Trail Gap

- Limits: From North Indian Hills around the Indian Hills Golf Course, ending at Georgia Avenue. Would connect with the Historic Downtown segment to the north.
- Alternatives:
  - Primary Alternative: Red line indicates proposed trail SUN Trail application
  - East Alternative 1: Pink Line
  - East Alternative 2: Blue Line *NEW Alternative*

Visit the workshop stations during the meeting tonight for more details!



11

SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Alternatives Comparison Matrix

- The alternatives will be evaluated on the following criteria:
  - Design: Does or does not meet SUN Trail Program criteria
  - Social Features: Land Use, Community Cohesion, *Relocations, ROW or Easements Required*, Potential User Conflicts
  - Cultural: Archaeological/ Historical Resource, Section 4(f)
  - Natural: Threatened and Endangered Species, Wetlands/Surface Waters Upland Habitat, Outstanding Florida Waters/Aquatic Preserves, Floodplains
  - Physical: Noise, Air Quality, Contamination

Visit the workshop stations during the meeting tonight for more details!

12

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

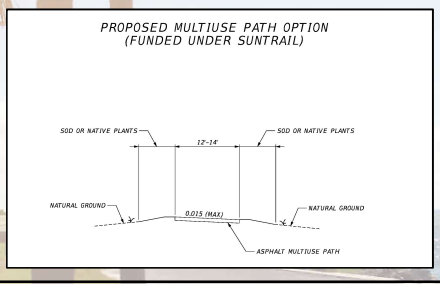
Alternatives Comparison Matrix

- KEY Criteria:
  - Meets SUN Trail Program Design Criteria - path must be:
    - 10-14 ft (8ft in rare cases)
    - Multiuse (bicyclists, pedestrians, runners, skaters)
    - Paved
    - Separated from roadway (at least 5 ft or physical barrier/railing)
  - ROW or Easements Required (no FEC or other private property)

Please visit the workshop stations during the meeting tonight for more details!

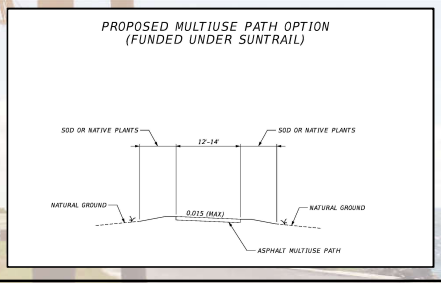
13

Historic Highwayman Trail Gap – Typical Sections



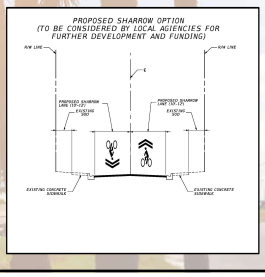
14

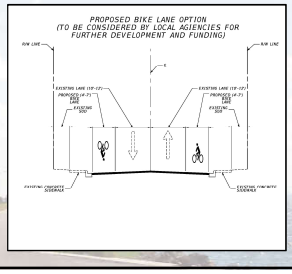
Historic Downtown Fort Pierce Retrofit – Typical Sections



15

Historic Downtown Fort Pierce Retrofit – Typical Sections





16

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Next Steps

- Following this Alternatives Analysis Public Meeting, Draft and Final Feasibility Reports will be prepared to include a recommended Alternative for each segment.
- Feasibility Study completion anticipated September 2018

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SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Project Schedule

Feasibility Study → Preliminary Engineering (PE)/Design → Acquisition of Right of Way (If necessary) → Construction

We are here

Design for both segments will be funded in FY 2019. The goal is to construct the trail within City/County ROW and minimize having to purchase ROW.

18


SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1
Historic Highwayman Trail
Financial Project Number: 440034-1
FDOT
SUNTRAIL
Your Comments
❖ Fill out and submit a comment sheet tonight (comment box)
❖ Mail in comment sheet later. NOTE: all comments must be postmarked by Tuesday, June 19, 2018 so that we may complete our study.
Mail comments to:
Lauren Rand
3400 West Commercial Boulevard,
Fort Lauderdale, Florida 33309
❖ Email comments or questions:
Lauren.Rand@dot.state.fl.us
Stay involved with project updates, please visit project website:
www.FloridaSUNTrail.com
19


SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1
Historic Highwayman Trail
Financial Project Number: 440034-1
FDOT
SUNTRAIL
Questions?
Thank you for your interest!
Please visit the workshop stations during the meeting tonight for more details!
20

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Project Overview

The Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida (see location maps and pages 2 & 3).

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway (with an exception along US Highway 1 from Avenue H to Avenue M)
- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

Feasibility Study Process

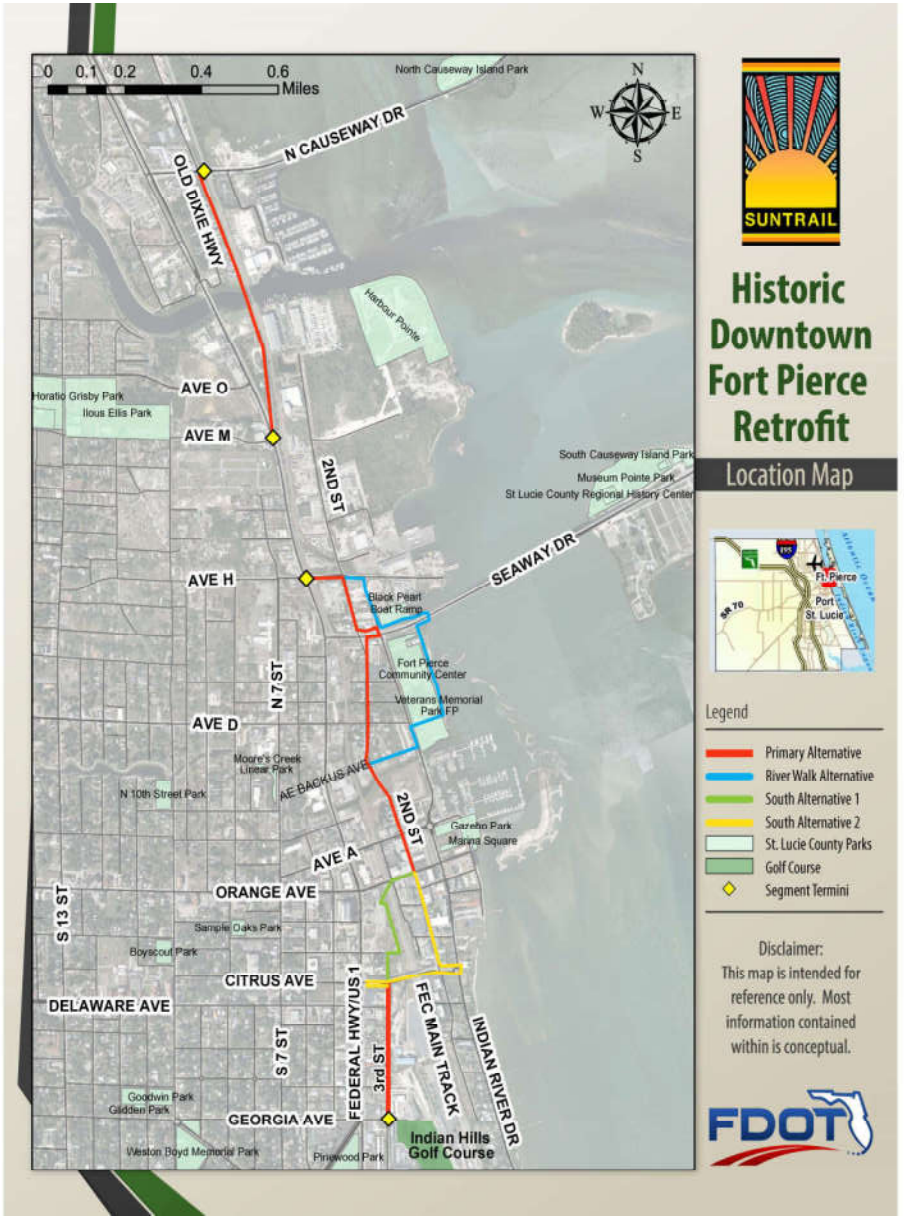
The goal is to develop basic information, including operational necessity, financial benefits and costs, and environmental impact.

Feasibility study stages:

- Data Collection
- Environmental Surveys and Studies
- Evaluation of Alternatives
- Recommended Alternatives
- Feasibility Report

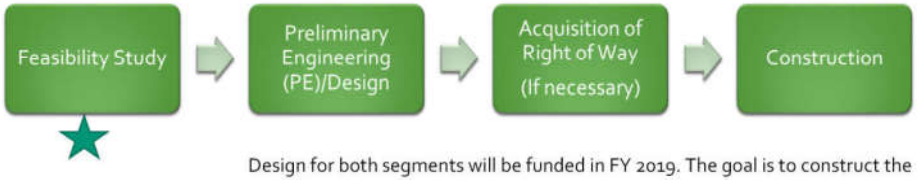
Feasibility Study Schedule

Project Milestones	2017									2018								
	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September
Begin Study	★																		
Public Involvement		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Data Collection		■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Kick-off Meeting								★											
Design and Environmental Analysis								■	■	■	■	■	■	■	■	■			
Alternatives Analysis Meeting																★			
Draft and Final Feasibility Reports														■	■	■	■	■	■
Study Completion																			★





Overall Project Schedule



Design for both segments will be funded in FY 2019. The goal is to construct the trail within City/County ROW and minimize having to purchase ROW.

Next Steps

Following the Alternatives Analysis Public Meeting, Draft and Final Feasibility Studies will be prepared to include a recommended Alternative for each segment.

Following the completion of this Feasibility Study, the Florida Department of Transportation will proceed with the project Design in 2019.

Contact Us

Lauren Rand, Project Manager
Florida Department of Transportation
(954) 777-4499 or Lauren.Rand@dot.state.fl.us
SUN Trails Website—www.FloridaSUNTrail.com

It is the policy of the Florida Department of Transportation that no person be denied the benefits of or be subjected to discrimination or retaliation under any program or activity administered by the Department or its sub-recipients on the basis of race, color, national origin, sex, age, disability/handicap, or income status.

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Comment Sheet

Please provide any comments or drawings you may have regarding the Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail Gap SUN Trails. The SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida.

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Historic Highwayman Trail Gap Segment is from North Indian Hills Drive to Georgia Avenue

Name: _____

Address: _____

_____

NOTE: Please complete and return to the "Comments" Box; mail to Lauren Rand at the address on the back of this sheet; or e-mail comments to Lauren.Rand@dot.state.fl.us by Tuesday, June 19, 2018. All comments are part of the project record and are available for viewing by the public and media.

☐ Please add me to the mailing list for the SUN Trails Feasibility Study.

It is the policy of the Florida Department of Transportation that no person be denied the benefits of or be subjected to discrimination or retaliation under any program or activity administered by the Department or its sub-recipients on the basis of race, color, national origin, sex, age, disability/handicap, or income status.

Fold

Postage Required Place Stamp Here

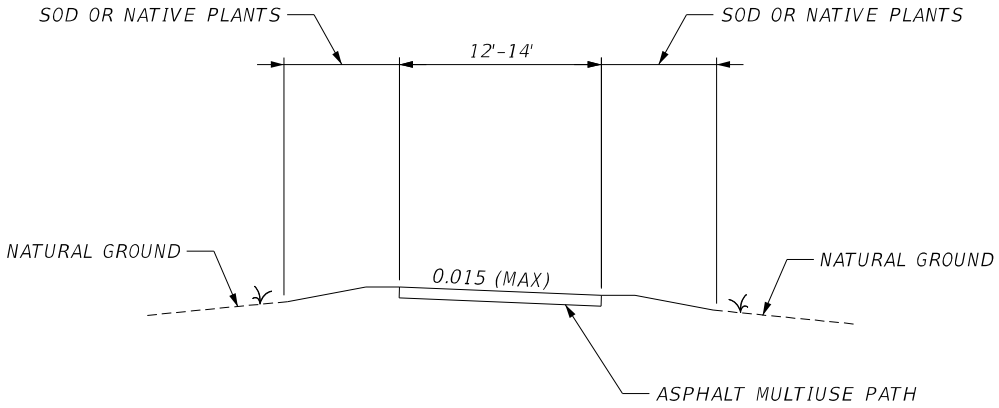
Lauren Rand
Project Manager
Florida Department of Transportation
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

Fold

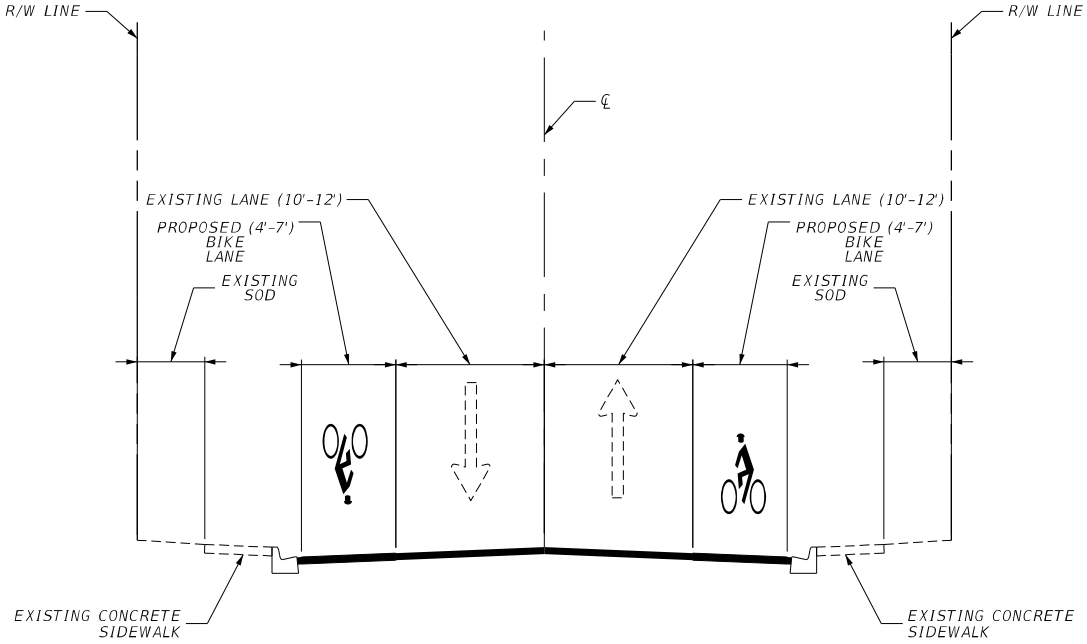

Legend
East Alternative 1
East Alternative 2
Primary Alternative
NR - Eligible Bridges
NR - Eligible Resource Groups
NR - Listed Resources
Locally Designated Districts
ROW
N
0 0,05 0,1 0,2 Miles
Private ROW
Both Alternatives meet SUN Trail Program criteria. A SUN Trail multi-use path is recommended.
River's Edge Historic District
8SL2602
FEC RR - Lake Harbor Branch
8SL3014
Alternative would require FEC ROW.
Scrub Habitat
FEC ROW


Legend
Primary Alternative
South Alternative 1
South Alternative 2
River Walk Alternative
NR - Eligible Bridges
NR - Eligible Resource Groups
NR - Listed Resources
Locally Designated Districts
N
0 0,1 0,2 0,4 Miles
Alternative does not meet the SUN Trail Program criteria, so will be explored by local agencies for further development and funding.
Flaws: There is no room for a separated multiuse path. Would require widening the Old Dixie Highway bridge.
Bike lanes/sharrows are recommended.
Dixie Highway
8SL1056
Fixed Bridge over Taylor Creek
8SL3181
Will not be covered under this feasibility study due to future work on Federal Highway/US1 at Avenue H.
FEC RR - Lake Harbor Branch
8SL3014
Alternative does not meet the SUN Trail Program criteria, so will be explored by local agencies for further development and funding.
Flaws: There is no room for a separated multiuse path. Would require building, sidewalk, street lamp relocations.
Bike lanes/sharrows are recommended.
Alternative does meet the SUN Trail Program criteria, so SUN Trail multi-use path would be recommended.
Edge Town Historic District
8SL2601
Moores Creek Bridge
8SL1141
Downtown Historic District
8SL2790
Sunrise Theatre
8SL799
Alternative does not meet the SUN Trail Program criteria, so will be explored by local agencies for further development and funding.
Flaws: There is no room for a separated multiuse path. Would require widening Citrus Ave Bridge, and sidewalk and building relocations.
Citrus Ave bridge slope more than 5%.
Flaws: Alternative would require the private and FEC ROW, so will be explored by local agencies for further development and funding.
Alternative does not meet the SUN Trail Program criteria, so will be explored by local agencies for further development and funding.
Flaws: There is no room for a separated multiuse path. Would require onstreet parking relocation.
Bike lanes/sharrows are recommended.

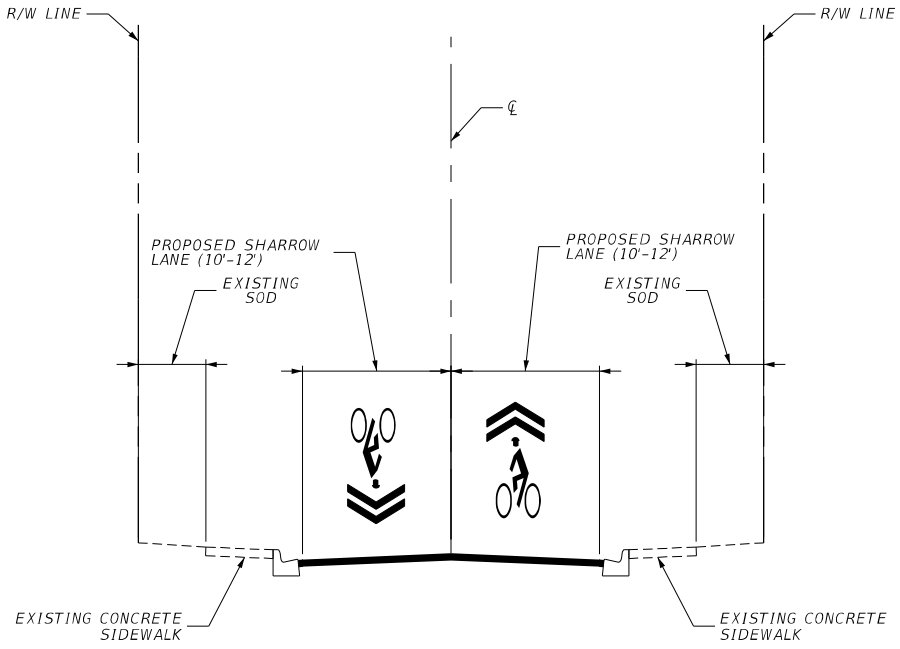
PROPOSED MULTIUSE PATH OPTION
(FUNDED UNDER SUNTRAIL)



PROPOSED BIKE LANE OPTION
(TO BE CONSIDERED BY LOCAL AGIENCIES FOR FURTHER DEVELOPMENT AND FUNDING)



PROPOSED SHARROW OPTION
(TO BE CONSIDERED BY LOCAL AGIENCIES FOR FURTHER DEVELOPMENT AND FUNDING)



SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Alternatives Analysis Meeting — **Please Sign-In** — **June 5, 2018**

(Sign-in sheets are subject to public record requests)

Name (Please Print)	Address	E-Mail	Telephone
JOSEPH G. MILLER	5500 ORANGE AVE 34947	JGM01 & COMCAST, NET	772-475-6066
Ryan Jensen		Ryan.Jensen@Atkinsglobal.com	305 984-5230
Lauren Rand		Lauren.Rand@Dot.State.fl.us	954-777-4499
Lynn Kelley	FDOT D4	lynn.kelley@dot...	X4334
Jenn McGee	SLC ERD	mcgeej@stlucieco.org	772 462 3862
ALBERT SORREL	116 INDIAN HILL DR		
DAVID H. KAPLAN	4105E Naranja Ave PSL	DKAPLAN73@HOTMAIL.COM	
LAURA A. KAPLAN	"	LAURASTLUCIEREALTOR@GMAIL.COM	772-342-7736
Jim Bounds	206 Southern Av. Ft. Pierce	Jbounds133@gmail.com	772-359-4952
DOUGLAS DAVIS	2201 ATLANTIC BEACH BLVD FP 34949	ddavis@rkdavis.com	772 461 8335
STAN & JEAN SYNKOSKI	2005 COCONUT DR. FORT PIERCE FL 34949	INSYNKINC@GMAIL.COM	301 232-5692
Buck Bryan			
CHARLIE BECK	2001 SURESITE DR.		
Toni Monokian	6010 Myrtle Dr. Ft Pierce 34982	tonif6@cs.com	
Jim KAUFFMANN	2919 S. INDIAN RIVER DR	Jim KAUFFMANN@Icloud.com	772-370-5621
Greg Griffett		ggriffett@stlucie.com	
MURRSAH DEKLE	437 N. 7TH STREET FORT PIERCE	DEKLEM@STLUCIECO.ORG	772-462-3065
Peter Buchwald	St. Lucie TPO		

(9)

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Alternatives Analysis Meeting — **Please Sign-In** — **June 5, 2018**

(Sign-in sheets are subject to public record requests)

Name (Please Print)	Address	E-Mail	Telephone
GARY GAIOTTI		gary.gaiotti@atkinsglobal.com	407-806-4184
Bassel Kassem	633 Dartmouth St Orlando, Fl	bkassem@flbridge.com	407 492-1744
PAUL HAYDT	11 WILMONT PL PALM COAST 32164	PAUL@GREENWAY.ORG	386 503-0294
KEN SCOTT	453 MILTON RD. FT. PIERCE		
TERRY WOLTERS	900 S. 3RD ST. FT. PIERCE		
Luis ORTIZ	601 S Indian River Dr #8	Fpierlort1986@Gmail.Com	772 971 7115
Jack Andrews	City of Ft. Pierce	JAndrews@City-FtPierce.com	772-467-3773
SELENA GRIFFETT	SLC PW ENG	griffetts@stlucieco.org	772-462-2153

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Alternatives Analysis Meeting

Please Sign-In

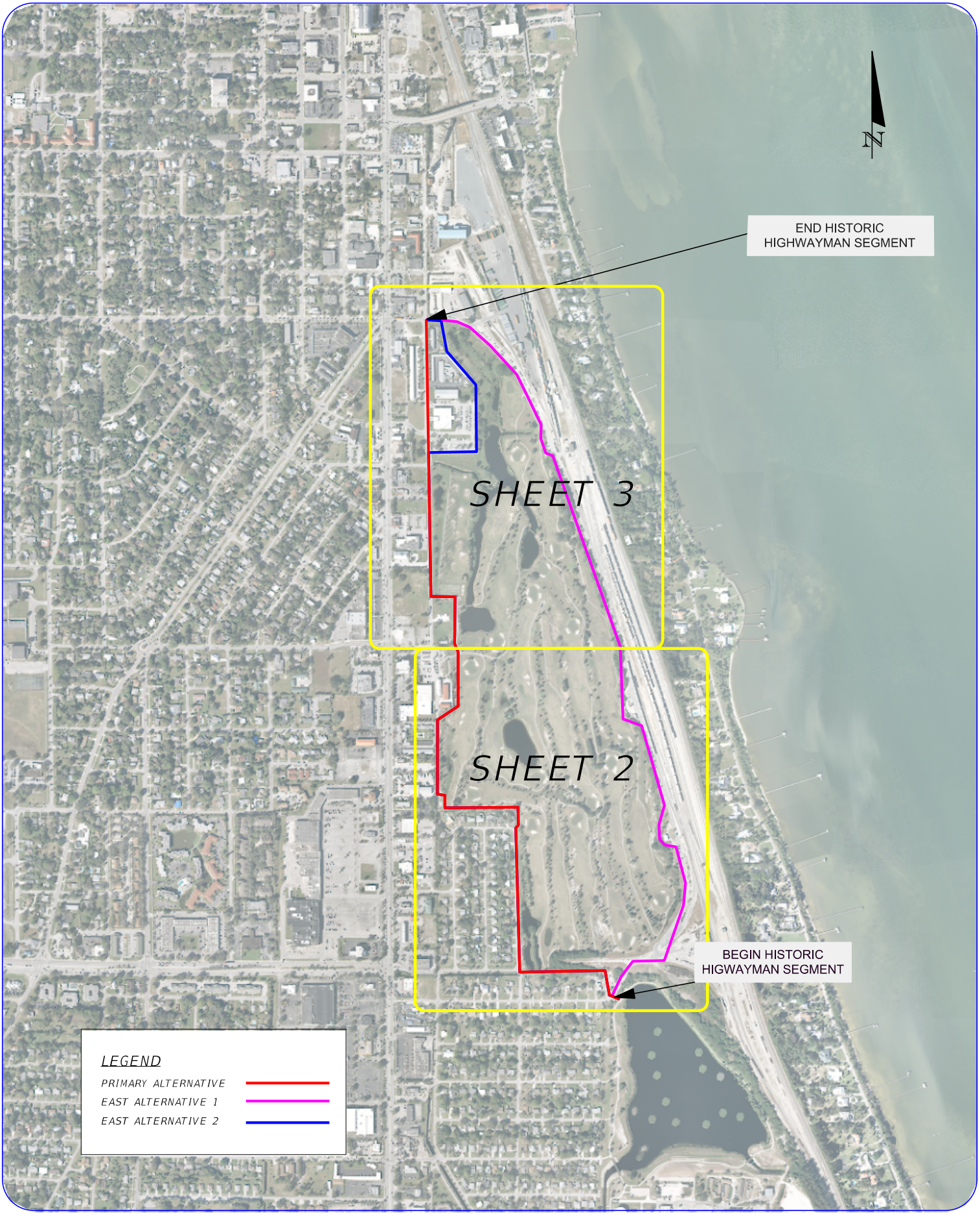
(Sign-in sheets are subject to public record requests)

June 5, 2018

Name (Please Print)	Address	E-Mail	Telephone
REP. LARRY LEE, JR.	7936 SADDLEBROOK DR. PSL, FL	LARRY.LEE.JR55@GMAIL	772-528-4167

Appendix C

Environmental Opportunities and Right-of-Way Constraint Maps



jens6760

7/6/2018 8:00:42 AM

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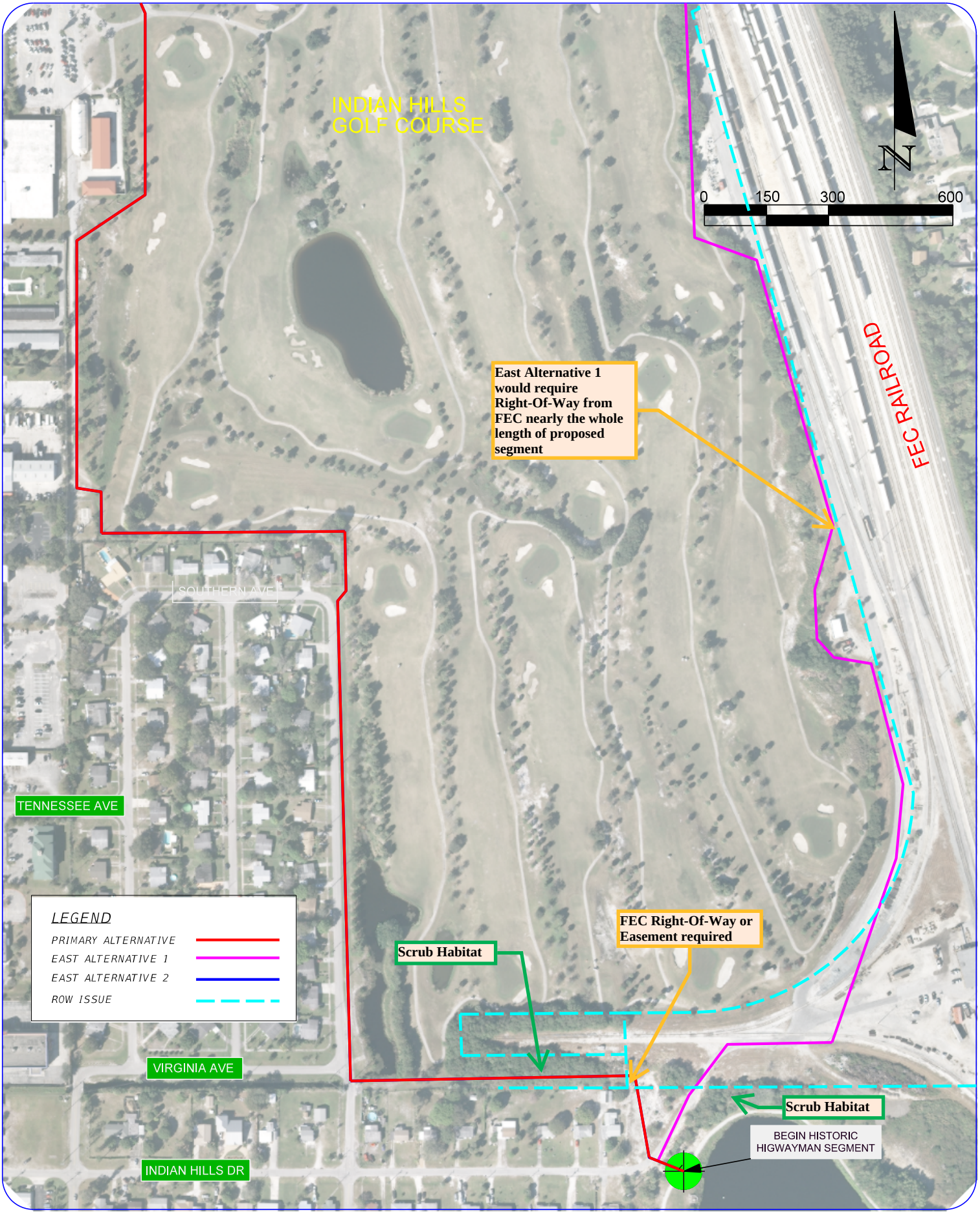
ENVIRONMENTAL OPPORTUNITIES AND RIGHT-OF-WAY CONSTRAINTS MAP

SUN TRAIL HISTORIC HIGHWAYMAN SEGMENT
FEASIBILITY STUDY
FORT PIERCE, FL

SHEET 1 OF 3	FPID: 440034-1-52-01	JULY 2018	SCALE:1" = 1000'

ATKINS
CORPORATE OFFICE:
4030 W. BOY SCOUT BOULEVARD
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF
AUTHORIZATION NO.24
www.atkinsglobal.com



jens6760

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ENVIRONMENTAL OPPORTUNITIES AND RIGHT-OF-WAY CONSTRAINTS MAP

SUN TRAIL HISTORIC HIGHWAYMAN SEGMENT
FEASIBILITY STUDY
FORT PIERCE, FL

SHEET 2 OF 3	FPID: 440034-1-52-01	JULY 2018	SCALE: 1" = 300'

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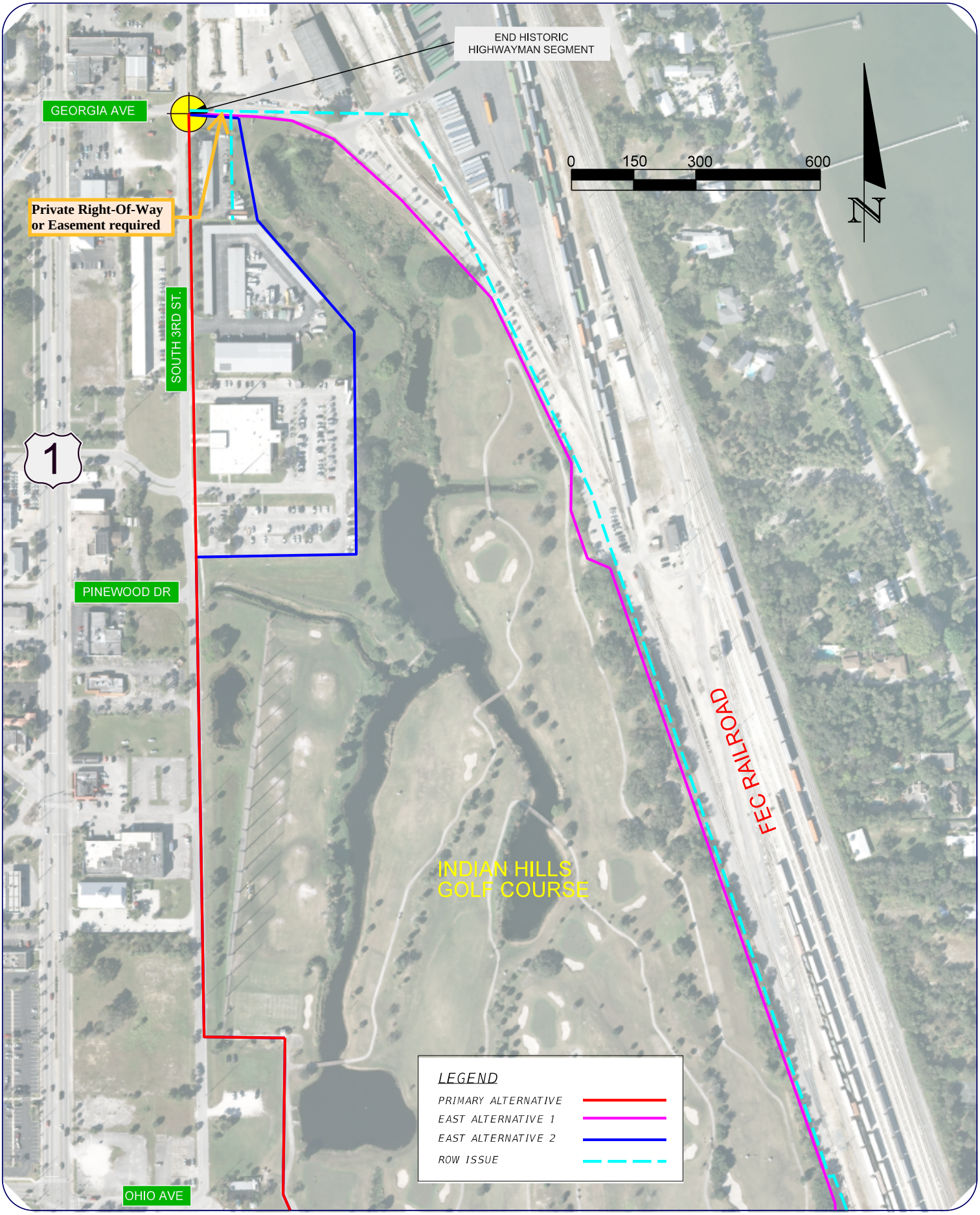
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTHORIZATION NO.24
www.atkinsglobal.com



jens6760

7/6/2018 8:01:04 AM

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ENVIRONMENTAL OPPORTUNITIES AND RIGHT-OF-WAY CONSTRAINTS MAP

SUN TRAIL HISTORIC HIGHWAYMAN SEGMENT
FEASIBILITY STUDY
FORT PIERCE, FL

SHEET 3 OF 3	FPID: 440034-1-52-01	JULY 2018	SCALE: 1" = 300'

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TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF
AUTHORIZATION NO.24
www.atkinsglobal.com

Appendix D

Existing Land Use Maps and Fort Pierce Future Land Use Map



FLUCFCS Data: SFWMD 2009

Imagery: NAIP 2013



SUN Trail Highwayman Gap Trail
Ft. Pierce, St. Lucie County, Florida

- 1110 FIXED SINGLE FAMILY UNITS
- 1210 FIXED SINGLE FAMILY UNITS
- 1400 COMMERCIAL AND SERVICES
- 1820 GOLF COURSE
- 1900 OPEN LAND
- 3200 UPLAND SHRUB AND BRUSHLAND
- 5300 RESERVOIRS
- 6410 FRESHWATER MARSHES - GRAMINOID PRAIRIE - MARSH
- 8120 RAILROADS AND RAILYARDS

D-1: Existing Land Use

1 in = 281 feet

Prepared By: Atkins N.A.
Date: July 06, 2018

ATKINS



FLUCFCS Data: SFWMD 2009

Imagery: NAIP 2013



SUN Trail Highwayman Gap Trail
Ft. Pierce, St. Lucie County, Florida

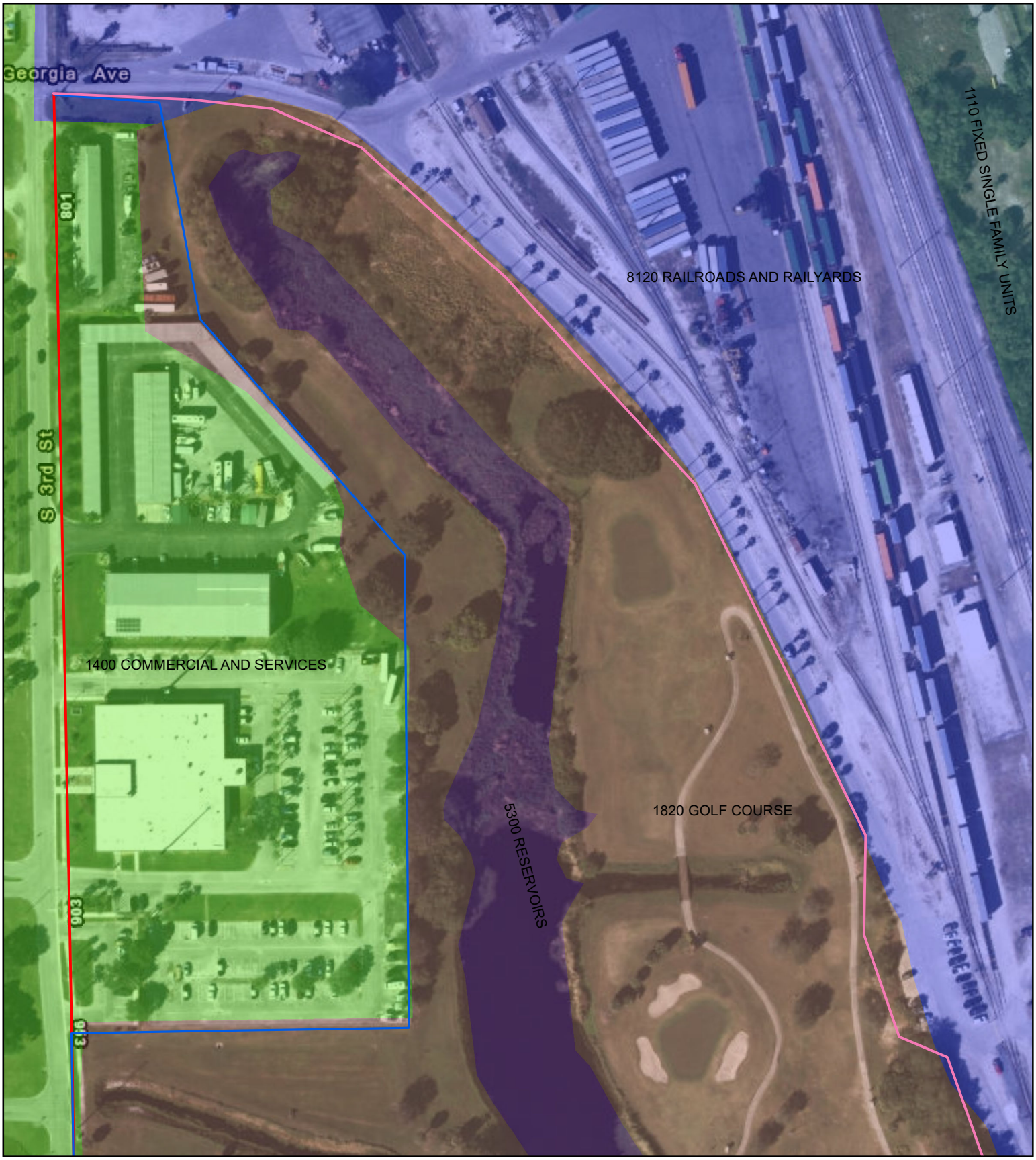
- 1110 FIXED SINGLE FAMILY UNITS
- 1400 COMMERCIAL AND SERVICES
- 1820 GOLF COURSE
- 5300 RESERVOIRS
- 5410 EMBAYMENTS OPENING DIRECTLY TO GULF OR OCEAN
- 8120 RAILROADS AND RAILYARDS

D-2: Existing Land Use

1 in = 244 feet

Prepared By: Atkins N.A.
Date: July 06, 2018

ATKINS



FLUCFCS Data: SFWMD 2009

Imagery: NAIP 2013



SUN Trail Highwayman Gap Trail

Ft. Pierce, St. Lucie County, Florida

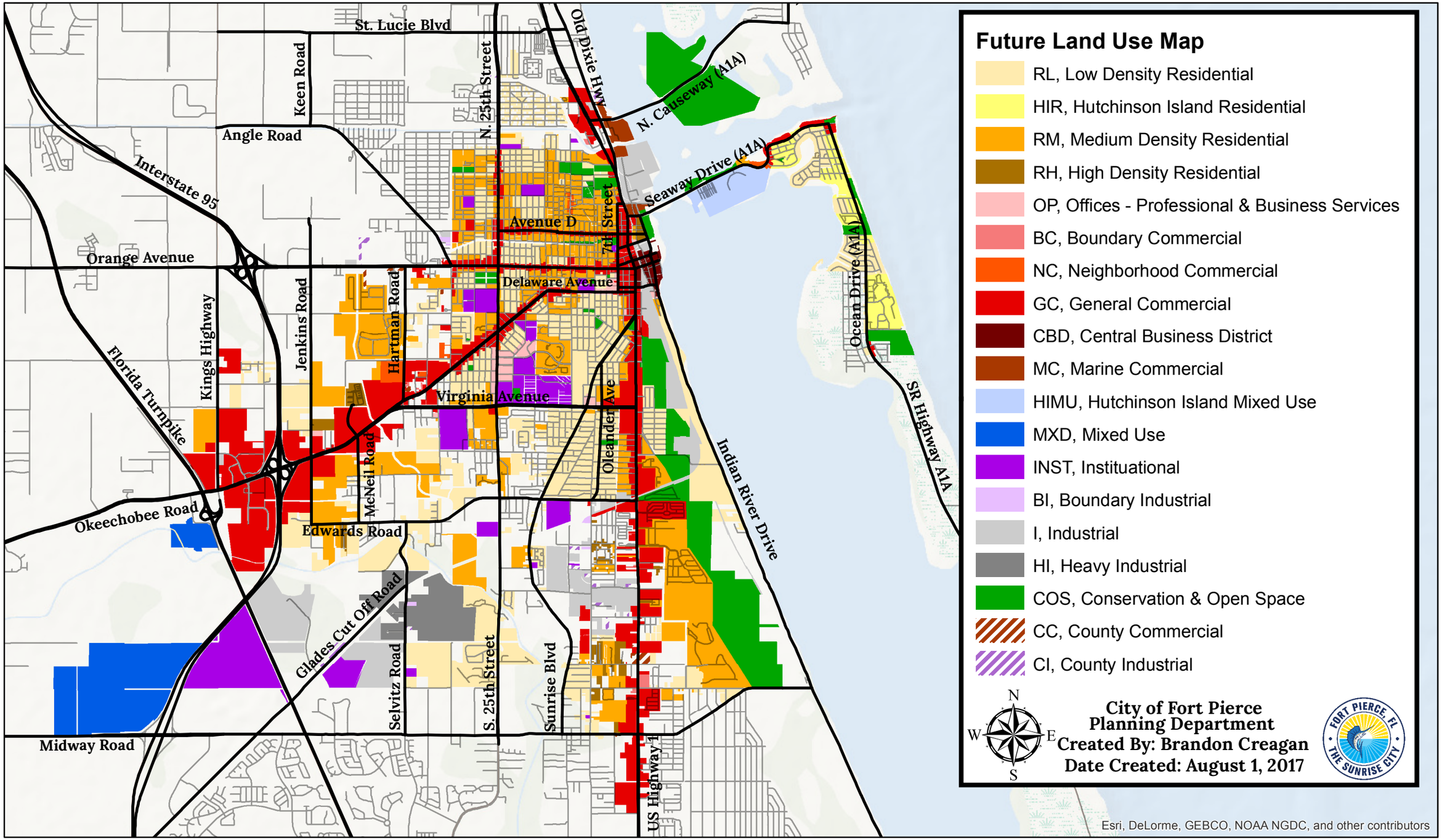
- 1110 FIXED SINGLE FAMILY UNITS
- 1400 COMMERCIAL AND SERVICES
- 1820 GOLF COURSE
- 5300 RESERVOIRS
- 8120 RAILROADS AND RAILYARDS

D-3: Existing Land Use

1 in = 147 feet

Prepared By: Atkins N.A.
Date: July 06, 2018

ATKINS


Future Land Use Map
RL, Low Density Residential
HIR, Hutchinson Island Residential
RM, Medium Density Residential
RH, High Density Residential
OP, Offices - Professional & Business Services
BC, Boundary Commercial
NC, Neighborhood Commercial
GC, General Commercial
CBD, Central Business District
MC, Marine Commercial
HIMU, Hutchinson Island Mixed Use
MXD, Mixed Use
INST, Instituational
BI, Boundary Industrial
I, Industrial
HI, Heavy Industrial
COS, Conservation & Open Space
CC, County Commercial
CI, County Industrial
N
W
E
S
City of Fort Pierce
Planning Department
Created By: Brandon Creagan
Date Created: August 1, 2017
FORT PIERCE, FL
THE SUNRISE CITY
St. Lucie Blvd
Keen Road
Angle Road
Interstate 95
Orange Avenue
Kings Highway
Florida Turnpike
Okeechobee Road
Midway Road
Jenkins Road
Hartman Road
McNeil Road
Edwards Road
Glades Cut Off Road
Selvitz Road
S. 25th Street
N. 25th Street
Old Dixie Hwy
Avenue D
Delaware Avenue
Virginia Avenue
7th Street
Olender Ave
Sunrise Blvd
US Highway 1
N. Causeway (A1A)
Seaway Drive (A1A)
Ocean Drive (A1A)
SR Highway A1A
Indian River Drive
Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Appendix E

Previously Recorded Significant Resources and Locally-Designated Historic Districts

Table 1: Previously Recorded Significant Resources, and Previously Recorded and Locally-Designated Historic Districts Within and Adjacent to the Downtown Fort Pierce Trail

FMSF No.	Site Name/Address	Year Built	Resource Type/Style	SHPO Evaluation
8SL799	Sunrise Theater / 117 S 2nd Street	1923	Building	National Register–Listed
8SL1141	Moore's Creek Bridge	1925	Roadway Bridge	National Register–Listed
8SL1666	Dixie Highway	1914 or earlier	Road	National Register–Eligible
8SL2799	Downtown Historic District	c. 1882	Historic District	National Register–Ineligible
8SL3014	FEC Railroad-Lake Harbor Branch	1892	Railroad	National Register–Eligible
8SL3191	Bridge at Mile Post 240.1	c. 1961	Railway Bridge	National Register–Eligible
8SL2801	Edgar Town Historic District	c. 1870s	Historic District	Not Evaluated
8SL2802	River's Edge Historic District	c. 1900	Historic District	National Register–Ineligible

Table 2: Previously Recorded Significant Resources, and Previously Recorded and Locally-Designated Historic Districts Within and Adjacent to the Highwayman Gap Trail Alternatives

FMSF No.	Site Name/Address	Year Built	Resource Type/Style	SHPO Evaluation
8SL3014	FEC Railroad-Lake Harbor Branch	1892	Railroad	National Register–Eligible



Previously Recorded Significant Resources and Previously Recorded and Locally-Designated Historic Districts

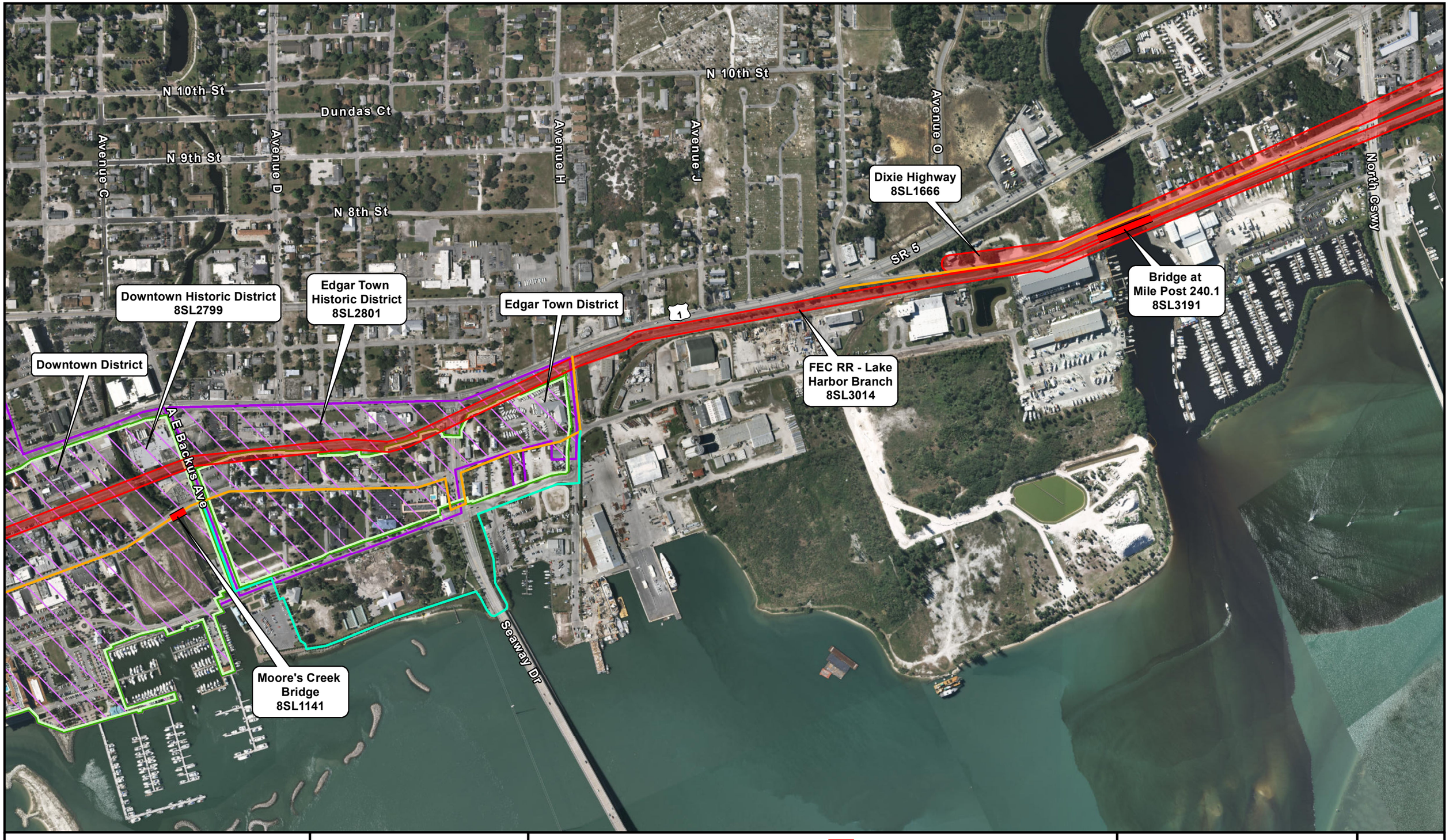
Sun Trail - Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail Gap

- Primary Route
- East Alternate 1
- East Alternate 2
- River Walk Alternative
- South Alternate 1
- South Alternate 2
- National Register-Listed or Eligible
- Historic District (FMSF Boundaries)
- Historic District (Local Boundaries)

City of Fort Pierce, St. Lucie County

0 100 200 Meters

Map 1



Previously Recorded Significant Resources and Previously Recorded and Locally-Designated Historic Districts

Sun Trail - Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail Gap

- Primary Route
- East Alternate 1
- East Alternate 2
- River Walk Alternative
- South Alternate 1
- South Alternate 2
- National Register-Listed or Eligible
- Historic District (FMSF Boundaries)
- Historic District (Local Boundaries)

City of Fort Pierce, St. Lucie County

0 100 200 Meters

Map 2

Appendix F

Florida Natural Areas Inventory (FNAI) Standard Data Report

FLORIDA Natural Areas INVENTORY

1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

April 5, 2018

Beth Zimmer
Atkins
800 Waterford Way, Suite 700
Miami, FL 33126

Dear Ms. Zimmer,

Thank you for requesting information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project: SUN Trail Indian Hills Historic Highwayman Trail Gap Feasibility Study

Date Received: 04/02/18

Location: St. Lucie County

Element Occurrences

A search of our maps and database indicates that we currently have several element occurrences mapped in the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The element occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, element occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant. Extirpated element occurrences will be marked with an 'X' following the occurrence label on the enclosed map.

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

Florida Resources and Environmental Analysis Center

Institute of Science and Public Affairs

The Florida State University

The Inventory always recommends that professionals familiar with Florida's flora and fauna conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

Thank you for your use of FNAI services. An invoice will be mailed separately. If I can be of further assistance, please contact me at (850) 224-8207 or at kbrinegar@fnai.fsu.edu.

Sincerely,

Kerri Brinegar

Kerri Brinegar
GIS / Data Services

Encl

SUN Trail Indian Hills Historic Highwayman Trail Gap

Site boundaries are approximate.

St. Lucie County

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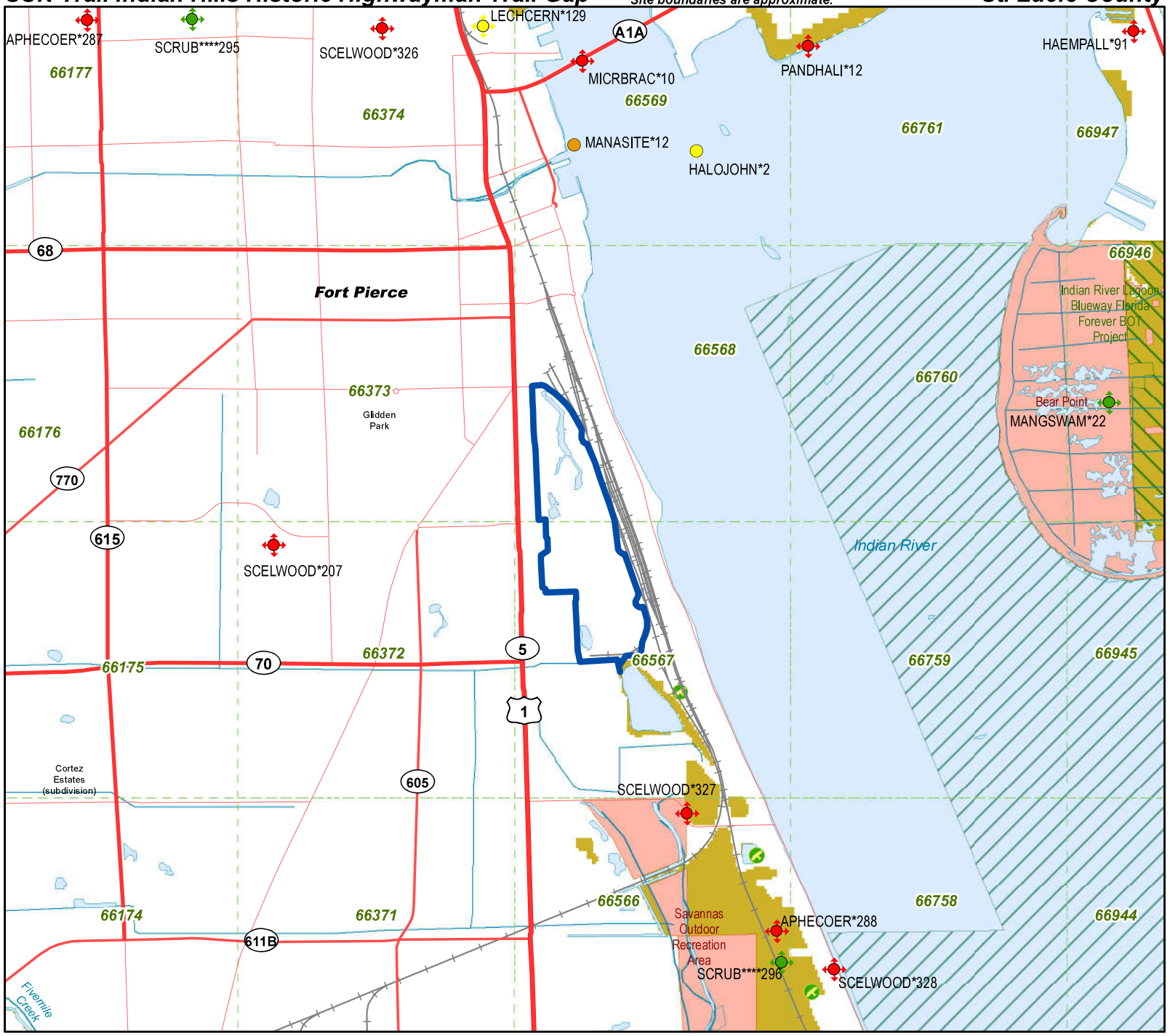
FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive
- Point Indicates General Vicinity of Element
- U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

NOTE
Map should not be interpreted without accompanying documents.

Map produced by KAB
4/2/2018

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FNAI ELEMENT OCCURRENCE REPORT on or near

SUN Trail Indian Hills Historic Highwayman Trail Gap Feasibility Study

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
APHECOER*288	*Aphelocoma coerulescens*	Florida Scrub-Jay	G2	S2	T	FT	1980-12	OAK SCRUB AND SAND PINE SCRUB.	1980-12 AND 1980-11: SCRUB JAYS REPORTED BY WILLIAM AND HELEN.
HALOJOHN*2	*Halophila johnsonii*	Johnson's seagrass	G2	S2	T	E	1988-10-17	SANDY SHOAL IN INDIAN RIVER LAGOON.	PLANTS FORM SPARSE LOW MATS FEW INCHES HIGH IN WATER 1.1' DEEP ON INCOMING TIDE (11:30 AM EDT); INTERSPERSED WITH HALODULE WRIGHTII.
LECHCERN*129	*Lechea cernua*	nodding pinweed	G3	S3	N	T	1987-07-26	1987-07-26: TALL, LEAFY SAND PINE, ARISTIDA, QUERCUS MYRTIFOLIA, ASCLEPIAS CURTISSII, POLYGONELLA, Q. INOPINA, HELIANTHENUM, VITRIS, OPUNTIA, SILKGRASS, SELAGINELLA, PALAFOX, RHYCHOSPORA MEGACARPA, Q. GEMINATA, SMILAX, Q. CHAPMANII, SERENOA, ROSEMARY, CL	1987-07-26: ON SITE(U92MIN01FLUS).
MANASITE*12	Manatee Aggregation Site		GNR	SNR	N	N	1988	WARM-WATER EFFLUENT FROM POWER PLANT AT THE MOUTH OF MOORE CREEK WHERE IT ENTERS A LARGE COASTAL RIVER.	UP TO 44 MANATEES USE THIS SITE DURING THE WINTER.
MANGSWAM*22	Mangrove swamp		G5	S4	N	N	1999	No general description given	2010: Prior to the 2010 natural community reclassification effort this EO had been known as Estuarine tidal swamp EO number 22 (see U10FNA01FLUS for updated community descriptions). 1999: Update to last obs date was based on interpretation of aerial phot
MICRBRAC*10	*Microphis brachyurus*	Opossum Pipefish	G4G5	S2	SC	N	1981	No general description given	Specimens collected.
PANDHALI*12	*Pandion haliaetus*	Osprey	G5	S3S4	N	SSC*	1984	THROUGHOUT AREA.	SIGNIFICANT MIGRATORY AREA, UP TO 80 INDIVIDUALS CAN BE FOUND DAILY IN GENERAL AREA.
SCELWOOD*207	*Sceloporus woodi*	Florida Scrub Lizard	G2G3	S2S3	N	N	1930-08-13	No general description given	8 SPEC. COLL. 13 AUG. 1930 BY O.C. VAN HYNING (AMNH-58573-80).
SCELWOOD*326	*Sceloporus woodi*	Florida Scrub Lizard	G2G3	S2S3	N	N	1986-05-12	Coastal scrub	1986-05-12: K.E. Enge, GFC, observation. See Enge et al (1986; Coop Unit Tech Rep No 26).

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FNAI ELEMENT OCCURRENCE REPORT on or near

SUN Trail Indian Hills Historic Highwayman Trail Gap Feasibility Study

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
SCELWOOD*327	*Sceloporus woodi*	Florida Scrub Lizard	G2G3	S2S3	N	N	1986-05-12	Coastal scrub	1986-05-12: K.E. Enge, GFC, observation. See Enge et al (1986; Coop Unit Tech Rep No 26).
SCELWOOD*328	*Sceloporus woodi*	Florida Scrub Lizard	G2G3	S2S3	N	N	1986-05-12	Coastal scrub	1986-05-12: K.E. Enge, GFC, observation. See Enge et al (1986; Coop Unit Tech Rep No 26).
SCRUB****296	Scrub		G2	S2	N	N	2004-09-18	2004-09-18: Large areas of open white sand with scrub oaks and scattered clumps of sand pine scrub (PNDTAN01FLUS). OAK SCRUB AND SAND PINE SCRUB.	2004-09-18: Disturbed scrub on pivate land and along railroad (PNDTAN01FLUS).

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Florida Natural Areas Inventory

Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 66567					
Documented					
Scrub		G2	S2	N	N
Likely					
Aphelocoma coerulescens	Florida Scrub-Jay	G2	S2	LT	FT
Mycteria americana	Wood Stork	G4	S2	LT	FT
Potential					
Acipenser oxyrinchus oxyrinchus	Atlantic Sturgeon	G3T3	S1	LE	FE
Asimina tetramera	Four-petal Pawpaw	G1	S1	LE	E
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	ST
Chamaesyce cumulicola	Sand-dune Spurge	G2	S2	N	E
Cladonia perforata	Perforate Reindeer Lichen	G1	S1	LE	E
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	T
Conradina grandiflora	Large-flowered Rosemary	G3	S3	N	T
Ctenogobius stigmaturus	Spottail Goby	G2	S2	N	N
Dicerandra immaculata	Lakela's Mint	G1	S1	LE	E
Drymarchon couperi	Eastern Indigo Snake	G3Q	S3	LT	FT
Eretmochelys imbricata	Hawksbill Sea Turtle	G3	S1	LE	FE
Forestiera segregata var. pinetorum	Florida Pinewood Privet	G4T2	S2	N	N
Glandularia maritima	Coastal Vervain	G3	S3	N	E
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
Halophila johnsonii	Johnson's Seagrass	G2	S2	LT	E
Harrisia fragrans	Fragrant Prickly Apple	G1	S1	LE	E
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	T
Lechea divaricata	Pine Pinweed	G2	S2	N	E
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	E
Polygala smallii	Tiny Polygala	G1	S1	LE	E
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	T
Rivulus marmoratus	Mangrove Rivulus	G4G5	S3	SC	N
Rostrhamus sociabilis	Snail Kite	G4G5	S2	LE	N
Sceloporus woodi	Florida Scrub Lizard	G2G3	S2S3	N	N
Schizachyrium niveum	Scrub Bluestem	G1G2	S1S2	N	E
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC
Setophaga discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Trichechus manatus	West Indian Manatee	G2	S2	LE, PT	FE
Matrix Unit ID: 66568					
Likely					
Scrub		G2	S2	N	N
Trichechus manatus	West Indian Manatee	G2	S2	LE, PT	FE
Potential					
Acipenser oxyrinchus oxyrinchus	Atlantic Sturgeon	G3T3	S1	LE	FE
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	ST
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	T

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

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Florida Natural Areas Inventory

Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Conradina grandiflora	Large-flowered Rosemary	G3	S3	N	T
Ctenogobius stigmaturus	Spottail Goby	G2	S2	N	N
Drymarchon couperi	Eastern Indigo Snake	G3Q	S3	LT	FT
Eretmochelys imbricata	Hawksbill Sea Turtle	G3	S1	LE	FE
Forestiera segregata var. pinetorum	Florida Pinewood Privet	G4T2	S2	N	N
Glandularia maritima	Coastal Vervain	G3	S3	N	E
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
Halophila johnsonii	Johnson's Seagrass	G2	S2	LT	E
Lechea cernua	Nodding Pinweed	G3	S3	N	T
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	E
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	T
Rivulus marmoratus	Mangrove Rivulus	G4G5	S3	SC	N
Rostrhamus sociabilis	Snail Kite	G4G5	S2	LE	N
Sceloporus woodi	Florida Scrub Lizard	G2G3	S2S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC
Setophaga discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

Elements and Element Occurrences

An **element** is any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

Element Ranking and Legal Status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4 = Apparently secure globally (may be rare in parts of range).
G5 = Demonstrably secure globally.
GH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
GX = Believed to be extinct throughout range.
GXC = Extirpated from the wild but still known from captivity or cultivation.
G#? = Tentative rank (e.g., G2?).
G#G# = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
G#T#Q = Same as above, but validity as subspecies or variety is questioned.
GU = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
GNA = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
GNR = Element not yet ranked (temporary).
GNRTNR = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

S1 = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2 = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
S4 = Apparently secure in Florida (may be rare in parts of range).
S5 = Demonstrably secure in Florida.
SH = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
SX = Believed to be extirpated throughout Florida.
SU = Unrankable; due to a lack of information no rank or range can be assigned.
SNA = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
SNR = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
E = Endangered: species in danger of extinction throughout all or a significant portion of its range.
E, T = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
E, PDL = Species currently listed endangered but has been proposed for delisting.
E, PT = Species currently listed endangered but has been proposed for listing as threatened.
E, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
T = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
PE = Species proposed for listing as endangered
PS = Partial status: some but not all of the species' infraspecific taxa have federal
PT = Species proposed for listing as threatened
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service
FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
FXN = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
N = Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: http://www.doacs.state.fl.us/pi/.

E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
N = Not currently listed, nor currently being considered for listing.

Element Occurrence Ranking

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g. an immediate threat to an EO by local development pressure could lower an EO rank).

A = Excellent estimated viability
A? = Possibly excellent estimated viability
AB = Excellent or good estimated viability
AC = Excellent, good, or fair estimated viability
B = Good estimated viability
B? = Possibly good estimated viability
BC = Good or fair estimated viability
BD = Good, fair, or poor estimated viability
C = Fair estimated viability
C? = Possibly fair estimated viability
CD = Fair or poor estimated viability
D = Poor estimated viability
D? = Possibly poor estimated viability
E = Verified extant (viability not assessed)
F = Failed to find
H = Historical
NR = Not ranked, a placeholder when an EO is not (yet) ranked.
U = Unrankable
X = Extirpated

*For additional detail on the above ranks see: http://www.natureserve.org/explorer/eorankguide.htm

FNAI also uses the following EO ranks:

H? = Possibly historical
F? = Possibly failed to find
X? = Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).

ON SALE NOW

Atlas of Florida's Natural Heritage

Biodiversity, Landscapes, Stewardship, and Opportunities

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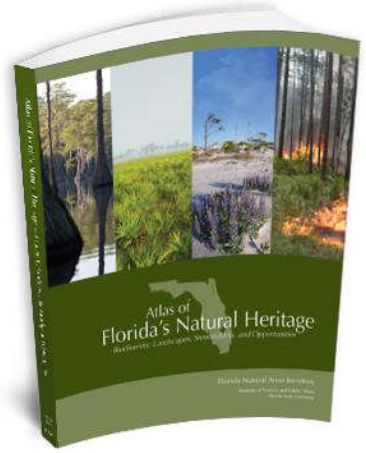

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ECOLOGY AND DEVELOPMENT-RELATED HABITAT REQUIREMENTS OF THE FLORIDA SCRUB JAY (*APHELOCOMA COERULESCENS COERULESCENS*)

NONGAME WILDLIFE PROGRAM
TECHNICAL REPORT NO. 8



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FLORIDA GAME AND FRESH WATER FISH COMMISSION
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32399-1600

APRIL 1991

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This publication provides guidelines to both developers and regulators where habitat protection for Florida scrub jays is desired. The recommendations in this publication reflect the development-related actions considered necessary by the authors and by staff of the Commission if the scrub jay is to survive outside existing protected lands. These do not, however, constitute rules or formal policies of the Florida Game and Fresh Water Fish Commission and are not legally binding on developers or on regulators that make decisions affecting scrub jays and scrub jay habitat.

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SECTION 1

RECOMMENDATIONS: DEVELOPMENT-RELATED HABITAT PRESERVATION FOR THE THREATENED FLORIDA SCRUB JAY

PREFACE

The recommendations presented in this section were developed by Mark Kopeny, nongame biologist with Florida Game and Freshwater Fish Commission, Office of Environmental Services, in consultation with biologists at Archbold Biological Station, the Commission, and other institutions. Many of the recommendations presented here are based on the research results that comprise Section 2 of this report, "Ecology and Habitat Requirements of the Threatened Florida Scrub Jay," prepared by John Fitzpatrick and Glen Woolfenden. These recommendations are applicable to Developments of Regional Impact and to any other land conversion activities within the range of the Florida scrub jay, and are intended for use by regulatory and review agencies.

ACKNOWLEDGMENTS

The preparation of this section involved the help of many individuals, each of whom gladly contributed their time and energy. Dave Breininger, Ray Fernald, Grace Iverson, Peter Merritt, Dick Roberts, and Brian Toland, all currently or recently involved in research on the Florida scrub jay, contributed significantly in the development of these recommendations by sharing unpublished information and reviewing earlier drafts. Mike Allen and Randy Kautz also were closely involved in developing these recommendations throughout the process. Many others, in academia, private enterprise, and state and federal agencies, were asked to comment on various parts of this section at one time or another and their assistance was always forthcoming. David Cook edited the final draft. Sharon Hunter and Traci Wallace provided indispensible secretarial support. We gratefully acknowledge everyone that contributed to this conservation effort for the Florida scrub jay.

DEFINITIONS

The following terms are used throughout this section.

COMPENSATE OFF-SITE, OFF-SITE COMPENSATION. To contribute land or money for the purchase of land in lieu of on-site protection of habitat for jays. Off-site compensation may be accomplished through participation in a mitigation park program, or by conveyance of property or property rights to an appropriate private conservation organization or state agency.

JAY, SCRUB JAY. Synonyms for Florida scrub jay.

JAY GROUP. One or more jays occupying a territory. A jay group may be composed of a breeding pair of adults, with or without helpers and young of the year, or may consist of a single, unpaired, territorial individual that is not a member of other jay groups on-site.

OFF-SITE. Outside the boundaries of a proposed development site.

ON-SITE. Within the boundaries of a proposed development site.

PRESERVE, PRESERVATION. To contribute habitat for the Florida scrub jay, either on-site (i.e., protection) or off-site (i.e., compensation).

PROTECT ON-SITE, ON-SITE PROTECTION. To establish one or more refuges for the Florida scrub jay on a proposed development site.

SATELLITE REFUGE. A protected area established on-site in Type I habitat. Satellite refuges are established when there is a large amount of Type I habitat on-site compared to the number of jay groups on-site. Satellite refuges are established 1) *in addition to territory refuges* when jays are on-site or 2) *in the absence of territory refuges* when jays are not onsite, but occur within normal dispersal distance of Type I habitat. The primary purpose of establishing satellite refuges is to secure a portion of the unoccupied scrub that is potential scrub jay habitat and is of critical importance in maintaining local jay populations.

SCRUB OAK SPECIES. Any of the following stunted, low-growing species of oak that occur on sandy soils within the range of the Florida scrub jay; *Quercus geminata*, *Q. chapmanii*, *Q. inopina*, *Q. myrtifolia*, *Q. minima*. Taxonomically confusing scrub oaks related to *Q. geminata* are sometimes lumped under the name *Q. virginiana*.

TERRITORY REFUGE. A protected area established on-site in Type I, Type II, and/or Type III habitat. Territory refuges are established on-site when one or more jays occur on-site. The primary purpose of territory refuges is to provide permanent habitat and other resources for each jay group onsite.

TYPE I HABITAT. Upland plant communities, assessed in one-acre plots, with greater than or equal to 15% cover of scrub oak species.

TYPE II HABITAT. Plant communities, assessed in one-acre plots, with percent cover of scrub oak species greater than zero but less than 15%.

TYPE III HABITAT. Native and improved uplands and seasonally dry wetlands within 1/4 mile of Type I or Type II habitat.

DICHOTOMOUS KEY

The following dichotomous key describes the intended step-by-step application of this section. The purpose of the key is to initiate the reader and to provide an overview. Recommendations per se are not presented in the key. It is necessary to read both sections of the report in order to understand and implement the recommendations contained in it.

1a. PROPOSED DEVELOPMENT IS WITHIN THE CURRENT RANGE OF SCRUB JAYS. Inventory habitat on-site (p. 13). Go to couplet 2.

1b. PROPOSED DEVELOPMENT IS *NOT* WITHIN THE CURRENT RANGE OF SCRUB JAYS. No habitat preservation measures for scrub jays are recommended.

2a. TYPE I, II, OR III HABITAT EXISTS ON-SITE. Survey all Type I, II, and III habitat for scrub jays (pp. 13-15). Go to couplet 3.

2b. *NO* TYPE I, II, or III HABITAT EXISTS ON-SITE. No habitat preservation measures for scrub jays are recommended.

3a. SCRUB JAYS OCCUR ON-SITE. Establish one or more territory refuges in Type I, II and/or III habitat. The total number of acres of habitat to be protected in territory refuge(s) equals 25 times the number of scrub jay groups on-site (p. 16). Off-site compensation may be an option in certain circumstances (p. 16). Go to couplet 4.

3b. *NO* SCRUB JAYS OCCUR ON-SITE. Search records for recent documentation of scrub jays within 5 miles of Type I habitat on the proposed development site (p. 15). Go to couplet 5.

4a. THE TOTAL NUMBER OF ACRES OF TYPE I HABITAT ON-SITE IS GREATER THAN THE TOTAL NUMBER OF ACRES DESIGNATED FOR TERRITORY REFUGE(S) IN 3a, ABOVE. Establish one or more satellite refuges in Type I habitat. The total number of acres to be protected equals: [(total number of acres of Type I habitat on-site) – (total number of acres preserved as territory refuges in 3a, above)] X 0.25 (p. 16). Off-site compensation may be an alternative to on-site protection in certain circumstances (p. 16). No further habitat preservation measures for scrub jays are recommended.

4b. THE TOTAL NUMBER OF ACRES OF TYPE I HABITAT ON-SITE IS LESS THAN THE TOTAL NUMBER OF ACRES DESIGNATED FOR TERRITORY REFUGE(S) IN 3a, ABOVE. No further habitat preservation measures for scrub jays are recommended.

5a. POST-1974 RECORDS EXIST OF SCRUB JAYS WITHIN 5 MILES OF TYPE I HABITAT ON THE PROPOSED DEVELOPMENT SITE. Establish one or more satellite refuges in Type I habitat (p. 16) or demonstrate that the jays in question have since been extirpated (p. 15). The total number of acres to be preserved equals 25% of all Type I habitat on-site. Off-site compensation may be an alternative to on-site protection in certain circumstances (p. 16). No further habitat preservation measures for scrub jays are recommended.

5b. *NO* POST-1974 RECORDS EXIST OF SCRUB JAYS WITHIN 5 MILES OF TYPE I HABITAT ON THE PROPOSED DEVELOPMENT SITE. No further habitat preservation measures for scrub jays are recommended.

SUBSECTION 1.1
INTRODUCTION

STATUS OF THE FLORIDA SCRUB JAY

The statewide population of the Florida scrub jay (*Aphelocoma coerulescens coerulescens*) was recently estimated at about 7,000 to 11,000 birds (Breininger 1989). Over half of the remaining jays in the state occur on and around two large, federally owned tracts of land: Ocala National Forest and Merritt Island National Wildlife Refuge. Breininger (1989) estimated the Merritt Island population to be about 1,400-3,600 birds. Cox (1987) estimated the Ocala National Forest population to be 2,600-3,400 birds. Based on current management practices in these two tracts and their effects on Florida scrub jays, it is doubtful that the number of jays on these two federal properties will remain stable or increase; declines are likely. Extant but fragmented habitat on the Lake Wales Ridge in Highlands and Polk counties supports the third large concentration of jays. Beyond these three population centers, the Florida scrub jay occurs in widely scattered populations inhabiting patches of scrub along the interior and coastal sand ridges of the Florida peninsula.

Cox (1987) estimated that the number of jays statewide probably has declined by 50% or more over the last 100 years. More recent information indicates that 50% is almost certainly an underestimate of the statewide decline. The estimated population loss along the Lake Wales Ridge, considered to have been at the heart of the species' range prior to human settlement, is 80% or more. This estimate is based on the amount of scrub habitat that has been destroyed or otherwise rendered unsuitable for jays.

The decline of the Florida scrub jay throughout its present and former range is attributed almost entirely to the loss of Florida's scrub communities to agriculture, silviculture, and commercial and residential development. The Florida scrub jay has been classified as Threatened by the Florida Game and Fresh Water Fish Commission since 1975 and by the U.S. Fish and Wildlife Service since 1987.

PATTERNS OF HABITAT USE BY THE FLORIDA SCRUB JAY

The Florida scrub jay is strongly associated with several Florida scrub communities, and also will use *adjacent* non-scrub habitats of certain types. However, Florida scrub jays persist only in areas where one or more species of scrub oaks (*Quercus* spp.) occur, even if only vestigially represented. Prior to human settlement, virtually all these natural scrub communities were maintained by frequent natural fires.

Florida scrub jays are most abundant in open, oak-dominated scrub communities of the interior and Atlantic coast sand ridges of the Peninsula. Examples of optimal habitat include xeric oak scrub (Figures 1.1-1.2), open sand pine scrub (Figure 1.3), open scrubby flatwoods with slash pines (Figure 1.4), and rosemary scrub (Figure 1.5).

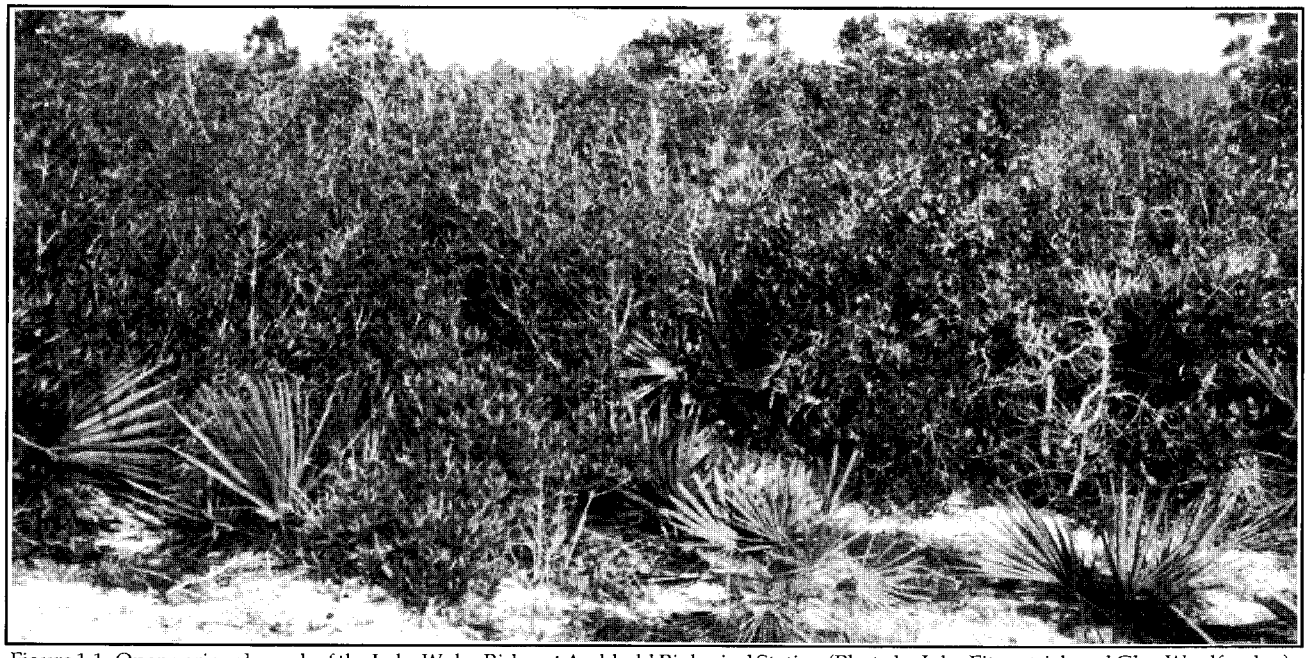

Figure 1.1. Open xeric oak scrub of the Lake Wales Ridge at Archbold Biological Station (Photo by John Fitzpatrick and Glen Woolfenden).

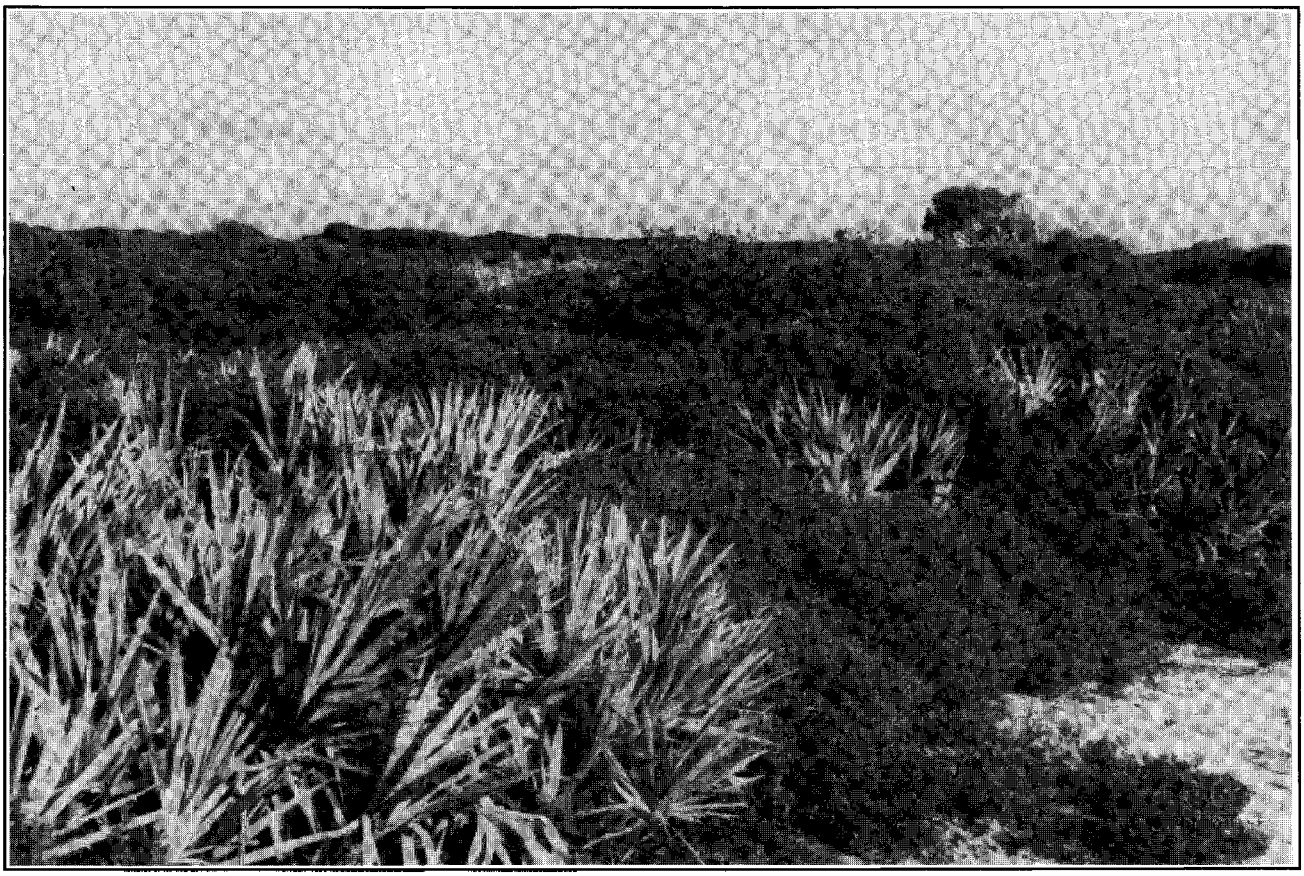

Figure 1.2. Oak-palmetto scrub of the Atlantic coast in Brevard County (Photo by Dave Breininger).

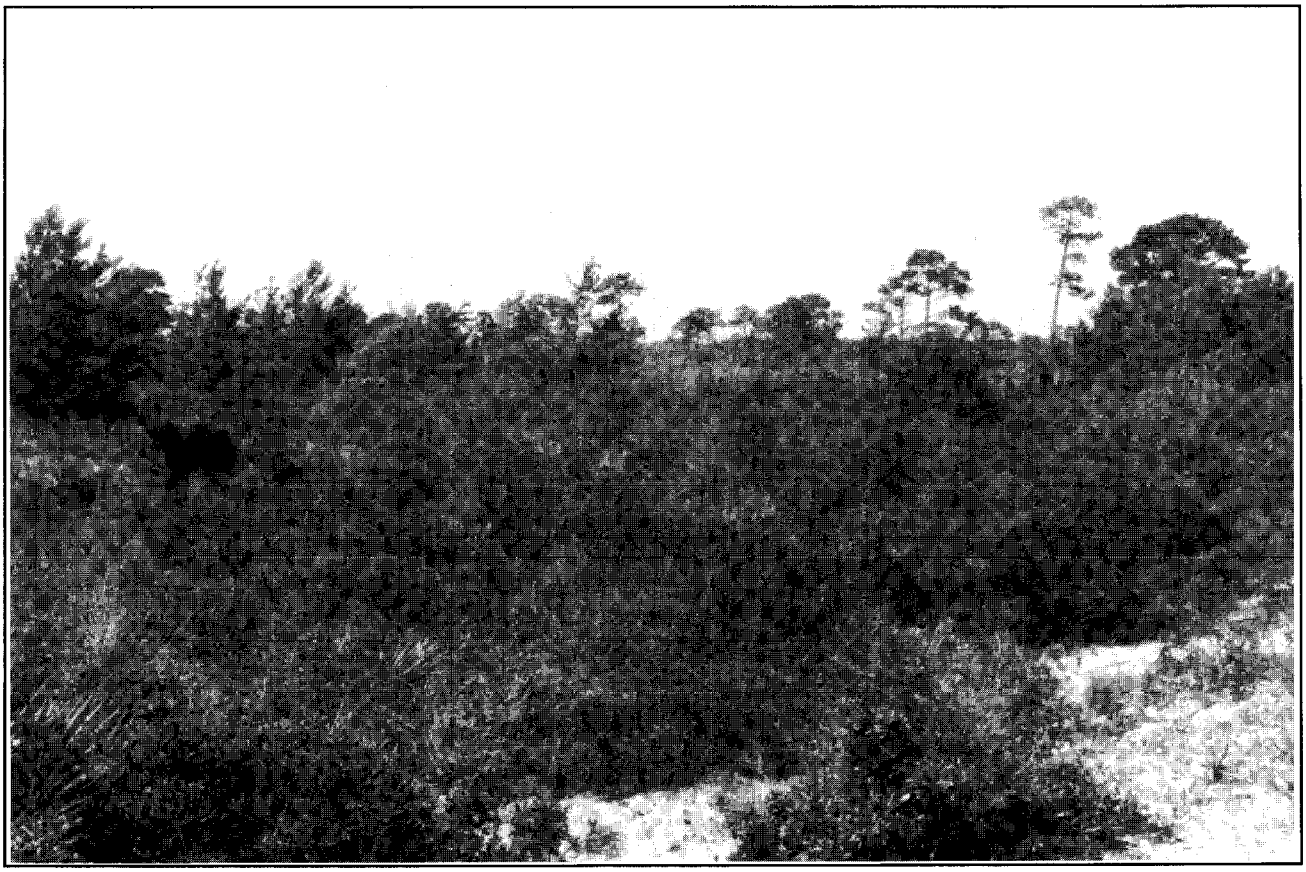

Figure 1.3. Early successional sand pine scrub of the Southern Atlantic Coast, at Jonathan Dickinson State Park, Martin County (Photo by Judith C. Norton).

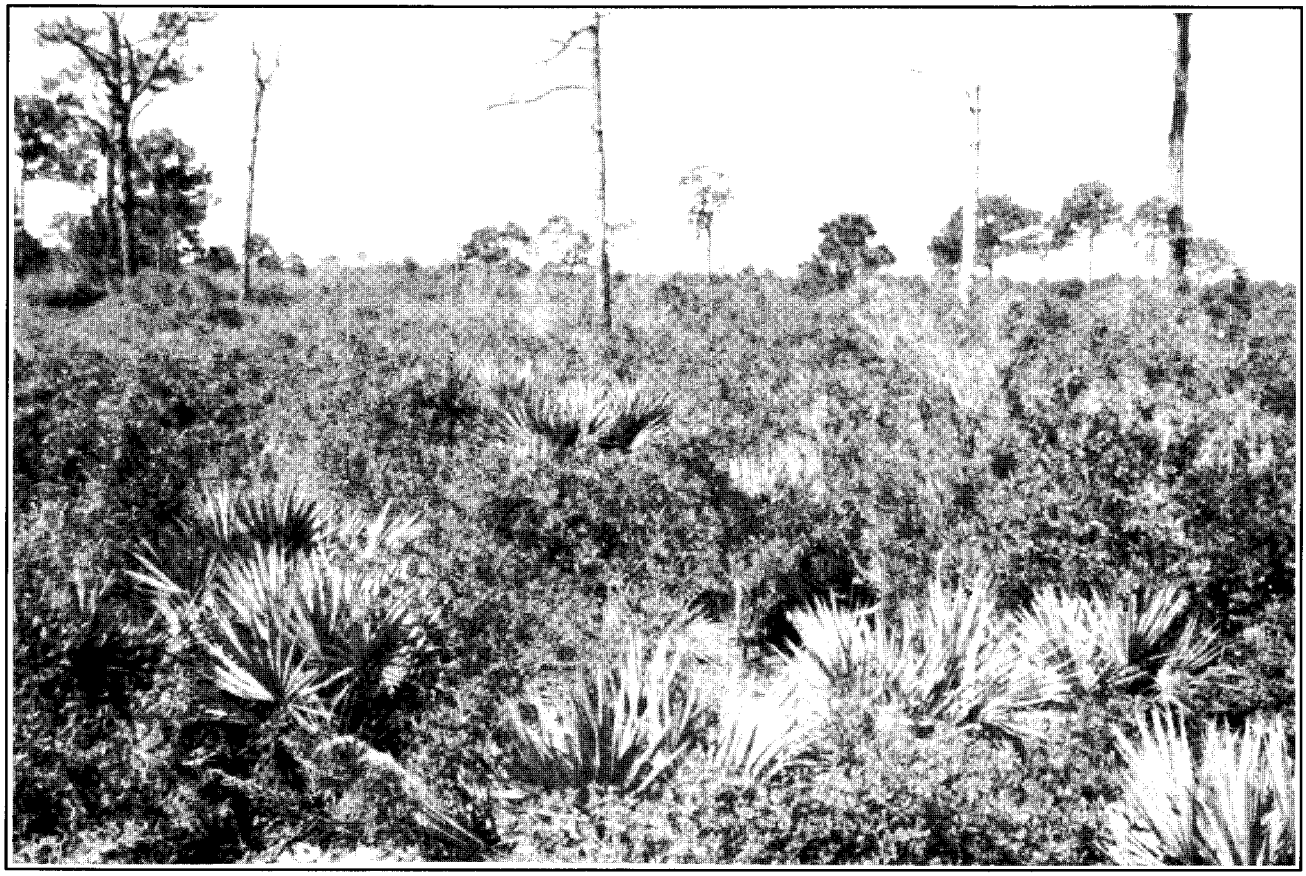

Figure 1.4. Scrubby slash pine flatwoods near the Atlantic Coast in Brevard County (Photo by Dave Breininger).

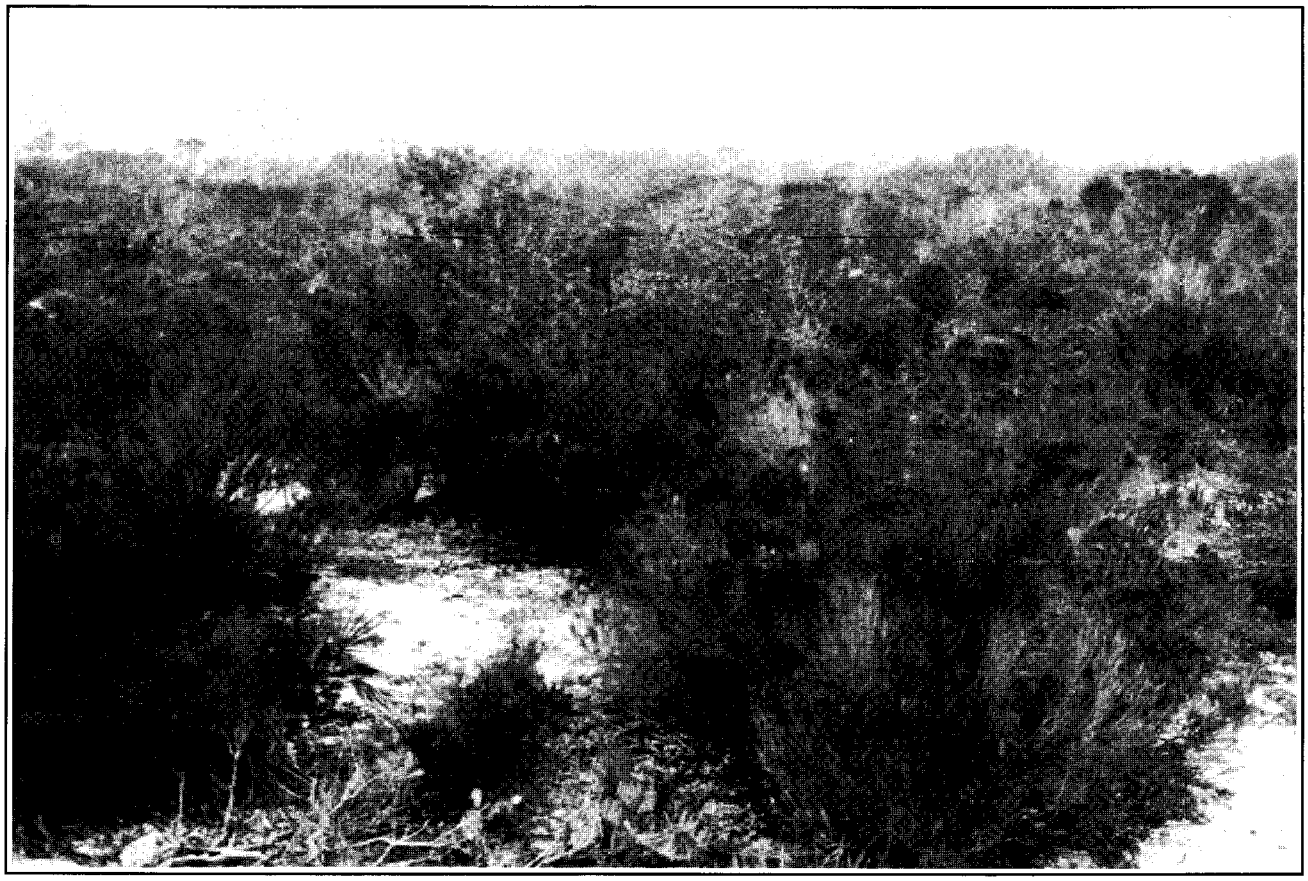

Figure 1.5. Rosemary scrub of the Lake Wales Ridge at Archbold Biological Station (Photo by John Fitzpatrick and Glen Woolfenden).

Land conversion in Florida has resulted in extensive reduction, fragmentation and insularization of Florida's fire-maintained scrub communities. Consequently, natural fires burn fewer acres, and only a fraction of Florida's remaining oak-dominated scrub communities is in a condition that can support a stable (i.e., not declining) population of the jays. Fire-suppressed scrub, with a dense, tall understory and/or an encroaching canopy of pines, is low quality habitat for Florida scrub jays. Examples depicted here are unburned interior and coastal xeric oak scrub (Figures 1.6-1.7) and mature sand pine scrub (Figure 1.8).

Many scrub areas are subjected to direct human disturbance (mechanical and chemical treatment of vegetation, altered hydrology, etc.), *often in addition to* fire-suppression. Certain of these habitats are used by scrub jays in low, and usually decreasing, densities (Figures 1.9-1.12). Cox (1987) depicts various successional stages of sand pine scrub after clear-cutting and sand pine seeding in the Ocala National Forest. Shortly after seeding (Cox's figures 29 and 30) the habitat lacks scrub jays. During the intervening few years the jays are present (Cox's figures 28 and 4). Fernald (1989) depicts several examples of degraded coastal scrub (Fernald's figure 14) and overgrown scrub (Fernald's figure 13), as well as scrub acceptable to the jays (Fernald's figures 8 and 9).

Fragmentation itself promotes changes in structure and species composition in the scrub community because of changed species-area relationships and edge effects. Scrub areas subjected to severe or multiple forms of degradation may show only remnants of the original community composition, and are difficult to categorize according to most existing schemes for classifying native vegetation. Fernald's (1989) treatment of the remaining scrub in the Treasure Coast region is the most useful classification scheme available in this respect.

Florida scrub jays use human-altered scrub-like landscapes in some parts of the state. Individual territories may be dissected by residential dwellings, roads, recreational areas, etc. In these situations, jays often use non-scrub habitat in conjunction with remnant patches of scrub, deviating somewhat from ecology and behavior seen in less disturbed areas. Few data exist to indicate whether Florida scrub jays in these situations maintain stable populations in the absence of immigration from source populations in nearby native scrub.

Given the severity of the problems confronting the Florida scrub jay, *all* areas occupied by jays are significant. Long-term population persistence is most likely under optimal habitat conditions (Figures 1.1-1.3) across expansive (several square miles) tracts of protected xeric oak scrub. Areas that are in less suitable condition may in fact represent habitat sinks that siphon dispersers from nearby jay source pools. These areas nevertheless may be indispensable in maintaining the abundance and distribution of jays in Florida because they provide corridors for dispersal and allow overall populations to be larger in areas that otherwise would support smaller populations.



Figure 1.6. Xeric oak scrub of the Lake Wales Ridge, unburned for 60 years, at the Archbold Biological Station. Scrub jays no longer exist here (Photo by John Fitzpatrick).

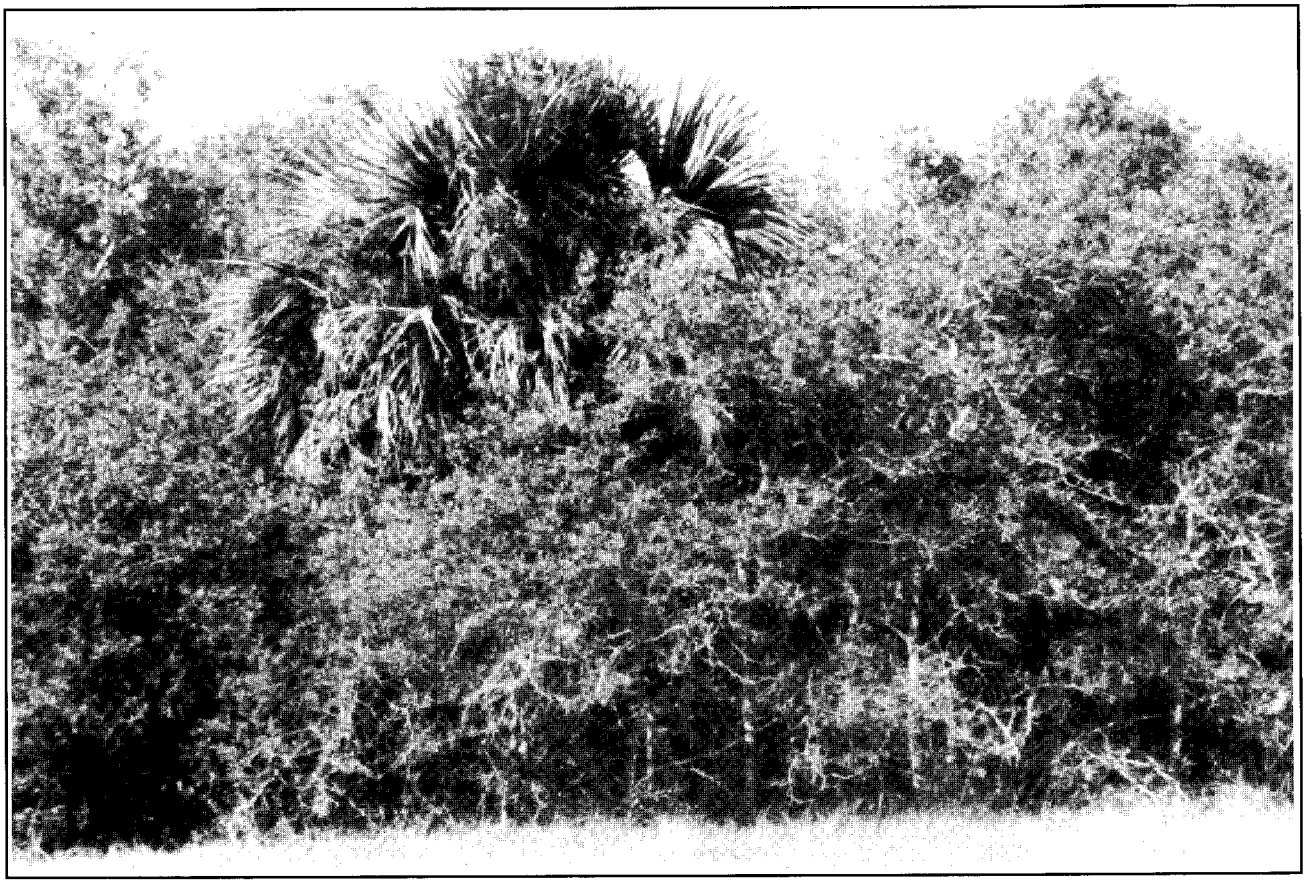

Figure 1.7. Unburned oak-palmetto coastal scrub in Brevard County. Scrub jays live along the edge of this overgrown, dense habitat (Photo by Dave Breininger).



Figure 1.8. Remnant coastal sand pine scrub in Indian River County. Scrub jays occupy the edges of this habitat (Photo from Fernald 1989, figure 4).



Figure 1.9. Cattle pasture with palmetto and scrub oaks on the Lake Wales Ridge in Highlands County. Scrub jays occur here in low densities. Note resident jay atop tall oak (Photo by John Fitzpatrick and Glen Woolfendenden).

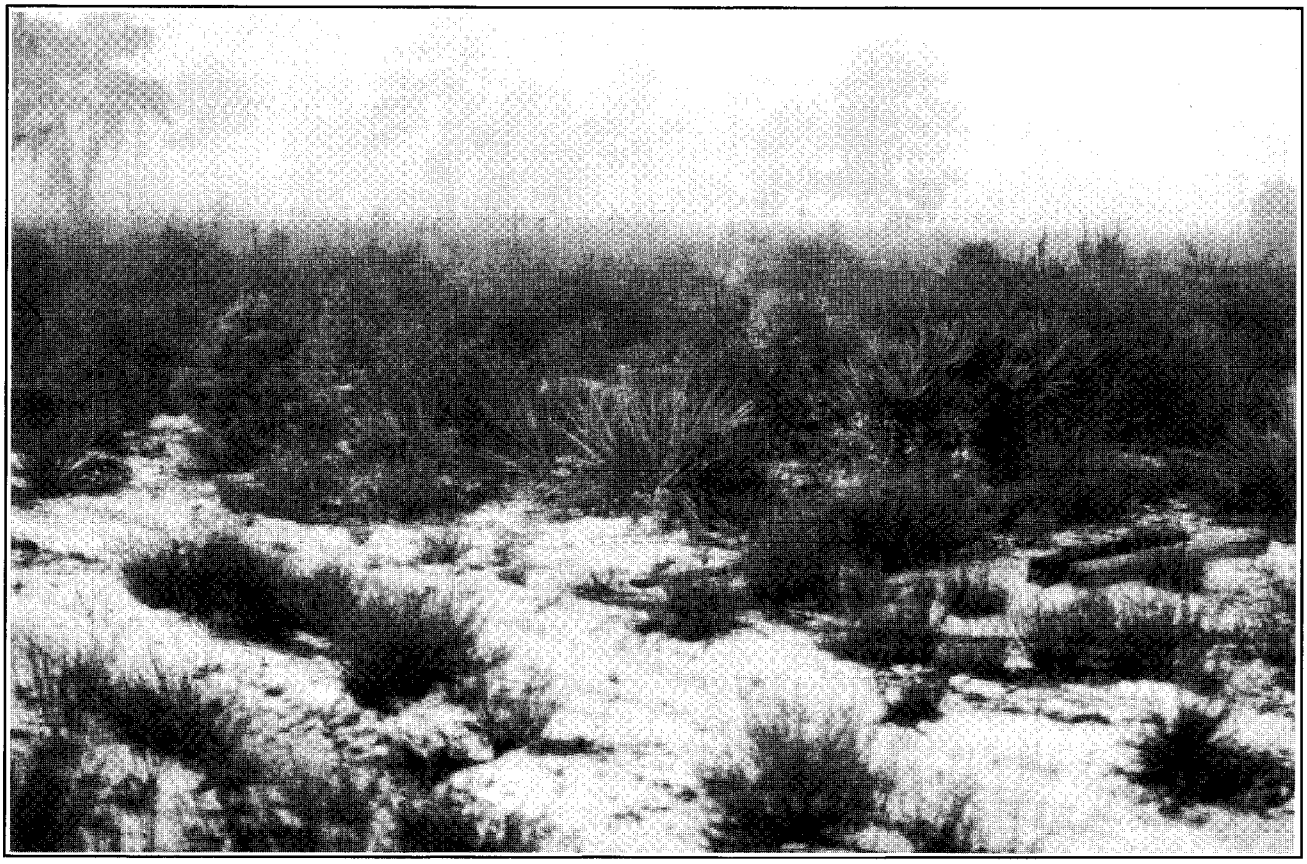

Figure 1.10. Recently-chopped xeric oak scrub on the Lake Wales Ridge in Highlands County. Scrub jays occur here in low densities (photo by John Fitzpatrick and Glen Woolfenden).



Figure 1.11. Partially disturbed, remant coastal scrub community in Jupiter, Palm Beach County (Radnor Tract). Jays nested at this site in 1989 and 1990 (Photo by Grace Iverson).

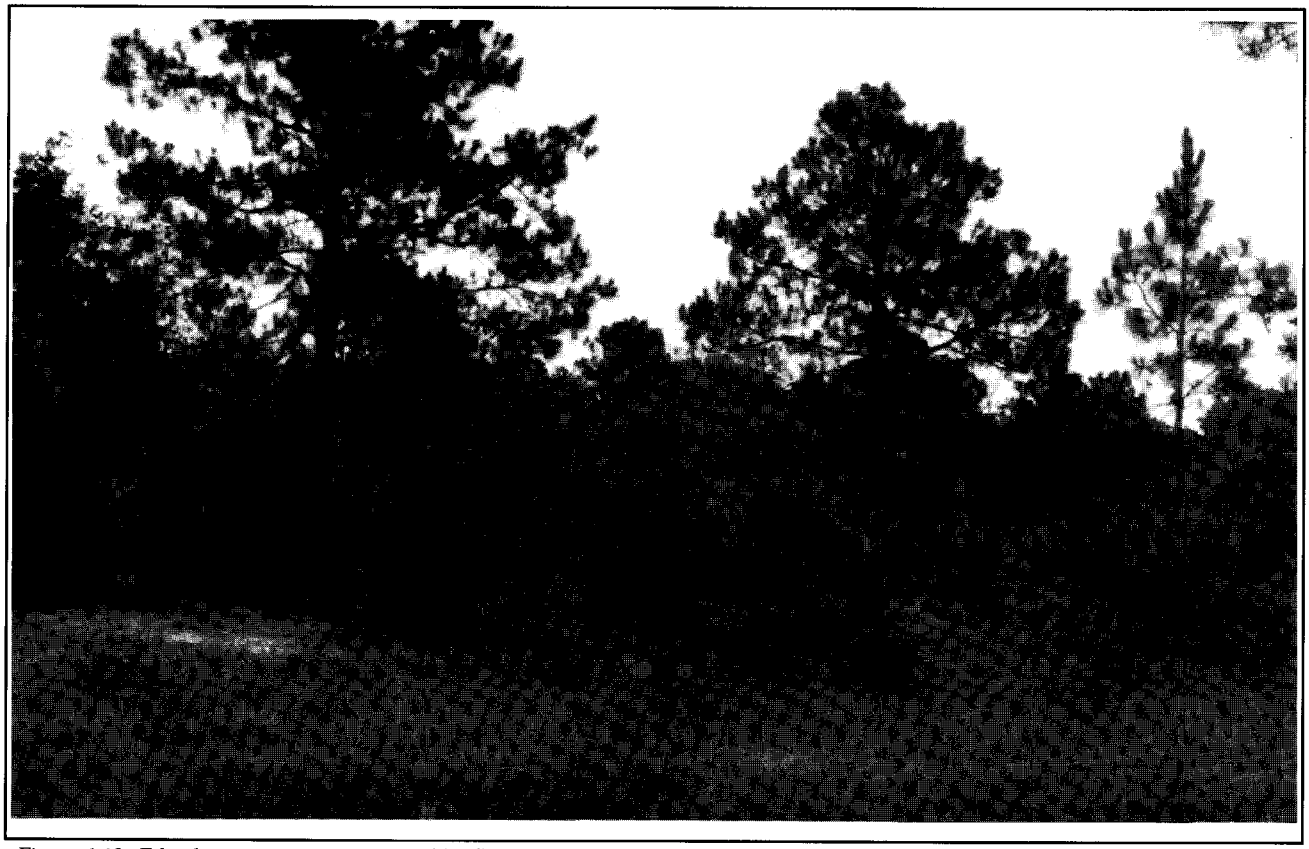

Figure 1.12. Edge between overgrown scrubby flatwoods and disturbed open area in Charlotte County. This site is occupied by scrub jays (Photo by Rick Gooch).

CONSERVATION GOALS AND APPROACH TO THE PROBLEM

The primary conservation goal of these recommendations is to minimize further decline of the remaining Florida scrub jay population resulting from habitat conversion. This is a difficult goal because of human demands on the species' fundamental resource, Florida oak scrub communities.

If wild populations of Florida scrub jays are to persist, they will reside in a mosaic of protected and unprotected oak scrub islands. Most islands will be small relative to scrub jay population dynamics, but will be supported by a network of large preserves with enduring populations. Small oak scrub islands periodically may lose their jays through random extirpation events. Islands that remain suitable or are restored to that condition may be recolonized. Long distances between vacated habitat islands and resident populations of jays impede recolonization, and seemingly suitable habitat patches may remain unoccupied for long periods. Relocation experiments currently in progress may provide a management tool to reduce recolonization time.

To reduce further loss of scrub jay habitat we recommend development-related habitat preservation and management on two levels: 1) protection of an adequate amount of habitat for every jay group occurring on a proposed development site (i.e., territory refuges), and 2) protection of a portion of suitable or recoverable habitat on-site additional to that recommended in level 1 (i.e., satellite refuges) when there is a great deal of such habitat on-site relative to the number of jay groups present. We recommend implementing these measures whenever: 1) jays are on-site, or 2) jays are not on-site, but important habitat exists on-site, any portion of which is within normal dispersal distance (5 miles) of jays off-site.

Our recommendations emphasize on-site protection. Off-site compensation is a preservation measure that we anticipate being implemented only infrequently. When off-site compensation is implemented in conjunction with on-site protection, decisions on which tracts of habitat to eliminate and which to protect must be based on optimizing the quality of protected habitat on-site.

HOW TO USE THE INFORMATION PRESENTED IN THIS SECTION

Areas of Florida Where These Recommendations are Applicable.

The current geographic range of the Florida scrub jay extends south to Lee, Hendry, Collier, and Palm Beach counties. To the north, the range extends to Levy, Alachua, Bradford, Clay, and St Johns counties. These recommendations apply to any proposed conversion of uplands within this range.

Organization of Information in this Section.

These recommendations are organized in three parts. Subsection 1.2 describes procedures for determining if a proposed development will negatively affect jays. This determination is based on the number of jay groups on-site as well as the amount of habitat important to jays. Subsection 1.3 describes the number of acres and, to some extent, the types of habitat that should be preserved in cases where development activities will negatively affect jays. Subsection 1.4 describes procedures for implementing the preservation measures: how to design refuges, which habitat parcels to incorporate in refuges, and how to manage refuges.

SUBSECTION 1.2
PROCEDURES FOR DETERMINING IF PROPOSED DEVELOPMENT WILL NEGATIVELY AFFECT SCRUB JAYS

HABITAT INVENTORY AND MAPPING

The primary objective of these procedures is to develop a vegetation map that depicts all plant communities on-site that are used by the Florida scrub jay or have the potential to be used by jays. Map plant communities either on a 7.5' USGS topographic map or on an aerial photograph at a scale of no more than 400 feet per inch. The vegetation map must show all forms of existing development (e.g., roads, buildings). The vegetation map 1) provides information needed to survey the site for jays, and, 2) provides information needed for planning refuges, if any are to be established on-site.

Use the Florida Land Use Cover and Forms Classification System (Florida Department of Transportation 1985) to map the entire proposed development site. The following classes are especially important in identifying potential habitat of the Florida scrub jay (number in parentheses represents hierarchical designation in the classification system): Improved, unimproved and woodland pastures (211, 212, 213), citrus groves (221), rangeland (310-330), pine flatwoods (411), long-leaf pine-xeric oak (412), sand pine (413), sand-pine plantations (4411), forest regeneration areas (443), sand other than beaches (720), disturbed rural land in transition without positive indicators of intended activity (741), disturbed burned areas (745).

Add a second level of information to the vegetation map. For purposes at hand, consider three types of habitat for jays. Two of these habitat types, collectively, include any and all areas where one or more species of scrub oak are present, even if only vestigially represented:

TYPE I HABITAT. Any upland plant community in which percent cover of the substrate by scrub oak species is 15% or more.

TYPE II HABITAT. Any plant community, not meeting the definition of Type I habitat, in which one or more scrub oak species is represented.

In most instances, Type I habitat is easily recognized as xeric oak scrub, scrubby pine flatwoods, scrubby coastal strand, or sand pine scrub. Conventional classification schemes are of less value in identifying or predicting the presence of Type II habitat; the presence of scrub oaks is the key indicator.

The third habitat type includes a variety of plant communities where scrub oak species are *not* represented, but that are nearby or adjacent to Type I or Type II habitat:

TYPE III HABITAT. Any upland or seasonally dry wetland within 1/4 mile of any area designated as Type I or Type II habitat.

Grid the vegetation map in 1-acre units. Label each acre that, upon field inspection, is identified as Type I, Type II, or Type III habitat. Qualitative field inspection normally will be adequate for distinguishing Type I from Type II habitat. If a quantitative approach is desired, we recommend that Breininger's (1981, 1989) modification of Canfield's (1941) line transect method be used. Because of the difficulties involved in successfully designing and executing a quantitative habitat analysis in scrub vegetation, we strongly recommend that sampling design, data collection, and data analysis be developed with the assistance of a plant ecologist experienced in quantitative techniques.

SURVEYING FOR SCRUB JAYS

Searching for Scrub Jays On-site.

The primary objective of these procedures is to obtain an accurate count of the number of jay groups on-site. Secondary objectives include mapping the location of each jay group and estimating the size and age constituency of each group.

The most effective method for surveying a site for jays is to traverse the area systematically, using a high quality tape recording of Florida scrub jay territorial scolding in an attempt to attract the jays. The recording should include clear examples of all typical territorial scolds, including the female "hiccup" call. Copies of taped vocalications may be obtained from Archbold Biological Station, P.O. Box 2057, Lake Placid, FL 33852.

Survey Design. Establish parallel line transects, and playback stations along each transect, on the vegetation map developed earlier. Space the transects and playback stations so that all Type I, II, and III habitat onsite will be sampled for jays (i.e., so that the taped calls unquestionably will be effectively broadcast across areas of concern). Distances between transects, and between stations along transects, depend on many factors, including the power of the speaker used for broadcasting the calls, topography, and the density of the surrounding vegetation. Adequate spacing between transects can be estimated roughly as the distance at which a person listening to the tape directly in front of the speaker perceives the "bird" to be no more than about 100 meters away. A distance of 100 to 200 meters between transects and between stations is generally adequate when using a good-quality, hand-held cassette player broadcasting at full volume.

Surveys should be carried out on calm, clear days about one hour after sunrise, and should terminate before midday

heat or wind. Surveys should not be conducted in winds stronger than a moderate breeze (5-8 mph), in mist or fog, or in precipitation exceeding a light, intermittent drizzle. Heat and especially wind lowers the tendency for jays to respond to distant territorial scolds, and wind reduces the distance over which recordings can be heard. Furthermore, jays are reluctant to fly on windy days regardless of hour or season.

Surveys should be conducted during: 1) spring (especially March), 2) fall (September and October), when territorial displays are most frequent and vigorous, and 3) mid-summer (July) when young of the year are independent but still distinguishable by plumage. The poorest times of year to survey are late winter, when jays are most likely to fly far for food, and late spring when the young are quiet and the adults are occupied with molt and feeding fledglings.

Survey Protocol. Transects may be driven or walked. If driven, step out of or stand atop the vehicle at each playback station. Broadcast the calls at each station for at least 1 minute in all four directions around the playback station, emphasizing any direction in which low-growing oak scrub is the predominant vegetation. On the vegetation map, plot the locations and indicate group sizes of all Florida scrub jays where they are first seen or heard. Distinguish adult-plumaged jays from juvenal-plumaged jays whenever possible.

At localities with car trails, large areas of scrub can be surveyed with a vehicle in one day. On foot, the process is more laborious because of the relatively large size of territories (often 10 to 40 acres). Once a group is located, stop broadcasting at that station. Remaining at this station briefly should result in the assembly of the entire group. This allows one to estimate group size and, if done during mid-summer, to distinguish young of the year from adults.

Sometimes two or more groups will be attracted to one station, usually from different directions. Observers should be careful, therefore, to plot each group where it was first spotted or heard, not at the site to which the jays were attracted. In rare circumstances, especially at sites where numerous groups congregate at artificial food or water sources, it may be difficult to differentiate groups. This is especially true where the jays have become habituated and tame to human approach. Again, in such cases careful observation is extremely important. Studies of such congregations using color-marked jays have confirmed that *almost always* they consist of members of different family groups. Often they may have crossed several territory boundaries to reach the neutral feeding or drinking area. The result gives a false impression of extremely high jay density.

It is essential that the subject area be visited *as often as necessary* to establish an accurate count of jay groups. If more than 8 to 10 jays are encountered at a single playback station during a fall or spring survey period, the jays at this site should be monitored carefully over several visits and different times of day. Numbers will shift as groups arrive and depart. Often it is possible to watch where the jays come from or return to as a means of determining how many groups are represented. If a question exists as to how many groups of scrub jays are on-site, we strongly recommend that the review agency involved request permission from the land owner to conduct an independent survey on-site.

The key products of this procedure are 1) a complete count of all jay groups on-site, and 2) an approximate territory map or home range center for each group. The map shown in Figure 1.13 took only a few full mornings of work to complete using a 4-wheel drive vehicle. Such a map allows developers and land-use planners to identify accurately the localities where preserving a given acreage will result in saving the largest possible population of jays.

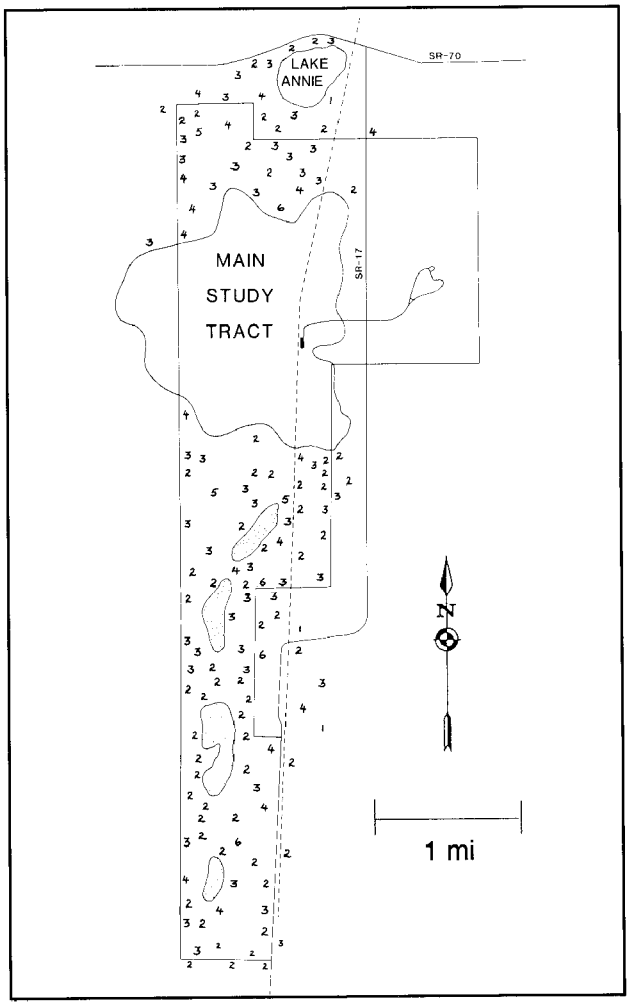

Figure 1.13. Example of a census map obtained by systematic traversing of patchy oak scrub habitat in southern Highlands County over several clear spring mornings in 1979. Detailed study of this area beginning in 1986 proved that this map was extremely accurate for estimating territory density. See text for methods. Each number designates the location of a jay group and estimates group size.

Survey Report. Provide the appropriate review or regulatory agencies with a final report that includes the following, as applicable:

A. An information sheet including:
   1. Dates and starting and ending times of all survey conducted.
   2. Weather conditions during all surveys, including average temperature, wind speed and direction, visibility, and precipitation.
   3. Total number of jay groups found, number of jays in each group and number of juvenal-plumaged jays in each of these groups .

B. An aerial photograph or vegetation map depicting:
   1. The entire area of interest, including all Type I, II, and III habitat.
   2. Transect lines and playback stations.
   3. Locations of all jays seen or heard while conducting the survey or at any other time.
   4. Approximate suspected territory boundaries between jay groups or suspected home range centers for each group.

Consulting Sources for Documentation of Scrub Jays within Dispersal Distance of Important Habitat On-site.

Habitat preservation for the Florida scrub jay is recommended if jays are not on-site, but are within normal dispersal distance (5 miles) of Type I habitat on-site. The following sources on Florida scrub jay records of occurrence (confirmed observations or museum specimens) should be consulted in order to determine if jays have been documented within 5 miles of Type I habitat on-site.

1) Florida Natural Areas Inventory. 1018 Thomasville Rd., Suite 200-C, Tallahassee, FL 32303.
2) Florida Breeding Bird Atlas. Florida Audubon Society, 1101 Audubon Way, Maitland, FL 32751.
3) Cox, J.A. 1987. Status and distribution of the Florida scrub jay. Fla. Ornithol. Soc. Spec. Publ. No. 3, Florida Ornithological Society, Gainesville, 110 pp.
4) Regional Planning Councils whose jurisdiction either includes all or part of the proposed development or is within five miles of the proposed development.
5) County environmental agencies whose jurisdiction either includes all or part of the proposed development or is within 5 miles of the proposed developments.
6) Regional Offices of Environmental Services, Florida Game and Fresh Water Fish Commission, whose jurisdiction either includes all or part of the proposed development or is within five miles of the proposed development.

Presume that any areas in which jays were documented within 5 miles of Type I habitat on-site *since 1975* are currently inhabited by jays. The developer may want to investigate for present occurrence of jays if it seems likely that the local jays in question have been extirpated since that time. Submit a report of the entire investigation to the reviewing agency, which may want to conduct an independent investigation of the records as well as field surveys for jays in the 5-mile area surrounding Type I habitat on-site.

SUBSECTION 1.3
PRESERVATION MEASURES TO BE IMPLEMENTED IF SCRUB JAYS WILL BE NEGATIVELY AFFECTED BY DEVELOPMENT

Preservation refers to both *on-site protection* of habitat and *off-site compensation* for any habitat of critical importance to the Florida scrub jay that is eradicated on-site. In this subsection we discuss the acreage that should be preserved in order to mitigate adequately the impact of development on jays, and whether protection or compensation is the appropriate means of habitat preservation.

DETERMINING ADEQUATE LEVEL OF HABITAT PRESERVATION

Habitat preservation for the Florida scrub jay is recommended whenever 1) jays exist on-site, or 2) jays do not exist on-site, but are off-site within five miles of Type I habitat on-site. *In either case*, the total number of acres to be designated for preservation on behalf of the Florida scrub jay is determined by performing the calculations in parts 1A and 1B, below, and *summing* the answers to both parts.

1A. Number of Acres to be Preserved for Territory Refuges.

The number of acres to be preserved as territory refuges, based on the number of jay groups on-site, equals:

$$\text{Preserved acres} = \left[\text{Number of scrub jay groups on-site}\right] \times 25$$

or the total number of acres of developable uplands, whichever is less

This acreage is designated for the establishment of one or more territory refuges on-site, or, when appropriate, for the provision of an equal amount of habitat off-site. This acreage is arrived at completely independent of habitat type or types on-site. When on-site protection is appropriate, as opposed to off-site compensation, the habitat types (i.e., the particular parcels of land) that should comprise this acreage must be determined based on optimal location, shape, and habitat composition of territory refuges. These are the subjects of the recommendations in Subsection 1.4.

1B. Number of Acres to be Preserved for Satellite Refuges.

The number of acres to be preserved as satellite refuges, based on the amount of Type I habitat on-site compared to the number of jay groups on-site, equals:

$$\text{Preserved acres} = \left[\text{Total no. acres Type I habitat on-site}\right] - \left[\text{No. acres designated for preservation in 1A}\right] \times 0.25$$

or 0, whichever is greater

This acreage is designated for the establishment of one or more satellite refuges on-site, or, when appropriate, for the provision of an equal amount of habitat off-site. When on-site protection is appropriate, the acreage entering into satellite refuges for jays must be exclusively Type I habitat. Determining *which* parcels of Type I habitat should comprise this acreage must be based on optimal location, shape, and habitat composition of satellite refuges. These are the subject of the recommendations in Subsection 1.4

DETERMINING THE APPROPRIATE MEANS OF HABITAT PRESERVATION

In most instances we recommend on-site protection of habitat, as opposed to off-site compensation for destruction of jay habitat. The only circumstances in which we recommend off-site compensation are: 1) when the acreage designated for preservation is extremely small and therefore of greater conservation value in a mitigation park or elsewhere off-site, or 2) when the acreage designated for preservation is a large proportion of all developable uplands on-site. Determine the appropriate means of preservation as follows.

Exclusive On-site Protection.

Provide exclusive on-site protection whenever the total amount of land designated for preservation, as calculated by summing parts 1A and 1B, is greater than 10 acres and less than 25% of all developable uplands on-site.

Either Exclusive On-site Protection, or On-site Protection in Conjunction with Off-site Compensation.

Consider either alternative when the amount of land designated for preservation, as calculated by summing parts 1A and 1B, is greater than 25% of all developable uplands. For either alternative, provide on-site protection of at least 25% of all developable uplands; provide off-site compensation for any remaining acreage designated for jays but not protected on-site.

Either Exclusive On-site Protection, or Exclusive Off-site Compensation.

Consider either alternative whenever fewer than 10 acres have been designated for preservation as calculated by summing parts 1A and 1B.

SUBSECTION 1.4
PROCEDURES FOR IMPLEMENTING PRESERVATION MEASURES

All decisions made in designing territory and satellite refuges should be based on maximizing their conservation value. In the simplest, ideal situation the total acreage designated for the Florida scrub jay in Subsection 1.3 can be protected as a single, uninterrupted parcel of high quality oak scrub habitat (Figure 1.14). Unfortunately, circumstances commonly depart from the ideal. In order to maximize the conservation value of a refuge, it is necessary to consider four features: habitat composition, size, shape, and location. In many instances, one or more factors must be compromised in order to achieve another.

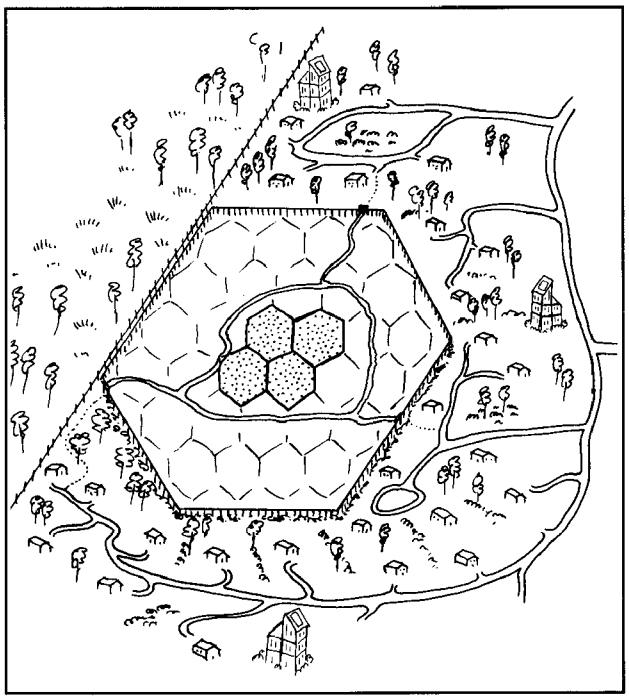

Figure 1.14. Configuration of a model habitat preserve containing about 30 Florida Scrub Jay territories. Approximate hexagonal packing of jay territories emphasizes that even in a 750 acre preserve of roughly circular dimensions, only about four jay territories are buffered from the edge by more than a single territory-width (stippled territories at center). Placement of preserve adjacent to undeveloped land (left of fence) helps buffer additional territories. Arterial roadways are separated from preserve by housing developments, reducing mortality from vehicular traffic. Fire breaks also serve as nature trails. Fence limits entry by domestic animals. Natural vegetation planted around the outside of the fence increases effective area of preserve and adds to its visual appeal.

PRIMARY CONSIDERATIONS FOR ESTABLISHING TERRITORY REFUGES

The following recommendations apply to all developments regardless of the number of jay groups on-site. When more than one jay group exists on-site, establish the smallest number of disjunct territory refuges possible within the constraints discussed below, by maximizing the number of adjoining territories within refuges.

When planning either territory or satellite refuges on-site, first rank all parcels of Type I and Type II habitat from highest to lowest quality. In ranking scrub parcels consider the *potential* quality of the scrub, based on anticipated management, in addition to present condition. Scrub that is optimal for jays (Figures 1.1-1.3) has a well-developed shrub layer, approximately one to two meters tall, that covers 50% - 75% of the substrate. The shrub layer is dominated by scrub oaks which cover at least 30% of the substrate. The scrub oaks must be mature enough to produce a mast crop (i.e., three or more years since a fire or mechanical clearing). At least 25% of the substrate is exposed or only sparsely vegetated, usually with low-growing annuals. These openings are well-distributed throughout the vegetation. Canopy cover is less than 20%; overstory trees, if present at all, usually are sand pine (*Pinus clausa*), slash pine (*P. elliottii*), or longleaf pine (*P. palustris*). Scrub habitat that is in or near optimal condition for jays is characteristic of well-managed xeric oak scrub, but may also occur in other community types, including scrubby flatwoods, scrubby coastal strand, and early successional sand pine scrub.

Usually, areas on-site that offer the most potential as territory refuges will be those already occupied by jays. Consequently, part or all of the actual jay territories on-site should be incorporated into the territory refuge. Exceptions are likely to be sites with dense, overgrown scrub where jays have been displaced to the margins. Such areas sometimes can offer the most potential after being properly managed. Only when the best on-site location for a territory refuge clearly is in an area beyond the actual jay territory, do we recommend that such action be taken.

Configuration of Territory Refuges

Wherever possible, protect the total number of acres of habitat designated for territory refuges in a single tract of land uninterrupted by any form of development. The only circumstance under which a single jay group should be provided habitat on two or more disjunct parcels of land is where existing development precludes establishing a single refuge.

Establish territory refuges that are approximately square or circular in order to minimize the edge-to-area ratio. Deviate from this design only to maximize the area containing high quality habitat. At some point the benefits of

maximizing overall habitat quality are offset by the costs of a high edge-to-area ratio.

Habitat Composition of Territory Refuges

Identify the largest, highest quality tract of scrub habitat on-site and build the territory refuge to incorporate this tract. If the largest scrub tract is not the highest quality tract on-site, then sacrifice quality for size, and build the territory refuge to incorporate the largest tract of Type I or Type II habitat on-site. Obvious exceptions will favor quality over quantity (e.g., little difference in size and great difference in quality.) If the size of a tract of scrub is less than the total acreage designated for the territory refuge, add other contiguous parcels of habitat to the core until the total designated acreage is reached. If choices exist as to what types of habitat to include in the territory refuge, follow the priorities below:

TYPE I OR TYPE II HABITAT

1. Oak scrub or sand pine scrub communities judged capable of supporting the highest density of jays when properly managed.
2. Other oak scrub communities.

TYPE III HABITAT

3. Managed grasslands, dry prairie.
4. Other open or semi-open uplands.
5. Seasonally dry, open and semi-open wetlands.
6. Wooded uplands.

PRIMARY CONSIDERATIONS FOR ESTABLISHING SATELLITE REFUGES

Satellite refuges may be established whether or not jays exist on-site. They serve as outlying foraging areas, buffer zones near territory refuges, and dispersal islands or corridors. Large satellite refuges may attract and support breeding jays. Satellite refuges preserve a portion of the Type I habitat onsite, and are composed exclusively of Type I habitat. When deciding which parcel or parcels of Type I habitat on-site to protect as satellite refuges, use the following recommendations.

Configuration and Location of Satellite Refuges

The shape of satellite refuges depends mostly on the distribution of Type I habitat. Protect the recommended number of acres of Type I habitat in as few satellite refuges as habitat permits. If two or more parcels of Type I habitat are of equal acreage and habitat quality, protect the one that has the lowest edge-to-area ratio.

Locate satellite refuges close to territory refuges on-site or off-site. If possible, adjoin satellite refuges to territory refuges, creating, in effect, an expanded territory refuge.

Quality of Type I Habitat for Satellite Refuges

In designing satellite refuges, select Type I habitat that most closely approximates optimal conditions for jays, or has the greatest potential for recovery to optimal conditions with appropriate management. A point will exist at which the benefits of maximizing habitat quality are offset by the costs of sacrificing aspects of refuge configuration. Biological judgment appropriate to the individual case must prevail.

SECONDARY CONSIDERATIONS FOR ESTABLISHING BOTH TYPES OF REFUGES

If alternatives are available for meeting the constraints discussed above for territory or satellite refuges, follow these priorities:

1. Place refuges as close as possible to protected natural habitat, especially oak scrub, and as close as possible to protected or unprotected jay territories.
2. Place refuges as far as possible from roads with posted speed limit $\geq$ 30 mph, especially major highways.
3. Select habitat known to contain other elements of the endangered scrub biota.
4. Place refuges as close as possible to off-site undeveloped lands that are expected to remain undeveloped.
5. Place refuges as far as possible from off-site undeveloped lands that are expected to be developed.

MANAGING REFUGES

The major goal in managing scrub jay refuges is to maintain optimal habitat for jays. Where and when feasible, prescribed burning should be used as a primary management tool.

Where prescribed burning is feasible, create fire lanes through the refuge, dissecting it into manageable units. For territory refuges, design units so that each jay group retains an adequate amount of mature oak scrub while recently-burned scrub regenerates. No more than 25% of a refuge occupied by jays should be burned at any one time. When laying out firebreaks, one also may want to consider their later use as nature trails.

Oak scrub should be burned every 5 to 20 years in order to maintain suitable jay habitat. Oak scrub burned more frequently than every 5 years produces mast below the level needed to support jays, and experiences proliferation of palmetto (*Sabal etonia, Serenoa repens*). Oak scrub burned less than every 20 years frequently grows too tall and dense to support jays, accommodates undesirable competitors, undergoes unnatural successional changes in species composition of the vegetation, and develops an unnaturally high canopy cover.

Prescribed burning is the preferred method of scrub habitat management. Above-ground mechanical treatments, such as roller chopping, are short-term alternatives, but may be less effective long-term. The long-term effects of mechanical treatment on composition and diversity of scrub are unknown. Mechanical treatments do provide important practical means for managing prescribed burns.

In designing territory or satellite refuges, develop a proposed management plan. A management plan should be submitted to the reviewing agency prior to establishing refuges. We recommend that this plan include the following:

1) A map of the proposed refuges depicting management units, fire lanes and other openings, buffer zones, habitat islands and corridors, and the surrounding commercial and residential area that may be affected by prescribed burning.

2) A schedule of the burning regime and the type and frequency of mechanical treatment planned for each management unit.

3) Identification of the party or parties responsible for the management of the refuges, including specific provision for any legal transfer of this authority.

INTEGRATING REFUGES INTO THE DEVELOPMENT COMMUNITY

Buffer Zones

Provide buffer zones around the perimeter of territory refuges to insulate jays and facilitate burning. Satellite refuges may be used to buffer territory refuges from impacts of development. Position recreational areas (e.g., golf courses, parks) as boundaries to refuges. Plan cul-de-sacs, driveways, dwellings and backyards in fire-safe areas along the perimeter of refuges.

Habitat Islands and Corridors

Certain habitats outside of territory and satellite refuges can enhance the scrub jay by serving as islands or corridors for dispersal. Habitat islands and corridors are especially important when they lie between two or more refuges separated by about five miles or more. Such habitats also are important in connecting unprotected areas that are occupied by jays and are separated by about five miles or more.

Ideally, such islands and corridors contain scrub. Other natural areas and land uses that may contain no scrub also serve in this capacity. Examples are parks, golf courses, rights-of-way along low-speed roads and transmission lines, and other quasi-natural open habitats.

Public Education

Implement a program to educate residents as to the threatened nature of the oak scrub habitat including the Florida scrub jay. Effective means of accomplishing this include providing self-guided nature trails and educational signage through the refuges, and providing informative pamphlets to local residents. Emphasize the importance of fire in maintaining the natural scrub community. Post nature trails with rules discouraging destruction of oak scrub habitat, while encouraging enjoyment and study of it. Prohibit house pets and unauthorized motor vehicles in refuges. Encourage the use of native plants, especially oaks, for xeriscaping roadsides and yards. Discourage the use of ornamental shade trees and rapidly-spreading introduced species, especially Brazilian pepper (*Schinus terebinthifolius*).

SECTION 2

ECOLOGY AND HABITAT REQUIREMENTS OF THE THREATENED FLORIDA SCRUB JAY

PREFACE

In 1988, the Florida Game and Fresh Water Fish Commission solicited a report on ecology and management of the Florida scrub jay from John Fitzpatrick and Glen Woolfenden. That report was reviewed and edited and is presented here as Section 2 of this publication. The recommendations contained in Section 1 of this publication are based largely on the information presented here.

ACKNOWLEDGMENTS

Archbold Biological Station continues to provide extensive support for our long-term study of Florida scrub jay ecology. During the preparation of this report we were provided office space, field and office equipment, secretarial help, and library resources. We are extremely grateful for the assistance. In addition we thank Debra K. Moskovits who contributed to the preparation of the three-dimensional diagrams (Fig. 2.16), Emily K. McGowan who prepared many figures, Anita DelGenio and Nancy Stotz who typed text, and Jan Woolfenden who typed text and prepared the bibliography. Special thanks go to Ron Mumme who provided data and many useful comments.

The National Science Foundation (BSR-8705443), the Conover Fund of the Field Museum of Natural History (Fitzpatrick), and the University of South Florida (Woolfenden) provided support for the field work for which we are extremely grateful.

SUBSECTION 2.1
INTRODUCTION

Many thousands of years ago, arid scrublands of western North America were distributed eastward to the Atlantic Ocean across what is now northern Mexico and southern United States. Climatic changes associated with glacial fluctuations severed this habitat connection between east and west, and the eastern forests adapted to wetter conditions. The once widespread scrub all but disappeared from eastern North America, clinging to a last stronghold on ancient sand dunes scattered through the Florida peninsula. Because these pure sand soils were porous to water, they produced growing conditions similar to those in arid environments supporting scrub habitats elsewhere around the continent. Long isolated from its western counterparts, and constantly adapting to the seasonally wet subtropical environment of the peninsula, the Florida scrub evolved into one of the rarest and most distinctive vegetation formations in all of North America. It is a habitat utterly unique to Florida, harboring scores of plant and animal species found nowhere else in the world. The fates of all those species now hang in the balance, as the Florida scrubs disappear at the hands of man.

The Florida scrub jay (*Aphelocoma c. coerulescens*) is the most conspicuous animal in the scrub. Some taxonomists (e.g., Phillips 1986) consider it a full biological species. If indeed it is, then it is the only bird species whose distribution is entirely confined to the state of Florida. Once scattered widely throughout the peninsula, it is now extirpated from vast areas within its former range. It is endangered or severely threatened essentially wherever it still persists, a fact that seems incongruous to countless human inhabitants of the peninsula who know these jays as tame, easily watched, and conspicuous backyard neighbors.

Like many species currently threatened with extinction, the Florida scrub jay is a victim of an unkind ecological accident. Its requisite habitat is a leftover from ancient times, an anomaly among the swamplands, prairies and flatwoods that dominate the Florida landscape. The scrubby oaks and bare sand patches absolutely essential for the survival of Florida scrub jays are present only in scattered, isolated patches surrounded by habitats almost as inhospitable to the jays as ocean. With essentially no hope of survival or reproduction outside these sharply bounded habitat patches, the Florida scrub jay evolved into one of the most ecologically restricted birds in North America. Its social system arose out of the ecological constraints thus imposed: permanent monogamy, year-round territoriality, delayed dispersal, and cooperative breeding as the most successful route to territory acquisition in a permanently overcrowded environment.

The accident of having severely restricted habitat requirements became unkind when humans discovered the importance to their own species of a well-drained sandy soil substrate. For human agriculture, residence, and recreation, the ancient dunes that support scrub are of superior quality, especially in a state with thousands of square miles only a few meters above sea level. As the human population expands in Florida, economic pressures seem to dictate an accelerating effort to clear what final vestiges of oak scrub remain intact. As a result, by the early 1980's the Florida scrub jay was extirpated from eight counties, and nearly so in as many more. In 1975 the Florida scrub jay was formally listed as "Threatened" by the Florida Game and Fresh Water Fish Commission. In 1987 the jay became listed as "Threatened" within the Endangered Species classifications of the United States Fish and Wildlife Service (*Federal Register* vol. 52, no. 106, pp. 20715-20719, 3 June 1987).

Florida scrub jays reside and breed only on periodically-burned, low-growing oak scrub, with abundant bare sand and only scattered tall pines. For the species to persist in Florida, these very specific kinds of places must remain protected and managed. Such places must exist in sufficient number and size to protect against accidental annihilation by random demographic fluctuations, epidemics, skilled domestic predators, and human interference. Land developers bear both a responsibility and an opportunity to contribute to the mounting effort to preserve this beautiful Florida specialty. This section of the report is a compilation of available information on how to protect the Florida scrub jay by protecting its unique habitat.

Because the Florida scrub jay is easy to detect, sedentary, and extremely habitat specific, this bird is an excellent indicator species for good quality oak scrub habitat. Moreover, because the jay requires modest to large-sized patches of scrub in order to persist, preserving this species entails preservation of endangered oak scrub habitat. Many of the endangered scrub organisms, plant and animal, will thrive in viable populations within the space needed to maintain safely a population of Florida scrub jays. For example, the gopher tortoise (*Gopherus polyphemus*), classified as a "Species of Special Concern" by the Florida Game and Fresh Water Fish Commission (Wood 1986), can maintain excellent population sizes within a scrub habitat minimally acceptable for scrub jay preservation (Cox et al. 1987). Thus, the Florida scrub jay can be considered a vanguard for oak scrub habitat as well as its most distinctive indicator species.

Subsection 2.2 describes those life history characteristics most important from a management point of view, especially for persons not already familiar with the species. Characteristics of the oak scrub habitat are summarized, including the overwhelming importance of fire in maintaining the scrub ecosystem. The excellent management potential for the species also is described.

Subsection 2.3 discusses numbers of jays per unit area in some different scrub habitats, and summarizes the natality and mortality factors in these habitats. It is strongly recommended that densities be calculated as territories per unit area. Evidence on the nature and frequency of catastrophic epidemics is presented, and their effects on population models are highlighted. The importance of limited dispersal distances is discussed.

Subsection 2.4 discusses factors affecting the coexistence of Florida scrub jays with human settlements. The principal causes of local extirpations are outlined, along with recommended means to prevent them. Prescribed burning is emphasized as a means to prevent degradation of oak scrub habitat.

Subsection 2.5 draws upon the data presented in previous subsections for development of a model simulating the population fluctuations in a natural population of limited size. Replicate simulations, under different demographic conditions and population sizes, provide the first detailed estimation of the relationships between Florida scrub jay population size and probabilities of extinction through time. Interpretation of these models provides a basis for determining the sizes and configurations of habitat preserves that will permit long-term persistence of Florida scrub jays in the presence of commercial and residential development.

SUBSECTION 2.2
LIFE HISTORY, MANAGEMENT POTENTIAL, AND HABITAT REQUIREMENTS

LIFE HISTORY

The Florida scrub jay has been the subject of an intensive demographic and behavioral study at the Archbold Biological Station in Highlands County for 20 years. One result is that considerable published information pertinent to developing habitat protection guidelines already is available. This fortunate situation stands in contrast to that of many other threatened or endangered species, in which primary biological data remain scanty.

In this section we summarize briefly those factors considered most pertinent to a general understanding of Florida scrub jay biology and life history from a management point of view. This information is drawn principally from our book, *The Florida Scrub Jay: Demography of a Cooperative Breeding Bird* (Woolfenden and Fitzpatrick 1984) and a recent summary chapter we have written for another book (Woolfenden and Fitzpatrick 1990). Additional information appears in numerous other publications (e.g., Bancroft and Woolfenden 1982; DeGange et al. 1989; Fitzpatrick and Woolfenden 1986, 1988; Fitzpatrick et al. 1988; McGowan and Woolfenden 1989; Woolfenden 1974, 1975, 1978a, 1978b; Woolfenden and Fitzpatrick 1977, 1978, 1986).

Description

The Florida scrub jay is similar in size (about 12 inches total length) and shape to its close relative the blue jay (*Cyanocitta cristata*). Although the predominant color of both these species is blue, they differ strikingly in color pattern. Blue jays are boldly marked with many white-tipped, black-barred feathers and with a black bridle pattern about the head and neck. They also have an ample crest. Scrub jays are far more subtly marked. They lack the white tips, black barring, bridle, and crest. The blue of the head, nape, wings and tail grades into pale gray on the back and belly. They have a white eyeline that blends with a frosted white forehead (forehead is blue in subspecies of western North America). Scrub jays possess an indistinctly striped throat and upper breast, bordered by blue to form a dickey.

In contrast to blue jays, scrub jays have longer, stronger feet, a longer tail and shorter wings. All these features reflect their more terrestrial existence. Scrub jays rarely fly long distances, while the forest-inhabiting blue jays are much more capable in the air.

The sexes of scrub jays are indistinguishable by plumage. Males average only slightly larger than females (Woolfenden 1978a). Young scrub jays during their first four months of life are distinguished easily from adults. As characterizes jaybirds, the nestlings hatch naked. They are well feathered before they leave the nest at about 15-20 days after hatching. The juvenal plumage, fuzzy in texture, is smoky gray on the head and back, entirely lacking the blue crown and nape.

An incomplete postjuvenal molt during their first summer (Bancroft and Woolfenden 1982) makes the juveniles nearly indistinguishable from adults by about September. In the hand, most first-year birds can be distinguished through the following spring by their worn primary coverts, which appear grayish instead of bluish at the tips.

Range And Habitat

Scrub jays occur throughout the brushlands, scrub lands, semideserts, chaparral, open woodlands, and pinyon-juniper hillsides of southwestern North America and in scattered populations south to southern Mexico. Florida scrub jays are isolated from the closest of these western relatives (*Aphelocoma coerulescens texana*, in west-central Texas) by about 1000 miles.

Florida scrub jays occur only in central peninsular Florida, where they are restricted to one habitat type, the low-growing oak scrub that occurs on well-drained sandy ridges. This distinctive habitat is endemic to Florida, and contains numerous species of animals and plants found nowhere else. The scrub jay is the only bird whose distribution depends on patches of this rare habitat. It is essential to any conservation effort that the critical importance of the oak scrub be understood. In contrast to blue jays, which are broadly tolerant of a variety of habitats, Florida scrub jays are exceedingly habitat-restricted. As habitat preservation and management is the only solution to Florida scrub jay protection, we discuss the scrub habitat extensively in later sections.

Food And Predators

Florida scrub jays have a very broad diet. Insects and other arthropods plucked from the leaves or leaf litter in the shrubby vegetation form the bulk of their diet. The jays do not dig extensively, and rarely sally for aerial insects. A wide variety of small vertebrates also is taken, especially tree frogs (*Hyla* spp.), *Anolis* lizards, and small snakes.

Scrub jays do not eat large fruits such as citrus. Although they eat small quantities of berries and seeds (e.g. slash pine, *Pinus elliottii*, and sand pine, *P. clausa*), only one plant food is crucial to their existence. Annually each jay harvests and buries for later use about 6,000 to 8,000 acorns, taken from all the principal scrubby oak species in the territory (DeGange et al. 1989). It is estimated that about a third of these acorns are later recovered and eaten. Caching behavior allows jays to eat acorns during every month of the year. This reliance upon acorns and caching may constitute a major reason for the Florida scrub jay's restriction to the oak scrub and the sandy ridges within Florida.

Various snakes, mammals, and birds feed on scrub jay eggs, small young, or adults. Both the eastern coachwhip (*Masticophis flagellum*) and indigo snake (*Drymarchon corias*) are known to eat adults and fledglings, and the coachwhip also is known to eat nestlings. Known natural mammalian predators include bobcat (*Lynx rufus*) and raccoon (*Procyon lotor*). Cotton rats (*Sigmodon hispidus*) sometimes take eggs. Domestic cats (*Felis cattus*) also prey on adults. We suspect that a population of domestic cats supported by human food offerings could eliminate a small, local population of Florida scrub jays. Avian predators of small young include the great horned owl (*Bubo virginianus*), eastern screech-owl (*Otus asio*), red-tailed hawk (*Buteo jamaicensis*), and northern harrier (*Circus cyaneus*). The American crow (*Corvus brachyrhynchos*), fish crow (*C. ossifragus*) and blue jay no doubt take eggs and nestlings. Indeed, we suspect that nest predation by blue jays may be one factor limiting the numbers of scrub jays in dense scrub or wooded habitats. The most frequent avian predators on adult jays are the sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*A. cooperii*), merlin (*Falco columbarius*), and northern harrier.

Social Organization

Florida scrub jays live in groups, varying in size from a simple mated pair (group size of 2) up to large, extended-family groups of 8 adults and 1 to 4 juveniles. Large groups are rare; average group size is 3.

Four activities account for almost all daily actions performed by the jays: foraging, predator surveillance and defense, territory defense, and body maintenance. Jays execute all these activities in close proximity to one another within the group. They forage independently, but usually near each other among the shrubs or on the ground. When a large food item is obtained the possessor usually moves some distance away in order to consume it unharassed. One jay usually sits on an exposed perch as a sentinel while most other group members forage. If an aerial predator is spotted, distinctive warning calls are given and all jays dash for dense cover. If a ground predator is seen, alarm scolds are given and the group converges to mob the predator with noisy scolds and even furtive pecks. In fall and winter when bird-eating hawks (mostly *Accipiter* spp.) are most abundant, we suspect that the groups average at least one encounter with a hawk per day.

Florida scrub jays live in large all-purpose territories throughout their lives (e.g., Fig. 2.1). Exceptions occur during dispersal, when prebreeders are searching for breeding space. Territory defense is a group activity spearheaded by the breeders, especially the male, and sometimes the oldest male offspring. Territorial squabbles peak in fall and again in early spring before nesting. Many of the daylight hours are spent resting, especially during hot midday periods in the summer. However, when resting perched atop a low shrub in open habitat, Florida scrub jays probably are nearly immune to predation, and at the same time can scan for intruders into their territory. The advantages conferred by this behavior may help explain their obvious preference for low-growing vegetation unobstructed by large trees.

Well-defined division of labor exists between males and females, especially during the breeding season. Only females incubate eggs and brood young in the nest. Males lead in providing food for young nestlings and their mates. Males also are more often the leaders in territorial defense

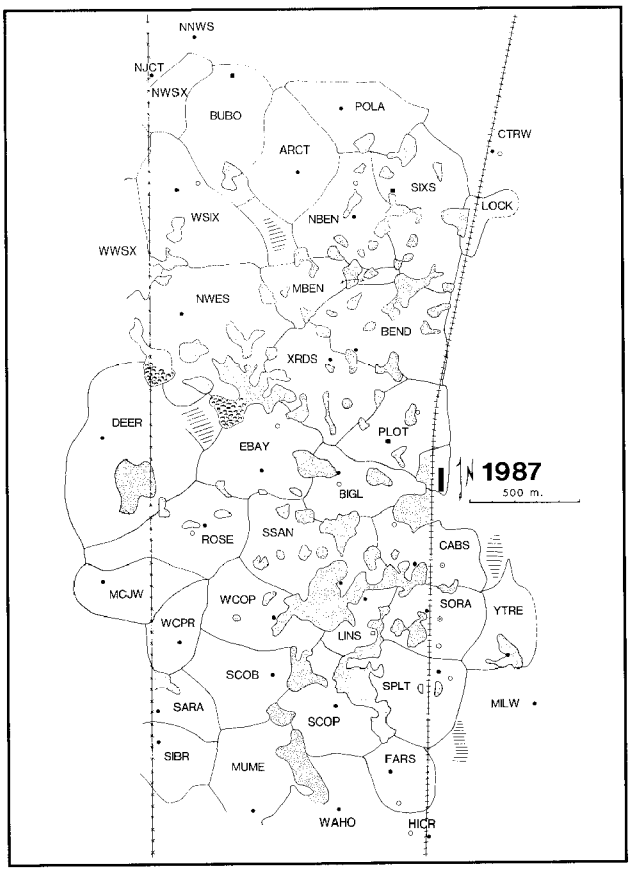

Figure 2.1. A representative map of Florida scrub jay territories (April 1987) occupying about 400 ha. of open, periodically burned oak scrub at Archbold Biological Station. Strippled areas are seasonally inundated grassy depressions rarely used by the jays. Four-letter codes refer to standard names for each territory in the study population. Main building of the Station is shown at center right adjacent to a north-south railroad track.

and predator mobbing, although both sexes participate actively in these activities.

Young jays remain in their natal territory for at least one year before beginning to attempt dispersal. Some, especially males, may remain non-breeders for several years. These "helpers" assist the breeders in most activities, including caring for dependent young. Although they do not build nests, incubate, or brood, they do feed nestlings and fledglings. They also help mob predators, perform sentinel duties, and defend the territory. Breeders assisted by helpers produce more independent young than pairs without helpers. Perhaps of equal importance, breeders show increased annual survival when helpers are present. Helpers also experience lower mortality while remaining within the group. Clearly all group members benefit in various ways from being a part of a group.

Reproduction

Florida scrub jays build their nests low to mid-height in dense shrubs (mean nest height is 1.0 m. at Archbold Biological Station). Often the nest is placed in a dense shrub at the edge of a thicket, bordering an open space or even bare ground. The nest is a bulky basket of twigs, usually taken from oak shrubs. Nests are lined with a tightly woven cup consisting entirely of fibers from *Sabal* palmettos or palms. The jays never reuse the nest or any of the materials from which it was constructed. Even if the nest is removed after use, the probability of their nesting in the exact same location is nil.

The nesting season extends from March through June (Fig. 2.2). True second broods, defined as a nest with eggs layed concurrent with living offspring from a previous brood of the same season, are extremely rare. At Archbold Biological Station we have documented 23 double broods in 524 pair-years (4.4%), and most of these occurred during a few exceptionally productive years. However, renesting after a nest fails is a regular event, especially early in the nesting season. The probability of a pair attempting a replacement clutch following nest failure declines rapidly after late April. Average number of attempts per pair per breeding season is 1.4, and typically the maximum number for any one pair is 3 attempts (one pair attempted 4 nests in 1972).

Clutch size typically is either 3 or 4 eggs (mean = 3.33, range - 1 to 5). Age and experience of the breeders, time in the nesting season, annual food supply, and heredity all influence clutch size to some extent.

Nest failure almost always occurs through predation. Inclement weather, desertion, fire, and starvation account for fewer than 2% of all losses. Overall nest success (probability of fledging at least one young) is about 50%, but this varies substantially with time in nesting season, with presence or absence of helpers, and among years. Nest success decreases steadily through the season. We suspect that this rapid decline, combined with greater risk of adult

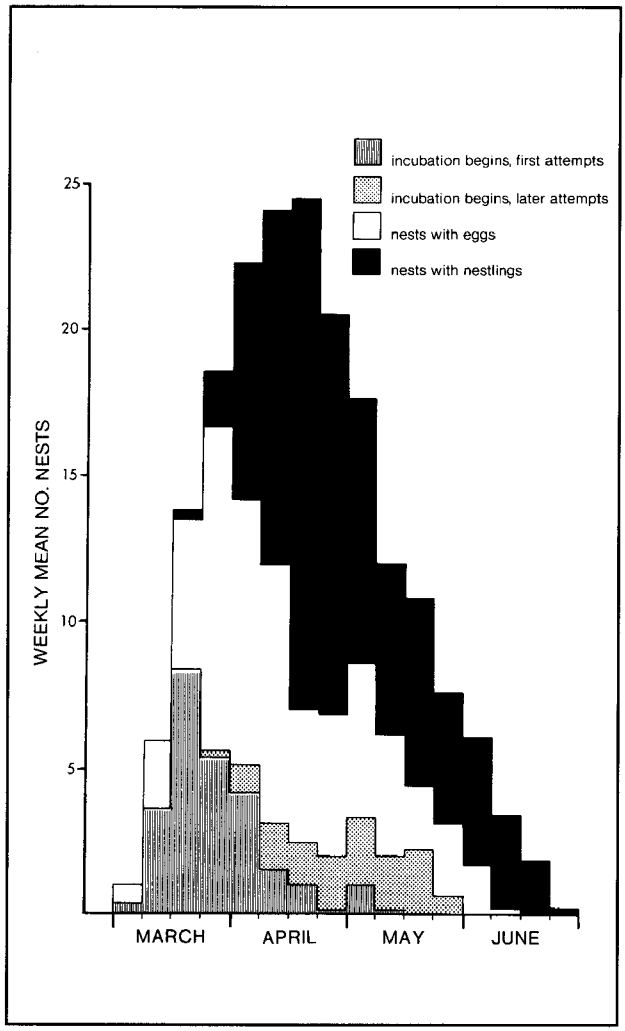

Figure 2.2. Nesting chronology of Florida scrub jays, based on nests found in the study tract at Archbold Biological Station, 1970-1979. The outer line shows the total number of nests with eggs or young each week. Black and shaded portions separate nests and renests into different stages. From Woolfenden and Fitzpatrick (1984).

mortality during nesting, contributes to the relatively brief nesting season of the Florida scrub jay compared to those of other songbirds in the region.

Average production of young is about 2 fledglings per pair per year. Fledgling brood sizes vary from 1 to 5, with 3 being by far the most common number for successful nests. Mortality of fledglings within the first few weeks post-fledging is extremely high. On average only about 35% of the fledglings survive to their first birthday, when they normally serve as helpers in the home territory.

Helpers

About 30-40% of the jays alive at the onset of a nesting season are not breeders. Predominantly yearlings, these jays are adult-plumaged prebreeders, mostly living in their natal territory where they assist the breeders, usually their parents, with all daily activities mentioned above. In performing these acts, nonbreeding helpers may further their own genetic representation in future generations.

This is because on average helpers help the breeders produce larger numbers of young, and these extra young usually are genetic sibs or half-sibs of the helpers. Helpers also behave in ways to maximize their own opportunities to become breeders. The probability that siblings will actively compete for breeding vacancies is reduced through an intrafamilial dominance hierarchy in which males dominate females, breeders dominate helpers, and older helpers dominate younger ones.

Space is at a premium in the world of Florida scrub jays. Potential breeders always outnumber breeding vacancies. Helper males may remain nonbreeders for up to five years, while helper females generally disperse after one or two years of helping. Both sexes follow the general strategy of waiting at home while monitoring the neighborhood for breeding vacancies, which mainly arise through the death of an established breeder. New territories arise at about the same rate as established ones disappear from deaths or family breakups.

New territories are established through a process we have termed *territorial budding* (Woolfenden and Fitzpatrick 1978). Helpers generally increase reproductive success and survival within the group, which naturally causes family size to increase. As family size grows, territory size also is expanded. Expansion occurs at the expense of neighboring breeders whose family size is decreasing. Frequently, following such a build-up, the dominant nonbreeding male takes over a segment of the now larger family territory as his own. Obtaining a mate from outside his functional family, he becomes a paired breeder on a new, "budded" territory. Female helpers become heirs to territory in this fashion only rarely. Budding is almost exclusively a male-inheritance system.

Female non-breeders also help at the nest, although they deliver less food than males of equal age. In addition to gaining experience at nesting, and minimizing risk of early mortality by spending most of their time in the safety of the home territory, females also are constantly monitoring the greater neighborhood for breeding vacancies or males that are budding a territory. As their territory grows, in part through their own efforts, the number of neighboring territories that can be monitored without leaving home increases. Thus, the helping system benefits females even though they rarely inherit space directly.

New territories cannot be established in habitat previously unoccupied, because essentially no such land exists (see Fig. 2.1). This fact presents the most fundamental ecological constraint facing Florida scrub jay populations. *It also presents the fundamental conservation problem.* The extremely intense competition for breeding vacancies has caused a social system to evolve in which prebreeders queue for breeding space within the existing territories. This insures that densities of breeders virtually always are at their maximum. The process of working to become breeders involves a system of cooperation within the family group. The cooperative-breeding system of the Florida scrub jay thus appears to be a natural evolutionary consequence of their restriction to a severely limited and sharply defined habitat.

Scrub jays have helpers only in Florida. In western North America where habitat suitable for these jays occurs in a variety of forms, over vast areas, and in a broad range of climates, the young leave home soon after they are nutritionally independent (Carmen in press). The profound differences between these closely related forms in Florida and western North America therefore provide unparallelled insight into forces shaping animal behavior and the evolution of cooperation. Because Florida scrub jays can be tamed so easily and live in a low-growing, easily observed habitat, they have considerable appeal and importance to the layman and scientist alike. Protected populations of this jay not only provide enjoyment to countless human neighbors, but also a natural outdoor laboratory (of increasing world-wide recognition) for the study of animal behavior.

MANAGEMENT POTENTIAL

Although genuinely threatened throughout the state, Florida scrub jays are by no means a hopeless case for preservation, even in the context of land development by humans. Many attributes of the species make it relatively easy to preserve, as long as some suitable habitat can be left intact at a site:

1) We know a great deal about the biology of the species already, which allows biologists and regulatory agencies to make accurate predictions as to the effects of certain activities upon the populations.

2) The species depends entirely upon one very specific and easily identified habitat.

3) The requisite habitat naturally occurs in patches or ecological "islands," many of them small and isolated from one another. Therefore, both the habitat and the bird have proven through geologic time that they can withstand fragmentation.

4) The Florida scrub jay is not migratory, but instead defends year-round territories that are passed on to succeeding generations indefinitely. Therefore, if the quality of the habitat remains suitable, no jay population will "voluntarily" leave the patch in search of new places to live.

5) Maintaining the habitat in its native condition is relatively easy if it can be burned. None of its component species is highly sensitive to environmental perturbations, as long as the soil is left more or less intact.

6) The Florida scrub jay is an attractive and endearing "flagship" species within a rare and vanishing habitat. Local residents routinely grow quite fond of "their" local groups of jays, which often become exceptionally tame. This attribute provides an *opportunity* for local developers to foster a special relationship between the residents, their environment, and a highly visible and

beautiful Florida specialty.

All these features make the Florida scrub jay a bird that can thrive around people. The jay can benefit enormously from the local protection of moderately sized habitat preserves. Moreover, each such preserve has a compound effect upon the fate of the species as a whole. Clusters of small, isolated preserves provide one another with occasional colonists that maintain genetic variability and provide some measure of insurance against local extinctions that normally occur through random population fluctuations.

HABITAT REQUIREMENTS

The essential habitat is oak-dominated scrub, a peculiar vegetation formation found only on extremely well-drained, sandy soil formed by old coastal dunes or paleodunes (Laessle 1958, 1968). The most characteristic and essential species in the habitat are four species of stunted, low-growing oaks. At different sites around the Florida peninsula these species occur in varying percentages, and one or two may even be lacking, but as a group they always dominate the habitat: scrub oak (*Quercus inopina*), sand live oak (*Q. geminata*), Chapman's oak (*Q. chapmanii*), and myrtle oak (*Q. myrtifolia*). Certain scrub habitats contain taxonomically confusing oaks closely related to *Q. geminata*, all of which are sometimes lumped under the name live oak (*Q. virginiana*).

In optimal jay habitat most of the oak shrubs are between 1 and 3 m. tall. Apparently critical to Florida scrub jays, the oak cover must be interspersed with numerous patches of exposed sand. Percent of total surface area represented by exposed sand can vary down to 10 to 15%; habitat with less open sand usually is overgrown and unsuitable. We suspect that various factors cause this peculiar ecological requirement, including the need for sufficient sandy substrate to bury and recover thousands of acorns each year. Florida scrub jays spend considerable portions of their foraging time on the ground, and while foraging they avoid areas of heavy leaf litter or herbaceous cover. As discussed below, natural fires were frequent in native oak scrub. Florida scrub jays will not persist in scrub that is prohibited from burning regularly. One possible reason for this is the steady loss of bare sand as leaf litter, herbaceous growth, and new oak shoots build up.

Trees and dense herbaceous vegetation are rare in naturally occurring habitats preferred by Florida scrub jays. Among the common plant associates in typical oak scrub habitat are scrub palmetto (*Sabal etonia*), saw palmetto (*Serenoa repens*) crooked wood (*Lyonia ferruginea*), fetterbush (*Lyonia lucida*), tar flower (*Befaria racemosa*), dwarf blueberry (*Vaccinium myrsinites*), scrub hickory (*Carya floridana*), and rosemary (*Ceratiola ericoides*), Trees, when they do occur, are widely scattered pines, usually slash pine (*Pinus elliottii*) or sand pine (*Pinus clausa*). Various grasses (e.g., *Aristida stricta, Panicum abscissum, Andropogon brachystachys*) grow in depressions between the sandy ridges. Where these depressions are wet or seasonally inundated, gallberry (*Ilex glabra*) or St. John's wort (*Hypericum* spp.) often occur.

A considerable body of literature exists on the oak scrub in Florida. Austin (1976) provides a general overview. Early references (e.g. Harper 1913, 1915, 1921; Howell 1932; Laessle 1958, 1968; Davis 1967) provide good descriptions including mention of the variable nature of scrubs around the Florida peninsula. Woolfenden and Fitzpatrick (1984, 1986), Cox (1984, 1987), and Breininger (1981) discuss the relationships between scrub habitats and aspects of Florida scrub jay population biology. Recent technical literature includes studies of natural succession (e.g. Abrahamson et al. 1984; Cooper et al. 1959; Veno 1976), effects of fire suppression (Givens et al. 1984), and the effects of prescribed burning (Doren et al. 1987).

Fire

Fire is a natural and frequent event in scrub habitats throughout Florida. The frequency and effects of natural fires in scrub habitats before the influence of man are still unclear, and presumably vary from site to site (Myers 1985, Myers and White 1987). No debate exists, however, that lightning strikes are frequent in summer months in peninsular Florida, and that they often ignite local brush fires in scrub habitats (e.g., Archbold Biological Station unpublished records). Local sites probably burned at intervals much shorter than the experimental 50-year spans studied by Myers (1985) and Myers and White (1987).

For Florida scrub jay habitat, a fire frequency averaging about once every 10 to 20 years is probably optimal. Much greater frequency (e.g., every 2-3 years) consistently maintains the principal oak species below acorn-bearing height, and may slowly favor the spread of palmettos at the expense of oaks. Lower frequency produces pine forests and tall, dense oak understories. These habitats (referred to below as "overgrown scrub") are of limited value, if not entirely unsuitable, to Florida scrub jays, and often are occupied by a competitor-predator, the blue jay.

At the Archbold Biological Station, fire suppression in a tract formerly supporting low, open oak scrub has provided an excellent experimental opportunity to document the response of Florida scrub jays to advanced habitat succession. The 400 ha property originally acquired by Richard Archbold in 1941 had last burned extensively about 1927 (Myers and White 1987). Extensive portions of this tract were occupied by Florida scrub jays through the 1940's (Amadon 1944), 1950's, and 1960's (Woolfenden 1974). By the onset of our long-term study in 1969 the habitat already had become tall and dense, with numerous sapling slash pines; density of territories in this tract was about 3.8 per 40 ha. During the 1970's we witnessed the gradual decline of jays in this tract, and since 1980 the area has been colonized only sporadically by

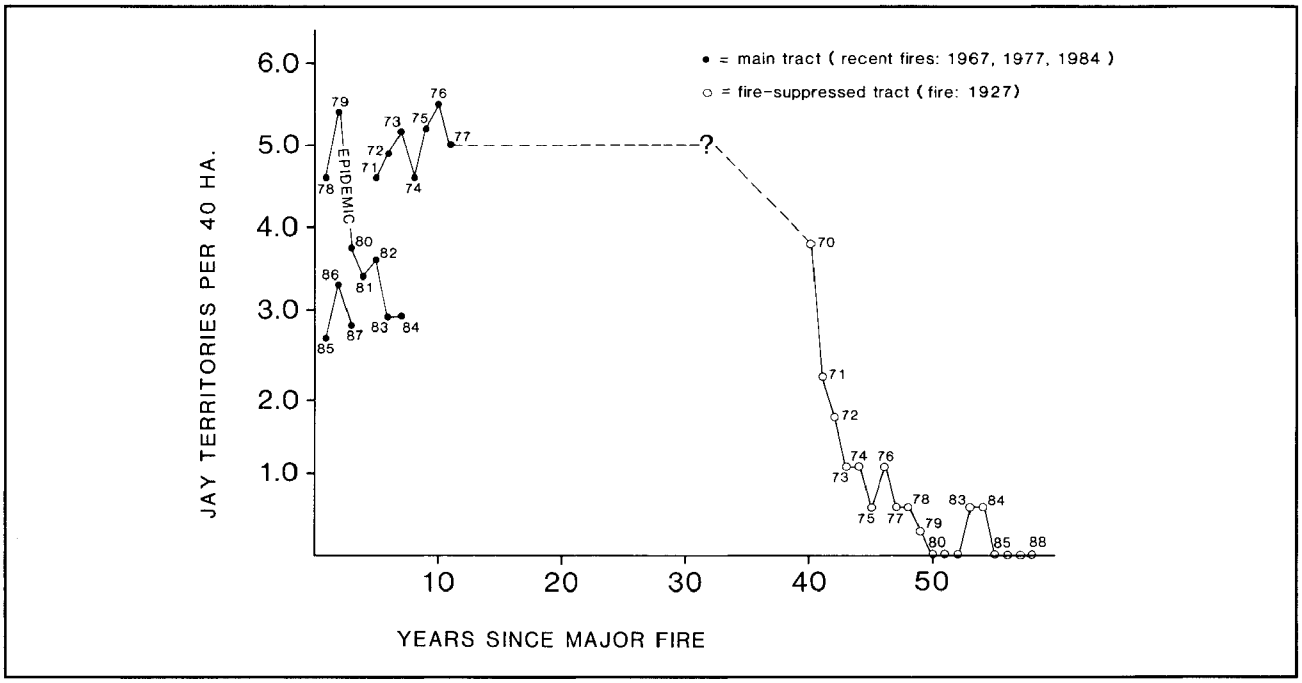

Figure 2.3. Density of Florida scrub jay territories in several tracts of scrubby flatwoods at Archbold Biological Station, in relation to time since most recent major fire in the respective habitat patch. Precipitous decline after 40 years post-fire reflects the point at which reproduction no longer kept pace with average mortality of adults and young in tall, overgrown scrub.

dispersing jays, then abandoned. Fifty years post-fire in this case was the final point, but reproduction and survival had dipped below replacement levels even by 1969 (about 42 years post-fire). Density in the fire-suppressed tract already had been reduced below the density in periodically-burned oak scrub just a few hundred meters away.

Fig. 2.3 summarizes our density measurements in relation to the most recent major fires at the Archbold Biological Station. We conclude that, for interior scrub, a fire frequency of 10 to 20 years is optimal for maintaining a healthy population of Florida scrub jays.

DISTRIBUTION AND POPULATIONS

The distribution of the Florida scrub jay throughout the state, both historically and in the early 1980's, was carefully documented and mapped by J.A. Cox (1984, 1987). Because the species is confined to a naturally patchy habitat (primarily old sand dunes or shorelines) its distribution is characterized by numerous small, isolated patches (Fig. 2.4). This is true even in the five counties in which the species is most abundant, Brevard (includes Merritt Is. National Wildlife Refuge, Kennedy Space Center, and Cape Canaveral Air Force Station), Highlands (includes Archbold Biological Station), and Marion, Lake, and Putnam counties (collectively include Ocala National Forest). The largest presently-existing contiguous populations of Florida scrub jays occur at and around the localities listed above in parentheses.

Historically the Florida scrub jay occurred on the peninsula in 39 of the 40 counties south of, and including, Levy, Gilchrist, Alachua, Clay, and Duval. Only the

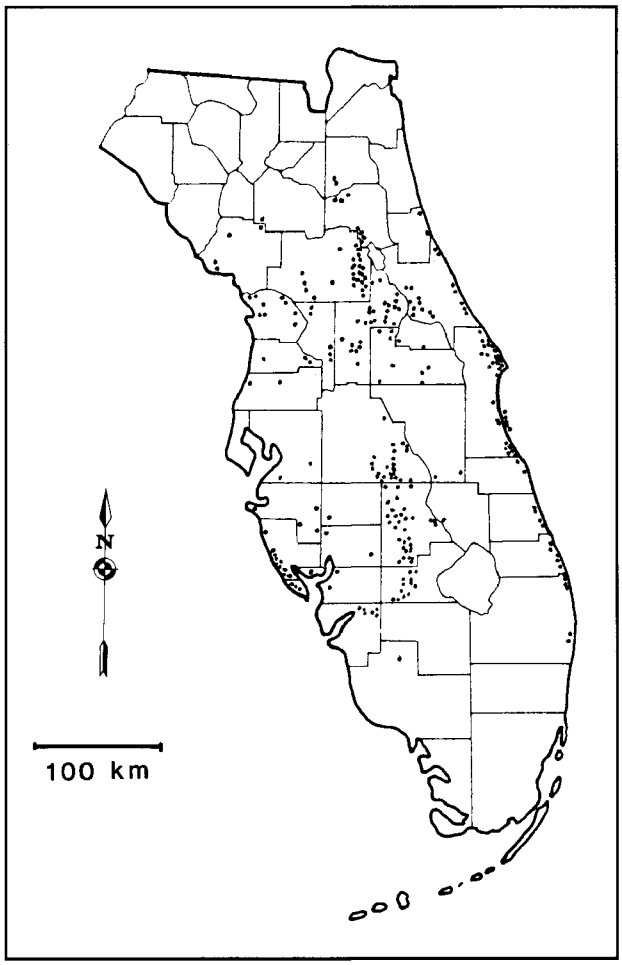

Figure 2.4. Approximate locations of all remaining populations of Florida scrub jays as of early in the 1980's. Modified from Cox (1984).

southernmost peninsular county, Monroe, lacked jays. The jay is now extirpated from 7 of these (Broward, Dade, Duval, Gilchrist, Hendry, Pinellas, and St. John's) and is nearing extirpation in several others. The distribution of the Florida scrub jay as of the early 1980's shown in Fig. 2.4 is drawn from Cox's report and amended slightly based on our own findings in certain areas.

Cox (1987) estimated the total population of Florida scrub jays in 1984 to be 15,600 to 22,800, and suggested that this represented a decrease of about 50% during historical times. By his own account, Cox's census methods were crude and often hasty. In our opinion they were susceptible to error and overestimate (see below). Regardless, the total number of individuals remaining in the state is not large, and has decreased rapidly in recent years, even since Cox conducted his counts.

Cox made judgements on the probability of survival of many of the isolated populations he located, and whose sizes he estimated. However, these judgements constituted necessarily subjective guesses as to whether the habitat patch would remain intact and suppositions as to whether the jays would survive in it. Furthermore, he mostly ignored the statewide problem of fire suppression rendering small habitat patches unsuitable. Unfortunately, based upon our demographic data and our models of population survival using real-world values, we consider most of Cox's judgements to be overly optimistic.

With due respect for Cox's valuable efforts, we provide one example from his report that illustrates the need for more realistic projections as to survival of Florida scrub jay populations. Cox (1987, p. 35) commented that "as many as 10 jays" were seen near the west side of the Immokalee Airport (Collier County), and stated that "the population could survive indefinitely." Estimates such as these contribute to his conclusion (p. 101) that "a total of 11,900 to 18,900 Florida scrub jays . . . may survive indefinitely into the future." However, our population models based on demography alone demand far more conservative estimates. Local sites with 10 jays (2 - 4 territories) bear about a 50% chance of going extinct within 30 years even in the absence of habitat degradation, unless they are located near a source population that could supply colonists as the population dwindles. The Florida peninsula contains scores, perhaps hundreds, of small populations such as those at Immokalee. The long-term future of the Florida scrub jay depends upon recognizing the fragile nature of such a population structure.

SUBSECTION 2.3
POPULATION DENSITY AND DEMOGRAPHY

POPULATION DENSITIES AND TERRITORY SIZE

Preservation of Florida scrub jays in the context of land development requires strict attention to two facts: all individuals reside within territories, and each territory must contain sufficient habitat to sustain a family of jays throughout the year. Therefore, the importance of a given parcel of scrub for preserving a *population* of scrub jays depends upon three particulars: 1) the total *area* of habitat; 2) the density of territories supported by that patch of habitat; 3) the *long-term management* of the habitat to maintain its suitability for scrub jays. The first and third of these issues, in large part, are subject to control by humans. The second issue, territory density, largely is determined by the natural quality of the local habitat and by the evolutionary and ecological history of the scrub jay in Florida. In a natural scrub not already perturbed by man, Florida scrub jay territory densities probably cannot be significantly increased by management.

Density

The most biologically sound measure of Florida scrub jay density is the number of jay territories defended within a unit area of scrub. Use of this measure over other density estimates (e.g., jays per ha) is dictated by several aspects of Florida scrub jay behavior and ecology. Most important, jays are easily attracted to human census-takers, especially along artificial openings such as trails or roads. Calculating densities based upon numbers thus obtained can result in substantial overestimates. Secondly, our long-term data show that densities of territories fluctuate little from year to year, even during periods when total jay density varies widely. Therefore, counting the number of territories within a given area of native scrub provides a reliable measure of the long-term carrying capacity of the local habitat patch. Thirdly, the number of territories provides the only meaningful measure of the number of breeding jays, because each territory contains one and only one monogamous pair of jays. Additional jays (juveniles and older "helpers") can obscure the biologically important density, namely the density of reproductive individuals. Finally, measuring or estimating the density of territories is easily accomplished using tape-recorded jay vocalizations to attract each territorial group and plotting them on aerial photographs. This method is elaborated in Subsection 1.2.

Figure 2.5 shows densities of Florida scrub jay territories in three habitats at the Archbold Biological Station from 1971 through 1987. We have observed natural

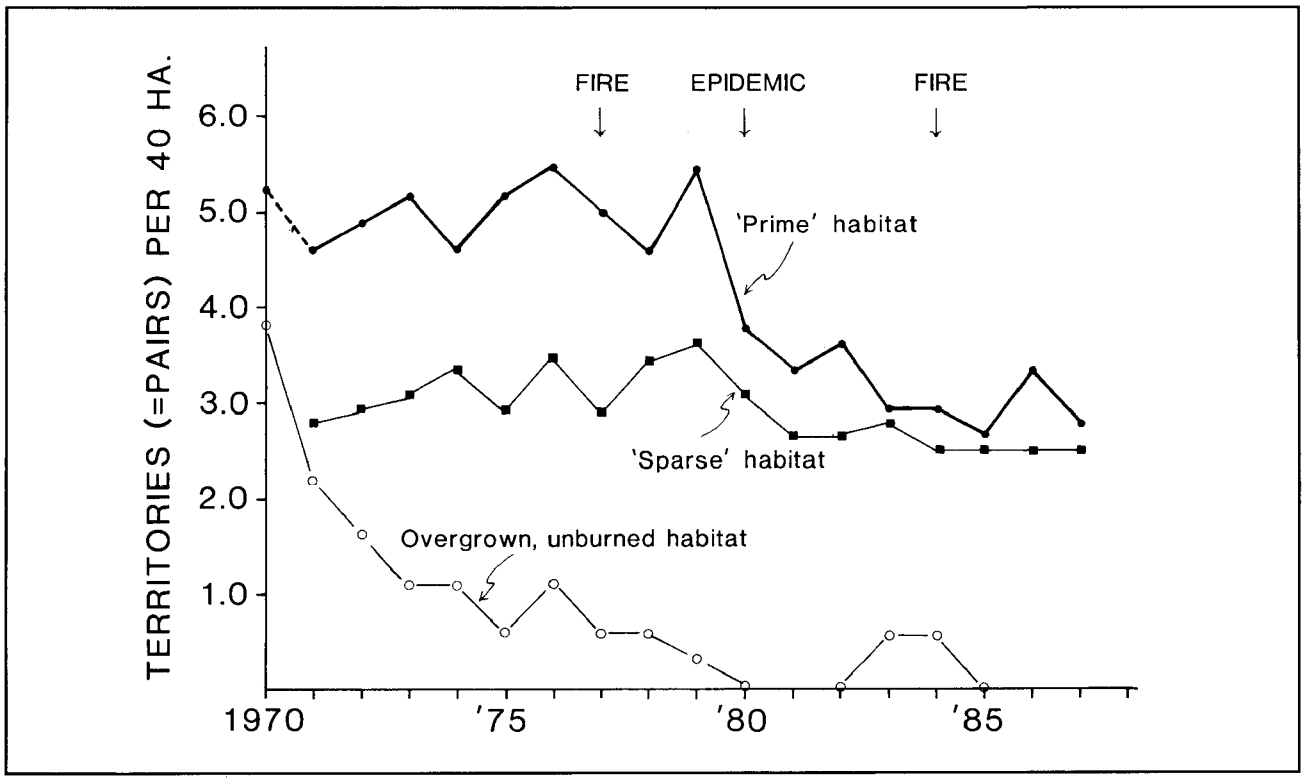

Figure 2.5. Densities of Florida scrub jay territories in three scrubby flatwoods habitats at Archbold Biological Station. Higher density occurs in periodically-burned oak scrub atop well drained sand ridges, while adjacent lower-lying habitat of sparser oak density and abundant palmetto-wiregrass areas supports larger territories, hence lower density. Overgrown scrubby flatwoods supports declining population 40 years after the most recent fire.

variation from about 2 to about 6 territories per 40 ha. of scrub. Mean density in the apparently prime habitat was about 5 territories per 40 ha. before an epidemic in 1979. That habitat patch now varies between 3 and 4 territories per 40 ha, perhaps reflecting lower carrying capacity owing to more extensive burning after the epidemic, perhaps reflecting a regional aftereffect from the epidemic itself (see below).

Territory sizes are larger in scrub habitats that are poorer in quality. At Archbold Biological Station, jay density along the western edge of our study tract ("sparse" habitat) varied between 2.5 and 3.5 territories per 40 ha, 1971-1987 (mean = 2.9; Fig. 2.5). This area is characterized by widely scattered oak patches interspersed with extensive areas of low palmetto and sparse oaks. Scrub jay density declines at the other extreme of oak density as well. In scrubby flatwoods (sensu Abrahamson 1984) that had not burned since the 1930's, density of Florida scrub jays declined in the 1970's from about 3.0 territories per 40 ha to nearly zero. This area has been occupied only sporadically since 1980 (Fig. 2.5). The management implications of this experimental result are discussed carefully elsewhere. Its importance here is the indication that jay densities even in excellent scrubby flatwoods habitat probably *rarely exceed* 5 to 6 territories per 40 ha, and often are considerably lower.

Densities of Florida scrub jays at Archbold Biological Station appear to be similar to those elsewhere around Florida (contra Westcott 1970), although comparably detailed data from other study sites are not available. Cox (1984, 1987) found that "densities of 10-20 birds/40 ha seem to be typical" (Cox 1987, p. 3). Considering average group sizes to be about 3 jays (Woolfenden and Fitzpatrick 1984), these figures correspond to densities of 3.3 to 6.7 territories per 40 ha. Certain areas may occasionally harbor considerably higher densities (e.g., Breininger 1981), but all such estimates known to us are made in disturbed areas where temporary jay concentrations probably do not reflect true local densities (Breininger pers. comm.). Until any study using mapped territories reveals a genuinely higher density, we consider 6.5 territories per 40 ha (ca. 0.5 jays per ha) to be the maximum sustainable density of Florida scrub jays within optimal habitat for the species. Densities of about 2.0 territories per 40 ha should be considered the minimum for stable populations.

Determining a course of action at a site containing Florida scrub jays requires knowledge of population density and local distribution. These data are necessary to assess the population size, and must be used in planning which areas to commit toward scrub jay habitat preservation. The best survey method is to plot the locations of jay families on an aerial photograph or detailed vegetation map of the site. The entire area should be censused carefully enough to insure that most or all groups of jays are noted.

Detailed methods for surveying for Florida scrub jays are presented in Section 1; Figure 1.13 shows a map of a three square-mile tract in Highlands County that was mapped over several days using these methods.

Territory Size

Average territory sizes in continuous oak scrub habitat sometimes can be calculated directly from density estimates. However, most scrub is patchy and characterized by sandy ridges with shrubby oaks interspersed by low areas supporting other plant formations (e.g., flatwoods, palmetto, grassy ponds). Density estimates in highly patchy scrub do not provide direct estimates of territory size, because the jays avoid some of the non-oak habitats.

At Archbold Biological Station, Florida scrub jay territories have been mapped precisely from 1971 to the present. Our maps permit us to delete unused habitats from the measurements of territory size for certain analyses. Overall average territory size in good jay habitat is 9.0 ha (about 23 acres; Woolfenden and Fitzpatrick 1984). Stable territories have ranged in size from 4 to 18 ha (10 to 45 acres). From a conservation perspective, this should be considered the *average amount of usable oak habitat* required to support a single breeding group of Florida scrub jays. Because most scrub habitats contain patches of unused habitat, the total area effectively occupied by jay territories is larger than 23 acres on average. *We recommend considering the average space requirement of the Florida scrub jay to be 25 acres per territory.*

Considerable variation in territory size exists among groups, among habitats, and among years (Fig. 2.3). The most important variables affecting territory size are habitat quality and group size (Woolfenden and Fitzpatrick 1978, 1984). Fig. 2.6 shows two important samples of territories that were substantially smaller than the average for the study population. The lower contains the smallest territories maintained by a single breeding pair for three or more consecutive years. The average size of 5.4 ha (13.5 acres) among this sample provides the best available estimate for the *minimum sustainable territory size* for the Florida scrub jay within contiguous, optimal habitat. The upper includes all smaller-than-average territories that *disappeared* after only one or two years. Many of these persisted for only a few months, as the breeders unsuccessfully attempted to expand their boundaries. Average size among this sample of failures was 3.3 ha (8.3 acres). This result corroborates our suspicion that territories containing less than about 5.4 ha (13.5 acres) of oak scrub cannot be considered adequate to support a family of jays.

Figure 2.7 shows sizes of 33 jay territories in unburned, overgrown oak scrub prior to their disappearance from this unsuitable habitat. The average size of 6.9 ha (17.3 acres) in the unsuitable habitat is significantly smaller than the average size in optimal scrub ($t = 11.3$, $p < .0001$), yet larger than the minimum-sustained territories in optimal scrub. This indicates that territory size problems per se were not a primary cause of disappearances within the unburned habitat.

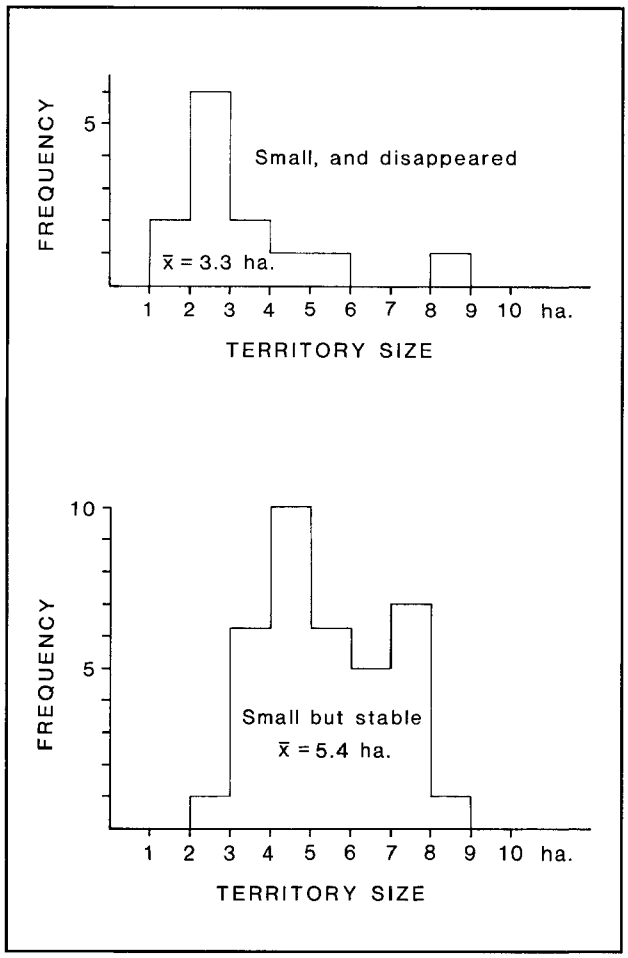

Figure 2.6. Two samples of the smallest territory sizes at Archbold Biological Station, 1970-1979. Upper sample contains territories that disappeared after one year, often through abandonment by the unsuccessful breeders. In lower sample territories persisted for three to four years before either disappearing or expanding. The lower sample probably reflects the smallest sustainable territory size for Florida scrub jays in open scrubby flatwoods habitat.

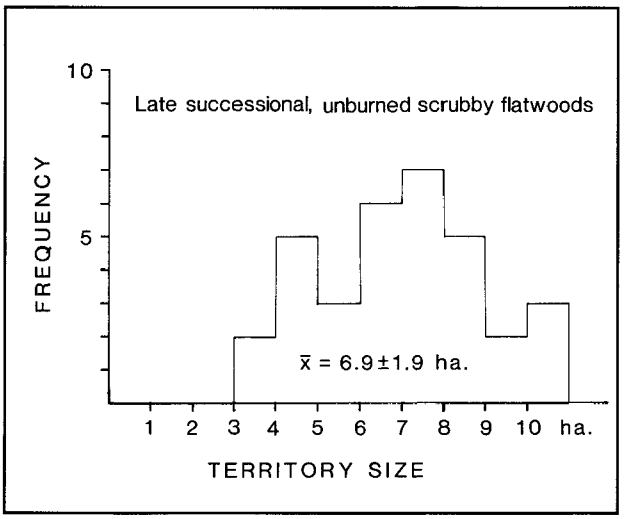

Figure 2.7. Territory sizes of all groups living in late successional, unburned scrubby flatwoods at Archbold Biological Station, 1970-1986. Mean size is slightly smaller than average throughout the main study area, and larger than the apparent minimum sustainable size shown in Fig. 2.6.

REPRODUCTION AND MORTALITY IN SEVERAL HABITATS

Long-term survival of any population depends upon adequate recruitment of new breeders to replace those that die. The balance between birth rates and death rates depends upon a host of variables, and can vary substantially from year to year. However, fundamental to the long-term survival of any Florida scrub jay population is the necessity to maintain this average balance. A large part of the management scheme to protect Florida scrub jays must include efforts to reduce or avoid perturbations that reduce average reproductive success or increase average mortality beyond equilibrium values.

Average Values

Table 2.1 summarizes reproduction and survival in the Florida scrub jay at Archbold Biological Station from 1969 through 1986. The results are separated into four habitat categories pertinent to management concerns: periodically-burned, open oak scrub; unburned and overgrown scrubby flatwoods; unburned Southern Ridge Sandhill (Slash Pine/Turkey Oak formation); mature citrus groves bordering scrub. To our knowledge these represent the only data of their kind for any population of Florida scrub jays. Data on other populations, in other scrub habitats within Florida, would be extremely useful for testing the generality of the following conclusions.

Long-term survival of a population of Florida scrub jays is impossible in all habitats we monitored except for periodically-burned oak scrub. In this habitat: average annual reproductive success was 2.0 fledglings per pair; average survival of fledglings to age one year ("yearlings") was .31; average annual survival of breeding adults was .79. These values translate to an average lifetime production of about 1.3 jays of potential breeding age (yearling) per individual. (The surplus of potential breeders represents the source of the "helper" population—non-breeders working their way into the breeding ranks.)

In each of the remaining habitats monitored, annual reproductive success or survivorship, or both, were substantially lower than in open scrub habitat. The worst of all habitats was overgrown, unburned scrubby flatwoods. Reproductive success was 1.6 fledglings per pair, first year survival was .23, and annual breeder survival was only .72. Under these demographic conditions the average individual breeder does not replace itself, instead producing only 0.6 potentially breeding offspring. This explains why the local populations inhabiting these unburned, late successional habitats became extirpated (Figure 2.5). In the remaining two habitats, where our samples are smaller, reduced reproductive success and greatly increased breeder mortality produced demographic conditions only slightly better than in unburned scrub. Average breeders produced only 0.8 potential breeding offspring, again causing the populations to go locally extinct.

Table 2.1. Mean surviviorships and reproduction of Florida scrub jays in several habitats, 1969-1986

	HABITAT							
	Periodically burned, open-oak scrub		Unburned, overgrown scrubby flatwoods		Unburned Southern Ridge Sandhill (Slash Pine-Turkey Oak)		Mature Citrus bordering unburned scrub	
N (pair-years)	429		74		8		21	
Seasonal nest attempts	1.38	(593/429)	1.49	(110/74)	1.50	(12/8)	1.11	(20/18)
Fledgl./pr.	1.97	(843/429)	1.58	(117/74)	1.38	(11/8)	2.00	(38/18)
Indep. Yg./pr.	1.17	(500/429)	0.80	(59/74)	1.13	(9/8)	1.56	(28/18)
Yearl./pr.	0.60	(259/429)	0.36	(27/74)	0.50	(4/8)	0.61	(11/18)
First-yr. survival	0.307	(259/843)	0.231	(27/117)	0.364	(4/11)	0.289	(11/38)
Breeder survival	0.789	(697/883)†	0.723	(107/148)	0.688	(11/16)	0.619	(26/42)
	EXPECTED LIFETIME SUCCESS/INDIVIDUAL							
Breeding seasons	4.4		3.5		3.2		2.6	
Fledglings	4.3		2.8		2.2		2.6	
Indep. Young	2.6		1.4		1.8		2.0	
Yearlings	1.3		0.6		0.8		0.8	

†N = 883 breeder-years for calculating breeder survival

Annual Variation

Average values for reproduction and survival form a general picture of the health and long-term prospects of a population. However, no single year in the life of a jay or a population is an "average" year. Natural environmental variability plays an exceedingly important role in governing the probability that a given population can survive (MacArthur and Wilson 1967, Soule 1987). For Florida scrub jays, this aspect of population biology is especially crucial because of their naturally patchy, "island-like" distribution. Populations being protected for long-term conservation must be large enough to withstand, or recover from, random fluctuations in birth rate or death rate.

Our long-term data on Florida scrub jay demography provide an opportunity to assign values to the variation surrounding the mean birth rates and death rates. Figures 2.8, 2.9, and 2.10 clearly illustrate the difference between healthy, periodically-burned scrub and overgrown, unburned scrub. Three conclusions are paramount from these graphs and the data in Table 2.1:

1) The average annual values for reproduction and survival are consistently higher in the periodically-burned scrub compared to the overgrown habitat (Table 2.1). In only 4 of 18 years was average fledgling production slightly higher in the tall, unburned habitat. All were during relatively productive years, when both habitats did well. Until 1985, when sample sizes in suboptimal habitat had become very small, only one year in 15 showed mortality in unburned habitat below that in open, periodically-burned habitat (Fig. 2.10). The single exceptional year (1980) was one of unusually low mortality in both habitats.

2) Variation among years is substantial, regardless of habitat. Even in the optimal habitat, average reproductive success has varied from 1.05 to 2.71 fledglings per pair (Fig. 2.8) and breeder mortality ranged from .04 to .45 (Fig. 2.10). Such wide swings in birth and death rates cause considerable local fluctuations in population size and structure. Assuming that these results are typical for Florida scrub jay populations across the state, *the long-term implications of demographic variability among years must be built into any management or conservation plan.*

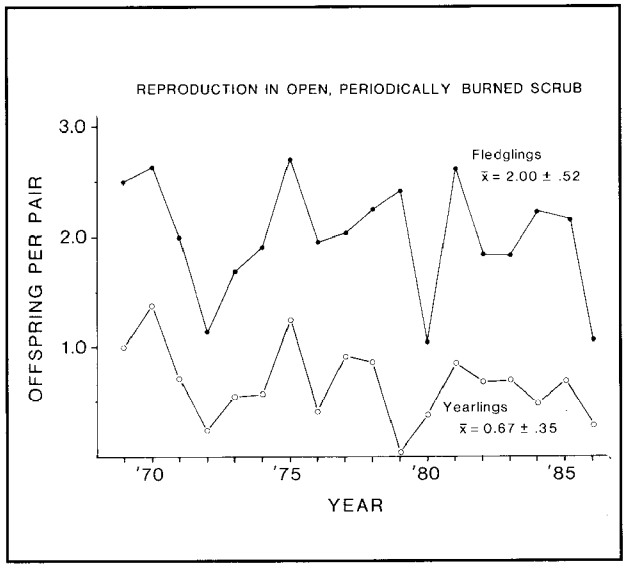

Figure 2.8. Reproduction in open, periodically burned scrubby flatwoods on the main study tract at Archbold Biological Station, 1969-1986. Compare with Fig. 2.9.

3) Variation among years is especially pronounced in the suboptimal habitats, suggesting yet another risk to Florida scrub jay populations inhabiting them. Coefficient of variation (CV) in average fledgling production is lower in periodically-burned scrub compared to unburned scrub (26% vs. 52%), and the same holds for production of

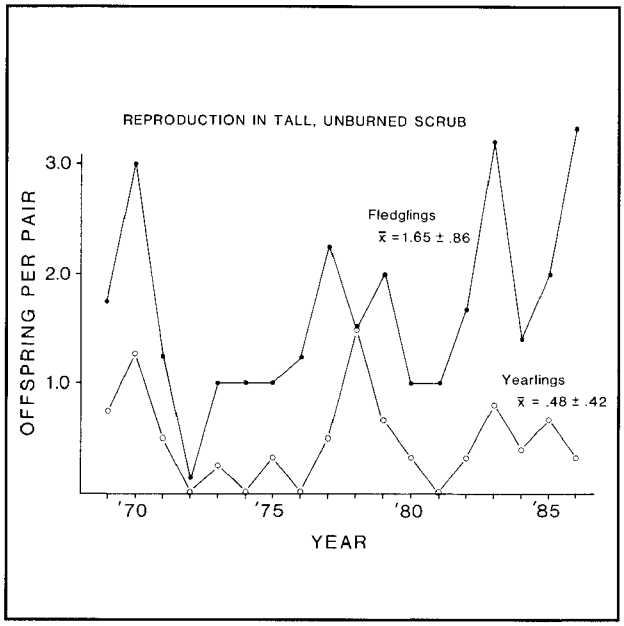

Figure 2.9. Reproduction in tall, unburned scrubby flatwoods and tall ridge scrub with abundant scrub hickory at Archbold Biological Station, 1969-1986. Compare with Fig. 2.8.

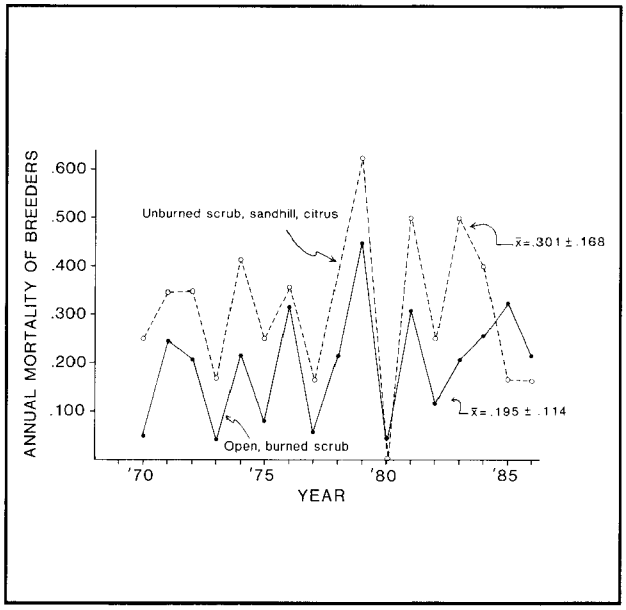

Figure 2.10. Annual mortality of breeding Florida scrub jays at Archbold Biological Station, 1970-1986. Mortality in open, periodically-burned scrub in main study tract is lower than that of several other habitats, all unburned since 1927. Dashed line includes small number of jays living at the edge of a citrus grove bordering tall, unburned ridge scrub for several years before going extinct.

yearlings (52% vs. 88%). Coefficient of variation in annual mortality is similar between the two habitats (54% vs. 55%), but the total range is higher for the unburned habitat (including a year in which nearly two-thirds of the breeders died). Greater variation in demographic parameters leads to greater annual fluctuations in population size. This leads to an important conclusion: *small, isolated populations of Florida scrub jays are more likely to become extinct owing to normal demographic fluctuations if their habitat is not maintained in a low, open condition by periodic burning.*

EPIDEMICS AND OTHER NATURAL CATASTROPHIES

In addition to normal year to year fluctuations in birth and death rates, population numbers are affected by the frequency and severity of catastrophic mortality. All demographic models of extinction probabilities for small populations converge upon one striking conclusion: *the relationship between population size and its probability of extinction depends very heavily upon the frequency and nature of catastrophies* (Ewens et al. 1987, Shaffer 1987).

Epidemics

One catastrophic event has affected the Florida scrub jay population at Archbold Biological Station between 1969 and 1988. Between September 1979 and February 1980 an apparent epidemic swept through the study population, killing about half of all adult-plumaged jays and all but one of 93 juveniles of the 1979 year-class (Fig. 2.11). Characteristics of this epidemic are described in Woolfenden and Fitzpatrick (1984, pp.351-355), and its demographic consequences are summarized here in Table 2.2. Although no epizootic agent was identified, water levels in late summer 1979 were abnormally high throughout the scrub habitat in and around the study area. We suspect that this condition permitted a lethal arbovirus to incubate and spread, possibly borne by mosquitoes. No sick jays were observed, suggesting that death was rapid after infection. In all, 128 of 184 jays (70%) in the study tract died between June, 1979 and May, 1980. Fifty-three of these deaths (41%) were noted during September and October (Fig. 2.11).

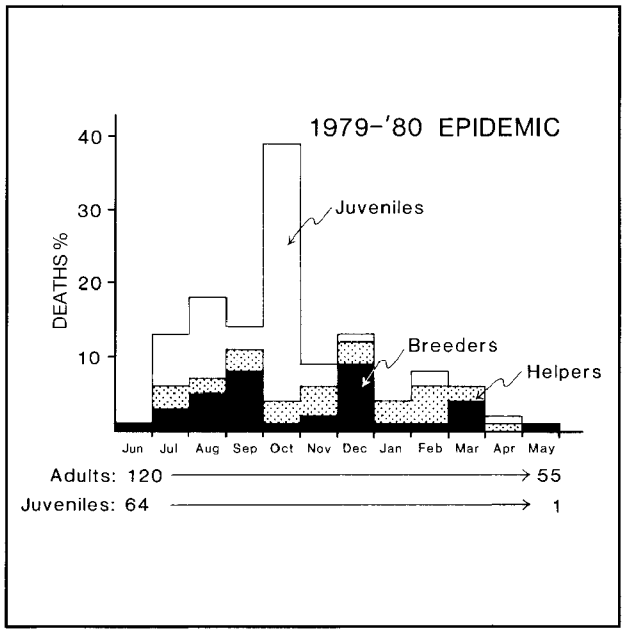

Figure 2.11. Phenology of an apparent epidemic; nearly 70% of the 184 Florida scrub jays alive in mid-June, 1979, were dead by the following May. Breeder and helper mortality approached 50%, and juvenile mortality was essentially complete.

Table 2.2. Effects of apparent epidemic in Florida scrub jay study tract, September 1979-February 1980.

	Previous Averages (1969-1979)	1979-80
ANNUAL SURVIVAL:		
BREEDERS	0.81	0.55*
HELPERS	0.80	0.49
JUVENILES	0.34	0.01
REPRODUCTION:		
(fledglings per pair)	2.04 ($\bar{x}$) 2.42 (1979)	1.05 (1980)
BREEDING DENSITY		
(pairs per 40 ha.)	5.0	3.8 (1980)

*Mortality of oldest breeders (age 9 or older, N = 18) significantly higher than that of youngest breeders (age 2 or 3, N = 26), with rates of .54 vs. 31, respectively ($\chi^2 = 6.32$, $p<.01$).

We have no data to indicate how widespread the 1979 epidemic was in southern Highlands County beyond our study area at the Archbold Biological Station. A few jays of the 1979 year-class immigrated into the study tract over the ensuing year, proving that the regional population of that year-class was not totally destroyed. However, the total population density in our study tract has not recovered to its pre-epidemic levels (Fig. 2.11). Presumably, immigration from surrounding areas of higher density would have been rapid if the population reduction had been limited to the immediate study area. We suspect that elevated mortality afflicted at least the entire population of the Archbold Biological Station (ca. 120 pairs), and probably the contiguous scrub habitats around its borders.

We have no way yet of estimating how frequent or regularly spaced such epidemics are in natural populations of Florida scrub jays. Certainly on our study site they are rare with respect to the average lifetime of a jay, as the study population has experienced only one epidemic, approximately midway through our 20 years of study. For purposes of projecting an expected frequency of epidemics, therefore, we can only make educated guesses. Moreover, the frequency of such catastrophic events presumably varies regionally. Even if we knew their frequency in southern Highlands County, we would need comparable data from several other populations before confidently estimating a general frequency for the species as a whole.

Various circumstances lead us to suspect that a die-off of older breeding jays had overtaken our study tract shortly before the study began in 1969. Largely for this reason, in the demographic models to follow we have chosen to incorporate epidemics occurring at an average frequency of one every 20 years (results assuming a lower frequency are also shown).

Other Catastrophies

Besides epidemic diseases, we know of no other natural catastrophies that affect Florida scrub jay populations. Fire, even when hot and widespread, probably is never catastrophic in its long-term effects. We know that jays continue to use and defend burned oak scrub, and the scrub regenerates extremely quickly after any fire (Abrahamson 1984). Because they do not migrate, and live in a warm temperate climate, Florida scrub jays are not subject to large scale, weather-related disasters that occasionally inflict heavy mortality on migratory bird populations or those restricted to cold, less predictable climes. Major tropical storms and hurricanes periodically batter portions of peninsular Florida, but their effects on oak scrub are minimal. No natural predator is known to be capable of systematically devouring enough individual scrub jays in a local area to affect populations at catastrophic levels. In the absence of habitat alteration by humans, Florida scrub jay populations probably are as resilient to natural catastrophy as any native bird population in Florida.

DISPERSAL CHARACTERISTICS

Florida scrub jays are extremely sedentary, a feature that may have profound influence upon large scale population structures and upon habitat protection measures. Juvenile jays remain in their natal territory for one to five years before dispersing to become breeders. Only during a brief pre-breeding period do Florida scrub jays disperse any appreciable distance. Once they become breeders, jays remain on or near their breeding territory until death. Fig. 2.12 (from Woolfenden and Fitzpatrick 1986) shows documented dispersal distances of 119 color-marked jays that became breeders in or near the study tract at Archbold Biological Station. Typical of most bird species (Greenwood 1980), females on average move slightly farther from their natal ground than do males. No male is known to have dispersed more than 1.5 km. from its birthplace. Average dispersal distance for females is 1.1 km., and the maximum confirmed dispersal distance known to us is 5.6 km. (about 3.4 miles). Most Florida scrub jays become breeders within a few hundred meters of the patch of scrub in which they were hatched.

The sedentary nature of Florida scrub jays has important implications for conservation measures. On the positive side, territorial inheritance and short-distance dispersal insure that protected patches of suitable habitat routinely pass among generations without requiring new colonization events. Successful lineages of jays probably retain "possession" of good patches of habitat for many decades under natural circumstances. In addition, limited contact between local populations may reduce the probability that lethal diseases can spread across major portions of a regional population.

On the negative side, isolated patches of suitable scrub in which jay populations have drifted to extinction may go uncolonized indefinitely if they are more than a few km. from the closest possible source population. Small populations are less likely to go extinct in the first place if they

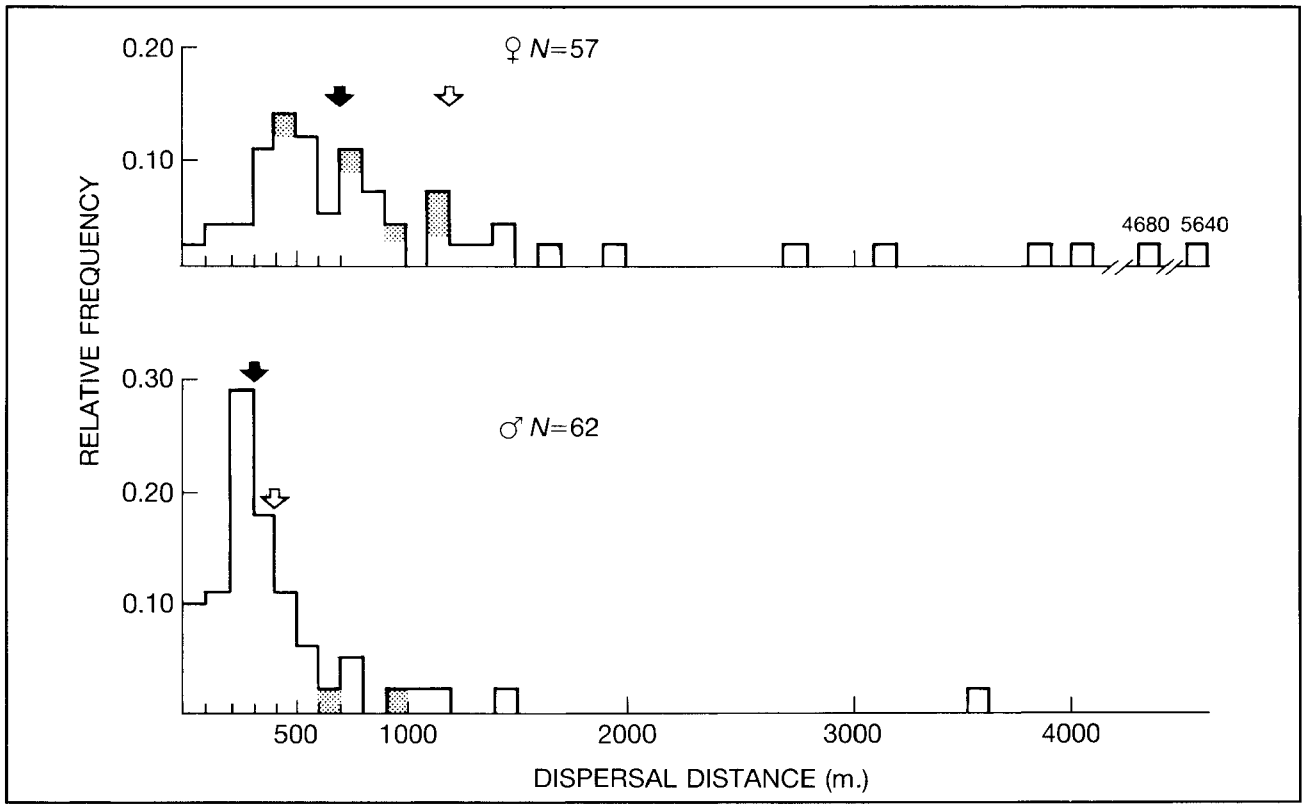

Figure 2.12. Dispersal distances of male and female Florida scrub jays, measured between nest last attended as a helper and first nest of first season as a breeder. Median (solid arrows) and mean (open arrows) dispersal distances are indicated. Shaded samples represent known minimum distances for known-age immigrants upon entering the study tract. From Woolfenden and Fitzpatrick (1986).

are located within the normal dispersal radius of other jay populations. For these reasons, clusters of small to intermediate-sized local populations may constitute a suitable configuration of Florida scrub jay meta-populations where the total area of preserved habitat is limited.

Based on our dispersal data, we suggest that *isolated scrub habitat preserves within about 5 miles of one another are sufficiently close to allow for some occasional movement of Florida scrub jays among them.*

SUBSECTION 2.4
FLORIDA SCRUB JAY CONSERVATION ISSUES

The Florida scrub jay easily could become a symbol of successful conservation efforts within Florida. Not only are its populations eminently preservable, but the birds themselves have numerous qualities that endear them to humans. Foremost among these is the fact that Florida scrub jays can become extremely tame, and even often give the impression of enjoying perching atop the hands or heads of surprised onlookers. Once tame they are easy to attract and observe. They are aesthetically and intellectually pleasing, possessing a rich and complex social system that can be examined at close range. If viewed with respect and admiration for what they tell us about ecology and the environment, they have the potential for capturing the fancy of otherwise disinterested landowners. Protection of Florida scrub jays insures the protection of an entire community of threatened species. The jay can become Florida's most easily advertised conservation success story. In this section we describe the harmful, the non-harmful, and the potentially beneficial effects of humans on Florida scrub jay populations.

POPULATION DECLINE: CAUSES AND PREVENTION

Habitat Elimination

Without question, the most pervasive and final action brought about by humans that reduces or destroys populations of Florida scrub jays is outright elimination of their habitat. The clearing of oak scrub, whether a few thousand acres or patches of a few acres, reduces the number of territories of scrub jays that can be supported. *The popular misconception that clearing a few acres of scrub will simply cause the resident family to "move over" to adjacent scrub is patently false.* If it is suitable for jays, the adjacent scrub is occupied already by its own resident, territorial groups of jays, and these territories cannot be compressed to "make room" for new ones. It is extremely difficult or impossible to increase the local carrying capacity for Florida scrub jays. Jays that are displaced from a territory because of destruction of their habitat are immediately dead, from the population standpoint.

Large-scale developments located in areas containing Florida scrub jays can insure persistence of the jays only by leaving one or more sizeable tracts of oak scrub intact, and by following procedures to avoid degradation of the habitat, especially through management via prescribed burning.

Habitat Fragmentation

Despite all safeguards, some populations of Florida scrub jays become extinct through random fluctuations in their numbers. Undoubtedly some of these local extinctions took place even before humans began accelerating their frequency and making them irreversible. As with populations of any organism, the probability of random extinction increases as population size decreases. In Florida today, several areas of apparently suitable oak scrub lack Florida scrub jays. To our knowledge, no specific local extirpation is *known* to have resulted from random population fluctuations, but the probability is high that some indeed have.

As large continuous tracts of oak scrub are broken into smaller and smaller fragments during the course of human development, local populations of Florida scrub jays are isolated from one another. Inevitably, smaller populations have higher probabilities of extinction than larger ones (MacArthur and Wilson 1967). Inevitably, therefore, fragmentation of habitat increases the rate of local extirpation of jays beyond that which would be expected from the overall loss of habitat alone.

Developments in which Florida scrub jay preservation is being attempted should make every reasonable effort to maximize the area of suitable habitat left intact, and to configure it in the fewest possible patches so as to maximize the size of each isolated population of jays. This technique will minimize the probability that each population will go extinct.

When the choice exists, favor preservation of one or a few large tracts of oak scrub habitat rather than a larger number of smaller preserves. If several tracts can be preserved, small patches of scrub or corridors of scrub between the larger tracts will reduce the probability that the jays in any one patch will go extinct. No Florida scrub jay population containing fewer than 30 territories can be considered safe from extinction over the long term. The ideal system for habitat preservation is a network of at least 750-acre scrub tracts in which no tract is greater than 5 miles from another.

Habitat Degradation

Almost as important as outright obliteration of habitat are various forms of degradation commonly inflicted upon oak scrub in Florida. The most common form of habitat degradation is the supression or prevention of fire, which has the *inevitable* result of changing the structure of the habitat into one that cannot support Florida scrub jays. We have visited numerous isolated tracts of habitat that once had been open, oak-dominated scrub, but in recent years are characterized by dense overstories of pines, especially sand pine, and thickets of tall oak shrubs. Such areas either lack Florida scrub jays entirely, or support a few scattered pairs around the edges where open oaks still exist.

Many oak scrubs in Florida support large populations of sand pines, which form dense canopies when mature. Cox (1984, 1987) found reductions in Florida scrub jay densities in any scrub with more than 20% cover by trees. Florida scrub jays cannot exist in mature sand pine scrub, nor in slash pine scrub (scrubby flatwoods) that has gone unburned more than about 40 years. However, fire or clear-cutting in a mature sand pine scrub community causes a return to conditions acceptable for Florida scrub jays.

It is imperative that assessment of any area as potential habitat for Florida scrub jays include careful biological judgement as to the area's suitability after habitat restoration by prescribed burning and/or clear-cutting. Oak scrub habitats can remain near optimal in condition for Florida scrub jays indefinitely, but only through a fire management program or its equivalent. The best program would be a rotation of prescribed burns, each covering relatively small portions of a preserved tract of scrub. On average, each point in the tract should be burned about once every 10 to 20 years. It is not necessary, nor even advantageous, that every square meter of scrub burn during a prescribed burn. Natural scrub fires usually are extremely patchy, and the jays continue to defend and use their entire territory after it burns. Small patches left unburned provide cover and foraging sites as the scrub regenerates.

Dirt bikes and other off-road vehicles disrupt the sand soil layers and uproot underground stems of oaks and other scrub perennials. The disturbed sandy soil becomes acceptable substrate for numerous exotic species that spread and dominate scrub. Most notorious of these is Brazilian pepper (*Schinus terebinthifolia*), a tall and fast-growing shrub that has taken over extensive areas of scrub formerly occupied by Florida scrub jays, especially in the coastal scrubs inland from the Atlantic Ocean. Such fast-spreading perennials commonly begin along the edges of roadways through scrub.

Other intrusions include frequent and uncontrolled pedestrian traffic, trash dumps, and other casual uses of oak scrub habitat. These activities reduce the quality of scrub habitat for jays, primarily by decreasing the density of oak shrubs or inhibiting their growth. Any such degradation has the effect of reducing the density of territories that can be supported in the area.

Degradation of existing scrub through a variety of human uses is especially hazardous to Florida scrub jay populations located on very small tracts of habitat. Several small (15-30 ha) patches of once-suitable scrub in Indian River County (Cox 1987) were found to lack the jays in 1987. These areas were surrounded by residential housing, and were criss-crossed with dirt-bike trails. Alien annuals and perennials were abundant among the oak shrubs. Refuse was scattered throughout. We suspect that the level of human disturbance *of the habitat* (not of the jays per se) was responsible for these extirpations, although we cannot rule out that mortality, from house cats for example, also played a role.

Florida scrub jays *can* coexist alongside humans, as long as the native structure and species composition of the principal patches of oak scrub are allowed to remain intact. Scrub preserves should be located as far as possible from potential sources of uncontrolled use of off-road vehicles. Trails through the scrub should be few in number and well marked. Refuse dumps should be located elsewhere.

Direct Human-related Mortality

The presence of humans near populations of Florida scrub jays results in a variety of incidental encounters that usually increase the mortality of both juveniles and adults. Certainly most important among these is the killing of jays by household pets, especially house cats. Scrub jays are highly terrestrial birds, and juvenile jays are clumsy and vulnerable. House cats, even a few, whose density is bolstered by human care and feeding, easily could eliminate a small population of Florida scrub jays occupying otherwise suitable habitat (see Churcher and Lawton 1989). Because the jays frequently become extremely tame to human approach (when fed by interested and enlightened persons), they also are exceedingly vulnerable to wanton destruction by children or unenlightened adults.

Various methods of controlling household or garden pests also carry the risk of killing local scrub jays. Most important of these are any of a variety of small-mammal traps, *including live traps*. Virtually any trap that holds a jay and keeps it confined at night will cause its death, either from exposure or from nocturnal predators.

None of the above effects, taken separately, is likely to be enough to eliminate outright a sizeable jay population, with the probable exception of the house cats. However, all will take place when human residences are built within a population of scrub jays. Their cumulative effects easily could elevate average mortality of the jays to a level above that which can be replaced through average reproduction. In such cases, even if gradual, the effect is to drive the whole population toward extinction. Reserves should be large enough to insure that at least several scrub jay territories are located away from the edges, where hunting pressure from house cats is highest.

Vehicle traffic through good scrub jay habitat can have a significant, directly negative effect on the jays occupying territories along the roadside. We measured such an effect at the Archbold Biological Station in 1986 and 1987. Approximately 2 mi (3.3 km.) of optimum-quality oak scrub at the station borders a two-lane, paved state road (SR 17). An estimated 100-150 vehicles pass through this area each day at speeds averaging about 50 mph. As of June, 1986, 28 color-banded breeding jays resided in 14 territories contiguous with this stretch of road. One year later only 16 of these jays were alive, yielding below-average survival rate of 0.57. Survival of breeders during the same 12-month period in contiguous habitat lacking paved roads was significantly higher (0.79; 95 of 121

breeders surviving, Chi-square=5.46, p=0.019). Several road-killed adult jays were found during this period.

Survival of fledglings from nest-leaving to nutritional independence (about age 3 months) also appears to be lower along roadside territories, though our sample sizes are smaller. In the roadside territories 8 of 21 fledglings survived to independence, versus 61 of 112 in non-roadside territories (0.38 vs. 0.55 survival, Chi-square=1.90, p=0.17). Several road-killed fledglings also were found during the period of study.

If the above mortality data are representative, Florida scrub jays cannot maintain stable territory dynamics along roads with appreciable high-speed traffic flow. This result is especially crucial for areas with relatively small jay populations. Any local population in which the overall average mortality is similar to that measured along SR 17 will go extinct within several years. The one practical method of protection against such locally elevated mortality is to preserve contiguous, safer habitat that serves as a source pool for the roadside territories experiencing higher mortality.

Numerous patches of scrub border a major U.S. highway (A1A) through coastal dunes in Brevard and Indian River counties. Historically these sandy coastal islands supported almost continuous scrub jay habitat, but human development has fragmented the jays into a few remnant populations. In these areas jays routinely perch on utility wires and tall vegetation near the highway. However, in all such cases jays occupy patches of scrub that border adjacent, larger tracts of scrub away from the highway. Scrub patches not bordering such protected source areas (as well as a few that do seem to have source areas) appear to be devoid of jays. It is doubtful that small populations of jays, even if totally habituated to major traffic flow, can avoid greatly elevated juvenile and adult mortality along major highways.

HUMAN ACTIVITIES THAT ARE NON-HARMFUL OR ARE BENEFICIAL TO SCRUB JAYS

Probably the most beneficial interaction with humans is the inevitable reduction in numbers of the larger and long-lived natural predators of the jays. Among these are certain snakes (e.g., eastern coachwhip, indigo snake), mammals (e.g., bobcat, gray fox), and birds (especially various hawks and owls). These changes probably reduce mortality somewhat, although they probably do not offset the effects discussed above.

Artificial feeding of wild animals by humans is inevitable, even though it can be harmful for certain species (e.g., hibernating rodents, bears). We have no reason to suspect that the various foods routinely fed to Florida scrub jays by interested residents are harmful in any way, unless tainted with chemical poisons. Indeed, under certain conditions, artificial food might increase slightly a local jay population by decreasing the average size of territories required by the resident jays. Any such effect would, of course, be highly dependent upon the predilections and behavior of individual human residents, and could change frequently through time. For this reason, it is not recommended that artificial feeding be incorporated into a habitat protection plan.

SUBSECTION 2.5
SURVIVORSHIP OF POPULATIONS: SIMULATION MODELS

Recently, considerable attention has been focused on the problem of defining "minimum viable populations" for purposes of conserving biological populations and diversity (reviews in Soule 1987). Although this specific field of inquiry is young, the general principles are drawn from well-established ecological theory and wildlife management practice (Shaffer 1981, 1983; Soule 1980; Wright and Hubbell 1983). No formulae exist for calculating minimum viable populations; the biological world is too complex and unpredictable for an exact minimum viable population size to exist for any species. We are, however, well equipped to model the survival probabilities of Florida scrub jay populations under a variety of circumstances, because our long-term demographic study allows us to use real-world values for the critical variables in simulation models.

DEMOGRAPHIC MODELS OF EXTINCTION TIMES FOR FLORIDA SCRUB JAYS

Our approach is to begin with a hypothetical population of jays containing a given number of territories. Through Monte Carlo simulation techniques, natural birth and death processes are allowed to take place year after year indefinitely, until the number of breeders is reduced to one or zero, at which time the population is deemed extinct. The number of years is counted in which at least one breeding pair had remained. The process is repeated a large number of times (in the present case, N=100) for each population size to generate a frequency distribution of years-to-extinction (= persistence times) for that size. Such distributions always take the form of a negative exponential distribution (Goodman 1987), and can be described or depicted in a number of ways. The median persistence time is one comparative index of the viability of populations of a specified size. Alternatively, the cumulative probability of extinction can be plotted against time since isolation, with various population sizes plotted on the same graph (e.g., Figs. 2.13, 2.14).

The following assumptions are incorporated into the simulation model, each of which represents a real-world biological feature of Florida scrub jay population: 1) each territory contains one and only one pair of breeding jays; 2) the population is assumed to be at carrying capacity to start with, and is not allowed to exceed the initial number of territories at any time during the "life" of the population; 3) the initial population begins with one helper of potential breeding age in each territory; 4) the number of helpers is permitted to vary between 0 (= no helpers present) and three times the number of territories (= average of 3 helpers per territory); 5) yearlings are not allowed to breed; 6) the pool of non-breeders older than age one year permits an equal chance for each individual to become a breeder (i.e., no age-specific differences in success probability after the first year); 7) all breeders have an equal probability of dying during a given year; 8) *average* demographic values are set to a steady state population (no intrinsic population growth or decline), but individual survival and reproduction is treated probabalistically. This simulates natural environmental variability (stochasticity).

Various demographic features are open to variation within the simulated lifespans of a population. Table 2.3 shows the important variables, and lists the assumed values for our primary simulations.

Perhaps the most far-reaching conclusion proven by recent models of population extinction is the overwhelming importance of environmental variation in affecting expected persistence times for populations (Belovsky 1987, Ewens et al. 1987, Shaffer 1987). Our own models indicate the same result. The effects of year-to-year variation are so

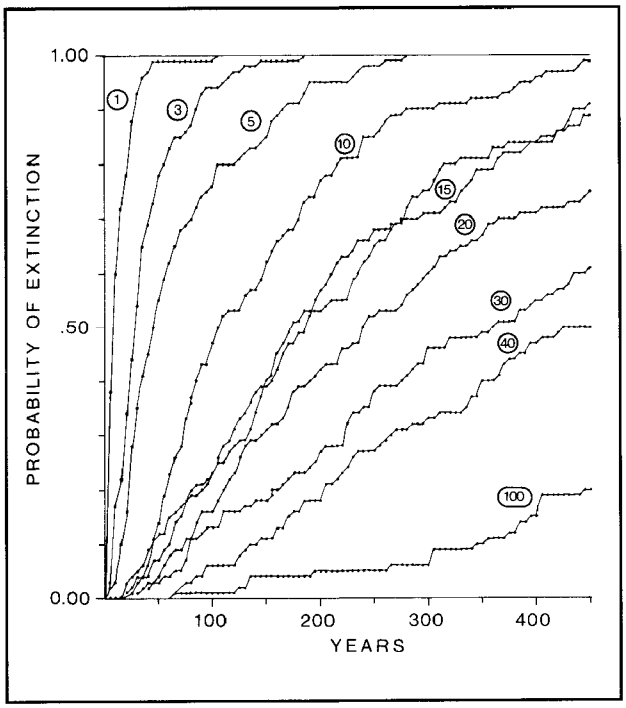

Figure 2.13. Cumulative extinction probabilities versus time for Florida scrub jay populations of different maximum sizes, measured in number of territories (circled numbers). For each population size, 100 replicate populations were simulated using a computer model, with natural demographic variables for birth and death rates and annual variations in these values. All were permitted to run until extinction occurred (i.e., when fewer than 2 jays remained). Points show cumulative proportions extinct at 5-year intervals through the first 460 years after beginning the run (e.g., after isolation of the preserve). Two separate runs of 100 populations each are plotted for population size 15 territories, to illustrate robustness of the curves. In this graph epidemics are assumed to occur at random intervals with a mean frequency of one every twenty years (cf. Fig. 2.15).

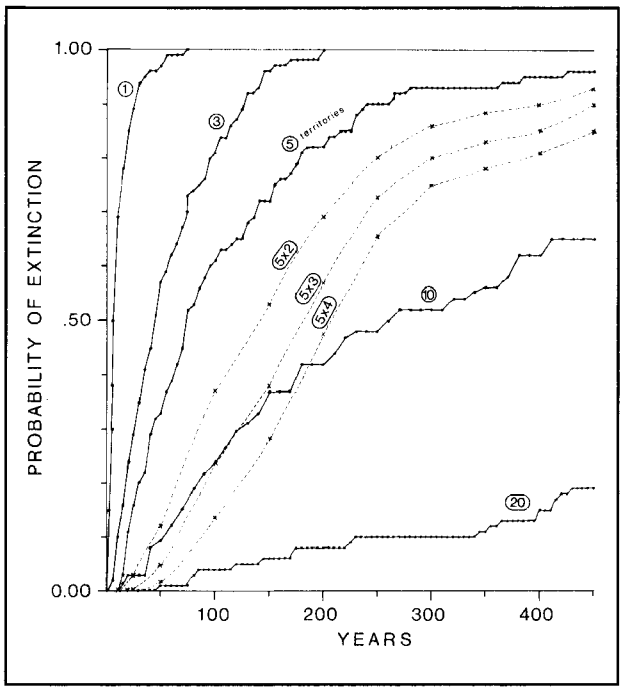

Figure 2.14. Cumulative extinction probabilities versus time for Florida scrub jay populations of different maximum sizes. Methods exactly as in Fig. 2.13, but here epidemics are assumed to occur at average frequencies of one every fifty years. Dashed lines show analogous extinction curves for Florida scrub jay populations fragmented into 2, 3, or 4 isolated populations of 5 territories each, so that probability of overall extinction is expressed as probability of extinction of the 5-territory sample, raised to the power of 2, 3, or 4. Relative positions of these lines compared with that for a single population of 10 territories illustrates that in this size range one larger preserve is preferable to several smaller preserves.

profound that we include here a quote from one expert on the design of biological reserves (Goodman 1987, p. 34):

> "Inasmuch as incorporation of effects of environmental variation leads to qualitative as well as enormous quantitative differences, in the predictions of stochastic population models bearing on the central questions of conservation biology, we conclude that: (1) practical models must take environmental variation into account, (2) serious attention must be given *to field programs of estimation of the relevant parameters of environmental variation* . . . and (3) strategies for population management and reserve design must be re-evaluated in light of the results of models which incorporate environmentally driven variation." (italicizing ours).

We incorporate environmental variation, including epidemics, into our simulation model. Our method assumes a *distribution* of annual mean birth rates and death rates, rather than a fixed average value for these variables that remains constant each year. The distributions we use are exactly those shown in Figs. 2.8 and 2.10, namely the measured annual values during 18 years of study at Archbold Biological Station. Each year during the simulation the program randomly chooses a value from the observed frequency distributions of mean annual birth rates and death rates. For every year in which the population persists, each individual's probability of surviving, and each pair's probability of fledging from 0 to 4 young, are corrected so that an infinitely large population would conform to that year's mean demographic values.

Epidemics are incorporated as follows: when the highest observed value for breeder mortality is selected (0.45 in our model), the program is flagged to assume that an epidemic has spread through the population that year. During such a year, the juvenile death rate becomes 0.99, the death rate of helpers older than one year is elevated (from its stable value of 0.23) to 0.50, and the following year's mean reproduction is set at its lowest observed value (1.1 fledglings per pair, compared with the overall average of 2.0). Because we do not know the natural frequency of such epidemics, our choice of frequencies was arbitrary. Our primary simulation assumed a once-in-20-year average frequency (.05 probability each year). For comparison, similar simulations were performed assuming a lower frequency (once in 50 years, or .02 annual probability).

SIMULATION RESULTS

For each specified population size, 100 hypothetical populations were allowed to proceed through random birth and death processes (e.g., Fig. 2.15) until they went extinct through demographic extinction. The resulting 100 "population lifespans" or persistence times conformed to the general results of Goodman (1987). Broadly leptokurtic distributions closely resemble the negative exponential; the only deviation from true negative exponential extinction probabilities reflects the "safe" period at the onset of isolation, because it always takes some time

Table 2.3. Demographic values and their annual variations used in computer simulation of Florida scrub jay populations.

X ANNUAL FECUNDITY:

frequency	$\bar{x}$ annual fledgl./pr
.17	1.12
.06	1.73
.06	1.94
.32	2.04
.11	2.24
.11	2.45
.17	2.65

$\bar{X}$ ANNUAL SURVIVAL:

juveniles to age 1 year	
normal:	.35
epidemic:	0
yearlings to age 2 years	
normal:	.70
epidemic:	.50
older helpers	
normal:	.77
epidemic:	.50

breeders: frequency	annual survival
.16	.950
.11	.925
.06	.875
.05	.825
.33	.775
.06	.725
(.17)*	.68
(.05)*	.55 = epidemic

*lowest values for mortality are varied according to specified frequency of epidemics.

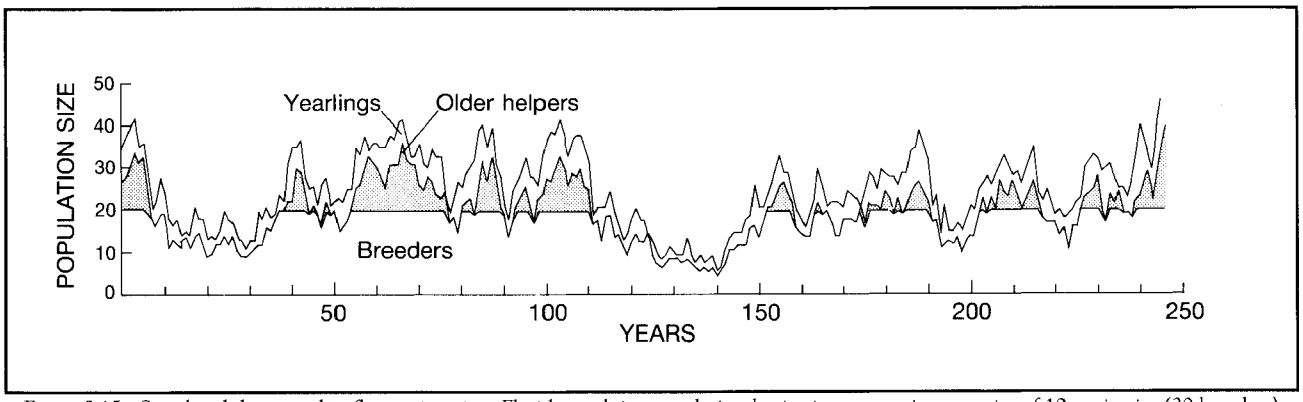

Figure 2.15. Simulated demographic fluctuations in a Florida scrub jay population beginning at carrying capacity of 10 territories (20 breeders), illustrating the behavior of the model used to estimate persistence times. Breeder numbers are prohibited from exceeding the specified size, as would be the case in a small habitat preserve. Shaded portions illustrate the numbers of non-breeding helper jays older than one year, waiting to become breeders. Epidemics occur at random intervals, with an average frequency of once every 20 years. Their long-term effects on the population structure are apparent. Portions of this figure closely resemble the 18-year fluctuations documented in a real world population at Archbold Biological Station.

for extant individuals all to die even in the face of minimal reproduction and recruitment.

Our general results are shown in Figs. 2.13, 2.14, and 2.16. Cumulative extinction probabilities increase with time, but this increase is slower for larger populations. These graphs emphasize the importance of approaching preservation of small populations from the viewpoint of probability. It is well known that any population subject to annual variability and periodic catastrophic reduction has some finite probability of going extinct through demographic fluctuation within a relatively short period. The goal of habitat preservation in this context is to reduce these probabilities to as low a level as possible in the context of economic reality. Ultimately, the decision is arbitrary as to how high an extinction probability can be tolerated. *We recommend as a minimum guideline attempting to insure a 90% probability that each local Florida scrub jay population will survive for at least 100 years.*

Recommended Preserve Size

It is clear from Figs. 2.13 - 2.16 that under conditions of isolation, habitat preserves containing as few as 1 to 5 territories of Florida scrub jays are highly subject to local

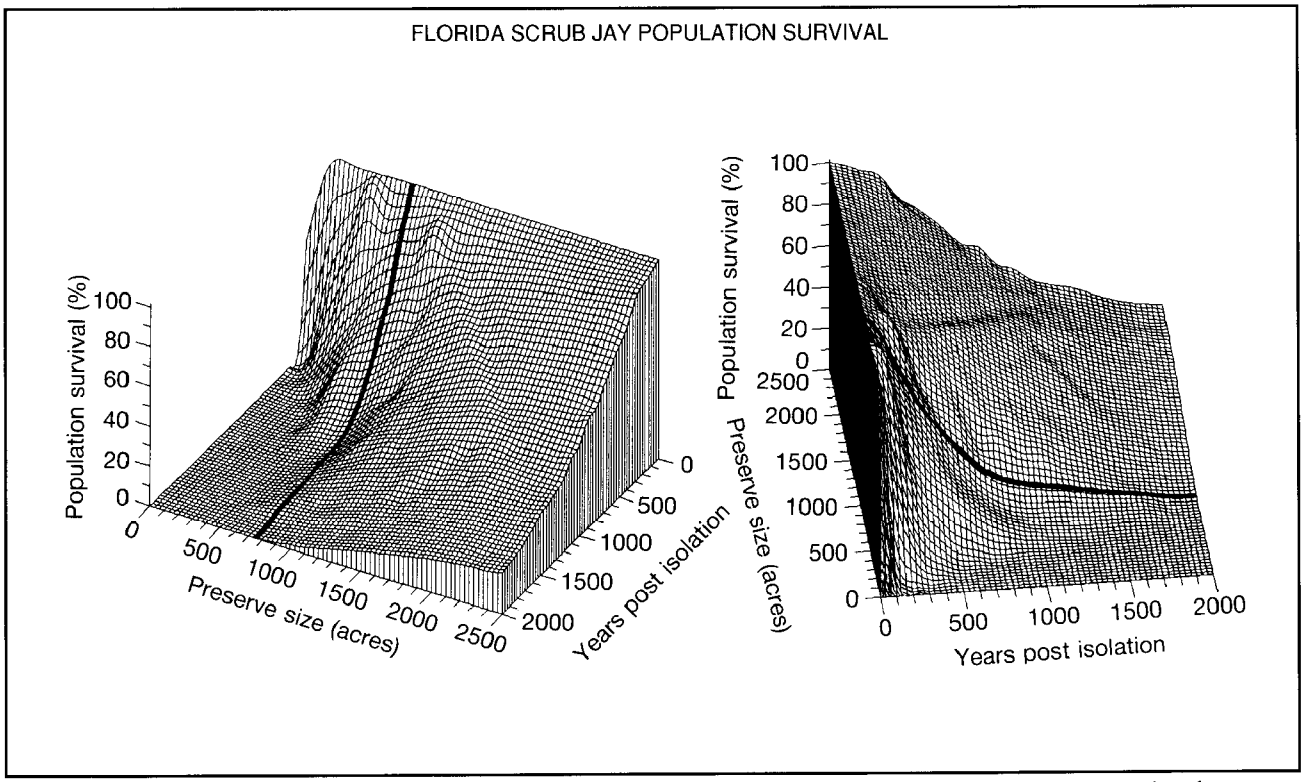

Figure 2.16. Two views of the same three-dimensional graph showing relationships between preserve area, population survival, and time in simulated Florida scrub jay populations. Preserve area is expressed in acres and assumes about 25 acres per Florida scrub jay territory. For a given population size, the graph indicates approximately what proportion of such populations would likely remain extant after N years after isolation. The isobar for a 30-territory preserve is darkened for reference. Populations larger than 30 territories show 90% or better probability of surviving at least 100 years. This graph assumes that epidemics occur on average once in 20 years.

extinction. Even if epidemics are absent from such populations, extinction is likely to occur rapidly. Furthermore, populations maintained for even a few generations at this small size are known to undergo severe reduction in genetic variability, with detrimental effects owing to inbreeding and loss of ability to cope with small environmental perturbations (e.g., Lande and Barrowclough 1987). In larger populations these genetic considerations are of secondary importance compared to the overwhelming problem of extinction-risk from demographic causes (R. Lande, personal communication).

Populations of between 15 and 30 territories should be considered marginally protected. Depending on the frequency of epidemics these populations may or may not exhibit 90% survival probability over 100 years. However, a population of 15 territories (= 15 breeding pairs) still is well below a generally accepted population size at which genetic variability is maintained (Soule 1980). The adequacy of a preserve limited to this range of sizes is in large part dependent upon its proximity to other, better protected preserves that can supply occasional colonists. *Florida scrub jay populations of 15 to 30 territories should be considered adequately protected only if placed within 3 to 5 miles of at least one other protected population containing more than 30 territories.*

Populations containing 30 or more territories probably are the smallest populations in which long-term survival is 90% guaranteed for 100 years or more. Such a population typically would contain at least 60 breeding individuals and a non-breeding population of 30 to 50 jays that serve as demographic and genetic buffers against population extinction or degradation. *In average habitat, therefore, about 750 acres of periodically-burned oak scrub are required to support an adequately protected population of Florida scrub jays* (assuming 25 acres per territory and 30 contiguous territories). Fig. 2.17 schematically illustrates how extinction probability varies with time among isolated Florida scrub jay populations, with larger population sizes affording greater degrees of protection from extinction (progressively darker shading).

One Large Preserve vs. Multiple Small Ones

For certain kinds of animals, numerous small preserves may provide equal or larger overall probability of long-term survival than a small number of large ones. In the case of Florida scrub jays, Fig. 2.17 illustrates that a single larger preserve is to be preferred. From a demographic standpoint, extinction probabilities are lower in a single preserve of 10 territories, for example, than they would be in two preserves containing 5 territories each (unless they were so close together as to act as a single preserve of 10). Indeed, in the example shown, one 10-territory preserve is more effective at reducing extinction probabilities than *four* preserves of 5 territories each.

Management problems also favor a smaller number of

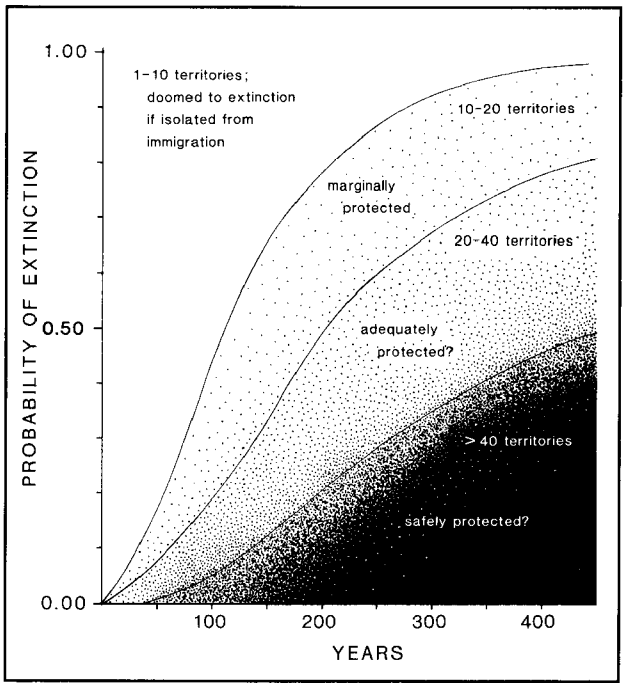

Figure 2.17. Schematic relationship between Florida scrub jay population size within a habitat preserve and the degree of protection from demographic extinction thus provided by that preserve. Adapted from Figs. 2.13, 2.14 and 2.16. Assumes an epidemic frequency intermediate between twenty-year and fifty-year intervals.

larger preserves in the vicinity of humans. Small preserves always expose more of their enclosed territories to the edge of the protected habitat patch. This subjects a larger proportion of the total jay population to pressure from cats, roads, humans, and other incidental sources of mortality. Such effects mean that the average mortality in smaller populations is elevated, further reducing their effective size. *The larger the population and the more circular its configuration the greater proportion of its inhabitants will be protected from the ill effects of living at the edge.* Finally, in general, the control of human access, authorized or otherwise, and prescribed burning of the habitat with minimal impact on surrounding dwellings are both much easier in a single large, circular preserve.

Metapopulations

The spatial configuration of locally protected populations on a larger geographic scale is of considerable importance for both long-term survival and maintenance of genetic diversity regionally (Levins 1970, Gilpin 1987). In the context of large-scale developments, where economic realities are likely to act against the interests of Florida scrub jay preservation, the regional need for and impact of habitat protection should be carefully examined in assessing where and how large to create any given habitat preserve.

In certain instances, for example, the existence of a large, protected population of Florida scrub jays near or at the border outside a development project adds considerable value to each territory potentially preserved within the development tract. In such cases, protection of a scrub

tract considerably less than 750 acres may have an equal or greater impact on regional survival of the species than a much larger preserve might have in complete isolation elsewhere. Placement of the new preserve as close as possible to existing or potentially protected ones outside the developed area is vital. Providing habitat corridors between these preserves can be more beneficial, in certain cases, than simply adding area to a reasonably large existing preserve. These and a host of related issues make it imperative that each potential new preserve be examined in the context of the regional structure of Florida scrub jay populations ("metapopulations" of Levins 1970). Regional analysis often may provide developers and state agencies with avenues for compromise in terms of total land area set aside for scrub habitat protection.

The regional context also dictates an axiom that should be adhered to in all cases of large-scale development: every isolated population of Florida scrub jays, no matter how small, is now a vital part of a disappearing metapopulation. Each "island" of scrub habitat serves both as a stepping stone between other such islands and as a potential source of new colonists and new genetic input for other small populations some distance away. No regional population fragmented to the extent now shown by Florida scrub jays (Fig. 2.4) can afford to lose whole local populations. *Therefore, it is strongly recommended that no local population of Florida scrub jays, no matter how small or isolated, be permitted to be extirpated as a direct result of development.*

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Appendix G

USFWS Information for Planning and Consultation (IPaC) Trust Resources Report

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

St. Lucie County, Florida



Local office

South Florida Ecological Services Field Office

(772) 562-3909
(772) 562-4288

1339 20th Street
Vero Beach, FL 32960-3559

http://fws.gov/verobeach

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

NOT FOR CONSULTATION

Mammals

NAME	STATUS
Florida Panther Puma (=Felis) concolor coryi No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1763	Endangered
Puma (=mountain Lion) Puma (=Felis) concolor (all subsp. except coryi) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6049	SAT
Southeastern Beach Mouse Peromyscus polionotus niveiventris No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3951	Threatened
West Indian Manatee Trichechus manatus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/4469	Threatened Marine mammal

Birds

NAME	STATUS
Audubon's Crested Caracara Polyborus plancus audubonii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8250	Threatened
Everglade Snail Kite Rostrhamus sociabilis plumbeus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7713	Endangered
Florida Scrub-jay Aphelocoma coerulescens No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6174	Threatened
Ivory-billed Woodpecker Campephilus principalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8230	Endangered
Kirtland's Warbler Setophaga kirtlandii (= Dendroica kirtlandii) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8078	Endangered

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Piping Plover Charadrius melodus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/6039	Threatened
Red Knot Calidris canutus rufa No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1864	Threatened
Red-cockaded Woodpecker Picoides borealis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7614	Endangered
Whooping Crane Grus americana No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/758	EXPN
Wood Stork Mycteria americana No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8477	Threatened

Reptiles

NAME	STATUS
American Alligator Alligator mississippiensis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/776	SAT
Eastern Indigo Snake Drymarchon corais couperi No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/646	Threatened
Hawksbill Sea Turtle Eretmochelys imbricata There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3656	Endangered
Leatherback Sea Turtle Dermochelys coriacea There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1493	Endangered
Loggerhead Sea Turtle Caretta caretta There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1110	Threatened

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Insects

NAME	STATUS
Miami Blue Butterfly Cyclargus (=Hemiargus) thomasi bethunebakeri No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3797	Endangered

Flowering Plants

NAME	STATUS
Fragrant Prickly-apple Cereus eriophorus var. fragrans No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/982	Endangered
Lakela's Mint Dicerandra immaculata No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6390	Endangered
Tiny Polygala Polygala smallii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/996	Endangered

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Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see maps of where birders and the general public have sighted birds in and around your project area, visit E-bird tools such as the E-bird data mapping tool (search for the name of a bird on your list to see specific locations where that bird has been reported to occur within your project area over a certain timeframe) and the E-bird Explore Data Tool (perform a query to see a list of all birds sighted in your county or region and within a certain timeframe). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

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NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
American Oystercatcher Haematopus palliatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31
Bachman's Sparrow Aimophila aestivalis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/6177	Breeds May 1 to Sep 30

Bald Eagle *Haliaeetus leucocephalus* This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Sep 1 to Jul 31
Black Skimmer *Rynchops niger* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/5234	Breeds May 20 to Sep 15
Black-whiskered Vireo *Vireo altiloquus* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds May 1 to Aug 15
Clapper Rail *Rallus crepitans* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 10 to Oct 31
King Rail *Rallus elegans* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936	Breeds May 1 to Sep 5
Least Tern *Sterna antillarum* This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds Apr 20 to Sep 10
Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Limpkin *Aramus guarauna* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 15 to Aug 31
Magnificent Frigatebird *Fregata magnificens* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Oct 1 to Apr 30
Prairie Warbler *Dendroica discolor* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Jul 31

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Prothonotary Warbler Protonotaria citrea — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-headed Woodpecker Melanerpes erythrocephalus — Breeds May 10 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Reddish Egret Egretta rufescens — Breeds Mar 1 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/7617

Seaside Sparrow Ammodramus maritimus — Breeds May 10 to Aug 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Semipalmated Sandpiper Calidris pusilla — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Short-tailed Hawk Buteo brachyurus — Breeds Mar 1 to Jun 30
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8742

Swallow-tailed Kite Elanoides forficatus — Breeds Mar 10 to Jun 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8938

Whimbrel Numenius phaeopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9483

Willet Tringa semipalmata — Breeds Apr 20 to Aug 5
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

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Wilson's Plover Charadrius wilsonia — Breeds Apr 1 to Aug 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (▪)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant

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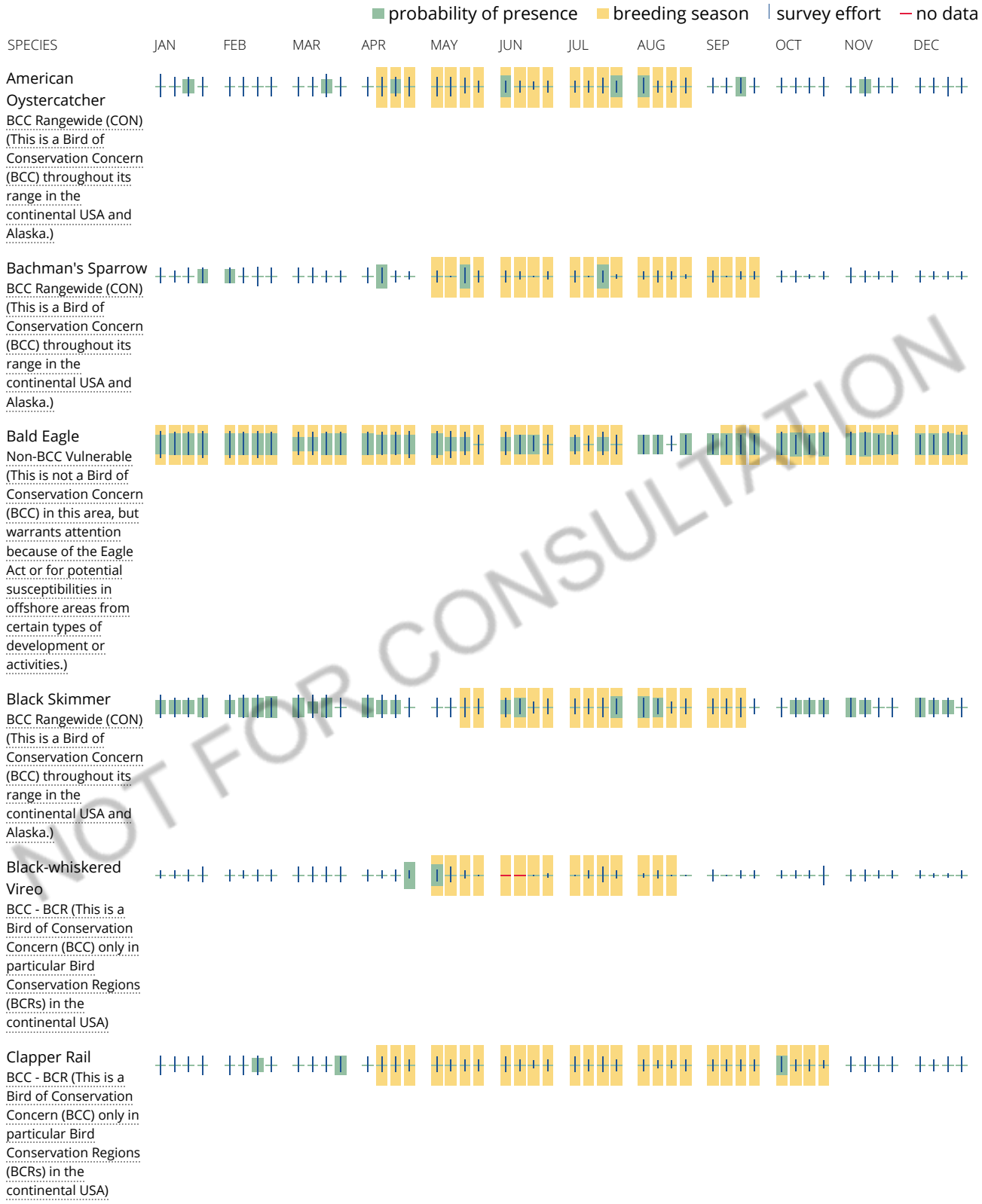
information.



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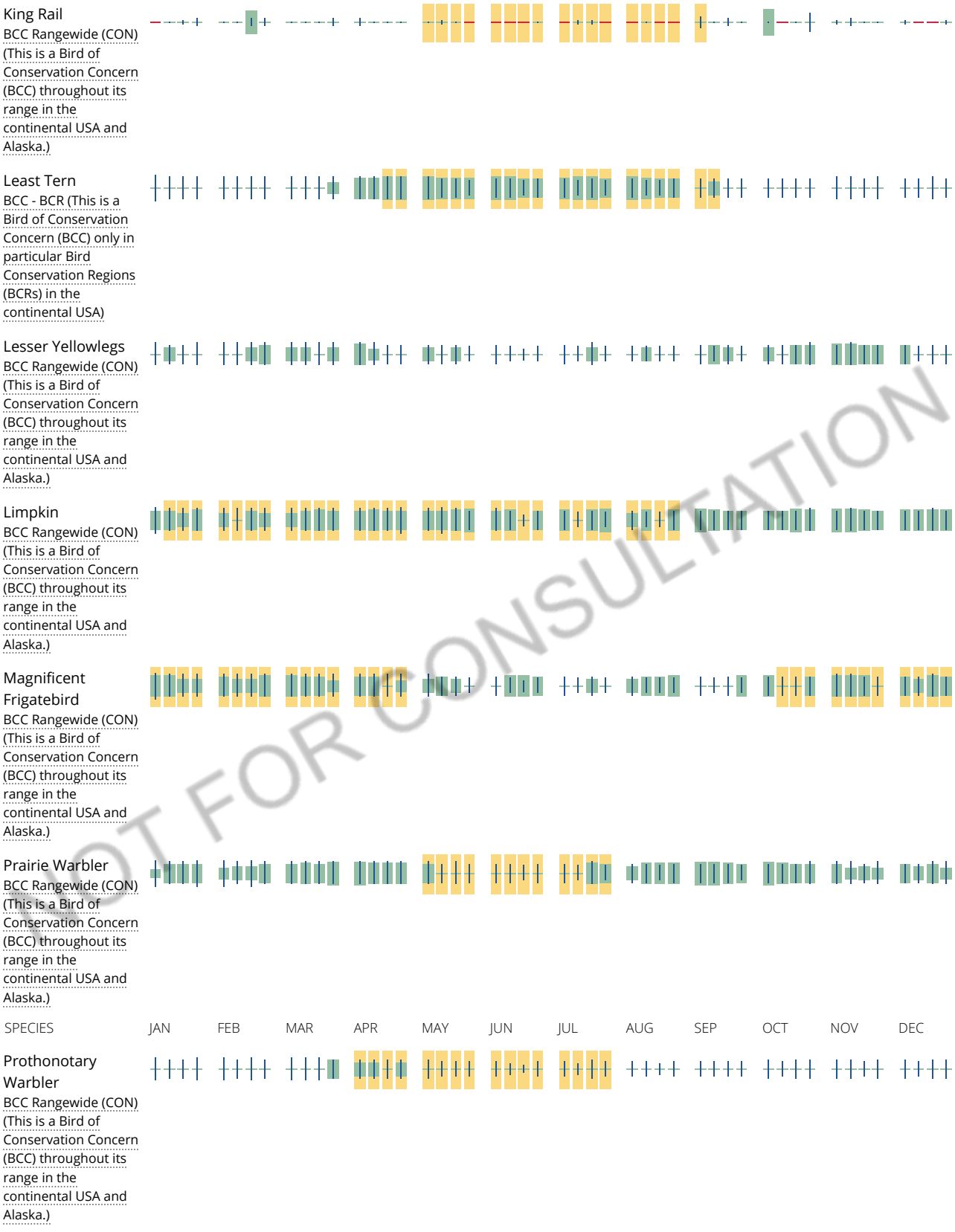

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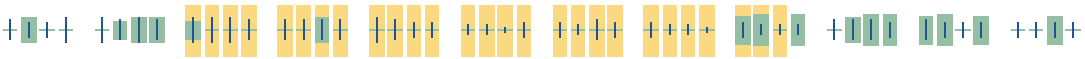
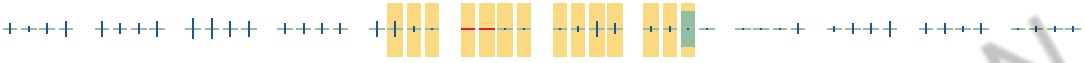
Red-headed Woodpecker
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Reddish Egret
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Seaside Sparrow
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



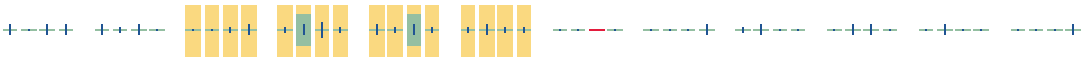
Semipalmated Sandpiper
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



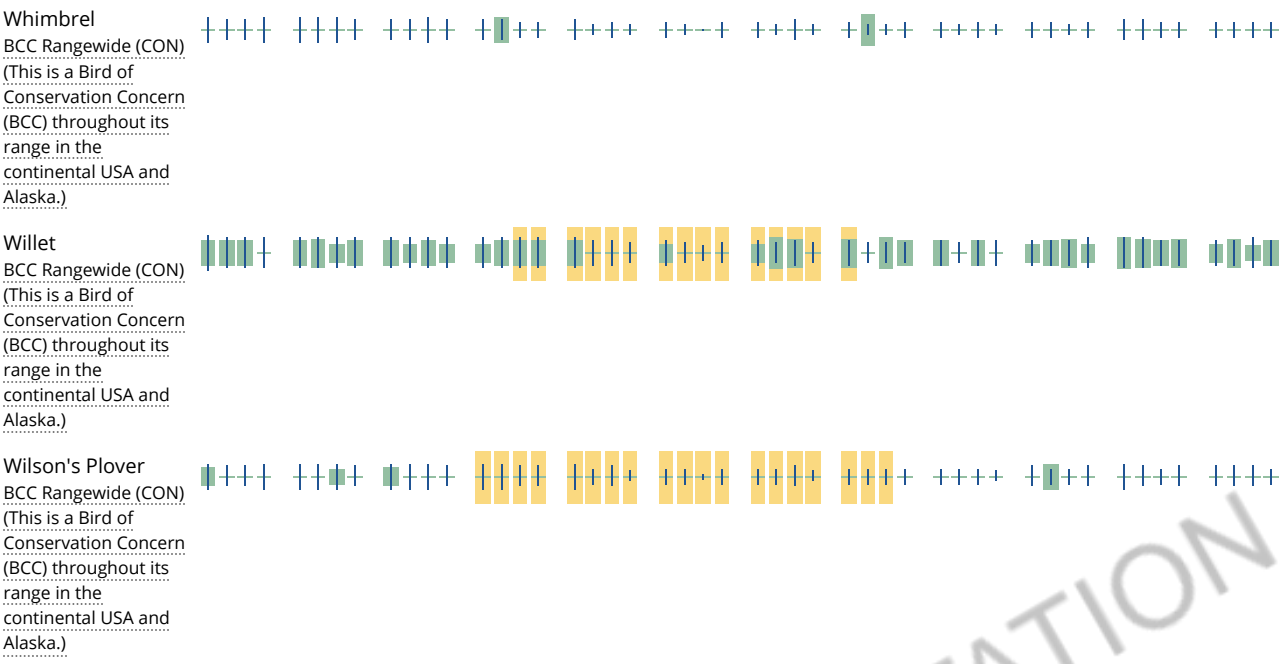
Short-tailed Hawk
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



Swallow-tailed Kite
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



NOT FOR CONSULTATION



NOT FOR CONSULTATION

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the counties which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird entry on your migratory bird species list indicates a breeding season, it is probable that the bird breeds in your project's counties at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the BGEPA should such impacts occur.

NOT FOR CONSULTATION

Marine mammals

Marine mammals are protected under the Marine Mammal Protection Act. Some are also protected under the Endangered Species Act

[1] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora[2].

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries

[3] [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The Endangered Species Act (ESA) of 1973.
2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

West Indian Manatee *Trichechus manatus*
https://ecos.fws.gov/ecp/species/4469

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Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

FRESHWATER POND
PUBHx

A full description for each wetland code can be found at the National Wetlands Inventory website: https://ecos.fws.gov/ipac/wetlands/decoder

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Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

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Appendix H

USFWS's Species Conservation Guidelines for the Florida Scrub-jay

Species Conservation Guidelines

South Florida

Florida Scrub-jay

The Species Conservation Guidelines for the Florida Scrub-jay (*Aphelocoma coerulescens*) (scrub-jay) provide a tool to assist the user in determining if an action, i.e., a Federal permit, a Federal construction project, or other such action, may adversely affect the scrub-jay. Here we describe what actions might have a detrimental impact on the Florida scrub-jay and how these effects can be avoided or minimized.

Life History

The Fish and Wildlife Service (Service) federally listed the scrub-jay as threatened in 1987 due to loss, fragmentation, and degradation of scrub habitats throughout Florida. Service (1999) provides a synopsis of scrub-jay ecology. Fitzpatrick et al. (1991) provides additional information on habitat needs, territory sizes, and species biology.

The scrub-jay is a relict species of fire-dominated oak scrub habitat that occurs on well drained sandy soils in peninsular Florida. Scrub-jays are extremely habitat-specific, sedentary, and territorial. Florida scrub-jays form family groups; fledglings remain with their parents in their natal territory as helpers. They are similar in size and shape to the blue jay (*Cyanocitta cristata*), but differ significantly in coloration (Woolfenden and Fitzpatrick 1996). Unlike the blue jay, scrub-jays lack a crest.

Habitat

Suitable habitats for the scrub-jay are not only the more "classic" xeric oak scrub, scrubby pine flatwoods, scrubby coastal strand, and sand pine scrub, but also include (FLUCCS code in parentheses): improved, unimproved, and woodland pastures (211-213); citrus groves (221); rangeland (310-330); pine flatwoods (441); longleaf pine xeric oak (412); sand pine (413); sand pine plantations (4411); forest regeneration areas (443); sand other than beaches (720); disturbed rural land in transition without positive indicators of intended activity (741); and disturbed burned areas (745). The presence of scrub oaks, no matter how sparsely distributed, is a key indicator of "scrub" habitat. Fitzpatrick et al. (1991) defined three classes of scrub-jay habitat:

> Type I – any upland plant community in which percent cover of the substrate by scrub oak species is 15 percent or more.

Type II – any plant community, not meeting the definition of type I habitat, in which one or more scrub oak species is represented.

Type III – any upland or seasonally dry wetland within 400 m (0.25 mi) of any area designated as Type I or II habitats.

Distribution

The scrub-jay can be found in coastal and ridge scrub areas throughout central Florida (Fig. 1). Historically, the only county on the peninsula that lacked scrub-jays was Monroe, although they were never considered abundant on the Atlantic coast south of Martin County, and occurred only in a narrow coastal band there (Service 1999). Scrub-jays are presently extirpated from Broward and Miami-Dade Counties. Scrub-jays are divided into 10 metapopulations in south Florida (Stith 1999). Table 1 lists the metapopulation and ranks their level of risk.

Determination

The Standard Local Operating Procedures for Endangered Species (SLOPES) are used to make a determination for the scrub-jay. See the SLOPES Introduction for details on this process (Service 2004a). The SLOPES flowchart for scrub-jays can be found in Figure 2. For the scrub-jay consider not only the project area, but also a 183-m (600-ft) buffer surrounding the area. This buffer allows for overlap of an off-site scrub-jay territory onto the property. Next review Figure 1 to determine if the project falls within the consultation area.

Suitable habitat for the scrub-jay is typically oak scrub and scrubby coastal strand, but includes a wide range of habitat. Type I, II, or III habitats defined above are considered suitable habitat for scrub-jays. If the project is outside the consultation area or is within the consultation area and no suitable habitat is present then no effect to scrub-jays is anticipated.

If the project is located within the consultation area and suitable habitat is present then the project may affect the scrub-jay. Two options are available to assess potential effects. Suitable habitat can be surveyed (option a**)**. Details on how to carry out a scrub-jay survey can be found in Appendix A (Service 2004b). If no scrub-jays are detected by survey in the project and buffer area then the scrub-jay is not likely to be adversely affected. However, if habitat alterations do not begin prior to the next year's nesting season, then a follow-up survey should be conducted prior to construction. Survey results should be included in the biological assessment. Alternatively (option b), suitable habitat can be assumed to support scrub-jays and conservation measures implemented.

If scrub-jays are detected by survey or are known to be present on the property then the project may affect the scrub-jay.

Table 1. Metapopulations of scrub-jays in south Florida with protected population size, maximum population size if all occupied habitat acquired for conservation, extinction probability with no further acquisition, quasi-extinction probability (population falls below 10 pairs) with no further acquisition, rank of risk in south Florida, and rank of risk statewide.

Metapopulation	Protected Population Size	Maximum Population Size	Extinction Probability	Quasi-Extinction Probability	South Florida Rank	State Rank
Central Charlotte	5	61	1.00	1.00	1	1
Lake Wales Ridge	535	858	0.00	0.00	10	16
Lee	15	62	0.73	1.00	4	8
Manatee	36	145	0.97	1.00	2	4
Martin	85	120	0.00	0.00	8	16
NW Charlotte	28	56	0.67	1.00	5	9
Palm Beach	9	13	0.90	1.00	3	7
Sarasota	50	89	0.03	0.10	8	15
South Brevard	62	165	0.07	0.20	7	13
St. Lucie	23	37	0.20	0.73	5	11

	Counties in south Florida included in metapopulation (see Stith 1999 for details).
Central Charlotte	Charlotte, Lee
Lake Wales Ridge	Polk, Osceola, Hardee, DeSoto, Highlands, Okeechobee, Glades, Hendry, Charlotte
Lee	Lee, Charlotte, Hendry, Collier
Manatee	Polk, Hardee, DeSoto, Sarasota
Martin	Martin, Palm Beach
NW Charlotte	Charlotte, Sarasota, DeSoto
Palm Beach	Palm Beach, Broward
Sarasota	Sarasota, Charlotte
South Brevard	Indian River
St. Lucie	St. Lucie

Conservation Measures

We encourage the use of Fitzpatrick et al. (1991) for guidance on any on-site preservation, enhancement, or management actions that might be proposed for the scrub-jay. The Service recommends that occupied scrub habitat be avoided and preserved. This can be accomplished by modifying the project footprint to avoid direct impacts to scrub-jay habitat. The Service also recommends that the habitat be protected from further development via deed restriction, easement, or other protective covenant. If the occupied habitat exceeds 2 ha (5 acres), then a Scrub-jay Habitat Management Plan is also recommended (see below).

The Service recommends on-site enhancements in situations where a project can not avoid impacting occupied scrub-jay habitat. When a project has avoided impacting a substantial portion of the scrub habitat, but a small amount of habitat loss will still occur, the loss can be compensated by restoring or enhancing the remaining scrub through exotic vegetation removal, reintroduction of fire, or fencing to exclude predators such as domestic cats. The incorporation of these improvements into the proposed project may decrease the potential for adverse affects to scrub-jays to occur. The management plan, in this scenario, also needs a monitoring program to document the success of any enhancement actions.

The Service strongly recommends that occupied scrub-jay habitats be avoided and preserved, but if the amount of habitat on-site and in the adjacent off-site buffer is not sufficient to support a scrub-jay family, then the project is likely to adversely affect the scrub-jay. Sufficient habitat for this evaluation is 10.1 ha (25 acres), which is the average size of a scrub-jay territory.

To assist in minimizing adverse effects from anticipated incidental take, the Service has developed measures that are applicable to projects where compensation is appropriate. These measures further the Service's goals for conservation and recovery of the species. The measures were originally developed by the Service to address mitigation needs for "Incidental Take Permits" under section 10 of the ESA. The mitigation guidelines identified scrub-jay metapopulation territories where conservation and recovery goals for the species can be achieved. In general the guidelines recommend expanding the boundaries of existing preserves or protecting and managing occupied and unoccupied habitats that are contiguous to the preserved lands or that are within unobstructed scrub-jay dispersal distances from the preserved lands. The specifics of each of these measures can be found in Appendix B (Service 2004c) and should be incorporated into the Scrub-jay Habitat Management Plan.

Reports

Scrub-jay Management Plan

A Scrub-jay Habitat Management Plan will be helpful in minimizing potential adverse effects to scrub-jays. In general, the plan should include a description of the project and a description of how the project will affect scrub-jays as well as any survey reports, survey data sheets,

delineated territorial boundaries, and any proposed land preservation covenant. The plan should also include descriptions of habitats and techniques that will be used to manage the land. The Scrub-jay Habitat Management Plan should be included with the consultation initiation package See Service (2004d) for a more details on what should be in this document.

A monitoring plan is needed if on-site enhancements are proposed. An annual report should include a description of the site and any habitat enhancements made, as well as, a survey to document scrub-jay population levels and area occupied. Survey reports should be submitted to the Scrub-jay Lead Biologist at U.S. Fish and Wildlife Service, South Florida Ecological Services Office, 1339 29th Street, Vero Beach, Florida 32960-3559.

Literature Cited

Fitzpatrick, J.W., G.E. Woolfenden, and M.T. Kopeny. 1991. Ecology and development-related habitat requirements of the Florida scrub-jay (*Aphelocoma coerulescens*). Florida Game and Fresh Water Fish Commission, Nongame Wildlife Program Technical Report No. 8. Tallahassee, Florida.

Stith, B. 1999. Metapopulation viability analysis of the Florida scrub-jay (*Aphelocoma coelurescens*): a statewide assessment. Report to U.S. Fish and Wildlife Service, Jacksonville, Florida.

U.S. Fish and Wildlife Service (Service). 1999. South Florida multi-species recovery plan. Atlanta, Georgia. http://verobeach.fws.gov/Programs/Recovery/vbms5.html.

U.S. Fish and Wildlife Service (Service). 2004a. Standard local operating procedures for endangered species: Introduction. South Florida Ecological Services Office, Vero Beach, Florida.

U.S. Fish and Wildlife Service (Service). 2004b. Scrub-jay survey protocol. South Florida Ecological Services Office, Vero Beach, Florida. (Appendix A).

U.S. Fish and Wildlife Service (Service). 2004c. Amended guidance for assessing mitigation needs for Florida scrub-jays. February 24, 2004. Jacksonville Field Office, Jacksonville, Florida. (Appendix B).

U.S. Fish and Wildlife Service (Service). 2004d. Guide to a complete initiation package. South Florida Ecological Services Office, Vero Beach, Florida. (see SLOPES Introduction Appendix A).

Woolfenden, G.E., and J.W. Fitzpatrick. 1996. Florida scrub jay. Pages 267-280 in J.A. Rodgers, H.W. Kale, and H.T. Smith, editors. Rare and endangered biota of Florida, volume V. Birds. University Presses of Florida; Gainesville, Florida.

GIS Data Layers

Scrub-jay_CA.shp - consultation area boundary

Appendices

Appendix A. Scrub-jay survey protocol.
Appendix B. Amended guidance for assessing mitigation needs for Florida scrub-jays

South Florida Ecological Services
DRAFT
May 28, 2004

APPENDIX A

Scrub-jay survey protocol

Florida Scrub-jay Survey Protocol

These guidelines are the minimum levels of effort the Service believes are necessary to determine the presence or absence of the Florida scrub-jay (*Aphelocoma coerulescens*) (scrub-jay) in an area. Suitable habitat on the property may not only be the nest sites of scrub-jays, but could be part of the scrub-jay foraging habitat, which is considered by the Service as occupied, because the habitat fulfills the species life history requirements. In most applications, a one time survey event within the preferred time-of-year sufficient for Service consultations.

These survey protocols are primarily adapted from Fitzpatrick et al. (1991). The most effective method of surveying a site for scrub-jays is to traverse the area systematically, using a high quality tape recording of scrub-jay territorial scolding in an attempt to attract the scrub-jays. The recording should include clear examples of all typical territorial scolds, including the female "hiccup" call. Vocalizations are available from:

Macaulay Library
Cornell Lab of Ornithology
159 Sapsucker Woods Road
Ithaca, NY 14850
Phone: (607) 254-2157
Fax: (607) 254-2439
Email: macaulaylibrary@cornell.edu
Web site: www.birds.cornell.edu/macaulaylibrary

Map habitat types for the project area and a 183-m (600 ft) buffer zone either on a 7.5-min U.S. Geological Survey (USGS) topographic map or an aerial photograph at a scale of no more than 1:4800 scale. The habitat map should also show all existing development. On the habitat map, establish parallel line transects across all suitable habitat. Habitats to sample should include not only the more "classic" xeric oak scrub, scrubby pine flatwoods, scrubby coastal strand, and sand pine scrub, but also improved, unimproved, and woodland pastures; citrus groves; rangeland; pine flatwoods; longleaf pine xeric oak; sand pine; sand pine plantations; forest regeneration areas; sand other than beaches; disturbed rural land in transition without positive indicators of intended activity; and disturbed burned areas. The presence of scrub oaks, no matter how sparsely distributed, is the key indicator of "scrub" habitat.

Along each transect establish playback stations. Distance between transects and stations depend on many factors, including power of the speaker used for broadcasting the calls, topography of the site, and the density of the surrounding vegetation. Adequate spacing between transects can be estimated roughly as the distance at which a person listening to the tape directly in front of the speaker perceives the "bird" to be no more than about 100 m (328 ft) away. A distance of 100 to 200 m (328-656 ft) between transects and stations is generally adequate when using a good-quality, hand-held cassette player broadcasting at full volume. Use 100 m (328 ft) for dense canopy scrub and 200 m (656 ft) for open scrub. Place transect and playback stations so that all scrub types will be sampled for scrub-jays.

Surveys should be carried out on calm, clear days about one hour after sunrise, and should terminate before midday. Surveys should not be conducted in winds stronger than a moderate breeze (5-8 mph), in mist or fog, or in precipitation exceeding a light, intermittent drizzle. Heat and especially wind lowers the tendency for scrub-jays to respond to distant territorial scolds, and wind reduces the distance over which recordings can be heard. Scrub-jays are also reluctant to fly on windy days regardless of hour or season.

Surveys should be conducted during the spring (March) or fall (September and October), when territorial displays are most frequent and vigorous. Other times of year are poor times to survey because scrub-jays are most likely to fly far for food or the young are quiet and the adults are occupied with molt and feeding fledglings. Consecutive surveys for a minimum of five days are sufficient to assess scrub-jay presence and territory size and distribution.

Transects may be driven or walked. If driven, step out or stand atop the vehicle at each playback station. Broadcast the calls at each station for at least one minute in all four directions around the playback station, emphasizing any direction in which low-growing oak scrub is the predominant vegetation. On the habitat map, plot the locations and indicate group size of all scrub-jays where they are first seen or heard. Note the direction from whence they came. Distinguish adult-plumaged scrub-jays from juvenile-plumaged scrub-jays whenever possible.

At localities with car trails, large areas of scrub can be surveyed with a vehicle in one day. On foot, the process is more laborious because of the relatively large size of territories. Once a group is located, stop broadcasting at that station. Remaining at this station briefly should result in the assembly of the entire group. This allows one to estimate group size and, if done during the midsummer, to distinguish young of the year from adults.

Sometimes two or more groups will be attracted to one station, usually from different directions. Observers should be careful, therefore, to plot each group where it was first spotted or heard. In rare circumstances, especially at sites where numerous groups congregate at artificial food or water sources, it may be difficult to differentiate groups. This is especially true where scrub-jays have become habituated and tame to human approach. Again, in such cases careful observation is extremely important. Studies of such congregations using color-marked scrub-jays have confirmed that almost always they consist of members of different family groups. Often they may have crossed several territory boundaries to reach the neutral feeding or drinking areas. The result gives a false impression of extremely high scrub-jay density.

It is essential that the subject area be surveyed to establish an accurate count of scrub-jay groups and territorial boundaries. If more than eight to ten scrub-jays are encountered at a single playback station during a fall or spring survey period, the scrub-jays at this site should be monitored carefully over several visits and different times of day. Numbers will shift as groups arrive and depart. Often it is possible to watch where the scrub-jays come from or return to as a means of determining how many groups are represented.

Territory Boundary Determinations

In general, scrub-jays have well-defined territories defended year-round by all group members. Territorial defense is most active immediately before nesting in the spring and after molt is complete in autumn. Territorial boundaries may be most accurately predicted through a combination of observing scrub-jays and listening for territorial behavior (in the case where several families of scrub-jays exist in contiguous habitats) or by including habitat suitable for occupation by scrub-jays within a territorial boundary (in the case where a family of scrub-jays is somewhat isolated from other groups). Territories typically occupy the same areas for many years, and ownership is passed on by mate replacement or inheritance by helpers. Mean territory size is about 9 ha (25 acres), although the size may vary depending on group size and suitability of habitat. To determine the territorial boundaries of the scrub-jay group, it is essential that the surveyor be familiar with different types of behavior exhibited by scrub-jays.

The boundaries of scrub-jay groups can be determined by standard methods (Bibby et al. 2000). Here is a brief synopsis of the procedure. At each station, record the direction the scrub-jays came from and any observed hostility to other scrub-jays that also approach the station, especially if from a different direction. Also note the number of scrub-jays that approach the station as a group.

These responses are mapped on the habitat vegetation map and are the basis for determining occupied territories. A schematic is provided below that gives an example of scrub-jay survey responses and territory boundary determinations (Fig. 1). The survey grids are shown with the point counts for scrub-jays at each station, with direction of flight.

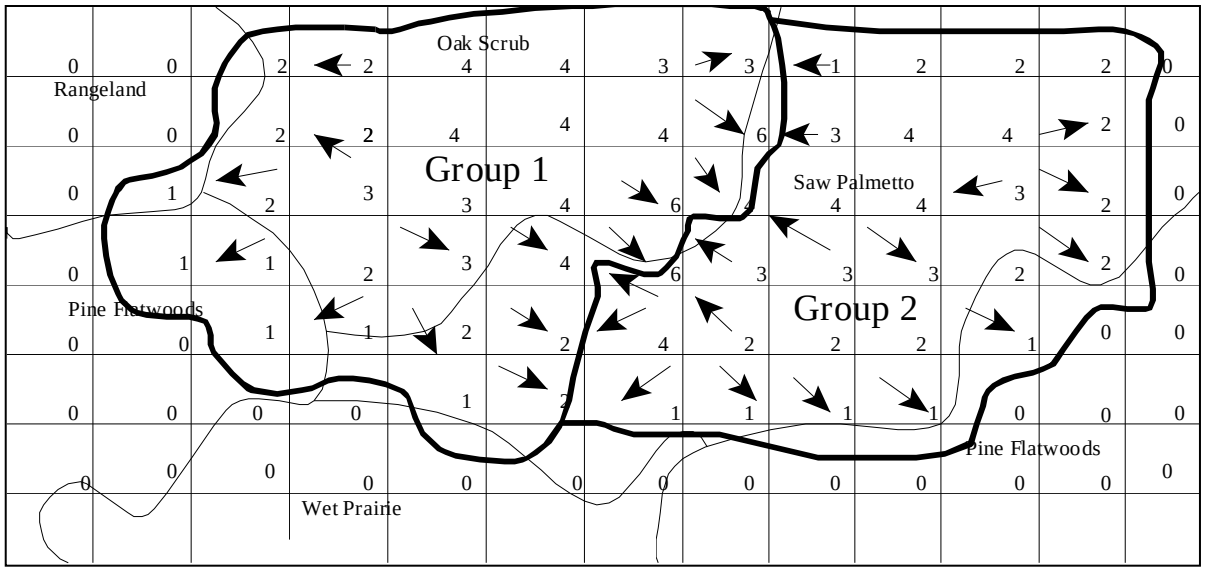

Figure 1. Schematic on determining territorial boundaries. Arrows indicate flight direction.

Territorial boundaries between adjacent groups are based on connecting station locations where territorial defense displays between scrub-jays were first observed. Fringe boundaries are determined as the midpoint between the last location that attracted scrub-jays and adjacent no-response locations. The boundaries are determined by connecting midpoints (Fig. 1). Where birds are attracted from different directions, the boundary between groups will be determined by connecting the stations with mixed groups.

The key end products of this procedure are a complete count of all on-site scrub-jay groups and an approximate territory map for each group.

A survey report to the Service should include the following, as applicable:

1. Brief description of the project.

2. An aerial photograph or habitat map depicting:
   A. the project area and buffer zone;
   B. habitat types;
   C. transect lines and playback stations; and
   D. territory boundaries of all scrub-jay groups.

3. Field data sheets including:
   A. dates and starting and ending times of all surveys conducted;
   B. weather conditions during all surveys, including average temperature, wind speed and direction, visibility, and precipitation; and
   C. total number of scrub-jay groups found, number of scrub-jays in each group, and number of juvenile-plumaged scrub-jays in each of these groups.

Literature Cited

Bibby, C.J., N.D. Burgess, D.A. Hill, and S.H. Mustoe. 2000. Bird Census Techniques. 2nd Edition. Academic Press, London, United Kingdom.

Fitzpatrick, J.W., G.E. Woolfenden, and M.T. Kopeny. 1991. Ecology and development-related habitat requirements of the Florida scrub-jay (*Aphelocoma coerulescens*). Florida Game and Fresh Water Fish Commission, Nongame Wildlife Program Technical Report No. 8. Tallahassee, Florida.

South Florida Ecological Services
DRAFT
May 28, 2004

APPENDIX B

Amended guidance for assessing mitigation needs for Florida scrub-jays

United States Department of the Interior

FISH AND WILDLIFE SERVICE
6620 Southpoint Drive, Suite 310
Jacksonville, Florida 32216-0958
Phone: (904) 232-2580 FAX: (904) 232-2404

In Reply Refer To:
FWS/R4/ES-JAFL

IN REPLY REFER TO:
FWS/R4/ES-JAFL

February 24, 2004

MEMORANDUM

To: Staff

From: Field Supervisor, Jacksonville Field Office
Field Supervisor, South Florida Ecological Services Office

Subject: Amended Guidance for Assessing Mitigation Needs for Florida Scrub-Jays

This guidance supercedes similar guidance provided by the State Supervisor on July 2, 1999 (amended July 10, 2003), and is to be used when assessing minimization/mitigation needs for the Florida scrub-jay relative to applications for Incidental Take Permits for Florida scrub-jays. The Service will pursue similar "minimization" goals for scrub-jay conservation in section 7 actions, subject to the ultimate determination of acceptability by the action agency. This guidance is intended to provide interim direction until the scrub-jay recovery plan is revised.

The primary underlying principle embraced by this guidance is that future mitigation efforts by the Service will enhance existing scrub-jay populations occurring on publicly and privately protected lands. To evaluate conservation opportunities for scrub-jays under this guidance, the Service assessed multiple data sources to determine current and expected habitat availability, and current and expected scrub-jay distribution. Results of a spatially-explicit model in combination with published metapopulation data, GIS coverages of public lands and scrub habitat, published and unpublished biological data, and working knowledge of localized scrub-jay populations were used to identify and delineate areas within which future mitigation needs would result in the highest conservation benefit to scrub-jays.

These analyses resulted in the delineation of mitigation service areas (MSAs) throughout the range of the species (Figure 1). MSAs encompass areas that: (1) contain one or more public or protected private lands that, when combined, have one or more populations of scrub-jays that are anticipated to persist long-term, (2) have at least one population with a minimum of 10 pairs of scrub-jays, and (3) minimize the potential for demographic fragmentation. To maximize the effectiveness of this guidance, impacts to scrub-jays within MSAs should be mitigated within the

same MSA. Impacts to scrub-jays occurring outside of a defined MSA may be mitigated to the closest MSA.

The overall procedures are as follows:

A. General Mitigation Strategies (in order of preference)

1. Expand existing preserves and protect and manage occupied and unoccupied habitat that is contiguous with managed public or private lands where the extant population of scrub-jays is viable.

2. Protect and manage occupied and unoccupied habitat within 2 miles of protected and managed occupied habitat where the extant population of scrub-jays is viable, provided proposed mitigation lands are sufficient to support at least one family of scrub-jays. Ensure that dispersal barriers (such as open water exceeding 200 yards, densely urbanized areas, heavily canopied pine forests or plantations, open pasture, or croplands) do not predominate the landscape between mitigation sites and occupied scrub-jay habitat. Composition of the habitat proposed for mitigation should maximize continuity of habitat and minimize the edge effect of the suitable or restorable habitat. In this respect, a circular parcel of land with contiguous suitable or restorable habitat would be more beneficial (biologically), whereas a linear strip of land with interspersed patches of suitable and unsuitable habitat would be of low benefit.

3. Protect and manage occupied and unoccupied habitat that is within 5 miles of protected and managed occupied scrub-jay habitat where the extant population of scrub-jays is viable, provided proposed mitigation lands are sufficient to support at least one family of scrub-jays. Ensure that, in addition to the dispersal barriers identified above, other barriers (such as heavily canopied suburbs, unbroken citrus groves, treeless or nearly treeless suburbs, or pine flatwoods) do not predominate the landscape between mitigation sites and occupied habitat. The relative biological benefit of mitigation lands with respect to its composition should be assessed as described above.

B. Determine Population Viability

Ensure that a minimum of 10 families of demographically connected scrub-jays are present or will be present following mitigation **OR** sufficient unoccupied but restorable scrub-jay habitat (unoccupied habitat) is, or will be (after restoration, as set forth in the proposed action and concurred to by the Service) available to support at least 10 scrub-jay families. Viable groups of scrub-jays require about 200 acres of scrub habitat which may be contiguous or composed of patches of scrub habitat at least 20 acres in size. The spatial orientation of habitat patches must not lead to demographic isolation, as described in A.2 and A.3 above, and must provide for the successful dispersal of scrub-jays between habitat patches.

C. Determine Demographic Priority

Demographic considerations in selecting mitigation locations within the MSA are described in order of preference below:

1. Mitigate onsite if conditions in B. (above) exist or can be achieved through management.

2. Mitigate offsite but within affected viable population, as defined in B.

3. Mitigate offsite to the nearest viable population, as defined in B.

D. Determining Habitat Mitigation Need - Small Landowners Only

1. Small landowners (described herein as any person or company owning real property represented by one or more contiguous lots not exceeding, in combination, 0.5 acres, within a residential subdivision) may choose to implement any one of the mitigation alternatives described in items E.1. - E.5. without regard to preference.

E. Determine Habitat Mitigation Need (in order of preference) - Other Than Small Landowners. Selection of any of the first 5 options will require the applicant to provide funds for restoration (if needed) and management of the lands into perpetuity.

1. Purchase (or otherwise acquire fee title) two acres of occupied scrub-jay habitat for each acre of affected occupied scrub-jay habitat[1,2] .

2. Purchase (or otherwise acquire fee title) two acres of unoccupied, but restorable[3] habitat for each acre of affected occupied habitat provided the unoccupied, restorable habitat is immediately contiguous to occupied scrub-jay habitat under public ownership that is managed for conservation purposes[1,2].

3. Secure perpetual conservation easement and land management agreement on sufficient lands to achieve mitigation needs identified in E.1. and E.2. above[1,2]. Holder of any agreement must be approved by the Service.

4. Purchase (or otherwise acquire fee title) or secure perpetual conservation easement and land management agreement on three acres of unoccupied, but restorable habitat for each acre of affected habitat, provided the unoccupied, but restorable habitat lies within two miles of occupied scrub-jay habitat under public ownership that is managed for conservation purposes[1,2,4].

5. Deposit funding into the Florida Scrub-Jay Conservation Fund sufficient to achieve mitigation needs identified in E.1., plus five percent of total mitigation costs to cover administrative overhead.

6. Purchase/acquire fee title (at a ratio of five acres of habitat for each acre of affected occupied habitat) lands adjoining publicly-owned occupied or unoccupied but restorable scrub-jay habitat to provide buffer from adjacent urban activities and to buffer adjacent urban areas from land management activities (e.g., prescribed fire).

F. Applicant Protocols

1. A through E above will be discussed and reviewed with applicants as soon as sufficient information is provided to determine the extent of project impacts.

2. The Service will provide the applicant a list of mitigatory requirements immediately following initial discussion of a project. Written updates will be provided if the project changes scope.

3. If E.5. applies, notify applicant that mitigation cost will be based on the cost to conduct work at the most appropriate mitigation site as determined above. Field offices will maintain written cost estimates on file for applicant review as requested. Mitigation cost will be obtained primarily through assessments of comparative sales of land within the scrub-jay group (as defined in B above) to which mitigation will be directed. Where such data are lacking, broader assessments of comparative sales data may be needed. These values should be updated as necessary considering changes in land values and inflation. Mitigation cost estimates will be based on Service documents at the time of final application for an incidental take permit, unless the applicant can demonstrate comparative land sales data resulting in a lower mitigation cost.

4. Upon request, the Service shall provide the applicant copies of modeling software and associated data used by the Service in making determinations in A through E above, provided the release of information does not violate copyright or other legal instruments that may protect such information.

This guidance should be updated jointly by our respective staffs as needs and new information dictate.

[1] During the process of drafting the Brevard County Scrub Conservation and Development Plan, certain "core" areas were designated as essential to long-term survival of Florida scrub-jays within that county. As a result, these core areas are more beneficial (biologically speaking) to scrub-jays than other areas within the county. Impacts to core areas within Brevard County, therefore, will be mitigated by purchase or otherwise acquiring fee title to four acres of occupied habitat for each acre of occupied habitat affected and will be located only in areas included in the draft reserve design.

[2] All acquisition and easements must be accompanied by a cash endowment sufficient to provide perpetual management of preserved lands and any other funds identified by a prospective title or easement recipient that may be necessary for that entity to accept title or easement (e.g., contaminants surveys, fencing, trash removal, etc.).

[3] Restorable habitat refers to areas with appropriate soil and vegetation types that require implementation of land management actions to provide the vegetative structure and diversity typical of suitable scrub-jay habitat.

[4] The Service requires a higher ratio in the case of restored habitat not contiguous to public lands managed for and occupied by scrub-jays to address the uncertainties inherent in habitat restoration and recolonization by scrub-jays, and the temporal loss of habitat.

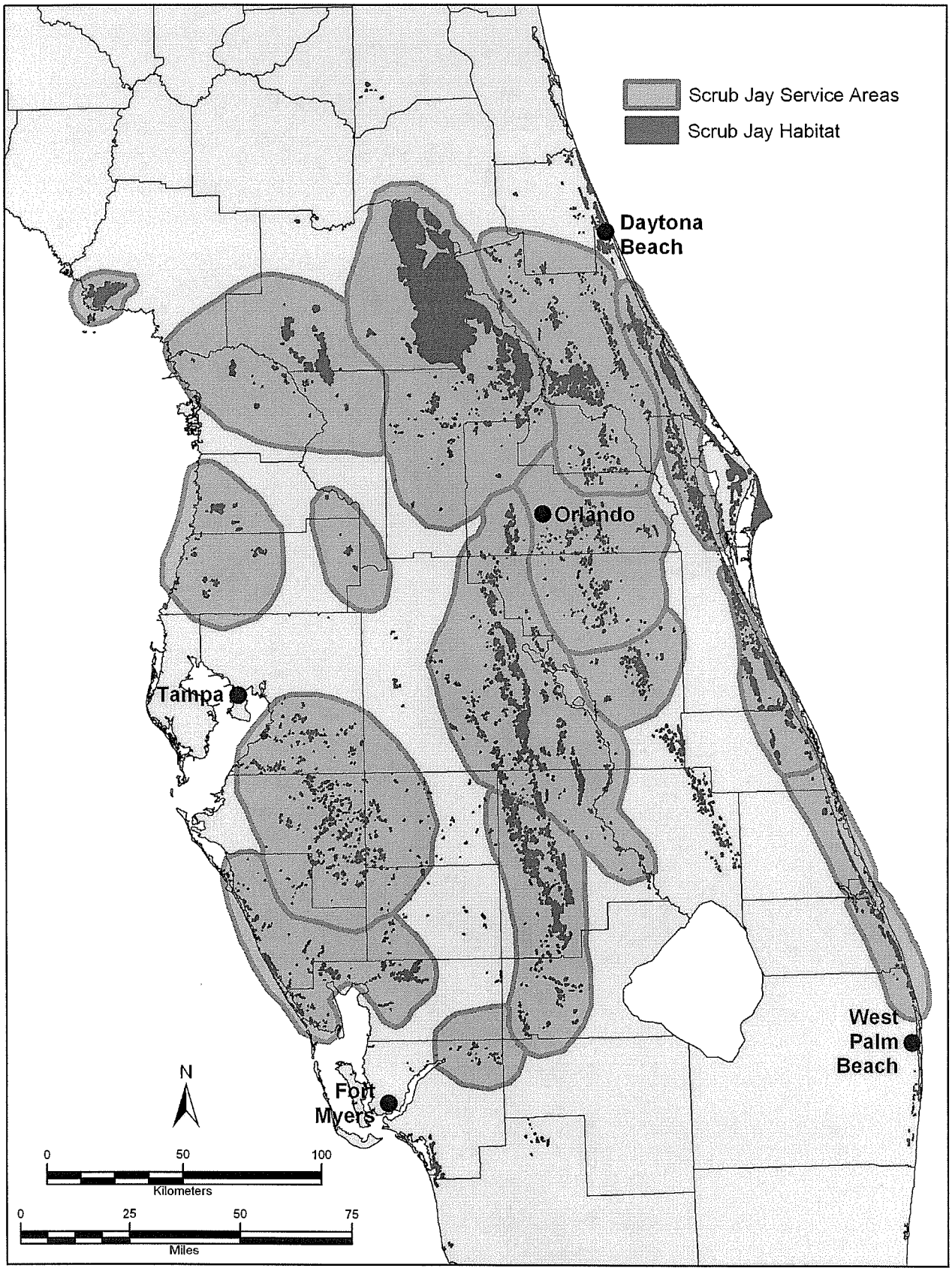

Figure 1. Mitigation Service Areas for the Florida scrub-jay.

Appendix I

USFWS Standard Protection Measures for The Eastern Indigo Snake

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE
U.S. Fish and Wildlife Service
August 12, 2013

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: jaxregs@fws.gov; South Florida Field Office: verobeach@fws.gov; Panama City Field Office: panamacity@fws.gov). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or "approval" from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

POSTER INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11" x 17" or larger paper and laminated, is attached):

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTION UNDER FEDERAL AND STATE LAW: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

IF YOU SEE A <u>LIVE</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A <u>DEAD</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336
Panama City Field Office – (850) 769-0552
South Florida Field Office – (772) 562-3909

PRE-CONSTRUCTION ACTIVITIES

1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.

2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.

3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

DURING CONSTRUCTION ACTIVITIES

1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).

2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.

3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

POST CONSTRUCTION ACTIVITIES

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.

Appendix J

Preliminary Long-Range Estimates (LRE)

Date: 6/20/2018 8:19:32 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 440034-1-52-01 **Letting Date:** 01/2099

Description: The Historic Highwayman Gap Trail Segment includes constructing a multi-use paved trail from North Indian Hills Drive to Georgia Avenue in St. Lucie County

District: 04 **County:** 94 ST. LUCIE **Market Area:** 11 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 1.330 MI

Project Manager:

Version 3 Project Grand Total **$649,354.50**

Description: East Alternative 2

Sequence: 1 MIS - Miscellaneous Construction **Net Length:** 1.420 MI
7,498 LF

Description: This segment starts at the northern terminus of the Indian Hills Recreation Area and the ending point of this segment is at Georgia Avenue. East alternative 2 is along the west side of the golf course

Special Conditions: The proposed project will consist of constructing an 8-14' paved multi-use path. For estimate purposes we will assume 10' average width. East alternative 2 will go around the east side of the Police Station at the North end of the project

---

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	5.16 AC	$13,867.17	$71,554.60
	Comment: Project length (1.42 miles) X (10' average pavement width + 10' on each side of multi-use path)			
	Earthwork Component Total			$71,554.60

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	11,662.93 SY	$5.35	$62,396.68
	Comment: Type "B" stabilization 14' in width X project length			
285-701	OPTIONAL BASE,BASE GROUP 01	8,886.00 SY	$14.15	$125,736.90
	Comment: Optional base group one 10.66' in width X project length			
339-1	MISCELLANEOUS ASPHALT PAVEMENT	833.00 TN	$231.63	$192,947.79
	Comment: 2" of 100 lb/cy per inch asphalt for a 10' multiuse path X the project length			
711-11-160	THERMOPLASTIC, STD, WHITE, MESSAGE	24.00 EA	$103.69	$2,488.56

	Comment: Bike, pedestrian and direction arrow pavement markings. Need 1 of each at both path ends and in both directions (12), plus 2 more sets in each direction divided evenly on the total path length (12)			
711-12-241	THERMOPLASTIC,REFURB,YELLOW,DOT/GDLN,6"	1.27 GM	$2,540.80	$3,226.82
	Comment: Yellow skip strip used to designate centerline in areas where adequate passing sight distance is available.(90% of overall length)			
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.15 GM	$4,252.14	$637.82
	Comment: Used to separate opposite directions of travel where passing is inadvisable and at approaches to intersections.			
	Roadway Component Total			$387,434.57

SHOULDER COMPONENT

User Input Data

Description	Value

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	7,497.00	LF	$1.45	$10,870.65
	Comment: For entire project length				
104-11	FLOATING TURBIDITY BARRIER	1,000.00	LF	$9.83	$9,830.00
	Comment: For proposed construction next to water hazards on golf course				
570-1-1	PERFORMANCE TURF	16,661.00	SY	$1.64	$27,324.04
	Comment: 10' of performance turf on both sides of proposed multi-use trail X project length				
	Shoulder Component Total				$48,024.69

DRAINAGE COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-173-112	PIPE CULV OPT MATL, ROUND, 12", GD	64.00	LF	$89.93	$5,755.52
	Comment: Proposed 12" pipe culverts at an estimated 5 locations.				
	Drainage Component Total				$5,755.52

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	12.00	AS	$450.57	$5,406.84
	Comment: 4 sign posts every mile in each direction. 1.42 miles X 2 X 4 per mile.				
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,195.08	$2,390.16
	Comment: 1 sign in each direction of 1.42 mile multi-use trail				

Signing Component Total	$7,797.00
Sequence 1 Total	$520,566.38

Date: 6/20/2018 8:19:32 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 440034-1-52-01 **Letting Date:** 01/2099

Description: The Historic Highwayman Gap Trail Segment includes constructing a multi-use paved trail from North Indian Hills Drive to Georgia Avenue in St. Lucie County

District: 04 **County:** 94 ST. LUCIE **Market Area:** 11 **Units:** English

Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 1.330 MI

Project Manager:

Version 3 Project Grand Total **$649,354.50**

Description: East Alternative 2

Project Sequences Subtotal			**$520,566.38**
102-1	Maintenance of Traffic	8.00 %	$41,645.31
101-1	Mobilization	10.00 %	$56,221.17
Project Sequences Total			**$618,432.86**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$30,921.64	$30,921.64
Project Non-Bid Subtotal					**$30,921.64**
Version 3 Project Grand Total					**$649,354.50**

FINAL FEASIBILITY STUDY

Historic Downtown Fort Pierce Retrofit SUN Trail

St. Lucie County, Florida

Financial Project ID:

440033-1

Prepared for:



Florida Department of Transportation

District Four

3400 West Commercial Boulevard

Fort Lauderdale, Florida 33309

January 2019

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Section 1.0 Introduction

St. Lucie County applied for and received funding through the Florida Greenways and Trails System (FGTS) Shared-Use Nonmotorized (SUN) Trails program for the Feasibility Study of the Historic Downtown Fort Pierce Retrofit Trail from Georgia Avenue to North Causeway in Fort Pierce, Florida. The Florida Department of Transportation (FDOT), in conjunction with St. Lucie County and the City of Fort Pierce, is conducting this Feasibility Study for the proposed trail. A Feasibility Study represents a definition of a problem or opportunity to be studied, an analysis of the current mode of operation, a definition of requirements, an evaluation of alternatives, and an agreed upon course of action. This report examines proposed alternatives for the trail segment and the associated physical and natural considerations for each alternative. The trail will connect to the larger East Coast Greenway (ECG) footprint, with the North Causeway Trail to the north and the proposed Historic Highwayman Trail Gap to the south. See **Appendix A** for the SUN Trail Application with the potential trail locations.

The scope of this feasibility study included database and in-person field reviews of the alternatives provided in the SUN Trail Application submitted by St. Lucie County. Additionally, meetings were held with stakeholders and the public to discuss the alternatives (**Appendix B**). Where applicable, changes to the alternatives were identified and analyzed to minimize impacts.

Section 2.0 Background and History

The State of Florida created the SUN Trail program in 2015 to provide bicycle and pedestrian ways along state roads and transportation facilities. The State of Florida allots $25 million annually for the development of regionally significant greenways and trails projects (FDOT, 2018). The criteria required for projects to be eligible for funding through the SUN Trails program includes the following:

- Must be located on the SUN Trail Network (FGTS Land Trails Priority Map);
- Priority of the Metropolitan Planning Organization (MPO);
- Must be identified on who will operate and maintain the constructed trail; and
- Ready to be programmed and to begin the first/next phase of work (Birdsong).

The St. Lucie Transportation Planning Organization (TPO) conducted studies evaluating the need for bicycle and pedestrian facilities within the County including the *Bicycle and Pedestrian Systems Analysis* (St. Lucie County Urban Area MPO, 2007) and *St. Lucie Bicycle/Pedestrian Corridor Study Area of Interest Analysis* (St. Lucie TPO, 2012). The TPO also conducted a study on how to best implement ECG trails throughout the County. The ECG is an initiative focused on providing a connection along Florida's Atlantic Coast from the Georgia border to the Florida Keys. The main goal of the ECG is to "establish a

safe, traffic free pathway for muscle powered users as a connection between our eastern seaboards cities," as stated in the *East Coast Greenway Implementation Plan* (St. Lucie TPO, 2012). The highest priority for the ECG is to construct trails that are off of the roadways.

The Historic Downtown Fort Pierce Retrofit Trail would be considered a critical piece of the ECG network and would connect to the North Causeway ECG Trail and the proposed Historic Highwayman Gap Trail. The trail segment is included in the Go2040 Long Range Transportation Plan (LRTP) (St. Lucie TPO, 2016) for St. Lucie County.

Section 3.0 Purpose

This report includes an analysis of alternatives that are technically sound, environmentally sensitive, economically feasible, and socially acceptable that can be further evaluated in future development phases. Specifically, this study evaluates existing conditions and proposes recommendations. The evaluated areas include

- Design: does or does not meet SUN Trail Program criteria
- Social Features: Land Use, Community Cohesion, Relocations, Right-of-Way (ROW) or Easements Required, Community Services, Potential User Conflicts
- Cultural: Archaeological/ Historical Resource, Section 4(f)
- Natural: Threatened and Endangered Species, Wetlands/Surface Waters and Essential Fish Habitat, Upland Habitat, Outstanding Florida Waters/Aquatic Preserves, Floodplains
- Physical: Noise, Air Quality, Contamination

The purpose of this study is to conduct a fatal flaw analysis to determine which alternative and typical section(s) will best adhere to the SUN Trail program criteria as well as being cost feasible. The Environmental Opportunities and ROW Constraint Map (**Appendix C**) includes additional information.

3.1 SUN Trail Funding and Design Criteria

In order to be funded under the SUN Trail Program, the alternatives must meet the following SUN Trail Program Design Criteria:

- 10 to 14 feet in width (eight feet is allowed in rare cases)
- Multi-use (bicyclists, pedestrians, runners, skaters)
- Paved
- Separated from roadway (by at least five feet or by a physical barrier/railing)
- No significant amount of private property ROW or easements can be required

The alternatives that do not meet the design criteria, must consider other funding and design options. Additional details are provided in Section 5 - Preliminary Engineering Analysis.

Section 4.0 Project Description

The Historic Downtown Fort Pierce Retrofit Trail Segment includes constructing an approximately 2.3-mile long multi-use paved trail from Georgia Avenue to North Causeway Drive/SR A1A in St. Lucie County, Florida, as shown in **Figure 1**. The starting point of this segment is at the northern terminus of the Historic Highwayman Trail Gap, which is north of the Indian Hills Golf Course at Georgia Avenue. The ending point of this segment is at North Causeway Drive/SR A1A, which is the southern terminus of the North Causeway ECG Trail.

There is a gap in the project along Federal Highway/US 1 between Avenue M and Avenue H. The gap in the trail will not be studied under this Feasibility Study due to future work on Federal Highway/US 1 at Avenue H.

The proposed project will consist of constructing a 10 to 14-foot wide paved trail. Either asphalt or concrete could be used in sections of the trail. The study area for this project includes the proposed alternatives; a 20-foot buffer, which includes 10 feet on either side of the proposed trail centerline, surrounding each alternative to evaluate potential effects to listed species and for evaluating direct and secondary impacts to other resources including wetlands, social resources, and other natural resources; and a 500-foot buffer on each side of each alternative centerline for contamination analysis.

The alternatives developed by St. Lucie County and examined within this Feasibility Report include the Primary Alternative, South Alternative 1, South Alternative 2, and the Riverwalk Alternative. Details of each alternative are provided in Section 5 - Preliminary Engineering Analysis.

Figure 1: Project Location Map



Section 5.0 Preliminary Engineering Analysis

5.1 Historic Downtown Fort Pierce Retrofit Trail

St. Lucie County defined five alternatives in the SUN Trails Application: Primary Alternative, North Alternative 1, North Alternative 2, South Alternative 1, and South Alternative 2, see Appendix A for the map from the SUN Trails Application.

For the purpose of this Feasibility Study and as a comparison of impacts, four alternatives were developed and evaluated; Primary Alternative, South Alternative 1, South Alternative 2, and the River Walk Alternative described below. In addition, based on stakeholder input and data collection conducted, shifts or changes in the alternatives were evaluated and described in this report. It is important to note that there is now a gap in the project along Federal Highway/US 1 between Avenue M and Avenue H. The gap in the trail will not be included under this Feasibility Study due to future FDOT work on Federal Highway/US 1 at Avenue H. Given this change, North Alternative 1 and North Alternative 2 will not be evaluated under this project.

5.1.1 Primary Alternative

The original Primary Alternative that was identified in the SUN Trail Application submitted by St. Lucie County was modified to avoid fatal flaws such as ROW acquisitions. The modified Primary Alternative would still originate at Georgia Avenue, the northern end of the Indian Hills Golf Course, and would still terminate at North Causeway Drive/SR A1A. The first potion of the Primary Alternative starts on 3rd Street at Georgia Avenue and continues along the eastern side of 3rd Street to Citrus Avenue, where it has a break. The Primary Alternative picks back up on North 2nd Street at Orange Avenue and continues north to Avenue H. There is a 2nd break between Avenue H and Avenue M. At Avenue M the Alternative travels to the west to intersect Old Dixie Highway, and continues north to North Causeway Drive/SR A1A.

The final Primary Alternative is shown in **Figure 2.**

5.1.2 River Walk Alternative (New Alternative)

The River Walk Alternative provides a deviation from the Primary Alternative north of AE Backus Avenue. At the intersection of AE Backus Avenue and North 2nd Street the Alternative heads east and is proposed to connect with the existing Riverwalk path within Veterans Memorial Park. The proposed River Walk Alternative once connected to the existing Alternative would then continue under the Seaway Drive bridge and then follow the east side of Indian River Drive until it reaches Avenue H/Fisherman's Warf. The River Walk Alternative reconnects with the Primary Alternative at the intersection of Avenue H/Fisherman's Warf and North 2nd Street. The River Walk Alternative is shown in Figure 2.

Figure 2: Downtown Fort Pierce Retrofit Alternatives Map



5.1.1 South Alternative 1

The South Alternative 1 provides a deviation from the Primary Alternative at Citrus Avenue. South Alternative 1 would travel along the Florida East Coast (FEC) Railroad from north of Citrus Avenue to Orange Avenue. The alternative would continue east on Orange Avenue to intersect North 2nd Street and the Primary Alternative. This alternative would require ROW from the FEC Railroad. The South Alternative 1 is shown in Figure 2.

5.1.2 South Alternative 2

The South Alternative 2 would utilize the bridge on Citrus Avenue and travel east along the south side of Citrus Avenue to Indian River Drive. South Alternative 2 would use the pedestrian facilities present at Indian River Drive and Citrus Avenue to traverse to the north side of Citrus Avenue. The alternative would then travel back west to North 2nd Street, then travel north along North 2nd Street to Orange Avenue to intersect the Primary Alternative. The South Alternative 2 alternative is shown in Figure 2.

5.2 Considerations to Minimize Impacts

Changes to these alternatives were considered in order to reduce impacts to the natural and physical environments. Other impacts considered were confirming that the SUN Trail design criteria was and could be met in all areas. The design criteria included no private ROW acquisition, a minimum multi-use path width of 10 – 14 feet (eight-foot paths can also be used if necessary, but are not preferred), and a five-foot separation from any roadway unless a railing or physical barrier is installed.

For areas that cannot meet SUN Trail design criteria, other design options would be considered to minimize impacts to private and FEC ROW, and could include sharrows or bike lanes. The options would be considered by local agencies for further development and funding.

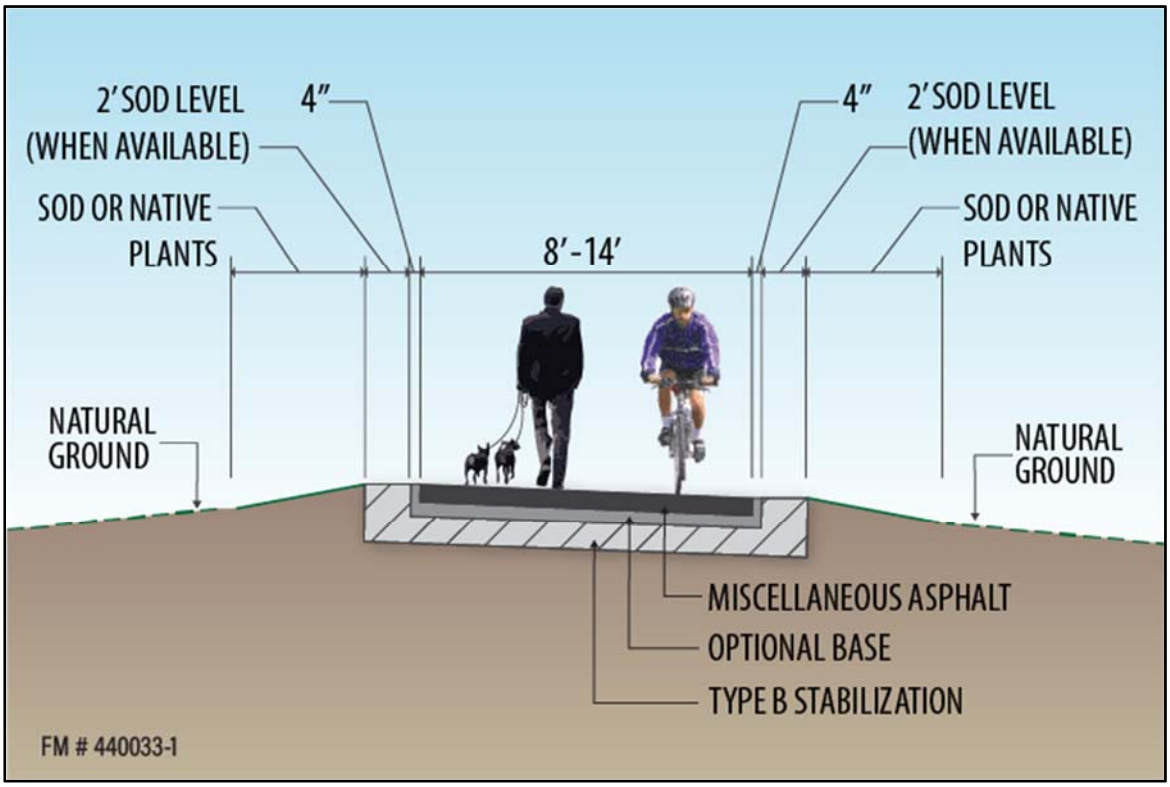
5.3 Typical Sections

Two typical sections were developed for this study, as described below.

5.3.1 At-Grade Typical Section – Proposed Multi-use Path Option

This typical section includes an eight- to 14-foot multi-use trail, two-foot on either side of the trail will be graded and sodded level when available and should be recoverable in all weather conditions. On the outside of the 2-foot recoverable area, a 1V:6H slope max is allowed to tie back into existing ground (see **Figure 3**).

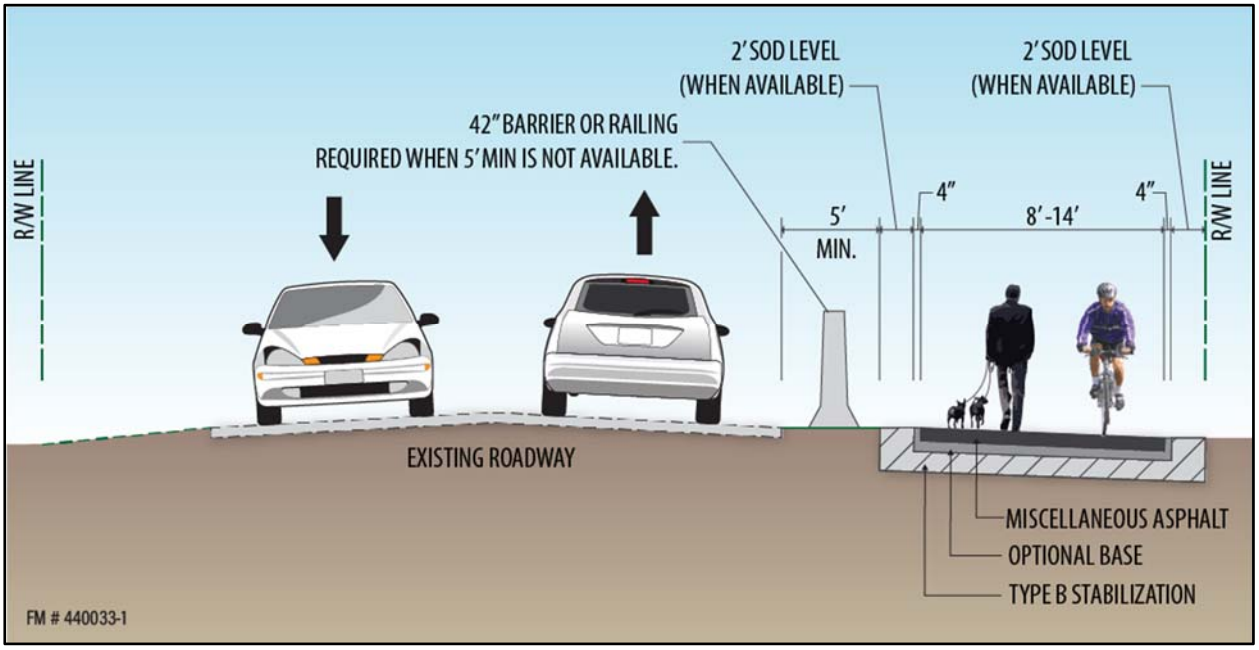
Figure 3: Proposed Multi-use Path Option



5.3.1 At-Grade Typical Section – Proposed Multi-use Path with Wall Option

This typical section includes an eight to 14-foot multi-use trail, two-foot on either side of the trail will be graded and sodded level when available and should be recoverable in all weather conditions. On the side of the typical that is adjacent to the roadway and is less than five feet away, a physical barrier or railing will be provided between the path and the roadway. Such barriers or railings serve both to prevent path users from making undesirable or unintended movements from the path to the roadway and reinforce that the path is an independent facility. The barrier or railing should be a minimum of 42-inches high. Other treatments such as rumble strips can be considered as alternatives to physical barriers or railings, where the separation is less than five feet (see **Figure 4**).

Figure 4: Proposed Multi-use Path with Wall Option



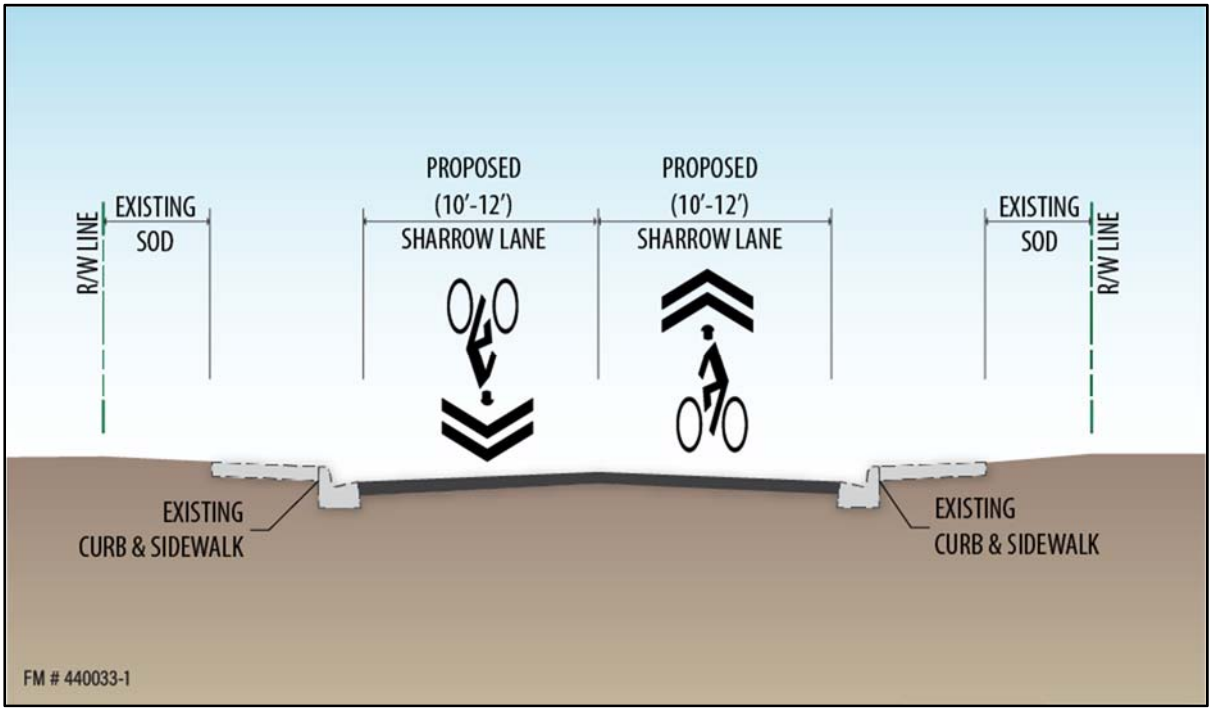
5.3.2 Options to be considered by Local Agencies for Further Development and Funding

In order to be funded under the SUN Trail Program, the alternatives must meet the following SUN Trail Program Design Criteria:

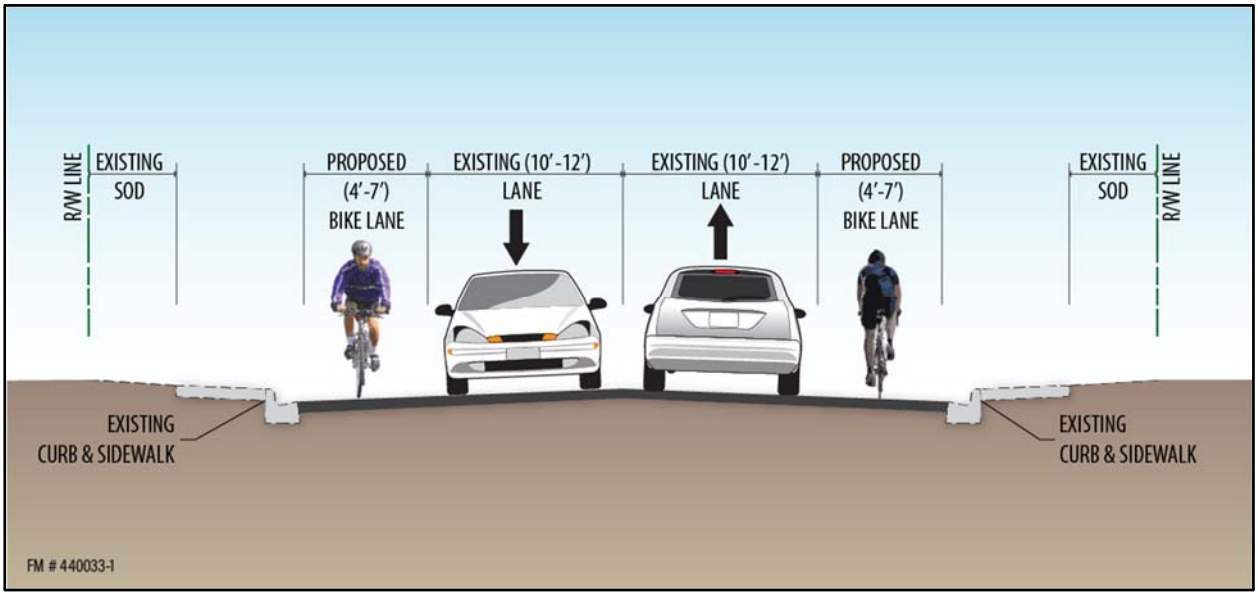
- 10 to 14 feet in width (eight feet is allowed in some cases)
- Multi-use (bicyclists, pedestrians, runners, skaters)
- Paved
- Separated from roadway (by at least five feet or by a physical barrier/railing)
- No significant amount of private property ROW or easements can be required

For areas that do not meet SUN Trail design criteria, other design options would be considered by local agencies for further development and funding. These options would include sharrows or bike lanes (**Figure 5**). Additional details regarding the locations for these options is provided in Appendix C.

Figure 5: Proposed Sharrow and Bike Lane Options



*To be explored by local agencies for further development and funding



*To be explored by local agencies for further development and funding

Section 6.0 Environmental Effects

Each of the alternatives described under Section 5 will be evaluated on the following criteria:

- Design: does or does not meet SUN Trail Program criteria (Section 5.3.3)
- Social Features: Land Use, Community Cohesion, Relocations, ROW or Easements Required, Community Services, Potential User Conflicts
- Cultural: Archaeological/ Historical Resource, Section 4(f)
- Natural: Threatened and Endangered Species, Wetlands/Surface Waters and Essential Fish Habitat, Upland Habitat, Outstanding Florida Waters/Aquatic Preserves, Floodplains
- Physical: Noise, Air Quality, Contamination

Additional details are provided in the following sections and summarized in the Alternatives Comparison Matrix in Section 9.

6.1 Social Features

Several social features surrounding the proposed Historic Downtown Fort Pierce Retrofit Trail alternatives were analyzed to identify any potential impacts to existing features and to determine the trail's compatibility with future planned features. Social features surrounding the alternatives for analysis included existing land use, future land use, community cohesion, relocations, ROW or easements which may be required, existing community services, and other potential user conflicts.

6.1.1 Existing Land Use

Existing land use within the study area was determined through the interpretation of 1" = 100' scale aerial photography, review of land cover Geographic Information Systems (GIS) data obtained from the South Florida Water Management District (SFWMD). Existing land use was mapped based on the Florida Land Use, Cover and Forms Classification System (FLUCFCS) (FDOT, 1999) for the proposed trail locations. The FLUCFCS maps for the Downtown Fort Pierce Retrofit Trail are depicted in **Appendix D**.

The existing land use for the Downtown Fort Pierce Retrofit Trail Primary Alternative can be described as fixed single-family units, commercial and services, other light industry, channelized waterways-canals, transportation, railroads and railyards, roads and highways, port facilities, and electrical power facilities.

The existing land use for the Downtown Fort Pierce Retrofit Trail South Alternative 1 can be described as commercial and services, sand and gravel pits, and railroads and railyards.

The existing land use for the Downtown Fort Pierce Retrofit Trail South Alternative 2 can be described as commercial and services, other light industry, railroads and railyards.

The existing land use for the Downtown Fort Pierce Retrofit Trail River Walk Alternative can be described as fixed single-family units, parks and zoos, roads and highways, port facilities, and electrical power facilities.

No adverse effects to existing land use are anticipated as a result of this project with any of the proposed alternatives.

6.1.2 Future Land Use

Future land use was determined based on a review of the Fort Pierce Future Land Use Map (FLUM) and the St. Lucie County Future Land Use, included as Appendix D.

The future land use of the Downtown Fort Pierce Retrofit Trail Primary Alternative consists of general commercial, central business district, medium density residential, high density residential, marine commercial, and industrial.

The future land use of the Downtown Fort Pierce Retrofit Trail South Alternative 1 consists of central business district and industrial.

The future land use of the Downtown Fort Pierce Retrofit Trail South Alternative 2 consists of general commercial, central business district, and industrial.

The future land use of the Downtown Fort Pierce Retrofit Trail River Walk Alternative consists of central business district, high density residential, industrial, and conservation and open space.

No adverse effects to future land use are anticipated as a result of this project with any of the proposed alternatives.

6.1.3 Community Cohesion

The project consists of adding missing links of the ECG trail systems through Fort Pierce. The project would not divide neighborhoods or increase social isolation. The project is expected to enhance community cohesion by adding a multi-use trail facility for pedestrians and bicyclists. The trails will promote recreational use and the Historic Downtown Fort Pierce Retrofit Trail will promote travel and tourism in Downtown Fort Pierce. These trails will provide connectivity between nearby neighborhoods and Downtown Fort Pierce.

6.1.4 ROW and Relocation Potential

As noted in Section 5.3.3, an alternative requiring an easement or ROW acquisition for a significant amount of land from a private landowner or the FEC railroad company does not meet the SUN Trail Program Design Criteria, so other design options would need to

be considered. The anticipated private/FEC ROW or easements that will be required for each of the alternatives is shown in **Table 1**.

Table 1: Private Right-of-Way or Easements Required

Alternative	Right-of-way or Easement Required (in acres)
Primary Alternative	0.0
Riverwalk Alternative	0.0
South Alternative 1	(+/-) 0.65
South Alternative 2	0.0

Primary Alternative: will require ROW or easements to complete the connection under the existing Citrus Avenue bridge along 3rd Street.

South Alternative 1: will require private or FEC ROW from Boston Avenue to Orange Avenue.

6.1.5 Community Services

Community facilities are shown in **Figure 6** and **Table 2**. No direct impacts are anticipated to any community services as a result of this proposed trail project. The proposed trail will provide bicycle and pedestrian facilities available for public use. The purpose of the project is to connect existing ECG trails; therefore, no negative impacts will occur to these trails.

Temporary access and noise impacts could occur during construction but are expected to be short-term. The study corridor is situated in a low residential populated area, with the majority of the noise sensitive locations being neighborhoods adjacent to the proposed trails.

Potential User Conflicts

Given the project is located in an urban downtown setting, potential user conflicts for the proposed trails are the necessary road crossings, a traffic circle, heavy delivery trucks to warehouses, on street parking, boat ramp users, park users (fishing), and confusion for novice riders.

Specialized road crossing, including cross walks, should be utilized to help increase the safety of the trail users. In addition, the other potential user conflicts can be minimized with the appropriate use of signage and wayfinding techniques.

Figure 6: Community Facilities



Table 2: Community Facilities

Community Facility	Address
Taylor Creek Commons	1851 N US Highway 1
Indian River Terminal Company	100 Terminal Drive
BOCC Rental – AGAPE	809 N 9th Street
Health Department	707 7th Street
Ft. Pierce Community Center	600 N Indian River Drive
Juvenile Courthouse Annex	435 N 7th Street
FPUA Substation	205 AE Backus Avenue
St. Lucie County Health Office/Clinic	408/412 Browns Court
State Government Building	337 N US Highway 1
St. Lucie County Health Department Complex	714 Avenue C
Ft. Pierce Branch Library	101 Melody Lane
Ft. Pierce City Hall	100 N US Highway 1
Healthy Kids	117 Atlantic Avenue
Court Administration	200 S 2nd Street
Federal Public Defender	216 S 2nd Street
St. Lucie County Courthouse	221 S Indian River Drive
Clerk of the Court	201 S Indian River Drive
St. Lucie County Courthouse Annex	218 S 2nd Street
Courthouse Parking Garage	271 S 2nd Avenue
State Attorney	415 S 2nd Street
State Attorney	411 S 2nd Street

6.1.6 Archaeological/Historical Resources

A search of the Florida Master Site File (FMSF) GIS data, identified the following Archaeological/Historical Resources. Locations of the resources are shown in the Environmental Constraints Map (**Appendix C**) and the FMSF data (**Appendix E**).

Primary Alternative

The search of the FMSF GIS data identified one National Register of Historic Places (NRHP)–listed resource, Moore's Creek Bridge (8SL1141), within the Primary Alternative. Three additional National Register–eligible resources, Dixie Highway (8SL1666), FEC Railroad-Lake Harbor Branch (8SL3014), and Bridge at Mile Post 240.1 (8SL3191), are within and adjacent to the Alternative. The Primary Alternative is also within two locally-designated districts: The Downtown Historic District and the Edgar Town Historic District.

South Alternative 1

The search of the FMSF GIS data identified one National Register–eligible resource, the FEC Railroad-Lake Harbor Branch (8SL3014), within the South Alternative 1. The South Alternative 1 is within one locally-designated district: The Downtown Historic District.

South Alternative 2

The search of the FMSF GIS data identified one National Register–eligible resource, the FEC Railroad-Lake Harbor Branch (8SL3014), within the South Alternative 2. One National Register–listed resource, the Sunrise Theater (8SL799), adjacent to the Alternative. The South Alternative 2 is within the locally-designated Downtown Historic District and aligned along the northern boundary of the locally-designated River's Edge Historic District.

River Walk Alternative

The search of the FMSF GIS data did not identify any National Register–listed or eligible resources within or adjacent to the River Walk Alternative. The River Walk Alternative is located along the boundaries of two locally-designated districts: The Downtown Historic District and the Edgar Town Historic District.

6.1.7 Section 4(f) Resources

Cultural resources that are listed in or determined eligible for listing in the National Register of Historic Places fall under the mandate of Section 4(f).

The SUN Trail program is state funded and Section 4(f) would not apply, however coordination with the City of Fort Pierce will continue. If federal funds are applied to future phases of the proposed trail, Section 4(f) would apply and coordination with Central Office - Office of Environmental Management (OEM) will be necessary for the following resources:

Moore's Creek Bridge (8SL1141) is National Register –listed, and Dixie Highway (8SL1666) and the Bridge at Mile Post 240.1 (8SL3191) are National Register –eligible. All three are located along the Downtown Fort Pierce Trail's Primary Alternative. The Sunrise Theater (8SL799) is National Register –listed and located adjacent to the Downtown Fort Pierce Trail's South Alternative 2. The FEC Railroad-Lake Harbor Branch (8SL3014) is National Register –eligible and located along the Downtown Fort Pierce Trail's Primary Alternative, South Alternative 1, and South Alternative 2.

6.2 Natural Features

The following data were reviewed to determine potential impacts to threatened and endangered species, essential fish habitat wetlands and essential fish habitat, uplands, floodplains, and other natural features within the vicinity of the project study area:

- Historical aerial photography from Google Earth and MapWise
- Efficient Transportation Decision Making (ETDM) Environmental Screening Tool (EST) (FDOT, 2018)
- Florida Natural Areas Inventory (FNAI) Standard Data Report for the project study area included in **Appendix F**
- U.S. Fish and Wildlife Service's (USFWS) Information for Planning and Consultation (IPaC) Trust Resources Report included in **Appendix G**
- Habitat and species-specific information obtained from the USFWS, the Florida Fish and Wildlife Conservation Commission (FWC), Florida Fish and Wildlife Research Institute (FWRI), Florida Geographic Data Library (FGDL), and FNAI
- FWC Eagle Nest Locator database (FWC, 2018)
- Species status assessments, species recovery plans, and other technical documents and reports for each of the listed species evaluated in this document
- The USFWS National Wetland Inventory (NWI) maps and GIS data (USFWS, 2018)
- The US Geological Survey (USGS) 7.5-Minute Quadrangle maps
- Natural Resources Conservation Service (NRCS) Soil Survey data
- National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) Essential Fish Habitat (EFH) Mapper (NOAA, 2018)
- The Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRM) (FEMA, 2018)

In addition to the review of the above-listed databases and resources, an environmental field review was conducted on April 19, 2018 to identify sensitive habitats and protected species within the proposed trail alternatives. During the environmental field review, biologists investigated the proposed Primary Alternative, South Alternative 1, South Alternative 2, and River Walk Alternative. In areas where a proposed new trail could potentially be constructed, the biologists assessed a 20-foot-wide area along the potential new trail alternatives (i.e., 10 feet on either side of the proposed trail centerline). This width was determined to be appropriate since the proposed trail would have a maximum width of 14 feet under the SUN Trail Program and will not require any shoulder construction. The entirety of the Primary Alternative and the South Alternative 2 will utilize existing pavement. A portion of the South Alternative 1 between Citrus Avenue and Orange Avenue will require construction of a new trail. A portion of the River Walk Alternative located on the north side of the causeway between Indian River Drive and the

existing concrete path that runs underneath the Seaway Drive bridge will require construction of a new trail.

6.2.1 Threatened and Endangered Species

Information on the potential occurrence of Federally and State-listed species within the project study area was reviewed using available literature and databases. In addition, during the environmental field review, biologists investigated those areas of potential new trail construction for the presence of listed species and/or potential impacts to habitat that support protected species. The results of the federal and state database and GIS reviews are summarized below.

The following species were identified in the FNAI and USFWS database reports that have no likelihood of occurrence in the project study area based on the lack of suitable habitat and/or the current level of development within the project study area: Florida panther (*Puma concolor coryi*), southeastern beach mouse (*Peromyscus polionotus niveiventris*), Audubon's crested caracara (*Polyborus plancus audubonii*), ivory-billed woodpecker (*Campephilus principalis*), Kirtland's warbler (*Setophaga kirtlandii*), piping plover (*Charadrius melodus*), red knot (*Calidris cantus rufa*), red-cockaded woodpecker (*Picoides borealis*), whooping crane (*Grus americana*), Miami blue butterfly (*Cyclargus thomasi bethunebakeri*), and Small's flax (*Linum carteri* var. *smalii*). Therefore, these species are not discussed further in the document. The proposed project is anticipated to have ***no effect*** on these species.

FNAI Standard Data Report

The FNAI Standard Data Report indicates that there is documented rare species habitat located within two miles of the project area, but not within the project study area itself. During the environmental field review, biologists assessed a 20-foot-wide area along the potential new trail alternatives. The area where a proposed new trail could potentially be constructed along South Alternative 1 (between Citrus Avenue and Orange Avenue) consists mostly of previously cleared, grass-covered ground with occasional trees and other vegetation (e.g., Brazilian pepper) in an industrial/commercial area. The area where a proposed new trail could potentially be constructed along the River Walk Alternative (on the north side of Seaway Drive between Indian River Drive and the existing concrete path beneath the Seaway Drive bridge) consists of maintained grass between a roadway and a parking lot. Refer to Section 6.2.3 of this document for photographs of these areas. No rare habitat was identified in these areas.

According to the FNAI Element Occurrence Report, a manatee aggregation site, a bird rookery, scrub habitat, and mangrove swamp habitat have been documented within two miles of the project area, but not within the project study area itself. The documented

manatee aggregation site and bird rookery are located east of the project area within the Indian River Lagoon. Because the proposed project does not have any components that will impact the Indian River Lagoon and because no in-water work is required, no impacts to the manatee aggregation site or bird rookery are anticipated from the proposed project. The documented scrub habitat is located approximately 0.75 miles west of the project area. No scrub habitat was observed within the proposed new trail alternative or adjacent to any of the Alternatives. During the environmental field review, biologists observed mangroves located along the River Walk Alternative, adjacent to the north of the existing concrete path that runs beneath the Seaway Drive bridge (**Figure 7**). The proposed River Walk Alternative in this location will utilize the existing pavement and will not require construction of a new trail; thus, no impacts to mangroves are anticipated from the proposed project.

Figure 7: Mangroves located along the Riverwalk Alternative



Photographs of the mangroves observed along the River Walk Alternative, adjacent to the north of the existing concrete path that runs beneath the Seaway Drive bridge. Left photo looking east. Right photo looking west.

According to the FNAI Element Occurrence Report, the following listed species have been documented within two miles of the project area, but not within project study area itself: Florida scrub-jay (*Aphelcoma coerulescens*), Johnson's seagrass (*Holophila johnsonii*), nodding pinweed (*Lechea cernua*), opossum pipefish (*Microphys brachyurus*), and osprey (*Pandion haliaetus*). The likelihood of occurrence of these species is addressed in **Table 3**.

The FNAI Standard Data Report also provides a Biodiversity Matrix Report which identifies rare species and natural communities that may be present based on habitat models and species range models. The Biodiversity Matrix Report identified scrub habitat as a documented natural community within the vicinity of the project study area and also

identified Johnson's seagrass, the West Indian manatee (*Trichechus manatus*), and the wood stork (*Mycteria americana*) as likely to occur within the vicinity of the project study area. The Biodiversity Matrix Report also identified the following Federally and State-listed species as having the potential to occur within the vicinity of the project study area: Sherman's fox squirrel (*Sciurus niger shermani*), Everglade snail kite (*Rostrhamus sociabilis plumbeus*), Florida scrub-jay, Florida burrowing owl (*Athene cunicularia floridana*), osprey, hawksbill sea turtle (*Eretmochelys imbricata*), Eastern indigo snake (*Drymarchon corais couperi*), gopher tortoise (*Gopherus polyphemus*), Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*), opossum pipefish, mangrove rivulus (*Rivulus marmoratus*), tiny polygala (*Polygala smallii*), coastal vervain (*Glandularia maritima*), celestial lily (*Nemastylis floridana*), coastal hoary-pea (*Tephrosia angustissima* var. *curtissii*), Piedmont jointgrass (*Coelorachis tuberculosa*), large-flowered rosemary (*Conradina grandiflora*), nodding pinweed, and giant orchid (*Pteroglossaspis ecristata*).. The likelihood of occurrence of these species is addressed in Table 3.

Table 3: Potential Federally- and State-Listed Fauna and Flora that May Occur within the Project Area

Common Name	Scientific Name	Federal Status	State Status[1]	Likelihood of Occurrence	Effect Determination
Mammals					
West Indian manatee	*Trichechus manatus*	FE	FE	High	**No effect**
Sherman's fox squirrel	*Sciurus niger shermani*	NL	SSC	Low	--
Birds					
Everglade snail kite	*Rostrhamus sociabilis plumbeus*	FE	FE	Low	**No effect**
Wood stork	*Mycteria americana*	FT	FT	Low	**No effect**
Florida scrub-jay	*Aphelocoma coerulescens*	FT	FT	Low	**No effect**
Florida burrowing owl	*Athene cunicularia floridana*	NL	ST	Low	--
Osprey*	*Pandion haliaetus*	NL	SSC*	High	--
Reptiles					

Common Name	Scientific Name	Federal Status	State Status[1]	Likelihood of Occurrence	Effect Determination
Hawksbill sea turtle	*Eretmochelys imbricata*	FE	FE	Low	**No effect**
Leatherback sea turtle	*Dermochelys coriacea*	FE	FE	Low	**No effect**
Loggerhead sea turtle	*Caretta caretta*	FT	FT	Low	**No effect**
Eastern indigo snake	*Drymarchon corais couperi*	FT	FT	Low	**Not Likely to Adversely Affect**
Gopher tortoise	*Gopherus polyphemus*	C	ST	Low	--
Fish					
Atlantic sturgeon	*Acipenser oxyrinchus oxyrinchus*	FE	FE	Moderate	**No effect**
Opossum pipefish	*Microphis brachyurus*	C	NL	Moderate	**No effect**
Mangrove rivulus	*Rivulus marmoratus*	C	NL	Low	**No effect**
Plants					
Fragrant prickly apple	*Harrisia fragrans*	FE	FE	Low	**No effect**
Lakela's mint	*Dicerandra immaculata*	FE	FE	Low	**No effect**
Tiny polygala	*Polygala smallii*	FE	FE	Low	**No effect**
Johnson's seagrass	*Holophila johnsonii*	FT	SE	Low	**No effect**
Coastal vervain	*Glandularia maritima*	NL	SE	Low	--
Celestial lily	*Nemastylis floridana*	NL	SE	Low	--
Coastal hoary-pea	*Tephrosia angustissima* var. *curtissii*	NL	SE	Low	--
Piedmont jointgrass	*Coelorachis tuberculosa*	NL	ST	Low	--

Common Name	Scientific Name	Federal Status	State Status[1]	Likelihood of Occurrence	Effect Determination
Large-flowered rosemary	*Conradina grandiflora*	NL	ST	Low	--
Nodding pinweed	*Lechea cernua*	NL	ST	Low	--
Giant orchid	*Pteroglossaspis ecristata*	NL	ST	Low	--

[1]Based on *Florida's Endangered and Threatened Species* updated January 2017 available on http://myfwc.com/wildlifehabitats/imperiled/

Federal Status: FE = Endangered, FT = Threatened, T(S/A) = Threatened due to similarity of appearance, SSC = Species of Special Concern, C = Candidate species, NL = Not Listed

State Status: FE= Federally Endangered, FT = Federally Threatened, FT(S/A) = Federally Threatened due to similarity of appearance, ST = State Threatened; Note: Coordination is not required with FWC for Federally-listed species

*Osprey nests are protected by FWC under Chapter 68A of the Florida Administrative Code (FAC) and under the Migratory Bird Treaty Act of 1918, as amended. The osprey is listed as a SSC only in Monroe County, Florida.

USFWS Data

The project study area, including all four alternatives, is located within the USFWS's Consultation Areas for the Florida scrub-jay, Everglade snail kite, piping plover, Audubon's crested caracara, manatee, and Atlantic coast plants. In addition, the project study area is located within the 18.6-mile core foraging area of two wood stork colonies (i.e., North Fork St. Lucie River colony and Sewal Point MC2-Bird Island colony). No USFWS-designated critical habitat for any protected species occurs within the project site. The USFWS's IPaC Trust Resources Report (**Appendix G**) provided by the USFWS identified 21 Federally and State-listed species that may be present in the project study area. Four (4) of the 21 species identified in the IPAC Trust Resources Report have some likelihood of occurrence in the project study area but were not identified in the FNAI Standard Data Report: leatherback sea turtle (*Dermochelys coriacea*), loggerhead sea turtle (*Caretta caretta*), fragrant prickly apple (*Harrisia fragrans*), and Lakela's mint (*Dicerandra immaculata*). The likelihood of occurrence of these species is also addressed in Table 3.

FWC Eagle Nest Locator Database

The bald eagle (*Haliaeetus leucocephalus*) is not a Federally- or State-listed species; however, it is protected under the Bald and Golden Eagle Protection Act, Migratory Bird Treaty Act, and FWC Management Plan regulations. According to the FWC's Eagle Nest Locator database, the closest documented bald eagle nest (SL014 – last known active in 2016) is located more than 1.5 miles northeast of the project study area. The proposed project is located well outside of the 200-meter (660-foot) nest protection zone. No impacts are anticipated to bald eagles or their nests from the proposed project.

Species Likelihood of Occurrence and Effect Determinations

Based on the Federal and State database and GIS reviews, as well as with the environmental field survey, those Federally- and State-listed species that may occur in the project area are identified in Table 3, along with their likelihood of occurrence within the project area. Table 3 also includes a determination of effect for Federally-listed species. Additional detail for each of these Federally-listed and State-listed species is provided below.

Federally-listed Fauna

Mammals

West Indian Manatee

The West Indian manatee is a large, aquatic mammal that reach lengths of nine to 10 feet and weigh approximately 1,000 pounds. They have two fore limb flippers and a large, round, flattened paddle-shaped tail. Manatees can tolerate a range of salinities, including freshwater rivers, estuarine bays, and marine coastlines. The year-round distribution of the Florida subspecies (*Trichechus manatus latirostris*) is generally restricted to peninsular Florida due to their need for warm water to survive the winter. Manatees in estuarine or marine environments regularly seek freshwater sources to drink, such as creeks or industrial outfalls. Manatees are generalist herbivores that feed on a variety of marine and freshwater vegetation. Because manatees are unable to tolerate prolonged exposure to temperatures below about 16°C (61ºF), they typically seek out warm-water refuges associated with electric power plant thermal outfalls or artesian springs.

The project area contains two estuarine habitats that are accessible to manatees: Moore's Creek and Taylor Creek. Additionally, the FNAI Standard Data Report documented a manatee aggregation site within the Indian River Lagoon at the mouth of Moore's Creek. The Primary Alternative crosses over Moore's Creek and Taylor Creek and is located in close proximity to the manatee aggregation site. Additionally, the River Walk Alternative is located just north of the manatee aggregation site. If the Primary Alternative were to be selected, the trail alternative would be limited to the existing paved area on the bridges over Moore's Creek and Taylor Creek. Likewise, if the River Walk Alternative were selected, the alternative would be limited to the existing paved areas in the vicinity of the manatee aggregation site. There would be no in-water work associated with the project. Thus, a determination of ***no effect*** has been made for the manatee.

Birds

Everglade snail kite

The Everglade snail kite (snail kite) is a medium-sized, gray or black raptor with broad, paddle-shaped wings, a square-tipped tail with a white base, and a long, hooked bill. This

bird feeds almost exclusively on the apple snail (*Pomacea paludosa*). Snail kites inhabit large, relatively clear and open freshwater marshes and the shallow vegetated edges of lakes where apple snails occur. Snail kites typically nest in small trees or shrubs (usually < 33 feet in height). The project study area falls within the USFWS consultation area for the snail kite; however, there is no designated USFWS critical habitat for this species within the project study area. During the environmental field survey, no snail kites or evidence of apple snails were observed. Due to lack of suitable habitat for the snail kite within the project study area, a determination of ***no effect*** has been made for the snail kite.

Wood Stork

The wood stork is a large, white wading bird with a dark gray head and neck, standing more than three feet tall with a five-foot wing span. It nests in inundated wetlands (typically marshes, cypress swamps, and mangrove swamps) and forages in shallow waters (two to 15 inches deep). Suitable foraging habitat for the wood stork includes freshwater marshes, swamps, lagoons, tidal creeks, flooded pastures, artificial ponds, managed impoundments, and seasonally flooded roadside or agricultural ditches. The project study area is located within the 18.6-mile core foraging area of two wood stork colonies (i.e., North Fork St. Lucie River colony and Sewal Point MC2-Bird Island colony). The closest documented wood stork colony (North Fork St. Lucie River colony) is located approximately 12 miles south of the project study area. During the environmental field survey, no wood storks or suitable habitat for this species were observed. As discussed in Section 6.2.2 of this document, there will be no impacts to wetlands from any of the project Alternatives. Based on a review of the USFWS's Wood Stork Effect Determination Key, a determination of ***no effect*** has been made for the wood stork.

Florida scrub-jay

The Florida scrub-jay (scrub-jay) has blue head, nape, wings, and tail with a pale gray on the back and belly. This species is endemic to Florida and is extremely habitat-restricted. It inhabits the low-growing oak scrub habitat (e.g., sand pine, xeric oak scrub, and scrubby flatwoods) that occurs on well-drained, sandy ridges on the central Florida peninsula. Optimal habitat includes scrub oak with oaks and other low-lying shrubs that are interspersed with numerous small patches of bare sand. Scrub-jays live in family groups that consist of a breeding pair and their offspring and they typically do not travel long distances. During the environmental field survey, no scrub-jays or scrub habitat were observed within the project area. Based on the lack of suitable habitat for this species within the project area, a determination of ***no effect*** has been made for the scrub-jay.

Reptiles

Eastern indigo snake

The eastern indigo snake is a glossy, iridescent, blue-black snake that is the longest snake in North America, reaching lengths of 8.5 feet (2.6 m). This species can be found in almost any habitat in Florida, including pine flatwoods, scrubby flatwoods, high pine, dry prairie, tropical hardwood hammocks, edges of freshwater marshes, agricultural fields, coastal dunes, and human-altered habitats. They are known to inhabit the burrows of other animals (e.g., armadillos, cotton rats, and land crabs) and particularly gopher tortoise burrows, though this is more prevalent where temperatures drop to below 50 degrees regularly in the winter. These snakes require large tracts of land for survival. Suitable habitat for this species is present within the project study area. No indigo snakes and no burrows were observed during environmental field survey. According to the *USFWS's July 2017 Eastern Indigo Snake Programmatic Effect Determination Key*, with the implementation of the *USFWS Standard Protection Measures for the Eastern Indigo Snake* (August 12, 2013; See **Appendix H**) during construction, a determination of ***may affect, not likely to adversely affect*** can been made for the proposed project.

Hawksbill sea turtle

The hawksbill sea turtle is a small- to medium-sized (up to three feet in length) marine turtle with a small head, distinctive hawk-like beak, and an elongated oval shell. The carapace has overlapping scutes and it is generally brown in color with splotches of yellow, orange, or reddish-brown. The hawksbill sea turtle feeds primarily on sponges and is most often associated with the coral reef habitats. This species can be found in shallow waters (rarely seen in water deeper than 65 feet) in association with rocky areas, coral reefs, shallow coastal areas, lagoons or oceanic islands, and narrow creeks and passes. Nesting may occur on almost any undisturbed beach with deep sand. The Primary Alternative crosses over two estuaries (Moore's Creek and Taylor Creek) and a portion of the River Walk Alternative is located adjacent to the Indian River Lagoon. If the Primary Alternative were to be selected, the trail alternative would be limited to the existing paved area on the bridges over Moore's Creek and Taylor Creek. Likewise, if the River Walk Alternative were selected, the alternative would be limited to the existing paved areas in the vicinity of the Indian River Lagoon. There would be no in-water work associated with the project. Thus, a determination of ***no effect*** has been made for the hawksbill sea turtle.

Leatherback sea turtle

The leatherback sea turtle is the largest of the sea turtles, at four to eight feet in length and 500-2,000 pounds in weight. It is easily identified by its size and its shell, which is covered by a firm, rubbery skin with seven longitudinal ridges. This species forages mainly on jellyfish, but also consumes sea urchins, squid, crustaceans, tunicates, fish, blue-green algae, and floating seaweed. This species is the most pelagic of the sea turtles

and adult females require sandy nesting beaches backed with vegetation and sloped sufficiently so the distance to dry sand is limited. The project area does not contain the preferred habitat for this species and because there will be no in-water work associated with the project, a determination of ***no effect*** has been made for the leatherback sea turtle.

Loggerhead sea turtle

The loggerhead sea turtle is a small- to medium-sized (averaging three feet in length) marine turtle with a large head, blunt jaws, a reddish-brown carapace. This species forages on mollusks, crustaceans, fish, and other marine animals. The loggerhead sea turtle inhabits pelagic environments, as well as nearshore areas (e.g., bays, lagoons, salt marshes, creeks, ship channels, coral reefs, rocky areas, and river mouths). Nesting occurs mainly on open beaches or along narrow bays with suitable sand. The Primary Alternative crosses over two estuaries (Moore's Creek and Taylor Creek) and a portion of the River Walk Alternative is located adjacent to the Indian River Lagoon. If the Primary Alternative were to be selected, the trail alternative would be limited to the existing paved area on the bridges over Moore's Creek and Taylor Creek. Likewise, if the River Walk Alternative were selected, the alternative would be limited to the existing paved areas in the vicinity of the Indian River Lagoon. There would be no in-water work associated with the project. Thus, a determination of ***no effect*** has been made for the loggerhead sea turtle.

Fish

Atlantic sturgeon

The Atlantic sturgeon is a large fish which is brown/tan in color with a whitish belly, rough, scale-less skin, and five rows of scutes on the top and sides of the body. It has a long forked heterocercal tail and a hard snout with four whisker-like barbels. It is anadromous, spending the majority of its life in brackish or marine environments, and migrating into freshwater to spawn. This species feeds in the sediment, consuming worms, snails, shellfish, crustaceans, and small fish. It inhabits nearshore marine environments, estuarine environments (e.g., bays, sounds, lagoons, river mouths, tidal rivers), and riverine habitats. The Primary Alternative crosses over two estuaries (Moore's Creek and Taylor Creek) and a portion of the River Walk Alternative is located adjacent to the Indian River Lagoon. If the Primary Alternative were to be selected, the trail alternative would be limited to the existing paved area on the bridges over Moore's Creek and Taylor Creek. Likewise, if the River Walk Alternative were selected, the alternative would be limited to the existing paved areas in the vicinity of the Indian River Lagoon. There would be no in-water work associated with the project. Thus, a determination of ***no effect*** has been made for the Atlantic sturgeon.

Opossum pipefish

The opossum pipefish is a relative large (7.6 inches in length) pipefish with small fins and a long snout (1.5-2.0 times the head length). It has a distinctive coloration with a sienna brown head, a series of dark red blotches forming a red stripe between the lateral and superior trunk ridges, a bright red lower snout with vertical black bard, and a red caudal fin with a central dark stripe. This species is known to occur within the Indian River Lagoon. They forage on small fish in dense vegetation. The Primary Alternative crosses over two estuaries (Moore's Creek and Taylor Creek) and a portion of the River Walk Alternative is located adjacent to the Indian River Lagoon. If the Primary Alternative were to be selected, the trail alternative would be limited to the existing paved area on the bridges over Moore's Creek and Taylor Creek. Likewise, if the River Walk Alternative were selected, the alternative would be limited to the existing paved areas in the vicinity of the Indian River Lagoon. There would be no in-water work associated with the project and a determination of ***no effect*** has been made for the opossum pipefish.

Mangrove rivulus

The mangrove rivulus is a small (lengths of up to 2.4 inches) fish, olive in color, with a flat back body, rounded tail fin, and often small black dots located throughout the body surface. This species consumes worms, copepods, and mosquito larvae. The mangrove rivulus inhabits mangrove forests and is an amphibious/fossorial species, meaning that it is capable of living on land and water. On land, they burrow and can typically be found hidden in rotten wet logs or under moist leaf litter. During the environmental field review, biologists observed mangroves located along the River Walk Alternative, adjacent to the north of the existing concrete path that runs beneath the Seaway Drive bridge (Figure 7). In the area of the mangroves, the proposed River Walk Alternative will utilize the existing pavement and will not require construction of a new trail; thus, a determination of ***no effect*** has been made for the mangrove rivulus.

State-Listed Fauna

Mammals

Sherman's fox squirrel

This large tree squirrel can reach a length of up to 27.6 inches (70 cm) and weighs from one to three pounds. This species varies in color from black to brown and has a black head, white ears, and a white snout with a long bush tail. Its diet consists of mostly longleaf pine seeds and turkey oak acorns, but they also consume fungi, fruit, and buds. This species inhabits open, fire-maintained longleaf pine, turkey oak, sandhill, and pine flatwood habitats. Other habitat types that might be utilized by this species include mixed hardwood pine, mature pine forests, cypress domes, pastures, the ecotone between bayheads and pine flatwoods, and other open habitats with pine and oaks. No fox squirrels or their nests

were observed during environmental field survey. Suitable habitat for the Sherman's fox squirrel was not observed within the project area and no adverse effects to this species are anticipated from the proposed project.

Birds

Florida burrowing owl

This small, ground-dwelling owl averages nine inches in height with a mean wingspan of approximately 21 inches. Burrowing owls have sandy brown plumage and are spotted and barred with brown and white. They typically dig burrows that are six to nine feet in length and up to three feet deep; however, they may also utilize gopher tortoise burrows or armadillo burrows. Burrowing owls inhabit open habitats with short groundcover and suitable habitats includes dry prairie, pasture land, agricultural fields, golf courses, airports, schools, and vacant residential lots. No burrowing owls or burrows were observed during the environmental field survey. However, the South Alternative 1 and River Walk Alternative may require construction of trail portions that are located in areas with suitable habitat for this species. ***A burrowing owl survey should be conducted during design and permitting of the project*** to determine the location of any burrows within the proposed project area. In the event that any project activities are to occur within 50 feet of a burrowing owl burrow, a FWC Incidental Take Permit would be required.

Reptiles

Gopher tortoise

This terrestrial tortoise averages nine to 11 inches in length with an oblong shell that is generally tan, brown, or gray. It can be identified by its stumpy, elephantine hind feet and flattened, shovel-like forelimbs adapted for digging. Gopher tortoises typically inhabit upland habitats that have the following general characteristics: well drained, sandy soils; abundant groundcover; relatively open canopy and sparse shrub cover. These habitat characteristics occur in a variety of Florida's native upland communities, including scrub communities, coastal strand, and pine flatwoods. Gopher tortoises dig extensive burrows for shelter and forage on low-growing plants. Gopher tortoises share their burrows with more than 350 other species, including the Eastern indigo snake, gopher frog, and Florida mouse, and are therefore referred to as a keystone species. Development pressures on many of the upland communities in Florida have been increasing. Thus, more disturbed habitats, such as fence rows, old fields, range lands, and canal banks have become important to gopher tortoises. Suitable habitat for this species can be found throughout the project study area. No gopher tortoises or burrows were observed during the environmental field survey. A gopher tortoise survey should be conducted along the selected trail alternative during the design phase of the project, prior to construction, and FWC gopher tortoise permitting guidelines should be implemented. If a 25-foot buffer

around a burrow cannot be maintained during construction, then the gopher tortoise must be relocated.

Other species

Osprey

The osprey is a raptor with a white underside and head, a brownish back, a dark brown streak that extends through their eye towards the back of the head, and streaks across the top of their head and breast. The osprey is listed as a species of special concern by FWC only within Monroe County, but the nests are protected by FWC in other parts of the state and under the Migratory Bird Treaty Act. In Florida, osprey habitat includes coasts, lakes, rivers, and swamps containing suitable nesting sites. Nesting typically occurs in large trees and on man-made structures/platforms. Osprey also nest in low lying sites, such as those found in mangrove swamps. Suitable habitat for the osprey be found within the project study area; however, no osprey or osprey nests were observed during the environmental field survey. No adverse effects to this species are anticipated from the proposed project.

Listed Plant Species

Federally-Listed Plants

Fragrant prickly apple

The fragrant prickly apple is rare, slender, columnar, solitary tree cactus with one to eight spiny, cane-like, stout, and succulent stems. The stems are up to 0.20 inches in diameter and have 10 or 12 ridges, with alternating deep, sharp, grooves. The flowers are showy, solitary, five to eight inches long, with a long, scaly floral tube. Petals are numerous, long and narrow, fragrant, white when open at night and turn pink the next morning. Typically, the fragrant prickly-apple also has one round, red, fruit, with wooly spines. Three populations of this species are known and these are restricted to 11 small disjunct sites along the Atlantic Coastal Ridge in eastern St. Lucie County. One of the three known populations occur on private land in residential areas and the other two occur in Florida's Savannas State Preserve, located south of the project study area. This species prefers early-successional sand pine scrub habitat and known sites are limited to the St. Lucie sand soil which is excessively well drained where water capacity, fertility, and organic matter content are all very low. No fragrant prickly apple was observed during the environmental field survey and no suitable habitat for this species occurs within the project area. Therefore, a determination of ***no effect*** has been made for the fragrant prickly apple.

Lakela's mint

Lakela's mint is a small (up to 1.3 feet tall), fragrant shrub that has 1-inch long, narrowly oval, opposite leaves, with rounded tips that have inrolled margins and are covered in glands. Flowers are less than 0.8 inches long, one to three per whorl, and rose-purple in color, with no spots or lines. Its growth is bushy in open sun and lax in shade and it forms small mats or domes of ascending to spreading or sprawling branches. The range of this species is extremely small and it is known for a single population that occurs in six isolated sites in southern Indian River and northern St. Lucie counties. It found in light shade or clearings in scrub along the Atlantic coastal ridge. No Lakela's mint was observed during the environmental field survey and no suitable habitat for this species occurs within the project area. Therefore, a determination of ***no effect*** has been made for the Lakela's mint.

Tiny polygala

The tiny polygala is an erect, relatively short-lived (germinating and dying within one year) herbaceous species that grows to a height of approximately four inches tall, has one to four unbranched stems, and a fragrant tap root. The plant is also characterized by two-inch long, lance-shaped leaves that extend radially from the base. The corolla is a greenish-yellow color with three petals. This species requires high light levels and open sand with little to no organic litter accumulation. The documented St. Lucie County population of this species occurs on a scrubby flatwoods knoll in Hobe Sand soils with sand pine, slash pine, and scrub live oak canopy trees. According to the US Department of Agriculture (USDA) NRCS Web Soil Survey, there are no Hobe Sand soils located within the project study area. No tiny polygala was observed during the environmental field survey and no suitable habitat for this species occurs within the project area. Therefore, a determination of ***no effect*** has been made for the tiny polygala.

Johnson's seagrass

Johnson's seagrass is a submerged sea grass and was the first marine plant to be listed under the Endangered Species Act. Its leaves are 0.8-2.0 inches in length and occur in pairs along a single stem. The leaves have a brown mid-rib and veins and occur at 0.5-2.0-inch intervals along the stem. Johnson's seagrass has one of the most limited geographic ranges of all seagrass species and is only known to occur between Sebastian Inlet and northern Biscayne Bay on the east coast of Florida. It is located in coastal sediments in shallow estuarine and marine waters (up to nine feet deep) and is often found on tidal deltas inside inlets and on sandy shoals. The Primary Alternative crosses over two estuaries (Moore's Creek and Taylor Creek) and a portion of the River Walk Alternative is located adjacent to the Indian River Lagoon. If the Primary Alternative were to be selected, the trail alternative would be limited to the existing paved area on the bridges over Moore's Creek and Taylor Creek. Likewise, if the River Walk Alternative were selected, the alternative would be limited to the existing paved areas in the vicinity

of the Indian River Lagoon. There would be no in-water work associated with the project and a determination of ***no effect*** has been made for Johnson's seagrass.

State-Listed Plants

Coastal vervain

Coastal vervain is a perennial herb with sprawling stems up to two feet long. Leaves are succulent and irregularly lobed and toothed. Its calyx has stalked glands and pointed lobes. The flowers are lavender in color with an orange throat, five-lobed, and tubular with each lobe approximately 0.5 inches long. This species occurs in disturbed, sandy areas on back dunes, dune swales, and coastal hammocks. No coastal vervain was observed during the environmental field survey and no suitable habitat for this species occurs within the project area. No adverse effects to this species are anticipated from the proposed project.

Celestial lily

The celestial lily is a perennial herb with a single, tall, slender stem. Its basal leaves are grass-like and can exceed two feet in length and the stem leaves are small and scattered along the stem. It has six dark blue flowers that are more than 1.5 inches across with spreading petals and sepals. This species inhabits wet, swampy habitats such as wet flatwoods, prairies, marshes, and the edges of cabbage palm hammocks. No celestial lily was observed during the environmental field survey and no suitable habitat for this species occurs within the project area. No adverse effects to this species are anticipated from the proposed project.

Coastal hoary-pea

The coastal hoary-pea is a perennial herb with straggling or arching stems (eight to 32 inches long). It has few scattered hairs and compound leaves with 11-17 opposite leaflets with conspicuous veins. The flowers are tiny and white to dark pink, typically pea-shaped with a large erect banner petal. This species inhabits scrub and sandy areas. No coastal hoary-pea was observed during the environmental field survey and no suitable habitat for this species occurs within the project area. No adverse effects to this species are anticipated from the proposed project.

Piedmont jointgrass

Piedmont jointgrass is a tall, tufted, perennial grass with erect or ascending culms in solitary or in small tufts. This particular jointgrass has three spikelets (1.3 - two mm wide) and the first glume has scattered small, or no, transverse ridges. Habitat includes depressional marshes, flatwoods, swamps, savannas, ponds, roadway ROW, and ditches. No Piedmont jointgrass was observed during the environmental field survey and

no suitable habitat for this species occurs within the project area. No adverse effects to this species are anticipated from the proposed project.

Large-flowered rosemary

Large-flowered rosemary is a perennial, evergreen, aromatic shrub that reaches a height of three to four feet and a width of one to two feet, with purple to lavender flowers. This species has hairy, glandular, needle-like, opposite leaves. It flowers year-round and the large, two-lipped, bright-blue-to-lavender colored flowers with dark spots on the lower lip. This species inhabits coastal scrub, pine scrub, dunes, and sandhill habitats with fine, deep soils. No large-flowered rosemary was observed during the environmental field survey and no suitable habitat for this species occurs within the project area. No adverse effects to this species are anticipated from the proposed project.

Nodding pinweed

Nodding pinweed is a perennial herb that has slender, erect, flowering stems, rising from a dense mat of spreading, older stems. It has short leaves (less than 0.4 inches) that are alternative and narrowly oval with pointed tips. The flowers of this species occur in tight clusters at the ends of short branches, with three tiny, purple or green petals and five sepals. The entire plant is covered with spreading, gray hairs. Habitat includes scrub and scrubby flatwoods. No nodding pinweed was observed during the environmental field survey and no suitable habitat for this species occurs within the project area. No adverse effects to this species are anticipated from the proposed project.

Giant orchid

The giant orchid is a perennial herb that has two to four erect, pleated, veined, basal leaves (six to 28 inches long and 0.5-1.5 inches wide). The flower stalk is 1.0-5.5 feet tall and leafless with a terminal spike of five to 30 flowers with a stiff floral bract beneath each flower. The sepals and petals are yellow-green and folded forward over the three-lobed lip. The prominent central lobe is maroon with green margins. This species is known to occur in sandhill, scrub, pine flatwood, and pine rockland habitats. No giant orchids were observed during the environmental field survey and no suitable habitat for this species occurs within the project area. No adverse effects to this species are anticipated from the proposed project.

6.2.2 Wetlands and Essential Fish Habitat

The USFWS's NWI data were reviewed to determine the presence of wetlands and other surface waters within the project study area. The findings below are based on the NWI data, as well as the environmental field review conducted on April 19, 2018. Wetland and

surface water impacts were calculated only in areas where a proposed new trail could potentially be constructed and do not include areas where the proposed trail alternative would utilize an existing paved surface. A 20-foot-wide trail alternative was used for the impact analysis, which includes ten feet on either side of the proposed trail centerline.

Estuarine and Marine Deepwater

The only wetland category identified by the NWI data within the project study area is estuarine marine and deep-water habitat (E1UBLx – estuarine, subtidal, unconsolidated bottom, subtidal). The Primary Alternative crosses over Moore's Creek south of Backus Avenue (Bridge No. 940029). The Primary Alternative also crosses over Taylor Creek between North 4th Street and North Causeway Drive/SR A1A (Bridge 945000). If the Primary Alternative were to be selected, the trail alternative would be limited to the existing paved area on the bridges over Moore's Creek and Taylor Creek. There would be no in-water work or work on the banks of Moore's Creek or Taylor Creek. Additionally, the River Walk Alternative is located in close proximity to the Indian River Lagoon; however, if the River Walk Alternative were selected, the alternative would be limited to the existing paved areas adjacent to the Indian River Lagoon and there would be no in-water work. **Figure 8** shows the location of these estuarine wetlands in relation to the project study area. Thus, no impacts to any wetlands or Other Surface Waters from the any of the proposed Alternatives are anticipated.

Essential Fish Habitat (EFH)

The NMFS EFH Mapper was reviewed to identify EFH within and adjacent to the project area. Moore's Creek and Taylor Creek are two waterbodies within the project study area that are understood to contain EFH. The Primary Alternative crosses over Moore's Creek south of Backus Avenue (Bridge No. 940029). The Primary Alternative also crosses over Taylor Creek between North 4th Street and North Causeway/SR A1A (Bridge 945000). If the Primary Alternative were to be selected, the trail alternative would be limited to the existing paved area on the bridges over Moore's Creek and Taylor Creek. There would be no in-water work or work on the banks of Moore's Creek or Taylor Creek. Additionally, the River Walk Alternative is located in close proximity to the Indian River Lagoon; however, if the River Walk Alternative were selected, the alternative would be limited to the existing paved areas adjacent to the Indian River Lagoon and there would be no in-water work. Thus, no impacts to EFH are anticipated from the Primary Alternative or any other Alternative.

Figure 8. Wetlands Map



6.2.3 Upland Habitat

The FLUCFCS data were reviewed to identify the natural upland habitat types within the project study area. Based upon the FLUCFCS maps, there are no natural, undeveloped

upland communities located within or adjacent to the project study area. As described in Section 6.1.1 of this document, the existing land use within the project study area is a mix of residential, commercial, industrial, and transportation. This finding was confirmed by the observations of biologists during the environmental field survey. The area where a proposed new trail could potentially be constructed along South Alternative 1 (between Citrus Avenue and Orange Avenue) consists mostly of previously cleared, grass-covered ground with occasional trees and other vegetation (e.g., Brazilian pepper) in an industrial/commercial area (**Figure 9**). The area where a proposed new trail could potentially be constructed along the River Walk Alternative (on the north side of Seaway Drive between Indian River Drive and the existing concrete path beneath the Seaway Drive causeway bridge) consists of maintained grass between a roadway and a parking lot (Figure 9).

Figure 9: Proposed New Trail Areas



Photographs of the area where a proposed new trail could potentially be constructed. Top photos were taken along the South Alternative 1 between Citrus Avenue and Orange Avenue. Top left photo looking northwest from a position east of Boston Avenue and west of the railroad tracks. Top right photo looking north from Boston Avenue. Bottom photograph shows the potential new River Walk Alternative on the north side of Seaway Drive (photograph looking northwest).

Upland habitat impacts are calculated only in areas where a proposed new trail could potentially be constructed and do not include areas where the proposed trail alternative would utilize an existing paved surface. No impacts to any natural upland habitats is anticipated from the any of the proposed Alternatives**.**

6.2.4 Outstanding Florida Waters/Aquatic Preserves

Section 403.061(27), Florida Statutes, grants the Florida Department of Environmental Protection (FDEP) the power to establish rules that provide for Outstanding Florida Waters (OFW) that are worthy of special protection based on their natural attributes. The list of designated OFW provided in Rule 62-302.700 (9), Florida Administrative Code, was reviewed. There are no OFW or aquatic preserves identified within or adjacent to the project study area.

6.2.5 Floodplains

The FEMA floodplain data were reviewed. These data are based on the FEMA FIRM. Portions of the project study area are located within the 100-year floodplain (Flood Zones A, AE, AH, and VE); however, floodplain impacts are calculated only in areas where a proposed new trail could potentially be constructed and do not include areas where the proposed trail alternative would utilize an existing paved surface. The only area where a proposed new trail alternative is located within the 100-year floodplain is along the River Walk Alternative, on the north side of the Seaway Drive bridge between Indian River Drive and the existing concrete path beneath the Seaway Drive bridge. This small area (0.04 acres) is located within Flood Zones AE and VE. **Figure 10** shows the FEMA flood zones within the project study area. **Table 4** shows the estimated floodplain impacts for each alternative.

Table 4: Floodplain Impacts (Acres)

FEMA Flood Zone	Primary Alternative	East Alternative 1	East Alternative 2	River Walk Alternative
Flood Zone (AE)	0.00	0.00	0.00	0.02
Flood Zone (VE)	0.00	0.00	0.00	0.02
Total	0.00	0.00	0.00	0.04

Note: Impact calculations are based on a 20-foot-wide trail alternative (which includes 10 feet on either side of the proposed trail centerline) only in areas where a proposed new trail could potentially be constructed.

Figure 10: Flood Zones



6.3 Physical Features

The proposed project's impact to nearby physical features, such as noise, air quality and potential contamination sites, were identified and evaluated.

6.3.1 Noise

The referenced project does not meet the criteria for a Type I project established in 23 CFR 772 and Chapter 18 of Part 2 of the FDOT *PD&E Manual*. Therefore, the project requires no analysis for highway traffic noise impacts. Because it is a trail project, no long-term noise impacts are anticipated.

6.3.2 Air Quality

The project is in an area that is designated as attainment for all of the National Ambient Air Quality Standards under the criteria provided in the Clean Air Act. Therefore, the Clean Air Act conformity requirements do not apply to the project. The project will have no effect on area-wide air quality levels and no screening analyses was required.

6.3.3 Contamination

A preliminary evaluation of the project area was conducted to determine if potential contamination sources occur and if the project would be affected by any known contaminants. This analysis included a review of FDEP's on-line data and aerial review. According to online FDEP data and the Contamination Locator Map (FDEP, 2018), there are known contamination sites occurring within 500 feet of the proposed alternatives centerlines as shown in **Table 5**. Based on this limited review, it is unlikely that a contamination source would be impacted by the current project scope; however, this final determination is made by the FDOT District Contamination Impacts Coordinator (DCIC).

Table 5: Potential Contamination Sites

Site Description (Type, Facility ID, Address, Status)	**Primary Alternative**	**South Alternative 1**	**South Alternative 2**	**River Walk Alternative**
Brownfields:				
• BF561101001 – Parcel 1, 322 North 2nd Street (Active Brownfield Cleanup)	X			X
• BF561101002 – Parcel 2, 125 A.E. Backus Avenue (Active Brownfield Cleanup)	X			X

Site Description (Type, Facility ID, Address, Status)	Primary Alternative	South Alternative 1	South Alternative 2	River Walk Alternative
• BF561101003 – Parcel 3, North 2nd Street (Active Brownfield Cleanup)	X			X
Petroleum / Storage Tank Contamination Monitoring (STCM):				
• 8631077 – Culligan Water Conditioning, 302 Georgia Avenue (Active Petroleum Cleanup)	X			
• 9202664 – Conchem, 250 Florida Avenue (Pending Petroleum Cleanup)	X			
• 8838094 – Debrooks Fishing Corner, 107 Fishermans Wharf (Pending Petroleum Cleanup)	X			X
• 9202212 – Egan Packing Co., 304 Boston Avenue (Pending Petroleum Cleanup)	X	X	X	
• 9300064 – FL East Coast Railway-Material Yard, 353 Florida Avenue (Pending Petroleum Cleanup)	X	X	X	
• 8520200 – CEMEX – Ft. Pierce District Shop, 1301 North 2nd Street (Pending Petroleum Cleanup)	X			
• 8518593 – Giant Oil #137, 511 S US Highway 1 (Active Petroleum Cleanup)	X	X	X	
• 9400513 – Kane & Grunbaum Property, 621 Southe US Highway 1 (Active Petroleum Cleanup)	X			
• 9814380 – Vacant Lot-SE of Courthouse, South US Highway 1 (Active Petroleum Cleanup)	X	X	X	
• 8516135 – Vak Express, 701 South US Highway 1 (Active Petroleum Cleanup)	X			
• 8516038 – Palmdale Oil Co Inc, 911 North 2nd Street (Active Petroleum Cleanup)	X			X

Site Description (Type, Facility ID, Address, Status)	Primary Alternative	South Alternative 1	South Alternative 2	River Walk Alternative
• 8516231 – Taylor Creek Marina, 1600 North 2nd Street (Active Petroleum Cleanup)	X			
Other Waste Cleanup:				
• ERIC_3834 – Qual-Krom, 301 Florida Avenue (Pending Other Cleanup / polluted soils and groundwater)	X			
• COM_259345 – Boston Avenue Project a/k/a Egan & Company a/k/a FEC Railway, 1900 Old Dixie Highway (Active Other Cleanup)	X	X	X	
• COM_82363 – HD King Electric Power Plant (Former), 311 N Indian River Drive (Active Other Cleanup)	X			X
Total Potential Contamination Sites	**18**	**5**	**5**	**6**

Note: Any '**X**' indicates potential contamination site is adjacent (within approximately 100 feet of the proposed centerline) to proposed alternative.

Section 7.0 Permit Requirements

The following permits are anticipated to be required for the proposed project:

- FDEP National Pollutant Discharge Elimination System (NPDES) General Permit
- Section 10/Section 404 Department of the Army Permit
- SFWMD Environmental Resource Permit

Section 8.0 Coordination

Numerous meetings were held with agency stakeholders to discuss the proposed project. Meeting materials are provided in Appendix B.

Table 6: Agency Stakeholders Meetings

Date	Meeting	Attendees	Comments
January 18, 2017	Pre-Project Kick-Off Meeting	FDOT, Atkins,	Provided a general overview of the SUN

Date	Meeting	Attendees	Comments
		St. Lucie County, City of Fort Pierce, St. Lucie TPO, and Treasure Coast Regional Planning Council (RPC)	Trail projects, potential locations, and any foreseen concerns or challenges
April 25, 2017	Local Agency Kick-Off Meeting	FDOT, Atkins, St. Lucie County, City of Fort Pierce, Janus Research, and Treasure Coast RPC	Discussed preliminary alternatives that were developed by Fort Pierce, Saint Lucie County, St. Lucie TPO, and the Treasure Coast RPC
September 20, 2017	City of Fort Pierce Design Coordination Meeting	FDOT, Atkins, St. Lucie County, City of Fort Pierce, St. Lucie TPO	General discussion of alternatives and issues that may arise; new potential alternatives were proposed
March 30, 2018	Design Coordination Meeting	FDOT, St. Lucie TPO	General discussion of alternatives and issues that may arise; new potential alternatives were proposed
May 9, 2018	Design Coordination Meeting	FDOT, Atkins, St. Lucie County, City of Fort Pierce, St. Lucie TPO	Decided on final alternatives to be evaluated

8.1 Public Kick-Off Meeting

A Public Kick-Off Meeting was held on October 10, 2017 at the Old City Hall, 315 Avenue A in Fort Pierce from 5 p.m. to 7 p.m. Notification of the meeting was sent to all land owners and residents within 300-feet of each alternative. A total of 24 members of the public attended the meeting. A brief presentation including the alternatives and potential environmental and user conflicts was presented during the meeting. Handouts and displays were provided detailing the Feasibility Study process and helping the public become familiar with the SUN Trails and study process.

A total of six comments were received from the public. The comments included questions, a suggestion of the trail placement, a suggestion of the material used to construct the trail, a suggestion of adding historical significance placement markers along the trail, and two letters of non-support of the trail.

8.2 Public Alternatives Analysis Meeting

A Public Alternatives Analysis Meeting was held on June 5, 2018 at the Old City Hall, 315 Avenue A in Fort Pierce from 5 p.m. to 7 p.m. Notification of the meeting was sent to all land owners and residents within 300-feet of each alternative. A total of 23 members of the public attended the meeting. A brief presentation including the alternatives and potential environmental and user conflicts was presented during the meeting and attendees were given the opportunity to ask questions and present comments. Handouts and displays were provided detailing the final potential alternatives that were developed and studied during the Feasibility Study process. No written public comments were received.

Section 9.0 Alternatives Comparison

This Section summarizes and compares the anticipated impacts for each of the alternatives identified during this feasibility study.

Table 7: Historic Downtown Fort Pierce Trail Alternatives Comparison Matrix

	No Build	Primary Alternative	South Alternative 1	South Alternative 2	River Walk Alternative
Meets SUN Trail Program Design Criteria	N/A	Yes (portions)	No (requires significant amount private ROW)	No	Yes (portions)
Social Features					
Existing Land Use	No adverse effects	No adverse effects	No adverse effects	No adverse effects	No adverse effects
Future Land Use	No adverse effects	No effect	No effect	No effect	No effect
Community Cohesion	No adverse effects; but does not enhance connectivity in the area and does not meet the intended purpose of the project.	Enhanced connectivity.	Enhanced connectivity.	Enhanced connectivity.	Enhanced connectivity.
Relocations	None	• No potential building relocations identified if project remains within existing ROW. • Relocation of existing overhead power lines near the southern terminus along 3rd Street.	No potential relocations identified.	No potential relocations identified.	No potential relocations identified.
ROW or Easements Required (Private/FEC)	None	Yes (portions)	Yes	Yes	No
Community Services	No adverse effects	No impacts to community services if project remains within existing ROW.	No community services will be impacted.	No community services will be impacted.	No community services will be impacted.
Potential User Conflicts	None	• Conflicts with road crossings could be handled with specialized road crossing, including cross walks. • Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage. • Conflicts with on street parking could be handled with signage or different alternative selection.	• Conflicts with road crossings could be handled with specialized road crossing, including cross walks. • Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage. • Conflicts with on street parking could be handled with signage or different alternative selection.	• Very steep and narrow bridge on Citrus Ave creates unsafe bicycle terrain. Minimize conflict by not using bridge. • Conflicts with road crossings could be handled with specialized road crossing, including cross walks. • Conflicts with on street parking could be handled	• Conflicts with boat ramp users. Minimize conflicts with signage. • Conflicts with park users (fishing). Minimize with signage and specific fishing and resting spots. • Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage.

	No Build	Primary Alternative	South Alternative 1	South Alternative 2	River Walk Alternative
				with signage or different alternative selection. • Traffic Circle conflicts and confusion for novice riders could be handled with signage.	
Cultural					
Archaeological/ Historical Resources	None	1 National Register-Listed bridge, 1 National Register-Eligible bridge, 1 National-Register-Eligible railroad, 1 National Register-Eligible roadway, 2 Fort Pierce-designated historic districts	1 National Register-Eligible railroad, 1 Fort Pierce-designated historic district	1 National Register-Listed structure, 1 National Register-Eligible railroad, 2 Fort Pierce-designated historic districts	2 Fort Pierce-designated historic districts
Section 4(f)	N/A	N/A	N/A	N/A	N/A
Natural					
Threatened and Endangered Species	No effect	No effects	No adverse effects	No effects	No effects
Wetlands/Other Surface Waters (acres)	None	None	None	None	None
Upland Habitat (acres)	None	None	None	None	None
Outstanding Florida Waters/Aquatic Preserves	None	None	None	None	None
Floodplains (acres)	No effect	None	None	None	0.04
Physical					
Noise	None	No effect	No effect	No effect	No effect
Air Quality	None	No effect	No effect	No effect	No effect
Contamination	None	See “Contamination Summary” table in Section 6 for sites identified. (Contamination Impacts to be determined by FDOT DCIC)	See “Contamination Summary” table in Section 6 for sites identified. (Contamination Impacts to be determined by FDOT DCIC)	See “Contamination Summary” table in Section 6 for sites identified. (Contamination Impacts to be determined by FDOT DCIC)	See “Contamination Summary” table in Section 6 for sites identified. (Contamination Impacts to be determined by FDOT DCIC)

Section 10.0 Conclusions and Recommendations

Based on the analysis conducted and summarized in this report, the Recommended Alternative is a combination of the Primary Alternative, Riverwalk Alternative, and South Alternative 1 (**Figure 11**). In addition to the summary provided below, there was a consensus for this alternative among the project partners, St. Lucie County, St. Lucie TPO, and the City of Fort Pierce. The following is a summary of impacts for the Recommended Alternative:

SUN Trail Design Criteria

As noted in Section 5.3.3, only certain portions of the Primary Alternative and Riverwalk Alternative meet the design criteria and can be funded under the SUN Trail Program. For these portions, two options should be considered: 10 to 14-foot multi-use path or eight-foot multi-use path and wall. Figure 11 provides details.

For the areas that do not meet the criteria, other design options would be considered by local agencies for further development and funding. The South Alternative 1 does not meet SUN Trail criteria because the entire section would require either private or FEC ROW. Ongoing coordination with the FDOT District 4, City of Fort Pierce, St. Lucie County, and St. Lucie TPO would be recommended to identify and explore design and funding options. Design options would include sharrows or bike lanes and these different options are outlined in Figure 11.

It is important to note that there is an opportunity for the Recommended Alternative between Avenue M and the North Causeway along Old Dixie Highway. Currently, there is not enough ROW for an eight to 14-foot multi-use path across the Old Dixie Highway Bridge. However, a separate local project is proposing improvements that would provide adequate space for an eight to 14-foot multi-use path. Following the presentation of three options to the City Commission on December 17, 2018, the City Commission, by consensus in a letter dated December 18, 2018, chose Option 3 as follows:

Option 3 – One-Way Bridge with East Coast Greenway Trail

- Establishes the East Coast Greenway on the one-way Bridge and Old Dixie Highway
- Minimal Right-of-Way Acquisition Required (approximately 0.25 acres)
- Eliminates the Blind Intersection at Old Dixie Highway and U.S. Highway 1
- Estimated Cost $2,600,000

Ongoing coordination with local project stakeholders is recommended.

Social Features

- Community Services: This alternative will not affect community cohesion or adversely impact community facilities. The project instead is an enhancement for the community as it provides recreational opportunities and multi-modal opportunities for the surrounding communities.
- Potential user conflicts for the proposed trails are the necessary road crossings, heavy delivery trucks to warehouses, on street parking, park users (fishing), and confusion for novice riders. Specialized road crossing, including cross walks, should be utilized to help increase the safety of the trail users. In addition, the other potential user conflicts can be minimized with the appropriate use of signage and wayfinding techniques.
- No potential building relocations identified, but relocation of existing overhead power lines would be required near the southern terminus along 3rd Street. While there are potential design conflicts with the east and west side along 3rd St, the west side presents more conflicts including limited ROW, impacts to 10 driveways/garage entrances, and on multiple street parking relocations.
- For this reason, the east side is chosen as the Recommended Alternative. Given the limited ROW constraints along the east side, existing utility poles are located within the path where the future trail is proposed, so will need to be relocated. One of the project partners, City of Ft. Pierce, has requested that the west side be considered for the recommended alternative, so additional design coordination is recommended during the design phase.

Archaeological/ Historical Resources

- There are several National Register-Listed and Eligible properties, and two Fort Pierce-designated historic districts located in the project vicinity. Continued coordination with the State Historic Preservation Officer (SHPO) will be required to assess and minimize impacts during final design of the project.

Natural Resources

- Floodplains: This alternative would result in a total of 0.04 acres of impacts to the 100-year floodplain (Flood Zones AE and VE).

Figure 11: Recommended Alternative



Wayfinding

The Historic Downtown Fort Pierce Retrofit Trail is considered a critical piece of the ECG network and would connect to the North Causeway ECG Trail and the proposed Historic Highwayman Trail Gap. In addition to the trail providing connectivity between nearby neighborhoods and Downtown Fort Pierce, the project could provide a connection to other network trails including the Highwaymen Heritage Trail located west of project. To ensure easy navigation and cohesion throughout the corridor, wayfinding signage and pavement markings are recommended to be placed throughout the corridor. The use of signage will also assist with minimizing potential user conflicts. All wayfinding signage design must follow MUTCD standards and would be coordinated during the project design phase.

Cost Analysis

A Preliminary Long-Range Estimate (LRE) was prepared for the Recommended Alternative that can be constructed using the SUN Trail funding (**Appendix I**). To be funded under SUN Trail Program, the following design criteria were considered: path must be 10 to 14 feet in width (eight feet in rare cases), a multi-use paved path, and separated from the roadway (at least five feet of separation is needed or a physical barrier/railing). To put a cost to these different options the LRE consists of five different sequences, each sequence represents a different section that meets SUN Trail Design criteria. The sequences do not link the project from beginning to end because there are certain sections along the preferred route that will require ROW or will need to be funded with money not from SUN Trail. The sections that are excluded and included from the LRE are highlighted in Figure 11**.** The LRE shows the estimated cost for a multi-use trail with an average width of 10 feet.

Section 11.0 References

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St. Lucie Transportation Planning Organization. (2012). *St. Lucie TPO East Coast Greenway Implmentation Plan.* Kimley-Horn and Associates, Inc.

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Appendix A

St. Lucie County SUN Trail Application

Florida Department of Transportation
Shared-Use Nonmotorized (SUN) Trail Network Program
Individual Trail Application

PART I – ELIGIBILITY CRITERIA

Projects **must meet all** of the **eligibility criteria** to receive consideration for SUN Trail funding. SUN Trail will only fund paved multi-use trails.

1. **Will the project be developed as a paved multi-use trail within the Florida Department of Environmental Protection, Florida Greenways and Trails System (FGTS) Priority Land Trail Network and the SUN Trail Network?**

   ☒ **Yes** ☐ **No**

2. **Is the project identified as a priority by the applicable jurisdiction(s)?** If the project is within a boundary of a Metropolitan/Transportation Planning Organization (MPO), it must be a MPO priority. Projects outside of an MPO boundary must be identified as a priority of the county (inclusive of their municipalities), tribal government, and federal or state-managing agency. **Attach the prioritization list and complete Part V.**

   ☒ **Yes** ☐ **No**

   Indicate the priority number of the project: St. Lucie TPO: Priority 3

3. **Has an entity formally committed to operation and maintenance of the project? Complete and sign Part VI (CERTIFICATION OF WILLING MANGER).**

   ☒ **Yes** ☐ **No**

4. **Is the project consistent with the applicable comprehensive plan(s) or the long-term management plan(s)?**

   ☒ **Yes** ☐ **No**

   Indicate the type of plan(s) and date(s) of adoption. SLC GW&T Master Plan (2001); SLC Comp Plan (2010); ECG Plan (2016); Go2040 St Lucie TPO LRTP (2016)

Do not proceed to Part II if the project resulted in a "no" response in Part I.

PART II – PROJECT INFORMATION

Project Name: Historic Downtown East Coast Greenway Segment

Project Location (attach a labeled location map with aerial view, optional: submit shape files)

Municipality: Ft. Pierce, FL

County: St. Lucie County

FDOT District Number: 4

Termini Begin: Historic Highwaymen Segment terminus & 3rd Street

Termini End: North Causeway Drive

Total Length: 13,000 LF

Briefly describe the scope of the project: Project would connect the Historic Highwaymen East Coast Greenway Segment to the North Causeway East Coast Greenway connector segment.

PART III – PROJECT COSTS

Florida Statue requires a reasonable estimate of the project cost prior to adoption in the Department's Five Year Work Program. Use **Present Day Cost** values. Projects must follow appropriate design criteria and meet Americans with Disabilities Act requirements. If necessary, attach a separate spreadsheet.

Funding Phase(s) requested:

- ■ **Feasibility Study (FS)** ■ **Project Development & Environment (PD&E)**
- ■ **Preliminary Engineering/Design (PE)** ■ **Acquisition of right-of-way (ROW)**
- ■ **Construction (CON)** ☐ **Construction Engineering & Inspection Activities (CEI)**

Briefly describe any project work phases that are underway or completed.
The North 2nd Street roadway improvement project is approximately 25 percent complete with construction (which includes addition of 5 ft wide concrete sidewalks). The project is scheduled for completion in February 2017.

Proposed timeline and funding needs:

Phase	Proposed Year(s)	Amount(s) Requested	Matching Funds	Total Project Costs	Source(s) of Match
FS	1	50,000.00		50,000.00	
PD&E	2	175,000.00		175,000.00	
PE	3	230,000.00		230,000.00	
ROW	4	300,000.00		300,000.00	
CON	4,5	1,150,000.00		1,150,000.00	
CEI				0.00	
TOTAL	5		0.00	1,905,000.00	

PART IV – SELECTION CRITERIA

Projects may not meet all of the following selection criteria, a numerical ranking will not be calculated, and Individual Trail Projects with the greatest strengths will advance more quickly. **Optional**: provide attachments if additional space is needed.

1. **Does the project enhance the safety of bicyclists, pedestrians and motorists?**
   ■ **Yes** ☐ **No**
   If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

   ■ Project includes a safety component.

   ■ Project is located in an area identified as a hazardous biking/walking zone or in an area with significant numbers of safety concerns.

   ■ Project implements a bicycle and pedestrian safety action plan. Provide the name of the plan and date of adoption. Go2040 Long Range Transportation Plan (2/3/16)

   ■ Other (list).

   Provides a safer corridor away from faster speed limit streets/roads by directing users to 2nd and 3rd St.

2. **Is the project recognized as having regional, state or national importance?**
   ■ **Yes** ☐ **No**
   If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

   ■ Project is a component of a Regional Trail System prioritized by the Florida Greenways and Trails Council. List the Regional Trail System(s).
   East Coast Greenway (ECG) Southeast Region and the Florida GWT System Plan

   ■ Project is a component of a National Recreational Trail, East Coast Greenway or a trail that has other national importance. List the national recognitions.
   East Coast Greenway

   ■ Project implements an adopted regional bicycle, pedestrian or trail master plan. Provide the name of the regional plan(s). St. Lucie County Master Greenway Trail Plan; Southeast Florida Regional Greenways & Trails Master Plan; Go2040 LRTP

   ■ Other (list) A focal point in the St. Lucie Bicycle/Pedestrian Corridor Study Area of Interest Analysis by the St. Lucie Transportation Planning Organization.

3. **Is there an additional financial contribution committed to the project?**
Select the most appropriate response.

☐ Yes, funds are leveraged by multiple public/private sources of investments dedicated to this specific trail segment (i.e. federal, state, local, non-profit, private landowner contributions). If yes, what are the sources? _____

_____

What is the total percentage of match? _____

☐ Yes, funds are leveraged by at least one additional public/private source of investment dedicated to this specific trail segment.
If yes, what is the source? _____

What is the total percentage of match? _____

■ No, funds are not leveraged by public/private sources of investments dedicated to this specific trail segment.

4. **Does the project blend transportation modes by completing, improving or enhancing existing facilities?**

■ **Yes** ☐ **No**

If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

☐ Project implements Complete Streets objectives and initiatives.
■ Project implements Safe Routes to Schools objectives and initiatives.
■ Project provides a direct connection to regional transit systems (i.e. rail stations, express or local bus routes).
■ Project is located in a designated multi-modal district.
■ Project has the potential to reduce vehicular congestion.
☐ Project improves access in a Bicycle Friendly Community or Bicycle Friendly University, as designated by the League of American Bicyclists. If yes, indicate the name of the designated community or university. _____

_____

☐ Project improves access in a Walk Friendly Community, as designated by the Pedestrian and Bicycle Information Center. If yes, indicate the name of the designated community. _____

■ Other (list) Connects two completed phases of ECG segments in St. Lucie County. Connects destinations such Historic Downtown Fort Pierce, including Ft. Pierce City Marina, Riverwalk, Historic Egdar Town, Manatee Education Center, and the Treasure Coast GWT loop, etc.

5. **Is the project ready for construction?** Select the most appropriate response.

Project is ready for immediate construction and all pre-construction phases are complete.

☐ **Yes** ■ **No**

Project is capable of near term development. The design is nearly complete and permitting is underway. This project includes pre-construction phases. If yes, include the schedule.

☐ **Yes** ■ **No**

Project proposal is feasible but still needs to be designed. Construction will occur in the future.

■ **Yes** ☐ **No**

6. **Does the project have a high level of documented public support?**

■ **Yes** ☐ **No**

If yes, select from the following and briefly explain how the project meets the selection criteria.

■ The greater community supports the project as demonstrated by recently adopted proclamations or resolutions expressing commitment. Provide the resolution number, adopted date and participating parties. Go2040 LRTP (Adopted 2/3/16) SLC Greenways and Trails Master Plan (Resolution 01-123)

■ Demonstration of public support is consistent across multiple entities representing the greater community, rather than a select few interest groups. Briefly explain. The St. Lucie TPO support represents the planning efforts for the City of Fort Pierce, City of Port St. Lucie, St. Lucie Village and the unincorporated areas of St. Lucie County.

■ Recent community surveys provide an indication of need and support. Briefly explain. Unified Planning Work Program FY 2016/17-17/18 Call for Projects Summary of Comments included specific public request (dated 1/20/16) for a multi-use trail system

☐ An advertised public meeting for discussing the project occurred. Provide the date and type of meeting.

☐ Other (list)

7. **Does the project have a significant immediate impact to the quality of life by enhancing economic opportunities and providing connectivity to destinations?**

☒ **Yes** ☐ **No**

If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

☒ The project connects to or through federal, state or local conservation/recreation areas. List the conservation/recreation areas. Directly: Indian Hills Stormwater Park, Savannas Rec Area, and Savannas Preserve State Park. In the future: Indian River Lagoon Aquatic Preserve, Ft. Pierce Inlet State Park, Hope Sound National Wildlife Refuge, and JD State Park (nearest).

☒ The project connects people to jobs, businesses or civic resources.

☒ The project is located along or connects to a Florida Scenic Highway. List the Scenic Highway(s). Segments will lead to Indian River Lagoon-Treasure Coast Scenic Highway.

☐ The project is part of a public/private partnership where developers, linear corridor owners, small businesses, corporations, foundations or private sector partners are directly supporting the project.

☐ The project is located within a Rural Economic Development Initiative (REDI) Community defined pursuant to Section 288.0656, Florida Statutes. List the REDI area. _____

☐ The project is located within a Rural Area of Opportunity (RAO) defined pursuant to Section 288.0656, Florida Statutes. List the RAO area. _____

☐ Other (list) _____

8. **Does the project enhance or preserve environmental resources?**

☒ **Yes** ☐ **No**

If yes, check applicable attributes and briefly describe how the project meets the selection criteria.

☒ The project ensures the Florida Ecological Greenway Network (FEGN) maximizes protection of high priority linkages; the project is within a Priority 1 or 2 Critical Linkage as identified by the FEGN.
☐ The project restores or mitigates impacts of environmental degradation.
☒ The project incorporates water quality or drainage improvements.
☐ The project incorporates conservation initiatives to restore/maintain connectivity by reducing vehicle-caused wildlife mortality.
☐ The project's environmental impact assessment or statement does not identify specific issues.
☐ The project's environmental approval and permitting process is complete.

9. **Does the project facilitate a system of interconnected trails by closing a gap in the SUN Trail Network?**

☒ **Yes** ☐ **No**

If yes, how many miles of trail will be available once this gap is complete? ~30 Miles
List the trail names. AIA to Brevard County line

10. **The project includes cost-saving elements.**

☐ **Yes** ☒ **No**

If yes, briefly describe the potential for overall cost savings for completing this project in conjunction with another project (i.e. new/resurfacing roadway, redevelopment/new development project, trail phase/extending trail project). Remember to provide the other project(s) scope and schedule, the funding source, the funding year, and if funding is through FDOT, provide the Financial Management Number.

PART V – CERTIFICATION OF PROJECT PRIORITZATION

1. **For projects within a MPO/TPO boundary, complete the following information. If the project is outside of a MPO/TPO boundary, proceed to Part V – question #2.**

St Lucie Transportation Planning Organization

Name of Metropolitan/Transportation Planning Organization

Peter Buchwald, Executive Director

Name of Contact

466 SW Port St. Lucie Boulevard, Suite 111

Address

Port St. Lucie, Florida 34953

City, State and Zip Code

buchwaldp@stlucieco.org

Contact email

772-462-1593

Telephone Number

Signature: Peter Buchwald

Print Name: Peter Buchwald

Title: Executive Director

DATE: 06/20/2016

Signature confirms the requested project is consistent with MPO/TPO plans and documents, it is an eligible priority, the MPO/TPO supports the project and you possess authorization to submit the funding request.

2. For projects outside of a MPO/TPO boundary, complete the following information.

Intentionally Left Blank N/A

Name of County

Name of Contact

Address

City, State and Zip Code

Contact email

Telephone Number

Signature: _____

Print Name: _____

Title: _____

DATE: _____

Your signature confirms the requested project is consistent with applicable comprehensive plan(s) and/or the long-term management plan(s), it is an eligible priority, the County (tribal government, federal or state-managing agency) supports the project, and you possess authorization to submit the funding request.

PART VI – CERTIFICATION OF WILLING MANAGER(S)

The managing entity will provide routine regular maintenance, is responsible for the daily upkeep and operation of the trail to protect users, will reduce safety hazards that occur, and will ensure a quality level of service is maintained on the facility. Projects traversing multiple jurisdictional boundaries may have multiple managers. Submit the Certification of Willing Manager(s) for all proposed trail segments.

Routine Maintenance: Involves the day-to-day upkeep of a trail. Activities may consist of litter pick-up, trash removal, debris removal, soil and weed control, maintenance of drainage, graffiti removal, mowing, sweeping, sign replacement, shrub trimming and other regularly scheduled maintenance activities.

- For FDOT Constructed Trails Inside of FDOT ROW – FDOT will maintain the pavement and any bridge structures for a trail in its ROW, and will apply normal roadway maintenance standards such as mowing and litter control to the entire ROW inclusive of the trail. Beyond this, a local sponsor/agency will enter into a maintenance agreement with the department to undertake all other trail maintenance. The area of responsibility will be the footprint of the trail within FDOT ROW as defined by the District. The local agency/sponsor will be responsible for any mowing and litter control above FDOT roadway standards and maintenance of trail specific facilities, drainage, and features such as ornamental landscaping, wayside areas, benches, litter receptacles, and restrooms. The local sponsor/agency will be identified prior to programming the PD&E phase. The maintenance agreement detailing the full maintenance requirements of that entity must be executed prior to letting for construction.

- For FDOT Constructed Trails Outside of FDOT ROW – Trails that are constructed outside of FDOT ROW shall be maintained by an entity other than FDOT. The department will enter into an agreement or other form of documented commitment to ensure that a local sponsor/agency is committed to long-term trail maintenance. The local sponsor/agency will be responsible for all trail operation and maintenance needs which includes routine pavement and bridge structure repair, drainage, litter control, sweeping, vegetation management, and the maintenance of trail specific facilities and features such as ornamental landscaping, wayside areas, benches, litter receptacles, and restrooms.

RE: _____

Name of Project

_____

Address or Location of Project

FROM: St. Lucie County and City of Ft. Pierce

_____

Name of Managing Entity

Florida Department of Transportation
Shared-Use Nonmotorized Trail
Individual Trail Application

Mike Middbrook

Name of Contact

2300 Virginia Avenue

Address of Managing Entity

Fort Pierce, Florida 34982

City, State and Zip Code

middlebrookm@stlucieco.org

Contact email

(772) 462-2897

Telephone Number

Signature: Mike Middlebrook Digitally signed by Mike Middlebrook Date: 2016.06.20 14:44:34 -04'00'

Print Name: Mike Middlebrook

Title: Natural Resources Management Coordinator

DATE: 06/20/2016

Your signature serves as certification of (1) a commitment from your agency to maintain the facility requested and that your agency will enter into a Maintenance Memorandum of Agreement with the Department for the Project prior to the completion of design, or prior to the letting/advertisement for construction for any project proposed for a later phase; (2) the information in this application is true and accurate; (3) to comply with the Federal Uniform Relocation Assistance and Acquisition Policies Act (The Uniform Act) for any right-of-way actions required for the project; (4) lands developed with SUN Trail funds will be available for public use for the lifespan of the improvement; and (5) support of other actions necessary to fully implement the proposed project.

A separate application must be used for each project proposal that meets the minimum Individual Trail Eligibility Criteria. The applicable jurisdiction must p**rioritize and submit completed application(s) to your District Trail Coordinator no later than 5:00 p.m. on June 20, 2016.**

FOR FDOT USE ONLY
Application Complete ☐ **Yes** ☐ **No**

Project Eligible ☐ **Yes** ☐ **No**

Implementation Feasible ☐ **Yes** ☐ **No**

District Prioritization Number _____

Central Office Prioritization Number _____

Final Determination for inclusion in the Work Program ☐ **Yes** ☐ **No**

Historic Downtown Segment - North Indian Hills to North Causeway



2014 Ortho - Aerial

Legend

- Termini Begin
- Termini End
- Primary Route
- Alt Route
- Major Road

Disclaimer:

This map is intenteded for reference only. Most information contained within is conceptual. For more information about this map please contact the Environmental Resources Department Lands Division at 772-462-2897.

0 650 1,300 2,600 3,900 5,200 Feet

McGeeJ | 6/20/2016 | V:\Project Files\ERD Lands\G&T\MXD\Historic Downtown Segment FDOT Suntrail Map.mxd

St. Lucie County
Board of County Commissioners
Environmental Resources Department

Appendix B

Stakeholder Coordination and Public Meetings

Pre-Project Kick-Off Meeting

January 18, 2017

ST. LUCIE COUNTY ~ SUN TRAIL PROJECTS

General Meeting Notes

Project Kickoff Meeting with St. Lucie County, Florida Department of Transportation, Project Design Team & Agency Partners

WEDNESDAY, JANUARY 18, 2017
1:00 PM

Ecoheritage House at the Richard E. Becker Preserve
3398 Selvitz Road, Fort Pierce, FL 34981

Meeting arranged by the Florida Department of Transportation, District IV

NOTE TO READERS: This document reflects general meeting notes and key points of discussion raised during the project kickoff meeting with for the St. Lucie County SUN Trail projects funded by the Florida Department of Transportation. Meeting logistics were provided by St. Lucie County and the Treasure Coast Regional Planning Council. The meeting occurred on Wednesday, January 18, 2017 and was attended by various partner agencies and the project team. General meeting notes were prepared by Dr. Kim DeLaney, TCRPC.

Attendees

The meeting was attended by representatives of the following agencies:

- City of Fort Pierce (City)
- East Coast Greenway (ECG)
- Florida Department of Environmental Protection (FDEP) – Savannas State Park
- Florida Department of Transportation, District IV (FDOT)
- St. Lucie County – Environmental Resources Department (SLC ERD)
- St. Lucie Transportation Planning Organization (SL TPO)
- Treasure Coast Regional Planning Council (TCRPC)

Copies of sign-in sheets and meeting photos included as Attachment 1.

General Meeting Notes

- Participants welcomed and provided self-introductions.
- DeLaney (TCRPC) indicated of meeting to provide an overview of the SUN Trails program, recent funding allocations to projects in St. Lucie County, introduce the FDOT project team and process to local agency representatives, and identify initial implementation opportunities and challenges.

  Copy of meeting presentation is included as Attachment 2.

- DeLaney (TCRPC) provided overview of East Coast Greenway (ECG) project, which is a 3,000-mile trail project proposed along the east coast of the United States from Calais, Maine to Key West, Florida. Roughly 500 miles of the Greenway will be located along Florida's east coast, including St. Lucie County's segments. ECG is a centerpiece of the recently adopted Southeast Florida Regional Greenways and Trails Plan, and it is the only facility that traverses all seven counties in Southeast Florida.

- Maack (FDOT) provided overview of SUN Trails program; enacted by the Florida Legislature in 2014. Goal of program is to develop a statewide system of paved non-motorized trails as a component of the state-wide Florida Greenways and Trails System. Funding awards for the program's initial authorization of $25 million annually announced in October 2016. Per selection by the Florida Greenways and Trails Council, two-thirds of total funding awarded to Coast-to-Coast Connector and St. Johns River to the Sea Loop (identified as the top two regional trail systems in the state). Remaining third awarded to individual trails on the network selected and prioritized by FDOT. Overview of criteria used for selection and funding process for individual trails. Phases of project programming include: (1) Feasibility Study, (2) Project Development and Environment Study/Predesign Feasibility, (3) Preliminary Engineering/Design, and (4) Construction. Noted that SUN Trails funding could not be utilized for amenities associated with trail facilities, but rather, funding was exclusive for the ultimate development of the trails themselves.

- Broadwell (FDOT) indicated feasibility studies were focused on fatal flaws, and if none were identified, projects could advance to design if funding was available. Prior studies addressing alignment and feasibility to be utilized as a starting point, focused on avoidance and minimization in the layout of trails. Goal is to evaluate from federal National Environmental Policy Act (NEPA) perspective. It is also desirable for projects to adhere to Local Agency Program (LAP) criteria.

- Maack reviewed the funding awards for the five SLC projects including phase, amount of funding, and budget year. She noted the trail dimensions would ideally be twelve feet, but the program allows for trails as narrow as eight feet where there are constraints. Indicated there were no plans for a 2017 SUN Trails funding cycle, although additional funding could become available in a future year.

- Middlebrook (SLC ERD) provided overview of individual trail segments (images of project boards included as Attachment 3). SLC has divided the ECG into 18 miles of segments from Walton Road in Port St. Lucie to downtown Fort Pierce and the causeway. The funded segments were described as follows:

  (1) Savannas Preserve State Park segment is +/-12 miles; includes a connection to the existing trail within the Savannas Recreation Area. Facility proposed to be concrete not asphalt and will require trail bridges to cross wetlands and marshes on the alignment. Facility will also require amendments to the park management plan.
  (2) FEC Railroad Overpass segment is a +/-300 LF connection between the Savannas Recreation Area and Indian Hills Recreation Area. An easement from FEC will be required for the facility.
  (3) Indian Hills Recreation Area segment is +/-1.5 miles; will improve existing trail with paving to meet SUN Trails/ECG standards (rock surface to be widened and hardened). Funding is for the north/south segment on the western side of the property but SUN Trails funding cannot be

used for the loop portion. JPA between the City of Fort Pierce and FDOT to be executed to enable the transfer of funds. (this was done on March 2)

(4) Historic Highwayman segment is +/-2 miles; connects from the Indian Hills Golf Course to downtown Fort Pierce. Segment includes the consideration of industrial arts concepts, not to be funded with SUNTrail funds. Preliminary reviews suggest the western alignment may have fewer conflicts with ROW and golfers utilizing the golf course.

(5) Historic Downtown Retrofit segment is 2.5 miles along narrow ROW and historic infrastructure. The goal of facility is to tie in downtown features such as museums, marina, and art features with a connection to the North Causeway Bridge.

- Participants broke into groups arranged by project and reviewed conditions, project concepts, and initial opportunities and challenges. General and specific project summaries below. Comments are based on the discussion and are conceptual for consideration.

Savannas Preserve State Park segment:

- Walton Road includes an equestrian parking lot with potential wetland conflict.
- Suggested alignment for facility is through park, avoiding wetland, to connect to parking lot along pre-established trail (Gopher Tortoise Trail) running north of wetland.
- Consider a pedestrian signal at the park entrance, Walton Road is a county road
- Consider alignment's existing trails and adjacency to private back yards
- Uses to west of parking lot include Sandhill Crane Park and Port St. Lucie High School.
- Alignment could run north along existing firebreak; wooden boardwalk likely needed.
- SLD ERD/FDEP can provide GIS and LIDAR data to Kimley-Horn (FDOT project manager).
- Considereration of temporary closures for prescribed burns. Boardwalks present conflict issues with burns also.
- Need confirmation of SUN Trail criteria for access as park has dawn/dusk access restrictions.
- From PSL HS to Lennard Road, park contains significant wetlands and a new eagle's nest. Several alignment alternatives could be explored, including Lennard Road (ultimate 4-lane facility with county-owned ROW that could accommodate the trail segment), Hog Pen Ditch berm, fire breaks, McQuillen Road, FPL easement.
- Consideration of the FPL easement will be needed as well as SFWMD.
- Park management plan update underway; trail details to be added as a future amendment.
- Additional parties to include in project discussions: City of Port St. Lucie, HOAs for Savannas Club and Indian River Estates, School Board and principals of adjacent schools (Port St. Lucie High School, Savannas Elementary), St. Lucie County Conservation Alliance, Audubon, SFWMD, FPL.

Historic Highwayman segment:

- Consider Citrus Road overpass and connection to Depot Drive at northern end alignment
- Consider traveling under Citrus (N) thru FEC
- Consider easement through residential on southern connection
- Police station and park identified south of Georgia Street
- Indian Hills Golf Course is owned by the City of Fort Pierce

Historic Downtown Retrofit Segment:

- City of Fort Pierce may purchase Depot Drive (adjacent to port)
- Kayak ramp to be located at Citrus Avenue
- Alignment may require reconfiguration of bridge lanes by Citrus Avenue
- FDOT has made design changes to allow connection to the new North Causeway bridge a Dixie Hwy.

- Future meetings to be arranged as project components are advanced.

Next Steps

Distribution of Meeting Notes and Materials	FDOT lead with TCRPC support
Follow-Up Individual Project Team Meetings	FDOT Project Consultants lead
Determination of noted SUN Trails criteria (e.g., concrete versus asphalt construction; temporary closures for prescribed burns)	FDOT lead
Update Presentations to SLC, SL TPO, City of Fort Pierce, Other Agencies & Organizations	SLC lead with FDOT support

Attachments:

1 – Meeting Agenda, Sign in & Photos
2 – Meeting Presentation
3 – Project Boards prepared by SLC

ST LUCIE COUNTY SUN TRAILS

Project Kickoff Meeting

January 18, 2017

AGENDA

1. Welcome, Introductions & Purpose ..... Kim DeLaney, TCRPC
2. Overview of SUN Trails Program & Project Implementation ..... Lisa Maack, FDOT
3. Overview of Individual Projects ..... Mike Middlebrook, St Lucie County

PROJECT NAME	FUNDED ACTIVITY	FUNDING (YEAR)	LOCAL LEAD	CONSULTANT/FDOT LEAD
Savannas Preserve State Park	PreDesign Feasibility & Design	$500,000 (FY 2017) $750,000 (FY 2019)	**Chris Vandello (Park Manager)** 772-919-1760 Christopher.Vandello@dep.state.fl.us	**Lynn Kiefer (Kimley-Horn)** Direct: 772.794.4075 Main: 772.794.4100 Lynn.kiefer@kimley-horn.com
FEC RR Overpass	PreDesign Feasibility & Design	$275,000 (FY 2017) $305,885 (FY 2020)	**Mike Middlebrook (SLC)** 772-462-2897 middlebrookm@stlucieco.org **Jack Andrews (City of FP)** 772-467-3773 JAndrews@City-FtPierce.Com	**Lynn Kiefer (Kimley-Horn)** Direct: 772.794.4075 Main: 772.794.4100 Lynn.kiefer@kimley-horn.com
Indian Hills Recreation Area Trail Retrofit	Design & Construction	$80,000 (FY 2017) $408,434 (FY 2019)	**Jack Andrews (City of FP)** 772-467-3773 JAndrews@City-FtPierce.Com	**Lisa Maack (FDOT)** 954-717-2253 Lisa.Maack@dot.state.fl.us
Historic Highwayman Trail Gap	PreDesign Feasibility & Design	$100,000 (FY 2017) $ 100,000 (FY 2019)	**Jack Andrews (City of FP)** 772-467-3773 JAndrews@City-FtPierce.Com **Kori Benton (City of FP)** 772-467-3739 KBenton@City-FtPierce.Com	**Rudy Westerman/Ken Hardin (Janus)** (813) 636-8200 ken_hardin@janus-research.com **Beth Zimmer (Atkins)** (305) 514-3254 Beth.Zimmer@atkinsglobal.com
Historic Downtown Retrofit	PreDesign Feasibility	$275,000 (FY 2017)	**Jack Andrews (City of FP)** 772-467-3773 JAndrews@City-FtPierce.Com **Mike Middlebrook (SLC)** 772-462-2897 middlebrookm@stlucieco.org **Don West (SLC)** 772-462-1659 westd@stlucieco.org	**Rudy Westerman/Ken Hardin (Janus)** (813) 636-8200 ken_hardin@janus-research.com **Beth Zimmer (Atkins)** (305) 514-3254 Beth.Zimmer@atkinsglobal.com

4. Project Breakout ..... Project Managers
5. Regroup for Follow-Up Items & Next Steps ..... Kim DeLaney, TCRPC
    - Other Individuals to be Included Projects
    - Other Items

ST LUCIE COUNTY SUN TRAILS

PROJECT KICKOFF MEETING - JANUARY 18, 2017

SIGN-IN SHEET

NAME	ORGANIZATION	EMAIL
Jolly Jimenez	FDOT.	Jolly.Jimenez@dot.state.fl.us
Jack Andrews	City of Fort Pierce	JAndrews@city-FtPierce.com
Mike Forman	Kimley-Horn	Mike.Forman@kimley-horn.com
Tori O'Malley	Kimley-Horn	Tori.O'Malley@kimley-horn.com
Rudy Westerman	Janus Research	rudy_westerman@janus-research.com
Lynn Kiefer	Kimley-Horn	lynn.kiefer@kimley-horn.com
Beth Zimmer	Atkins	beth.zimmer@atkinsglobal.com
Chuck Broadbent	Fort Pierce Greenway	Chbroadbent@comcast.net
DON WEST	SLC Public Works	dwest@stlucie co. org
Wren Underwood	SLC ERD	underwoodw@stlucreco.org
Kori Benton	LOFP - Planning	KBenton@cityoftpierce.com
John Mach	DEP	john.mach@dep.state.fl.us
Doug Rogers	DEP - FPS	doug.t.rogers@dep.state.fl.us
Tris VANDELLO	DEP	Christopher.Vandello@dep.State.Fl.us
Lisa Maack	FDOT	Lisa.Maack@dot.State.fl.us
Peter Buchwald	St. Lucie TPO	buchwaldp@stlucieco.org ~~stlucietpo~~

ST LUCIE COUNTY SUN TRAILS

PROJECT KICKOFF MEETING - JANUARY 18, 2017

SIGN-IN SHEET

NAME	ORGANIZATION	EMAIL
Ann Broadwell	FDOT	ann.broadwell@dot.state.fl.us
Lynn Kelley	FDOT	Lynn.Kelley@dot.state.fl.us
Jenn McGee	SLC ERD	mcgeej@stlucieco.org
Kim DeLaney	TCRPC	KDELANEY@TCRPC.ORG

1-18-2017

Attachment 2

St Lucie County
East Coast Greenway Kickoff Meeting

January 18, 2017





Today's Agenda

1. Welcome, Introductions & Purpose
2. Overview of SUN Trails Program & Project Implementation
3. Overview of Individual Projects
   - Savannas Preserve State Park
   - FEC RR Overpass
   - Indian Hills Recreation Area Trail Retrofit
   - Historic Highwayman Trail Gap
   - Historic Downtown Retrofit
4. Project Breakout
5. Regroup for Follow-Up Items & Next Steps

East Coast Greenway – Treasure Coast Region





East Coast Greenway ALLIANCE

FDOT Florida Department of TRANSPORTATION

Shared-Use Nonmotorized (SUN) Trail Network Program

Lisa Maack, District 4 SUN Trail Program Coordinator
Florida Department of Transportation

4

1-18-2017

Shared-Use Nonmotorized (SUN) Trail Network

SUNTRAIL

- **Created under 339.81, F.S.**
- **To develop a statewide system of paved non-motorized trails as a component of the Florida Greenways and Trails System (FGTS)**
- **$25 million annually funded from new vehicle tag revenues**
- **Individual Trail Application period closed June 20, 2016**
- **FY 2017 Awards announced October 2016**

Framework for SUN Trail Funding Selection

SUN Trail Eligible (Priority Land Trails Network)

Top Regional Trail System

Coast-to-Coast Connector

Selected at December 2015 meeting

Second Regional Trail System

St. Johns River to the Sea Loop

Selected at March 2016 meeting

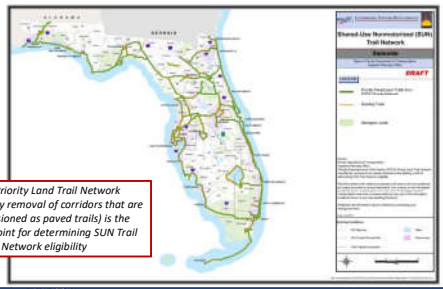
Selected by Florida Greenways and Trails Council (FDEP)

Individual Trail Category

Selected Summer 2016

Selected by FDOT

SUN Trail Network Map

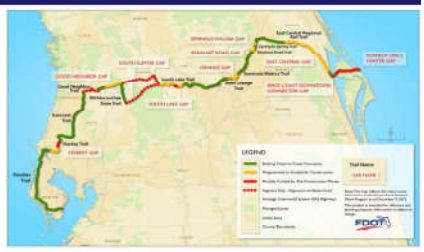


FGTS Priority Land Trail Network (modified by removal of corridors that are not envisioned as paved trails) is the starting point for determining SUN Trail Network eligibility

Top Regional Trail System

SUN Trail Eligible (Priority Land Trails Network)

Coast to Coast Connector



Selected by the Florida Greenways and Trails Council December 2015

Second Regional Trail System

SUN Trail Eligible
(Priority Land Trails Network)

St. Johns River to the Sea Loop



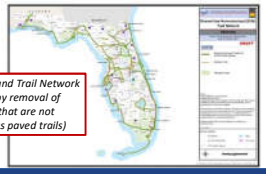


Selected by the Florida Greenways and Trails Council March 2016

Eligibility Criteria for Individual Trails

*There are four **eligibility criteria** a project **must meet** to receive consideration for SUN Trail funding. The applicable entity will transmit a priority list and project details to the respective FDOT District Trail Coordinator.*

1. Is the project a paved component of the Florida Greenways and Trails System (FGTS) Priority Land Trail Network, and therefore the SUN Trail Network?



FGTS Priority Land Trail Network (modified by removal of corridors that are not envisioned as paved trails)

Eligibility Criteria for Individual Trails

*There are four **eligibility criteria** a project **must meet** to receive consideration for SUN Trail funding. The applicable entity will transmit a priority list and project details to the respective FDOT District Trail Coordinator.*

2. Is the project identified as a priority by the applicable jurisdiction?

- If the project is within a boundary of the Metropolitan Planning Organization (MPO), it must be a MPO priority;
- For areas outside of a MPO boundary, the project must be identified as a priority of the county (inclusive of their municipalities), a tribal government, federal or state managing agency.

Eligibility Criteria for Individual Trails

*There are four **eligibility criteria** a project **must meet** to receive consideration for SUN Trail funding. The applicable entity will transmit a priority list and project details to the respective FDOT District Trail Coordinator.*

3. Has an entity formally committed to operation and maintenance of the project?



Suwannee River Greenway at Branford



Good Neighbor Trail, Brooksville



Little Econ Greenway, Orange County

Eligibility Criteria for Individual Trails

*There are four **eligibility criteria** a project **must meet** to receive consideration for SUN Trail funding. The applicable entity will transmit a priority list and project details to the respective FDOT District Trail Coordinator.*

4. Is the project consistent with the applicable comprehensive plan or the long-term management plan?



FDOT

October 11, 2016

Dick Kane, (850) 414-4590
dick.kane@dot.state.fl.us

Florida Department of Transportation Awards $44.4 Million for Bicycle and Pedestrian Trail Expansion in Florida

TALLAHASSEE – The Florida Department of Transportation (FDOT) announced today the selection of the first year of projects to receive funding under the Shared Use Nonmotorized (SUN) Trail program. A total of $44,434,543 million was awarded to 45 separate projects located across 21 counties throughout Florida. (See attached map and project list)

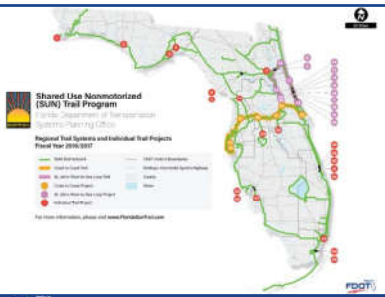
The projects include the construction of 11 separate trail segments, which will add or improve approximately 20 miles of trail to Florida's trail system. Another 34 projects will be in various preconstruction phases of work such as feasibility study, environmental review and design. The funds are for the current fiscal year (2016-17) and are immediately available to begin work.

SUNTRAIL

Process for Funding Individual Trails

Project Identification	•Identification of purpose, location and goals of the project; •Consistent with the community's vision, plans, and policies; •Consistent with transparent public involvement procedures.
Project Prioritization	•Identified priority of Metropolitan Planning Organization (MPO); •Identified priority of the county (inclusive of their citizens), tribal government, federal or state managing agency.
Project Selection & Programming	•Priority List and project details submitted to FDOT District by applicable entity; •District project evaluation and development of draft funding scenario; •Development of Statewide draft prioritization scenario; •Upon approval, projects are programmed into appropriate fiscal year of the five year Tentative Work Program.

Current Work Program Year (Fiscal Year 2016/2017)



Project Programming

Project Phases Include:

- **Feasibility Study (FS)** if necessary
- **Project Development and Environment Study (PD&E)**
- **Preliminary Engineering/Design (PE)**
- **Acquisition of Right-of-Way (ROW)** if necessary (will not be funded by SUNtrail funds)
- **Construction (CON)**

Maintenance

For FDOT Constructed Trails Inside of FDOT ROW – FDOT will maintain the pavement and any bridge structures for a trail in its ROW, and will apply normal roadway maintenance standards such as mowing and litter control to the entire ROW inclusive of the trail. Beyond this, a local sponsor/agency will enter into a maintenance agreement with the department to undertake all other trail maintenance. The area of responsibility will be the footprint of the trail within FDOT ROW as defined by the district. **The local agency/sponsor will be responsible for any mowing and litter control above FDOT roadway standards and maintenance of drainage and trail specific facilities and features such as ornamental landscaping, wayside areas, benches, litter receptacles, and restrooms.** The local sponsor/agency will be identified prior to programming the PD&E phase. The maintenance agreement detailing the full maintenance requirements of that entity must be executed prior to letting for construction.

For FDOT Constructed Trails Outside of FDOT ROW – Trails that are constructed outside of FDOT ROW shall be maintained by an entity other than FDOT. The department will enter into an agreement or other form of documented commitment to ensure that a local sponsor/agency is committed to long term trail maintenance. **The local sponsor/agency will be responsible for all trail operation and maintenance needs which includes routine pavement and bridge structure repair, litter control, sweeping, vegetation management, and the maintenance of drainage and trail specific facilities and features such as ornamental landscaping, wayside areas, benches, litter receptacles, and restrooms.** The local sponsor/agency will be identified prior to programming the PD&E phase. Each district will determine the appropriate form of commitment or agreement that will need to be executed prior to letting for construction.

Strategic, Effective and Efficient Investments

SUN Trail will not fund development of amenities associated with trail projects.

These amenities include but are not limited to:

- **Benches, trail furniture or seating areas;**
- **Bicycle racks, air stations or lockers;**
- **Buildings, restrooms, wayside structures or overlooks, shelters or picnic pavilions;**
- **Kiosks (regulatory and safety signage permitted);**
- **Landscaping (trail stabilization permitted);**
- **Litter or recycle receptacles;**
- **Parking areas or trailheads;**
- **Playgrounds, fitness equipment or structures;**
- **Promotional or educational materials;**
- **Sculptures, fountains or art; and**
- **Water fountains, spigots or showers.**

FDOT Florida Department of TRANSPORTATION

Questions or Comments?

SUN Trail Contact:

Lisa Maack
District 4 SUN Trail Program Coordinator
954-717-2253
Lisa.Maack@dot.state.fl.us
www.FloridaSunTrail.com

SUNTRAIL

Overview of Individual Projects









Indian Hills Rec Area



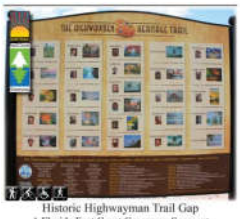
- Distance: 1.5 mi
- Improving Existing Infrastructure
- Underway
- Joint Agreement
- City or Ft Pierce
- FDOT JPA
- $80,000 FY17
- $408,434 FY19
- Design & Construction

FEC Railroad Overpass

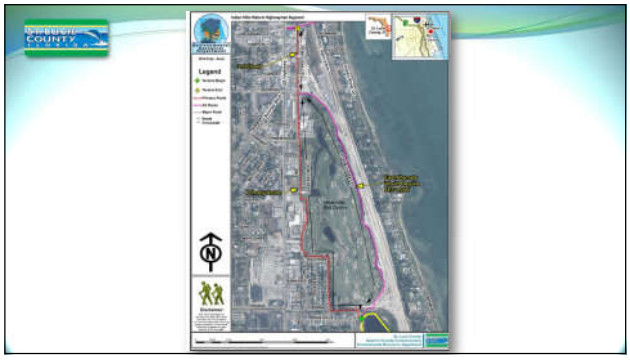


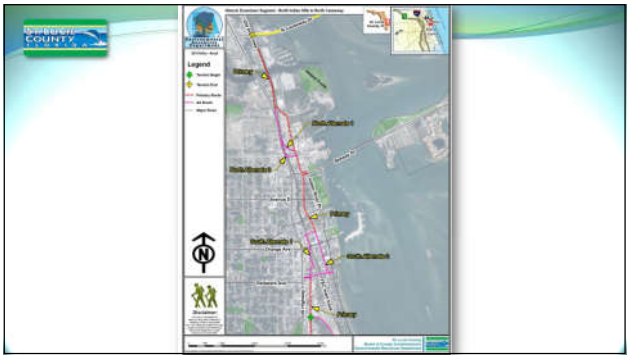
- Distance: 300 LF
- FEC Coordination
- Aerial Rights
- Cost
- Design
- Limited Options
- $275,000 FY17
- $305,885 FY20
- Feasibility & Predesign

Historic Highwaymen



- Distance: 2 mi
- Alignments
- Narrow ROW
- Old FEC ROW
- IH Golf Course Component
- Industrial/Art Component
- $100,000 FY17
- $100,000 FY19
- Feasibility & Predesign





Historic Downtown



- Distance: 2.5 mi
- Narrow ROW
- Historic Infrastructure
- City of Ft. Pierce & County Port Projects
- Edgar Town
- N. Causeway Bridge
- Traffic Congestion
- FEC Coordination
- Sharrows?
- $275,000 FY17
- Feasibility & Predesign

Discussion & Next Steps

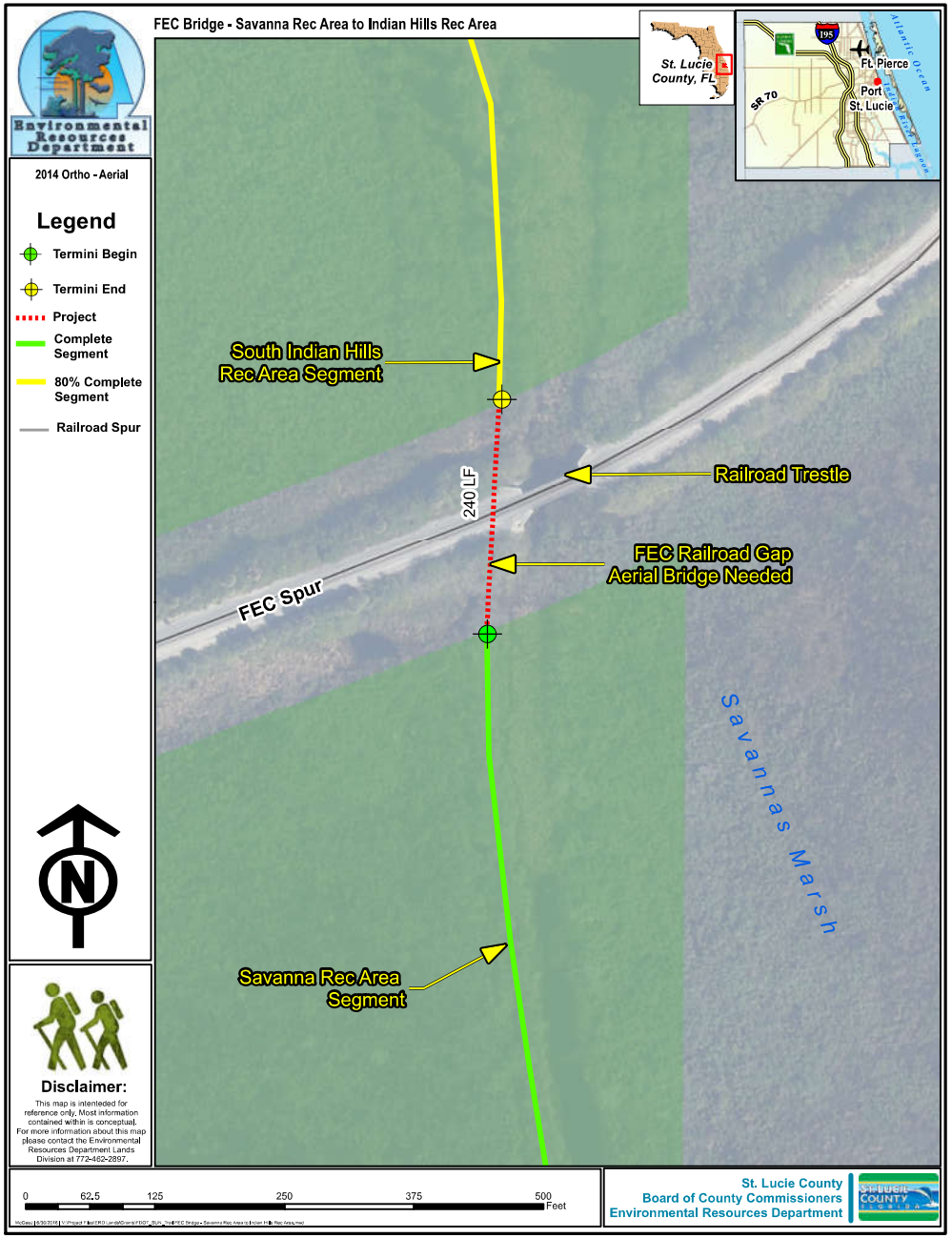
- Individual Project Summaries
- Other Individuals to be Included
- Timing for Follow-Up Activities
- Other Items

Thanks for Coming!

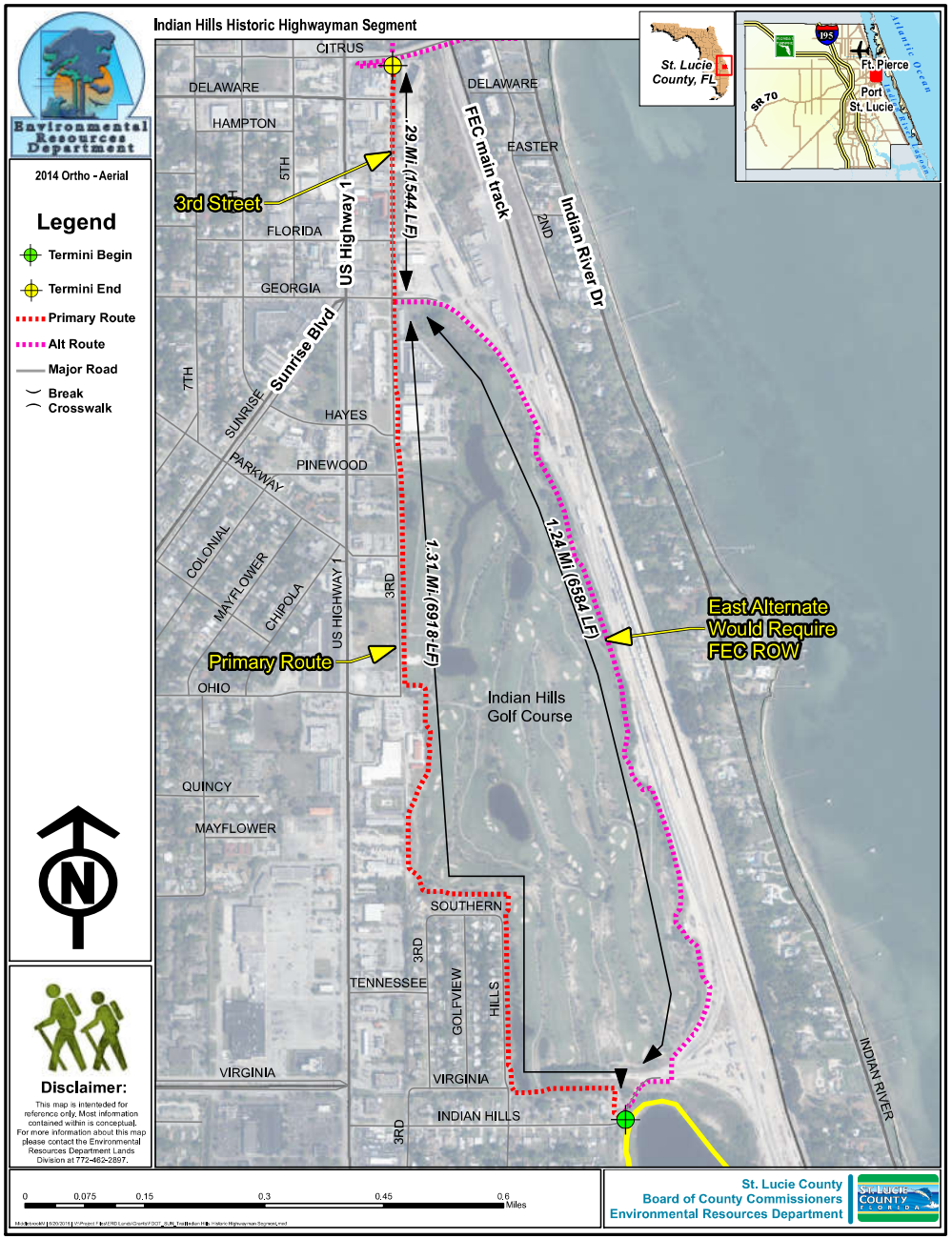


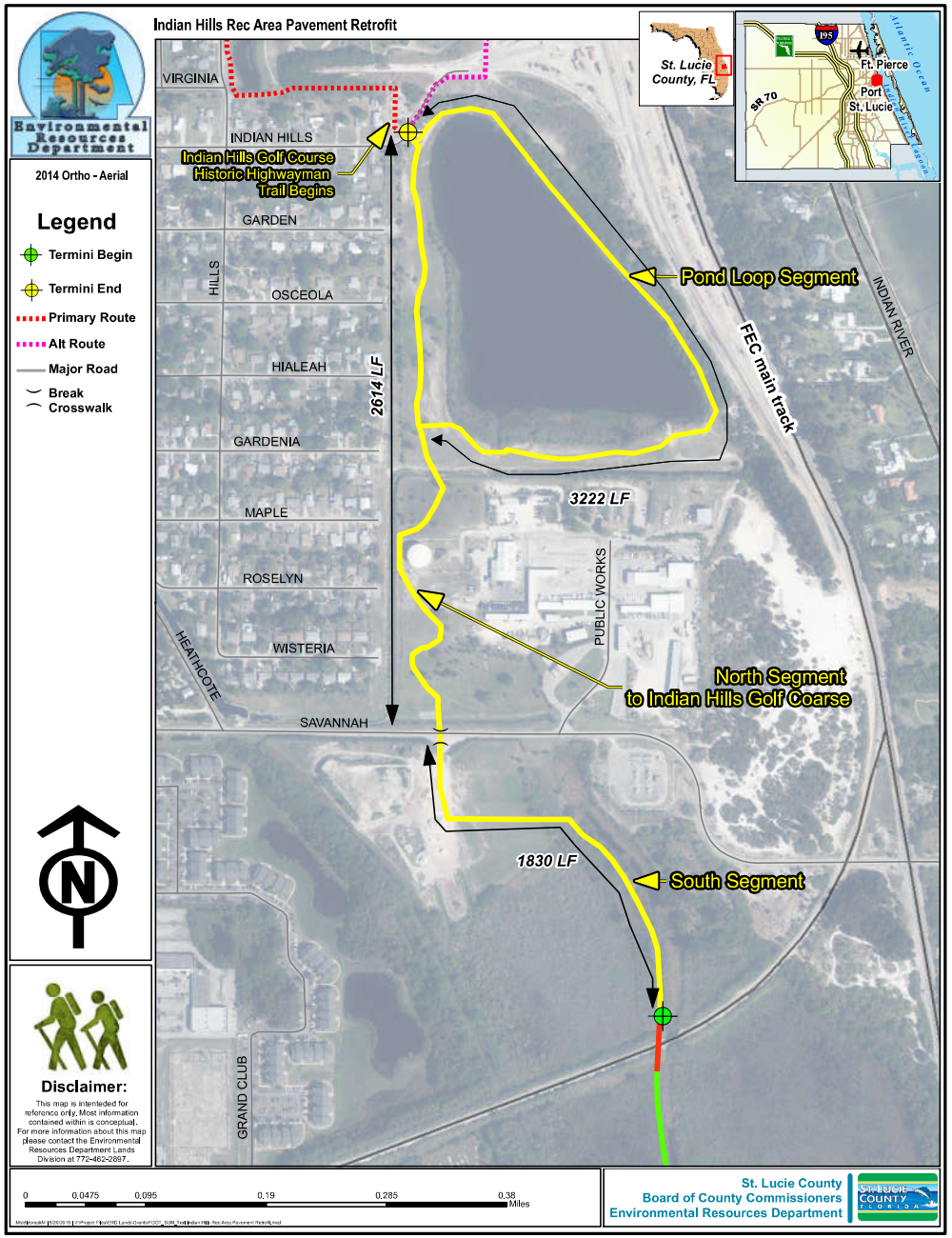





FEC Bridge - Savanna Rec Area to Indian Hills Rec Area
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Project
Complete Segment
80% Complete Segment
Railroad Spur
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
195
Atlantic Ocean
South Indian Hills Rec Area Segment
Railroad Trestle
240 LF
FEC Railroad Gap Aerial Bridge Needed
FEC Spur
Savannas Marsh
Savanna Rec Area Segment
N
Disclaimer:
This map is intended for reference only. Most information contained within is conceptual. For more information about this map please contact the Environmental Resources Department Lands Division at 772-462-2897.
0 62.5 125 250 375 500 Feet
St. Lucie County Board of County Commissioners Environmental Resources Department


Savannas State Park to Savanna Rec Area
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
195
Atlantic Ocean
1.25 Mi
Savanna Rec Area
Weatherbee
Midway Rd
Indian River Lagoon
S. Ocean Dr
Savannas Preserve State Park
2.90 Mi
Indian River Estates
North Alternate
FPL Easement
Indian River Dr
Kitterman
10.6 Mi
Primary
Savannas Preserve State Park
South Alternate
US Highway 1
1.93 Mi
Savanna Club
FEC main track
Walton Rd
Green River Parkway
N
Disclaimer:
This map is intended for reference only. Most information contained within is conceptual. For more information about this map please contact the Environmental Resources Department Lands Division at 772-462-2897.
0 0.375 0.75 1.5 2.25 3 Miles
St. Lucie County Board of County Commissioners Environmental Resources Department


Indian Hills Historic Highwayman Segment
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
Break
Crosswalk
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
195
Atlantic Ocean
Indian River Lagoon
3rd Street
.29 Mi (1544 LF)
US Highway 1
FEC main track
Indian River Dr
1.24 Mi (6584 LF)
1.31 Mi (6918 LF)
East Alternate Would Require FEC ROW
Primary Route
Indian Hills Golf Course
CITRUS
DELAWARE
HAMPTON
FLORIDA
GEORGIA
EASTER
HAYES
PINEWOOD
SUNRISE
Sunrise Blvd
PARKWAY
COLONIAL
MAYFLOWER
CHIPOLA
OHIO
QUINCY
SOUTHERN
TENNESSEE
GOLFVIEW
HILLS
VIRGINIA
INDIAN HILLS
INDIAN RIVER
1ST
2ND
3RD
5TH
7TH
Disclaimer:
This map is intended for reference only. Most information contained within is conceptual. For more information about this map please contact the Environmental Resources Department Lands Division at 772-462-2897.
0 0.075 0.15 0.3 0.45 0.6 Miles
St. Lucie County
Board of County Commissioners
Environmental Resources Department


Indian Hills Rec Area Pavement Retrofit
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
Break
Crosswalk
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
195
Atlantic Ocean
Indian River Lagoon
Indian Hills Golf Course Historic Highwayman Trail Begins
Pond Loop Segment
FEC main track
INDIAN RIVER
2614 LF
3222 LF
1830 LF
South Segment
North Segment to Indian Hills Golf Coarse
PUBLIC WORKS
VIRGINIA
INDIAN HILLS
GARDEN
OSCEOLA
HIALEAH
GARDENIA
MAPLE
ROSELYN
WISTERIA
SAVANNAH
HEATHCOTE
GRAND CLUB
HILLS
Disclaimer:
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St. Lucie County
Board of County Commissioners
Environmental Resources Department


Historic Downtown Segment - North Indian Hills to North Causeway
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
Disclaimer:
This map is intenteded for reference only. Most information contained within is conceptual. For more information about this map please contact the Environmental Resources Department Lands Division at 772-462-2897.
N Causeway Dr
Old Dixie Hwy
Primary
Harbour Pointe
North Alternate 1
North Alternate 2
Seaway Dr
Indian River Dr
Avenue D
Primary
South Alternate 1
Orange Ave
South Alternate 2
Delaware Ave
US Highway 1
FEC main track
Primary
St. Lucie County, FL
Ft. Pierce
Port St. Lucie
SR 70
I-95
Atlantic Ocean
Indian River Lagoon
0
650
1,300
2,600
3,900
5,200
Feet
St. Lucie County
Board of County Commissioners
Environmental Resources Department


Historic Downtown Segment - North Indian Hills to North Causeway
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
Old Dixie Hwy
N Causeway Dr
Primary
Harbour Pointe
North Alternate 1
North Alternate 2
Seaway Dr
Indian River Dr
Avenue D
Primary
South Alternate 1
Orange Ave
South Alternate 2
Delaware Ave
FEC main track
US Highway 1
Primary
Disclaimer:
St. Lucie County
Board of County Commissioners
Environmental Resources Department


Indian Hills Historic Highwayman Segment
Environmental Resources Department
2014 Ortho - Aerial
Legend
Termini Begin
Termini End
Primary Route
Alt Route
Major Road
Break
Crosswalk
3rd Street
DELAWARE
HAMPTON
FLORIDA
GEORGIA
US Highway 1
FEC main track
Sunrise Blvd
PINEWOOD
Primary Route
East Alternate
Would Require
FEC ROW
Indian Hills
Golf Course
QUINCY
MAYFLOWER
SOUTHERN
TENNESSEE
VIRGINIA
INDIAN HILLS
Disclaimer:
St. Lucie County
Board of County Commissioners
Environmental Resources Department

Local Agency Kick-Off Meeting

April 25, 2017

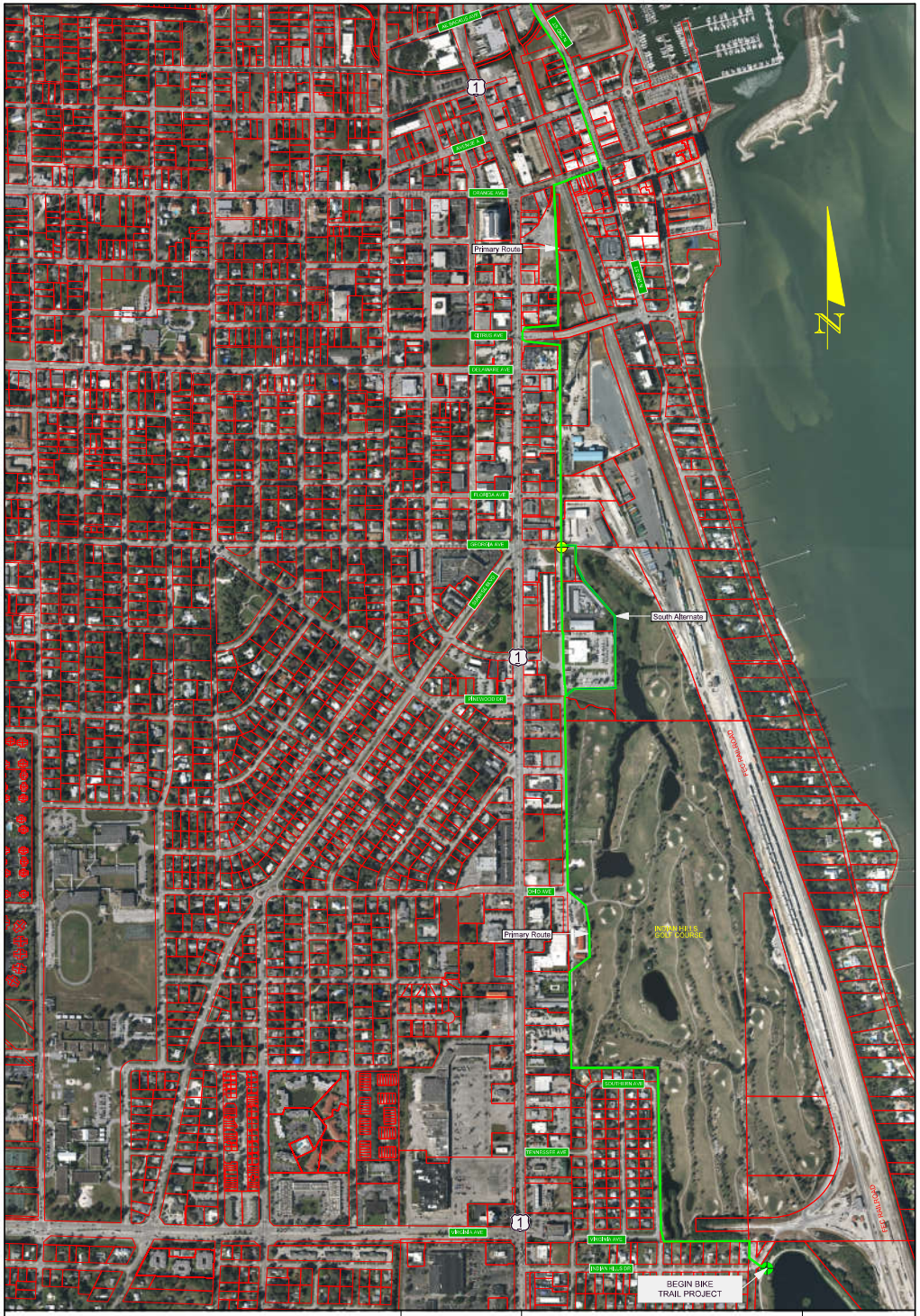
SUN Trail Feasibility Study
(Historic Highwayman and Historic Downtown)
Kickoff Meeting
Meeting Summary

Date/Time: April 25, 2017
1:30 PM
Location: City of Fort Pierce Town Hall
Engineering Conference Room
Subject: SUN Trail Feasibility Study Kickoff Meeting

- Introductions: Participants included:
  - FDOT: Lynn Kelley (FDOT PM), Lisa Maack
  - Saint Lucie County: Amy Griffin, Mike Middlebrook, Jennifer McGee
  - City of Fort Pierce: Jack Andrews, Kori Benton
  - Treasure Coast Regional Planning Council: Kim Delaney by phone
  - Consultants: Lance Decuir (Atkins), Rudy Westerman (Janus)
- Overview:
  - FDOT is conducting a feasibility study for the Historic Downtown Fort Pierce Retrofit (440033-1) from Georgia Avenue to North Causeway Drive and the Historic Highwayman Trail Gap (440034-1) from Indian Hills Drive to Georgia Avenue. These are both portions of the statewide SUN Trail system. This meeting was to discuss preliminary alignments that were developed by Fort Pierce, Saint Lucie County, Treasure Coast TPO, and the Treasure Coast Regional Planning Council. It was noted that the study was generally following the Type I environmental process so that federal funds would not be precluded in the future.
- Historic Highwayman Trail Gap
  - Eastern alternative of this portion along the golf course would use the FEC ROW and this is not ideal. It was noted that FEC is historically difficult to coordinate with.
  - The western route along the City owned Indian Hills Golf Course is ideal, but it was noted that special attention should be given to potential Section 4(f) impacts. Lynn mentioned that FDOT would write a letter for the City to sign, which states that the project would not impact the features or function of the golf course. The City stated that the trail would not modify the course and would be along the area that is generally out of bounds to the golf course play. This documentation is important in case federal funds become available.
  - Rudy mentioned that the golf course is over 50 years old, so it will need to be documented and evaluated for National Register of Historic Places (National Register) eligibility. Results of the evaluation will be coordinated with the Division of Historical Resources or State Historic Preservation Office (SHPO). The City mentioned that although the course dates to the 1930s, it has undergone major reconstruction.
- Historic Downtown – It was discussed that the Historic Downtown Retrofit portion of the SUN Trail has considerably more issues to incorporate a multi-use trail.
  - Starting from south to north, the first challenge will be to cross the FEC tracks near Citrus Avenue. There is currently a bridge at Citrus Avenue over the FEC tracks. The bridge has a sidewalk on the south side so this is one option for getting pedestrians/bicyclists over the bridge. Issues/challenges with this approach are that:
    - This would not be a 10' trail. Kim Delaney with TCRPC mentioned that it was ok if small sections of the trail were not 10' if they were considered necessary for connection and if substantial costs and impacts prohibited the 10' trail.
    - Another challenge with the Citrus Avenue is the Roundabout at S Indian River Drive. Later in the meeting, the group discussed that Indian River Drive would possibly be a good alternative for a trail. The trail would need to cross Citrus Avenue either at the signalized S 2nd street or at the roundabout at S Indian River Drive.

- Another option to cross the FEC tracks near Citrus Avenue would be to extend the trail north beyond Citrus Avenue and to cross the FEC at grade at Avenue A. This route will likely involve coordination with FEC.
- It was discussed that US 1 was previously the preferred alternative coming from the N Causeway (north side of Historic Downtown segment), but current preference is to bring the trail along Old Dixie Highway. This is a less traveled corridor and more desirable for a multi-use trail. Additionally, the North Causeway is currently in the final PD&E stage and accommodations have been made to bring the connecting sidewalk from the bridge to meet up with Old Dixie Highway.
- A challenge in the northern segment will be to get from N 2nd Street to Old Dixie Highway. There are currently two inactive rail spurs that are the preliminarily preferred areas for this crossing. Further exploration of the right-of-way in this area needs to be explored.
- It was also mentioned that the study team should coordinate with the Port and All Aboard Florida to determine how this might impact alignments.
- The group also discussed the potential of exploring an alternative along Indian River Drive since this a scenic route and is adjacent to the boat launch (potential weekday parking), the River Walk Center, and Veterans Memorial Park. Connecting roads to and from Indian River Drive could be Avenue H and Avenue D.
- Lynn mentioned that the downtown area is very historic and would potentially have many historic resources to assess for impacts depending on which route was determined. Old Dixie Highway is a historic roadway and the area of Old Dixie proposed for the primary alignment has been determined eligible for listing in the National Register. It is best for the alternatives to be preliminary developed before cultural resource assessments are conducted by Janus.

- Next Steps
  - Atkins will develop preliminary alternatives and assess based on engineering standards, right-of-way impacts, natural resources impacts and develop a matrix with these impacts as well as pros and cons of alternatives.
  - It was discussed at the meeting that a public kickoff meeting would be ideal to get feedback from stakeholders on the trail and the potential alignments. It would be best if this were held in early summer. ***(UPDATE: following the meeting, it was decided that additional stakeholder coordination and data collection should occur before the public kickoff meeting would be scheduled. The public kickoff meeting is now anticipated late summer/early fall.)***



ATKINS
482 S. Keller Road, Orlando, FL 32810

Indian Hills Historic
Highwayman Segment

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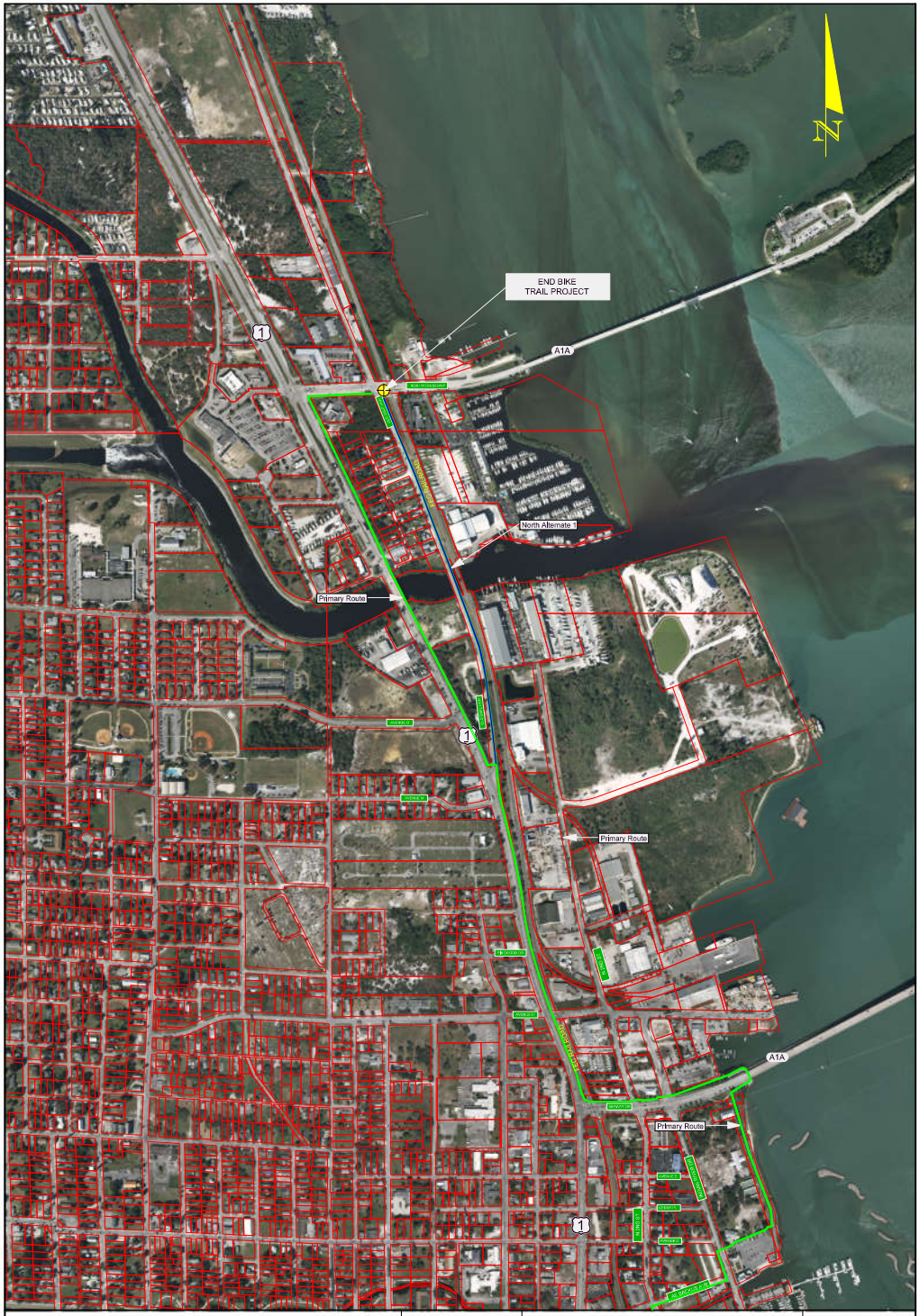

ATKINS
482 S. Keller Road, Orlando, FL 32810

Historic Downtown Segment
North Indian Hills to North Wauseway

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City of Fort Pierce Design Coordination Meeting

September 20, 2017

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

MIKE DEW
SECRETARY

Meeting Minutes

Date and Time:	September 20, 2017 1:00 p.m.
Location:	City Hall Fort Pierce, Florida
Subject:	D4 SUN Trails Project Coordination Meeting
Attendees:	Jack Andrews (City of Fort Pierce) Kori Benton (City of Fort Pierce) Edward Defini (TPO) Peter Buchwald (TPO – phone) Mike Middlebrook (St. Lucie County) Lynn Kelley (FDOT – phone) Lisa Maack (FDOT – phone) Reshawn Fields (Atkins) Brooke Feagle (Atkins) Gary Giaotti (Atkins)
Copies to:	File

The meeting began with introductions of the City of Fort Pierce, St. Lucie County, St. Lucie County Transportation Planning Organization (TPO), FDOT, and Atkins staff. Reshawn Fields provided an overview of the project development to present date. Reshawn described the project overview and potential alternatives, and mentioned the projected Type 1 Categorical Exclusion (CE) environmental document for the project. Per the schedule, Reshawn advised there will be a Public Kick-Off Meeting on October 10, 2017, followed by an Alternatives Workshop in February of 2018; afterwards, the final alternative will be selected and the documents will be finished by summer of 2018. The project is currently in the scoping phase and the purpose of the coordination meeting was to further the design concepts, starting with the original alignments proposed.

Mike Middlebrook started with an explanation of the alternatives and alignments that St. Lucie County chose; first was the Indian Hills Highwayman Segment. Mike mentioned that the east route of the alignment, on the FEC property, was ruled out through previous meetings. Jack Andrews spoke up and mentioned that things may have changed. He stated that the City of Fort

Pierce had a meeting with FEC about a month ago and they had a discussion regarding the 90 acres of golf course that the City leases from FEC. He mentioned that FEC may sell the property to the City of Fort Pierce since FEC is considering moving their rail yard close to the Wal-Mart Distribution Center. Since the FEC property would become City property, it would make the east alignment preferable with less obstacles, however Jack stated he is unsure of anything regarding the transfer of the property at this point. Reshawn asked Lisa Maack and Lynn Kelley what their thoughts were regarding the potential of acquiring the property. Reshawn reminded everyone that the environmental document must be based on current conditions, not the assumption that the City will obtain the property. The general consensus was to move forward with the alternatives and keep collecting data. Lisa mentioned that the best plan would be see which alternatives move forward for development and when the funding will be available.

To return to the proposed alignments, Mike mentioned that the Indian Hills Highwayman Segment would definitely begin at the Indian Hills recreational area south of the golf course. He mentioned the best alternative was to keep the trail in the green spaces instead of a street route. Mike stressed keeping the trail close to the golf course and off of the nearby roads. At this point, Gary Giaotti mentioned the numerous obstacles that are present along the western alignment. Kori Benton provided an explanation of the golf course placement and where the City of Fort Pierce sees the trail being placed. Gary raised concerns about Hole #9 on the golf course and Kori replied that the City owns the golf course and had looked at changing the course to accommodate the trail. Reshawn brought up the fact that the golf course may be Section 4(f) eligible, to which Kori replied that it was, however there is a ten-foot wide drainage easement along Virginia Avenue. Mike summed up the placement of the Indian Hills Highwayman segment as to keep the trail off of US 1 and in the green spaces.

The next trail to be discussed was the Historic Downtown Retrofit Segment. Mike stated the main issue with the Downtown trail was getting the trail over FEC at either 2nd Street or Indian River Drive, and the numerous obstacles that are within the boundaries of the trail. Reshawn mentioned the big question is the design standards, since most of the Downtown segment would need variations or meet different design criteria to fit. Reshawn asked if the design standards set forth must be followed perfectly. Lisa stated that this trail segment is completely different from any others since it is in an urban setting. Lisa said she has an ongoing conversation with FDOT Central Office regarding the design standards, but no answer has been forthcoming.

Gary stated that he and another designer from Atkins rode bicycles along the proposed alternatives and they determined an alternative to the west would be the best route from a safety standpoint. There are numerous issues with downtown Fort Pierce and US 1, therefore 7th Street is a safer alternative. 7th Street is less crowded and has existing bike traffic. If the SUN Trails were to take the 7th Street alignment, the SUN Trail could connect to the existing park and trail system owned by the City of Fort Pierce. Gary gave an explanation of the alternative route along 7th Street

and advised against using 2nd Street or allowing bicycles on the sidewalks. Kori stated that Primary Option 2 may be feasible since the City may acquire ten feet of right-of-way along the football fields. Kori mentioned that 7th Street has a positive in that it could bring people into the corridor and breathe life into it. He stated there is a new art district that will be along 7th Street, so the City would want an agreement to put in routes to get people from the arts district to downtown. Mike stated that the County would like to keep the routes towards the east. Gary brought up the Share Ride program coming to Fort Pierce and asked where the stations would be so that the SUN Trail could tie into them; the response was downtown Fort Pierce.

According to Mike, the area around the port is redeveloping and may be on board with a multi-use path in the port area. The issue with that would be getting the trail over the FEC. Mike expressed concerns with using the 7th Street alignment since that area of town can be a bit rough. Kori stated that the alignment may want to start on 7th Street at 10th Street and north to get people off of the main corridor. If it can be assumed that the FEC would transfer their property to the City, then the trail would could come back to the west at either Georgia Avenue, Delaware Avenue, or Orange Avenue and continue north. Kori also mentioned there is a Police Memorial Park at 3rd Street that would be nice to tie into. Gary stated that if the golf course can be used, it would eliminate all southern alternatives and connect further north. Kori mentioned that there is a RFQ for a HD site downtown that would connect to Moor's Linear Creek Park. With that trail, the 7th Street alignment would connect to downtown at Avenue C. Mike asked if the FEC would move everything to the north, to which Jack replied yes; therefore, that opens up more area to get the trail to 2nd Street. Jack agreed that the trail could go from Georgia Avenue to 7th Street, to Backus Avenue, and then downtown to tie in since there is a bridge at Backus Avenue.

Peter Buchwald asked why the 7th Street alignment was developed. Gary provided the explanation of the development of that alternative and mentioned the safety aspect. Peter asked for the differences in volume between 2nd Street and 7th Street. Gary replied that no true numbers are known, however the 7th Street alignment felt safer from a bicyclist standpoint. Peter asked what would be shown at the Public Kick-Off Meeting, to which Reshawn replied the alternatives in the application. Peter stated the alignments in the application went through the public involvement phase and vetting. He mentioned that it was important to keep the trail on 2nd Street in order to get people into the shops and amenities downtown. According to Peter, 2nd Street is a relatively low-speed street; therefore, the trail would be safe. Since 7th Street is a new alternative, Peter questioned if the alignment would meet the goals of the project and that if it doesn't, it may have to be pulled from the TIP and may not proceed forward. Reshawn reminded that this phase of the project is simply a feasibility study to develop the alternatives. Peter mentioned that he would like more information behind developing new alternatives. Reshawn stated that it is still early in the project schedule and the public comments received at the Kick-Off Meeting will help with the design and preferred alternative, which is still months out.

Peter questioned the validity of having a Kick-Off Meeting if the alternatives will be changed since the information presented would no longer be valid. Lynn mentioned that the point of the Kick-Off Meeting is to give the public a heads up so that if consultants or anyone show up looking around, the public doesn't become concerned. Lynn stated that the alternatives presented in February of 2018 would be more precise and definite. Peter asked how the public would be notified and which alignments would be notified. According to Lynn, the target audience has been identified along the two previously approved alternatives. She assured that the 7th Street alignment will not be presented at the Kick-Off Meeting.

Jack stated that there is value to the 7th Street alignment; the trail could come back downtown at Backus Avenue to tie into the downtown area. Jack raised a question about taking 7th Street all the way to Avenue M, since that would completely miss the downtown area. He stated that Avenue O at US 1 should be signalized to get onto the bridge. Lisa stated her concerns about getting the trail to connect to the new bridge at the north end of the project. Reshawn mentioned she would follow up with Lisa and Lynn regarding the design around the bridges at the north end. Mike mentioned that there is talk of making Old Dixie Highway one-way, which would potentially give the SUN Trail a lane of the bridge. There are right-of-way issues, according to Peter, at the new bridge. He advised to go north and east to Old Dixie Highway and then connect to the new Sunny Lane to avoid the necessity of right-of-way, which may be the case with Avenue O. Kori stated that there will be a commercial plaza on Avenue O that would require the intersection to be signalized.

The SUN Trail system will be a game-changer for Fort Pierce and St. Lucie County, according to Peter. Lisa agreed that the trails are special since they are in urban areas. Mike asked if the grant process and application to receive SUN Trail funds would be covered at the Kick-Off Meeting. Reshawn stated the background would be pulled and added to the presentation. Lisa agreed it was a good idea to add the background and how the project has developed to this stage. Peter suggested that other resources such as parks and amenities should be added to the display maps. With no further questions or comments, the meeting was concluded.

<u>Action Items:</u>

1. Send a meeting invite for the Public Kick-Off Meeting to the team (Reshawn Fields). *Completed.*
2. Identify resources, such as parks, on the alignment maps (Atkins).



Indian Hills Historic Highwayman Segment



Historic Downtown Segment
North Indian Hills to North Wauseway

Design Coordination Meeting

March 30, 2018



SUNTRAIL

Indian Hills Historic Highwayman Segment

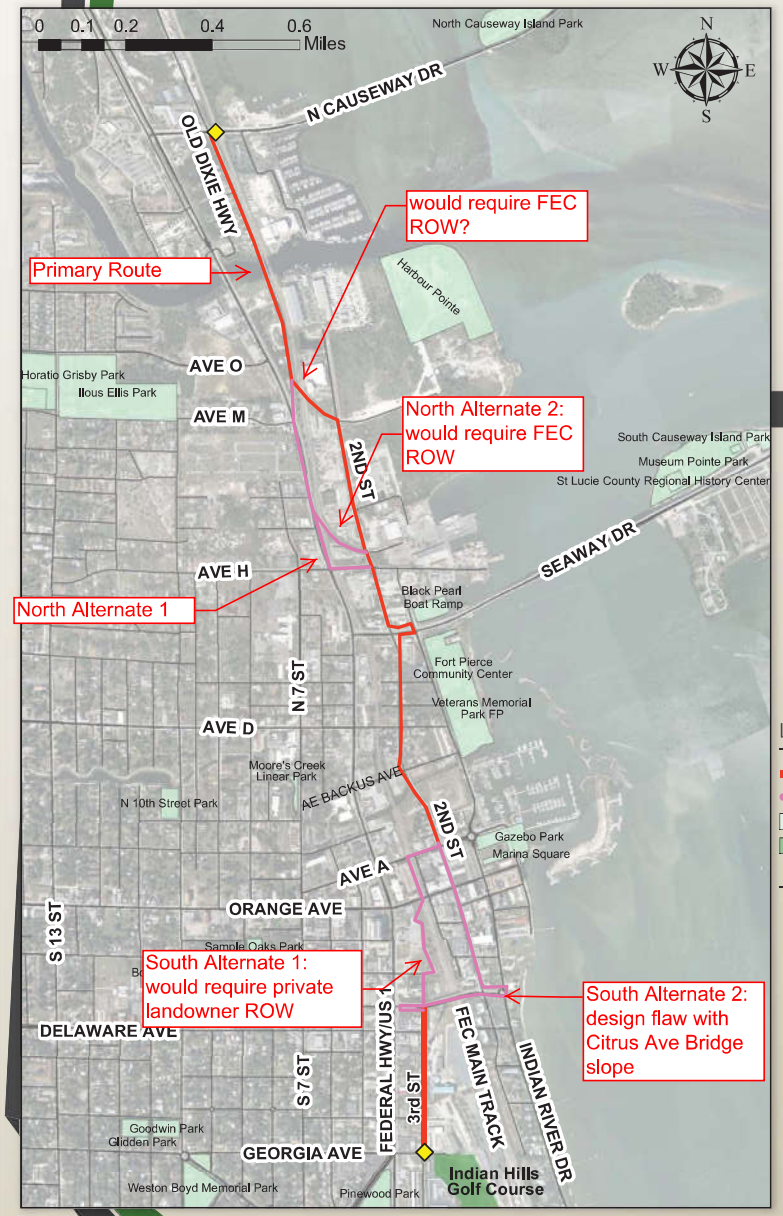
Location Map

Legend

- Primary Route
- Alternative Route
- St. Lucie County Parks
- Golf Course
- Segment Termini

Disclaimer:
This map is intended for reference only. Most information contained within is conceptual.

FDOT



SUNTRAIL

Historic Downtown Segment

Location Map



Legend

- Primary Route
- Alternative Route
- St. Lucie County Parks
- Golf Course
- Segment Termini

Disclaimer:
This map is intended for reference only. Most information contained within is conceptual.

FDOT

SUN Trail: Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail Gap Project Milestone Schedule	
DEADLINE	**TASK**
Alternatives Analysis	
04/27/18	Submit Draft Alternatives Analysis Comparison Matrix for D4 review
Week of 4/30	Design Coordination Meeting with City
Stakeholder Presentations	
05/08/18	City of Fort Pierce Planning Board Meeting
05/15/18	St. Lucie County TPO Meeting
05/18/18	Treasure Coast RPC Meeting
Alternatives Analysis Workshop	
04/27/18	Submit Draft PPT to D4 for review
05/18/18	(3 weeks) D4 Review and Provide Comments
06/01/18	Finalize Presentation/Meeting Materials (will also include City/County/RPC comments)
06/05/18	**Alternatives Analysis Workshop**
Draft Feasibility Report	
06/29/18	*Submit Draft Feasibility Report for D4 Review*
07/29/18	(30 days) D4 review and provide comments
Final Feasibility Report	
08/28/18	Revise Report to address D4 comments and submit Final to D4

Design Coordination Meeting

May 9, 2018

SUN Trail Feasibility Study
(Historic Highwayman Trail and Historic Downtown Ft. Pierce Retrofit Trail)
Design Coordination
Meeting Summary

Date/Time: May 9, 2018
10:30 a.m.

Location: St. Lucie County TPO

Subject: SUN Trail Feasibility Study Design Coordination Meeting

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Introductions

- Florida Department of Transportation (FDOT): Lauren Rand (Project Manager)
- Saint Lucie County: Mike Middlebrook, Jennifer McGee, Kori Benton
- City of Fort Pierce: Jack Andrews
- St. Lucie County Transportation Planning Organization (TPO): Peter Buchwald, Ed Defini
- Atkins: Reshawn Fields, Brooke Feagle, Ryan Jensen

Overview

- FDOT is conducting a feasibility study for the Historic Downtown Fort Pierce Retrofit (440033-1) from Georgia Avenue to North Causeway Drive and the Historic Highwayman Trail Gap (440034-1) from Indian Hills Drive to Georgia Avenue. These are both portions of the statewide SUN Trail system. This meeting was to discuss alignments that were developed by the City of Fort Pierce, Saint Lucie County, and St. Lucie County TPO then reviewed by Atkins.

Historic Highwayman Trail Gap

- It was noted that the entire eastern trail alternative is located within FEC right-of-way. The beginning of the trail has a "Y" shape of available right-of-way, but the primary alternative will need a corner clip of right-of-way from either FEC or a homeowner. Concurrence with FEC would be necessary in order to gain an easement. Reshawn Fields mentioned that the report would have language regarding the corner clip options.
    - A FDOT drainage project (FPID: 441715-1) will run along Virginia Avenue and continue behind the homes. The project should have to acquire the necessary right-of-way for the corner clip that the SUN Trail could use. Jack Andrews mentioned that the project will be a canal but should have enough room to fit the trail. Lauren Rand said she would contact the FDOT drainage project manager.
- The issues with the second eastern alignment (at the northern end of the project) were discussed, including the need for a fence or wall by the lake and the lack of right-of-way at the northern end to connect to 3rd Street. The City of Fort Pierce has a drainage easement along Georgia Avenue that could be utilized, depending on the width of the trail. It was stated that the SUN Trail could be shrunk down to eight feet wide with an exception. It was decided that if a solution could not be found before construction, the trail would end at Georgia Avenue with signs on where to continue on the SUN Trail. It was agreed that the second eastern alignment was a good option for the trail.
- It was pointed out that right-of-way issues are a fatal flaw and that relocations should be avoided. The relocations were added by the environmental team as a "just in case" for the alternatives. The right-of-way and relocation sections will be revised to show no effects.
- The historic section was brought into question regarding the golf course and potentially historic residences. It was decided the historical section would not prove a fatal flaw because the residences would not be impacted, but did have to be noted in the report. The golf course was reconfigured in 2004-2005 and no archaeological or historical resources were uncovered; however, monitoring during construction may be necessary. It was mentioned that there has been coordination with the State Historic Preservation Officer (SHPO) regarding the golf course; projects weren't restricted, there was just added coordination.

Historic Downtown Ft. Pierce Retrofit Trail

- The northern terminus of the project was moved from Avenue H back to Causeway Drive; however, the area on US Highway 1 between Avenue H and Old Dixie Highway will be studied under another project as there is no right-of-way.
- A current study by St. Lucie County proposes that the Old Dixie Highway Bridge be changed to include one lane for traffic and one lane for the SUN Trail, along with two other options for the bridge. It was agreed upon that this segment can be labeled as "under study by St. Lucie County."

- Options regarding the gap on US Highway 1 were discussed, but no viable alternatives were decided upon. It was mentioned that FDOT has been trying to redesign the intersection of US Highway 1 and Avenue H, so the portion of the trail could be completed if the intersection is reconfigured at a later date.
- An issue with the Downtown segment of the trail is that large portions of the proposed trail cannot be funded under SUN Trails due to the need for privately owned right-of-way. It was discussed that some of the alternatives in right-of-way constricted areas can include sharrows and bike lanes; neither of which can be funded by the SUN Trail program.
- The bridge on Citrus Avenue would be a fatal flaw if that option were decided upon. The bridge does not meet Americans with Disabilities Act (ADA) criteria. It was discussed that a bike lane could be added to the bridge if no other options were available.
- The southern alternative 1 would be in City-owned right-of-way until just north of the bridge on Citrus Avenue, at which point the right-of-way becomes privately owned. Kori Benton also mentioned that the open area along that route is supposed to become a Brightline railroad station.
    - It was discussed on where this alternative would turn east and connect back to the primary alternative. It was decided upon that the alternative would turn right on Orange Avenue instead of Avenue A and continue east to 2nd Street.
- The northern section of the project was discussed, since there is no right-of-way to construct a full multiuse path. The segments on 2nd Street would have to be sharrows or bike lanes, not a SUN Trail. It was suggested that the City is looking to remove the on-street parking along 2nd Street and adding another parking garage. If this option occurs, then bike lanes could be added to 2nd Street.
- It was briefly discussed if the option exists with placing the trail next to the railroad; however, since the Brightline train will use the railroad, it was determined that would not be a safe option for pedestrians. The trail needs to be kept on 2nd Street.
- The Riverwalk alternative was discussed and determined to be a viable alternative. The issue with that alternative is how to get the pedestrians to the already constructed trail. The existing boat ramp is currently under reconstruction.
- It was determined that the trail will continue on the north side of Avenue H to the railroad tracks, where the SUN Trail segment will end until Old Dixie Highway.

Next Steps

- Atkins and Janus will revise the existing matrices, maps, and reports to reflect the decisions made.
- FDOT will provide information regarding the upcoming drainage project along Virginia Avenue and if it is possible to include the SUN Trail segment within this project area.



Imagery: NAIP 2013



SUN Trail Historic Downtown Fort Pierce Retrofit Trail Potential Routes

Ft. Pierce, St. Lucie County, Florida

Primary Route

South Alternate 1

South Alternate 2

River Walk Alternate

Project Map

1 in = 1,351 feet

Prepared By: Atkins N.A.

Date: May 02, 2018

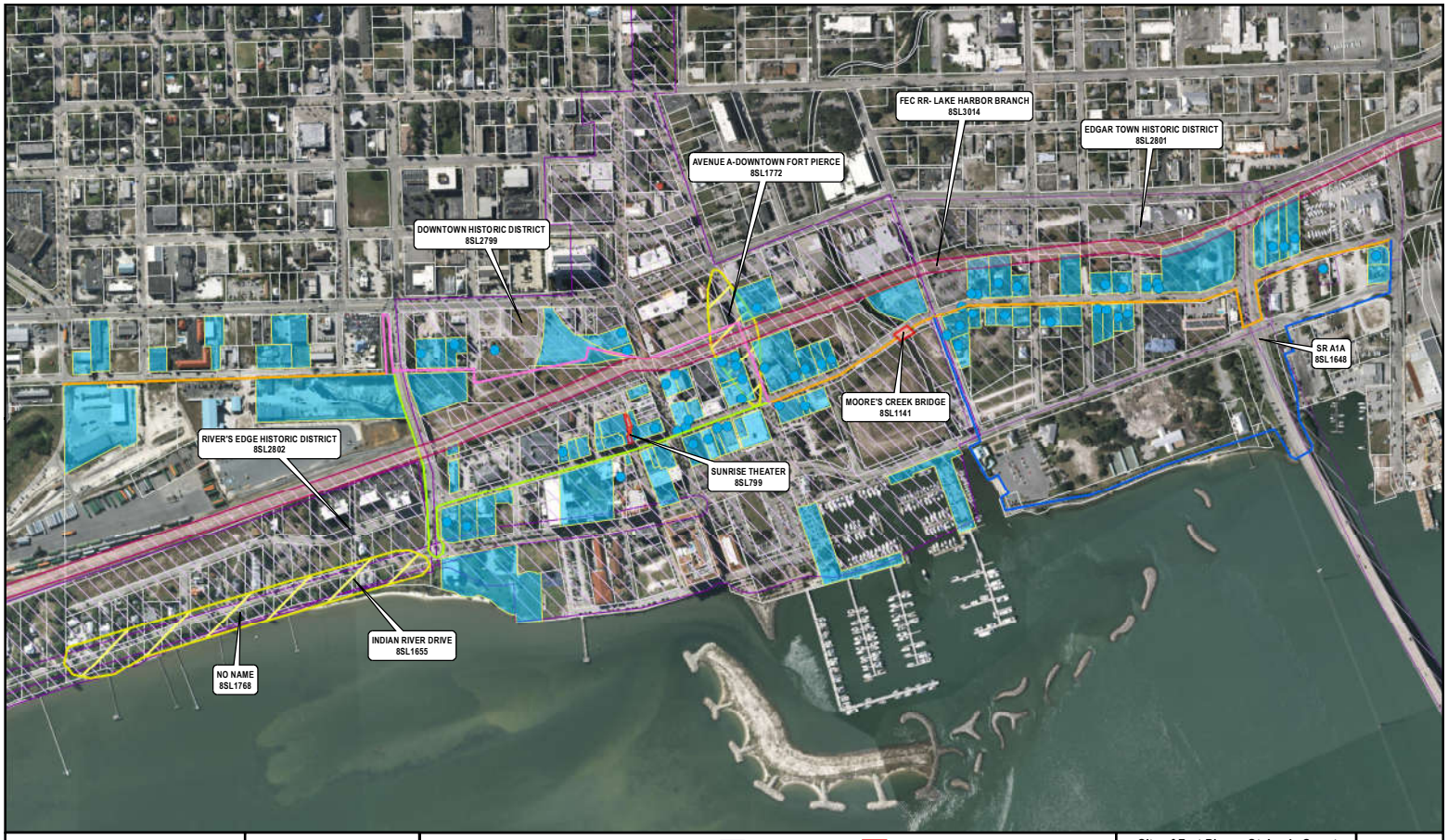
ATKINS

Historic Downtown Fort Pierce Trail Alternates Matrix

for Trails Constructed under the SUN Trail Program

	No Build	Primary Route	South Alternate 1	South Alternate 2	River Walk Alternate
Social Features					
Existing Land Use	No adverse effects	No adverse effects	No adverse effects	No adverse effects	No adverse effects
Future Land Use	No adverse effects	No effect	No effect	No effect	No effect
Community Cohesion	No adverse effects; but does not enhance connectivity in the area and does not meet purpose and need	Enhanced connectivity. Trail traverses through one residential area along North 2nd Street between A E Backus Avenue and Avenue E.	Enhanced connectivity.	Enhanced connectivity.	Enhanced connectivity.
Relocations	None	Unless trail remains within existing ROW, six to seven buildings may require relocation. Five of which are identified as historic along N 2nd Street. One or two buildings located at 514 S 3rd Street at the mineral processing/cement plant may require relocation. Car dealership property just south of bridge uses side alley for parking. Could be avoided if the route was taken West on Delaware Ave.	Potential relocation of a multi-level parking facility located at the corner of US 1 and Orange Avenue unless trail remains within existing ROW	None	Two potential relocations include the Manatee Observation and Education Center (600 N Indian River Dr) and a building located near the boat ramp at Indian River Veterans Memorial Park.
ROW or Easements Required	None	Not enough ROW provided to accommodate multiuse paths of 8'-14' wide. Other options such as sharrows and bike lanes will have to be utilized or different routes selected.	ROW or easement agreement would be needed between Citrus Ave. and Orange Ave. Current route goes through various properties in this area. Bridge would need widening to safely accommodate bicyclists.	Not enough ROW provided to accommodate multiuse paths of 8'-14' wide. Other options such as sharrows and bike lanes will have to be utilized or different routes selected.	Not enough ROW provided to accommodate multiuse paths of 8'-14' wide in all areas. Other options such as sharrows and bike lanes will have to be utilized or different routes selected.
Construct Under the SUN Trail Program	N/A	No	Yes (require private ROW)	No	Yes (portions)
Community Services	No adverse effects	The proposed trail Alternate and/or associated construction would have the potential to impact six historic structures along N 2nd St (200, 518, 522, 524, 532 and 658 N 2nd St).	The proposed trail Alternate and/or associated construction would have the potential to impact three historic structures (301 and 311 Orange Avenue and 208 Avenue A).	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.
Potential User Conflicts	None	Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage. Conflicts with on street parking could be handled with signage or different route selection.	Very steep and narrow bridge on Citrus Ave creates unsafe bicycle terrain. Minimize conflict by not using bridge. Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage. Conflicts with on street parking could be handled with signage or different route selection.	Very steep and narrow bridge on Citrus Ave creates unsafe bicycle terrain. Minimize conflict by not using bridge. Conflicts with on street parking could be handled with signage or different route selection. Traffic Circle conflicts and confusion for novice riders could be handled with signage.	Conflicts with boat ramp users. Minimize conflicts with signage. Conflicts with park users (fishing). Minimize with signage and specific fishing and resting spots. Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage.
Cultural					
Archaeological/ Historical Resources	None	1 National Register-Listed bridge, 1 historic district not evaluated by SHPO, 26 structures not evaluated by SHPO, 13 historic parcels	1 National Register-Eligible railroad, 3 historic structures not evaluated by SHPO, 3 historic parcels, 1 archaeological site not evaluated by SHPO	1 National Register-Listed structure, 1 National Register-Eligible railroad, 1 historic roadway not evaluated by SHPO, 13 historic structures not evaluated by SHPO, 15 historic parcels, 2 archaeological sites not evaluated by SHPO	1 historic district not evaluated by SHPO, 3 historic structures not evaluated by SHPO, 2 historic parcels
Section 4(f)	None	None	None	None	None
Natural					
Threatened and Endangered Species	No effect	No effects	No adverse effects	No effects	No effects
Wetlands/Surface Waters (acres)	None	None	None	None	None
Upland Habitat (acres)	None	None	None	None	None
Outstanding Florida Waters/Aquatic Preserves	None	None	None	None	None
Floodplains (acres)	No effect	None	None	None	None
Physical					
Noise	None	No effect	No effect	No effect	No effect
Air Quality	None	No effect	No effect	No effect	No effect
Contamination	None	See 'CONTAMINATION SUMMARY' table below for sites identified.	See 'CONTAMINATION SUMMARY' table below for sites identified.	See 'CONTAMINATION SUMMARY' table below for sites identified.	See 'CONTAMINATION SUMMARY' table below for sites identified.

Created 5/2/2018



Previously Recorded Cultural Resources and Historic Parcels

Sun Trail - Downtown Fort Pierce Segment

Primary Route
South Alternate 1
South Alternate 2
River Walk Alternative
Archaeological Site
Resource Group
Historic Bridge
Historic Structures
National Register-Listed or Eligible
Historic Parcels

City of Fort Pierce, St. Lucie County

0 250 500 Feet

0 50 100 Meters

Map 1



Imagery: NAIP 2013

Project Map

Prepared By: Atkins N.A.
Date: May 02, 2018

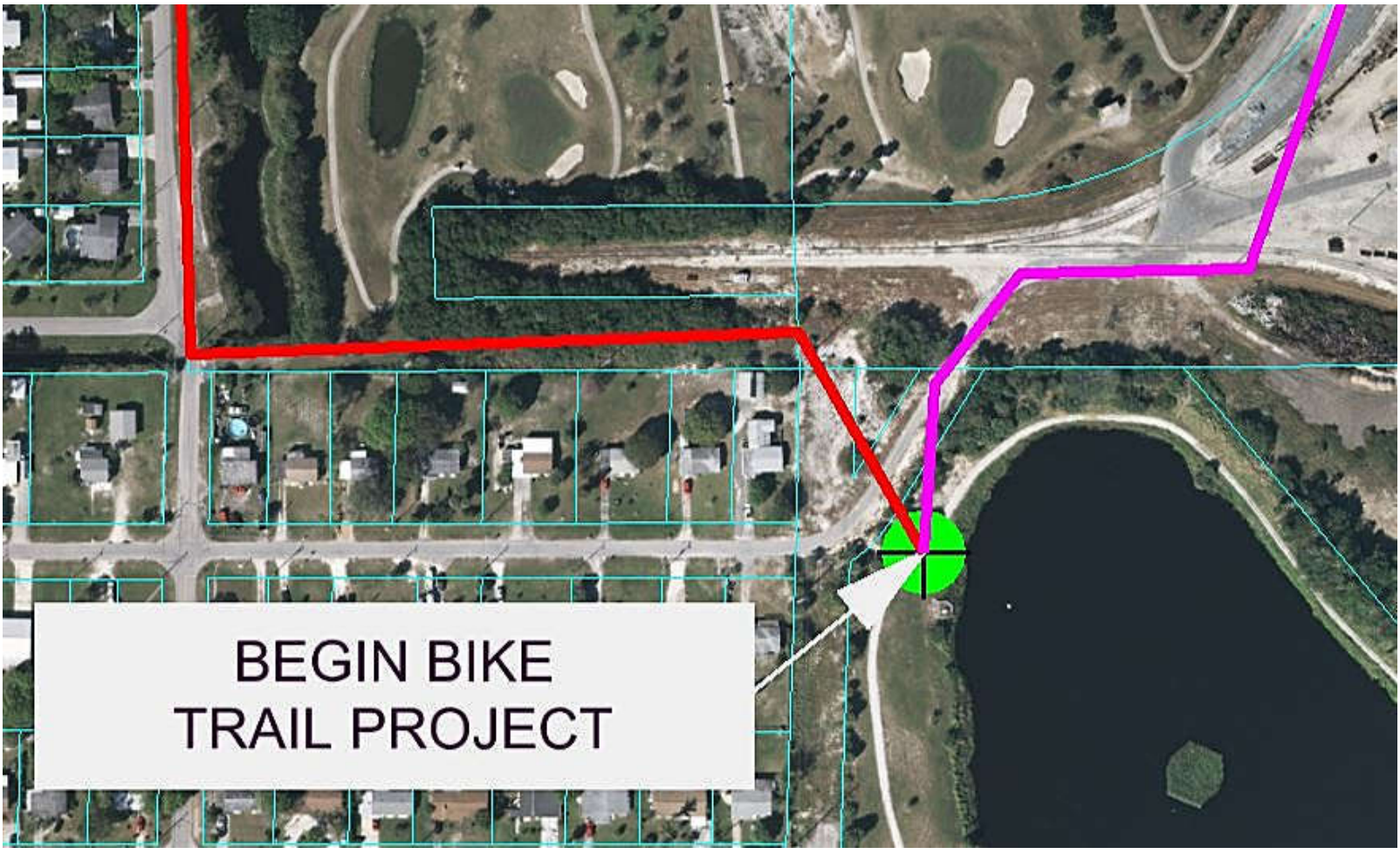
ATKINS

1 in = 673 feet

SUN Trail Highwayman Gap Trail
Potential Routes
Ft. Pierce, St. Lucie County, Florida

Primary Route
East Alternate 2
East Alternate 1

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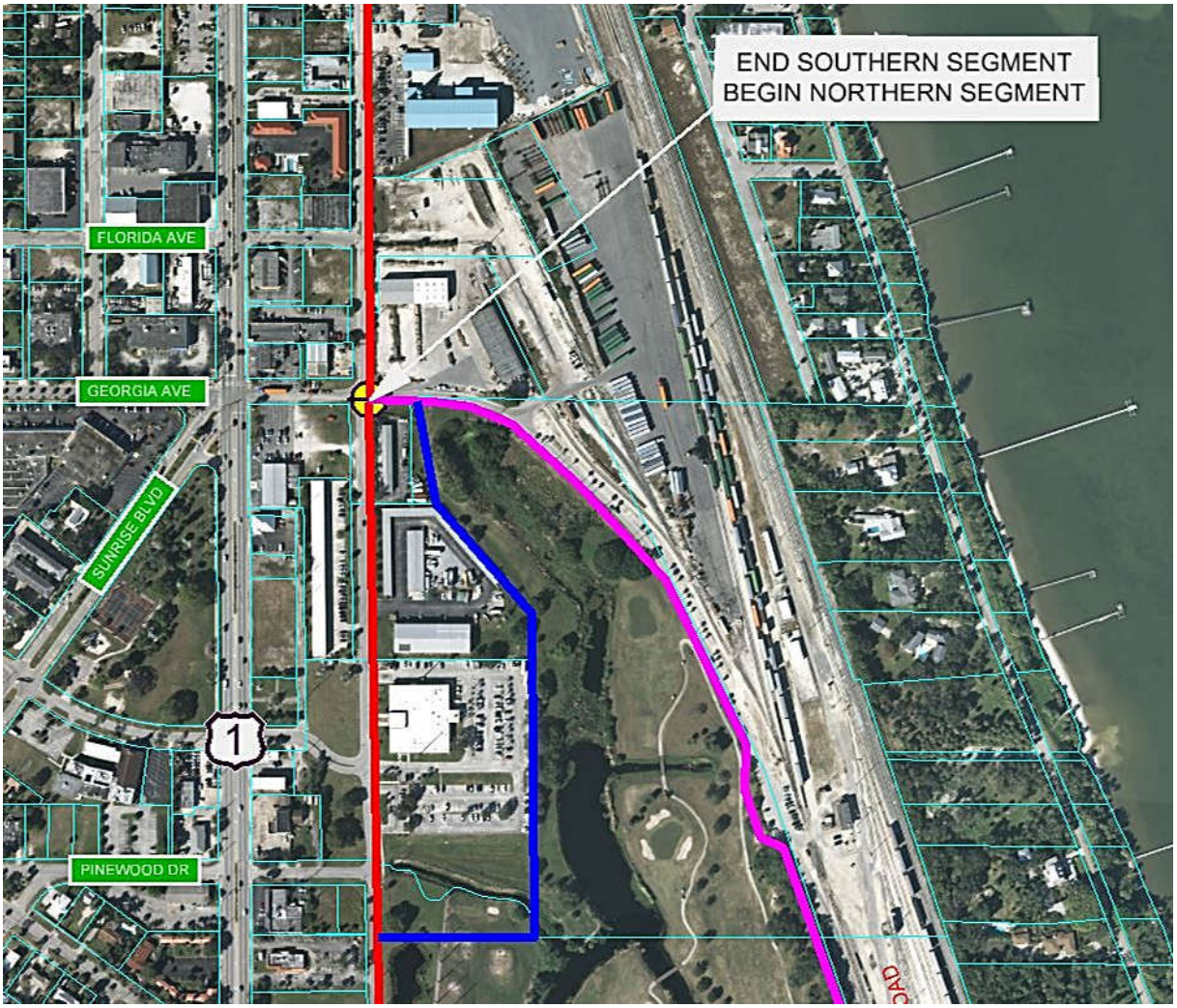
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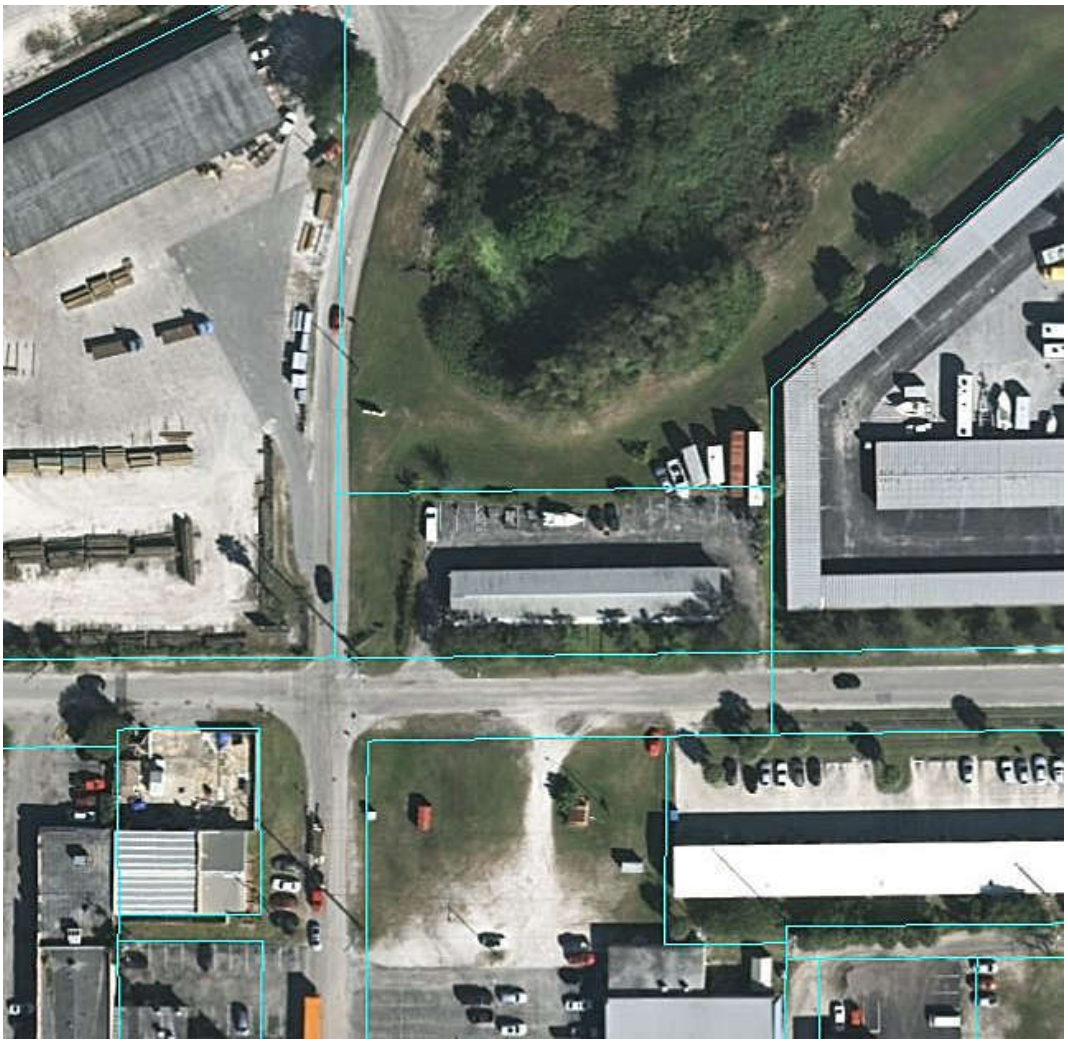
GEORGIA AVE
SUNRISE BLVD
1
PINEWOOD DR



Historic Highwayman Gap Trail Alternates Matrix

for Trails Constructed under the SUN Trail Program

	No Build	Primary Route	East Alternate 1	East Alternate 2
Social Features				
Existing Land Use	No adverse effects	No adverse effects	No adverse effects	No adverse effects
Future Land Use	No effect	No effect	No effect	No effect
Community Cohesion	No adverse effects; but does not enhance connectivity in the area and does not meet purpose and need	Enhanced connectivity. Trail travels along *Pleasant View* and *Indian Hills Estates* and would enhance connectivity in the area.	Enhanced connectivity.	Enhanced connectivity.
Relocations	None	One potential relocation. Along S 3rd St, one outlying building (and two small covered pavilion structures) of the Indian Hills Golf Course may require relocation. The alignment will also need to be shifted around private properties along the south edge of the golf course.	None	One potential relocation. Warehouse/self-storage building(s) may require relocation if adjoining undeveloped land cannot be utilized for trail.
ROW or Easements Required	None	R/W agreement will be needed with Indian Hills Golf Course to add proposed multiuse path onto the Southern and Western edge of the property. An easement will also be needed from the railroad company to get the multiuse path from the Southern start point on to the golf course. NEED TO DETERMINE OWNERSHIP OF GOLF COURSE	R/W agreement will be needed with Indian Hills Golf Course to add proposed multiuse path onto the Southern and Eastern edge of the property. An easement will also be needed from the railroad company to get the multiuse path from the Southern start point on to the golf course.	R/W agreement will be needed with Indian Hills Golf Course to add proposed multiuse path behind the Police Station and businesses on South 3rd Street. An easement will also be needed from the railroad company to get the path from behind the Police Station and businesses back to South 3rd Street because Georgia Ave. is a private drive East of South 3rd Ave.
Construct under the SUN Trail Program	N/A	Yes	No	Yes
Community Services	No adverse effects	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.	No adverse effects. Enhancement to the community by providing increased connectivity and modal options.
Potential User Conflicts	None	Golf ball and golf cart danger hazards. Minimize conflict with signage. Riders taking golf cart paths	Golf ball and golf cart hazards. Minimize conflict with signage. Riders taking golf cart paths	Golf ball hazards. Minimize conflict with signage. Proximity to golf course

		instead of the bike path. Minimize conflict with signage and paint markings. Conflicts with heavy delivery trucks to warehouses. Minimize conflict with signage.	instead of the bike path. Minimize conflict with signage and paint markings. Trains and path users in close quarters. Minimize conflicts with fencing.	lake. Minimize conflict with fencing and signage.
Cultural				
Archaeological/ Historical Resources	None	36 historic parcels	1 National Register eligible railroad; 2 archaeological sites not evaluated by SHPO, 3 historic parcels	1 archaeological site not evaluated by SHPO, 2 historic parcels
Section 4(f)	None	None	None	None
Natural				
Threatened and Endangered Species	No effect	No adverse effects	No adverse effects	No adverse effects
Wetlands/Surface Waters (acres)	None	0.02 acres wetlands 0.00 acres surface waters Impacts can be avoided/minimized by shifting the proposed trail route south adjacent to the existing freshwater wetland pond.	0.00 acres wetlands 0.00 acres surface waters	0.00 acres wetlands 0.01 acres surface waters
Upland Habitat (acres)	None	0.18 acres	0.25 acres	0.00 acres
Outstanding Florida Waters/Aquatic Preserves	None	None	None	None
Floodplains (acres)	No effect	1.32 acres	0.49 acres	0.73 acres
Physical				
Noise	None	No effect	No effect	No effect
Air Quality	None	No effect	No effect	No effect
Contamination	None	See 'CONTAMINATION SUMMARY' table below for sites identified. [Contamination Impacts TBD by FDOT District Contamination Impacts Coordinator (DCIC).]	See 'CONTAMINATION SUMMARY' table below for sites identified. [Contamination Impacts TBD by FDOT District Contamination Impacts Coordinator (DCIC).]	See 'CONTAMINATION SUMMARY' table below for sites identified. [Contamination Impacts TBD by FDOT District Contamination Impacts Coordinator (DCIC).]

Created 5/2/2018



Previously Recorded Cultural Resources and Historic Parcels

Sun Trail - Historic Highwayman Segment

Primary Route
East Alternate
East Alternate 2
Archaeological Site
Linear Resource
National Register-Eligible
Historic Parcel

City of Fort Pierce, St. Lucie County

0 250 500 Feet
0 50 100 Meters

Map 1

Public Kick-Off Meeting

October 10, 2017

FDOT

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

MIKE DEW
SECRETARY

September 29, 2017

Dear Property Owner or Other Interested Stakeholder:

RE: **Public Kick-Off Meeting**
Feasibility Study for Shared-Use Nonmotorized (SUN) Trails:
Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail
St. Lucie County, Florida
Financial Management Numbers: 440033-1 and 440034-1

On behalf of the Florida Department of Transportation (FDOT) District Four, you are invited to a Public Kick-Off Meeting to learn about the Feasibility Study for the above referenced projects. The Study will evaluate alternatives for multi-use recreational pathways.

The Kick-Off Meeting is scheduled for Tuesday, October 10, 2017, with an open house at 5 p.m. and a presentation at 6 p.m. at the Old City Hall located at 315 Avenue A in Fort Pierce. A location map of the meeting site is enclosed.

The study limits for the Historic Downtown Fort Pierce Retrofit segment are from Georgia Avenue to North A1A, a distance of about 2.3 miles. The study limits for the Historic Highwayman Trail segment are from Indian Hills Drive to Georgia Avenue, a distance of about 1.3 mile.

This letter is being sent to all property owners and tenants within at least 300 feet of either side of the proposed project and to public officials, regulatory agencies, and individuals interested in the project. This meeting is being conducted to give interested persons an opportunity to review the project materials and become acquainted with the proposed SUN Trails.

Persons wishing to submit written statements may do so at the meeting or by sending them to Lisa Maack, Project Manager, 3400 W. Commercial Boulevard, Fort Lauderdale, Florida 33309 or by email to Lisa.Maack@dot.state.fl.us. Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who require accommodations under the Americans with Disabilities Act or persons who may require translation services (free of charge) should contact Lisa Maack at (954) 717-2253 at least seven (7) days prior to the meeting.

If you have questions about the project or scheduled public meeting, please contact the Project Manager, Lisa Maack, at the phone number or at the email address listed above. You may also visit the SUN Trails website at www.FloridaSUNTrail.com.

Sincerely,

Lisa Maack
District Four Project Manager

Attachment: Location Map

SUNTRAIL

SUN Trails Location Map

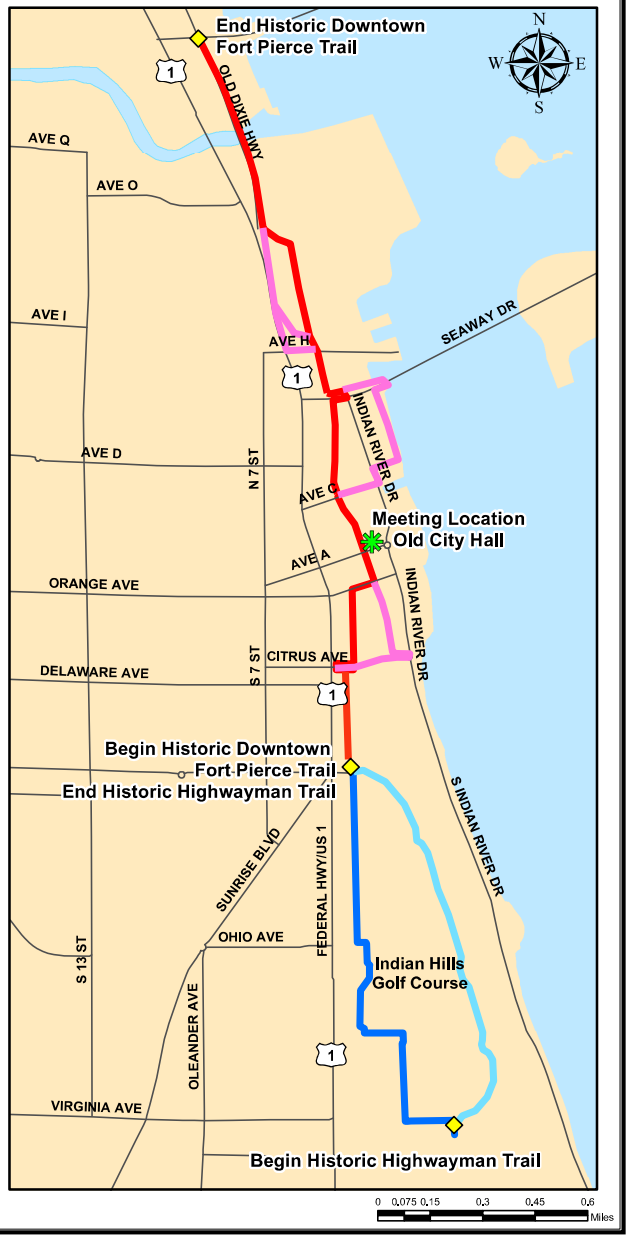
Legend

- Downtown Primary Route
- Downtown Alternative Route
- Historic Highwayman Primary Route
- Historic Highwayman Alternative



Disclaimer:
This map is intended for reference only. Most information contained within is conceptual.

FDOT



Feagle, Brooke

From: Cimini, Randy D
Sent: Wednesday, September 27, 2017 2:50 PM
To: Feagle, Brooke
Subject: FW: Submit Notice in FAR
Attachments: FL Admin Register notice_changes made.doc

Here you go. It will run on Monday, Oct. 2. Also, here is the file. I corrected the line spacing in the Public participation paragraph. It was wider than the other paragraphs.

Randy Cimini
Public Involvement Manager, FL Transportation Planning and PD&E

ATKINS
Find out more about what we do and how we do it - www.atkinsglobal.com

600 North Broadway Avenue, Suite 310, Bartow, Florida 33830 Main Office: +1 (863) 533-7000 | Direct: +1 (863) 800-9543 | Fax: +1 (863) 533-7888 | Cell: +1 (863) 512-2533
Email: randy.cimini@atkinsglobal.com | Web: www.atkinsglobal.com www.atkinsglobal.com/northamerica

-----Original Message-----
From: FL-Rules@dos.state.fl.us [mailto:FL-Rules@dos.state.fl.us]
Sent: Wednesday, September 27, 2017 2:47 PM
To: Cimini, Randy D <Randy.Cimini@atkinsglobal.com>
Subject: Submit Notice in FAR

You have successfully submitted a notice for publication in the Florida Administrative Register on 9/27/2017 2:47:05 PM.

Department: Other Agencies and Organizations

Organization: ATKINS - Bartow

Notice type: Notice of Meeting/Workshop Hearing

Issue: 43/190

Once this notice is published you will be able to view it by clicking the following link:

https://urldefense.proofpoint.com/v2/url?u=http-3A__www.FLRules.org_gateway_View-5FNotice.asp-3Fid-3D19464813&d=DwIFAg&c=cUkzcZGZt-E3UgRE832-4A&r=Jau9xTOVgJhpkpAByd9CJOcaYIHaUxaX59Yqa2woKRg&m=KUNTzKbU5rpdeyN1HZx2DzmMHkW6P14-U_BOsTsAQFc&s=_7g9GDlif9va9KlMceFLQAJpRqR82_GVfrcDR4pSn7M&e=

You may contact the Florida Administrative Register office at (850)245-6270 for additional information.

Notice of Meeting
DEPARTMENT OF TRANSPORTATION

The Florida Department of Transportation (FDOT), District Four, is hosting a Public Kick-off Meeting as part of the Feasibility Study for two segments of Shared-Use Nonmotorized (SUN) Trail Program, the Historic Downtown Fort Pierce Retrofit segment and Historic Highwayman Trail Gap segment in Fort Pierce, St. Lucie County. FDOT invites all members of the public to attend.

DATE AND TIME: Tuesday, October 10, 2017 from 5 p.m. to 7 p.m.
PLACE: Old City Hall, 315 Avenue A, Fort Pierce, FL 34950

GENERAL SUBJECT MATTER TO BE CONSIDERED: This public meeting offers the community the opportunity to express their views about the location, conceptual design, and social, economic, and environmental effects of constructing the trails on both proposed segments. The study limit for the Historic Downtown Fort Pierce Retrofit segment is from Georgia Avenue to North A1A; Financial Project ID 440033-1. The study limit for the Historic Highwayman Gap Trail segment is from Indian Hills Drive to Georgia Avenue; Financial Project ID 440034-1.

FDOT will provide an overview of both project segments, any potential issues of concern, and display information about the potential alternatives to be developed during the Feasibility Study. The meeting will be an open house format where people can ask questions and provide comments to FDOT representatives in a one-on-one setting. Written comments will be accepted.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. People requiring special accommodations under the Americans with Disabilities Act or who require translation services (free of charge) should contact Lisa Maack project manager, at (954) 717-2253 or toll free at 1 (866) 336-8435, or by email to lisa.maack@dot.state.fl.us at least seven (7) days prior to the meeting.

If you are hearing or speech impaired, please contact FDOT using the Florida Relay Service, 1 (800) 955-8771 (TDD) or 1 (800) 955-8770 (Voice).

For more information about the project or the Public Kick-off Meeting, please contact Lisa Maack or visit the SUN Trail website www.FloridaSUNTrail.com.

Treasure Coast Newspapers | TCPALM

Indian River Press Journal
1801 U.S. 1, Vero Beach, FL 32960

AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA
COUNTY OF INDIAN RIVER

Before the undersigned authority personally appeared, Natalie Zollar, who on oath says that she is Classified Inside Sales Manager of the Indian River Press Journal, a daily newspaper published at Vero Beach in Indian River County, Florida: that the attached copy of advertisement was published in the Indian River Press Journal in the following issues below. Affiant further says that the said Indian River Press Journal is a newspaper published in Vero Beach in said Indian River County, Florida, and that said newspaper has heretofore been continuously published in said Indian River County, Florida, daily and distributed in Indian River County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid or promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper. The Indian River Press Journal has been entered as Periodical Matter at the Post Offices in Vero Beach, Indian River County, Florida and has been for a period of one year next preceding the first publication of the attached copy of advertisement.

Customer	Ad Number	Copyline	PO #
930054 - ATKINS NORTH AMERICA	1772025	SUN TRAIL FDOT	

Pub Dates
October 3, 2017
October 3, 2017
October 3, 2017

Sworn to and subscribed before me this day of, October 03, 2017, by

Natalie Zollar, who is
Natalie Zollar
(X) personally known to me or
( ) who has produced _____ as identification.

Karol E Kangas

Karol Kangas — Notary Public

KAROL E KANGAS
Notary Public - State of Florida
Commission # GG 126041
My Comm. Expires Jul 29, 2021
Bonded through National Notary Assn.

Medical pot producer: Regulate edibles

FRANK GLUCK
USA TODAY NETWORK - FLORIDA

Florida voters last year overwhelmingly backed broad medical marijuana legalization, but one popular means of ingesting the drug — eating cannabis-infused candies and baked goods — remains in a regulatory limbo.

Surterra Wellness, one of the first companies to win state approval to grow and dispense medical marijuana in the Sunshine State, is now urging the Florida Department of Health to move more quickly in drafting rules on such products.

"Many patients have been seeking edible products because it is the best format for them to find relief," said Wesley Reynolds, president of Surterra Florida, in a written statement. "The more available options for people, the more likely they will be able to use a cannabis product instead of highly addictive and easily abused opiates."

Florida law defines edibles as "commercially produced food items made with marijuana oil, but no other form of marijuana, that are produced and dispensed by a medical marijuana treatment center."

The law also requires that the state determine the "shapes, forms, and ingredients" of such products discourage use by children.

In states where marijuana is even more tolerated, such as Colorado, edibles closely resemble popular candies.

Mara Gambineri, the spokeswoman for the Department of Health's Office of Medical Marijuana Use, said the office is "working diligently" to implement Amendment 2. But she did not comment when asked when rules on edibles might be written.

Florida voters in November approved Amendment 2, which legalized medical marijuana use for patients with certain "debilitating" medical conditions.

The enabling law that put that measure into effect outlawed smoking marijuana for any purpose. So, for now, dispensaries largely sell cannabis-infused oils, lotions and vaporizer pens.



Edible marijuana products on display at a medical marijuana dispensary in Denver. ED ANDRIESKI, AP

Witness: Menendez 'hostile' on call on behalf of donor

DAVID PORTER
ASSOCIATED PRESS

NEWARK, N.J. - U.S. Sen. Bob Menendez reacted angrily and threatened to use his position on the Senate Finance Committee when his entreaties about changing Medicare reimbursement policy were rejected, a former Medicare official testified Monday at Menendez's bribery trial.

The New Jersey Democrat didn't mention co-defendant Salomon Melgen in either a 2009 phone call or a 2012 meeting about the dispute, former Centers for Medicare and Medicaid Services official Jonathan Blum testified. But Blum said it was clear the Florida eye doctor's billing dispute was the issue.

An indictment charges Menendez with accepting private jet flights and luxury hotel stays from Melgen in exchange for political influence. Both men have denied the charges and say the gifts stem from their longtime friendship.

While Menendez has claimed in court filings that he sought out then-Health and Human Services Secretary Kathleen Sebelius — who attended the 2012 meeting — because of inconsistencies in Medicare billing practices, prosecutors allege he was acting solely on Melgen's behalf.

According to Blum, the 2009 phone call started off cordially, but soon turned icy.

"As I did not yield on his statement that the agency wasn't being consistent, his tone became more hostile," Blum said. "It was definitely a call that stands out to me. The tone was very angry. I could tell he was not happy with my answers."

On cross-examination by Melgen's attorney, Blum added, "I think both of us were frustrated with the call."

After the 2012 meeting with Sebelius, Blum said, Menendez said he "was going to use the authority he had as a member of the Senate finance committee" to continue to press the issue.

Menendez didn't mention Melgen by name either time, Blum testified, though then-Senate Democratic Majority Leader Harry Reid mentioned at the 2012 meeting that he had become familiar with the billing issue after talking to Melgen. Blum added that unlike other queries from members of Congress, no other doctors or other potentially affected stakeholders were mentioned in the conversations.

Last week, former Democratic U.S. Sen. Tom Harkin of Iowa, who led a Senate health committee at the time, testified Menendez set up a meeting between him and Melgen about the Medicare billing issue in 2011 but that he didn't offer assistance.

Melgen paid back $8.9 million to Medicare in the dispute. In a separate case not involving Menendez, Melgen was convicted in Florida in April on multiple counts of health care fraud, submitting false claims and falsifying patients' records. Sentencing was postponed until after the current trial concludes.

RAPCO TRAILER CONNECTION
STIHL Elite Dealer
3025 SE Dixie Hwy., Stuart
Rapcotrailer.com
288-1808

Special Referendum Elections
SAMPLE BALLOTS
Tuesday · November 7, 2017
POLLS OPEN 7 am - 7 pm

City of Stuart Referendum Election

Sale of City-Owned Commercial Lot Fronting Tidally-Influenced Waters	Long-Term Lease of City-Owned Commercial Lot Fronting Tidally-Influenced Waters	Long-Term Lease of City-Owned Commercial Lot Fronting Tidally-Influenced Waters
Shall the City sell the 2.638 acre parcel of property known as the North Point Parcel for at least it's appraised value? This sale would meet the Community Redevelopment Plan and would provide tax relief to the tax payers.	Shall the City seek a long-term lease of the property known as Mulligan's Beach House located at 131 SW Flagler Avenue? This lease would provide that the property would be maintained at no cost to the City and would provide tax relief to the tax payers.	Shall the City seek a long-term lease of the property known as the Pelican Cafe? This lease would provide that the property would be maintained at no cost to the City and would provide tax relief to the tax payers.
○ Yes for approval ○ No for rejection	○ Yes for approval ○ No for rejection	○ Yes for approval ○ No for rejection

Proposed Village of Indiantown Election
Shall the Village of Indiantown be created and its charter adopted?
○ YES ○ NO

Early Voting October 30-November 3 • 8 am to 5 pm Daily
Elections Center: 135 SE Martin Luther King, Jr. Blvd., Stuart, FL 34994
Elisabeth Lahti Library: 15300 SW Adams Ave., Indiantown, FL 34956
For more information visit: MartinVotes.com or call 772.288.5637
October 3 & 17, 2017 ND-1767361

SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit
Historic Highwayman Trail Gap
FDOT
Financial Project Numbers: 440033-1 and 440034-1

PUBLIC KICK-OFF MEETING

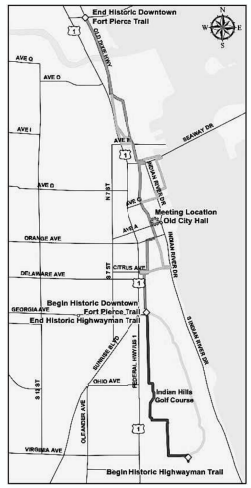
The Florida Department of Transportation (FDOT), District Four, is hosting a Public Kick-off Meeting as part of the Feasibility Study for two segments of Shared-Use Nonmotorized (SUN) Trail Program, the Historic Downtown Fort Pierce Retrofit segment and Historic Highwayman Trail Gap segment in Fort Pierce, St. Lucie County (see aerial photo). The public meeting is from 5 p.m. to 7 p.m., Tuesday, October 10, 2017, at the Old City Hall located at 315 Avenue A in Fort Pierce.

At this public meeting, FDOT will provide an overview of both project segments, any potential issues of concern, and potential trail alternatives. The study limits for the Historic Downtown Fort Pierce Retrofit study are from Georgia Avenue to North A1A. The study limits for the Historic Highwayman Trail Gap are from Indian Hills Drive to Georgia Avenue.

The meeting will be an open house format where people can ask questions and provide comments to FDOT representatives in a one-on-one setting. Written comments will be accepted. Your comments are an important part of this study.

Public participation is solicited without regard to race, color, national origin, age, sex, reli-gion, disability, or family status. People requiring special accommodations under the Americans with Disabilities Act or who require translation services (free of charge) should contact Lisa Maack project manager, at (954) 717-2253 or toll free at 1 (866) 336-8435, or by email to lisa.maack@dot.state.fl.us at least seven (7) days prior to the meeting.

For more information about the SUN Trail Feasibility Study, please contact Lisa Maack or visit the SUN Trail website www.FloridaSUNTrail.com.



October 3, 2017 ND-1772025

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Public Kick-off Meeting
October 10, 2017

Lisa Maack, AICP
FDOT, District 4

Reshawn Fields, AICP
ATKINS North America



SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Agenda

- Overall SUN Trail Program
- Overview of Fort Pierce SUN Trail Projects:
  - Historic Downtown Fort Pierce Retrofit
  - Historic Highwayman Trail Gap
- Anticipated Feasibility Study Process and Schedule
- Public Comments and Next Steps

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Title VI

The Florida Department of Transportation is required to comply with various non-discrimination laws and regulations, including Title VI of the Civil Rights Act of 1964.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status.

Persons wishing to express their concerns about Title VI may do so at the table located at the entrance or by contacting either:

District Four
Florida Department of Transportation
District Four Title VI Coordinator
Shavon Nelson
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309-3421
(954) 777-4389 or
Toll free at (866) 336-8435 ext. 4190
Shavon.Nelson@dot.state.fl.us

Central Office
Florida Department of Transportation
State Title VI Coordinator
Jacqueline Paramore
605 Suwannee Street, MS 65
Tallahassee, Florida 32399-0450
(850) 414-4753
Jacqueline.Paramore@dot.state.fl.us

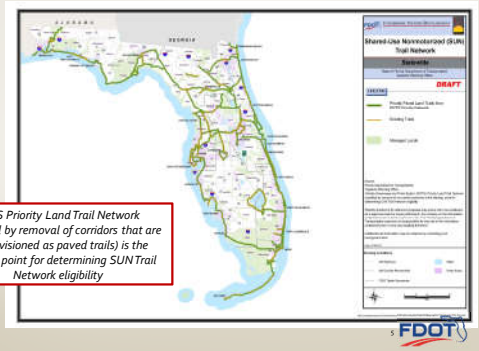
SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

SUN Trail Program

- Created under Florida Statute 339.81
- To develop a statewide system of paved non-motorized trails as a component of the Florida Greenways and Trails System (FGTS)
- $25 million annually funded from new vehicle tag revenues

SUN Trail Network Map



FGTS Priority Land Trail Network (modified by removal of corridors that are not envisioned as paved trails) is the starting point for determining SUN Trail Network eligibility

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Shared-Use Nonmotorized (SUN) Trail Network

FDOT

October 11, 2016

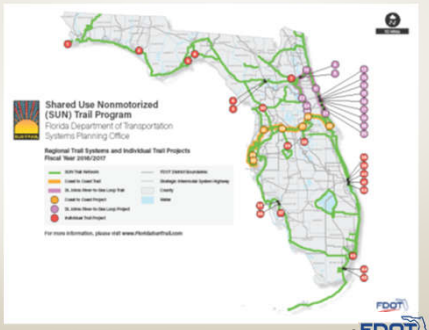
Dick Kane, (850) 414-4590
dick.kane@dot.state.fl.us

Florida Department of Transportation Awards $44.4 Million for Bicycle and Pedestrian Trail Expansion in Florida

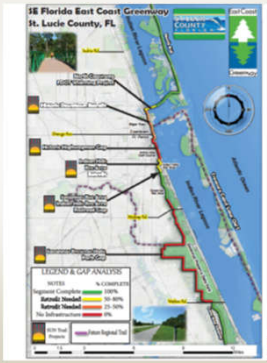
TALLAHASSEE – The Florida Department of Transportation (FDOT) announced today the selection of the first year of projects to receive funding under the Shared Use Nonmotorized (SUN) Trail program. A total of $44,434,543 million was awarded to 45 separate projects located across 21 counties throughout Florida. (See attached map and project list)

The projects include the construction of 11 separate trail segments, which will add or improve approximately 20 miles of trail to Florida's trail system. Another 34 projects will be in various pre-construction phases of work such as feasibility study, environmental review and design. The funds are for the current fiscal year (2016-17) and are immediately available to begin work.

Statewide SUN Trail Network Map with Projects Awarded funding



St. Lucie County East Coast Greenway Network Map



SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit Financial Project Number: 440033-1

Historic Highwayman Trail Financial Project Number: 440034-1

Project Purpose and Need

- A Feasibility Study is being conducted to evaluate two SUN Trail segments:
  - Historic Downtown Fort Pierce Retrofit
  - Historic Highwayman Trail Gap
- Study will evaluate the alternatives identified in the St. Lucie County May 2016 SUN Trail Application
- Trails will provide regional connectivity throughout St. Lucie County and Florida as part of the Greenways Trail System . Will connect to three trails:
  - FEC Overpass from Savanna's Recreation Area to South Savanna's Road
  - Indian Hills Recreation Area south of Savanna Road to Indian Hills Drive
  - Savanna's Preserve State Park from Walton Road to Savanna's Recreation Area

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit Financial Project Number: 440033-1

Historic Highwayman Trail Financial Project Number: 440034-1

Benefits of the Trails

- They make communities more livable and connected
- Improve the economy through tourism and civic improvement
- Preserve and restore open space
- Provide opportunities for physical activity to improve fitness and mental health

Historic Downtown Fort Pierce Retrofit Segment

From Georgia Avenue to North Causeway



Historic Highwayman Trail Segment

From North Indian Hills to Georgia Avenue



SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Feasibility Study Process

- Goal is to develop basic information, including operational necessity, financial benefits and costs, and environmental impact
- Feasibility Study Stages:
  - Data Collection: We need your input!
  - Environmental Surveys and Studies
  - Evaluation of Alternatives
  - Selection of a Preferred Alternative
  - Environmental Report and Conceptual Design

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Feasibility Study Schedule

Project Milestones	2017									2018					
	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July
Begin Study	☆																
Public Involvement		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Data Collection		■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Kick-off Meeting								☆									
Design and Environmental Analysis								■	■	■	■	■	■	■	■	■	
Alternatives Analysis Meeting													☆				
Study Completion																	☆

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Alternative Analysis

- Identify potential alignments and facility types for each alternative.
- The alternatives will be analyzed on the following criteria:
  - System Connectivity – provides a safe, alternative mode of transportation for all users
  - Constructability – ease of implementation based on right-of-way, probable cost, and design constraints
  - Ownership/Agency Support – placed on accessible land and has the support of the agency responsible for its use and maintenance
  - Health/Environmental Benefits – provides conservation values and environmental protection; connects people to natural habitats as a 'green' open space recreational corridor
  - Regional Benefits – economic and tourism potential to link to a network that extends throughout the region
  - Environmental Impacts – historic/ archeological, natural, Section 4(f)

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Next Steps

- Continue Data Collection and Stakeholder Meetings
- Environmental Surveys and Studies
- Alternative Analysis
- Alternatives Public Workshop – targeted Spring 2018
  - Alternative alignments will be presented for public opinion and feedback

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

SUN Trail Overall Project Schedule

Feasibility Study ★ → Preliminary Engineering (PE)/Design → Acquisition of Right of Way (If necessary) → Construction

We are here

Design for both segments will be funded in FY 2019. The goal is to construct the trail within City/County ROW and minimize having to purchase ROW.

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Provide Comments!

- Append post-it notes to display boards
- Write comments on flip charts
- Comment forms: submit tonight or mail in later

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

For more information, please contact

Lisa Maack, District 4 SUNTrail Coordinator

Florida Department of Transportation

3400 West Commercial Boulevard

Fort Lauderdale, Florida 33309

(954) 717-2253

Lisa.Maack@dot.state.fl.us

For more information on the SUNTrail program:

www.FloridaSUNTrail.com

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Thank You for Attending!!

Your input helps us build better trails!

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Project Overview

The Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida (see location maps and pages 2 & 3).

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

Feasibility Study Process

Goal is to develop basic information, including operational necessity, financial benefits and costs, and environmental impact

Feasibility study stages:

- Data Collection: We need your input!
- Environmental Surveys and Studies
- Evaluation of Alternatives
- Selection of a Preferred Alternative
- Environmental Report and Conceptual Design

Contact Us

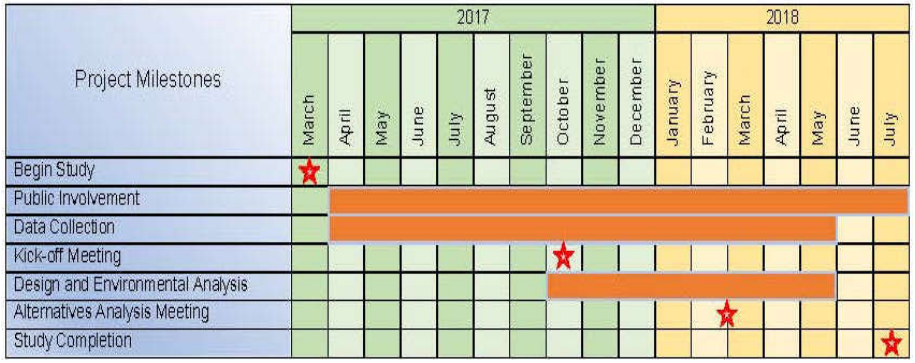
Lisa Maack, Project Manager

Florida Department of Transportation

(954) 717-2253 or Lisa.Maack@dot.state.fl.us

SUN Trails Website—www.FloridaSUNTrail.com

Feasibility Study Schedule



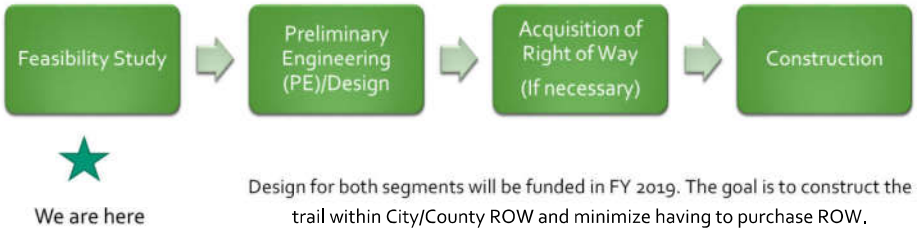




Next Steps

Next steps in the Feasibility Study Process will include additional stakeholder meetings, environmental field review and surveys, and an Alternatives Public Workshop is targeted for Spring 2018 where alternative alignments will be presented for public opinion and feedback.

Following the Feasibility Study, the Florida Department of Transportation will proceed with the project Design in 2019.



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SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Comment Sheet

Please provide any comments or drawings you may have regarding the Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails. The SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida.

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

Name: _____

Address: _____

_____

NOTE: Please complete and return to the "Comments" Box; mail to Lisa Maack at the address on the back of this sheet; or e-mail comments to Lisa.Maack@dot.state.fl.us by Tuesday, October 31, 2017. All comments are part of the project record and are available for viewing by the public and media.

☐ Please add me to the mailing list for the SUN Trails Feasibility Study.

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Fold

Postage Required Place Stamp Here

Lisa Maack
Project Manager
Florida Department of Transportation
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

Fold

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retro Fit FPID: 440033-1

Historic Highwayman Trail FPID: 440033-1

Project Overview

The Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida.

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Indian Hills Historic Highwayman Segment is from North Indian Hills Drive to Georgia Avenue

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Goal is to develop basic information, including operational necessity, financial benefits and costs, and environmental impact.

Feasibility study stages:

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- Environmental Surveys and Studies
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- Environmental Report and Conceptual Design

Contact us

Lisa Maack, Project Manager

Florida Department of Transportation

(954) 717-2253 or Lisa.Maack@dot.state.fl.us

SUN Trails Website—www.FloridaSUNTrail.com

Feasibility Study Schedule

Project Milestones	2017										2018						
	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July
Begin Study	☆																
Public Involvement		■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Data Collection		■	■	■	■	■	■	■	■	■	■	■	■	■	■		
Kick-off Meeting								☆									
Design and Environmental Analysis								■	■	■	■	■	■	■	■		
Alternatives Analysis Meeting												☆					
Study Completion																	☆

Next Steps

Next steps in the Feasibility Study Process will include additional stakeholder meetings, environmental field review and surveys, and an Alternatives Public Workshop is targeted for Spring 2018 where alternative alignments will be presented for public opinion and feedback.

Following the Feasibility Study, the Florida Department of Transportation will proceed with the project Design in 2019.



We are here

Design for both segments will be funded in FY 2019. The goal is to construct the trail within City/County ROW and minimize having to purchase ROW.



SUNTRAIL

Indian Hills Historic Highwayman Segment

Location Map



Legend

- Primary Route
- Alternative Route
- St. Lucie County Parks
- Golf Course
- Segment Termini

Disclaimer:
This map is intended for reference only. Most information contained within is conceptual.

FDOT



SUNTRAIL

Historic Downtown Segment

Location Map



Legend

- Primary Route
- Alternative Route
- St. Lucie County Parks
- Golf Course
- Segment Termini

Disclaimer:
This map is intended for reference only. Most information contained within is conceptual.

FDOT

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Public Kick-Off Meeting — **Please Sign-In** (Sign-in sheets are subject to public record requests) — **October 10, 2017**

Name (Please Print)	Address	E-Mail	Telephone
[illegible]			
CHARLES HAYEK	1111 FERNANDINA ST. F.P., FL 34949	CCHAWK77@AOL.COM	772 828 1080
MICHAEL MCLEOD	822 Atlantic Ave, FP, 34950	MCLAUDIUS2@NETZERO.COM	
Cathy Wassylenko	" "		
PAUL HAYAT	11 WILMONT PLACE PAUL COAST 32164	PAUL@GREENWAY.ORG	386-503-0294
KEN ROBERTS	1001 HARBOR ST. FORT PIERCE 34950		
DAVID ENGEL	ST. LUCIE COUNTY	engeld@stlucieco.org	772-462-5164
Wren Underwood	Jensen Bch, FL	underwoodw@stlucieco.org	772-785-5833
Kerri Jakubczak	2601 Palm Lakes Ave FP 34981	kerrijakubczak@gmail.com	704-718-0486
Peter Buchwald	St Lucie TPO		
Pamela Carithers	1234 Avenue D Fort Pierce 34950	pecarithers@aol.com	407-257-1678
Cynthia O'Connell	420 N 2nd St Ft Pierce	Cindi@OCRealtyTeam.com	772 924-2911
Holly Theuns	419 N 2nd St Ft Pierce 34950	hollytheuns@gmail.com	772-801-950[illegible]
DONALD E ROOT	4321 So. INDIAN RIVER Dr 34982 Ft Pierce		772-979-2987
Ed DeFini	ST. LUCIE TPO		772-462-1533
Lincoln Park Main Street		lincolnparkmainstreet@live.com	772-462-2481

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SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Public Kick-Off Meeting — **Please Sign-In** (Sign-in sheets are subject to public record requests) — **October 10, 2017**

Name (Please Print)	Address	E-Mail	Telephone
Charles Barrowclough	707 SE Pine Oak Terrace Stuart 34997	Charrowclough@comcast.net	772 475 5346
Luke ANDERS	1945 N. OLD DIXIE Hwy FT. P	LEW976@Gmail	772-453-3179
Diane Kimes - Heathcote Botanical Gardens	210 Savannah Rd, 34982	dkimes@heathcotebotanicalgardens.org	772-464-4672
PAUL JAKUBCZAK	2601 PALM LAKES AV	pjakubczak69@gmail.com	772-618-3528
Ed Becht	219 N. 2nd Street FPFL	edbecht@comcast.Net	

3

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Public Kick-Off Meeting | **Staff Sign-In** | **October 10, 2017**

Name (Please Print)	Representing	E-Mail	Telephone
Lynn Kelley	FDOT	lynn.Kelley@dot.state.fl.us	x43341
Lisa Maack	FDOT	Lisa.Maack@dot.state.fl.us	954-717-2253
Ryan Jensen	Atkins	Ryan.Jensen@AtkinsGlobal.com	305.989.5230
Mike Middlebrook	SLC ERD	middlebrookm@stlucieco.org	772-828-1661
Jeff Johnson	SLC PLANNING	johnsonja@stlucieco.org	772-462-1580
Amanda Thompson	SLC ERD	Thompsonam@stlucieco.org	772.462.2528
Jack Andrews	City of Ft. Pierce	JAndrews@city-FtPierce.com	772-467-3773
RESHAW FIELDS			

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Comment Sheet

Please provide any comments or drawings you may have regarding the Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails. The SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida.

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

PLEASE USE BITUMINUS RATHER THAN CONCRETE TO PROVIDE A BETTER EXPERIENCE FOR JOGGERS & WALKERS.

Name: DAVID LENGER

Address: ST. LUCIE CO. BOCC

NOTE: Please complete and return to the "Comments" Box; mail to Lisa Maack at the address on the back of this sheet; or e-mail comments to Lisa.Maack@dot.state.fl.us by Tuesday, October 31, 2017. All comments are part of the project record and are available for viewing by the public and media.

☐ Please add me to the mailing list for the SUN Trails Feasibility Study.

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SUN Trail Feasibility Study

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- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

DOWNTOWN SEGMENT - SHOULD NOT GO UP 2ND ST. UNTIL AVE A TOO CONJESTED BEFORE THEN

INDIAN HILLS SEGMENT - PREFER EAST SIDE ALONG TRACKS MORE SPACE TO WORK WITH

Name: CHARLES HAYEK

Address: 1111 FERNANDINA ST
FORT PIERCE, FL 34949
CCHAWK77@AOL.COM

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Honorable Governor Rick Scott
Mr. Mike Dew, Secretary, Florida Department of Transportation
Lisa Maack, FDOT District Four Project Manager
3400 West Commercial Boulevard, Ft. Lauderdale, Fl 33309

October 10, 2017

Ref: Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail
FDOT: Financial Management Numbers 44033-1 and 440034-1

Honorable Governor Rick Scott and Secretary Mike Dew:

Enclosed is a copy of a letter which we received regarding the above listed projects being proposed by FDOT over properties within the Port of Ft. Pierce and FECI railroad switching yard area which are in most cases private in ownership. Almost all of these properties are currently zoned Marine Industrial or Commercial/Industrial and are used for a variety of commerce related activities. The Port of Ft. Pierce properties have been in use since the early 1920s and the Florida Ports Council has recently funded infrastructure and road improvements within the Port area for the purpose of furthering commerce. The FECI (Flagler) railroad, was built in the late 1800s, and both areas have been the commercial life blood of Ft. Pierce for over 100 years. We support the continued usage of these properties as they are currently used and zoned in the 2015-16 Ft. Pierce, St Lucie County Comprehensive Master Plan and do not believe they should be included in the areas being considered for inclusion in another layer of quasi-government regulations.

There is no overriding public benefit or need for these properties, many privately owned, to be included in the Historic Downtown Retrofit Trail designation and Historic Highwayman Trail. In fact enhanced pedestrian traffic may prove detrimental to continued commercial / industrial uses and future job creation. We believe the citizens tax dollars could be much better utilized in improving the viability of the properties as currently zoned. Your prompt attention to this matter would be appreciated.

Sincerely yours,

Hans Van Zonneveld, Managing Partner
Mollywog, LLC, 1302 North 2nd Street, FT. Pierce, Florida
281 Sabal Palm Lane, Indian River Shores, Florida 32963,
Ph: 772-231-4000, email sunfieldgroup@yahoo.com

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Comment Sheet

Please provide any comments or drawings you may have regarding the Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails. The SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida.

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

Historic Markers for trail segments that chronicles The history along Indian River Drive (i.e, Grover Mc Carthy's Home site: The Original Hall of Fame Highwaymen Artist that sold their paintings along Indian River Drive). Also the significance of the people that lived there and Once Judge Alto Adams (Federal Courthouse on US Hwy 1) and other prominent families. Downtown Fort Pierce and it's Fishing Tournaments and other notable history facts.

* Also, Florida Humanities Council Story telling smart phone app could be used ~~to~~ tell the stories along ~~the~~ both segments of the Sun Trail, complete with pictures and music.

Name: Pamela Carithers
Address: 1934 Avenue D
Fort Pierce, FL 34950

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Honorable Governor Rick Scott
Mr. Mike Dew, Secretary, Florida Department of Transportation
Lisa Maack, FDOT District Four Project Manager
3400 West Commercial Boulevard, Ft. Lauderdale, Fl 33309 & Lisa.Maack@dot.state.fl.us

October 10, 2017

Ref: Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail
FDOT: Financial Management Numbers 44033-1 and 440034-1

Honorable Governor Rick Scott and Secretary Mike Dew:

We are in receipt of the notice sent on behalf of the FDOT District Four, inviting surrounding property owners to a public kick-off meeting to learn about the feasibility study for the above referenced projects.

It was disturbing to view the Location Map which reflects the projects proposed location of SUN trails north of Seaway Dr. We strongly oppose the proposed trails specifically north of Seaway drive which run thru the port operations area, most of which are privately owned properties and designated for commercial/industrial use. It strikes us that shared-use nonmotorized (SUN) trails to increase pedestrian traffic thru commercial/industrial properties arguably would do more harm than good, is not in the best interest of the state and would be a grave error.

We believe you already know that Florida Department of Transportation (FDOT) engaged in a multiphase endeavor to update the 2002 Port Master Plan for the Port of Fort Pierce, an irreplaceable asset. As a result in September 2015, St. Lucie County Ordinance amended the Comprehensive Port Master Plan. I'd direct your attention to attached Figures 2A-1 and 2A-2 of this St. Lucie County Ordinance. Please note the "port operations area" north of seaway drive along with the future land use of Industrial, both General Industrial and Marine Industrial on the surrounding properties of the proposed Historic Downtown Fort Pierce Trail location. Therefore, the Historic Downtown Trails proposed location conflicts with this ordinance.

Additional factors from the reports prepared for FDOT to consider:

1) It's consensus plan unified market demand and public desires to more clearly define the communities vision to capitalize the port's potential.
2) It identified opportunities of a more streamlined organizational structure and intergovernmental collaboration to allow for active marketing of the port to its highest and best use.
3) It recommended the County and City compose and adopt consistent land use and zoning plans to promote and support the economic development while providing flexibility to meet market demand and desired mixed uses.
4) The Florida Ports Council along with St. Lucie County recently funded $7.4 million in infrastructure improvements including rebuilding 2nd street from Fisherman's Warf north to where the road dead ends: upgrading gas, electric and sewer lines; and storm water retention ponds to promote and encourage economic development.
5) Florida ports have consistently proven to be significant economic drivers, the reason smart urban areas covet seaports which provide industrial, non-local economic base.
6) Ports fit in the footprint of Governor Scotts dream to attract more growth and create jobs.
7) Ports are economic engines that bring better paying sustained jobs and further support strong indirect and induced jobs in the community and region, something other sectors simply do not do.
8) The study reviewed the potential of the Port of Ft. Pierce to be designated a Strategic Intermodal System Facility, which could mean additional economic cargo opportunities available as Florida attracts an expected increase in maritime traffic from the widening of the Panama Canal. The port growth potential in its future is as a niche port serving nearby markets and for feeder services to and from large global vessels docking after or before transitioning the expanded Panama Canal.
9) Fort Pierces intermodal connection possibilities including air, Interstate 95 and the Fl. Turnpike, all within minutes of the port, and FEC rail on port property which offer potential that is much easier to accomplish than is the case at other nearby Fl. Ports.

For these reasons we do not believe the port operations area, north of seaway drive, should be considered as an area to locate the proposed Historic Downtown Ft. Pierce Trail. Instead we support positioning the Port of Fort Pierce for development to its highest and best use as a new economic engine to grow and improve the city.

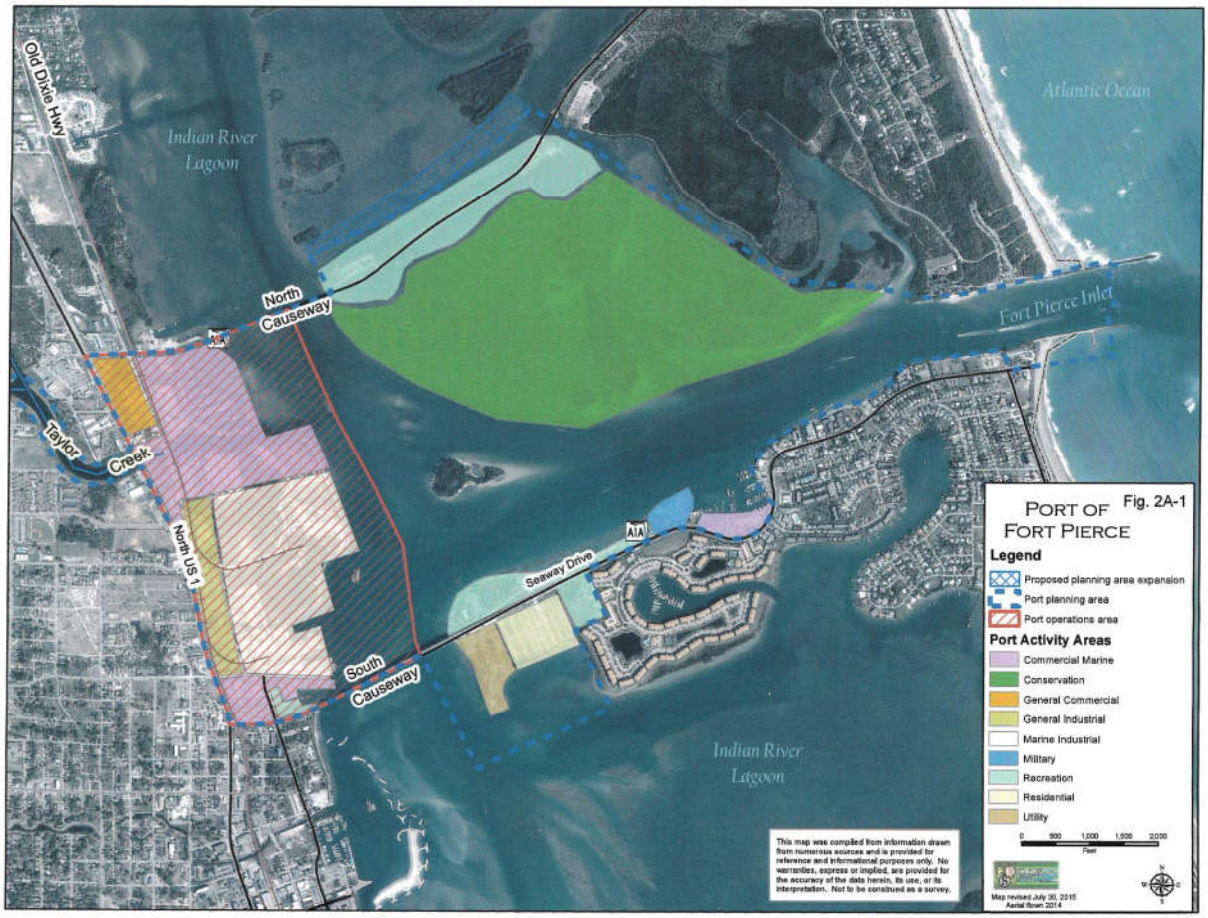
We urge you to consider these factors and appreciate your continued commitment to improving Florida.

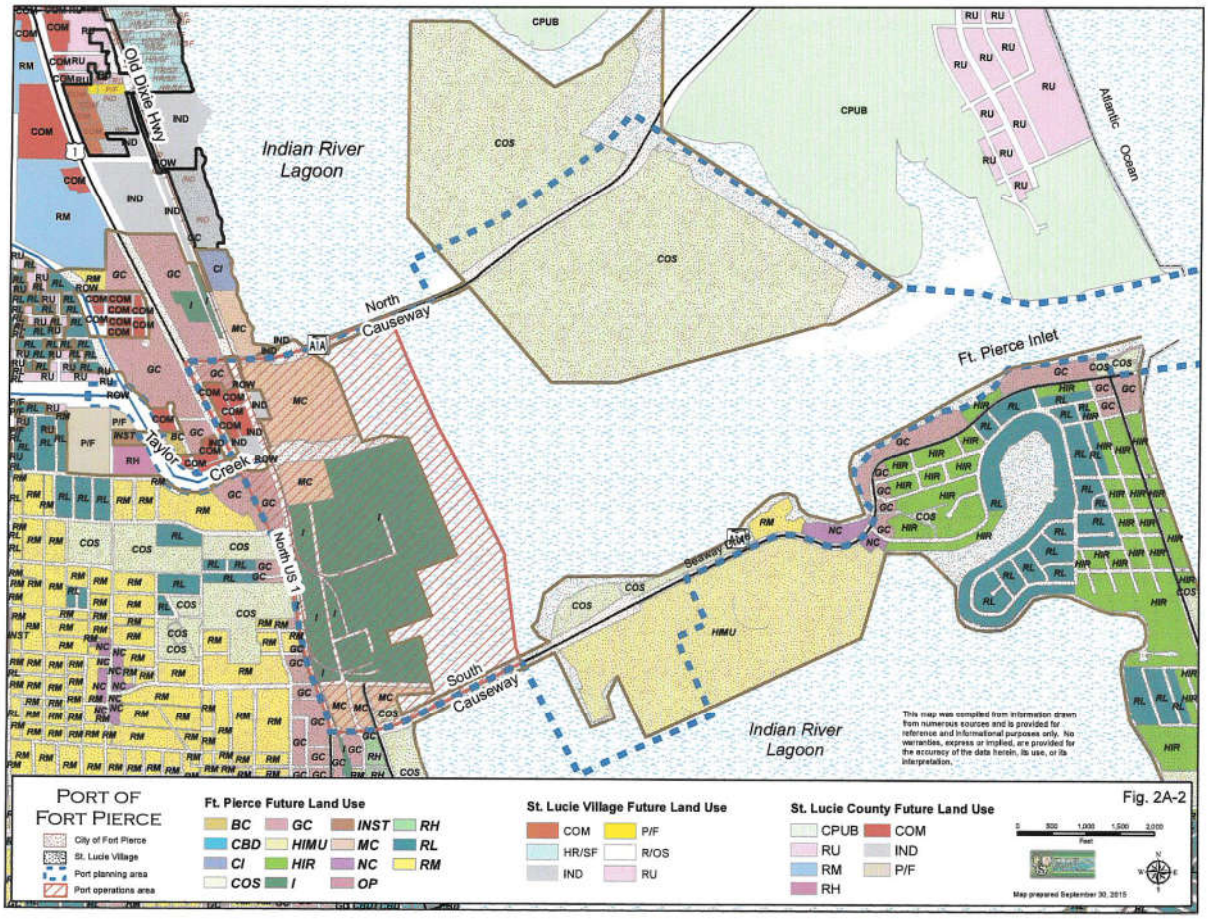
Sincerely,

Carmela Bell Christina R. Bell

Carmela Bell and Christina Bell
Destin Beach Inc., President and Vice President
Property owner of 67 acres - Port of Ft. Pierce
1008 Hwy 98 East Box B, Destin, Fl. 32541
Ph: 850-830-8030, email: cbell712@gmail.com Carmela Bell or Christina Bell crbell0660@gmail.com

Attachment: Figures 2A-1 and 2A-2 to St. Lucie County Ordinance


Old Dixie Hwy
Indian River Lagoon
Atlantic Ocean
North Causeway
Fort Pierce Inlet
Taylor Creek
North US 1
A1A
Seaway Drive
South Causeway
Indian River Lagoon
PORT OF FORT PIERCE
Fig. 2A-1
Legend
Proposed planning area expansion
Port planning area
Port operations area
Port Activity Areas
Commercial Marine
Conservation
General Commercial
General Industrial
Marine Industrial
Military
Recreation
Residential
Utility
This map was compiled from information drawn from numerous sources and is provided for reference and informational purposes only. No warranties, express or implied, are provided for the accuracy of the data herein, its use, or its interpretation. Not to be construed as a survey.
Map revised July 30, 2015
Aerial flown 2014


Old Dixie Hwy
Indian River Lagoon
Atlantic Ocean
North Causeway
Ft. Pierce Inlet
Taylor Creek
North US 1
A1A
Seaway Drive
South Causeway
Indian River Lagoon
PORT OF FORT PIERCE
Fig. 2A-2
City of Fort Pierce
St. Lucie Village
Port planning area
Port operations area
Ft. Pierce Future Land Use
BC GC INST RH
CBD HIMU MC RL
CI HIR NC RM
COS I OP
St. Lucie Village Future Land Use
COM P/F
HR/SF R/OS
IND RU
St. Lucie County Future Land Use
CPUB COM
RU IND
RM P/F
RH
This map was compiled from information drawn from numerous sources and is provided for reference and informational purposes only. No warranties, express or implied, are provided for the accuracy of the data herein, its use, or its interpretation.
Map prepared September 30, 2015

Feagle, Brooke

From: Jensen, Ryan M
Sent: Thursday, October 12, 2017 10:45 AM
To: Fields, Reshawn; Gaiotti, Gary E
Cc: Feagle, Brooke
Subject: RE: Historic Downtown Trail
Attachments: Downtown Comments.pdf

Does the primary route go through the port or is it adjacent to the west side of the port?
The Primary route (currently) is shown along 2nd Street on the Historic Downtown Section which is West of what I believe is the Port.

Also, are all the possible routes on public roadway right-of-ways?
No the routes are sometimes on FEC R/W for example the 2 short curved sections at the North end of the Historic Downtown section. There are also areas where the route goes thru property that is currently undeveloped and we are not sure if that is City, County, FEC or privately owned. Attached image for reference.

Ryan Jensen, E.I.
Engineer II, Transportation Design

ATKINS
800 Waterford Way (NW 62nd Ave), 7th floor, Miami, FL 33126

Tel: +(954) 903-3614 | Fax: 1 (954) 733-1101 | Mob: +(305) 989-5230
Email: Ryan.Jensen@atkinsglobal.com | Web: www.atkinsglobal.com | Careers: www.atkinsglobal.com/careers

From: Fields, Reshawn
Sent: Thursday, October 12, 2017 10:30 AM
To: Gaiotti, Gary E <Gary.Gaiotti@atkinsglobal.com>; Jensen, Ryan M <Ryan.Jensen@atkinsglobal.com>
Cc: Feagle, Brooke <brooke.feagle@atkinsglobal.com>
Subject: FW: Historic Downtown Trail

Ryan/Gary,

Please provide a response to this question, and I'll respond to Lisa.

Reshawn

From: Maack, Lisa [mailto:Lisa.Maack@dot.state.fl.us]
Sent: Thursday, October 12, 2017 10:15 AM
To: Fields, Reshawn <Reshawn.Fields@atkinsglobal.com>
Subject: FW: Historic Downtown Trail

Reshawn,

Could you assist me in responding to this question? See below.

Thanks,
Lisa

Lisa W. Maack, AICP
Multimodal Coordinator
FDOT D4
954-717-2253

From: Merritt, Larry
Sent: Wednesday, October 11, 2017 4:13 PM
To: Maack, Lisa
Cc: Padron, Gaspar; Rand, Lauren; Goddeau, Amie
Subject: RE: Historic Downtown Trail

Lisa,

Does the primary route go through the port or is it adjacent to the west side of the port? Also, are all the possible routes on public roadway right-of-ways?

Thanks.

Larry Merritt |
Passenger Operations Manager
District 4 Modal Development
Florida Department of Transportation
FDOT Only: 884-4683 | Direct: 954-777-4683

From: Maack, Lisa
Sent: Wednesday, October 11, 2017 2:49 PM
To: Goddeau, Amie; Merritt, Larry
Cc: Padron, Gaspar; Rand, Lauren
Subject: FW: Historic Downtown Trail

Amie/Larry,

I received the attached letter to the Governor, Secretary Dew and myself in opposition to the SUN Trail project alignments that are adjacent to the Port of Fort Pierce.

Lisa

Lisa W. Maack, AICP
Multimodal Coordinator
FDOT D4
954-717-2253

From: Bell, Carmela [mailto:Carmela.Bell@resortquest.com]
Sent: Tuesday, October 10, 2017 11:20 AM
To: Maack, Lisa
Cc: crbell0660@gmail.com
Subject: Historic Downtown Trail

We submit the attached. Please confirm your receipt by a return email.

Sincerely,

Carmela Bell
Broker
ResortQuest Real Estate
35000 Emerald Coast Pkwy.
Destin, FL 32541
O: 850-337-5000
C: 850-830-8030
E: cbell@resortquest.com

A Wyndham Worldwide Company, NYSE: WYN
Search Real Estate: www.DestinFLProperties.com

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Wyndham monitors all incoming and outgoing email communications, including the content of emails and attachments, for purposes of security, legal compliance, training, quality assurance and other purposes permitted by applicable law."

Public Alternatives Analysis Meeting

June 5, 2018

FDOT

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 W. Commercial Boulevard
Fort Lauderdale, FL 33309

MIKE DEW
SECRETARY

May 24, 2018

Dear Agency Official:

RE: **Alternatives Analysis Meeting Announcement**
Feasibility Study of Two Shared-Use Nonmotorized (SUN) Trails:
Historic Downtown Fort Pierce Retrofit Trail and
Historic Highwayman Trail
Limits: Indian Hills Drive to North Causeway Drive in Fort Pierce
St. Lucie County, Florida
Financial Project ID Numbers: 440033-1 and 440034-1

On behalf of the Florida Department of Transportation (FDOT), District Four, you and your staff are invited to an Alternatives Analysis Public Meeting for the Feasibility Study for the above referenced project. A Feasibility Study is FDOT's process to evaluate the social, economic and environmental impacts associated with a proposed transportation project. This Alternatives Analysis Meeting will provide an overview of both project segments, any potential issues of concern, and display information about the alternatives that were developed during the Feasibility Study.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration (FHWA) and FDOT.

The Alternatives Analysis Public Meeting is scheduled for **Tuesday, June 5, 2018, from 5:00 p.m. to 7:00 p.m. at the Old City Hall located at 315 Avenue A in Fort Pierce, Florida 34950**. The meeting will begin as an open house at 5:00 p.m. with a short presentation at 5:30 p.m., followed by a comment period. Notices are being sent to all property owners and tenants located within at least 300 feet on either side of the proposed alignment and to other public officials, regulatory agencies, organizations, and individuals interested in the project. Attached is a copy of the Public Notice for the Meeting.

If you require further information, please do not hesitate to contact the Project Manager, Ms. Lauren Rand at (954) 777-4499 or toll free at (866) 336-8435, via email at lauren.rand@dot.state.fl.us or visit the project website at www.FloridaSUNTrail.com.

Sincerely,

Lauren Rand

Lauren Rand, MPE, CPM
District Four Multimodal Coordinator

LR:rf

Attachment: Public Notice

ALTERNATIVES ANALYSIS PUBLIC MEETING

Historic Downtown Fort Pierce Retrofit Trail and Historic Highwayman Trail Shared-Use Nonmotorized (SUN) Trails
From Indian Hills Drive to North Causeway Drive in Fort Pierce
Feasibility Study
St. Lucie County, Florida
Financial Project ID Numbers: 440033-1 and 440034-1

The Florida Department of Transportation (FDOT), District Four, will hold an Alternatives Analysis Public Meeting for the Feasibility Study for the above referenced projects. The meeting will be held as an informal open house from **5:00 p.m. to 7:00 p.m. with a short presentation at 5:30 p.m. on Tuesday, June 5, 2018 at the Old City Hall located at 315 Avenue A in Fort Pierce, Florida 34950.**

The purpose of the Alternatives Analysis Meeting is to provide an overview of both project segments, any potential issues of concern, and display information about the alternatives that were developed during the Feasibility Study. Project representatives will be available during the meeting to discuss the projects, answer questions, and receive comments.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016 and executed by the Federal Highway Administration (FHWA) and FDOT.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who require special accommodations under the Americans with Disabilities Act (ADA) or persons who require translation services (free of charge) should contact Ms. Lauren Rand, Project Manager, at least seven (7) days prior to the meeting.

Contact Information:
Ms. Lauren Rand, Project Manager
3400 W. Commercial Boulevard, Fort Lauderdale, FL 33309
Telephone: (954) 777-4499 or toll free at (866) 336-8435
Email: lauren.rand@dot.state.fl.us,

You may also visit the project website at
www.FloridaSUNTrail.com.



ALTERNATIVES ANALYSIS PUBLIC

FDOT

DATE: Tuesday, June 5, 2018
TIME: 5:00 p.m. – 7:00 p.m.
PLACE: Old City Hall
315 Avenue A
Fort Pierce, Florida 34950

FLORIDA DEPARTMENT OF TRANSPORTATION

Florida Department of Transportation

RICK SCOTT
GOVERNOR

3400 W. Commercial Boulevard
Fort Lauderdale, FL 33309

MIKE DEW
SECRETARY

May 23, 2018

SUBJECT: Alternatives Analysis Meeting Announcement
Feasibility Study of Two Shared-Use Nonmotorized (SUN) Trails:
Historic Downtown Fort Pierce Retrofit Trail and
Historic Highwayman Trail
Limits: Indian Hills Drive to North Causeway Drive in Fort Pierce
St. Lucie County, Florida
Financial Project ID Numbers: 440033-1 and 440034-1

Dear Property Owner or Current Resident:

The Florida Department of Transportation (FDOT), District Four, will hold a public Alternatives Analysis Meeting for the two above referenced projects. The Alternatives Analysis Meeting will be held on Tuesday, June 5, 2018 with an open house from 5 p.m. to 7 p.m. at the Old City Hall located at 315 Avenue A in Fort Pierce. A brief presentation will be provided at 5:30 p.m. A location map with the meeting site is provided with this letter.

The study limits for the Historic Downtown Fort Pierce Retrofit study are from Georgia Avenue to North Causeway Drive (with an exception along US Highway 1 from Avenue H to Avenue M), for an overall distance of about 2.5 miles. The study limits for the Historic Highwayman Trail are from Indian Hills Drive to Georgia Avenue, a distance of about 2 miles. The project consists of building multi-use recreational pathways and includes the conceptual development of necessary trail heads, site furnishing details, rest stops and interpretive display recommendations. The trails will be developed to accommodate a range of appropriate non-motorized uses.

This letter is being sent to all property owners and tenants within at least 300 feet of either side of the proposed project and to public officials, regulatory agencies, organizations, and individuals interested in the project. This Alternatives Analysis Meeting will provide an overview of both project segments, any potential issues of concern, and display information about the alternatives that were developed during the Feasibility Study. Your attendance is encouraged and your participation and comments are appreciated. Persons wishing to submit written statements may do so at the meeting or by sending them to Lauren Rand, project manager, 3400 W. Commercial Boulevard, Fort Lauderdale, Florida 33309 or by email to Lauren.Rand@dot.state.fl.us.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. Persons who require accommodations under the Americans with Disabilities Act or persons who may require translation services (free of charge) should contact Lauren Rand at (954) 777-4499 at least seven (7) days prior to the meeting.

If you have questions about the project or scheduled Alternatives Analysis Meeting, please contact Project Manager Lauren Rand at the phone number or email address listed above. You may also visit the SUN Trails website at www.FloridaSUNTrail.com.

Sincerely,

Lauren Rand, MPE, CPM
District Four Multimodal Coordinator

LR:rf

Attachment: Location Map

Feagle, Brooke

From: FL-Rules@dos.state.fl.us
Sent: Tuesday, May 29, 2018 2:48 PM
To: Cimini, Randy D
Subject: Submit Notice in FAR

You have successfully submitted a notice for publication in the Florida Administrative Register on 5/29/2018 2:47:09 PM.

Department: Other Agencies and Organizations
Organization: ATKINS - Bartow
Notice type: Notice of Meeting/Workshop Hearing
Issue: 44/105

Once this notice is published you will be able to view it by clicking the following link:
https://urldefense.proofpoint.com/v2/url?u=http-3A__www.FLRules.org_gateway_View-5FNotice.asp-3Fid-3D20472061&d=DwIFAg&c=cUkzcZGZt-E3UgRE832-4A&r=Jau9xTOVgJhpkpAByd9CJOcaYIHaUxaX59Yqa2woKRg&m=GwHIMW0AnRzGwJak-0EzxR2_NgVPAwlSBJABSKrL6xc&s=-csuoQPcbobK0MY79j4KDnyxXkj7VCp5OdO7fhWc39g&e=

You may contact the Florida Administrative Register office at (850)245-6270 for additional information.

Notice of Meeting
DEPARTMENT OF TRANSPORTATION

The Florida Department of Transportation (FDOT), District Four, is hosting an Alternatives Analysis Meeting as part of the Feasibility Study for two segments of the Shared-Use Nonmotorized (SUN) Trail Program, the Historic Downtown Fort Pierce Retrofit segment and Historic Highwayman Trail Gap segment in Fort Pierce, St. Lucie County. FDOT invites all members of the public to attend.

DATE AND TIME: Tuesday, June 5, 2018 from 5 p.m. to 7 p.m.
PLACE: Old City Hall, 315 Avenue A, Fort Pierce, FL 34950

GENERAL SUBJECT MATTER TO BE CONSIDERED: This public meeting offers the community the opportunity to express their views about the location, conceptual design, and social, economic, and environmental effects of constructing the trails on both proposed segments. The study limits for the Historic Downtown Fort Pierce Retrofit segment are from Georgia Avenue to North Causeway Drive, with an exception along US Highway 1 from Avenue H to Avenue M; Financial Project ID 440033-1. The study limits for the Historic Highwayman Gap Trail segment are from Indian Hills Drive to Georgia Avenue; Financial Project ID 440034-1.

FDOT will provide an overview of both project segments, any potential issues of concern, and display information about the alternatives that were developed during the Feasibility Study. The meeting will include a brief presentation at 5:30 p.m. followed by an open house where people can ask questions and provide comments to FDOT representatives in a one-on-one setting. Written comments will be accepted.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. People requiring special accommodations under the Americans with Disabilities Act or who require translation services (free of charge) should contact Lauren Rand, project manager, at (954) 777-4499 or toll free at 1 (866) 336-8435, or by email to Lauren.Rand@dot.state.fl.us at least seven (7) days prior to the meeting.

If you are hearing or speech impaired, please contact FDOT using the Florida Relay Service, 1 (800) 955-8771 (TDD) or 1 (800) 955-8770 (Voice).

For more information about the project or the Alternatives Analysis Meeting, please contact Lauren Rand or visit the SUN Trail website www.FloridaSUNTrail.com.

Hawaii volcano leaves few escape routes

Denise Laitinen
Special to USA TODAY

KEAAU, Hawaii – As the Kilauea volcano spews lava and toxic gas, weary residents are facing the threat of fewer routes to escape – and the possibility of finding themselves stranded.

Three rural highways serve as evacuation routes for roughly 5,000 residents living near the erupting lava fissures. One is completely blocked and another remains open only to local residents – for now.

The biggest concern is the third exit route: Highway 130, a main connector road that runs from north to south through the region.

Several large cracks have formed in the road due to magma disrupting earth as it travels downslope underground. Nine metal plates have been installed over the cracks to maintain access.

But if those fail and the highway becomes impassable, residents in numerous neighborhoods will be stranded.

"We're doing everything humanly possible to keep Highway 130 open," says Don Smith, an engineering program manager for the Hawaii Department of Transportation.

To keep the road passable, transportation officials will reinforce the metal plates, fill in the cracks with aggregate material and use heat-resistant steel reinforced plates if needed.

"We have multiple contingencies in place and we'll go down the list depending on the circumstances," said Tim Sakahara, public information officer for the Hawaii transportation department.

One backup plan includes shoring up a road that runs through the closed Volcanoes National Park for use as a one-way emergency evacuation route.

But that also presents several challenges. While only a small portion of Chain of Craters Road has to be fixed, the route passes close to the Halema'uma'u crater, near the volcano summit, which continues to sporadically spew ash thousands of feet into the air.

Despite the uncertainty, Jean Howell, a Seaview Estates resident who lives a few miles downwind from where the lava is entering the ocean, is staying put.

"My knowing is that I am right here, right now, because this is where I am supposed to be," Howell said. "If I was supposed somewhere else I'd be guided by a higher knowing within me to go somewhere else."



Will Devine takes snapshots Thursday of lava flowing in Leilani Estates. Devine says he lost his home to the Kilauea volcano eruption. ROBERT HANASHIRO/USA TODAY NETWORK

If authorities order an evacuation for her area, Howell said she hasn't decided whether she would leave. "There really aren't a whole lot of places to go," she said.

Fellow Seaview resident Mark Wyatt is in a similar boat. He retired to the Big Island 12 years ago and manages three rental properties in the coastal neighborhood.

While his tenants and about 60 percent of the neighborhood have evacuated, Wyatt is staying as long as possible to watch over the homes.

"Even if they do mandatory evacuations they're going to have to drag me out of here," he said. "I'm going to have to see the lava before I decide to leave. I don't know where else I would go, because I love it here."

Prince Kelī'iho'omalu's family has lived in Kalapana for nearly a century and his father, Robert Kelī'iho'omalu, is the namesake of the internationally known Uncle Robert's Kava Bar and weekly farmers market.

As a member of a road maintenance crew with Hawaii County Department of Public Works, Kelī'iho'omalu relocated out of Kalapana due to his job. He said many of his relatives in Kalapana plan to stay.

"Their view is that they're not going to move unless they really have to," says Kelī'iho'omalu. "The majority of them are retired" and grow their own vegetables and raise pigs and chickens.

"They know they can survive off the land, that's why they feel comfortable staying. Part of it's cultural and part of it is they have nowhere else to go."

He adds younger relatives who have jobs requiring daily travel on Highway 130 will soon face tough choices. "They're going to have to make a decision (to stay or evacuate) sooner or later."

Depending on which way the lava travels and where new fissures erupt, the only way out may be by helicopter.

Officials are formulating plans to conduct mass air evacuations should the region's main roads be compromised.

According to a report in the Honolulu Star Advertiser, Hawaii Army National Guard commander Brig. Gen. Kenneth Hara told county, state and federal officials that two Sikorsky CH-53 Sea Stallion helicopters are available for evacuation purposes.

Hara was recently tasked to spearhead Joint Task Force 5-0, a dual command team comprised of National Guard and active military personnel based in the town of Hilo, roughly 15 miles north of the eruptions on the lower East Rift Zone. According to a Hawaii County spokesperson, the units can evacuate upwards of 500 people within two hours.

Great American Gun Shows
Big Weekend Event, Buy-Sell-Trade



STUART, FL
Martin County Fairgrounds
2616 SE Dixie Highway, Stuart
June 2-3, 2018
Saturday 9-5 - Sunday 10-4
$1.00 OFF Admission 12 and under Free with adult admission
Vendors please call 865-453-0074 or visit www. greatamericanpromotionsllc.com
For info on Concealed Carry Class Please call 561.214.5115

CITY OF PORT ST. LUCIE FLORIDA
PORT ST. LUCIE PARKS & RECREATION

CHANGE OF LOCATION FOR THE
2018 MEMORIAL DAY SERVICE
IN PORT ST. LUCIE

The United Veterans of Port St. Lucie and the City of Port St. Lucie Parks & Recreation's 2018 Memorial Day Service, scheduled for Monday, May 28, 2018, at 10 a.m., at Veteran's Memorial Park, has now been moved and will take place at the PSL Community Center, located at 2195 SE Airoso Blvd in the main ballroom. Weather permitting, the rifle salute will be in the outside plaza of the Community Center. Due to the recent heavy rain, conditions at the park are unconducive for this service.

FOR MORE INFORMATION, PLEASE CONTACT (772) 878-2277

SUNTRAIL
SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit
Historic Highwayman Trail Gap
FDOT
Financial Project Numbers: 440033-1 and 440034-1

ALTERNATIVES ANALYSIS MEETING

The Florida Department of Transportation (FDOT) District Four, is hosting an Alternatives Analysis Meeting as part of the Feasibility Study for two segments of the Shared-Use Non-motorized (SUN) Trail Program, the Historic Down-town Fort Pierce Retrofit segment and Historic Highwayman Trail Gap segment in Fort Pierce, St. Lucie County (see location map). The public meeting is from 5 p.m. to 7 p.m., Tuesday, June 5, 2018 at the Old City Hall located at 315 Avenue in Fort Pierce.



At this public meeting, FDOT will provide an overview of both project segments, any potential issues of concern, and the trail alternatives. The study limits for the Historic Downtown Fort Pierce Retrofit study are from Georgia Avenue to North Causeway Drive, with an exception along US Highway 1 from Avenue H to Avenue M. The study limits for the Historic Highwayman Trail Gap are from Indian Hills Drive to Georgia Avenue.

The meeting will include a brief presentation at 5:30 p.m. followed by an open house where people can ask questions and provide comments to FDOT representatives in a one-on-one setting. Written comments will be accepted. Your comments are an important part of this study.

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by FDOT pursuant to 23 U.S.C. § 327 and a Memorandum of Understanding dated December 14, 2016, and executed by FHWA and FDOT.

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status. People requiring special accommodations under the Americans with Disabilities Act can contact Lauren Rand, project manager, at (954) 777-4499 or toll free at 1 (866) 336-8435, or by email to Lauren.Rand@dot.state.fl.us at least seven (7) days prior to the meeting.

For more information about the SUN Trail Feasibility Study, please contact Lauren Rand or visit the SUN Trail website at www.FloridaSUNTrail.com.

May 27, 2018 TCN-2026275

Treasure Coast Newspapers | **TCPALM**

St. Lucie News-Tribune
1939 SE Federal Highway, Stuart, FL 34994

AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA
COUNTY OF ST. LUCIE

Before the undersigned authority personally appeared, Natalie Zollar, who on oath says that she is Classified Inside Sales Manager of the St. Lucie News-Tribune, a daily newspaper published at Fort Pierce in St. Lucie County, Florida: that the attached copy of advertisement was published in the St. Lucie News-Tribune in the following issues below. Affiant further says that the said St Lucie News-Tribune is a newspaper published in Fort Pierce, in said St. Lucie County, Florida, and that said newspaper has heretofore been continuously published in said St. Lucie County, Florida, daily and distributed in St. Lucie County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid or promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper. The St. Lucie News-Tribune has been entered as Periodical Matter at the Post Offices in Fort Pierce, St. Lucie County, Florida and has been for a period of one year next preceding the first publication of the attached copy of advertisement.

Customer	Ad Number	Copyline	PO #
930054 - ATKINS NORTH AMERICA	2026275	SUN TRAILS NEWS AD	

Pub Dates
May 27, 2018

Sworn to and subscribed before me this day of, May 29, 2018, by

Natalie Zollar, who is

(X) personally known to me or

( ) who has produced _____ as identification.

Karol E Kangas
Karol Kangas **Notary Public**

KAROL E KANGAS
Notary Public - State of Florida
Commission # GG 126041
My Comm. Expires Jul 29, 2021
Bonded through National Notary Assn.

SUN Trail Feasibility Study

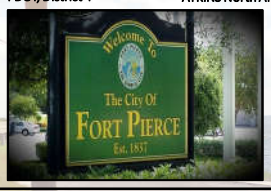
Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Alternatives Analysis Meeting
June 5, 2018

Lauren Rand, MPE, CPM
FDOT, District 4

Reshawn Fields, AICP
ATKINS North America



1

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

- Presentation and Q&A – 5:30pm
  - Overview of Fort Pierce SUN Trail Projects:
    - Historic Downtown Fort Pierce Retrofit
    - Historic Highwayman Trail Gap
  - Feasibility Study Process and Schedule
  - Alternatives and Evaluation
  - Public Comments and Next Steps
- Open House 6:00 pm to 7:00 pm





2

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Title VI of the Civil Rights Act of 1964

Public participation is solicited without regard to race, color, national origin, age, sex, religion, disability, or family status.

Persons wishing to express their concerns about Title VI may do so at the table located at the entrance or by contacting either:

District Four
Florida Department of Transportation
District Four Title VI Coordinator
Shavon Nelson
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309-3421
(954) 777-4389 or
Toll free at (866) 336-8435 ext. 4190
Shavon.Nelson@dot.state.fl.us

Central Office
Florida Department of Transportation
State Title VI Coordinator
Jacqueline Paramore
605 Suwannee Street, MS 65
Tallahassee, Florida 32399-0450
(850) 414-4753
Jacqueline.Paramore@dot.state.fl.us

3

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Study Partners

The Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN trail studies are being conducted by:

The Florida Department of Transportation in association with -

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SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Studies conducted to evaluate two proposed SUN trail segments

These Alternatives were identified in the St. Lucie County May 2016 SUN Trail Application





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SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1

Historic Highwayman Trail
Financial Project Number: 440034-1

Purpose of Study

- Trails will provide regional connectivity throughout St. Lucie County and Florida as part of the Greenways Trail System. Will connect:
  - FEC Overpass
  - Indian Hills Recreation Area
  - Savanna's Preserve State Park
- Trails benefits include:
  - Ability to make a community more livable and cohesive
  - Connect the community to other communities and amenities
  - Improve the economy through tourism and civic improvement
  - Preserve and restore open space
  - Provide opportunities for physical activities that can promote and improve fitness and mental health.

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SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Purpose of Study

- The feasibility study conducted for both segments is a planning process that will assess:
  - Engineering requirements
  - Impacts and enhancements to the natural, physical, and social environments
  - Costs
  - Public input
- Study will vet options and provide a basis for future phases:
  - Preliminary Engineering Studies
  - Project Development and Environment (PD&E) Studies
  - Final Design
  - Right-of-Way Acquisition (if necessary)
  - Construction

7

SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Feasibility Study Process

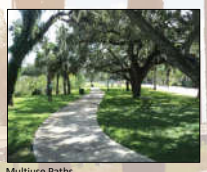
Project Milestones	2017									2018							
	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September
Begin Study	☆																		
Public Involvement		■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Data Collection		■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Kick-off Meeting								☆											
Design and Environmental Analysis								■	■	■	■	■	■	■	■	■			
Alternatives Analysis Meeting																☆			
Draft and Final Feasibility Reports														■	■	■	■	■	■
Study Completion																			☆

8

SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Where we are currently – Alternatives Analysis

- Alternatives developed through stakeholder coordination, design, and environmental analysis are presented tonight for public input
- Identify potential alignments and facility types for each Alternative.


Multiuse Paths




Sharrows


Bike Lanes

9

Historic Downtown Fort Pierce Retrofit

- Limits: From Georgia Avenue north through downtown area close to waterfront, ending at North Causeway Drive.
- NOTE: The "gap" in the trail will not be studied under this Feasibility Study due to future work on Federal Highway/US1 at Avenue H.
- Alternatives:
  - Primary Alternative: Red line indicates proposed trail SUN Trail application
  - River Walk Alternative: Blue line *NEW Alternative*
  - South Alternative 1: Green Line
  - South Alternative 2: Yellow Line

Visit the workshop stations during the meeting tonight for more details!



10

Historic Highwayman Trail Gap

- Limits: From North Indian Hills around the Indian Hills Golf Course, ending at Georgia Avenue. Would connect with the Historic Downtown segment to the north.
- Alternatives:
  - Primary Alternative: Red line indicates proposed trail SUN Trail application
  - East Alternative 1: Pink Line
  - East Alternative 2: Blue Line *NEW Alternative*

Visit the workshop stations during the meeting tonight for more details!



11

SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Alternatives Comparison Matrix

- The alternatives will be evaluated on the following criteria:
  - Design: Does or does not meet SUN Trail Program criteria
  - Social Features: Land Use, Community Cohesion, *Relocations, ROW or Easements Required*, Potential User Conflicts
  - Cultural: Archaeological/ Historical Resource, Section 4(f)
  - Natural: Threatened and Endangered Species, Wetlands/Surface Waters Upland Habitat, Outstanding Florida Waters/Aquatic Preserves, Floodplains
  - Physical: Noise, Air Quality, Contamination

Visit the workshop stations during the meeting tonight for more details!

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SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

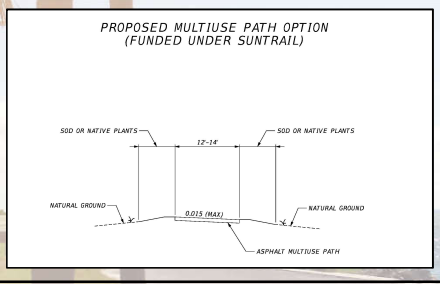
Alternatives Comparison Matrix

- KEY Criteria:
  - Meets SUN Trail Program Design Criteria - path must be:
    - 10-14 ft (8ft in rare cases)
    - Multiuse (bicyclists, pedestrians, runners, skaters)
    - Paved
    - Separated from roadway (at least 5 ft or physical barrier/railing)
  - ROW or Easements Required (no FEC or other private property)

Please visit the workshop stations during the meeting tonight for more details!

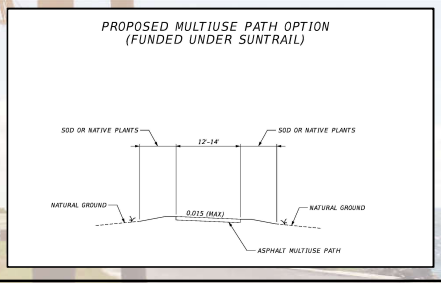
13

Historic Highwayman Trail Gap – Typical Sections



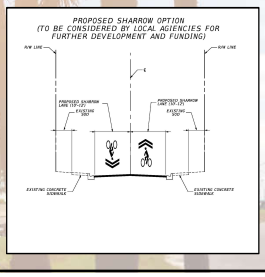
14

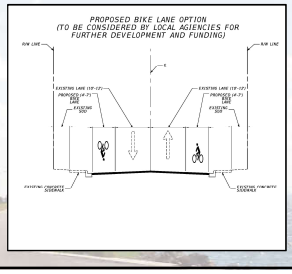
Historic Downtown Fort Pierce Retrofit – Typical Sections



15

Historic Downtown Fort Pierce Retrofit – Typical Sections





16

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Next Steps

- Following this Alternatives Analysis Public Meeting, Draft and Final Feasibility Reports will be prepared to include a recommended Alternative for each segment.
- Feasibility Study completion anticipated September 2018

17

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1
Historic Highwayman Trail — Financial Project Number: 440034-1

Project Schedule

Feasibility Study → Preliminary Engineering (PE)/Design → Acquisition of Right of Way (If necessary) → Construction

We are here

Design for both segments will be funded in FY 2019. The goal is to construct the trail within City/County ROW and minimize having to purchase ROW.

18


SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1
Historic Highwayman Trail
Financial Project Number: 440034-1
FDOT
SUNTRAIL
Your Comments
❖ Fill out and submit a comment sheet tonight (comment box)
❖ Mail in comment sheet later. NOTE: all comments must be postmarked by Tuesday, June 19, 2018 so that we may complete our study.
Mail comments to:
Lauren Rand
3400 West Commercial Boulevard,
Fort Lauderdale, Florida 33309
❖ Email comments or questions:
Lauren.Rand@dot.state.fl.us
Stay involved with project updates, please visit project website:
www.FloridaSUNTrail.com
19


SUN Trail Feasibility Study
Historic Downtown Fort Pierce Retrofit
Financial Project Number: 440033-1
Historic Highwayman Trail
Financial Project Number: 440034-1
FDOT
SUNTRAIL
Questions?
Thank you for your interest!
Please visit the workshop stations during the meeting tonight for more details!
20

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Project Overview

The Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida (see location maps and pages 2 & 3).

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway (with an exception along US Highway 1 from Avenue H to Avenue M)
- Historic Highwayman Trail Segment is from North Indian Hills Drive to Georgia Avenue

Feasibility Study Process

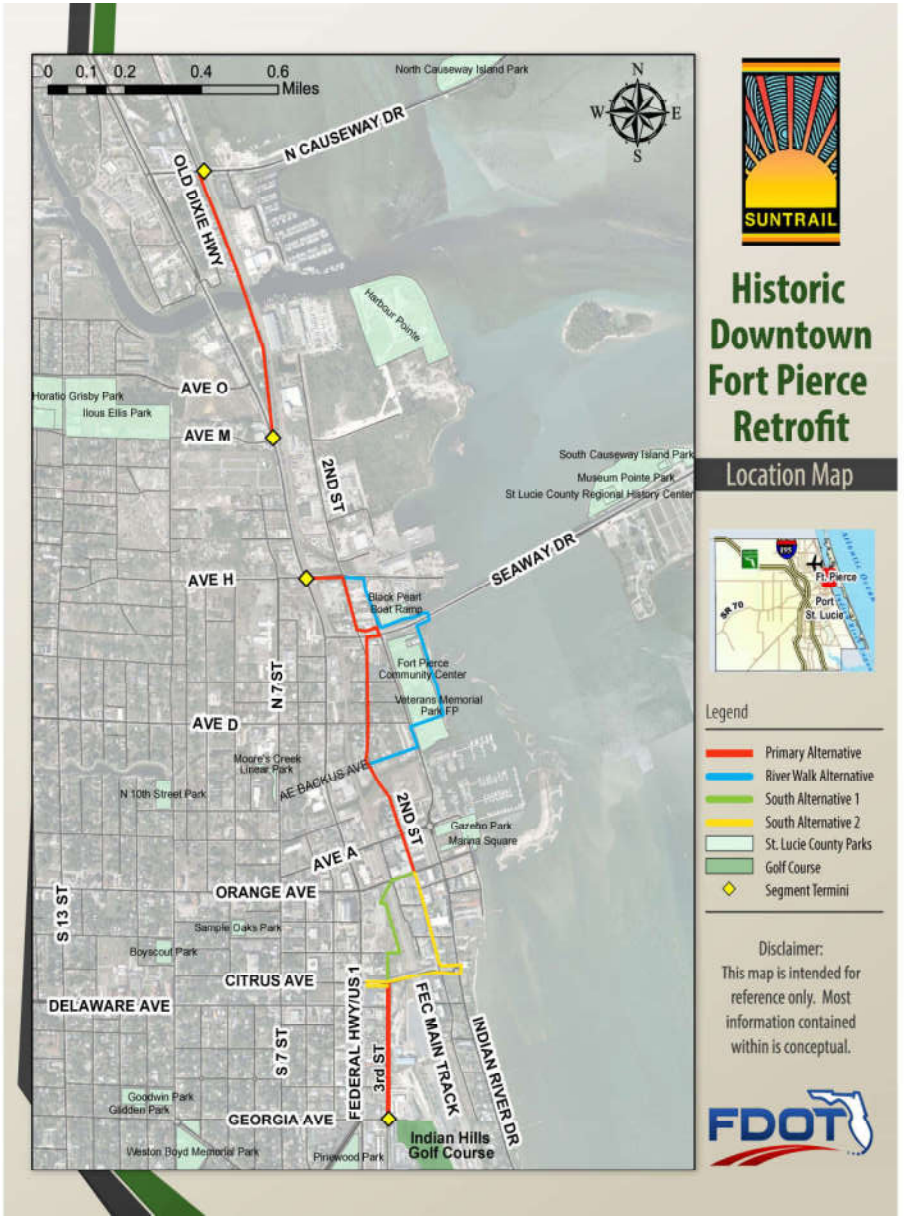
The goal is to develop basic information, including operational necessity, financial benefits and costs, and environmental impact.

Feasibility study stages:

- Data Collection
- Environmental Surveys and Studies
- Evaluation of Alternatives
- Recommended Alternatives
- Feasibility Report

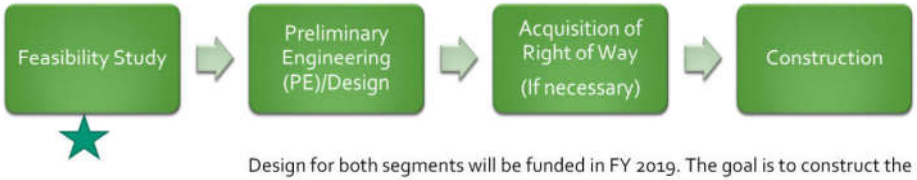
Feasibility Study Schedule

Project Milestones	2017									2018								
	March	April	May	June	July	August	September	October	November	December	January	February	March	April	May	June	July	August	September
Begin Study	★																		
Public Involvement		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Data Collection		■	■	■	■	■	■	■	■	■	■	■	■	■	■				
Kick-off Meeting								★											
Design and Environmental Analysis								■	■	■	■	■	■	■	■	■			
Alternatives Analysis Meeting																★			
Draft and Final Feasibility Reports														■	■	■	■	■	■
Study Completion																			★





Overall Project Schedule



Design for both segments will be funded in FY 2019. The goal is to construct the trail within City/County ROW and minimize having to purchase ROW.

Next Steps

Following the Alternatives Analysis Public Meeting, Draft and Final Feasibility Studies will be prepared to include a recommended Alternative for each segment.

Following the completion of this Feasibility Study, the Florida Department of Transportation will proceed with the project Design in 2019.

Contact Us

Lauren Rand, Project Manager
Florida Department of Transportation
(954) 777-4499 or Lauren.Rand@dot.state.fl.us
SUN Trails Website—www.FloridaSUNTrail.com

It is the policy of the Florida Department of Transportation that no person be denied the benefits of or be subjected to discrimination or retaliation under any program or activity administered by the Department or its sub-recipients on the basis of race, color, national origin, sex, age, disability/handicap, or income status.

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Comment Sheet

Please provide any comments or drawings you may have regarding the Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail Gap SUN Trails. The SUN Trails Feasibility Study is being conducted to evaluate a multi-use trail that will provide regional connectivity throughout St. Lucie County and Florida.

- Historic Downtown Fort Pierce Retrofit Segment is from Georgia Avenue to North Causeway
- Historic Highwayman Trail Gap Segment is from North Indian Hills Drive to Georgia Avenue

Name: _____

Address: _____

_____

NOTE: Please complete and return to the "Comments" Box; mail to Lauren Rand at the address on the back of this sheet; or e-mail comments to Lauren.Rand@dot.state.fl.us by Tuesday, June 19, 2018. All comments are part of the project record and are available for viewing by the public and media.

☐ Please add me to the mailing list for the SUN Trails Feasibility Study.

It is the policy of the Florida Department of Transportation that no person be denied the benefits of or be subjected to discrimination or retaliation under any program or activity administered by the Department or its sub-recipients on the basis of race, color, national origin, sex, age, disability/handicap, or income status.

Fold

Postage Required Place Stamp Here

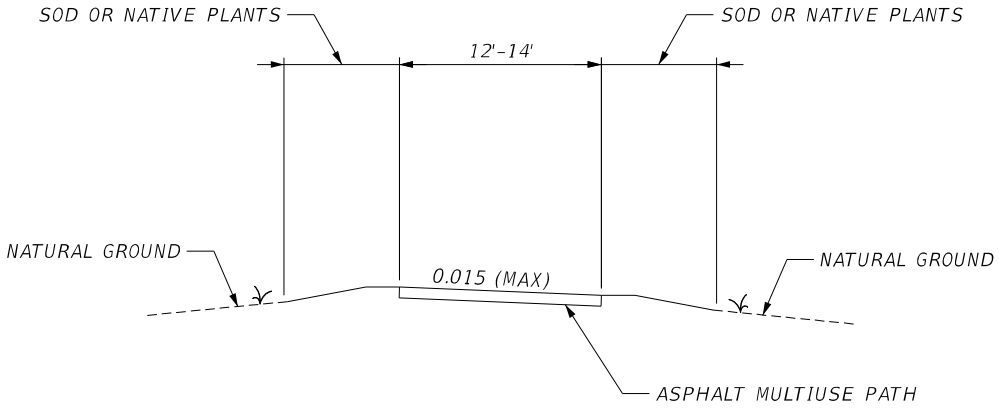
Lauren Rand
Project Manager
Florida Department of Transportation
3400 West Commercial Boulevard
Fort Lauderdale, Florida 33309

Fold

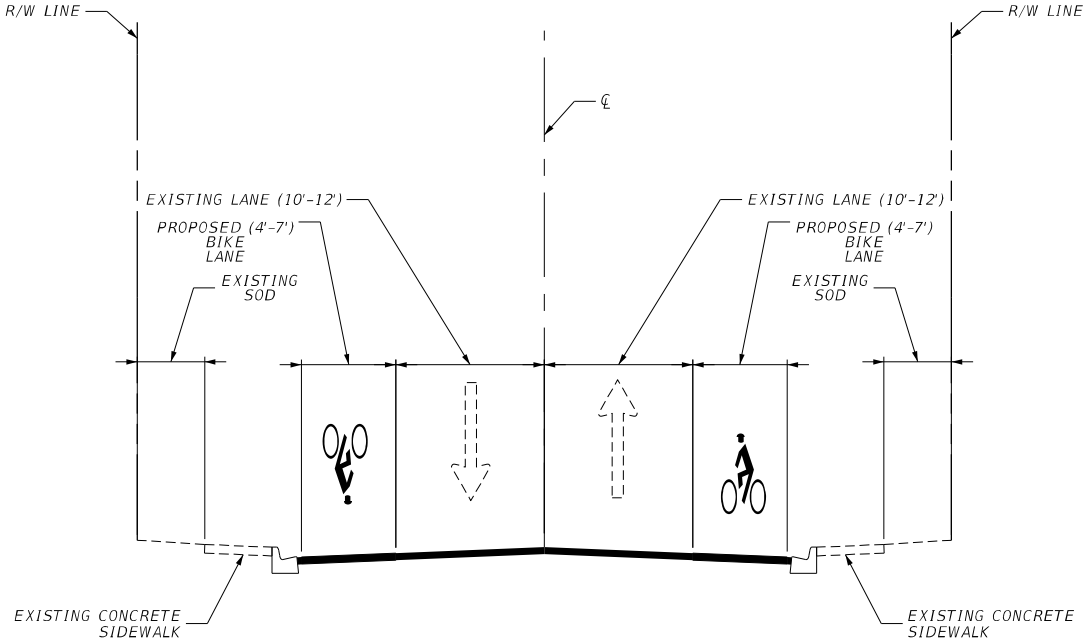

Legend
East Alternative 1
East Alternative 2
Primary Alternative
NR - Eligible Bridges
NR - Eligible Resource Groups
NR - Listed Resources
Locally Designated Districts
ROW
N
0 0,05 0,1 0,2 Miles
Private ROW
Both Alternatives meet SUN Trail Program criteria. A SUN Trail multi-use path is recommended.
River's Edge Historic District
8SL2602
FEC RR - Lake Harbor Branch
8SL3014
Alternative would require FEC ROW.
Scrub Habitat
FEC ROW


Legend
Primary Alternative
South Alternative 1
South Alternative 2
River Walk Alternative
NR - Eligible Bridges
NR - Eligible Resource Groups
NR - Listed Resources
Locally Designated Districts
N
0 0,1 0,2 0,4 Miles
Alternative does not meet the SUN Trail Program criteria, so will be explored by local agencies for further development and funding.
Flaws: There is no room for a separated multiuse path. Would require widening the Old Dixie Highway bridge.
Bike lanes/sharrows are recommended.
Dixie Highway
8SL1056
Fixed Bridge over Taylor Creek
8SL3181
Will not be covered under this feasibility study due to future work on Federal Highway/US1 at Avenue H.
FEC RR - Lake Harbor Branch
8SL3014
Alternative does not meet the SUN Trail Program criteria, so will be explored by local agencies for further development and funding.
Flaws: There is no room for a separated multiuse path. Would require building, sidewalk, street lamp relocations.
Bike lanes/sharrows are recommended.
Alternative does meet the SUN Trail Program criteria, so SUN Trail multi-use path would be recommended.
Edge Town Historic District
8SL2601
Moores Creek Bridge
8SL1141
Downtown Historic District
8SL2790
Sunrise Theatre
8SL799
Alternative does not meet the SUN Trail Program criteria, so will be explored by local agencies for further development and funding.
Flaws: There is no room for a separated multiuse path. Would require widening Citrus Ave Bridge, and sidewalk and building relocations.
Citrus Ave bridge slope more than 5%.
Flaws: Alternative would require the private and FEC ROW, so will be explored by local agencies for further development and funding.
Alternative does not meet the SUN Trail Program criteria, so will be explored by local agencies for further development and funding.
Flaws: There is no room for a separated multiuse path. Would require onstreet parking relocation.
Bike lanes/sharrows are recommended.

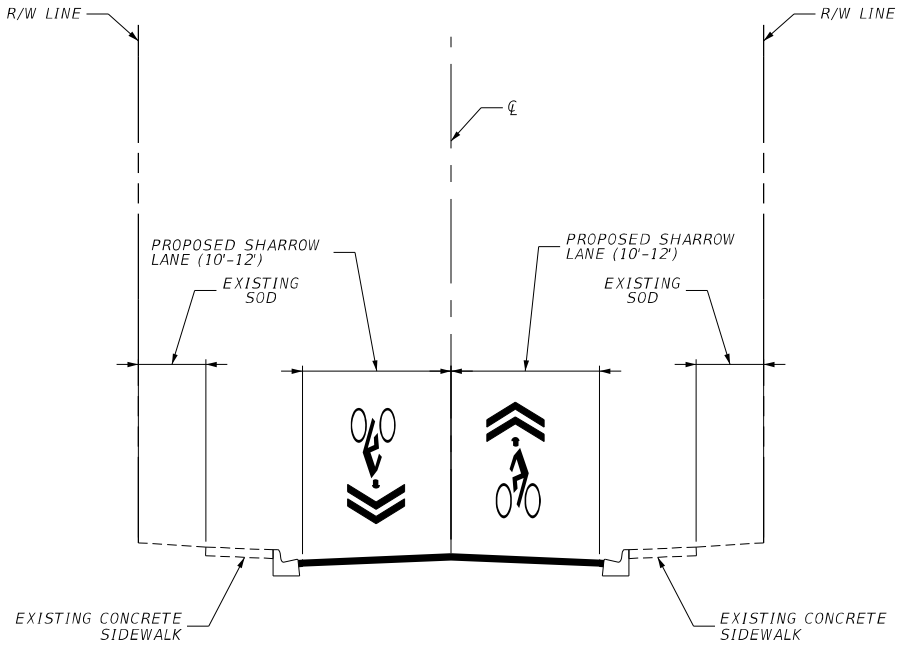
PROPOSED MULTIUSE PATH OPTION
(FUNDED UNDER SUNTRAIL)



PROPOSED BIKE LANE OPTION
(TO BE CONSIDERED BY LOCAL AGIENCIES FOR FURTHER DEVELOPMENT AND FUNDING)



PROPOSED SHARROW OPTION
(TO BE CONSIDERED BY LOCAL AGIENCIES FOR FURTHER DEVELOPMENT AND FUNDING)



SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Alternatives Analysis Meeting — **Please Sign-In** — **June 5, 2018**

(Sign-in sheets are subject to public record requests)

Name (Please Print)	Address	E-Mail	Telephone
JOSEPH G. MILLER	5500 ORANGE AVE 34947	JGM01 & COMCAST, NET	772-475-6066
Ryan Jensen		Ryan.Jensen@Atkinsglobal.com	305 984-5230
Lauren Rand		Lauren.Rand@Dot.State.fl.us	954-777-4499
Lynn Kelley	FDOT D4	lynn.kelley@dot...	X4334
Jenn McGee	SLC ERD	mcgeej@stlucieco.org	772 462 3862
ALBERT SORREL	116 INDIAN HILL DR		
DAVID H. KAPLAN	410 SE Naranja Ave PSL	DKAPLAN73@HOTMAIL.COM	
LAURA A. KAPLAN	"	LAURASTLUCIEREALTOR@GMAIL.COM	772-342-7736
Jim Bounds	206 Southern Av. Ft. Pierce	Jbounds133@gmail.com	772-359-4952
DOUGLAS DAVIS	2201 ATLANTIC BEACH BLVD FP 34949	ddavis@rkdavis.com	772 461 8335
STAN & JEAN SYNKOSKI	2005 COCONUT DR. FORT PIERCE FL 34949	INSYNKINC@GMAIL.COM	301 232-5692
Buck Bryan			
CHARLIE BECK	2001 SURESITE DR.		
Toni Monokian	6010 Myrtle Dr. Ft Pierce 34982	tonif6@cs.com	
Jim KAUFFMANN	2919 S. INDIAN RIVER DR	Jim KAUFFMANN@Icloud.com	772-370-5621
Greg Griffett		ggriffett@ostlock.com	
MURRSAH DEKLE	437 N. 7TH STREET FORT PIERCE	DEKLEM@STLUCSECO.ORG	772-462-3065
Peter Buchwald	St. Lucie TPO		

(9)

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Alternatives Analysis Meeting — **Please Sign-In** — **June 5, 2018**

(Sign-in sheets are subject to public record requests)

Name (Please Print)	Address	E-Mail	Telephone
GARY GAIOTTI		gary.gaiotti@atkinsglobal.com	407-806-4184
Bassel Kassem	633 Dartmouth St Orlando, Fl	bkassem@flbridge.com	407 492-1744
PAUL HAYDT	11 WILMONT PL PALM COAST 32164	PAUL@GREENWAY.ORG	386 503-0294
KEN SCOTT	453 MILTON RD. FT. PIERCE		
TERRY WOLTERS	900 S. 3RD ST. FT. PIERCE		
Luis ORTIZ	601 S Indian River Dr #8	Fpierlort1986@Gmail.Com	772 971 7115
Jack Andrews	City of Ft. Pierce	JAndrews@City-FtPierce.com	772-467-3773
SELENA GRIFFETT	SLC PW ENG	griffetts@stlucieco.org	772-462-2153

SUN Trail Feasibility Study

Historic Downtown Fort Pierce Retrofit — Financial Project Number: 440033-1

Historic Highwayman Trail — Financial Project Number: 440034-1

Alternatives Analysis Meeting

Please Sign-In

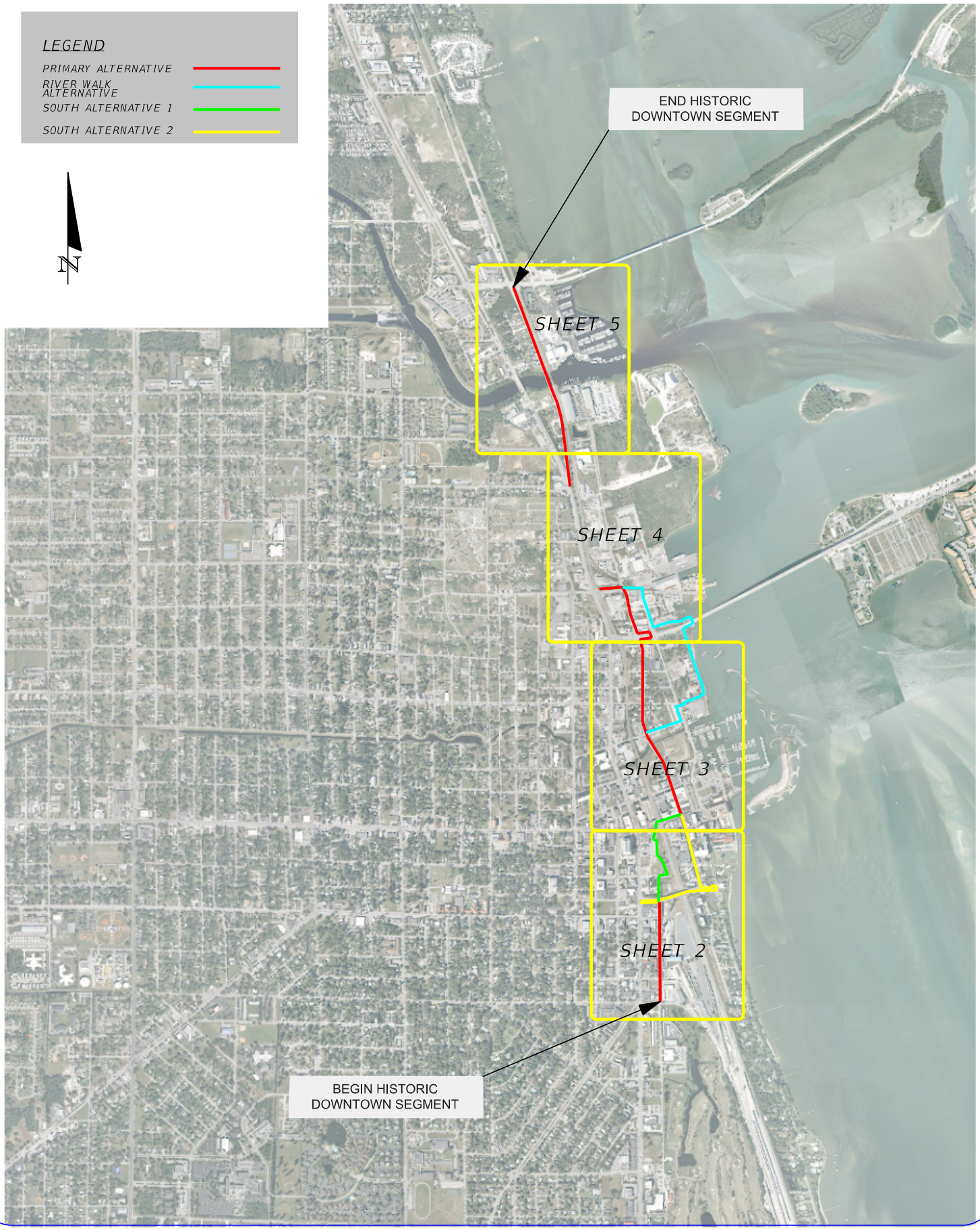
(Sign-in sheets are subject to public record requests)

June 5, 2018

Name (Please Print)	Address	E-Mail	Telephone
REP. LARRY LEE, JR.	7936 SADDLEBROOK DR. PSL, FL	LARRY.LEE.JR55@GMAIL	772-528-4167

Appendix C

Environmental Opportunities and Right-of-Way Constraint Maps



ENVIRONMENTAL OPPORTUNITIES AND RIGHT-OF-WAY CONSTRAINTS MAP

SUN TRAIL HISTORIC DOWNTOWN SEGMENT
FEASIBILITY STUDY
FORT PIERCE, FL

SHEET 1 OF 5	FPID: 440033-1-52-01	JULY 2018	SCALE:1" = 2000'

ATKINS
CORPORATE OFFICE:
4030 W. BOY SCOUT BOULEVARD
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTHORIZATION NO.24
www.atkinsglobal.com

jens6760
7/6/2018
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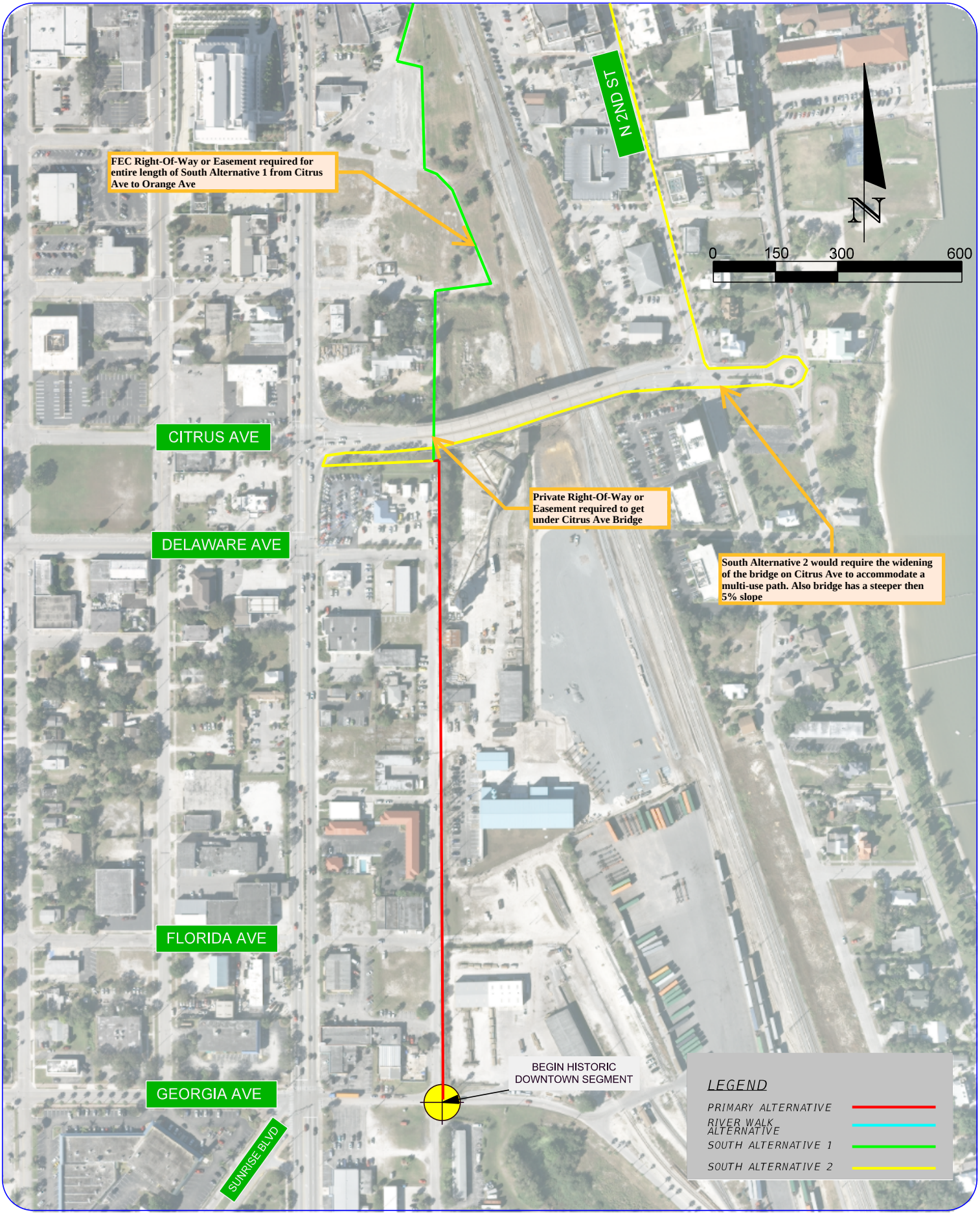

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ENVIRONMENTAL OPPORTUNITIES AND RIGHT-OF-WAY CONSTRAINTS MAP

SUN TRAIL HISTORIC DOWNTOWN SEGMENT
FEASIBILITY STUDY
FORT PIERCE, FL

SHEET 2 OF 5	FPID: 440033-1-52-01	JULY 2018	SCALE: 1" = 300'

ATKINS
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4030 W. BOY SCOUT BOULEVARD
TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTHORIZATION NO.24
www.atkinsglobal.com



jens6760 7/6/2018 8:00:01 AM O:\Projects\Sun_Trail\Cadd\Roadway\PLANRD01.DGN

ENVIRONMENTAL OPPORTUNITIES AND RIGHT-OF-WAY CONSTRAINTS MAP

SUN TRAIL HISTORIC DOWNTOWN SEGMENT
FEASIBILITY STUDY
FORT PIERCE, FL

SHEET 3 OF 5	FPID: 440033-1-52-01	JULY 2018	SCALE: 1" = 300'

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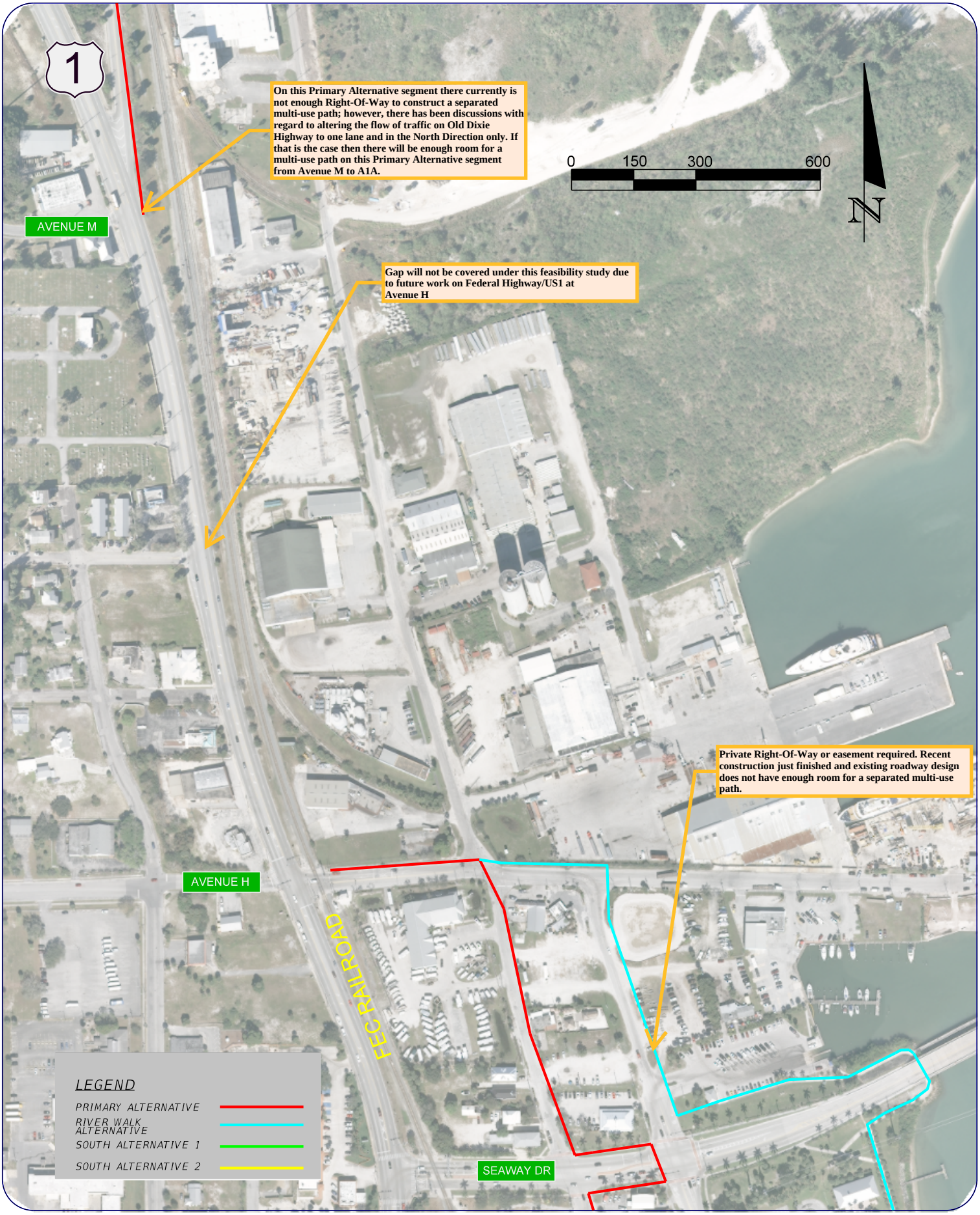

jens6760

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ENVIRONMENTAL OPPORTUNITIES AND RIGHT-OF-WAY CONSTRAINTS MAP

SUN TRAIL HISTORIC DOWNTOWN SEGMENT
FEASIBILITY STUDY
FORT PIERCE, FL

SHEET 4 OF 5	FPID: 440033-1-52-01	JULY 2018	SCALE: 1" = 300'

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CORPORATE OFFICE:
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TAMPA, FLORIDA 33607
FBPR CERTIFICATE OF AUTHORIZATION NO.24
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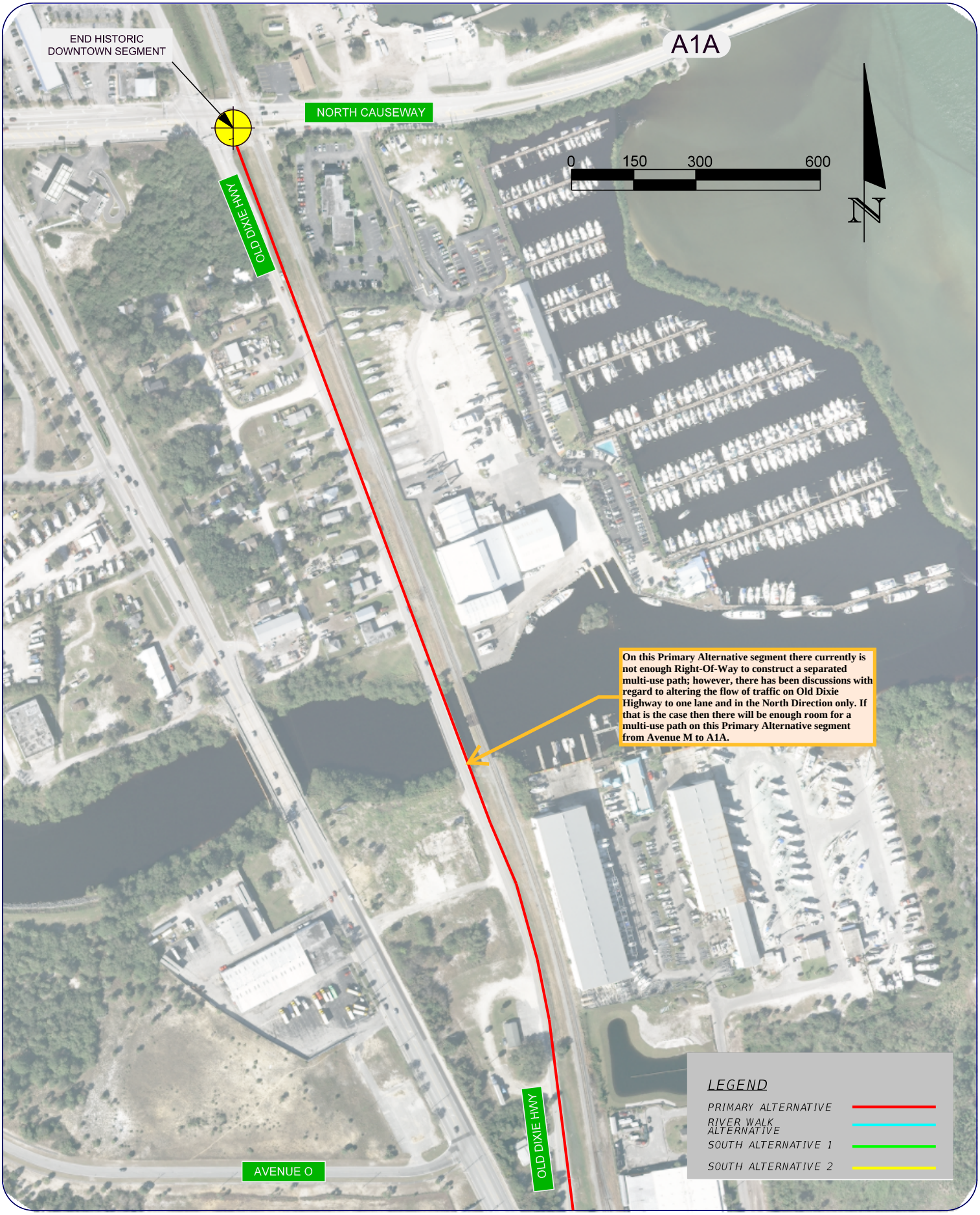

jens6760

7/6/2018

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ENVIRONMENTAL OPPORTUNITIES AND RIGHT-OF-WAY CONSTRAINTS MAP

SUN TRAIL HISTORIC DOWNTOWN SEGMENT
FEASIBILITY STUDY
FORT PIERCE, FL

SHEET 5 OF 5	FPID: 440033-1-52-01	JULY 2018	SCALE: 1" = 300'

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TAMPA, FLORIDA 33607
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AUTHORIZATION NO.24
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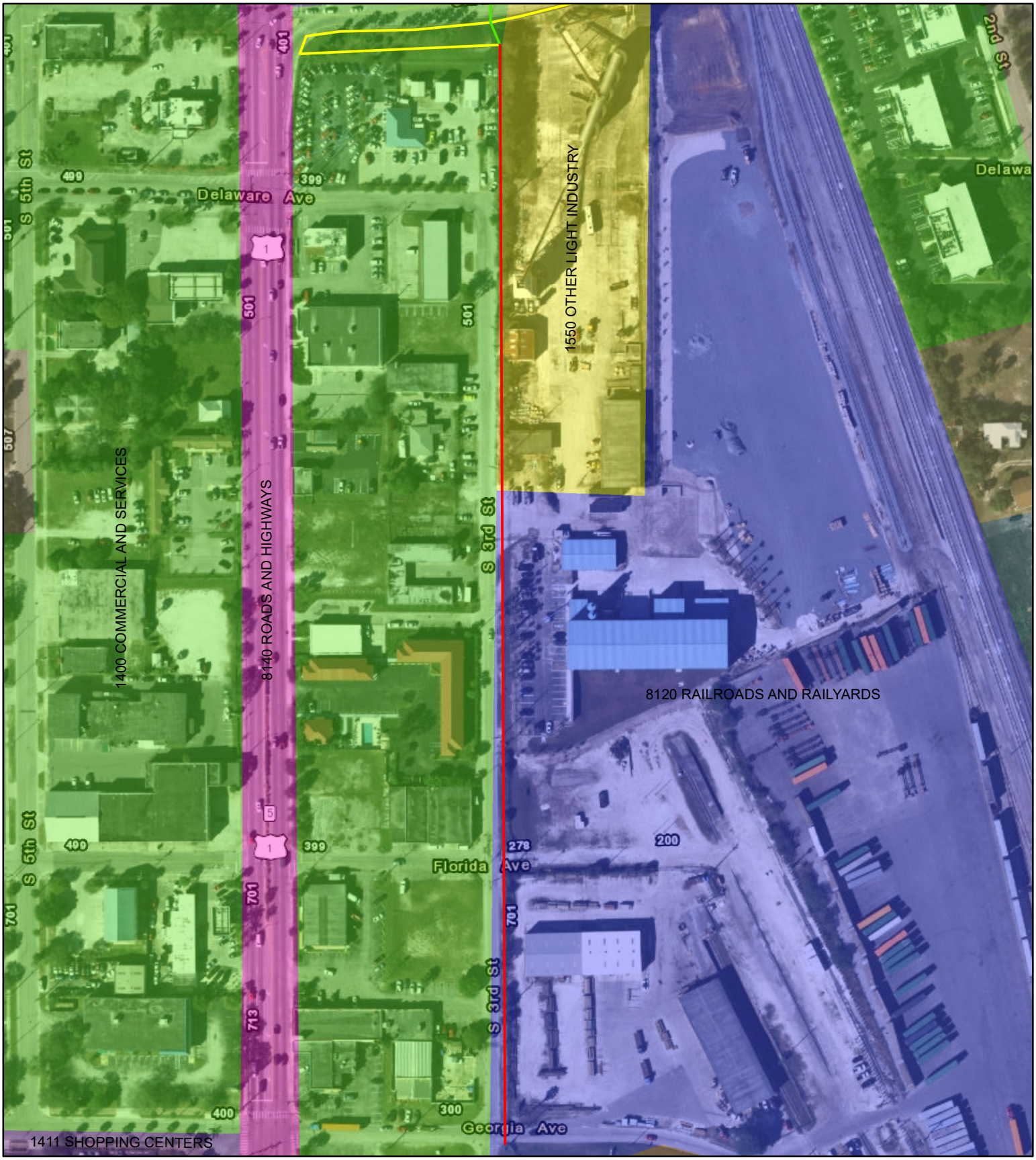
Appendix D

Existing Land Use Maps and Fort Pierce Future Land Use Map



FLUCFCS Data: SFWMD 2009

Imagery: NAIP 2013



SUN Trail Historic Downtown Fort Pierce Trail
Ft. Pierce, St. Lucie County, Florida

- 1110 FIXED SINGLE FAMILY UNITS
- 1210 FIXED SINGLE FAMILY UNITS
- 1400 COMMERCIAL AND SERVICES
- 1411 SHOPPING CENTERS
- 1550 OTHER LIGHT INDUSTRY
- 1620 SAND AND GRAVEL PITS
- 1820 GOLF COURSE
- 8120 RAILROADS AND RAILYARDS
- 8140 ROADS AND HIGHWAYS

D-1: Existing Land Use

1 in = 182 feet

Prepared By: Atkins N.A.
Date: July 06, 2018

ATKINS



FLUCFCS Data: SFWMD 2009

Imagery: NAIP 2013



SUN Trail Historic Downtown Fort Pierce Trail
Ft. Pierce, St. Lucie County, Florida

- 1210 FIXED SINGLE FAMILY UNITS
- 1400 COMMERCIAL AND SERVICES
- 1550 OTHER LIGHT INDUSTRY
- 1620 SAND AND GRAVEL PITS
- 1700 INSTITUTIONAL
- 8120 RAILROADS AND RAILYARDS

D-2: Existing Land Use

1 in = 158 feet

Prepared By: Atkins N.A.
Date: July 06, 2018

ATKINS



FLUCFCS Data: SFWMD 2009

Imagery: NAIP 2013



SUN Trail Historic Downtown Fort Pierce Trail

Ft. Pierce, St. Lucie County, Florida

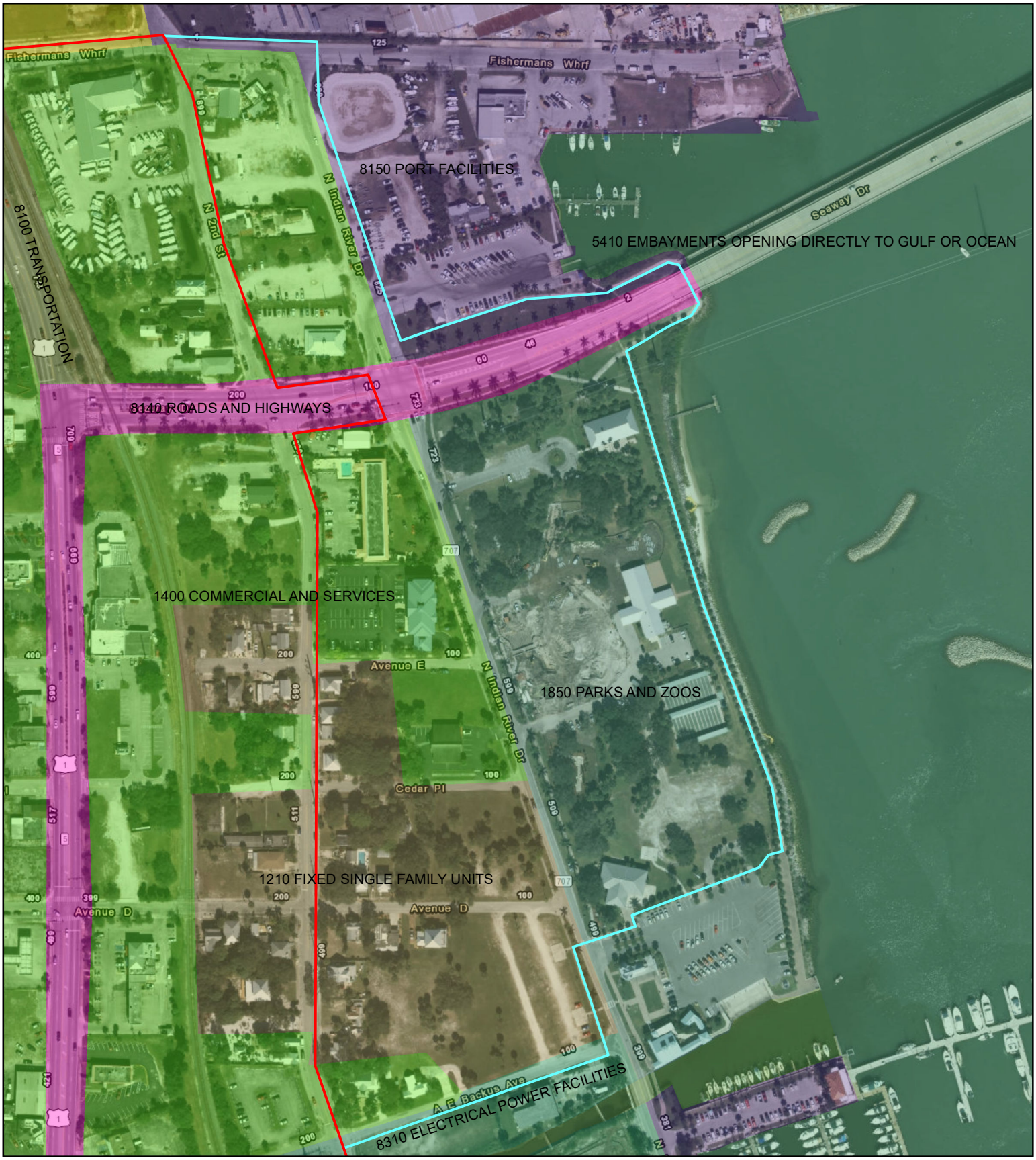
- 1400 COMMERCIAL AND SERVICES
- 1840 MARINAS AND FISH CAMPS
- 5120 CHANNELIZED WATERWAYS - CANALS
- 5410 EMBAYMENTS OPENING DIRECTLY TO GULF OR OCEAN
- 8120 RAILROADS AND RAILYARDS
- 8310 ELECTRICAL POWER FACILITIES

D-3: Existing Land Use

1 in = 153 feet

Prepared By: Atkins N.A.
Date: July 06, 2018

ATKINS



FLUCFCS Data: SFWMD 2009

Imagery: NAIP 2013



SUN Trail Historic Downtown Fort Pierce Trail
Ft. Pierce, St. Lucie County, Florida

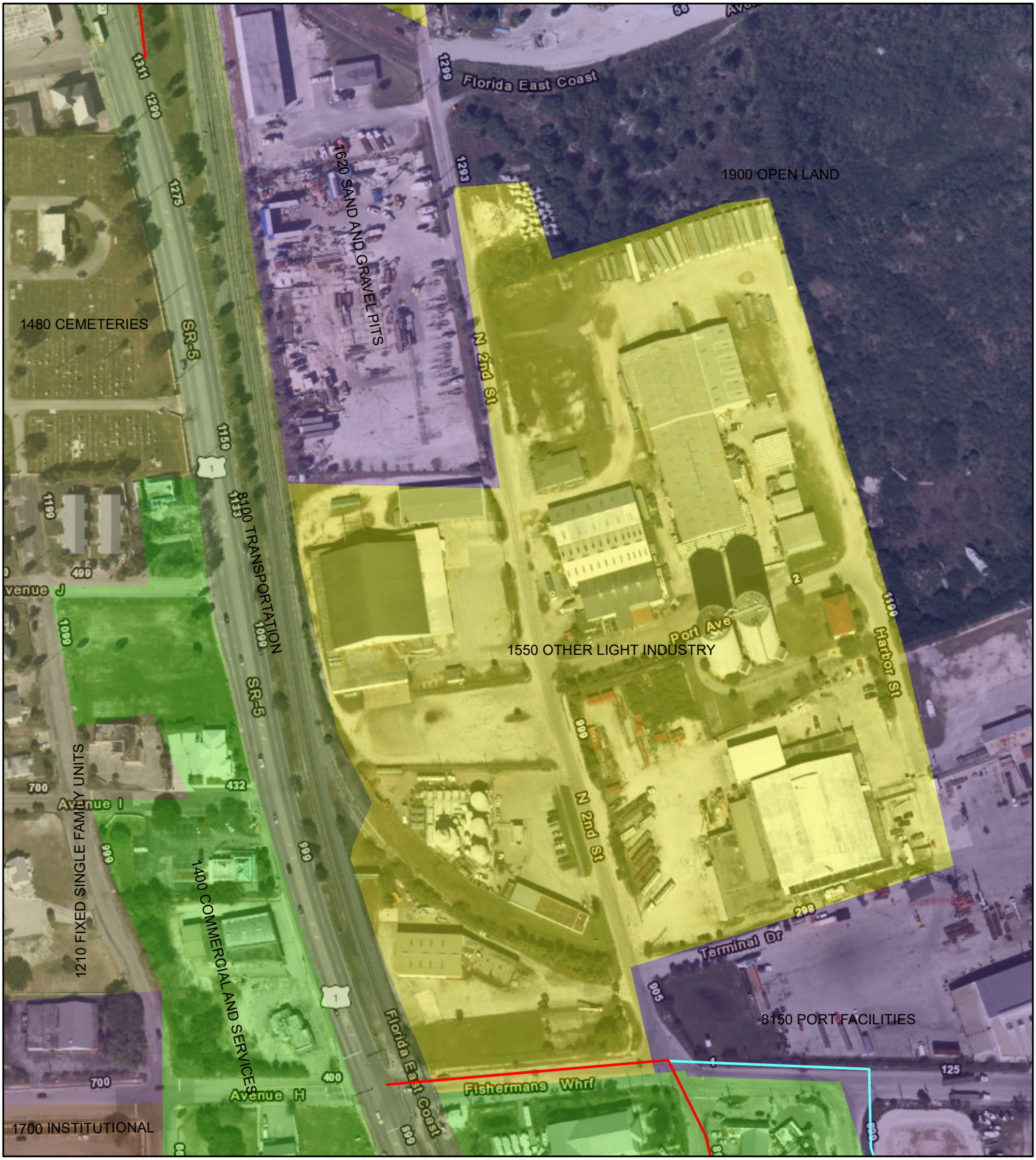
- 1210 FIXED SINGLE FAMILY UNITS
- 1400 COMMERCIAL AND SERVICES
- 1550 OTHER LIGHT INDUSTRY
- 1840 MARINAS AND FISH CAMPS
- 1850 PARKS AND ZOOS
- 5120 CHANNELIZED WATERWAYS - CANALS
- 5410 EMBAYMENTS OPENING DIRECTLY TO GULF OR OCEAN
- 8100 TRANSPORTATION
- 8140 ROADS AND HIGHWAYS
- 8150 PORT FACILITIES
- 8310 ELECTRICAL POWER FACILITIES

D-4: Existing Land Use

1 in = 261 feet

Prepared By: Atkins N.A.
Date: July 06, 2018

ATKINS



FLUCFCS Data: SFWMD 2009

Imagery: NAIP 2013



SUN Trail Historic Downtown Fort Pierce Trail
Ft. Pierce, St. Lucie County, Florida

- 1210 FIXED SINGLE FAMILY UNITS
- 1330 MULTIPLE DWELLING UNITS - LOW RISE
- 1400 COMMERCIAL AND SERVICES
- 1480 CEMETERIES
- 1550 OTHER LIGHT INDUSTRY
- 1620 SAND AND GRAVEL PITS
- 1700 INSTITUTIONAL
- 1900 OPEN LAND
- 8100 TRANSPORTATION
- 8150 PORT FACILITIES

D-5: Existing Land Use

1 in = 200 feet

Prepared By: Atkins N.A.
Date: July 06, 2018

ATKINS



FLUCFCS Data: SFWMD 2009

Imagery: NAIP 2013



SUN Trail Historic Downtown Fort Pierce Trail
Ft. Pierce, St. Lucie County, Florida

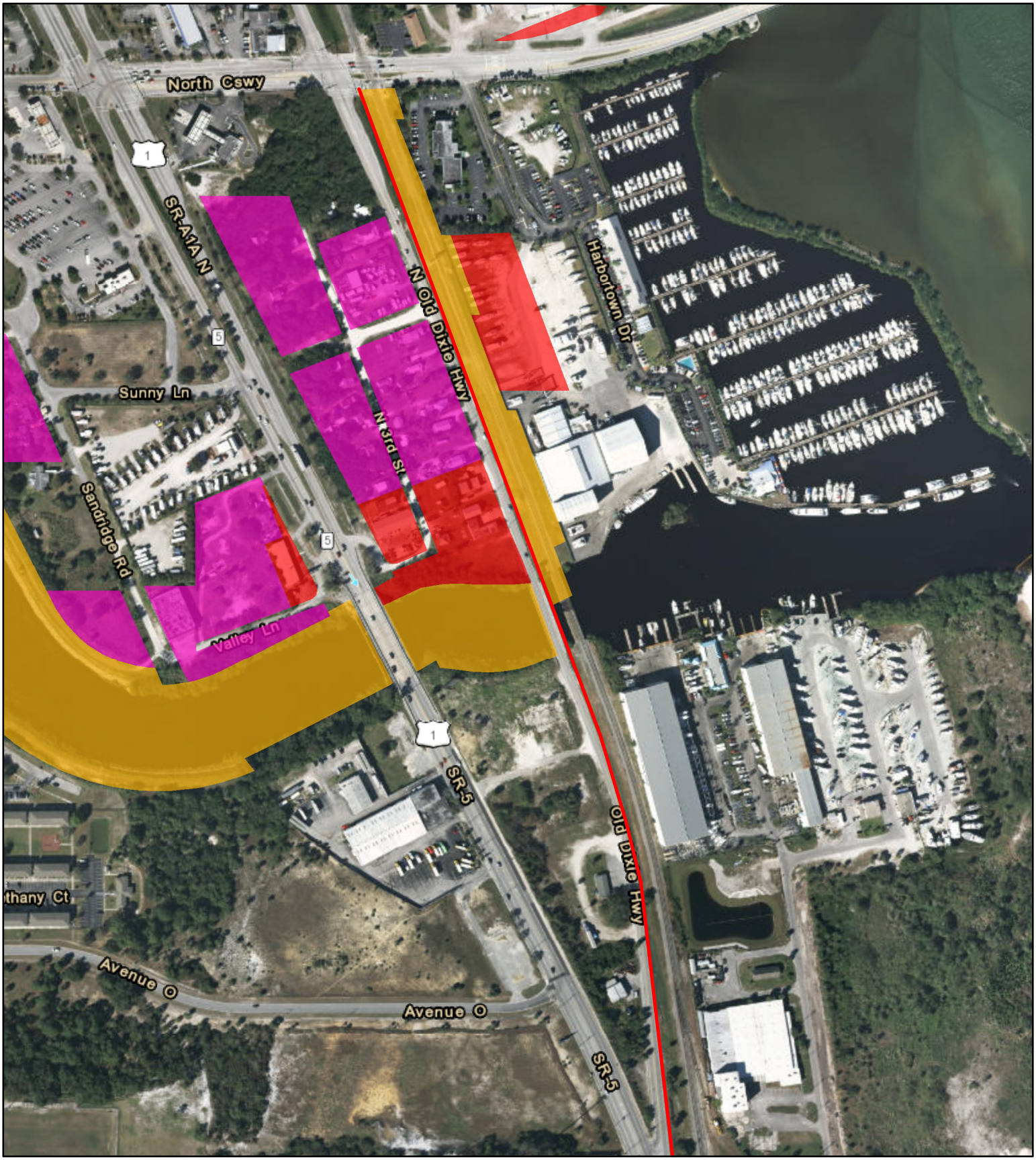
- 1110 FIXED SINGLE FAMILY UNITS
- 1210 FIXED SINGLE FAMILY UNITS
- 1320 MOBILE HOME UNITS
- 1330 MULTIPLE DWELLING UNITS - LOW RISE
- 1400 COMMERCIAL AND SERVICES
- 1411 SHOPPING CENTERS
- 1550 OTHER LIGHT INDUSTRY
- 1620 SAND AND GRAVEL PITS
- 1840 MARINAS AND FISH CAMPS
- 1850 PARKS AND ZOOS
- 1900 OPEN LAND
- 4130 SAND PINE
- 4220 BRAZILIAN PEPPER
- 5120 CHANNELIZED WATERWAYS - CANALS
- 5410 EMBAYMENTS OPENING DIRECTLY TO GULF OR OCEAN
- 8100 TRANSPORTATION
- 8140 ROADS AND HIGHWAYS

D-6: Existing Land Use

1 in = 358 feet

Prepared By: Atkins N.A.
Date: July 06, 2018

ATKINS



Future Land Use Data: St. Lucie County

Imagery: NAIP 2013



SUN Trail Historic Downtown Fort Pierce Trail
Ft. Pierce, St. Lucie County, Florida

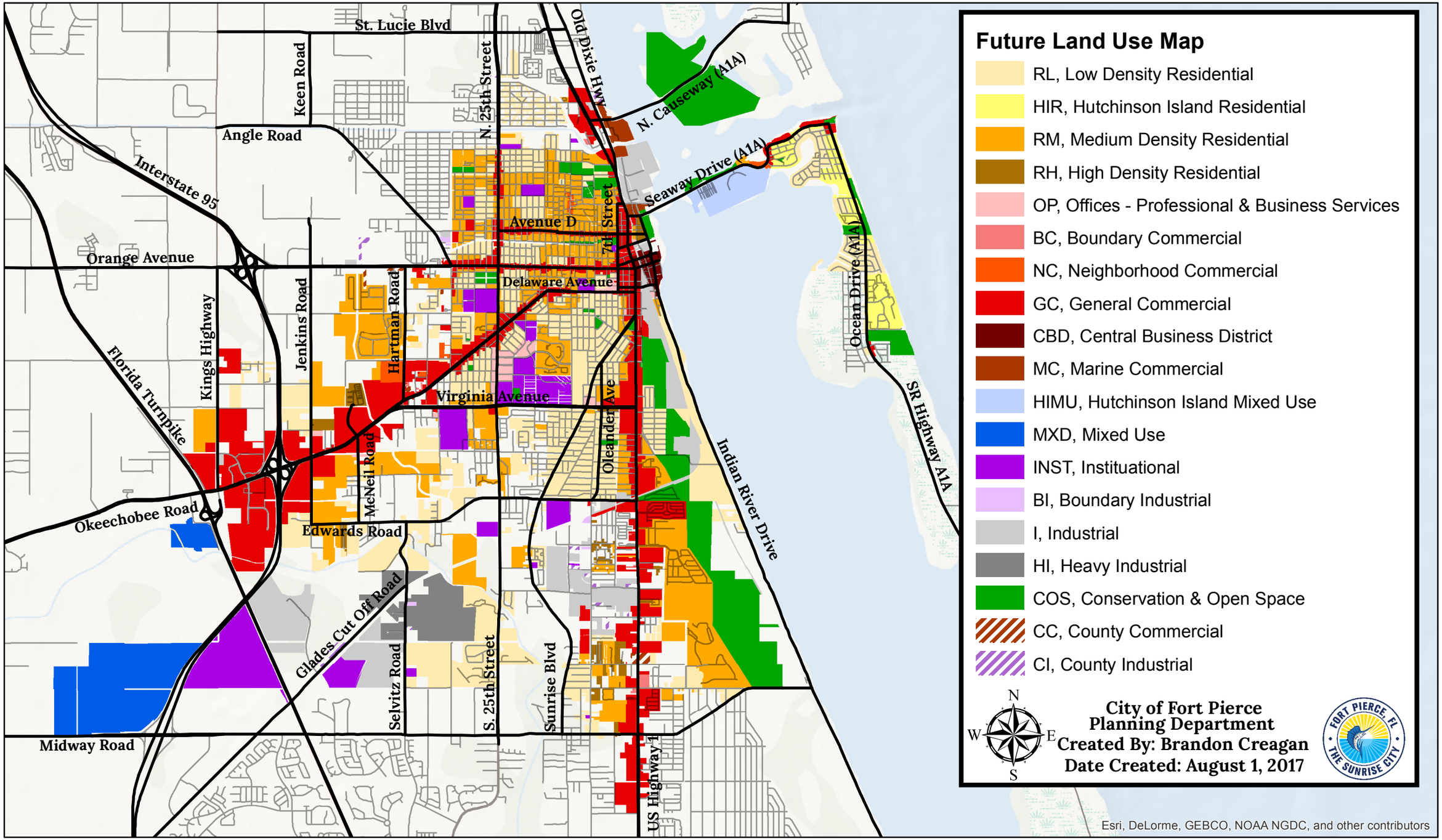
COM
IND
ROW

Future Land Use

1 in = 350 feet

Prepared By: Atkins N.A.
Date: July 05, 2018

ATKINS


Future Land Use Map
RL, Low Density Residential
HIR, Hutchinson Island Residential
RM, Medium Density Residential
RH, High Density Residential
OP, Offices - Professional & Business Services
BC, Boundary Commercial
NC, Neighborhood Commercial
GC, General Commercial
CBD, Central Business District
MC, Marine Commercial
HIMU, Hutchinson Island Mixed Use
MXD, Mixed Use
INST, Instituational
BI, Boundary Industrial
I, Industrial
HI, Heavy Industrial
COS, Conservation & Open Space
CC, County Commercial
CI, County Industrial
N
W
E
S
City of Fort Pierce
Planning Department
Created By: Brandon Creagan
Date Created: August 1, 2017
FORT PIERCE, FL
THE SUNRISE CITY
St. Lucie Blvd
Keen Road
Angle Road
Interstate 95
Orange Avenue
Kings Highway
Florida Turnpike
Okeechobee Road
Midway Road
Jenkins Road
Hartman Road
McNeil Road
Edwards Road
Glades Cut Off Road
Selvitz Road
S. 25th Street
N. 25th Street
Old Dixie Hwy
Avenue D
Delaware Avenue
Virginia Avenue
7th Street
Olender Ave
Sunrise Blvd
US Highway 1
N. Causeway (A1A)
Seaway Drive (A1A)
Ocean Drive (A1A)
SR Highway A1A
Indian River Drive
Esri, DeLorme, GEBCO, NOAA NGDC, and other contributors

Appendix E

Previously Recorded Significant Resources and Locally-Designated Historic Districts

Table 1: Previously Recorded Significant Resources, and Previously Recorded and Locally-Designated Historic Districts Within and Adjacent to the Downtown Fort Pierce Trail

FMSF No.	Site Name/Address	Year Built	Resource Type/Style	SHPO Evaluation
8SL799	Sunrise Theater / 117 S 2nd Street	1923	Building	National Register–Listed
8SL1141	Moore's Creek Bridge	1925	Roadway Bridge	National Register–Listed
8SL1666	Dixie Highway	1914 or earlier	Road	National Register–Eligible
8SL2799	Downtown Historic District	c. 1882	Historic District	National Register–Ineligible
8SL3014	FEC Railroad-Lake Harbor Branch	1892	Railroad	National Register–Eligible
8SL3191	Bridge at Mile Post 240.1	c. 1961	Railway Bridge	National Register–Eligible
8SL2801	Edgar Town Historic District	c. 1870s	Historic District	Not Evaluated
8SL2802	River's Edge Historic District	c. 1900	Historic District	National Register–Ineligible

Table 2: Previously Recorded Significant Resources, and Previously Recorded and Locally-Designated Historic Districts Within and Adjacent to the Highwayman Gap Trail Alternatives

FMSF No.	Site Name/Address	Year Built	Resource Type/Style	SHPO Evaluation
8SL3014	FEC Railroad-Lake Harbor Branch	1892	Railroad	National Register–Eligible



Previously Recorded Significant Resources and Previously Recorded and Locally-Designated Historic Districts

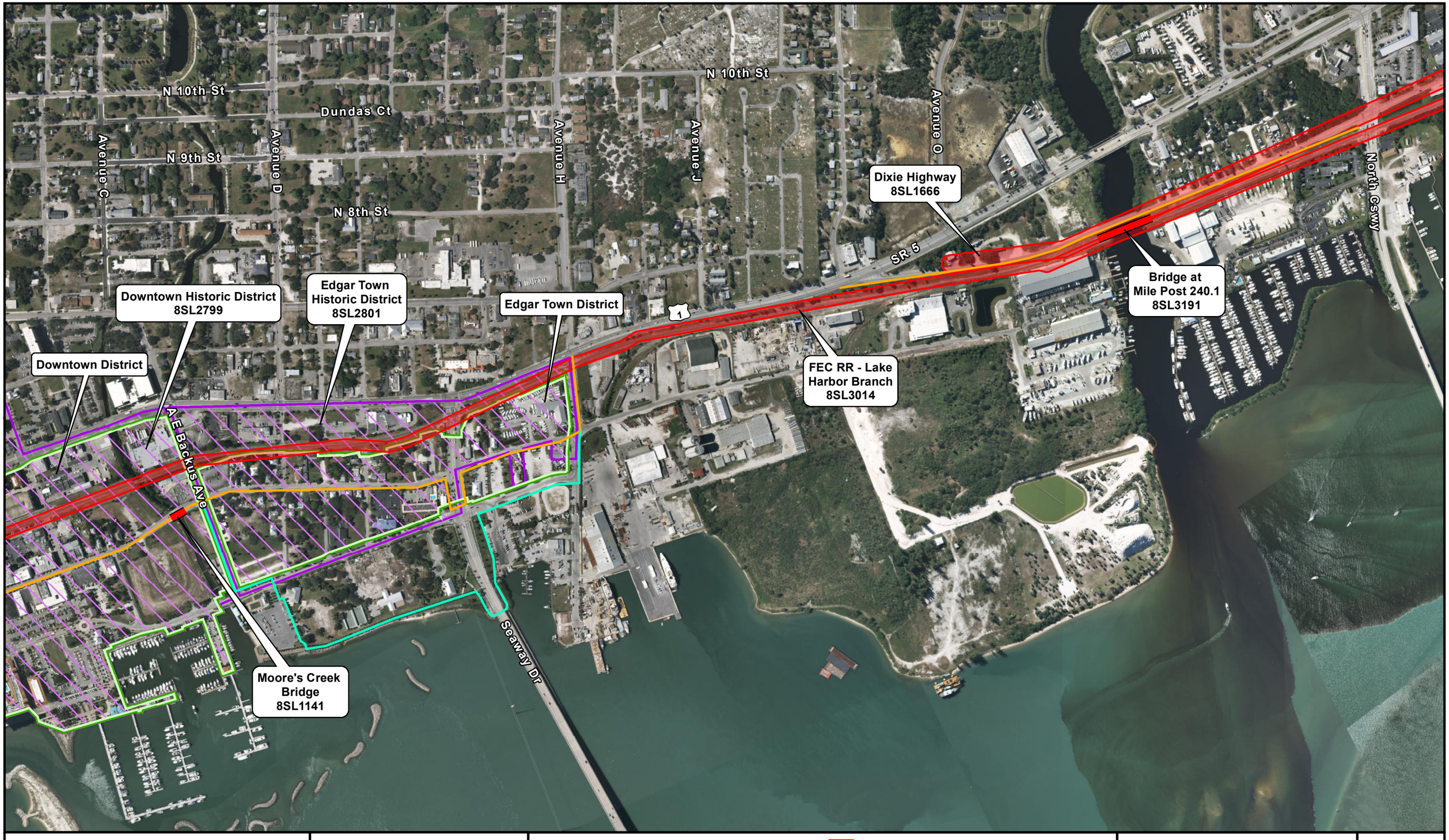
Sun Trail - Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail Gap

- Primary Route
- East Alternate 1
- East Alternate 2
- River Walk Alternative
- South Alternate 1
- South Alternate 2
- National Register-Listed or Eligible
- Historic District (FMSF Boundaries)
- Historic District (Local Boundaries)

City of Fort Pierce, St. Lucie County

0 100 200 Meters

Map 1



Previously Recorded Significant Resources and Previously Recorded and Locally-Designated Historic Districts

Sun Trail - Historic Downtown Fort Pierce Retrofit and Historic Highwayman Trail Gap

- Primary Route
- East Alternate 1
- East Alternate 2
- River Walk Alternative
- South Alternate 1
- South Alternate 2
- National Register-Listed or Eligible
- Historic District (FMSF Boundaries)
- Historic District (Local Boundaries)

City of Fort Pierce, St. Lucie County

0 100 200 Meters

Map 2

Appendix F

Florida Natural Areas Inventory Standard Data Report

FLORIDA
Natural Areas
INVENTORY

1018 Thomasville Road
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Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

April 12, 2018

Beth Zimmer
ATKINS
800 Waterford way, Suite 700
Miami, FL 33126

Dear Ms. Zimmer,

Thank you for requesting information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project: SUN Trail Historic Downtown Trail Gap

Date Received: 04/10/18

Location: St. Lucie County

Element Occurrences

A search of our maps and database indicates that we currently have several element occurrences mapped in the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The element occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, element occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant. Extirpated element occurrences will be marked with an 'X' following the occurrence label on the enclosed map.

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Florida Scrub-jay Survey – U.S. Fish and Wildlife Service
This survey was conducted by staff and associates of the Archbold Biological Station from 1992 to 1996. An attempt was made to record all scrub-jay (*Aphelocoma coerulescens*) groups, although most federal lands were not officially surveyed. Each map point represents one or more groups.

This data layer indicates that there are potential scrub-jay populations on or very near your site. For additional information:

Fitzpatrick, J.W., B. Pranty, and B. Stith, 1994, Florida scrub jay statewide map, 1992-1993. U. S. Fish and Wildlife Service Report, Cooperative Agreement no. 14-16-004-91-950.

The Inventory always recommends that professionals familiar with Florida's flora and fauna conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

Thank you for your use of FNAI services. An invoice will be mailed separately. If I can be of further assistance, please contact me at (850) 224-8207 or at kbrinegar@fnai.fsu.edu.

Sincerely,

Kerri Brinegar

Kerri Brinegar
GIS / Data Services

Encl

SUN Trail Historic Downtown Trail Gap

St Lucie County

Site boundaries are approximate.

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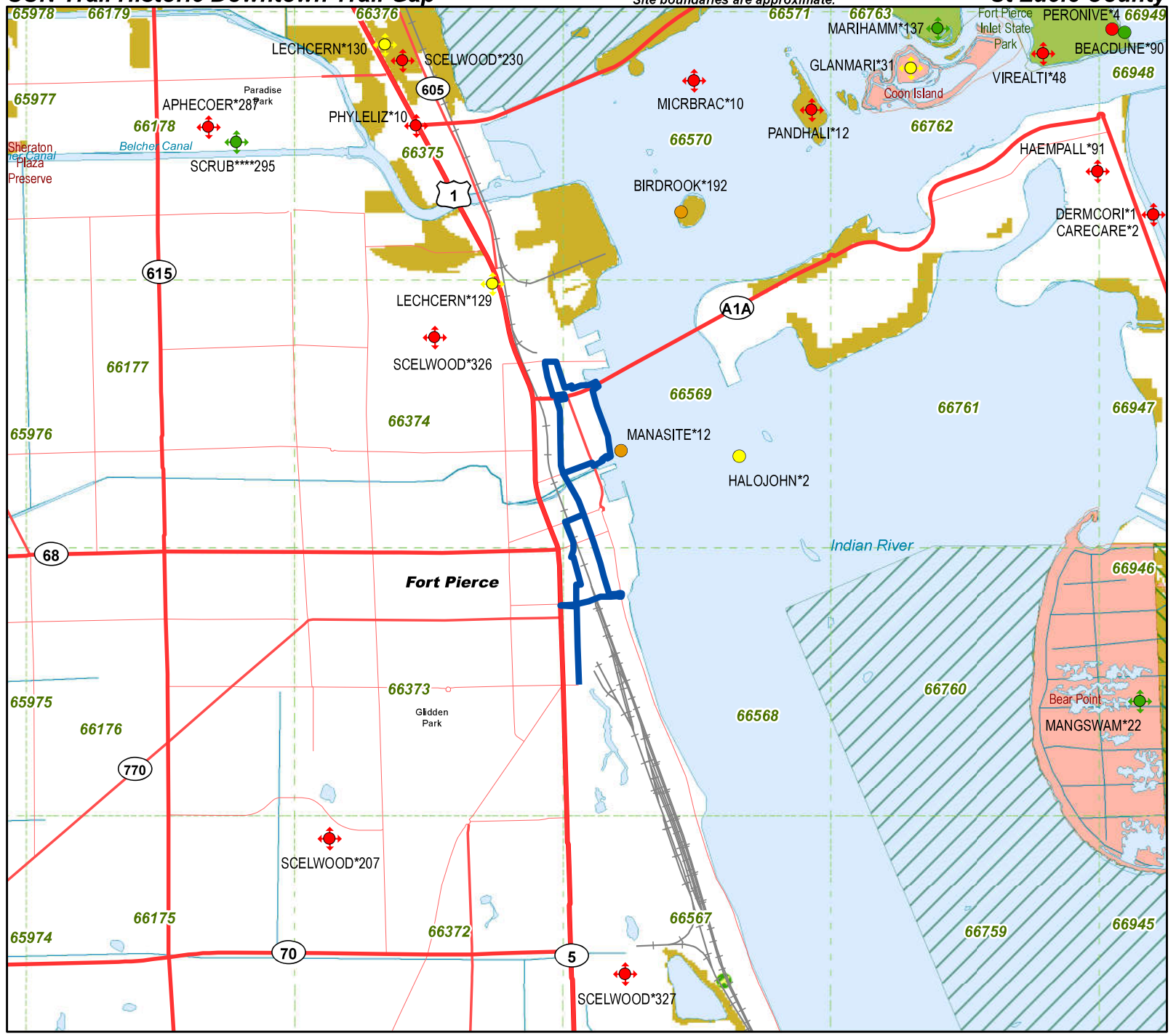
FLORIDA Natural Areas INVENTORY



Element Occurrences

- Animals
- Plants
- Communities
- Other
- Data Sensitive

Point Indicates General Vicinity of Element

U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96

Conservation Lands

- Federal
- State
- Local
- Private
- State Aquatic Preserves

Land Acquisition Projects

- Florida Forever Board of Trustees Projects

- FNAI Rare Species Habitat
- FNAI Biodiversity Matrix Square Mile Units

- County Boundary
- Interstate
- Turnpike
- Major Highway
- Local Road
- Railroad [Inactive railroads shown in Gray]
- Water

NOTE
Map should not be interpreted without accompanying documents.

Map produced by KAB
4/11/2018

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FNAI ELEMENT OCCURRENCE REPORT on or near

SUN Trail Historic Downtown Trail Gap

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
APHECOER*287	*Aphelocoma coerulescens*	Florida Scrub-Jay	G2	S2	T	FT	1981-05-11	REMNANT OAK SCRUB BETWEEN HOUSES.	1981-05-11: 2 SCRUB JAYS.
BIRDROOK*192	Bird Rookery		G5	SNR	N	N	1988-10-16	SPOIL ISLAND. CENTER OF ISLAND HAS NATIVE HAMMOCK HARDWOODS. AUSTRALIAN PINE AND BRAZILIAN PEPPER DOMINANT ON REST OF ISLAND. ISLAND SURROUNDED BY PRODUCTIVE GRASSBEDS.	40 NESTS GREAT BLUE HERONS AND DOUBLE CRESTED CORMORANTS. IMPORTANT NESTING ISLAND.
HALOJOHN*2	*Halophila johnsonii*	Johnson's seagrass	G2	S2	T	E	1988-10-17	SANDY SHOAL IN INDIAN RIVER LAGOON.	PLANTS FORM SPARSE LOW MATS FEW INCHES HIGH IN WATER 1.1' DEEP ON INCOMING TIDE (11:30 AM EDT); INTERSPERSED WITH HALODULE WRIGHTII.
LECHCERN*129	*Lechea cernua*	nodding pinweed	G3	S3	N	T	1987-07-26	1987-07-26: TALL, LEAFY SAND PINE, ARISTIDA, QUERCUS MYRTIFOLIA, ASCLEPIAS CURTISSII, POLYGONELLA, Q. INOPINA, HELIANTHENUM, VITRIS, OPUNTIA, SILKGRASS, SELAGINELLA, PALAFOX, RHYCHOSPORA MEGACARPA, Q. GEMINATA, SMILAX, Q. CHAPMANII, SERENOA, ROSEMARY, CL	1987-07-26: ON SITE(U92MIN01FLUS).
LECHCERN*130	*Lechea cernua*	nodding pinweed	G3	S3	N	T	1987-07-26	1987-07-26: tall sand pines; white sand; flora includes Quercus myrtifolia, Palafox, Polygonella, Q. chapmanii, Smilax, Aristida, Carya, Vitris, Sabal palmetto, Q. inopina, Opuntia, silgrass, Persea, Schinus, Q. geminata, tree cactus, hog plum, Lechea ce	1987-07-26: on site (U92MIN01FLUS).
MANASITE*12	Manatee Aggregation Site		GNR	SNR	N	N	1988	WARM-WATER EFFLUENT FROM POWER PLANT AT THE MOUTH OF MOORE CREEK WHERE IT ENTERS A LARGE COASTAL RIVER.	UP TO 44 MANATEES USE THIS SITE DURING THE WINTER.

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FNAI ELEMENT OCCURRENCE REPORT on or near

SUN Trail Historic Downtown Trail Gap

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
MANGSWAM*22	Mangrove swamp		G5	S4	N	N	1999	No general description given	2010: Prior to the 2010 natural community reclassification effort this EO had been known as Estuarine tidal swamp EO number 22 (see U10FNA01FLUS for updated community descriptions). 1999: Update to last obs date was based on interpretation of aerial phot
MICRBRAC*10	*Microphis brachyurus*	Opossum Pipefish	G4G5	S2	SC	N	1981	No general description given	Specimens collected.
PANDHALI*12	*Pandion haliaetus*	Osprey	G5	S3S4	N	SSC*	1984	THROUGHOUT AREA.	SIGNIFICANT MIGRATORY AREA, UP TO 80 INDIVIDUALS CAN BE FOUND DAILY IN GENERAL AREA.
PHYLELIZ*10	*Phyllophaga elizoria*	Elizoria June Beetle	G2	S2	N	N	2002-03-14	2002-03-14: No description given (N05LAM01FLUS).	2002-03-14: One specimen was collected (N05LAM01FLUS).
SCELWOOD*207	*Sceloporus woodi*	Florida Scrub Lizard	G2G3	S2S3	N	N	1930-08-13	No general description given	8 SPEC. COLL. 13 AUG. 1930 BY O.C. VAN HYNING (AMNH-58573-80).
SCELWOOD*230	*Sceloporus woodi*	Florida Scrub Lizard	G2G3	S2S3	N	N	1987-07-26	1987-07-26: tall sand pines, white sand, flora includes: Quercus myrtifolia, Palafox, Polygonella, Q. chapmanii, Smilax, Aristida, Carya, Vitris, Sabal palmetto, Q.inopina, Opuntia, silkgrass, Persea, Schinus, Q. geminata, tree cactus, hog plum, Lechea c	1987-07-26: scrub lizards abundant on site (U92MIN01FLUS).
SCELWOOD*326	*Sceloporus woodi*	Florida Scrub Lizard	G2G3	S2S3	N	N	1986-05-12	Coastal scrub	1986-05-12: K.E. Enge, GFC, observation. See Enge et al (1986; Coop Unit Tech Rep No 26).
SCELWOOD*327	*Sceloporus woodi*	Florida Scrub Lizard	G2G3	S2S3	N	N	1986-05-12	Coastal scrub	1986-05-12: K.E. Enge, GFC, observation. See Enge et al (1986; Coop Unit Tech Rep No 26).
SCRUB****295	Scrub		G2	S2	N	N	1981-05-11	REMNANT OAK SCRUB BETWEEN HOUSES.	No EO data given

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Florida Natural Areas Inventory

Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 66373					
Potential					
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	ST
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	T
Conradina grandiflora	Large-flowered Rosemary	G3	S3	N	T
Drymarchon couperi	Eastern Indigo Snake	G3Q	S3	LT	FT
Glandularia maritima	Coastal Vervain	G3	S3	N	E
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
Lechea cernua	Nodding Pinweed	G3	S3	N	T
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	E
Nemastylis floridana	Celestial Lily	G2	S2	N	E
Polygala smallii	Tiny Polygala	G1	S1	LE	E
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	T
Rostrhamus sociabilis	Snail Kite	G4G5	S2	LE	N
Sceloporus woodi	Florida Scrub Lizard	G2G3	S2S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC
Matrix Unit ID: 66374					
Likely					
Scrub		G2	S2	N	N
Trichechus manatus	West Indian Manatee	G2	S2	LE, PT	FE
Potential					
Acipenser oxyrinchus oxyrinchus	Atlantic Sturgeon	G3T3	S1	LE	FE
Aphelocoma coerulescens	Florida Scrub-Jay	G2	S2	LT	FT
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	ST
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	T
Conradina grandiflora	Large-flowered Rosemary	G3	S3	N	T
Ctenogobius stigmaturus	Spottail Goby	G2	S2	N	N
Drymarchon couperi	Eastern Indigo Snake	G3Q	S3	LT	FT
Glandularia maritima	Coastal Vervain	G3	S3	N	E
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
Halophila johnsonii	Johnson's Seagrass	G2	S2	LT	E
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	T
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	E
Microphis brachyurus	Opossum Pipefish	G4G5	S2	SC	N
Pandion haliaetus	Osprey	G5	S3S4	N	SSC*
Polygala smallii	Tiny Polygala	G1	S1	LE	E
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	T
Rostrhamus sociabilis	Snail Kite	G4G5	S2	LE	N
Sceloporus woodi	Florida Scrub Lizard	G2G3	S2S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC
Setophaga discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Matrix Unit ID: 66568					
Likely					

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

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Florida Natural Areas Inventory

Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Scrub		G2	S2	N	N
Trichechus manatus	West Indian Manatee	G2	S2	LE, PT	FE
Potential					
Acipenser oxyrinchus oxyrinchus	Atlantic Sturgeon	G3T3	S1	LE	FE
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	ST
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	T
Conradina grandiflora	Large-flowered Rosemary	G3	S3	N	T
Ctenogobius stigmaturus	Spottail Goby	G2	S2	N	N
Drymarchon couperi	Eastern Indigo Snake	G3Q	S3	LT	FT
Eretmochelys imbricata	Hawksbill Sea Turtle	G3	S1	LE	FE
Forestiera segregata var. pinetorum	Florida Pinewood Privet	G4T2	S2	N	N
Glandularia maritima	Coastal Vervain	G3	S3	N	E
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
Halophila johnsonii	Johnson's Seagrass	G2	S2	LT	E
Lechea cernua	Nodding Pinweed	G3	S3	N	T
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	E
Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	T
Rivulus marmoratus	Mangrove Rivulus	G4G5	S3	SC	N
Rostrhamus sociabilis	Snail Kite	G4G5	S2	LE	N
Sceloporus woodi	Florida Scrub Lizard	G2G3	S2S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC
Setophaga discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Matrix Unit ID: 66569					
Documented-Historic					
Halophila johnsonii	Johnson's Seagrass	G2	S2	LT	E
Manatee Aggregation Site		GNR	SNR	N	N
Likely					
Mycteria americana	Wood Stork	G4	S2	LT	FT
Trichechus manatus	West Indian Manatee	G2	S2	LE, PT	FE
Potential					
Acipenser oxyrinchus oxyrinchus	Atlantic Sturgeon	G3T3	S1	LE	FE
Coelorachis tuberculosa	Piedmont Jointgrass	G3	S3	N	T
Conradina grandiflora	Large-flowered Rosemary	G3	S3	N	T
Ctenogobius stigmaturus	Spottail Goby	G2	S2	N	N
Drymarchon couperi	Eastern Indigo Snake	G3Q	S3	LT	FT
Eretmochelys imbricata	Hawksbill Sea Turtle	G3	S1	LE	FE
Forestiera segregata var. pinetorum	Florida Pinewood Privet	G4T2	S2	N	N
Glandularia maritima	Coastal Vervain	G3	S3	N	E
Gopherus polyphemus	Gopher Tortoise	G3	S3	C	ST
Heterodon simus	Southern Hognose Snake	G2	S2	N	N
Lechea cernua	Nodding Pinweed	G3	S3	N	T
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	E
Microphis brachyurus	Opossum Pipefish	G4G5	S2	SC	N
Pandion haliaetus	Osprey	G5	S3S4	N	SSC*
Peromyscus polionotus niveiventris	Southeastern Beach Mouse	G5T1	S1	LT	FT

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

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Florida Natural Areas Inventory

Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Rivulus marmoratus	Mangrove Rivulus	G4G5	S3	SC	N
Rostrhamus sociabilis	Snail Kite	G4G5	S2	LE	N
Sceloporus woodi	Florida Scrub Lizard	G2G3	S2S3	N	N
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	SSC
Setophaga discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Tephrosia angustissima var. curtissii	Coastal Hoary-pea	G1T1	S1	N	E

Definitions: *Documented - Rare species and natural communities documented on or near this site.*
Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
Potential - This site lies within the known or predicted range of the species listed.

Elements and Element Occurrences

An **element** is any exemplary or rare component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature.

An **element occurrence (EO)** is an area of land and/or water in which a species or natural community is, or was, present. An EO should have practical conservation value for the Element as evidenced by potential continued (or historical) presence and/or regular recurrence at a given location.

Element Ranking and Legal Status

Using a ranking system developed by NatureServe and the Natural Heritage Program Network, the Florida Natural Areas Inventory assigns two ranks for each element. The global rank is based on an element's worldwide status; the state rank is based on the status of the element in Florida. Element ranks are based on many factors, the most important ones being estimated number of Element Occurrences (EOs), estimated abundance (number of individuals for species; area for natural communities), geographic range, estimated number of adequately protected EOs, relative threat of destruction, and ecological fragility.

FNAI GLOBAL ELEMENT RANK

G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2 = Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3 = Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4 = Apparently secure globally (may be rare in parts of range).
G5 = Demonstrably secure globally.
GH = Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker).
GX = Believed to be extinct throughout range.
GXC = Extirpated from the wild but still known from captivity or cultivation.
G#? = Tentative rank (e.g., G2?).
G#G# = Range of rank; insufficient data to assign specific global rank (e.g., G2G3).
G#T# = Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1).
G#Q = Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q).
G#T#Q = Same as above, but validity as subspecies or variety is questioned.
GU = Unrankable; due to a lack of information no rank or range can be assigned (e.g., GUT2).
GNA = Ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
GNR = Element not yet ranked (temporary).
GNRTNR = Neither the element nor the taxonomic subgroup has yet been ranked.

FNAI STATE ELEMENT RANK

S1 = Critically imperiled in Florida because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
S2 = Imperiled in Florida because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
S3 = Either very rare and local in Florida (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
S4 = Apparently secure in Florida (may be rare in parts of range).
S5 = Demonstrably secure in Florida.
SH = Of historical occurrence in Florida, possibly extirpated, but may be rediscovered (e.g., ivory-billed woodpecker).
SX = Believed to be extirpated throughout Florida.
SU = Unrankable; due to a lack of information no rank or range can be assigned.
SNA = State ranking is not applicable because the element is not a suitable target for conservation (e.g. a hybrid species).
SNR = Element not yet ranked (temporary).

FEDERAL LEGAL STATUS

Legal status information provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant federal agency.

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

C = Candidate species for which federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
E = Endangered: species in danger of extinction throughout all or a significant portion of its range.
E, T = Species currently listed endangered in a portion of its range but only listed as threatened in other areas
E, PDL = Species currently listed endangered but has been proposed for delisting.
E, PT = Species currently listed endangered but has been proposed for listing as threatened.
E, XN = Species currently listed endangered but tracked population is a non-essential experimental population.
T = Threatened: species likely to become Endangered within the foreseeable future throughout all or a significant portion of its range.
PE = Species proposed for listing as endangered
PS = Partial status: some but not all of the species' infraspecific taxa have federal
PT = Species proposed for listing as threatened
SAT = Treated as threatened due to similarity of appearance to a species which is federally listed such that enforcement personnel have difficulty in attempting to differentiate between the listed and unlisted species.
SC = Not currently listed, but considered a "species of concern" to USFWS.

STATE LEGAL STATUS

Provided by FNAI for information only. For official definitions and lists of protected species, consult the relevant state agency.

Animals: Definitions derived from "Florida's Endangered Species and Species of Special Concern, Official Lists" published by Florida Fish and Wildlife Conservation Commission, 1 August 1997, and subsequent updates.

C = Candidate for listing at the Federal level by the U. S. Fish and Wildlife Service
FE = Listed as Endangered Species at the Federal level by the U. S. Fish and Wildlife Service
FT = Listed as Threatened Species at the Federal level by the U. S. Fish and Wildlife Service
FXN = Federal listed as an experimental population in Florida
FT(S/A) = Federal Threatened due to similarity of appearance
ST = State population listed as Threatened by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
SSC = Listed as Species of Special Concern by the FFWCC. Defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification, environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species. (SSC* for Pandion haliaetus (Osprey) indicates that this status applies in Monroe county only.)
N = Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or see: http://www.doacs.state.fl.us/pi/.

E = Endangered: species of plants native to Florida that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue; includes all species determined to be endangered or threatened pursuant to the U.S. Endangered Species Act.
T = Threatened: species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in number as to cause them to be Endangered.
N = Not currently listed, nor currently being considered for listing.

Element Occurrence Ranking

FNAI ranks of quality of the element occurrence in terms of its viability (EORANK). Viability is estimated using a combination of factors that contribute to continued survival of the element at the location. Among these are the size of the EO, general condition of the EO at the site, and the conditions of the landscape surrounding the EO (e.g. an immediate threat to an EO by local development pressure could lower an EO rank).

A = Excellent estimated viability
A? = Possibly excellent estimated viability
AB = Excellent or good estimated viability
AC = Excellent, good, or fair estimated viability
B = Good estimated viability
B? = Possibly good estimated viability
BC = Good or fair estimated viability
BD = Good, fair, or poor estimated viability
C = Fair estimated viability
C? = Possibly fair estimated viability
CD = Fair or poor estimated viability
D = Poor estimated viability
D? = Possibly poor estimated viability
E = Verified extant (viability not assessed)
F = Failed to find
H = Historical
NR = Not ranked, a placeholder when an EO is not (yet) ranked.
U = Unrankable
X = Extirpated

*For additional detail on the above ranks see: http://www.natureserve.org/explorer/eorankguide.htm

FNAI also uses the following EO ranks:

H? = Possibly historical
F? = Possibly failed to find
X? = Possibly extirpated

The following offers further explanation of the H and X ranks as they are used by FNAI:

The rank of H is used when there is a lack of recent field information verifying the continued existence of an EO, such as (a) when an EO is based only on historical collections data; or (b) when an EO was ranked A, B, C, D, or E at one time and is later, without field survey work, considered to be possibly extirpated due to general habitat loss or degradation of the environment in the area. This definition of the H rank is dependent on an interpretation of what constitutes "recent" field information. Generally, if there is no known survey of an EO within the last 20 to 40 years, it should be assigned an H rank. While these time frames represent suggested maximum limits, the actual time period for historical EOs may vary according to the biology of the element and the specific landscape context of each occurrence (including anthropogenic alteration of the environment). Thus, an H rank may be assigned to an EO before the maximum time frames have lapsed. Occurrences that have not been surveyed for periods exceeding these time frames should not be ranked A, B, C, or D. The higher maximum limit for plants and communities (i.e., ranging from 20 to 40 years) is based upon the assumption that occurrences of these elements generally have the potential to persist at a given location for longer periods of time. This greater potential is a reflection of plant biology and community dynamics. However, landscape factors must also be considered. Thus, areas with more anthropogenic impacts on the environment (e.g., development) will be at the lower end of the range, and less-impacted areas will be at the higher end.

The rank of X is assigned to EOs for which there is documented destruction of habitat or environment, or persuasive evidence of eradication based on adequate survey (i.e., thorough or repeated survey efforts by one or more experienced observers at times and under conditions appropriate for the Element at that location).

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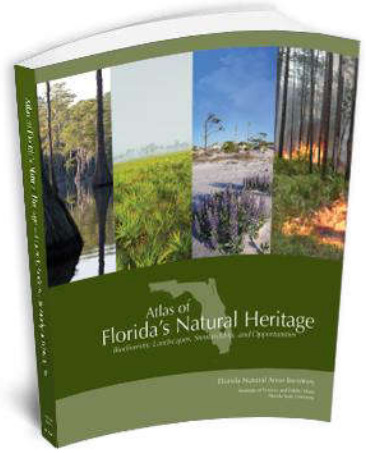

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ECOLOGY AND DEVELOPMENT-RELATED HABITAT REQUIREMENTS OF THE FLORIDA SCRUB JAY (*APHELOCOMA COERULESCENS COERULESCENS*)

NONGAME WILDLIFE PROGRAM
TECHNICAL REPORT NO. 8



JOHN W. FITZPATRICK, Ph.D
GLEN E. WOOLFENDEN, Ph.D
MARK T. KOPENY, Ph.D

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FLORIDA GAME AND FRESH WATER FISH COMMISSION
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32399-1600

APRIL 1991

ECOLOGY AND DEVELOPMENT-RELATED HABITAT REQUIREMENTS OF THE FLORIDA SCRUB JAY (*APHELOCOMA COERULESCENS COERULESCENS*)

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Suggested reference:

J.W. Fitzpatrick, G.E. Woolfenden and M.T. Kopeny. 1991. Ecology and development-related habitat requirements of the Florida scrub jay (*Aphelocoma coerulescens coerulescens*). Florida Game and Fresh Water Fish Commission, Nongame Wildlife Program Technical Report No. 8. Tallahassee, FL. 49 pp.

This publication provides guidelines to both developers and regulators where habitat protection for Florida scrub jays is desired. The recommendations in this publication reflect the development-related actions considered necessary by the authors and by staff of the Commission if the scrub jay is to survive outside existing protected lands. These do not, however, constitute rules or formal policies of the Florida Game and Fresh Water Fish Commission and are not legally binding on developers or on regulators that make decisions affecting scrub jays and scrub jay habitat.

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SECTION 1

RECOMMENDATIONS: DEVELOPMENT-RELATED HABITAT PRESERVATION FOR THE THREATENED FLORIDA SCRUB JAY

PREFACE

The recommendations presented in this section were developed by Mark Kopeny, nongame biologist with Florida Game and Freshwater Fish Commission, Office of Environmental Services, in consultation with biologists at Archbold Biological Station, the Commission, and other institutions. Many of the recommendations presented here are based on the research results that comprise Section 2 of this report, "Ecology and Habitat Requirements of the Threatened Florida Scrub Jay," prepared by John Fitzpatrick and Glen Woolfenden. These recommendations are applicable to Developments of Regional Impact and to any other land conversion activities within the range of the Florida scrub jay, and are intended for use by regulatory and review agencies.

ACKNOWLEDGMENTS

The preparation of this section involved the help of many individuals, each of whom gladly contributed their time and energy. Dave Breininger, Ray Fernald, Grace Iverson, Peter Merritt, Dick Roberts, and Brian Toland, all currently or recently involved in research on the Florida scrub jay, contributed significantly in the development of these recommendations by sharing unpublished information and reviewing earlier drafts. Mike Allen and Randy Kautz also were closely involved in developing these recommendations throughout the process. Many others, in academia, private enterprise, and state and federal agencies, were asked to comment on various parts of this section at one time or another and their assistance was always forthcoming. David Cook edited the final draft. Sharon Hunter and Traci Wallace provided indispensible secretarial support. We gratefully acknowledge everyone that contributed to this conservation effort for the Florida scrub jay.

DEFINITIONS

The following terms are used throughout this section.

COMPENSATE OFF-SITE, OFF-SITE COMPENSATION. To contribute land or money for the purchase of land in lieu of on-site protection of habitat for jays. Off-site compensation may be accomplished through participation in a mitigation park program, or by conveyance of property or property rights to an appropriate private conservation organization or state agency.

JAY, SCRUB JAY. Synonyms for Florida scrub jay.

JAY GROUP. One or more jays occupying a territory. A jay group may be composed of a breeding pair of adults, with or without helpers and young of the year, or may consist of a single, unpaired, territorial individual that is not a member of other jay groups on-site.

OFF-SITE. Outside the boundaries of a proposed development site.

ON-SITE. Within the boundaries of a proposed development site.

PRESERVE, PRESERVATION. To contribute habitat for the Florida scrub jay, either on-site (i.e., protection) or off-site (i.e., compensation).

PROTECT ON-SITE, ON-SITE PROTECTION. To establish one or more refuges for the Florida scrub jay on a proposed development site.

SATELLITE REFUGE. A protected area established on-site in Type I habitat. Satellite refuges are established when there is a large amount of Type I habitat on-site compared to the number of jay groups on-site. Satellite refuges are established 1) *in addition to territory refuges* when jays are on-site or 2) *in the absence of territory refuges* when jays are not onsite, but occur within normal dispersal distance of Type I habitat. The primary purpose of establishing satellite refuges is to secure a portion of the unoccupied scrub that is potential scrub jay habitat and is of critical importance in maintaining local jay populations.

SCRUB OAK SPECIES. Any of the following stunted, low-growing species of oak that occur on sandy soils within the range of the Florida scrub jay; *Quercus geminata*, *Q. chapmanii*, *Q. inopina*, *Q. myrtifolia*, *Q. minima*. Taxonomically confusing scrub oaks related to *Q. geminata* are sometimes lumped under the name *Q. virginiana*.

TERRITORY REFUGE. A protected area established on-site in Type I, Type II, and/or Type III habitat. Territory refuges are established on-site when one or more jays occur on-site. The primary purpose of territory refuges is to provide permanent habitat and other resources for each jay group onsite.

TYPE I HABITAT. Upland plant communities, assessed in one-acre plots, with greater than or equal to 15% cover of scrub oak species.

TYPE II HABITAT. Plant communities, assessed in one-acre plots, with percent cover of scrub oak species greater than zero but less than 15%.

TYPE III HABITAT. Native and improved uplands and seasonally dry wetlands within 1/4 mile of Type I or Type II habitat.

DICHOTOMOUS KEY

The following dichotomous key describes the intended step-by-step application of this section. The purpose of the key is to initiate the reader and to provide an overview. Recommendations per se are not presented in the key. It is necessary to read both sections of the report in order to understand and implement the recommendations contained in it.

1a. PROPOSED DEVELOPMENT IS WITHIN THE CURRENT RANGE OF SCRUB JAYS. Inventory habitat on-site (p. 13). Go to couplet 2.

1b. PROPOSED DEVELOPMENT IS *NOT* WITHIN THE CURRENT RANGE OF SCRUB JAYS. No habitat preservation measures for scrub jays are recommended.

2a. TYPE I, II, OR III HABITAT EXISTS ON-SITE. Survey all Type I, II, and III habitat for scrub jays (pp. 13-15). Go to couplet 3.

2b. *NO* TYPE I, II, or III HABITAT EXISTS ON-SITE. No habitat preservation measures for scrub jays are recommended.

3a. SCRUB JAYS OCCUR ON-SITE. Establish one or more territory refuges in Type I, II and/or III habitat. The total number of acres of habitat to be protected in territory refuge(s) equals 25 times the number of scrub jay groups on-site (p. 16). Off-site compensation may be an option in certain circumstances (p. 16). Go to couplet 4.

3b. *NO* SCRUB JAYS OCCUR ON-SITE. Search records for recent documentation of scrub jays within 5 miles of Type I habitat on the proposed development site (p. 15). Go to couplet 5.

4a. THE TOTAL NUMBER OF ACRES OF TYPE I HABITAT ON-SITE IS GREATER THAN THE TOTAL NUMBER OF ACRES DESIGNATED FOR TERRITORY REFUGE(S) IN 3a, ABOVE. Establish one or more satellite refuges in Type I habitat. The total number of acres to be protected equals: [(total number of acres of Type I habitat on-site) – (total number of acres preserved as territory refuges in 3a, above)] X 0.25 (p. 16). Off-site compensation may be an alternative to on-site protection in certain circumstances (p. 16). No further habitat preservation measures for scrub jays are recommended.

4b. THE TOTAL NUMBER OF ACRES OF TYPE I HABITAT ON-SITE IS LESS THAN THE TOTAL NUMBER OF ACRES DESIGNATED FOR TERRITORY REFUGE(S) IN 3a, ABOVE. No further habitat preservation measures for scrub jays are recommended.

5a. POST-1974 RECORDS EXIST OF SCRUB JAYS WITHIN 5 MILES OF TYPE I HABITAT ON THE PROPOSED DEVELOPMENT SITE. Establish one or more satellite refuges in Type I habitat (p. 16) or demonstrate that the jays in question have since been extirpated (p. 15). The total number of acres to be preserved equals 25% of all Type I habitat on-site. Off-site compensation may be an alternative to on-site protection in certain circumstances (p. 16). No further habitat preservation measures for scrub jays are recommended.

5b. *NO* POST-1974 RECORDS EXIST OF SCRUB JAYS WITHIN 5 MILES OF TYPE I HABITAT ON THE PROPOSED DEVELOPMENT SITE. No further habitat preservation measures for scrub jays are recommended.

SUBSECTION 1.1
INTRODUCTION

STATUS OF THE FLORIDA SCRUB JAY

The statewide population of the Florida scrub jay (*Aphelocoma coerulescens coerulescens*) was recently estimated at about 7,000 to 11,000 birds (Breininger 1989). Over half of the remaining jays in the state occur on and around two large, federally owned tracts of land: Ocala National Forest and Merritt Island National Wildlife Refuge. Breininger (1989) estimated the Merritt Island population to be about 1,400-3,600 birds. Cox (1987) estimated the Ocala National Forest population to be 2,600-3,400 birds. Based on current management practices in these two tracts and their effects on Florida scrub jays, it is doubtful that the number of jays on these two federal properties will remain stable or increase; declines are likely. Extant but fragmented habitat on the Lake Wales Ridge in Highlands and Polk counties supports the third large concentration of jays. Beyond these three population centers, the Florida scrub jay occurs in widely scattered populations inhabiting patches of scrub along the interior and coastal sand ridges of the Florida peninsula.

Cox (1987) estimated that the number of jays statewide probably has declined by 50% or more over the last 100 years. More recent information indicates that 50% is almost certainly an underestimate of the statewide decline. The estimated population loss along the Lake Wales Ridge, considered to have been at the heart of the species' range prior to human settlement, is 80% or more. This estimate is based on the amount of scrub habitat that has been destroyed or otherwise rendered unsuitable for jays.

The decline of the Florida scrub jay throughout its present and former range is attributed almost entirely to the loss of Florida's scrub communities to agriculture, silviculture, and commercial and residential development. The Florida scrub jay has been classified as Threatened by the Florida Game and Fresh Water Fish Commission since 1975 and by the U.S. Fish and Wildlife Service since 1987.

PATTERNS OF HABITAT USE BY THE FLORIDA SCRUB JAY

The Florida scrub jay is strongly associated with several Florida scrub communities, and also will use *adjacent* non-scrub habitats of certain types. However, Florida scrub jays persist only in areas where one or more species of scrub oaks (*Quercus* spp.) occur, even if only vestigially represented. Prior to human settlement, virtually all these natural scrub communities were maintained by frequent natural fires.

Florida scrub jays are most abundant in open, oak-dominated scrub communities of the interior and Atlantic coast sand ridges of the Peninsula. Examples of optimal habitat include xeric oak scrub (Figures 1.1-1.2), open sand pine scrub (Figure 1.3), open scrubby flatwoods with slash pines (Figure 1.4), and rosemary scrub (Figure 1.5).

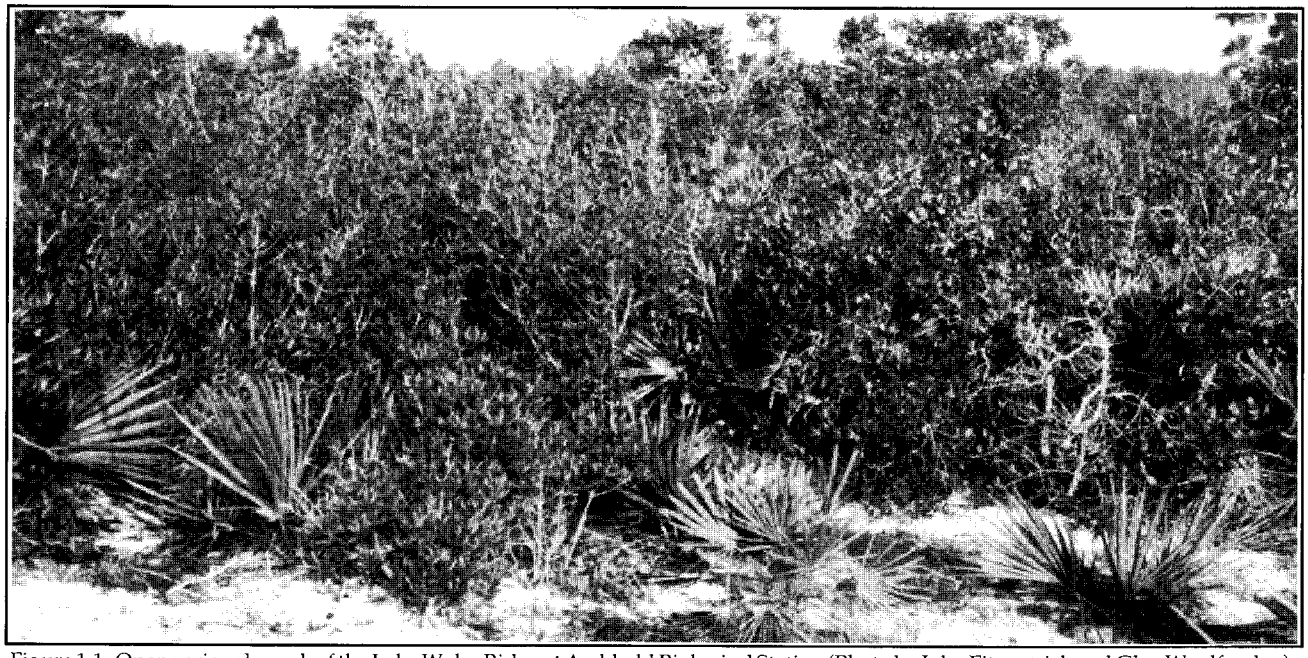

Figure 1.1. Open xeric oak scrub of the Lake Wales Ridge at Archbold Biological Station (Photo by John Fitzpatrick and Glen Woolfenden).

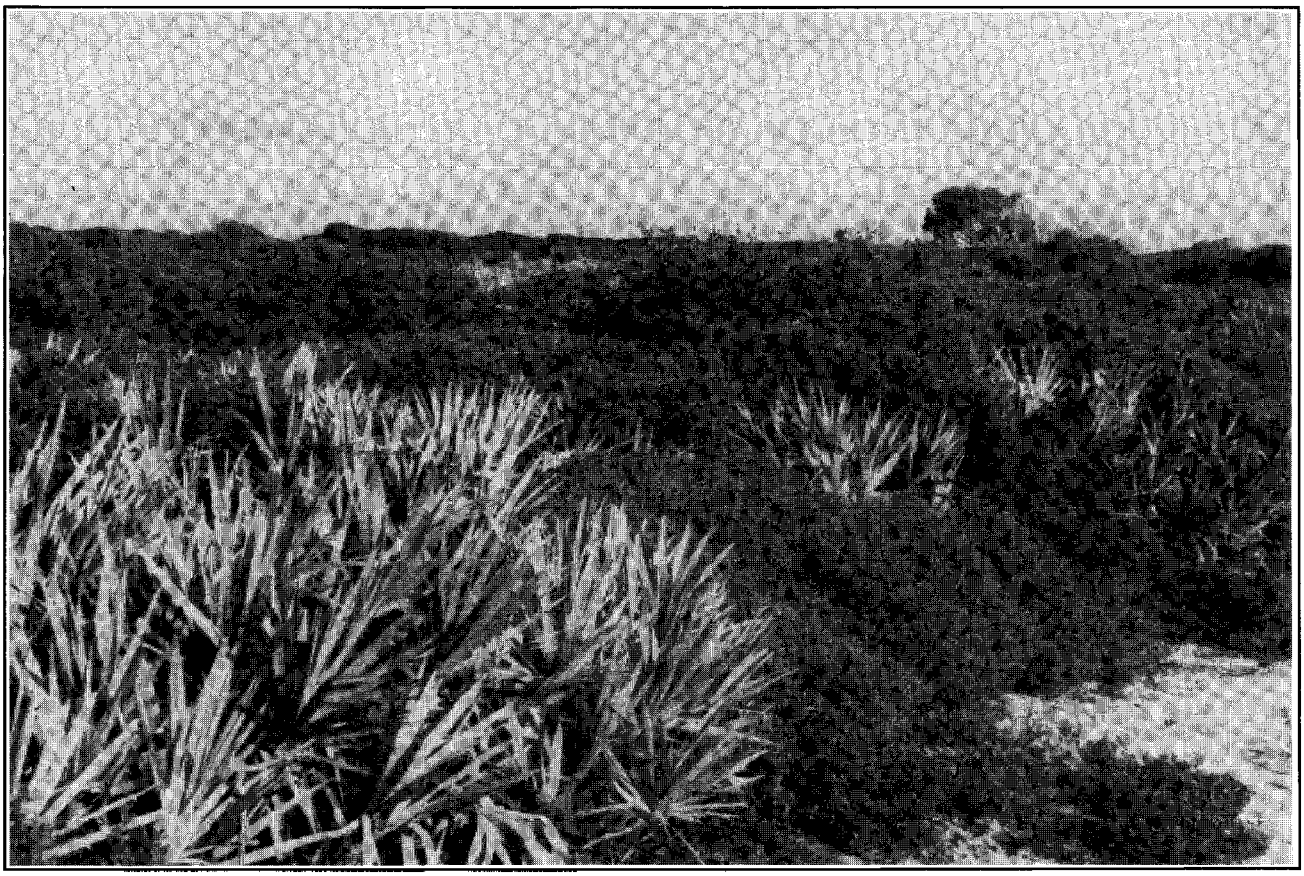

Figure 1.2. Oak-palmetto scrub of the Atlantic coast in Brevard County (Photo by Dave Breininger).

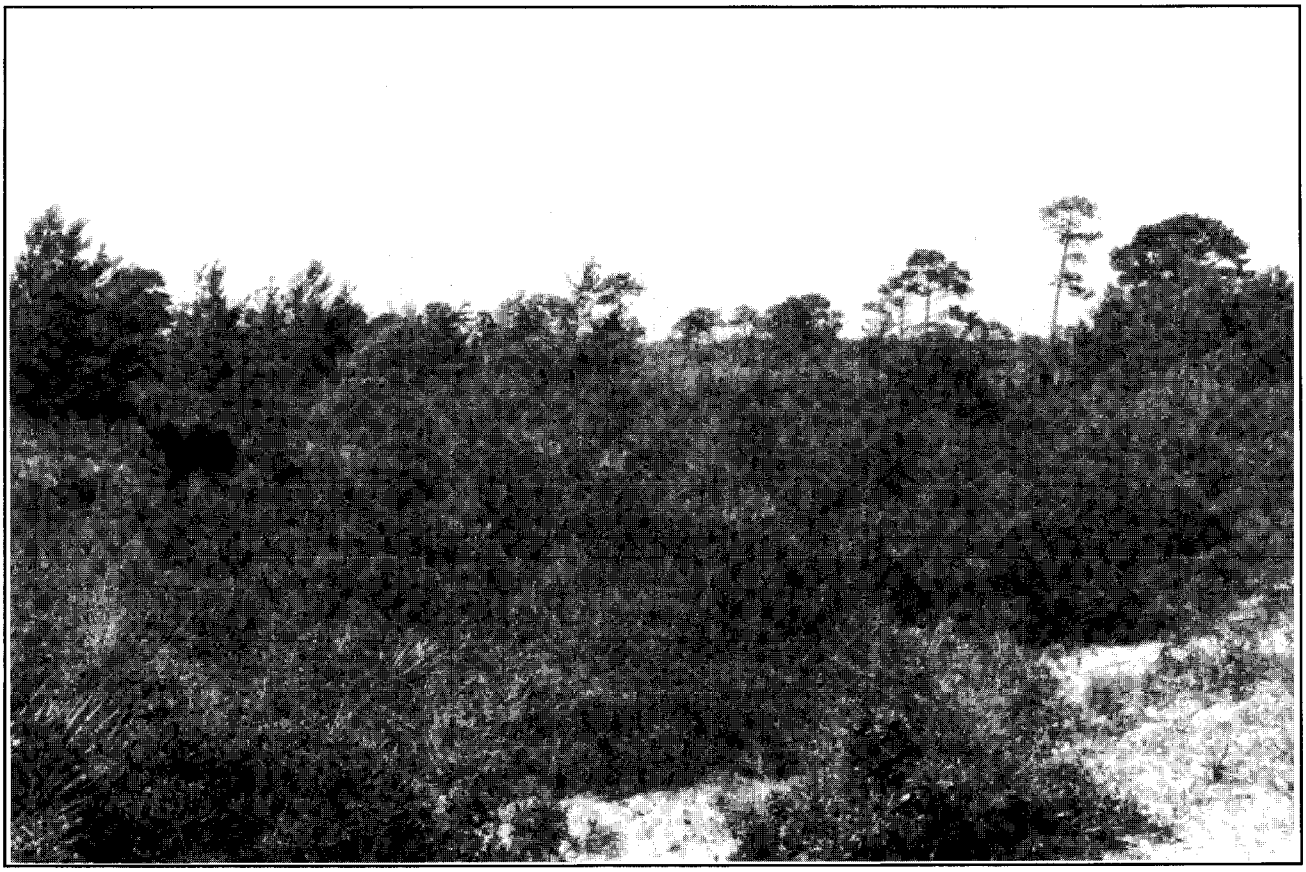

Figure 1.3. Early successional sand pine scrub of the Southern Atlantic Coast, at Jonathan Dickinson State Park, Martin County (Photo by Judith C. Norton).

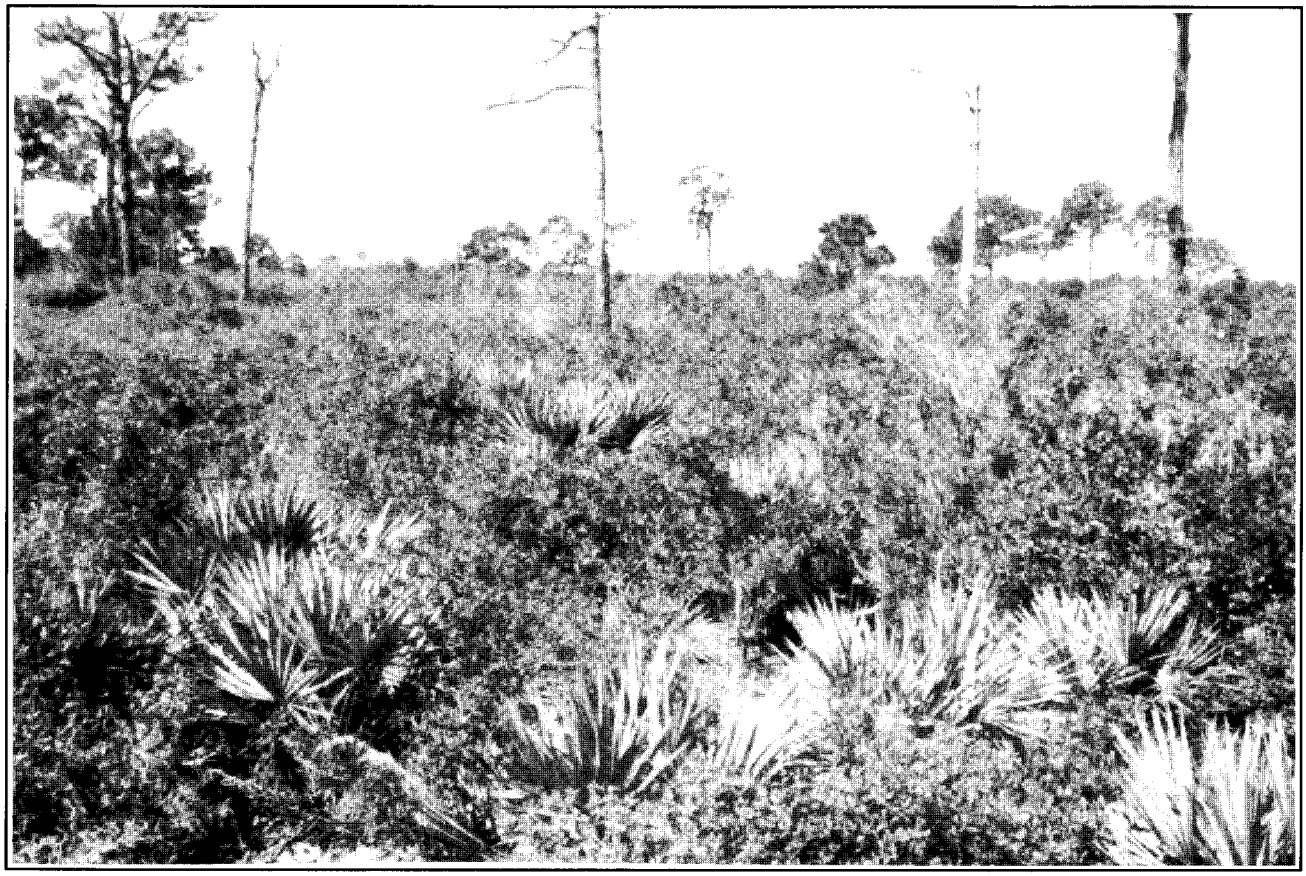

Figure 1.4. Scrubby slash pine flatwoods near the Atlantic Coast in Brevard County (Photo by Dave Breininger).

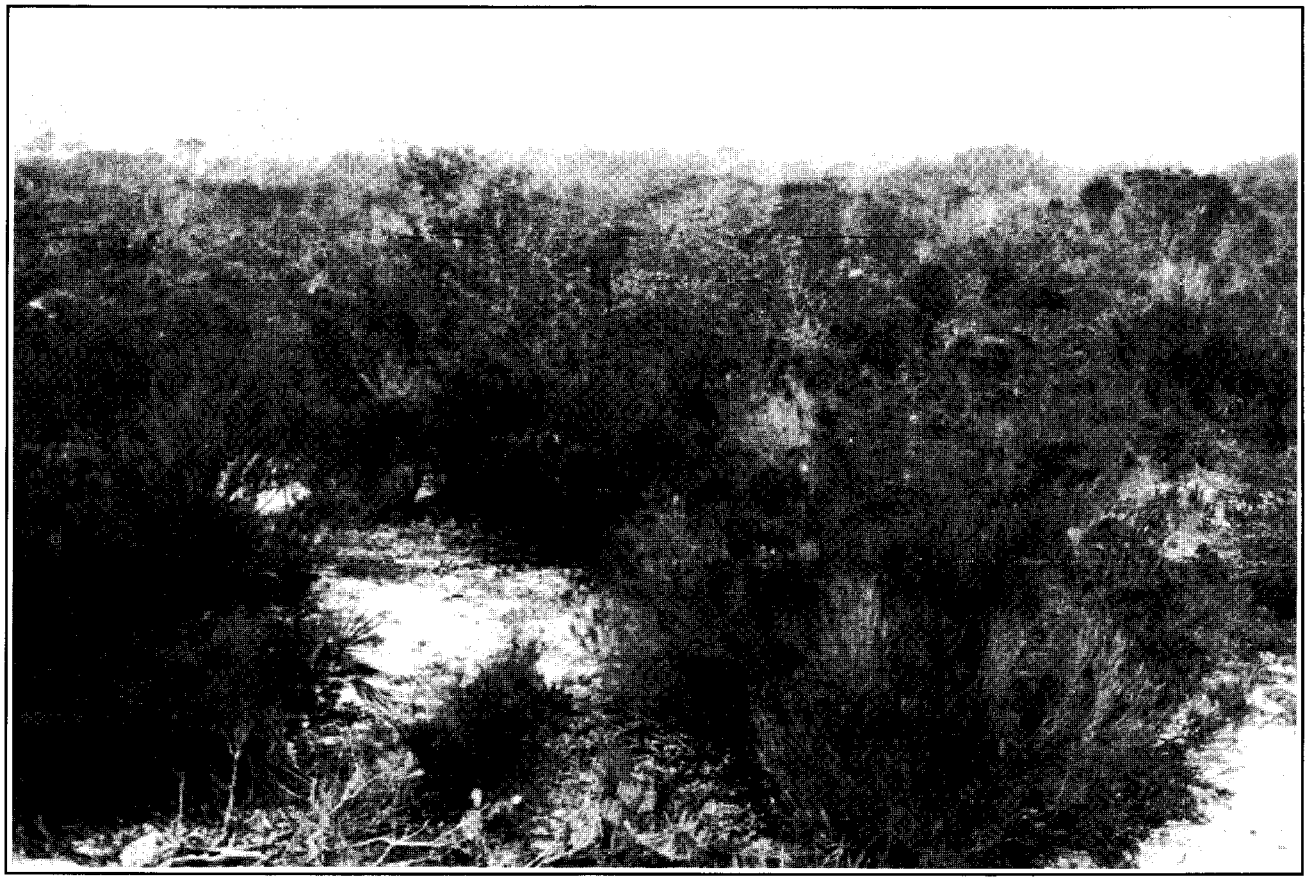

Figure 1.5. Rosemary scrub of the Lake Wales Ridge at Archbold Biological Station (Photo by John Fitzpatrick and Glen Woolfenden).

Land conversion in Florida has resulted in extensive reduction, fragmentation and insularization of Florida's fire-maintained scrub communities. Consequently, natural fires burn fewer acres, and only a fraction of Florida's remaining oak-dominated scrub communities is in a condition that can support a stable (i.e., not declining) population of the jays. Fire-suppressed scrub, with a dense, tall understory and/or an encroaching canopy of pines, is low quality habitat for Florida scrub jays. Examples depicted here are unburned interior and coastal xeric oak scrub (Figures 1.6-1.7) and mature sand pine scrub (Figure 1.8).

Many scrub areas are subjected to direct human disturbance (mechanical and chemical treatment of vegetation, altered hydrology, etc.), *often in addition to* fire-suppression. Certain of these habitats are used by scrub jays in low, and usually decreasing, densities (Figures 1.9-1.12). Cox (1987) depicts various successional stages of sand pine scrub after clear-cutting and sand pine seeding in the Ocala National Forest. Shortly after seeding (Cox's figures 29 and 30) the habitat lacks scrub jays. During the intervening few years the jays are present (Cox's figures 28 and 4). Fernald (1989) depicts several examples of degraded coastal scrub (Fernald's figure 14) and overgrown scrub (Fernald's figure 13), as well as scrub acceptable to the jays (Fernald's figures 8 and 9).

Fragmentation itself promotes changes in structure and species composition in the scrub community because of changed species-area relationships and edge effects. Scrub areas subjected to severe or multiple forms of degradation may show only remnants of the original community composition, and are difficult to categorize according to most existing schemes for classifying native vegetation. Fernald's (1989) treatment of the remaining scrub in the Treasure Coast region is the most useful classification scheme available in this respect.

Florida scrub jays use human-altered scrub-like landscapes in some parts of the state. Individual territories may be dissected by residential dwellings, roads, recreational areas, etc. In these situations, jays often use non-scrub habitat in conjunction with remnant patches of scrub, deviating somewhat from ecology and behavior seen in less disturbed areas. Few data exist to indicate whether Florida scrub jays in these situations maintain stable populations in the absence of immigration from source populations in nearby native scrub.

Given the severity of the problems confronting the Florida scrub jay, *all* areas occupied by jays are significant. Long-term population persistence is most likely under optimal habitat conditions (Figures 1.1-1.3) across expansive (several square miles) tracts of protected xeric oak scrub. Areas that are in less suitable condition may in fact represent habitat sinks that siphon dispersers from nearby jay source pools. These areas nevertheless may be indispensable in maintaining the abundance and distribution of jays in Florida because they provide corridors for dispersal and allow overall populations to be larger in areas that otherwise would support smaller populations.



Figure 1.6. Xeric oak scrub of the Lake Wales Ridge, unburned for 60 years, at the Archbold Biological Station. Scrub jays no longer exist here (Photo by John Fitzpatrick).

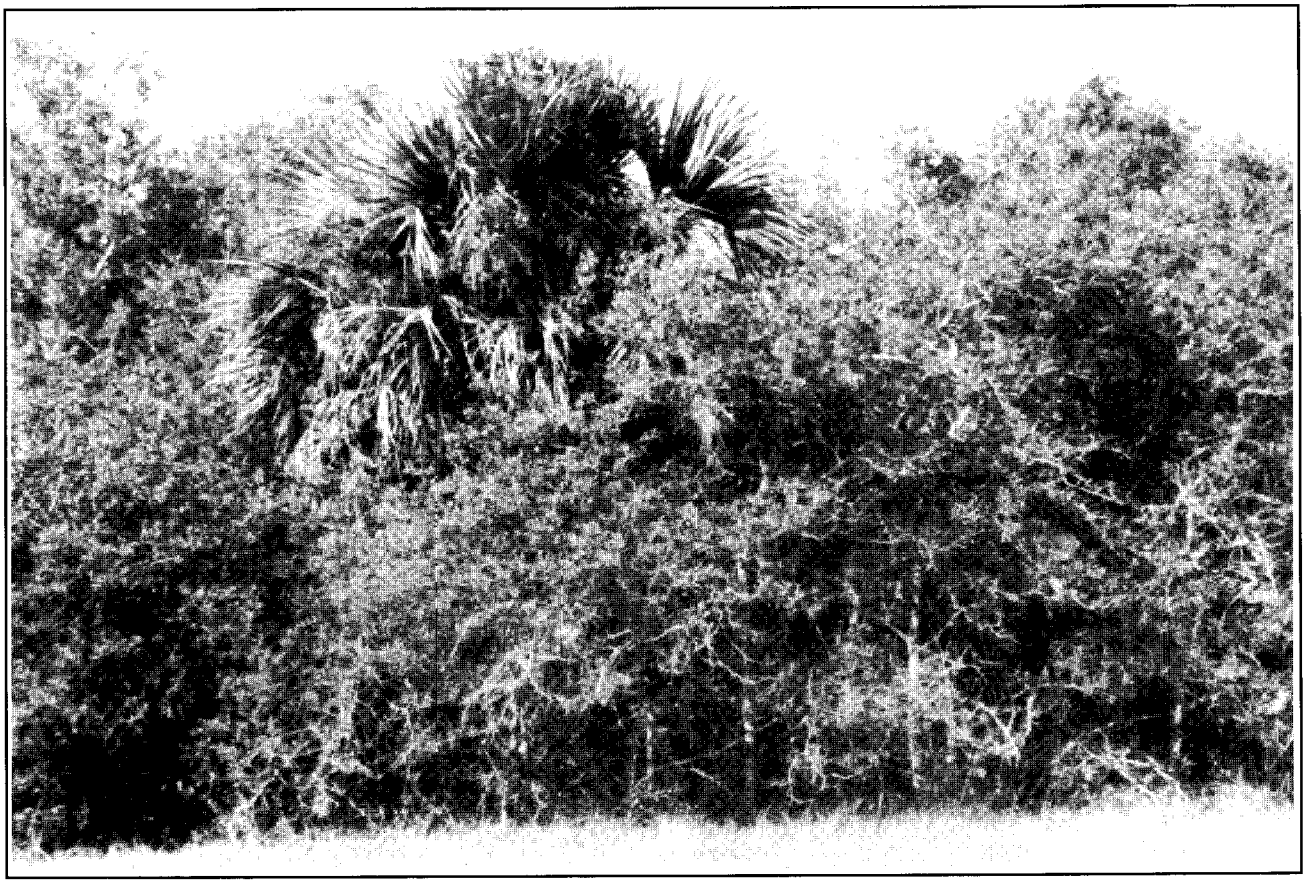

Figure 1.7. Unburned oak-palmetto coastal scrub in Brevard County. Scrub jays live along the edge of this overgrown, dense habitat (Photo by Dave Breininger).



Figure 1.8. Remnant coastal sand pine scrub in Indian River County. Scrub jays occupy the edges of this habitat (Photo from Fernald 1989, figure 4).



Figure 1.9. Cattle pasture with palmetto and scrub oaks on the Lake Wales Ridge in Highlands County. Scrub jays occur here in low densities. Note resident jay atop tall oak (Photo by John Fitzpatrick and Glen Woolfendenden).

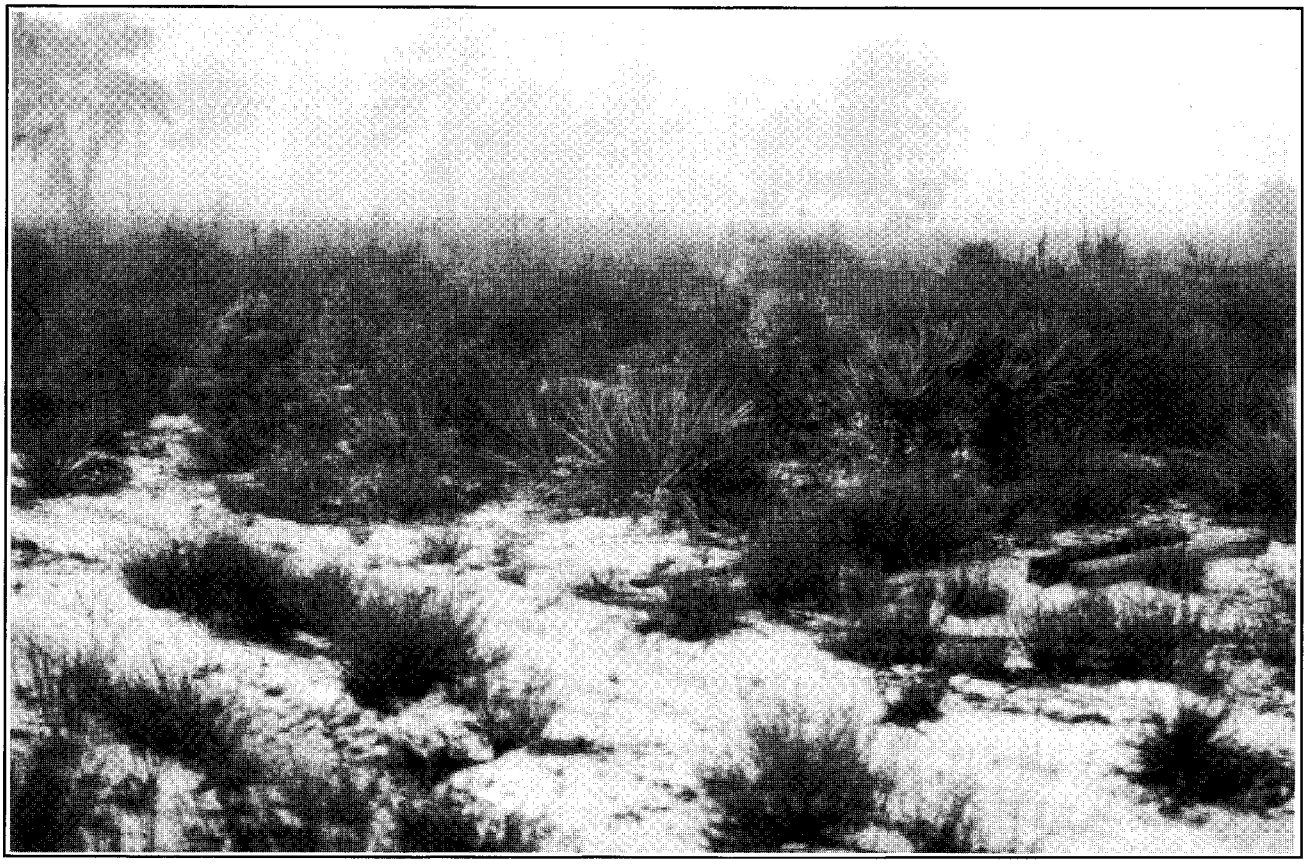

Figure 1.10. Recently-chopped xeric oak scrub on the Lake Wales Ridge in Highlands County. Scrub jays occur here in low densities (photo by John Fitzpatrick and Glen Woolfenden).



Figure 1.11. Partially disturbed, remant coastal scrub community in Jupiter, Palm Beach County (Radnor Tract). Jays nested at this site in 1989 and 1990 (Photo by Grace Iverson).

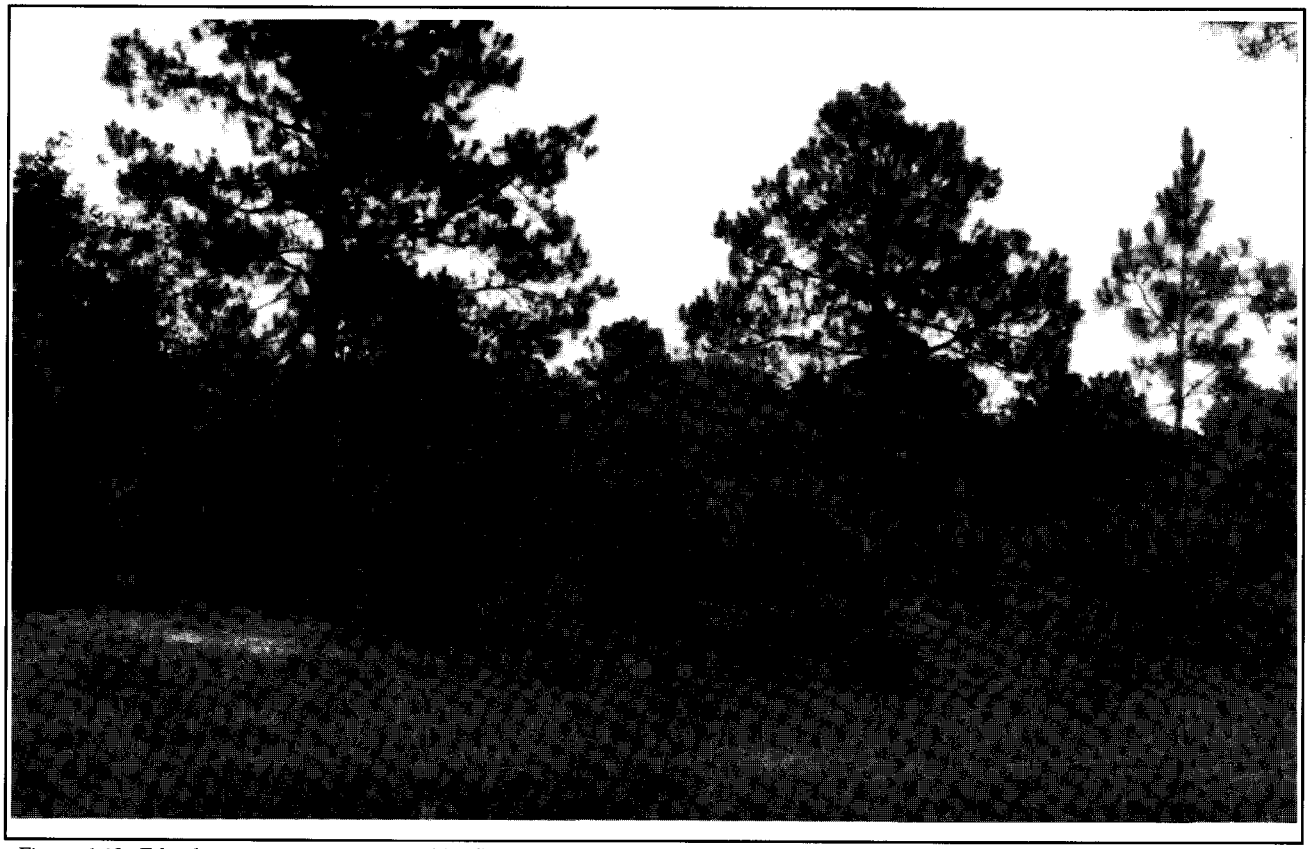

Figure 1.12. Edge between overgrown scrubby flatwoods and disturbed open area in Charlotte County. This site is occupied by scrub jays (Photo by Rick Gooch).

CONSERVATION GOALS AND APPROACH TO THE PROBLEM

The primary conservation goal of these recommendations is to minimize further decline of the remaining Florida scrub jay population resulting from habitat conversion. This is a difficult goal because of human demands on the species' fundamental resource, Florida oak scrub communities.

If wild populations of Florida scrub jays are to persist, they will reside in a mosaic of protected and unprotected oak scrub islands. Most islands will be small relative to scrub jay population dynamics, but will be supported by a network of large preserves with enduring populations. Small oak scrub islands periodically may lose their jays through random extirpation events. Islands that remain suitable or are restored to that condition may be recolonized. Long distances between vacated habitat islands and resident populations of jays impede recolonization, and seemingly suitable habitat patches may remain unoccupied for long periods. Relocation experiments currently in progress may provide a management tool to reduce recolonization time.

To reduce further loss of scrub jay habitat we recommend development-related habitat preservation and management on two levels: 1) protection of an adequate amount of habitat for every jay group occurring on a proposed development site (i.e., territory refuges), and 2) protection of a portion of suitable or recoverable habitat on-site additional to that recommended in level 1 (i.e., satellite refuges) when there is a great deal of such habitat on-site relative to the number of jay groups present. We recommend implementing these measures whenever: 1) jays are on-site, or 2) jays are not on-site, but important habitat exists on-site, any portion of which is within normal dispersal distance (5 miles) of jays off-site.

Our recommendations emphasize on-site protection. Off-site compensation is a preservation measure that we anticipate being implemented only infrequently. When off-site compensation is implemented in conjunction with on-site protection, decisions on which tracts of habitat to eliminate and which to protect must be based on optimizing the quality of protected habitat on-site.

HOW TO USE THE INFORMATION PRESENTED IN THIS SECTION

Areas of Florida Where These Recommendations are Applicable.

The current geographic range of the Florida scrub jay extends south to Lee, Hendry, Collier, and Palm Beach counties. To the north, the range extends to Levy, Alachua, Bradford, Clay, and St Johns counties. These recommendations apply to any proposed conversion of uplands within this range.

Organization of Information in this Section.

These recommendations are organized in three parts. Subsection 1.2 describes procedures for determining if a proposed development will negatively affect jays. This determination is based on the number of jay groups on-site as well as the amount of habitat important to jays. Subsection 1.3 describes the number of acres and, to some extent, the types of habitat that should be preserved in cases where development activities will negatively affect jays. Subsection 1.4 describes procedures for implementing the preservation measures: how to design refuges, which habitat parcels to incorporate in refuges, and how to manage refuges.

SUBSECTION 1.2
PROCEDURES FOR DETERMINING IF PROPOSED DEVELOPMENT WILL NEGATIVELY AFFECT SCRUB JAYS

HABITAT INVENTORY AND MAPPING

The primary objective of these procedures is to develop a vegetation map that depicts all plant communities on-site that are used by the Florida scrub jay or have the potential to be used by jays. Map plant communities either on a 7.5' USGS topographic map or on an aerial photograph at a scale of no more than 400 feet per inch. The vegetation map must show all forms of existing development (e.g., roads, buildings). The vegetation map 1) provides information needed to survey the site for jays, and, 2) provides information needed for planning refuges, if any are to be established on-site.

Use the Florida Land Use Cover and Forms Classification System (Florida Department of Transportation 1985) to map the entire proposed development site. The following classes are especially important in identifying potential habitat of the Florida scrub jay (number in parentheses represents hierarchical designation in the classification system): Improved, unimproved and woodland pastures (211, 212, 213), citrus groves (221), rangeland (310-330), pine flatwoods (411), long-leaf pine-xeric oak (412), sand pine (413), sand-pine plantations (4411), forest regeneration areas (443), sand other than beaches (720), disturbed rural land in transition without positive indicators of intended activity (741), disturbed burned areas (745).

Add a second level of information to the vegetation map. For purposes at hand, consider three types of habitat for jays. Two of these habitat types, collectively, include any and all areas where one or more species of scrub oak are present, even if only vestigially represented:

TYPE I HABITAT. Any upland plant community in which percent cover of the substrate by scrub oak species is 15% or more.

TYPE II HABITAT. Any plant community, not meeting the definition of Type I habitat, in which one or more scrub oak species is represented.

In most instances, Type I habitat is easily recognized as xeric oak scrub, scrubby pine flatwoods, scrubby coastal strand, or sand pine scrub. Conventional classification schemes are of less value in identifying or predicting the presence of Type II habitat; the presence of scrub oaks is the key indicator.

The third habitat type includes a variety of plant communities where scrub oak species are *not* represented, but that are nearby or adjacent to Type I or Type II habitat:

TYPE III HABITAT. Any upland or seasonally dry wetland within 1/4 mile of any area designated as Type I or Type II habitat.

Grid the vegetation map in 1-acre units. Label each acre that, upon field inspection, is identified as Type I, Type II, or Type III habitat. Qualitative field inspection normally will be adequate for distinguishing Type I from Type II habitat. If a quantitative approach is desired, we recommend that Breininger's (1981, 1989) modification of Canfield's (1941) line transect method be used. Because of the difficulties involved in successfully designing and executing a quantitative habitat analysis in scrub vegetation, we strongly recommend that sampling design, data collection, and data analysis be developed with the assistance of a plant ecologist experienced in quantitative techniques.

SURVEYING FOR SCRUB JAYS

Searching for Scrub Jays On-site.

The primary objective of these procedures is to obtain an accurate count of the number of jay groups on-site. Secondary objectives include mapping the location of each jay group and estimating the size and age constituency of each group.

The most effective method for surveying a site for jays is to traverse the area systematically, using a high quality tape recording of Florida scrub jay territorial scolding in an attempt to attract the jays. The recording should include clear examples of all typical territorial scolds, including the female "hiccup" call. Copies of taped vocalications may be obtained from Archbold Biological Station, P.O. Box 2057, Lake Placid, FL 33852.

Survey Design. Establish parallel line transects, and playback stations along each transect, on the vegetation map developed earlier. Space the transects and playback stations so that all Type I, II, and III habitat onsite will be sampled for jays (i.e., so that the taped calls unquestionably will be effectively broadcast across areas of concern). Distances between transects, and between stations along transects, depend on many factors, including the power of the speaker used for broadcasting the calls, topography, and the density of the surrounding vegetation. Adequate spacing between transects can be estimated roughly as the distance at which a person listening to the tape directly in front of the speaker perceives the "bird" to be no more than about 100 meters away. A distance of 100 to 200 meters between transects and between stations is generally adequate when using a good-quality, hand-held cassette player broadcasting at full volume.

Surveys should be carried out on calm, clear days about one hour after sunrise, and should terminate before midday

heat or wind. Surveys should not be conducted in winds stronger than a moderate breeze (5-8 mph), in mist or fog, or in precipitation exceeding a light, intermittent drizzle. Heat and especially wind lowers the tendency for jays to respond to distant territorial scolds, and wind reduces the distance over which recordings can be heard. Furthermore, jays are reluctant to fly on windy days regardless of hour or season.

Surveys should be conducted during: 1) spring (especially March), 2) fall (September and October), when territorial displays are most frequent and vigorous, and 3) mid-summer (July) when young of the year are independent but still distinguishable by plumage. The poorest times of year to survey are late winter, when jays are most likely to fly far for food, and late spring when the young are quiet and the adults are occupied with molt and feeding fledglings.

Survey Protocol. Transects may be driven or walked. If driven, step out of or stand atop the vehicle at each playback station. Broadcast the calls at each station for at least 1 minute in all four directions around the playback station, emphasizing any direction in which low-growing oak scrub is the predominant vegetation. On the vegetation map, plot the locations and indicate group sizes of all Florida scrub jays where they are first seen or heard. Distinguish adult-plumaged jays from juvenal-plumaged jays whenever possible.

At localities with car trails, large areas of scrub can be surveyed with a vehicle in one day. On foot, the process is more laborious because of the relatively large size of territories (often 10 to 40 acres). Once a group is located, stop broadcasting at that station. Remaining at this station briefly should result in the assembly of the entire group. This allows one to estimate group size and, if done during mid-summer, to distinguish young of the year from adults.

Sometimes two or more groups will be attracted to one station, usually from different directions. Observers should be careful, therefore, to plot each group where it was first spotted or heard, not at the site to which the jays were attracted. In rare circumstances, especially at sites where numerous groups congregate at artificial food or water sources, it may be difficult to differentiate groups. This is especially true where the jays have become habituated and tame to human approach. Again, in such cases careful observation is extremely important. Studies of such congregations using color-marked jays have confirmed that *almost always* they consist of members of different family groups. Often they may have crossed several territory boundaries to reach the neutral feeding or drinking area. The result gives a false impression of extremely high jay density.

It is essential that the subject area be visited *as often as necessary* to establish an accurate count of jay groups. If more than 8 to 10 jays are encountered at a single playback station during a fall or spring survey period, the jays at this site should be monitored carefully over several visits and different times of day. Numbers will shift as groups arrive and depart. Often it is possible to watch where the jays come from or return to as a means of determining how many groups are represented. If a question exists as to how many groups of scrub jays are on-site, we strongly recommend that the review agency involved request permission from the land owner to conduct an independent survey on-site.

The key products of this procedure are 1) a complete count of all jay groups on-site, and 2) an approximate territory map or home range center for each group. The map shown in Figure 1.13 took only a few full mornings of work to complete using a 4-wheel drive vehicle. Such a map allows developers and land-use planners to identify accurately the localities where preserving a given acreage will result in saving the largest possible population of jays.

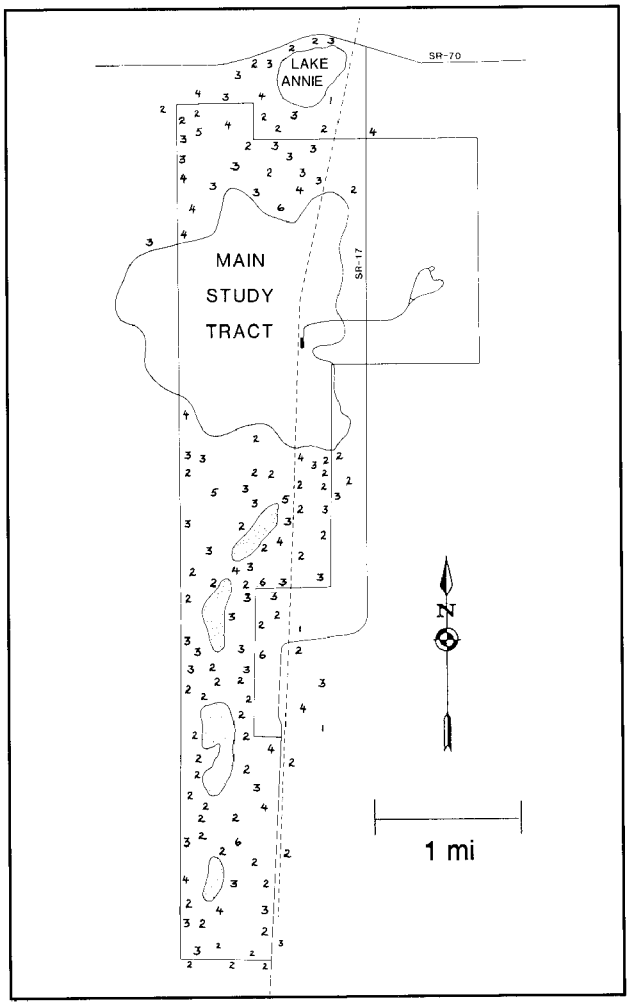

Figure 1.13. Example of a census map obtained by systematic traversing of patchy oak scrub habitat in southern Highlands County over several clear spring mornings in 1979. Detailed study of this area beginning in 1986 proved that this map was extremely accurate for estimating territory density. See text for methods. Each number designates the location of a jay group and estimates group size.

Survey Report. Provide the appropriate review or regulatory agencies with a final report that includes the following, as applicable:

A. An information sheet including:
   1. Dates and starting and ending times of all survey conducted.
   2. Weather conditions during all surveys, including average temperature, wind speed and direction, visibility, and precipitation.
   3. Total number of jay groups found, number of jays in each group and number of juvenal-plumaged jays in each of these groups .

B. An aerial photograph or vegetation map depicting:
   1. The entire area of interest, including all Type I, II, and III habitat.
   2. Transect lines and playback stations.
   3. Locations of all jays seen or heard while conducting the survey or at any other time.
   4. Approximate suspected territory boundaries between jay groups or suspected home range centers for each group.

Consulting Sources for Documentation of Scrub Jays within Dispersal Distance of Important Habitat On-site.

Habitat preservation for the Florida scrub jay is recommended if jays are not on-site, but are within normal dispersal distance (5 miles) of Type I habitat on-site. The following sources on Florida scrub jay records of occurrence (confirmed observations or museum specimens) should be consulted in order to determine if jays have been documented within 5 miles of Type I habitat on-site.

1) Florida Natural Areas Inventory. 1018 Thomasville Rd., Suite 200-C, Tallahassee, FL 32303.
2) Florida Breeding Bird Atlas. Florida Audubon Society, 1101 Audubon Way, Maitland, FL 32751.
3) Cox, J.A. 1987. Status and distribution of the Florida scrub jay. Fla. Ornithol. Soc. Spec. Publ. No. 3, Florida Ornithological Society, Gainesville, 110 pp.
4) Regional Planning Councils whose jurisdiction either includes all or part of the proposed development or is within five miles of the proposed development.
5) County environmental agencies whose jurisdiction either includes all or part of the proposed development or is within 5 miles of the proposed developments.
6) Regional Offices of Environmental Services, Florida Game and Fresh Water Fish Commission, whose jurisdiction either includes all or part of the proposed development or is within five miles of the proposed development.

Presume that any areas in which jays were documented within 5 miles of Type I habitat on-site *since 1975* are currently inhabited by jays. The developer may want to investigate for present occurrence of jays if it seems likely that the local jays in question have been extirpated since that time. Submit a report of the entire investigation to the reviewing agency, which may want to conduct an independent investigation of the records as well as field surveys for jays in the 5-mile area surrounding Type I habitat on-site.

SUBSECTION 1.3
PRESERVATION MEASURES TO BE IMPLEMENTED IF SCRUB JAYS WILL BE NEGATIVELY AFFECTED BY DEVELOPMENT

Preservation refers to both *on-site protection* of habitat and *off-site compensation* for any habitat of critical importance to the Florida scrub jay that is eradicated on-site. In this subsection we discuss the acreage that should be preserved in order to mitigate adequately the impact of development on jays, and whether protection or compensation is the appropriate means of habitat preservation.

DETERMINING ADEQUATE LEVEL OF HABITAT PRESERVATION

Habitat preservation for the Florida scrub jay is recommended whenever 1) jays exist on-site, or 2) jays do not exist on-site, but are off-site within five miles of Type I habitat on-site. *In either case*, the total number of acres to be designated for preservation on behalf of the Florida scrub jay is determined by performing the calculations in parts 1A and 1B, below, and *summing* the answers to both parts.

1A. Number of Acres to be Preserved for Territory Refuges.

The number of acres to be preserved as territory refuges, based on the number of jay groups on-site, equals:

$$\text{Preserved acres} = \left[\text{Number of scrub jay groups on-site}\right] \times 25$$

or the total number of acres of developable uplands, whichever is less

This acreage is designated for the establishment of one or more territory refuges on-site, or, when appropriate, for the provision of an equal amount of habitat off-site. This acreage is arrived at completely independent of habitat type or types on-site. When on-site protection is appropriate, as opposed to off-site compensation, the habitat types (i.e., the particular parcels of land) that should comprise this acreage must be determined based on optimal location, shape, and habitat composition of territory refuges. These are the subjects of the recommendations in Subsection 1.4.

1B. Number of Acres to be Preserved for Satellite Refuges.

The number of acres to be preserved as satellite refuges, based on the amount of Type I habitat on-site compared to the number of jay groups on-site, equals:

$$\text{Preserved acres} = \left[\text{Total no. acres Type I habitat on-site}\right] - \left[\text{No. acres designated for preservation in 1A}\right] \times 0.25$$

or 0, whichever is greater

This acreage is designated for the establishment of one or more satellite refuges on-site, or, when appropriate, for the provision of an equal amount of habitat off-site. When on-site protection is appropriate, the acreage entering into satellite refuges for jays must be exclusively Type I habitat. Determining *which* parcels of Type I habitat should comprise this acreage must be based on optimal location, shape, and habitat composition of satellite refuges. These are the subject of the recommendations in Subsection 1.4

DETERMINING THE APPROPRIATE MEANS OF HABITAT PRESERVATION

In most instances we recommend on-site protection of habitat, as opposed to off-site compensation for destruction of jay habitat. The only circumstances in which we recommend off-site compensation are: 1) when the acreage designated for preservation is extremely small and therefore of greater conservation value in a mitigation park or elsewhere off-site, or 2) when the acreage designated for preservation is a large proportion of all developable uplands on-site. Determine the appropriate means of preservation as follows.

Exclusive On-site Protection.

Provide exclusive on-site protection whenever the total amount of land designated for preservation, as calculated by summing parts 1A and 1B, is greater than 10 acres and less than 25% of all developable uplands on-site.

Either Exclusive On-site Protection, or On-site Protection in Conjunction with Off-site Compensation.

Consider either alternative when the amount of land designated for preservation, as calculated by summing parts 1A and 1B, is greater than 25% of all developable uplands. For either alternative, provide on-site protection of at least 25% of all developable uplands; provide off-site compensation for any remaining acreage designated for jays but not protected on-site.

Either Exclusive On-site Protection, or Exclusive Off-site Compensation.

Consider either alternative whenever fewer than 10 acres have been designated for preservation as calculated by summing parts 1A and 1B.

SUBSECTION 1.4
PROCEDURES FOR IMPLEMENTING PRESERVATION MEASURES

All decisions made in designing territory and satellite refuges should be based on maximizing their conservation value. In the simplest, ideal situation the total acreage designated for the Florida scrub jay in Subsection 1.3 can be protected as a single, uninterrupted parcel of high quality oak scrub habitat (Figure 1.14). Unfortunately, circumstances commonly depart from the ideal. In order to maximize the conservation value of a refuge, it is necessary to consider four features: habitat composition, size, shape, and location. In many instances, one or more factors must be compromised in order to achieve another.

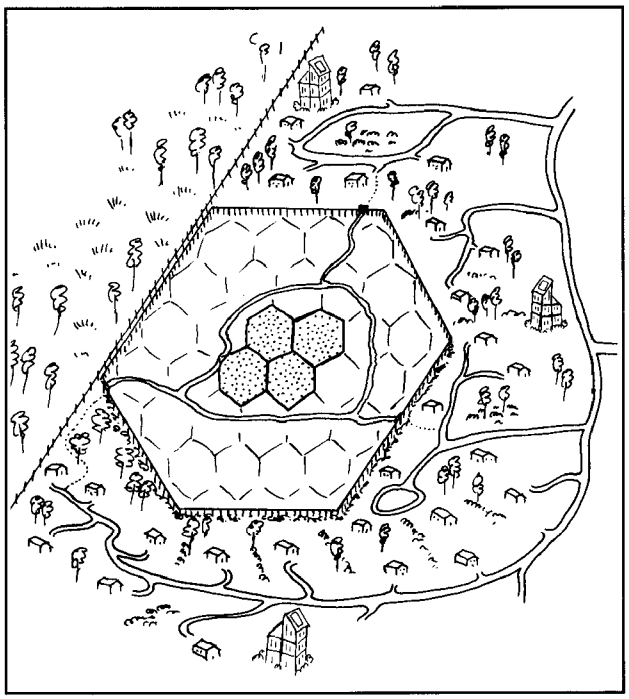

Figure 1.14. Configuration of a model habitat preserve containing about 30 Florida Scrub Jay territories. Approximate hexagonal packing of jay territories emphasizes that even in a 750 acre preserve of roughly circular dimensions, only about four jay territories are buffered from the edge by more than a single territory-width (stippled territories at center). Placement of preserve adjacent to undeveloped land (left of fence) helps buffer additional territories. Arterial roadways are separated from preserve by housing developments, reducing mortality from vehicular traffic. Fire breaks also serve as nature trails. Fence limits entry by domestic animals. Natural vegetation planted around the outside of the fence increases effective area of preserve and adds to its visual appeal.

PRIMARY CONSIDERATIONS FOR ESTABLISHING TERRITORY REFUGES

The following recommendations apply to all developments regardless of the number of jay groups on-site. When more than one jay group exists on-site, establish the smallest number of disjunct territory refuges possible within the constraints discussed below, by maximizing the number of adjoining territories within refuges.

When planning either territory or satellite refuges on-site, first rank all parcels of Type I and Type II habitat from highest to lowest quality. In ranking scrub parcels consider the *potential* quality of the scrub, based on anticipated management, in addition to present condition. Scrub that is optimal for jays (Figures 1.1-1.3) has a well-developed shrub layer, approximately one to two meters tall, that covers 50% - 75% of the substrate. The shrub layer is dominated by scrub oaks which cover at least 30% of the substrate. The scrub oaks must be mature enough to produce a mast crop (i.e., three or more years since a fire or mechanical clearing). At least 25% of the substrate is exposed or only sparsely vegetated, usually with low-growing annuals. These openings are well-distributed throughout the vegetation. Canopy cover is less than 20%; overstory trees, if present at all, usually are sand pine (*Pinus clausa*), slash pine (*P. elliottii*), or longleaf pine (*P. palustris*). Scrub habitat that is in or near optimal condition for jays is characteristic of well-managed xeric oak scrub, but may also occur in other community types, including scrubby flatwoods, scrubby coastal strand, and early successional sand pine scrub.

Usually, areas on-site that offer the most potential as territory refuges will be those already occupied by jays. Consequently, part or all of the actual jay territories on-site should be incorporated into the territory refuge. Exceptions are likely to be sites with dense, overgrown scrub where jays have been displaced to the margins. Such areas sometimes can offer the most potential after being properly managed. Only when the best on-site location for a territory refuge clearly is in an area beyond the actual jay territory, do we recommend that such action be taken.

Configuration of Territory Refuges

Wherever possible, protect the total number of acres of habitat designated for territory refuges in a single tract of land uninterrupted by any form of development. The only circumstance under which a single jay group should be provided habitat on two or more disjunct parcels of land is where existing development precludes establishing a single refuge.

Establish territory refuges that are approximately square or circular in order to minimize the edge-to-area ratio. Deviate from this design only to maximize the area containing high quality habitat. At some point the benefits of

maximizing overall habitat quality are offset by the costs of a high edge-to-area ratio.

Habitat Composition of Territory Refuges

Identify the largest, highest quality tract of scrub habitat on-site and build the territory refuge to incorporate this tract. If the largest scrub tract is not the highest quality tract on-site, then sacrifice quality for size, and build the territory refuge to incorporate the largest tract of Type I or Type II habitat on-site. Obvious exceptions will favor quality over quantity (e.g., little difference in size and great difference in quality.) If the size of a tract of scrub is less than the total acreage designated for the territory refuge, add other contiguous parcels of habitat to the core until the total designated acreage is reached. If choices exist as to what types of habitat to include in the territory refuge, follow the priorities below:

TYPE I OR TYPE II HABITAT

1. Oak scrub or sand pine scrub communities judged capable of supporting the highest density of jays when properly managed.
2. Other oak scrub communities.

TYPE III HABITAT

3. Managed grasslands, dry prairie.
4. Other open or semi-open uplands.
5. Seasonally dry, open and semi-open wetlands.
6. Wooded uplands.

PRIMARY CONSIDERATIONS FOR ESTABLISHING SATELLITE REFUGES

Satellite refuges may be established whether or not jays exist on-site. They serve as outlying foraging areas, buffer zones near territory refuges, and dispersal islands or corridors. Large satellite refuges may attract and support breeding jays. Satellite refuges preserve a portion of the Type I habitat onsite, and are composed exclusively of Type I habitat. When deciding which parcel or parcels of Type I habitat on-site to protect as satellite refuges, use the following recommendations.

Configuration and Location of Satellite Refuges

The shape of satellite refuges depends mostly on the distribution of Type I habitat. Protect the recommended number of acres of Type I habitat in as few satellite refuges as habitat permits. If two or more parcels of Type I habitat are of equal acreage and habitat quality, protect the one that has the lowest edge-to-area ratio.

Locate satellite refuges close to territory refuges on-site or off-site. If possible, adjoin satellite refuges to territory refuges, creating, in effect, an expanded territory refuge.

Quality of Type I Habitat for Satellite Refuges

In designing satellite refuges, select Type I habitat that most closely approximates optimal conditions for jays, or has the greatest potential for recovery to optimal conditions with appropriate management. A point will exist at which the benefits of maximizing habitat quality are offset by the costs of sacrificing aspects of refuge configuration. Biological judgment appropriate to the individual case must prevail.

SECONDARY CONSIDERATIONS FOR ESTABLISHING BOTH TYPES OF REFUGES

If alternatives are available for meeting the constraints discussed above for territory or satellite refuges, follow these priorities:

1. Place refuges as close as possible to protected natural habitat, especially oak scrub, and as close as possible to protected or unprotected jay territories.
2. Place refuges as far as possible from roads with posted speed limit $\geq$ 30 mph, especially major highways.
3. Select habitat known to contain other elements of the endangered scrub biota.
4. Place refuges as close as possible to off-site undeveloped lands that are expected to remain undeveloped.
5. Place refuges as far as possible from off-site undeveloped lands that are expected to be developed.

MANAGING REFUGES

The major goal in managing scrub jay refuges is to maintain optimal habitat for jays. Where and when feasible, prescribed burning should be used as a primary management tool.

Where prescribed burning is feasible, create fire lanes through the refuge, dissecting it into manageable units. For territory refuges, design units so that each jay group retains an adequate amount of mature oak scrub while recently-burned scrub regenerates. No more than 25% of a refuge occupied by jays should be burned at any one time. When laying out firebreaks, one also may want to consider their later use as nature trails.

Oak scrub should be burned every 5 to 20 years in order to maintain suitable jay habitat. Oak scrub burned more frequently than every 5 years produces mast below the level needed to support jays, and experiences proliferation of palmetto (*Sabal etonia, Serenoa repens*). Oak scrub burned less than every 20 years frequently grows too tall and dense to support jays, accommodates undesirable competitors, undergoes unnatural successional changes in species composition of the vegetation, and develops an unnaturally high canopy cover.

Prescribed burning is the preferred method of scrub habitat management. Above-ground mechanical treatments, such as roller chopping, are short-term alternatives, but may be less effective long-term. The long-term effects of mechanical treatment on composition and diversity of scrub are unknown. Mechanical treatments do provide important practical means for managing prescribed burns.

In designing territory or satellite refuges, develop a proposed management plan. A management plan should be submitted to the reviewing agency prior to establishing refuges. We recommend that this plan include the following:

1) A map of the proposed refuges depicting management units, fire lanes and other openings, buffer zones, habitat islands and corridors, and the surrounding commercial and residential area that may be affected by prescribed burning.

2) A schedule of the burning regime and the type and frequency of mechanical treatment planned for each management unit.

3) Identification of the party or parties responsible for the management of the refuges, including specific provision for any legal transfer of this authority.

INTEGRATING REFUGES INTO THE DEVELOPMENT COMMUNITY

Buffer Zones

Provide buffer zones around the perimeter of territory refuges to insulate jays and facilitate burning. Satellite refuges may be used to buffer territory refuges from impacts of development. Position recreational areas (e.g., golf courses, parks) as boundaries to refuges. Plan cul-de-sacs, driveways, dwellings and backyards in fire-safe areas along the perimeter of refuges.

Habitat Islands and Corridors

Certain habitats outside of territory and satellite refuges can enhance the scrub jay by serving as islands or corridors for dispersal. Habitat islands and corridors are especially important when they lie between two or more refuges separated by about five miles or more. Such habitats also are important in connecting unprotected areas that are occupied by jays and are separated by about five miles or more.

Ideally, such islands and corridors contain scrub. Other natural areas and land uses that may contain no scrub also serve in this capacity. Examples are parks, golf courses, rights-of-way along low-speed roads and transmission lines, and other quasi-natural open habitats.

Public Education

Implement a program to educate residents as to the threatened nature of the oak scrub habitat including the Florida scrub jay. Effective means of accomplishing this include providing self-guided nature trails and educational signage through the refuges, and providing informative pamphlets to local residents. Emphasize the importance of fire in maintaining the natural scrub community. Post nature trails with rules discouraging destruction of oak scrub habitat, while encouraging enjoyment and study of it. Prohibit house pets and unauthorized motor vehicles in refuges. Encourage the use of native plants, especially oaks, for xeriscaping roadsides and yards. Discourage the use of ornamental shade trees and rapidly-spreading introduced species, especially Brazilian pepper (*Schinus terebinthifolius*).

SECTION 2

ECOLOGY AND HABITAT REQUIREMENTS OF THE THREATENED FLORIDA SCRUB JAY

PREFACE

In 1988, the Florida Game and Fresh Water Fish Commission solicited a report on ecology and management of the Florida scrub jay from John Fitzpatrick and Glen Woolfenden. That report was reviewed and edited and is presented here as Section 2 of this publication. The recommendations contained in Section 1 of this publication are based largely on the information presented here.

ACKNOWLEDGMENTS

Archbold Biological Station continues to provide extensive support for our long-term study of Florida scrub jay ecology. During the preparation of this report we were provided office space, field and office equipment, secretarial help, and library resources. We are extremely grateful for the assistance. In addition we thank Debra K. Moskovits who contributed to the preparation of the three-dimensional diagrams (Fig. 2.16), Emily K. McGowan who prepared many figures, Anita DelGenio and Nancy Stotz who typed text, and Jan Woolfenden who typed text and prepared the bibliography. Special thanks go to Ron Mumme who provided data and many useful comments.

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SUBSECTION 2.1
INTRODUCTION

Many thousands of years ago, arid scrublands of western North America were distributed eastward to the Atlantic Ocean across what is now northern Mexico and southern United States. Climatic changes associated with glacial fluctuations severed this habitat connection between east and west, and the eastern forests adapted to wetter conditions. The once widespread scrub all but disappeared from eastern North America, clinging to a last stronghold on ancient sand dunes scattered through the Florida peninsula. Because these pure sand soils were porous to water, they produced growing conditions similar to those in arid environments supporting scrub habitats elsewhere around the continent. Long isolated from its western counterparts, and constantly adapting to the seasonally wet subtropical environment of the peninsula, the Florida scrub evolved into one of the rarest and most distinctive vegetation formations in all of North America. It is a habitat utterly unique to Florida, harboring scores of plant and animal species found nowhere else in the world. The fates of all those species now hang in the balance, as the Florida scrubs disappear at the hands of man.

The Florida scrub jay (*Aphelocoma c. coerulescens*) is the most conspicuous animal in the scrub. Some taxonomists (e.g., Phillips 1986) consider it a full biological species. If indeed it is, then it is the only bird species whose distribution is entirely confined to the state of Florida. Once scattered widely throughout the peninsula, it is now extirpated from vast areas within its former range. It is endangered or severely threatened essentially wherever it still persists, a fact that seems incongruous to countless human inhabitants of the peninsula who know these jays as tame, easily watched, and conspicuous backyard neighbors.

Like many species currently threatened with extinction, the Florida scrub jay is a victim of an unkind ecological accident. Its requisite habitat is a leftover from ancient times, an anomaly among the swamplands, prairies and flatwoods that dominate the Florida landscape. The scrubby oaks and bare sand patches absolutely essential for the survival of Florida scrub jays are present only in scattered, isolated patches surrounded by habitats almost as inhospitable to the jays as ocean. With essentially no hope of survival or reproduction outside these sharply bounded habitat patches, the Florida scrub jay evolved into one of the most ecologically restricted birds in North America. Its social system arose out of the ecological constraints thus imposed: permanent monogamy, year-round territoriality, delayed dispersal, and cooperative breeding as the most successful route to territory acquisition in a permanently overcrowded environment.

The accident of having severely restricted habitat requirements became unkind when humans discovered the importance to their own species of a well-drained sandy soil substrate. For human agriculture, residence, and recreation, the ancient dunes that support scrub are of superior quality, especially in a state with thousands of square miles only a few meters above sea level. As the human population expands in Florida, economic pressures seem to dictate an accelerating effort to clear what final vestiges of oak scrub remain intact. As a result, by the early 1980's the Florida scrub jay was extirpated from eight counties, and nearly so in as many more. In 1975 the Florida scrub jay was formally listed as "Threatened" by the Florida Game and Fresh Water Fish Commission. In 1987 the jay became listed as "Threatened" within the Endangered Species classifications of the United States Fish and Wildlife Service (*Federal Register* vol. 52, no. 106, pp. 20715-20719, 3 June 1987).

Florida scrub jays reside and breed only on periodically-burned, low-growing oak scrub, with abundant bare sand and only scattered tall pines. For the species to persist in Florida, these very specific kinds of places must remain protected and managed. Such places must exist in sufficient number and size to protect against accidental annihilation by random demographic fluctuations, epidemics, skilled domestic predators, and human interference. Land developers bear both a responsibility and an opportunity to contribute to the mounting effort to preserve this beautiful Florida specialty. This section of the report is a compilation of available information on how to protect the Florida scrub jay by protecting its unique habitat.

Because the Florida scrub jay is easy to detect, sedentary, and extremely habitat specific, this bird is an excellent indicator species for good quality oak scrub habitat. Moreover, because the jay requires modest to large-sized patches of scrub in order to persist, preserving this species entails preservation of endangered oak scrub habitat. Many of the endangered scrub organisms, plant and animal, will thrive in viable populations within the space needed to maintain safely a population of Florida scrub jays. For example, the gopher tortoise (*Gopherus polyphemus*), classified as a "Species of Special Concern" by the Florida Game and Fresh Water Fish Commission (Wood 1986), can maintain excellent population sizes within a scrub habitat minimally acceptable for scrub jay preservation (Cox et al. 1987). Thus, the Florida scrub jay can be considered a vanguard for oak scrub habitat as well as its most distinctive indicator species.

Subsection 2.2 describes those life history characteristics most important from a management point of view, especially for persons not already familiar with the species. Characteristics of the oak scrub habitat are summarized, including the overwhelming importance of fire in maintaining the scrub ecosystem. The excellent management potential for the species also is described.

Subsection 2.3 discusses numbers of jays per unit area in some different scrub habitats, and summarizes the natality and mortality factors in these habitats. It is strongly recommended that densities be calculated as territories per unit area. Evidence on the nature and frequency of catastrophic epidemics is presented, and their effects on population models are highlighted. The importance of limited dispersal distances is discussed.

Subsection 2.4 discusses factors affecting the coexistence of Florida scrub jays with human settlements. The principal causes of local extirpations are outlined, along with recommended means to prevent them. Prescribed burning is emphasized as a means to prevent degradation of oak scrub habitat.

Subsection 2.5 draws upon the data presented in previous subsections for development of a model simulating the population fluctuations in a natural population of limited size. Replicate simulations, under different demographic conditions and population sizes, provide the first detailed estimation of the relationships between Florida scrub jay population size and probabilities of extinction through time. Interpretation of these models provides a basis for determining the sizes and configurations of habitat preserves that will permit long-term persistence of Florida scrub jays in the presence of commercial and residential development.

SUBSECTION 2.2
LIFE HISTORY, MANAGEMENT POTENTIAL, AND HABITAT REQUIREMENTS

LIFE HISTORY

The Florida scrub jay has been the subject of an intensive demographic and behavioral study at the Archbold Biological Station in Highlands County for 20 years. One result is that considerable published information pertinent to developing habitat protection guidelines already is available. This fortunate situation stands in contrast to that of many other threatened or endangered species, in which primary biological data remain scanty.

In this section we summarize briefly those factors considered most pertinent to a general understanding of Florida scrub jay biology and life history from a management point of view. This information is drawn principally from our book, *The Florida Scrub Jay: Demography of a Cooperative Breeding Bird* (Woolfenden and Fitzpatrick 1984) and a recent summary chapter we have written for another book (Woolfenden and Fitzpatrick 1990). Additional information appears in numerous other publications (e.g., Bancroft and Woolfenden 1982; DeGange et al. 1989; Fitzpatrick and Woolfenden 1986, 1988; Fitzpatrick et al. 1988; McGowan and Woolfenden 1989; Woolfenden 1974, 1975, 1978a, 1978b; Woolfenden and Fitzpatrick 1977, 1978, 1986).

Description

The Florida scrub jay is similar in size (about 12 inches total length) and shape to its close relative the blue jay (*Cyanocitta cristata*). Although the predominant color of both these species is blue, they differ strikingly in color pattern. Blue jays are boldly marked with many white-tipped, black-barred feathers and with a black bridle pattern about the head and neck. They also have an ample crest. Scrub jays are far more subtly marked. They lack the white tips, black barring, bridle, and crest. The blue of the head, nape, wings and tail grades into pale gray on the back and belly. They have a white eyeline that blends with a frosted white forehead (forehead is blue in subspecies of western North America). Scrub jays possess an indistinctly striped throat and upper breast, bordered by blue to form a dickey.

In contrast to blue jays, scrub jays have longer, stronger feet, a longer tail and shorter wings. All these features reflect their more terrestrial existence. Scrub jays rarely fly long distances, while the forest-inhabiting blue jays are much more capable in the air.

The sexes of scrub jays are indistinguishable by plumage. Males average only slightly larger than females (Woolfenden 1978a). Young scrub jays during their first four months of life are distinguished easily from adults. As characterizes jaybirds, the nestlings hatch naked. They are well feathered before they leave the nest at about 15-20 days after hatching. The juvenal plumage, fuzzy in texture, is smoky gray on the head and back, entirely lacking the blue crown and nape.

An incomplete postjuvenal molt during their first summer (Bancroft and Woolfenden 1982) makes the juveniles nearly indistinguishable from adults by about September. In the hand, most first-year birds can be distinguished through the following spring by their worn primary coverts, which appear grayish instead of bluish at the tips.

Range And Habitat

Scrub jays occur throughout the brushlands, scrub lands, semideserts, chaparral, open woodlands, and pinyon-juniper hillsides of southwestern North America and in scattered populations south to southern Mexico. Florida scrub jays are isolated from the closest of these western relatives (*Aphelocoma coerulescens texana*, in west-central Texas) by about 1000 miles.

Florida scrub jays occur only in central peninsular Florida, where they are restricted to one habitat type, the low-growing oak scrub that occurs on well-drained sandy ridges. This distinctive habitat is endemic to Florida, and contains numerous species of animals and plants found nowhere else. The scrub jay is the only bird whose distribution depends on patches of this rare habitat. It is essential to any conservation effort that the critical importance of the oak scrub be understood. In contrast to blue jays, which are broadly tolerant of a variety of habitats, Florida scrub jays are exceedingly habitat-restricted. As habitat preservation and management is the only solution to Florida scrub jay protection, we discuss the scrub habitat extensively in later sections.

Food And Predators

Florida scrub jays have a very broad diet. Insects and other arthropods plucked from the leaves or leaf litter in the shrubby vegetation form the bulk of their diet. The jays do not dig extensively, and rarely sally for aerial insects. A wide variety of small vertebrates also is taken, especially tree frogs (*Hyla* spp.), *Anolis* lizards, and small snakes.

Scrub jays do not eat large fruits such as citrus. Although they eat small quantities of berries and seeds (e.g. slash pine, *Pinus elliottii*, and sand pine, *P. clausa*), only one plant food is crucial to their existence. Annually each jay harvests and buries for later use about 6,000 to 8,000 acorns, taken from all the principal scrubby oak species in the territory (DeGange et al. 1989). It is estimated that about a third of these acorns are later recovered and eaten. Caching behavior allows jays to eat acorns during every month of the year. This reliance upon acorns and caching may constitute a major reason for the Florida scrub jay's restriction to the oak scrub and the sandy ridges within Florida.

Various snakes, mammals, and birds feed on scrub jay eggs, small young, or adults. Both the eastern coachwhip (*Masticophis flagellum*) and indigo snake (*Drymarchon corias*) are known to eat adults and fledglings, and the coachwhip also is known to eat nestlings. Known natural mammalian predators include bobcat (*Lynx rufus*) and raccoon (*Procyon lotor*). Cotton rats (*Sigmodon hispidus*) sometimes take eggs. Domestic cats (*Felis cattus*) also prey on adults. We suspect that a population of domestic cats supported by human food offerings could eliminate a small, local population of Florida scrub jays. Avian predators of small young include the great horned owl (*Bubo virginianus*), eastern screech-owl (*Otus asio*), red-tailed hawk (*Buteo jamaicensis*), and northern harrier (*Circus cyaneus*). The American crow (*Corvus brachyrhynchos*), fish crow (*C. ossifragus*) and blue jay no doubt take eggs and nestlings. Indeed, we suspect that nest predation by blue jays may be one factor limiting the numbers of scrub jays in dense scrub or wooded habitats. The most frequent avian predators on adult jays are the sharp-shinned hawk (*Accipiter striatus*), Cooper's hawk (*A. cooperii*), merlin (*Falco columbarius*), and northern harrier.

Social Organization

Florida scrub jays live in groups, varying in size from a simple mated pair (group size of 2) up to large, extended-family groups of 8 adults and 1 to 4 juveniles. Large groups are rare; average group size is 3.

Four activities account for almost all daily actions performed by the jays: foraging, predator surveillance and defense, territory defense, and body maintenance. Jays execute all these activities in close proximity to one another within the group. They forage independently, but usually near each other among the shrubs or on the ground. When a large food item is obtained the possessor usually moves some distance away in order to consume it unharassed. One jay usually sits on an exposed perch as a sentinel while most other group members forage. If an aerial predator is spotted, distinctive warning calls are given and all jays dash for dense cover. If a ground predator is seen, alarm scolds are given and the group converges to mob the predator with noisy scolds and even furtive pecks. In fall and winter when bird-eating hawks (mostly *Accipiter* spp.) are most abundant, we suspect that the groups average at least one encounter with a hawk per day.

Florida scrub jays live in large all-purpose territories throughout their lives (e.g., Fig. 2.1). Exceptions occur during dispersal, when prebreeders are searching for breeding space. Territory defense is a group activity spearheaded by the breeders, especially the male, and sometimes the oldest male offspring. Territorial squabbles peak in fall and again in early spring before nesting. Many of the daylight hours are spent resting, especially during hot midday periods in the summer. However, when resting perched atop a low shrub in open habitat, Florida scrub jays probably are nearly immune to predation, and at the same time can scan for intruders into their territory. The advantages conferred by this behavior may help explain their obvious preference for low-growing vegetation unobstructed by large trees.

Well-defined division of labor exists between males and females, especially during the breeding season. Only females incubate eggs and brood young in the nest. Males lead in providing food for young nestlings and their mates. Males also are more often the leaders in territorial defense

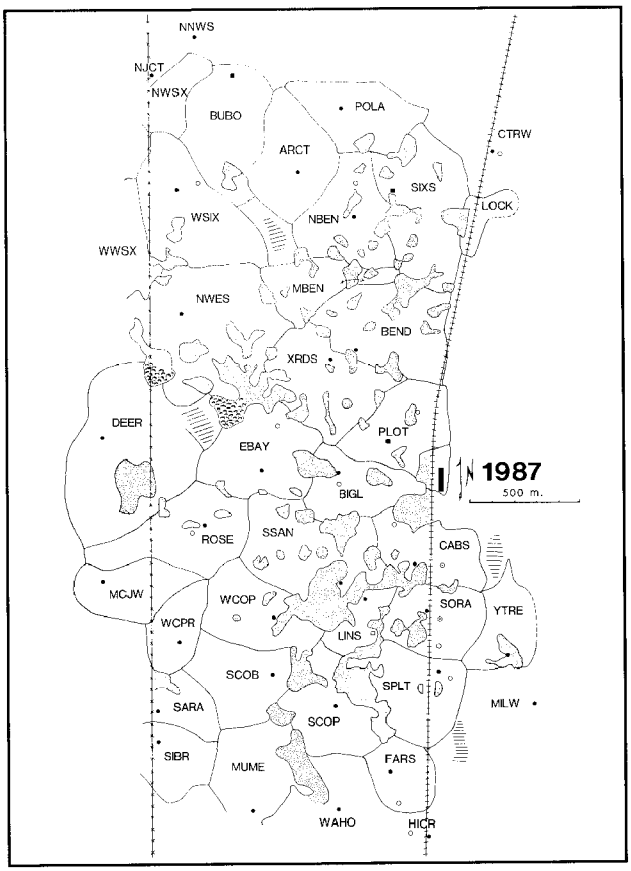

Figure 2.1. A representative map of Florida scrub jay territories (April 1987) occupying about 400 ha. of open, periodically burned oak scrub at Archbold Biological Station. Strippled areas are seasonally inundated grassy depressions rarely used by the jays. Four-letter codes refer to standard names for each territory in the study population. Main building of the Station is shown at center right adjacent to a north-south railroad track.

and predator mobbing, although both sexes participate actively in these activities.

Young jays remain in their natal territory for at least one year before beginning to attempt dispersal. Some, especially males, may remain non-breeders for several years. These "helpers" assist the breeders in most activities, including caring for dependent young. Although they do not build nests, incubate, or brood, they do feed nestlings and fledglings. They also help mob predators, perform sentinel duties, and defend the territory. Breeders assisted by helpers produce more independent young than pairs without helpers. Perhaps of equal importance, breeders show increased annual survival when helpers are present. Helpers also experience lower mortality while remaining within the group. Clearly all group members benefit in various ways from being a part of a group.

Reproduction

Florida scrub jays build their nests low to mid-height in dense shrubs (mean nest height is 1.0 m. at Archbold Biological Station). Often the nest is placed in a dense shrub at the edge of a thicket, bordering an open space or even bare ground. The nest is a bulky basket of twigs, usually taken from oak shrubs. Nests are lined with a tightly woven cup consisting entirely of fibers from *Sabal* palmettos or palms. The jays never reuse the nest or any of the materials from which it was constructed. Even if the nest is removed after use, the probability of their nesting in the exact same location is nil.

The nesting season extends from March through June (Fig. 2.2). True second broods, defined as a nest with eggs layed concurrent with living offspring from a previous brood of the same season, are extremely rare. At Archbold Biological Station we have documented 23 double broods in 524 pair-years (4.4%), and most of these occurred during a few exceptionally productive years. However, renesting after a nest fails is a regular event, especially early in the nesting season. The probability of a pair attempting a replacement clutch following nest failure declines rapidly after late April. Average number of attempts per pair per breeding season is 1.4, and typically the maximum number for any one pair is 3 attempts (one pair attempted 4 nests in 1972).

Clutch size typically is either 3 or 4 eggs (mean = 3.33, range - 1 to 5). Age and experience of the breeders, time in the nesting season, annual food supply, and heredity all influence clutch size to some extent.

Nest failure almost always occurs through predation. Inclement weather, desertion, fire, and starvation account for fewer than 2% of all losses. Overall nest success (probability of fledging at least one young) is about 50%, but this varies substantially with time in nesting season, with presence or absence of helpers, and among years. Nest success decreases steadily through the season. We suspect that this rapid decline, combined with greater risk of adult

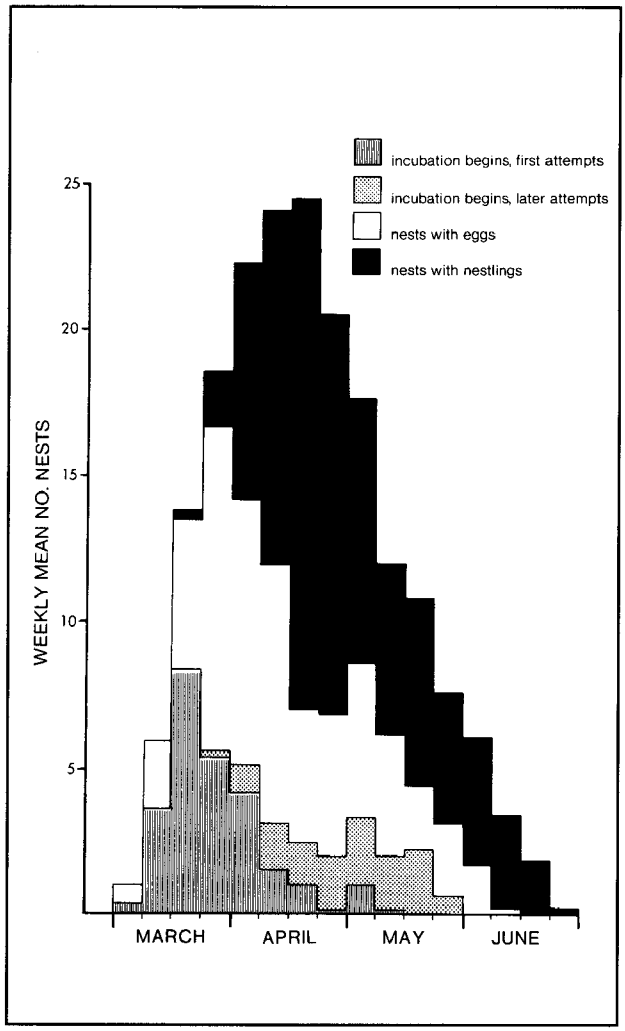

Figure 2.2. Nesting chronology of Florida scrub jays, based on nests found in the study tract at Archbold Biological Station, 1970-1979. The outer line shows the total number of nests with eggs or young each week. Black and shaded portions separate nests and renests into different stages. From Woolfenden and Fitzpatrick (1984).

mortality during nesting, contributes to the relatively brief nesting season of the Florida scrub jay compared to those of other songbirds in the region.

Average production of young is about 2 fledglings per pair per year. Fledgling brood sizes vary from 1 to 5, with 3 being by far the most common number for successful nests. Mortality of fledglings within the first few weeks post-fledging is extremely high. On average only about 35% of the fledglings survive to their first birthday, when they normally serve as helpers in the home territory.

Helpers

About 30-40% of the jays alive at the onset of a nesting season are not breeders. Predominantly yearlings, these jays are adult-plumaged prebreeders, mostly living in their natal territory where they assist the breeders, usually their parents, with all daily activities mentioned above. In performing these acts, nonbreeding helpers may further their own genetic representation in future generations.

This is because on average helpers help the breeders produce larger numbers of young, and these extra young usually are genetic sibs or half-sibs of the helpers. Helpers also behave in ways to maximize their own opportunities to become breeders. The probability that siblings will actively compete for breeding vacancies is reduced through an intrafamilial dominance hierarchy in which males dominate females, breeders dominate helpers, and older helpers dominate younger ones.

Space is at a premium in the world of Florida scrub jays. Potential breeders always outnumber breeding vacancies. Helper males may remain nonbreeders for up to five years, while helper females generally disperse after one or two years of helping. Both sexes follow the general strategy of waiting at home while monitoring the neighborhood for breeding vacancies, which mainly arise through the death of an established breeder. New territories arise at about the same rate as established ones disappear from deaths or family breakups.

New territories are established through a process we have termed *territorial budding* (Woolfenden and Fitzpatrick 1978). Helpers generally increase reproductive success and survival within the group, which naturally causes family size to increase. As family size grows, territory size also is expanded. Expansion occurs at the expense of neighboring breeders whose family size is decreasing. Frequently, following such a build-up, the dominant nonbreeding male takes over a segment of the now larger family territory as his own. Obtaining a mate from outside his functional family, he becomes a paired breeder on a new, "budded" territory. Female helpers become heirs to territory in this fashion only rarely. Budding is almost exclusively a male-inheritance system.

Female non-breeders also help at the nest, although they deliver less food than males of equal age. In addition to gaining experience at nesting, and minimizing risk of early mortality by spending most of their time in the safety of the home territory, females also are constantly monitoring the greater neighborhood for breeding vacancies or males that are budding a territory. As their territory grows, in part through their own efforts, the number of neighboring territories that can be monitored without leaving home increases. Thus, the helping system benefits females even though they rarely inherit space directly.

New territories cannot be established in habitat previously unoccupied, because essentially no such land exists (see Fig. 2.1). This fact presents the most fundamental ecological constraint facing Florida scrub jay populations. *It also presents the fundamental conservation problem.* The extremely intense competition for breeding vacancies has caused a social system to evolve in which prebreeders queue for breeding space within the existing territories. This insures that densities of breeders virtually always are at their maximum. The process of working to become breeders involves a system of cooperation within the family group. The cooperative-breeding system of the Florida scrub jay thus appears to be a natural evolutionary consequence of their restriction to a severely limited and sharply defined habitat.

Scrub jays have helpers only in Florida. In western North America where habitat suitable for these jays occurs in a variety of forms, over vast areas, and in a broad range of climates, the young leave home soon after they are nutritionally independent (Carmen in press). The profound differences between these closely related forms in Florida and western North America therefore provide unparallelled insight into forces shaping animal behavior and the evolution of cooperation. Because Florida scrub jays can be tamed so easily and live in a low-growing, easily observed habitat, they have considerable appeal and importance to the layman and scientist alike. Protected populations of this jay not only provide enjoyment to countless human neighbors, but also a natural outdoor laboratory (of increasing world-wide recognition) for the study of animal behavior.

MANAGEMENT POTENTIAL

Although genuinely threatened throughout the state, Florida scrub jays are by no means a hopeless case for preservation, even in the context of land development by humans. Many attributes of the species make it relatively easy to preserve, as long as some suitable habitat can be left intact at a site:

1) We know a great deal about the biology of the species already, which allows biologists and regulatory agencies to make accurate predictions as to the effects of certain activities upon the populations.

2) The species depends entirely upon one very specific and easily identified habitat.

3) The requisite habitat naturally occurs in patches or ecological "islands," many of them small and isolated from one another. Therefore, both the habitat and the bird have proven through geologic time that they can withstand fragmentation.

4) The Florida scrub jay is not migratory, but instead defends year-round territories that are passed on to succeeding generations indefinitely. Therefore, if the quality of the habitat remains suitable, no jay population will "voluntarily" leave the patch in search of new places to live.

5) Maintaining the habitat in its native condition is relatively easy if it can be burned. None of its component species is highly sensitive to environmental perturbations, as long as the soil is left more or less intact.

6) The Florida scrub jay is an attractive and endearing "flagship" species within a rare and vanishing habitat. Local residents routinely grow quite fond of "their" local groups of jays, which often become exceptionally tame. This attribute provides an *opportunity* for local developers to foster a special relationship between the residents, their environment, and a highly visible and

beautiful Florida specialty.

All these features make the Florida scrub jay a bird that can thrive around people. The jay can benefit enormously from the local protection of moderately sized habitat preserves. Moreover, each such preserve has a compound effect upon the fate of the species as a whole. Clusters of small, isolated preserves provide one another with occasional colonists that maintain genetic variability and provide some measure of insurance against local extinctions that normally occur through random population fluctuations.

HABITAT REQUIREMENTS

The essential habitat is oak-dominated scrub, a peculiar vegetation formation found only on extremely well-drained, sandy soil formed by old coastal dunes or paleodunes (Laessle 1958, 1968). The most characteristic and essential species in the habitat are four species of stunted, low-growing oaks. At different sites around the Florida peninsula these species occur in varying percentages, and one or two may even be lacking, but as a group they always dominate the habitat: scrub oak (*Quercus inopina*), sand live oak (*Q. geminata*), Chapman's oak (*Q. chapmanii*), and myrtle oak (*Q. myrtifolia*). Certain scrub habitats contain taxonomically confusing oaks closely related to *Q. geminata*, all of which are sometimes lumped under the name live oak (*Q. virginiana*).

In optimal jay habitat most of the oak shrubs are between 1 and 3 m. tall. Apparently critical to Florida scrub jays, the oak cover must be interspersed with numerous patches of exposed sand. Percent of total surface area represented by exposed sand can vary down to 10 to 15%; habitat with less open sand usually is overgrown and unsuitable. We suspect that various factors cause this peculiar ecological requirement, including the need for sufficient sandy substrate to bury and recover thousands of acorns each year. Florida scrub jays spend considerable portions of their foraging time on the ground, and while foraging they avoid areas of heavy leaf litter or herbaceous cover. As discussed below, natural fires were frequent in native oak scrub. Florida scrub jays will not persist in scrub that is prohibited from burning regularly. One possible reason for this is the steady loss of bare sand as leaf litter, herbaceous growth, and new oak shoots build up.

Trees and dense herbaceous vegetation are rare in naturally occurring habitats preferred by Florida scrub jays. Among the common plant associates in typical oak scrub habitat are scrub palmetto (*Sabal etonia*), saw palmetto (*Serenoa repens*) crooked wood (*Lyonia ferruginea*), fetterbush (*Lyonia lucida*), tar flower (*Befaria racemosa*), dwarf blueberry (*Vaccinium myrsinites*), scrub hickory (*Carya floridana*), and rosemary (*Ceratiola ericoides*), Trees, when they do occur, are widely scattered pines, usually slash pine (*Pinus elliottii*) or sand pine (*Pinus clausa*). Various grasses (e.g., *Aristida stricta, Panicum abscissum, Andropogon brachystachys*) grow in depressions between the sandy ridges. Where these depressions are wet or seasonally inundated, gallberry (*Ilex glabra*) or St. John's wort (*Hypericum* spp.) often occur.

A considerable body of literature exists on the oak scrub in Florida. Austin (1976) provides a general overview. Early references (e.g. Harper 1913, 1915, 1921; Howell 1932; Laessle 1958, 1968; Davis 1967) provide good descriptions including mention of the variable nature of scrubs around the Florida peninsula. Woolfenden and Fitzpatrick (1984, 1986), Cox (1984, 1987), and Breininger (1981) discuss the relationships between scrub habitats and aspects of Florida scrub jay population biology. Recent technical literature includes studies of natural succession (e.g. Abrahamson et al. 1984; Cooper et al. 1959; Veno 1976), effects of fire suppression (Givens et al. 1984), and the effects of prescribed burning (Doren et al. 1987).

Fire

Fire is a natural and frequent event in scrub habitats throughout Florida. The frequency and effects of natural fires in scrub habitats before the influence of man are still unclear, and presumably vary from site to site (Myers 1985, Myers and White 1987). No debate exists, however, that lightning strikes are frequent in summer months in peninsular Florida, and that they often ignite local brush fires in scrub habitats (e.g., Archbold Biological Station unpublished records). Local sites probably burned at intervals much shorter than the experimental 50-year spans studied by Myers (1985) and Myers and White (1987).

For Florida scrub jay habitat, a fire frequency averaging about once every 10 to 20 years is probably optimal. Much greater frequency (e.g., every 2-3 years) consistently maintains the principal oak species below acorn-bearing height, and may slowly favor the spread of palmettos at the expense of oaks. Lower frequency produces pine forests and tall, dense oak understories. These habitats (referred to below as "overgrown scrub") are of limited value, if not entirely unsuitable, to Florida scrub jays, and often are occupied by a competitor-predator, the blue jay.

At the Archbold Biological Station, fire suppression in a tract formerly supporting low, open oak scrub has provided an excellent experimental opportunity to document the response of Florida scrub jays to advanced habitat succession. The 400 ha property originally acquired by Richard Archbold in 1941 had last burned extensively about 1927 (Myers and White 1987). Extensive portions of this tract were occupied by Florida scrub jays through the 1940's (Amadon 1944), 1950's, and 1960's (Woolfenden 1974). By the onset of our long-term study in 1969 the habitat already had become tall and dense, with numerous sapling slash pines; density of territories in this tract was about 3.8 per 40 ha. During the 1970's we witnessed the gradual decline of jays in this tract, and since 1980 the area has been colonized only sporadically by

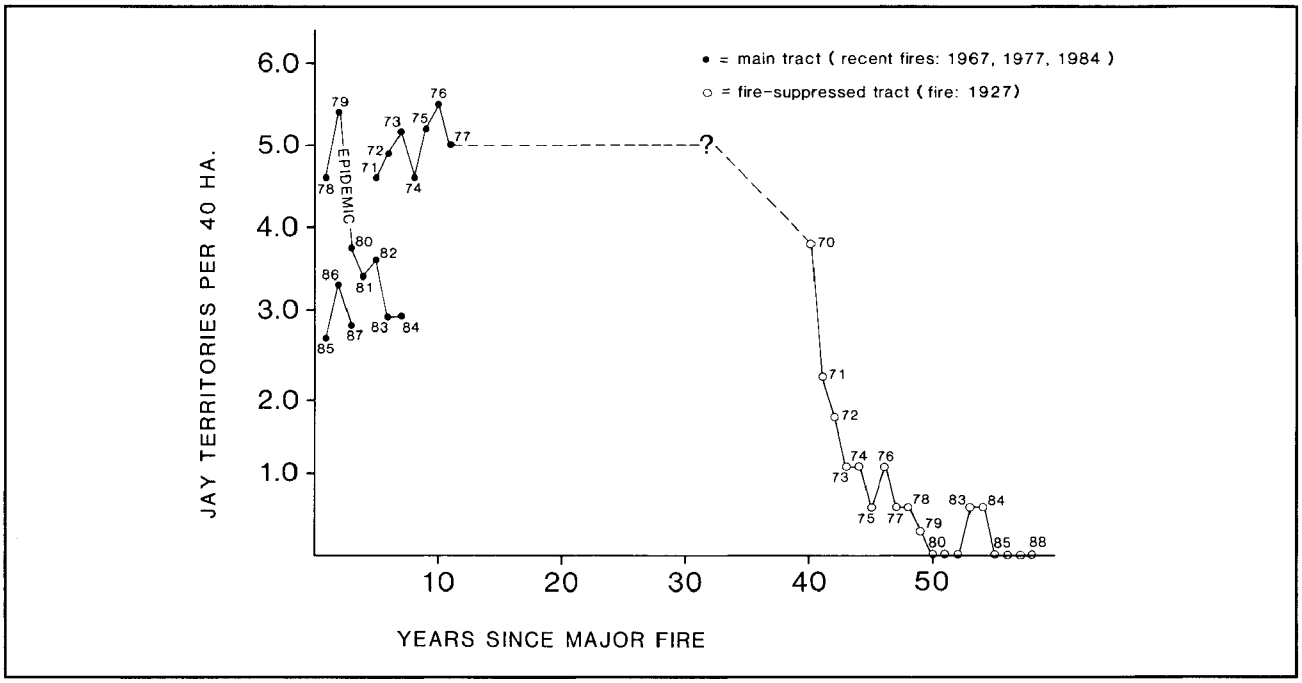

Figure 2.3. Density of Florida scrub jay territories in several tracts of scrubby flatwoods at Archbold Biological Station, in relation to time since most recent major fire in the respective habitat patch. Precipitous decline after 40 years post-fire reflects the point at which reproduction no longer kept pace with average mortality of adults and young in tall, overgrown scrub.

dispersing jays, then abandoned. Fifty years post-fire in this case was the final point, but reproduction and survival had dipped below replacement levels even by 1969 (about 42 years post-fire). Density in the fire-suppressed tract already had been reduced below the density in periodically-burned oak scrub just a few hundred meters away.

Fig. 2.3 summarizes our density measurements in relation to the most recent major fires at the Archbold Biological Station. We conclude that, for interior scrub, a fire frequency of 10 to 20 years is optimal for maintaining a healthy population of Florida scrub jays.

DISTRIBUTION AND POPULATIONS

The distribution of the Florida scrub jay throughout the state, both historically and in the early 1980's, was carefully documented and mapped by J.A. Cox (1984, 1987). Because the species is confined to a naturally patchy habitat (primarily old sand dunes or shorelines) its distribution is characterized by numerous small, isolated patches (Fig. 2.4). This is true even in the five counties in which the species is most abundant, Brevard (includes Merritt Is. National Wildlife Refuge, Kennedy Space Center, and Cape Canaveral Air Force Station), Highlands (includes Archbold Biological Station), and Marion, Lake, and Putnam counties (collectively include Ocala National Forest). The largest presently-existing contiguous populations of Florida scrub jays occur at and around the localities listed above in parentheses.

Historically the Florida scrub jay occurred on the peninsula in 39 of the 40 counties south of, and including, Levy, Gilchrist, Alachua, Clay, and Duval. Only the

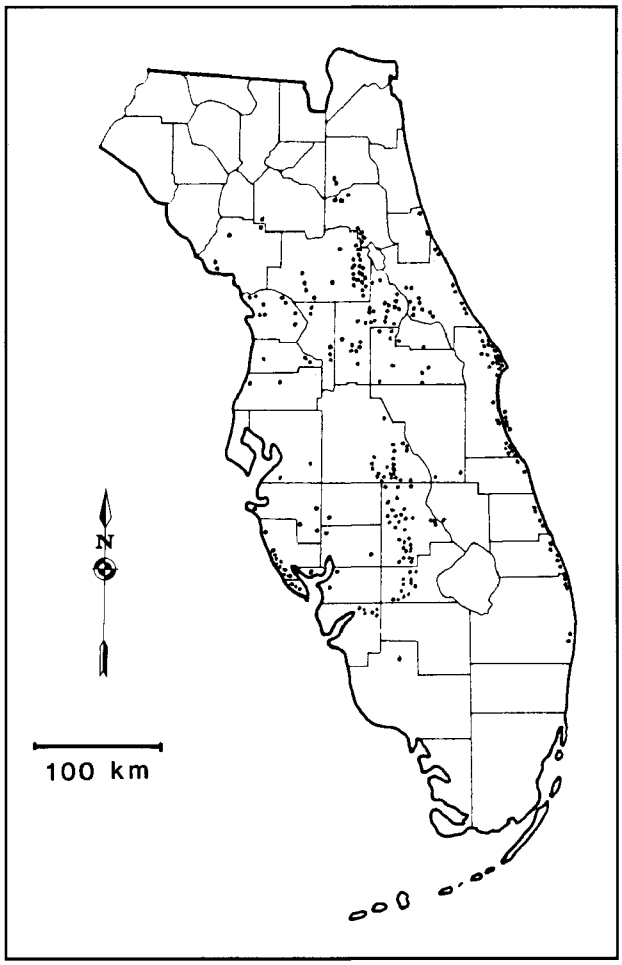

Figure 2.4. Approximate locations of all remaining populations of Florida scrub jays as of early in the 1980's. Modified from Cox (1984).

southernmost peninsular county, Monroe, lacked jays. The jay is now extirpated from 7 of these (Broward, Dade, Duval, Gilchrist, Hendry, Pinellas, and St. John's) and is nearing extirpation in several others. The distribution of the Florida scrub jay as of the early 1980's shown in Fig. 2.4 is drawn from Cox's report and amended slightly based on our own findings in certain areas.

Cox (1987) estimated the total population of Florida scrub jays in 1984 to be 15,600 to 22,800, and suggested that this represented a decrease of about 50% during historical times. By his own account, Cox's census methods were crude and often hasty. In our opinion they were susceptible to error and overestimate (see below). Regardless, the total number of individuals remaining in the state is not large, and has decreased rapidly in recent years, even since Cox conducted his counts.

Cox made judgements on the probability of survival of many of the isolated populations he located, and whose sizes he estimated. However, these judgements constituted necessarily subjective guesses as to whether the habitat patch would remain intact and suppositions as to whether the jays would survive in it. Furthermore, he mostly ignored the statewide problem of fire suppression rendering small habitat patches unsuitable. Unfortunately, based upon our demographic data and our models of population survival using real-world values, we consider most of Cox's judgements to be overly optimistic.

With due respect for Cox's valuable efforts, we provide one example from his report that illustrates the need for more realistic projections as to survival of Florida scrub jay populations. Cox (1987, p. 35) commented that "as many as 10 jays" were seen near the west side of the Immokalee Airport (Collier County), and stated that "the population could survive indefinitely." Estimates such as these contribute to his conclusion (p. 101) that "a total of 11,900 to 18,900 Florida scrub jays . . . may survive indefinitely into the future." However, our population models based on demography alone demand far more conservative estimates. Local sites with 10 jays (2 - 4 territories) bear about a 50% chance of going extinct within 30 years even in the absence of habitat degradation, unless they are located near a source population that could supply colonists as the population dwindles. The Florida peninsula contains scores, perhaps hundreds, of small populations such as those at Immokalee. The long-term future of the Florida scrub jay depends upon recognizing the fragile nature of such a population structure.

SUBSECTION 2.3
POPULATION DENSITY AND DEMOGRAPHY

POPULATION DENSITIES AND TERRITORY SIZE

Preservation of Florida scrub jays in the context of land development requires strict attention to two facts: all individuals reside within territories, and each territory must contain sufficient habitat to sustain a family of jays throughout the year. Therefore, the importance of a given parcel of scrub for preserving a *population* of scrub jays depends upon three particulars: 1) the total *area* of habitat; 2) the density of territories supported by that patch of habitat; 3) the *long-term management* of the habitat to maintain its suitability for scrub jays. The first and third of these issues, in large part, are subject to control by humans. The second issue, territory density, largely is determined by the natural quality of the local habitat and by the evolutionary and ecological history of the scrub jay in Florida. In a natural scrub not already perturbed by man, Florida scrub jay territory densities probably cannot be significantly increased by management.

Density

The most biologically sound measure of Florida scrub jay density is the number of jay territories defended within a unit area of scrub. Use of this measure over other density estimates (e.g., jays per ha) is dictated by several aspects of Florida scrub jay behavior and ecology. Most important, jays are easily attracted to human census-takers, especially along artificial openings such as trails or roads. Calculating densities based upon numbers thus obtained can result in substantial overestimates. Secondly, our long-term data show that densities of territories fluctuate little from year to year, even during periods when total jay density varies widely. Therefore, counting the number of territories within a given area of native scrub provides a reliable measure of the long-term carrying capacity of the local habitat patch. Thirdly, the number of territories provides the only meaningful measure of the number of breeding jays, because each territory contains one and only one monogamous pair of jays. Additional jays (juveniles and older "helpers") can obscure the biologically important density, namely the density of reproductive individuals. Finally, measuring or estimating the density of territories is easily accomplished using tape-recorded jay vocalizations to attract each territorial group and plotting them on aerial photographs. This method is elaborated in Subsection 1.2.

Figure 2.5 shows densities of Florida scrub jay territories in three habitats at the Archbold Biological Station from 1971 through 1987. We have observed natural

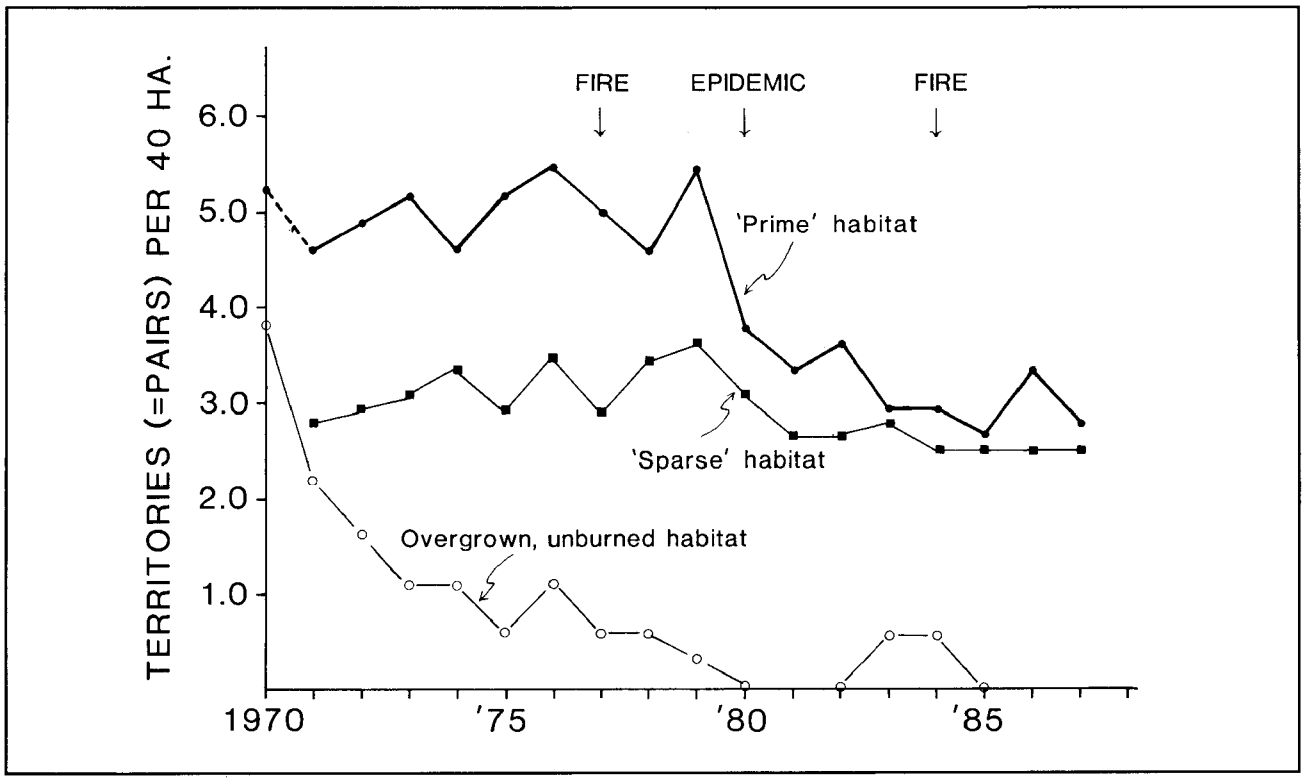

Figure 2.5. Densities of Florida scrub jay territories in three scrubby flatwoods habitats at Archbold Biological Station. Higher density occurs in periodically-burned oak scrub atop well drained sand ridges, while adjacent lower-lying habitat of sparser oak density and abundant palmetto-wiregrass areas supports larger territories, hence lower density. Overgrown scrubby flatwoods supports declining population 40 years after the most recent fire.

variation from about 2 to about 6 territories per 40 ha. of scrub. Mean density in the apparently prime habitat was about 5 territories per 40 ha. before an epidemic in 1979. That habitat patch now varies between 3 and 4 territories per 40 ha, perhaps reflecting lower carrying capacity owing to more extensive burning after the epidemic, perhaps reflecting a regional aftereffect from the epidemic itself (see below).

Territory sizes are larger in scrub habitats that are poorer in quality. At Archbold Biological Station, jay density along the western edge of our study tract ("sparse" habitat) varied between 2.5 and 3.5 territories per 40 ha, 1971-1987 (mean = 2.9; Fig. 2.5). This area is characterized by widely scattered oak patches interspersed with extensive areas of low palmetto and sparse oaks. Scrub jay density declines at the other extreme of oak density as well. In scrubby flatwoods (sensu Abrahamson 1984) that had not burned since the 1930's, density of Florida scrub jays declined in the 1970's from about 3.0 territories per 40 ha to nearly zero. This area has been occupied only sporadically since 1980 (Fig. 2.5). The management implications of this experimental result are discussed carefully elsewhere. Its importance here is the indication that jay densities even in excellent scrubby flatwoods habitat probably *rarely exceed* 5 to 6 territories per 40 ha, and often are considerably lower.

Densities of Florida scrub jays at Archbold Biological Station appear to be similar to those elsewhere around Florida (contra Westcott 1970), although comparably detailed data from other study sites are not available. Cox (1984, 1987) found that "densities of 10-20 birds/40 ha seem to be typical" (Cox 1987, p. 3). Considering average group sizes to be about 3 jays (Woolfenden and Fitzpatrick 1984), these figures correspond to densities of 3.3 to 6.7 territories per 40 ha. Certain areas may occasionally harbor considerably higher densities (e.g., Breininger 1981), but all such estimates known to us are made in disturbed areas where temporary jay concentrations probably do not reflect true local densities (Breininger pers. comm.). Until any study using mapped territories reveals a genuinely higher density, we consider 6.5 territories per 40 ha (ca. 0.5 jays per ha) to be the maximum sustainable density of Florida scrub jays within optimal habitat for the species. Densities of about 2.0 territories per 40 ha should be considered the minimum for stable populations.

Determining a course of action at a site containing Florida scrub jays requires knowledge of population density and local distribution. These data are necessary to assess the population size, and must be used in planning which areas to commit toward scrub jay habitat preservation. The best survey method is to plot the locations of jay families on an aerial photograph or detailed vegetation map of the site. The entire area should be censused carefully enough to insure that most or all groups of jays are noted.

Detailed methods for surveying for Florida scrub jays are presented in Section 1; Figure 1.13 shows a map of a three square-mile tract in Highlands County that was mapped over several days using these methods.

Territory Size

Average territory sizes in continuous oak scrub habitat sometimes can be calculated directly from density estimates. However, most scrub is patchy and characterized by sandy ridges with shrubby oaks interspersed by low areas supporting other plant formations (e.g., flatwoods, palmetto, grassy ponds). Density estimates in highly patchy scrub do not provide direct estimates of territory size, because the jays avoid some of the non-oak habitats.

At Archbold Biological Station, Florida scrub jay territories have been mapped precisely from 1971 to the present. Our maps permit us to delete unused habitats from the measurements of territory size for certain analyses. Overall average territory size in good jay habitat is 9.0 ha (about 23 acres; Woolfenden and Fitzpatrick 1984). Stable territories have ranged in size from 4 to 18 ha (10 to 45 acres). From a conservation perspective, this should be considered the *average amount of usable oak habitat* required to support a single breeding group of Florida scrub jays. Because most scrub habitats contain patches of unused habitat, the total area effectively occupied by jay territories is larger than 23 acres on average. *We recommend considering the average space requirement of the Florida scrub jay to be 25 acres per territory.*

Considerable variation in territory size exists among groups, among habitats, and among years (Fig. 2.3). The most important variables affecting territory size are habitat quality and group size (Woolfenden and Fitzpatrick 1978, 1984). Fig. 2.6 shows two important samples of territories that were substantially smaller than the average for the study population. The lower contains the smallest territories maintained by a single breeding pair for three or more consecutive years. The average size of 5.4 ha (13.5 acres) among this sample provides the best available estimate for the *minimum sustainable territory size* for the Florida scrub jay within contiguous, optimal habitat. The upper includes all smaller-than-average territories that *disappeared* after only one or two years. Many of these persisted for only a few months, as the breeders unsuccessfully attempted to expand their boundaries. Average size among this sample of failures was 3.3 ha (8.3 acres). This result corroborates our suspicion that territories containing less than about 5.4 ha (13.5 acres) of oak scrub cannot be considered adequate to support a family of jays.

Figure 2.7 shows sizes of 33 jay territories in unburned, overgrown oak scrub prior to their disappearance from this unsuitable habitat. The average size of 6.9 ha (17.3 acres) in the unsuitable habitat is significantly smaller than the average size in optimal scrub ($t = 11.3$, $p < .0001$), yet larger than the minimum-sustained territories in optimal scrub. This indicates that territory size problems per se were not a primary cause of disappearances within the unburned habitat.

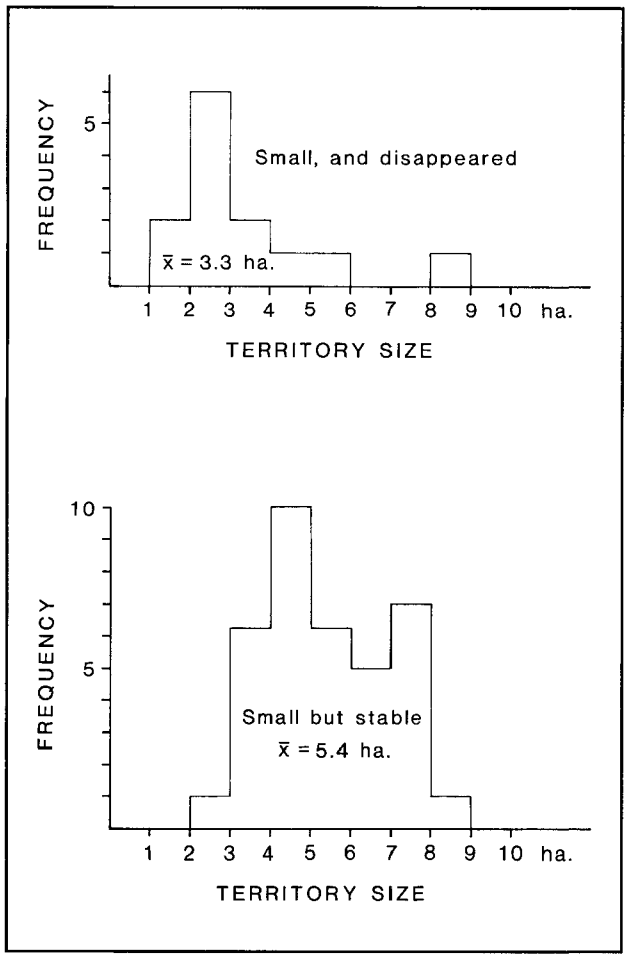

Figure 2.6. Two samples of the smallest territory sizes at Archbold Biological Station, 1970-1979. Upper sample contains territories that disappeared after one year, often through abandonment by the unsuccessful breeders. In lower sample territories persisted for three to four years before either disappearing or expanding. The lower sample probably reflects the smallest sustainable territory size for Florida scrub jays in open scrubby flatwoods habitat.

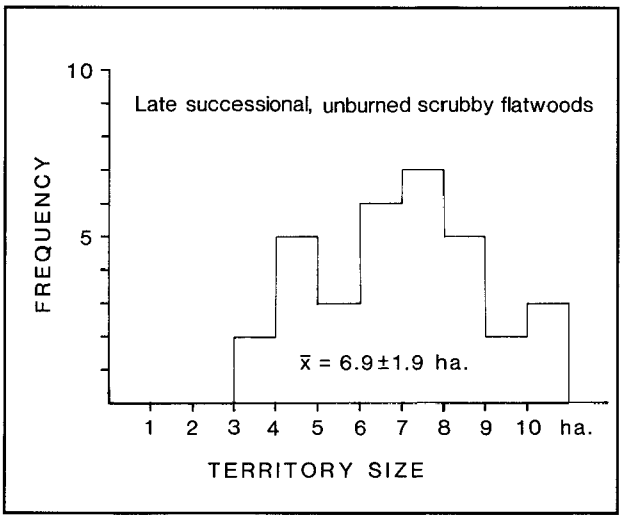

Figure 2.7. Territory sizes of all groups living in late successional, unburned scrubby flatwoods at Archbold Biological Station, 1970-1986. Mean size is slightly smaller than average throughout the main study area, and larger than the apparent minimum sustainable size shown in Fig. 2.6.

REPRODUCTION AND MORTALITY IN SEVERAL HABITATS

Long-term survival of any population depends upon adequate recruitment of new breeders to replace those that die. The balance between birth rates and death rates depends upon a host of variables, and can vary substantially from year to year. However, fundamental to the long-term survival of any Florida scrub jay population is the necessity to maintain this average balance. A large part of the management scheme to protect Florida scrub jays must include efforts to reduce or avoid perturbations that reduce average reproductive success or increase average mortality beyond equilibrium values.

Average Values

Table 2.1 summarizes reproduction and survival in the Florida scrub jay at Archbold Biological Station from 1969 through 1986. The results are separated into four habitat categories pertinent to management concerns: periodically-burned, open oak scrub; unburned and overgrown scrubby flatwoods; unburned Southern Ridge Sandhill (Slash Pine/Turkey Oak formation); mature citrus groves bordering scrub. To our knowledge these represent the only data of their kind for any population of Florida scrub jays. Data on other populations, in other scrub habitats within Florida, would be extremely useful for testing the generality of the following conclusions.

Long-term survival of a population of Florida scrub jays is impossible in all habitats we monitored except for periodically-burned oak scrub. In this habitat: average annual reproductive success was 2.0 fledglings per pair; average survival of fledglings to age one year ("yearlings") was .31; average annual survival of breeding adults was .79. These values translate to an average lifetime production of about 1.3 jays of potential breeding age (yearling) per individual. (The surplus of potential breeders represents the source of the "helper" population—non-breeders working their way into the breeding ranks.)

In each of the remaining habitats monitored, annual reproductive success or survivorship, or both, were substantially lower than in open scrub habitat. The worst of all habitats was overgrown, unburned scrubby flatwoods. Reproductive success was 1.6 fledglings per pair, first year survival was .23, and annual breeder survival was only .72. Under these demographic conditions the average individual breeder does not replace itself, instead producing only 0.6 potentially breeding offspring. This explains why the local populations inhabiting these unburned, late successional habitats became extirpated (Figure 2.5). In the remaining two habitats, where our samples are smaller, reduced reproductive success and greatly increased breeder mortality produced demographic conditions only slightly better than in unburned scrub. Average breeders produced only 0.8 potential breeding offspring, again causing the populations to go locally extinct.

Table 2.1. Mean surviviorships and reproduction of Florida scrub jays in several habitats, 1969-1986

	HABITAT							
	Periodically burned, open-oak scrub		Unburned, overgrown scrubby flatwoods		Unburned Southern Ridge Sandhill (Slash Pine-Turkey Oak)		Mature Citrus bordering unburned scrub	
N (pair-years)	429		74		8		21	
Seasonal nest attempts	1.38	(593/429)	1.49	(110/74)	1.50	(12/8)	1.11	(20/18)
Fledgl./pr.	1.97	(843/429)	1.58	(117/74)	1.38	(11/8)	2.00	(38/18)
Indep. Yg./pr.	1.17	(500/429)	0.80	(59/74)	1.13	(9/8)	1.56	(28/18)
Yearl./pr.	0.60	(259/429)	0.36	(27/74)	0.50	(4/8)	0.61	(11/18)
First-yr. survival	0.307	(259/843)	0.231	(27/117)	0.364	(4/11)	0.289	(11/38)
Breeder survival	0.789	(697/883)†	0.723	(107/148)	0.688	(11/16)	0.619	(26/42)
	EXPECTED LIFETIME SUCCESS/INDIVIDUAL							
Breeding seasons	4.4		3.5		3.2		2.6	
Fledglings	4.3		2.8		2.2		2.6	
Indep. Young	2.6		1.4		1.8		2.0	
Yearlings	1.3		0.6		0.8		0.8	

†N = 883 breeder-years for calculating breeder survival

Annual Variation

Average values for reproduction and survival form a general picture of the health and long-term prospects of a population. However, no single year in the life of a jay or a population is an "average" year. Natural environmental variability plays an exceedingly important role in governing the probability that a given population can survive (MacArthur and Wilson 1967, Soule 1987). For Florida scrub jays, this aspect of population biology is especially crucial because of their naturally patchy, "island-like" distribution. Populations being protected for long-term conservation must be large enough to withstand, or recover from, random fluctuations in birth rate or death rate.

Our long-term data on Florida scrub jay demography provide an opportunity to assign values to the variation surrounding the mean birth rates and death rates. Figures 2.8, 2.9, and 2.10 clearly illustrate the difference between healthy, periodically-burned scrub and overgrown, unburned scrub. Three conclusions are paramount from these graphs and the data in Table 2.1:

1) The average annual values for reproduction and survival are consistently higher in the periodically-burned scrub compared to the overgrown habitat (Table 2.1). In only 4 of 18 years was average fledgling production slightly higher in the tall, unburned habitat. All were during relatively productive years, when both habitats did well. Until 1985, when sample sizes in suboptimal habitat had become very small, only one year in 15 showed mortality in unburned habitat below that in open, periodically-burned habitat (Fig. 2.10). The single exceptional year (1980) was one of unusually low mortality in both habitats.

2) Variation among years is substantial, regardless of habitat. Even in the optimal habitat, average reproductive success has varied from 1.05 to 2.71 fledglings per pair (Fig. 2.8) and breeder mortality ranged from .04 to .45 (Fig. 2.10). Such wide swings in birth and death rates cause considerable local fluctuations in population size and structure. Assuming that these results are typical for Florida scrub jay populations across the state, *the long-term implications of demographic variability among years must be built into any management or conservation plan.*

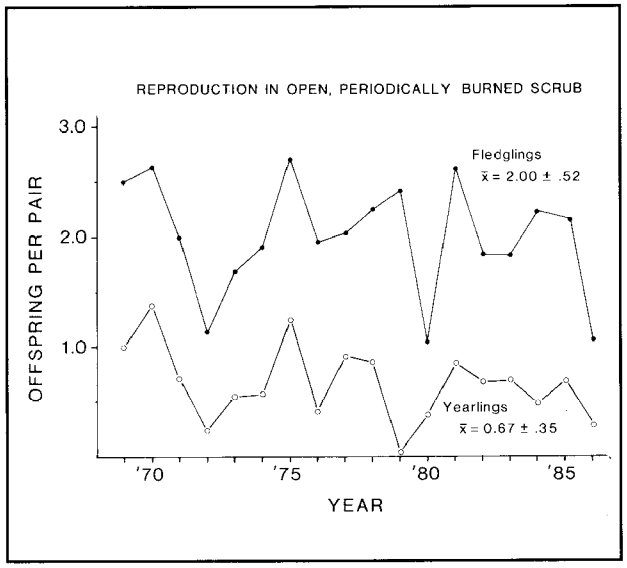

Figure 2.8. Reproduction in open, periodically burned scrubby flatwoods on the main study tract at Archbold Biological Station, 1969-1986. Compare with Fig. 2.9.

3) Variation among years is especially pronounced in the suboptimal habitats, suggesting yet another risk to Florida scrub jay populations inhabiting them. Coefficient of variation (CV) in average fledgling production is lower in periodically-burned scrub compared to unburned scrub (26% vs. 52%), and the same holds for production of

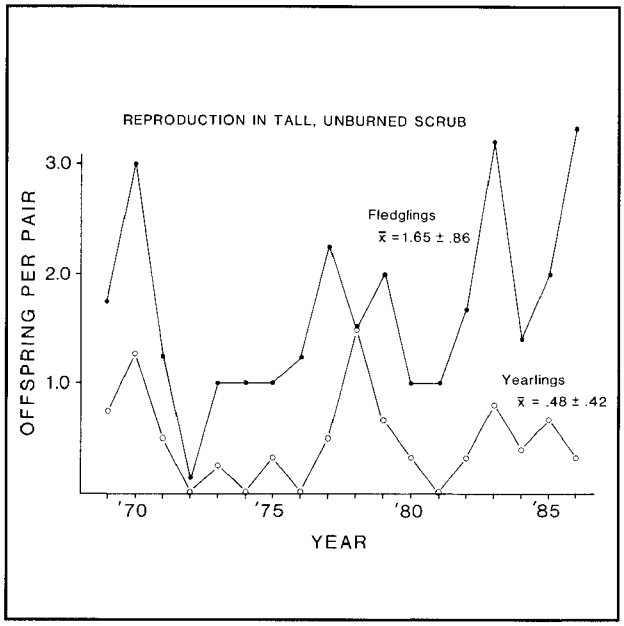

Figure 2.9. Reproduction in tall, unburned scrubby flatwoods and tall ridge scrub with abundant scrub hickory at Archbold Biological Station, 1969-1986. Compare with Fig. 2.8.

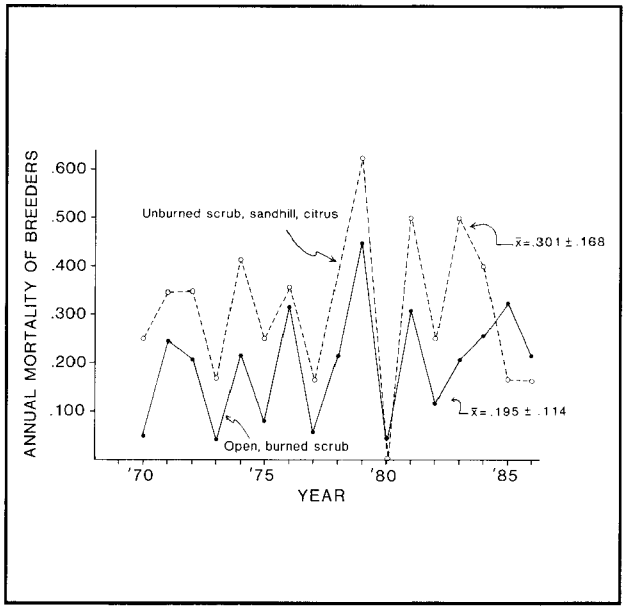

Figure 2.10. Annual mortality of breeding Florida scrub jays at Archbold Biological Station, 1970-1986. Mortality in open, periodically-burned scrub in main study tract is lower than that of several other habitats, all unburned since 1927. Dashed line includes small number of jays living at the edge of a citrus grove bordering tall, unburned ridge scrub for several years before going extinct.

yearlings (52% vs. 88%). Coefficient of variation in annual mortality is similar between the two habitats (54% vs. 55%), but the total range is higher for the unburned habitat (including a year in which nearly two-thirds of the breeders died). Greater variation in demographic parameters leads to greater annual fluctuations in population size. This leads to an important conclusion: *small, isolated populations of Florida scrub jays are more likely to become extinct owing to normal demographic fluctuations if their habitat is not maintained in a low, open condition by periodic burning.*

EPIDEMICS AND OTHER NATURAL CATASTROPHIES

In addition to normal year to year fluctuations in birth and death rates, population numbers are affected by the frequency and severity of catastrophic mortality. All demographic models of extinction probabilities for small populations converge upon one striking conclusion: *the relationship between population size and its probability of extinction depends very heavily upon the frequency and nature of catastrophies* (Ewens et al. 1987, Shaffer 1987).

Epidemics

One catastrophic event has affected the Florida scrub jay population at Archbold Biological Station between 1969 and 1988. Between September 1979 and February 1980 an apparent epidemic swept through the study population, killing about half of all adult-plumaged jays and all but one of 93 juveniles of the 1979 year-class (Fig. 2.11). Characteristics of this epidemic are described in Woolfenden and Fitzpatrick (1984, pp.351-355), and its demographic consequences are summarized here in Table 2.2. Although no epizootic agent was identified, water levels in late summer 1979 were abnormally high throughout the scrub habitat in and around the study area. We suspect that this condition permitted a lethal arbovirus to incubate and spread, possibly borne by mosquitoes. No sick jays were observed, suggesting that death was rapid after infection. In all, 128 of 184 jays (70%) in the study tract died between June, 1979 and May, 1980. Fifty-three of these deaths (41%) were noted during September and October (Fig. 2.11).

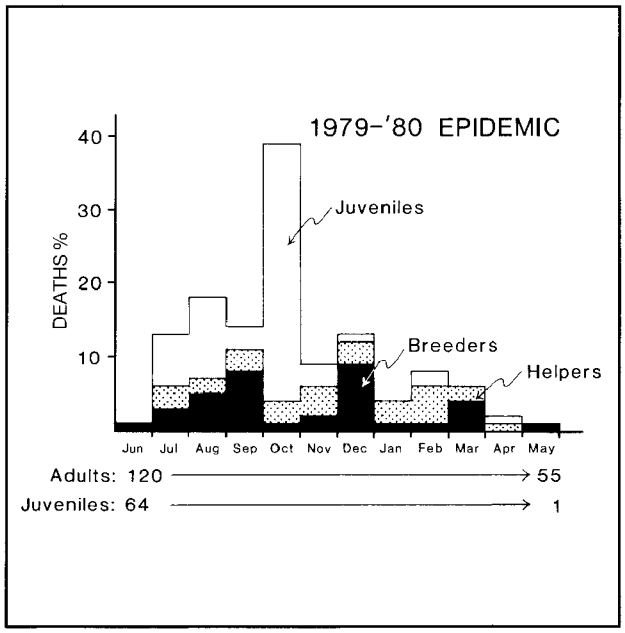

Figure 2.11. Phenology of an apparent epidemic; nearly 70% of the 184 Florida scrub jays alive in mid-June, 1979, were dead by the following May. Breeder and helper mortality approached 50%, and juvenile mortality was essentially complete.

Table 2.2. Effects of apparent epidemic in Florida scrub jay study tract, September 1979-February 1980.

	Previous Averages (1969-1979)	1979-80
ANNUAL SURVIVAL:		
BREEDERS	0.81	0.55*
HELPERS	0.80	0.49
JUVENILES	0.34	0.01
REPRODUCTION:		
(fledglings per pair)	2.04 ($\bar{x}$) 2.42 (1979)	1.05 (1980)
BREEDING DENSITY		
(pairs per 40 ha.)	5.0	3.8 (1980)

*Mortality of oldest breeders (age 9 or older, N = 18) significantly higher than that of youngest breeders (age 2 or 3, N = 26), with rates of .54 vs. 31, respectively ($\chi^2 = 6.32$, $p<.01$).

We have no data to indicate how widespread the 1979 epidemic was in southern Highlands County beyond our study area at the Archbold Biological Station. A few jays of the 1979 year-class immigrated into the study tract over the ensuing year, proving that the regional population of that year-class was not totally destroyed. However, the total population density in our study tract has not recovered to its pre-epidemic levels (Fig. 2.11). Presumably, immigration from surrounding areas of higher density would have been rapid if the population reduction had been limited to the immediate study area. We suspect that elevated mortality afflicted at least the entire population of the Archbold Biological Station (ca. 120 pairs), and probably the contiguous scrub habitats around its borders.

We have no way yet of estimating how frequent or regularly spaced such epidemics are in natural populations of Florida scrub jays. Certainly on our study site they are rare with respect to the average lifetime of a jay, as the study population has experienced only one epidemic, approximately midway through our 20 years of study. For purposes of projecting an expected frequency of epidemics, therefore, we can only make educated guesses. Moreover, the frequency of such catastrophic events presumably varies regionally. Even if we knew their frequency in southern Highlands County, we would need comparable data from several other populations before confidently estimating a general frequency for the species as a whole.

Various circumstances lead us to suspect that a die-off of older breeding jays had overtaken our study tract shortly before the study began in 1969. Largely for this reason, in the demographic models to follow we have chosen to incorporate epidemics occurring at an average frequency of one every 20 years (results assuming a lower frequency are also shown).

Other Catastrophies

Besides epidemic diseases, we know of no other natural catastrophies that affect Florida scrub jay populations. Fire, even when hot and widespread, probably is never catastrophic in its long-term effects. We know that jays continue to use and defend burned oak scrub, and the scrub regenerates extremely quickly after any fire (Abrahamson 1984). Because they do not migrate, and live in a warm temperate climate, Florida scrub jays are not subject to large scale, weather-related disasters that occasionally inflict heavy mortality on migratory bird populations or those restricted to cold, less predictable climes. Major tropical storms and hurricanes periodically batter portions of peninsular Florida, but their effects on oak scrub are minimal. No natural predator is known to be capable of systematically devouring enough individual scrub jays in a local area to affect populations at catastrophic levels. In the absence of habitat alteration by humans, Florida scrub jay populations probably are as resilient to natural catastrophy as any native bird population in Florida.

DISPERSAL CHARACTERISTICS

Florida scrub jays are extremely sedentary, a feature that may have profound influence upon large scale population structures and upon habitat protection measures. Juvenile jays remain in their natal territory for one to five years before dispersing to become breeders. Only during a brief pre-breeding period do Florida scrub jays disperse any appreciable distance. Once they become breeders, jays remain on or near their breeding territory until death. Fig. 2.12 (from Woolfenden and Fitzpatrick 1986) shows documented dispersal distances of 119 color-marked jays that became breeders in or near the study tract at Archbold Biological Station. Typical of most bird species (Greenwood 1980), females on average move slightly farther from their natal ground than do males. No male is known to have dispersed more than 1.5 km. from its birthplace. Average dispersal distance for females is 1.1 km., and the maximum confirmed dispersal distance known to us is 5.6 km. (about 3.4 miles). Most Florida scrub jays become breeders within a few hundred meters of the patch of scrub in which they were hatched.

The sedentary nature of Florida scrub jays has important implications for conservation measures. On the positive side, territorial inheritance and short-distance dispersal insure that protected patches of suitable habitat routinely pass among generations without requiring new colonization events. Successful lineages of jays probably retain "possession" of good patches of habitat for many decades under natural circumstances. In addition, limited contact between local populations may reduce the probability that lethal diseases can spread across major portions of a regional population.

On the negative side, isolated patches of suitable scrub in which jay populations have drifted to extinction may go uncolonized indefinitely if they are more than a few km. from the closest possible source population. Small populations are less likely to go extinct in the first place if they

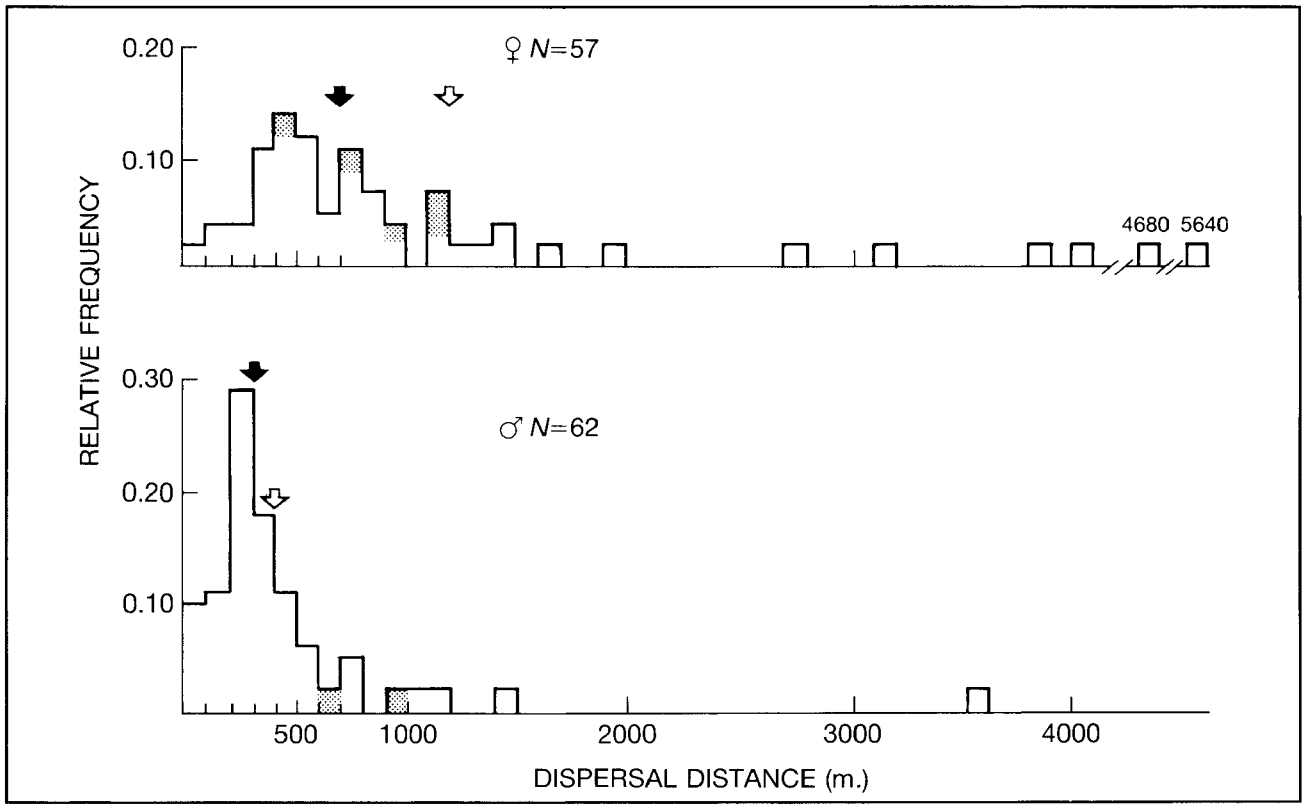

Figure 2.12. Dispersal distances of male and female Florida scrub jays, measured between nest last attended as a helper and first nest of first season as a breeder. Median (solid arrows) and mean (open arrows) dispersal distances are indicated. Shaded samples represent known minimum distances for known-age immigrants upon entering the study tract. From Woolfenden and Fitzpatrick (1986).

are located within the normal dispersal radius of other jay populations. For these reasons, clusters of small to intermediate-sized local populations may constitute a suitable configuration of Florida scrub jay meta-populations where the total area of preserved habitat is limited.

Based on our dispersal data, we suggest that *isolated scrub habitat preserves within about 5 miles of one another are sufficiently close to allow for some occasional movement of Florida scrub jays among them.*

SUBSECTION 2.4
FLORIDA SCRUB JAY CONSERVATION ISSUES

The Florida scrub jay easily could become a symbol of successful conservation efforts within Florida. Not only are its populations eminently preservable, but the birds themselves have numerous qualities that endear them to humans. Foremost among these is the fact that Florida scrub jays can become extremely tame, and even often give the impression of enjoying perching atop the hands or heads of surprised onlookers. Once tame they are easy to attract and observe. They are aesthetically and intellectually pleasing, possessing a rich and complex social system that can be examined at close range. If viewed with respect and admiration for what they tell us about ecology and the environment, they have the potential for capturing the fancy of otherwise disinterested landowners. Protection of Florida scrub jays insures the protection of an entire community of threatened species. The jay can become Florida's most easily advertised conservation success story. In this section we describe the harmful, the non-harmful, and the potentially beneficial effects of humans on Florida scrub jay populations.

POPULATION DECLINE: CAUSES AND PREVENTION

Habitat Elimination

Without question, the most pervasive and final action brought about by humans that reduces or destroys populations of Florida scrub jays is outright elimination of their habitat. The clearing of oak scrub, whether a few thousand acres or patches of a few acres, reduces the number of territories of scrub jays that can be supported. *The popular misconception that clearing a few acres of scrub will simply cause the resident family to "move over" to adjacent scrub is patently false.* If it is suitable for jays, the adjacent scrub is occupied already by its own resident, territorial groups of jays, and these territories cannot be compressed to "make room" for new ones. It is extremely difficult or impossible to increase the local carrying capacity for Florida scrub jays. Jays that are displaced from a territory because of destruction of their habitat are immediately dead, from the population standpoint.

Large-scale developments located in areas containing Florida scrub jays can insure persistence of the jays only by leaving one or more sizeable tracts of oak scrub intact, and by following procedures to avoid degradation of the habitat, especially through management via prescribed burning.

Habitat Fragmentation

Despite all safeguards, some populations of Florida scrub jays become extinct through random fluctuations in their numbers. Undoubtedly some of these local extinctions took place even before humans began accelerating their frequency and making them irreversible. As with populations of any organism, the probability of random extinction increases as population size decreases. In Florida today, several areas of apparently suitable oak scrub lack Florida scrub jays. To our knowledge, no specific local extirpation is *known* to have resulted from random population fluctuations, but the probability is high that some indeed have.

As large continuous tracts of oak scrub are broken into smaller and smaller fragments during the course of human development, local populations of Florida scrub jays are isolated from one another. Inevitably, smaller populations have higher probabilities of extinction than larger ones (MacArthur and Wilson 1967). Inevitably, therefore, fragmentation of habitat increases the rate of local extirpation of jays beyond that which would be expected from the overall loss of habitat alone.

Developments in which Florida scrub jay preservation is being attempted should make every reasonable effort to maximize the area of suitable habitat left intact, and to configure it in the fewest possible patches so as to maximize the size of each isolated population of jays. This technique will minimize the probability that each population will go extinct.

When the choice exists, favor preservation of one or a few large tracts of oak scrub habitat rather than a larger number of smaller preserves. If several tracts can be preserved, small patches of scrub or corridors of scrub between the larger tracts will reduce the probability that the jays in any one patch will go extinct. No Florida scrub jay population containing fewer than 30 territories can be considered safe from extinction over the long term. The ideal system for habitat preservation is a network of at least 750-acre scrub tracts in which no tract is greater than 5 miles from another.

Habitat Degradation

Almost as important as outright obliteration of habitat are various forms of degradation commonly inflicted upon oak scrub in Florida. The most common form of habitat degradation is the supression or prevention of fire, which has the *inevitable* result of changing the structure of the habitat into one that cannot support Florida scrub jays. We have visited numerous isolated tracts of habitat that once had been open, oak-dominated scrub, but in recent years are characterized by dense overstories of pines, especially sand pine, and thickets of tall oak shrubs. Such areas either lack Florida scrub jays entirely, or support a few scattered pairs around the edges where open oaks still exist.

Many oak scrubs in Florida support large populations of sand pines, which form dense canopies when mature. Cox (1984, 1987) found reductions in Florida scrub jay densities in any scrub with more than 20% cover by trees. Florida scrub jays cannot exist in mature sand pine scrub, nor in slash pine scrub (scrubby flatwoods) that has gone unburned more than about 40 years. However, fire or clear-cutting in a mature sand pine scrub community causes a return to conditions acceptable for Florida scrub jays.

It is imperative that assessment of any area as potential habitat for Florida scrub jays include careful biological judgement as to the area's suitability after habitat restoration by prescribed burning and/or clear-cutting. Oak scrub habitats can remain near optimal in condition for Florida scrub jays indefinitely, but only through a fire management program or its equivalent. The best program would be a rotation of prescribed burns, each covering relatively small portions of a preserved tract of scrub. On average, each point in the tract should be burned about once every 10 to 20 years. It is not necessary, nor even advantageous, that every square meter of scrub burn during a prescribed burn. Natural scrub fires usually are extremely patchy, and the jays continue to defend and use their entire territory after it burns. Small patches left unburned provide cover and foraging sites as the scrub regenerates.

Dirt bikes and other off-road vehicles disrupt the sand soil layers and uproot underground stems of oaks and other scrub perennials. The disturbed sandy soil becomes acceptable substrate for numerous exotic species that spread and dominate scrub. Most notorious of these is Brazilian pepper (*Schinus terebinthifolia*), a tall and fast-growing shrub that has taken over extensive areas of scrub formerly occupied by Florida scrub jays, especially in the coastal scrubs inland from the Atlantic Ocean. Such fast-spreading perennials commonly begin along the edges of roadways through scrub.

Other intrusions include frequent and uncontrolled pedestrian traffic, trash dumps, and other casual uses of oak scrub habitat. These activities reduce the quality of scrub habitat for jays, primarily by decreasing the density of oak shrubs or inhibiting their growth. Any such degradation has the effect of reducing the density of territories that can be supported in the area.

Degradation of existing scrub through a variety of human uses is especially hazardous to Florida scrub jay populations located on very small tracts of habitat. Several small (15-30 ha) patches of once-suitable scrub in Indian River County (Cox 1987) were found to lack the jays in 1987. These areas were surrounded by residential housing, and were criss-crossed with dirt-bike trails. Alien annuals and perennials were abundant among the oak shrubs. Refuse was scattered throughout. We suspect that the level of human disturbance *of the habitat* (not of the jays per se) was responsible for these extirpations, although we cannot rule out that mortality, from house cats for example, also played a role.

Florida scrub jays *can* coexist alongside humans, as long as the native structure and species composition of the principal patches of oak scrub are allowed to remain intact. Scrub preserves should be located as far as possible from potential sources of uncontrolled use of off-road vehicles. Trails through the scrub should be few in number and well marked. Refuse dumps should be located elsewhere.

Direct Human-related Mortality

The presence of humans near populations of Florida scrub jays results in a variety of incidental encounters that usually increase the mortality of both juveniles and adults. Certainly most important among these is the killing of jays by household pets, especially house cats. Scrub jays are highly terrestrial birds, and juvenile jays are clumsy and vulnerable. House cats, even a few, whose density is bolstered by human care and feeding, easily could eliminate a small population of Florida scrub jays occupying otherwise suitable habitat (see Churcher and Lawton 1989). Because the jays frequently become extremely tame to human approach (when fed by interested and enlightened persons), they also are exceedingly vulnerable to wanton destruction by children or unenlightened adults.

Various methods of controlling household or garden pests also carry the risk of killing local scrub jays. Most important of these are any of a variety of small-mammal traps, *including live traps*. Virtually any trap that holds a jay and keeps it confined at night will cause its death, either from exposure or from nocturnal predators.

None of the above effects, taken separately, is likely to be enough to eliminate outright a sizeable jay population, with the probable exception of the house cats. However, all will take place when human residences are built within a population of scrub jays. Their cumulative effects easily could elevate average mortality of the jays to a level above that which can be replaced through average reproduction. In such cases, even if gradual, the effect is to drive the whole population toward extinction. Reserves should be large enough to insure that at least several scrub jay territories are located away from the edges, where hunting pressure from house cats is highest.

Vehicle traffic through good scrub jay habitat can have a significant, directly negative effect on the jays occupying territories along the roadside. We measured such an effect at the Archbold Biological Station in 1986 and 1987. Approximately 2 mi (3.3 km.) of optimum-quality oak scrub at the station borders a two-lane, paved state road (SR 17). An estimated 100-150 vehicles pass through this area each day at speeds averaging about 50 mph. As of June, 1986, 28 color-banded breeding jays resided in 14 territories contiguous with this stretch of road. One year later only 16 of these jays were alive, yielding below-average survival rate of 0.57. Survival of breeders during the same 12-month period in contiguous habitat lacking paved roads was significantly higher (0.79; 95 of 121

breeders surviving, Chi-square=5.46, p=0.019). Several road-killed adult jays were found during this period.

Survival of fledglings from nest-leaving to nutritional independence (about age 3 months) also appears to be lower along roadside territories, though our sample sizes are smaller. In the roadside territories 8 of 21 fledglings survived to independence, versus 61 of 112 in non-roadside territories (0.38 vs. 0.55 survival, Chi-square=1.90, p=0.17). Several road-killed fledglings also were found during the period of study.

If the above mortality data are representative, Florida scrub jays cannot maintain stable territory dynamics along roads with appreciable high-speed traffic flow. This result is especially crucial for areas with relatively small jay populations. Any local population in which the overall average mortality is similar to that measured along SR 17 will go extinct within several years. The one practical method of protection against such locally elevated mortality is to preserve contiguous, safer habitat that serves as a source pool for the roadside territories experiencing higher mortality.

Numerous patches of scrub border a major U.S. highway (A1A) through coastal dunes in Brevard and Indian River counties. Historically these sandy coastal islands supported almost continuous scrub jay habitat, but human development has fragmented the jays into a few remnant populations. In these areas jays routinely perch on utility wires and tall vegetation near the highway. However, in all such cases jays occupy patches of scrub that border adjacent, larger tracts of scrub away from the highway. Scrub patches not bordering such protected source areas (as well as a few that do seem to have source areas) appear to be devoid of jays. It is doubtful that small populations of jays, even if totally habituated to major traffic flow, can avoid greatly elevated juvenile and adult mortality along major highways.

HUMAN ACTIVITIES THAT ARE NON-HARMFUL OR ARE BENEFICIAL TO SCRUB JAYS

Probably the most beneficial interaction with humans is the inevitable reduction in numbers of the larger and long-lived natural predators of the jays. Among these are certain snakes (e.g., eastern coachwhip, indigo snake), mammals (e.g., bobcat, gray fox), and birds (especially various hawks and owls). These changes probably reduce mortality somewhat, although they probably do not offset the effects discussed above.

Artificial feeding of wild animals by humans is inevitable, even though it can be harmful for certain species (e.g., hibernating rodents, bears). We have no reason to suspect that the various foods routinely fed to Florida scrub jays by interested residents are harmful in any way, unless tainted with chemical poisons. Indeed, under certain conditions, artificial food might increase slightly a local jay population by decreasing the average size of territories required by the resident jays. Any such effect would, of course, be highly dependent upon the predilections and behavior of individual human residents, and could change frequently through time. For this reason, it is not recommended that artificial feeding be incorporated into a habitat protection plan.

SUBSECTION 2.5
SURVIVORSHIP OF POPULATIONS: SIMULATION MODELS

Recently, considerable attention has been focused on the problem of defining "minimum viable populations" for purposes of conserving biological populations and diversity (reviews in Soule 1987). Although this specific field of inquiry is young, the general principles are drawn from well-established ecological theory and wildlife management practice (Shaffer 1981, 1983; Soule 1980; Wright and Hubbell 1983). No formulae exist for calculating minimum viable populations; the biological world is too complex and unpredictable for an exact minimum viable population size to exist for any species. We are, however, well equipped to model the survival probabilities of Florida scrub jay populations under a variety of circumstances, because our long-term demographic study allows us to use real-world values for the critical variables in simulation models.

DEMOGRAPHIC MODELS OF EXTINCTION TIMES FOR FLORIDA SCRUB JAYS

Our approach is to begin with a hypothetical population of jays containing a given number of territories. Through Monte Carlo simulation techniques, natural birth and death processes are allowed to take place year after year indefinitely, until the number of breeders is reduced to one or zero, at which time the population is deemed extinct. The number of years is counted in which at least one breeding pair had remained. The process is repeated a large number of times (in the present case, N=100) for each population size to generate a frequency distribution of years-to-extinction (= persistence times) for that size. Such distributions always take the form of a negative exponential distribution (Goodman 1987), and can be described or depicted in a number of ways. The median persistence time is one comparative index of the viability of populations of a specified size. Alternatively, the cumulative probability of extinction can be plotted against time since isolation, with various population sizes plotted on the same graph (e.g., Figs. 2.13, 2.14).

The following assumptions are incorporated into the simulation model, each of which represents a real-world biological feature of Florida scrub jay population: 1) each territory contains one and only one pair of breeding jays; 2) the population is assumed to be at carrying capacity to start with, and is not allowed to exceed the initial number of territories at any time during the "life" of the population; 3) the initial population begins with one helper of potential breeding age in each territory; 4) the number of helpers is permitted to vary between 0 (= no helpers present) and three times the number of territories (= average of 3 helpers per territory); 5) yearlings are not allowed to breed; 6) the pool of non-breeders older than age one year permits an equal chance for each individual to become a breeder (i.e., no age-specific differences in success probability after the first year); 7) all breeders have an equal probability of dying during a given year; 8) *average* demographic values are set to a steady state population (no intrinsic population growth or decline), but individual survival and reproduction is treated probabalistically. This simulates natural environmental variability (stochasticity).

Various demographic features are open to variation within the simulated lifespans of a population. Table 2.3 shows the important variables, and lists the assumed values for our primary simulations.

Perhaps the most far-reaching conclusion proven by recent models of population extinction is the overwhelming importance of environmental variation in affecting expected persistence times for populations (Belovsky 1987, Ewens et al. 1987, Shaffer 1987). Our own models indicate the same result. The effects of year-to-year variation are so

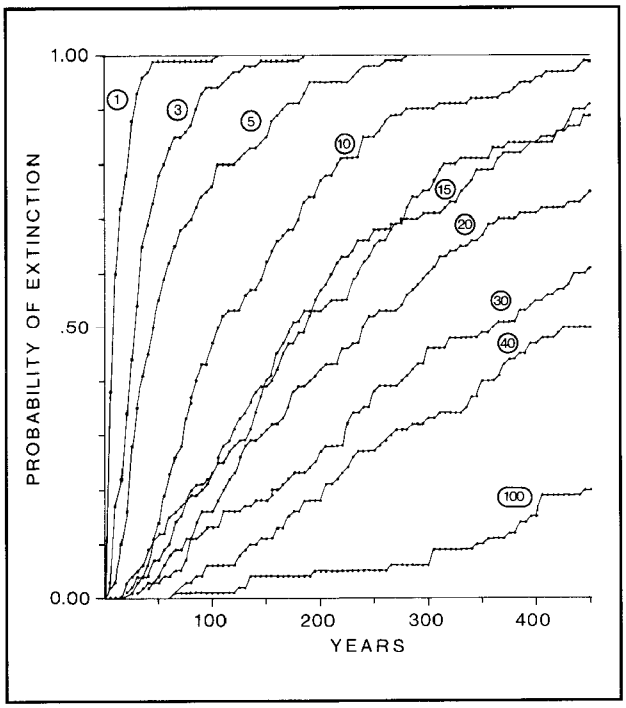

Figure 2.13. Cumulative extinction probabilities versus time for Florida scrub jay populations of different maximum sizes, measured in number of territories (circled numbers). For each population size, 100 replicate populations were simulated using a computer model, with natural demographic variables for birth and death rates and annual variations in these values. All were permitted to run until extinction occurred (i.e., when fewer than 2 jays remained). Points show cumulative proportions extinct at 5-year intervals through the first 460 years after beginning the run (e.g., after isolation of the preserve). Two separate runs of 100 populations each are plotted for population size 15 territories, to illustrate robustness of the curves. In this graph epidemics are assumed to occur at random intervals with a mean frequency of one every twenty years (cf. Fig. 2.15).

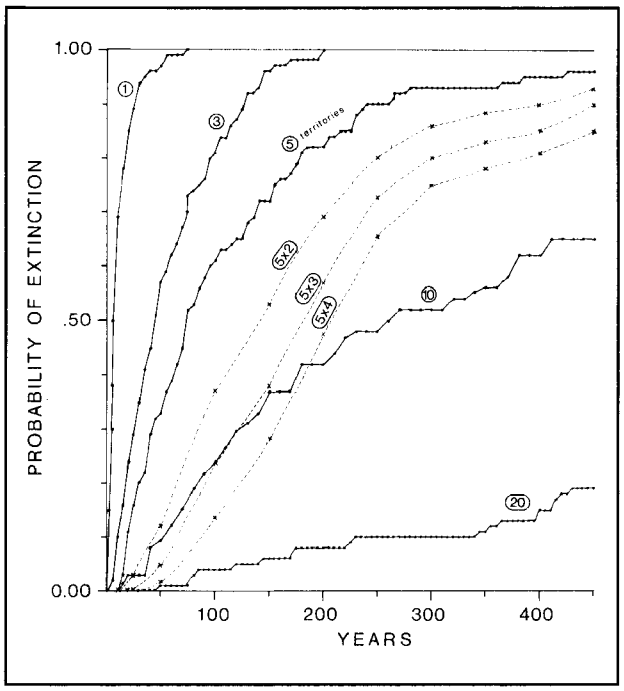

Figure 2.14. Cumulative extinction probabilities versus time for Florida scrub jay populations of different maximum sizes. Methods exactly as in Fig. 2.13, but here epidemics are assumed to occur at average frequencies of one every fifty years. Dashed lines show analogous extinction curves for Florida scrub jay populations fragmented into 2, 3, or 4 isolated populations of 5 territories each, so that probability of overall extinction is expressed as probability of extinction of the 5-territory sample, raised to the power of 2, 3, or 4. Relative positions of these lines compared with that for a single population of 10 territories illustrates that in this size range one larger preserve is preferable to several smaller preserves.

profound that we include here a quote from one expert on the design of biological reserves (Goodman 1987, p. 34):

> "Inasmuch as incorporation of effects of environmental variation leads to qualitative as well as enormous quantitative differences, in the predictions of stochastic population models bearing on the central questions of conservation biology, we conclude that: (1) practical models must take environmental variation into account, (2) serious attention must be given *to field programs of estimation of the relevant parameters of environmental variation* . . . and (3) strategies for population management and reserve design must be re-evaluated in light of the results of models which incorporate environmentally driven variation." (italicizing ours).

We incorporate environmental variation, including epidemics, into our simulation model. Our method assumes a *distribution* of annual mean birth rates and death rates, rather than a fixed average value for these variables that remains constant each year. The distributions we use are exactly those shown in Figs. 2.8 and 2.10, namely the measured annual values during 18 years of study at Archbold Biological Station. Each year during the simulation the program randomly chooses a value from the observed frequency distributions of mean annual birth rates and death rates. For every year in which the population persists, each individual's probability of surviving, and each pair's probability of fledging from 0 to 4 young, are corrected so that an infinitely large population would conform to that year's mean demographic values.

Epidemics are incorporated as follows: when the highest observed value for breeder mortality is selected (0.45 in our model), the program is flagged to assume that an epidemic has spread through the population that year. During such a year, the juvenile death rate becomes 0.99, the death rate of helpers older than one year is elevated (from its stable value of 0.23) to 0.50, and the following year's mean reproduction is set at its lowest observed value (1.1 fledglings per pair, compared with the overall average of 2.0). Because we do not know the natural frequency of such epidemics, our choice of frequencies was arbitrary. Our primary simulation assumed a once-in-20-year average frequency (.05 probability each year). For comparison, similar simulations were performed assuming a lower frequency (once in 50 years, or .02 annual probability).

SIMULATION RESULTS

For each specified population size, 100 hypothetical populations were allowed to proceed through random birth and death processes (e.g., Fig. 2.15) until they went extinct through demographic extinction. The resulting 100 "population lifespans" or persistence times conformed to the general results of Goodman (1987). Broadly leptokurtic distributions closely resemble the negative exponential; the only deviation from true negative exponential extinction probabilities reflects the "safe" period at the onset of isolation, because it always takes some time

Table 2.3. Demographic values and their annual variations used in computer simulation of Florida scrub jay populations.

X ANNUAL FECUNDITY:

frequency	$\bar{x}$ annual fledgl./pr
.17	1.12
.06	1.73
.06	1.94
.32	2.04
.11	2.24
.11	2.45
.17	2.65

$\bar{X}$ ANNUAL SURVIVAL:

juveniles to age 1 year	
normal:	.35
epidemic:	0
yearlings to age 2 years	
normal:	.70
epidemic:	.50
older helpers	
normal:	.77
epidemic:	.50

breeders: frequency	annual survival
.16	.950
.11	.925
.06	.875
.05	.825
.33	.775
.06	.725
(.17)*	.68
(.05)*	.55 = epidemic

*lowest values for mortality are varied according to specified frequency of epidemics.

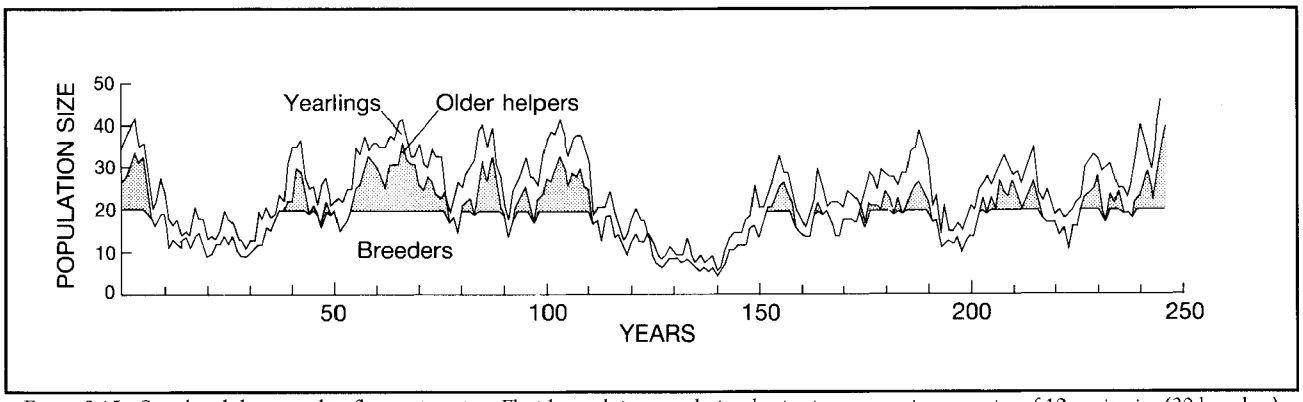

Figure 2.15. Simulated demographic fluctuations in a Florida scrub jay population beginning at carrying capacity of 10 territories (20 breeders), illustrating the behavior of the model used to estimate persistence times. Breeder numbers are prohibited from exceeding the specified size, as would be the case in a small habitat preserve. Shaded portions illustrate the numbers of non-breeding helper jays older than one year, waiting to become breeders. Epidemics occur at random intervals, with an average frequency of once every 20 years. Their long-term effects on the population structure are apparent. Portions of this figure closely resemble the 18-year fluctuations documented in a real world population at Archbold Biological Station.

for extant individuals all to die even in the face of minimal reproduction and recruitment.

Our general results are shown in Figs. 2.13, 2.14, and 2.16. Cumulative extinction probabilities increase with time, but this increase is slower for larger populations. These graphs emphasize the importance of approaching preservation of small populations from the viewpoint of probability. It is well known that any population subject to annual variability and periodic catastrophic reduction has some finite probability of going extinct through demographic fluctuation within a relatively short period. The goal of habitat preservation in this context is to reduce these probabilities to as low a level as possible in the context of economic reality. Ultimately, the decision is arbitrary as to how high an extinction probability can be tolerated. *We recommend as a minimum guideline attempting to insure a 90% probability that each local Florida scrub jay population will survive for at least 100 years.*

Recommended Preserve Size

It is clear from Figs. 2.13 - 2.16 that under conditions of isolation, habitat preserves containing as few as 1 to 5 territories of Florida scrub jays are highly subject to local

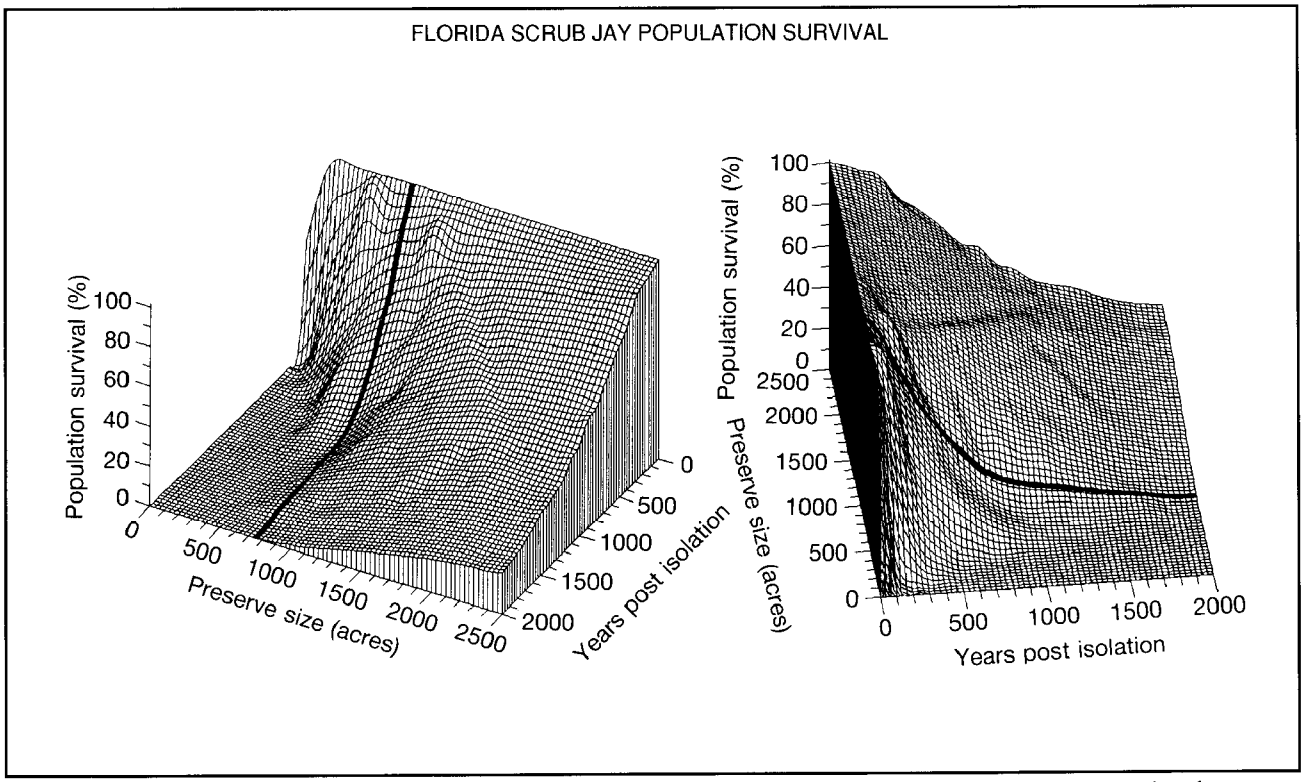

Figure 2.16. Two views of the same three-dimensional graph showing relationships between preserve area, population survival, and time in simulated Florida scrub jay populations. Preserve area is expressed in acres and assumes about 25 acres per Florida scrub jay territory. For a given population size, the graph indicates approximately what proportion of such populations would likely remain extant after N years after isolation. The isobar for a 30-territory preserve is darkened for reference. Populations larger than 30 territories show 90% or better probability of surviving at least 100 years. This graph assumes that epidemics occur on average once in 20 years.

extinction. Even if epidemics are absent from such populations, extinction is likely to occur rapidly. Furthermore, populations maintained for even a few generations at this small size are known to undergo severe reduction in genetic variability, with detrimental effects owing to inbreeding and loss of ability to cope with small environmental perturbations (e.g., Lande and Barrowclough 1987). In larger populations these genetic considerations are of secondary importance compared to the overwhelming problem of extinction-risk from demographic causes (R. Lande, personal communication).

Populations of between 15 and 30 territories should be considered marginally protected. Depending on the frequency of epidemics these populations may or may not exhibit 90% survival probability over 100 years. However, a population of 15 territories (= 15 breeding pairs) still is well below a generally accepted population size at which genetic variability is maintained (Soule 1980). The adequacy of a preserve limited to this range of sizes is in large part dependent upon its proximity to other, better protected preserves that can supply occasional colonists. *Florida scrub jay populations of 15 to 30 territories should be considered adequately protected only if placed within 3 to 5 miles of at least one other protected population containing more than 30 territories.*

Populations containing 30 or more territories probably are the smallest populations in which long-term survival is 90% guaranteed for 100 years or more. Such a population typically would contain at least 60 breeding individuals and a non-breeding population of 30 to 50 jays that serve as demographic and genetic buffers against population extinction or degradation. *In average habitat, therefore, about 750 acres of periodically-burned oak scrub are required to support an adequately protected population of Florida scrub jays* (assuming 25 acres per territory and 30 contiguous territories). Fig. 2.17 schematically illustrates how extinction probability varies with time among isolated Florida scrub jay populations, with larger population sizes affording greater degrees of protection from extinction (progressively darker shading).

One Large Preserve vs. Multiple Small Ones

For certain kinds of animals, numerous small preserves may provide equal or larger overall probability of long-term survival than a small number of large ones. In the case of Florida scrub jays, Fig. 2.17 illustrates that a single larger preserve is to be preferred. From a demographic standpoint, extinction probabilities are lower in a single preserve of 10 territories, for example, than they would be in two preserves containing 5 territories each (unless they were so close together as to act as a single preserve of 10). Indeed, in the example shown, one 10-territory preserve is more effective at reducing extinction probabilities than *four* preserves of 5 territories each.

Management problems also favor a smaller number of

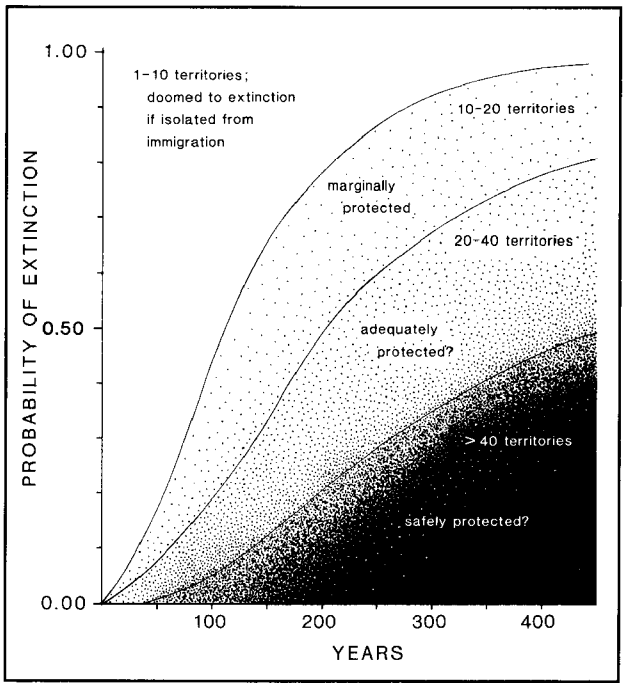

Figure 2.17. Schematic relationship between Florida scrub jay population size within a habitat preserve and the degree of protection from demographic extinction thus provided by that preserve. Adapted from Figs. 2.13, 2.14 and 2.16. Assumes an epidemic frequency intermediate between twenty-year and fifty-year intervals.

larger preserves in the vicinity of humans. Small preserves always expose more of their enclosed territories to the edge of the protected habitat patch. This subjects a larger proportion of the total jay population to pressure from cats, roads, humans, and other incidental sources of mortality. Such effects mean that the average mortality in smaller populations is elevated, further reducing their effective size. *The larger the population and the more circular its configuration the greater proportion of its inhabitants will be protected from the ill effects of living at the edge.* Finally, in general, the control of human access, authorized or otherwise, and prescribed burning of the habitat with minimal impact on surrounding dwellings are both much easier in a single large, circular preserve.

Metapopulations

The spatial configuration of locally protected populations on a larger geographic scale is of considerable importance for both long-term survival and maintenance of genetic diversity regionally (Levins 1970, Gilpin 1987). In the context of large-scale developments, where economic realities are likely to act against the interests of Florida scrub jay preservation, the regional need for and impact of habitat protection should be carefully examined in assessing where and how large to create any given habitat preserve.

In certain instances, for example, the existence of a large, protected population of Florida scrub jays near or at the border outside a development project adds considerable value to each territory potentially preserved within the development tract. In such cases, protection of a scrub

tract considerably less than 750 acres may have an equal or greater impact on regional survival of the species than a much larger preserve might have in complete isolation elsewhere. Placement of the new preserve as close as possible to existing or potentially protected ones outside the developed area is vital. Providing habitat corridors between these preserves can be more beneficial, in certain cases, than simply adding area to a reasonably large existing preserve. These and a host of related issues make it imperative that each potential new preserve be examined in the context of the regional structure of Florida scrub jay populations ("metapopulations" of Levins 1970). Regional analysis often may provide developers and state agencies with avenues for compromise in terms of total land area set aside for scrub habitat protection.

The regional context also dictates an axiom that should be adhered to in all cases of large-scale development: every isolated population of Florida scrub jays, no matter how small, is now a vital part of a disappearing metapopulation. Each "island" of scrub habitat serves both as a stepping stone between other such islands and as a potential source of new colonists and new genetic input for other small populations some distance away. No regional population fragmented to the extent now shown by Florida scrub jays (Fig. 2.4) can afford to lose whole local populations. *Therefore, it is strongly recommended that no local population of Florida scrub jays, no matter how small or isolated, be permitted to be extirpated as a direct result of development.*

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Appendix G

USFWS Information for Planning and Consultation (IPaC) Trust Resources Report

IPaC Information for Planning and Consultation **U.S. Fish & Wildlife Service**

IPaC resource list

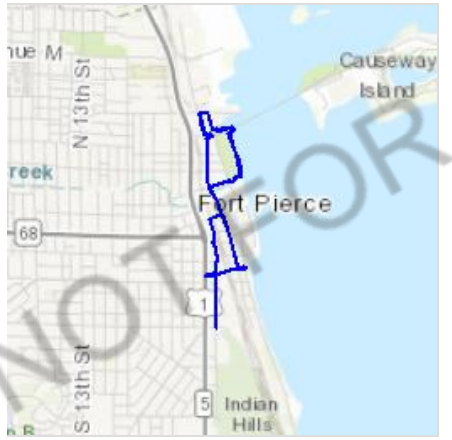
This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

NOT FOR CONSULTATION

Location

St. Lucie County, Florida



Local office

South Florida Ecological Services Field Office

(772) 562-3909
(772) 562-4288

1339 20th Street
Vero Beach, FL 32960-3559

http://fws.gov/verobeach

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information.
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

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Mammals

NAME	STATUS
Florida Panther Puma (=Felis) concolor coryi No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1763	Endangered
Puma (=mountain Lion) Puma (=Felis) concolor (all subsp. except coryi) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6049	SAT
Southeastern Beach Mouse Peromyscus polionotus niveiventris No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3951	Threatened
West Indian Manatee Trichechus manatus There is **final** critical habitat for this species. Your location overlaps the critical habitat. https://ecos.fws.gov/ecp/species/4469	Threatened Marine mammal

Birds

NAME	STATUS
Audubon's Crested Caracara Polyborus plancus audubonii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8250	Threatened
Everglade Snail Kite Rostrhamus sociabilis plumbeus There is **final** critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/7713	Endangered
Florida Scrub-jay Aphelocoma coerulescens No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6174	Threatened
Ivory-billed Woodpecker Campephilus principalis No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8230	Endangered
Kirtland's Warbler Setophaga kirtlandii (= Dendroica kirtlandii) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/8078	Endangered

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Piping Plover Charadrius melodus — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/6039

Red Knot Calidris canutus rufa — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/1864

Red-cockaded Woodpecker Picoides borealis — Endangered
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/7614

Whooping Crane Grus americana — EXPN
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/758

Wood Stork Mycteria americana — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/8477

Reptiles

NAME	STATUS

American Alligator Alligator mississippiensis — SAT
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/776

Eastern Indigo Snake Drymarchon corais couperi — Threatened
No critical habitat has been designated for this species.
https://ecos.fws.gov/ecp/species/646

Hawksbill Sea Turtle Eretmochelys imbricata — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/3656

Leatherback Sea Turtle Dermochelys coriacea — Endangered
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/1493

Loggerhead Sea Turtle Caretta caretta — Threatened
There is **final** critical habitat for this species. Your location is outside the critical habitat.
https://ecos.fws.gov/ecp/species/1110

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Insects

NAME	STATUS
Miami Blue Butterfly Cyclargus (=Hemiargus) thomasi bethunebakeri No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3797	Endangered

Flowering Plants

NAME	STATUS
Fragrant Prickly-apple Cereus eriophorus var. fragrans No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/982	Endangered
Lakela's Mint Dicerandra immaculata No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6390	Endangered
Tiny Polygala Polygala smallii No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/996	Endangered

NOT FOR CONSULTATION

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

This location overlaps the critical habitat for the following species:

NAME	TYPE
West Indian Manatee Trichechus manatus https://ecos.fws.gov/ecp/species/4469#crithab	Final

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see maps of where birders and the general public have sighted birds in and around your project area, visit E-bird tools such as the E-bird data mapping tool (search for the name of a bird on your list to see specific locations where that bird has been reported to occur within your project area over a certain timeframe) and the E-bird Explore Data Tool (perform a query to see a list of all birds sighted in your county or region and within a certain timeframe). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

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NAME	BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)
American Oystercatcher Haematopus palliatus This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8935	Breeds Apr 15 to Aug 31

Bachman's Sparrow Aimophila aestivalis — Breeds May 1 to Sep 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/6177

Bald Eagle Haliaeetus leucocephalus — Breeds Sep 1 to Jul 31
This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1626

Black Skimmer Rynchops niger — Breeds May 20 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/5234

Black-whiskered Vireo Vireo altiloquus — Breeds May 1 to Aug 15
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Clapper Rail Rallus crepitans — Breeds Apr 10 to Oct 31
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

King Rail Rallus elegans — Breeds May 1 to Sep 5
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8936

Least Tern Sterna antillarum — Breeds Apr 20 to Sep 10
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

Lesser Yellowlegs Tringa flavipes — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9679

Limpkin Aramus guarauna — Breeds Jan 15 to Aug 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Magnificent Frigatebird Fregata magnificens — Breeds Oct 1 to Apr 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

NOT FOR CONSULTATION

Prairie Warbler Dendroica discolor — Breeds May 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Prothonotary Warbler Protonotaria citrea — Breeds Apr 1 to Jul 31
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Red-headed Woodpecker Melanerpes erythrocephalus — Breeds May 10 to Sep 10
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Reddish Egret Egretta rufescens — Breeds Mar 1 to Sep 15
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/7617

Seaside Sparrow Ammodramus maritimus — Breeds May 10 to Aug 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Semipalmated Sandpiper Calidris pusilla — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Short-billed Dowitcher Limnodromus griseus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9480

Short-tailed Hawk Buteo brachyurus — Breeds Mar 1 to Jun 30
This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8742

Swallow-tailed Kite Elanoides forficatus — Breeds Mar 10 to Jun 30
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/8938

Whimbrel Numenius phaeopus — Breeds elsewhere
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9483

NOT FOR CONSULTATION

Willet Tringa semipalmata — Breeds Apr 20 to Aug 5
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Wilson's Plover Charadrius wilsonia — Breeds Apr 1 to Aug 20
This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

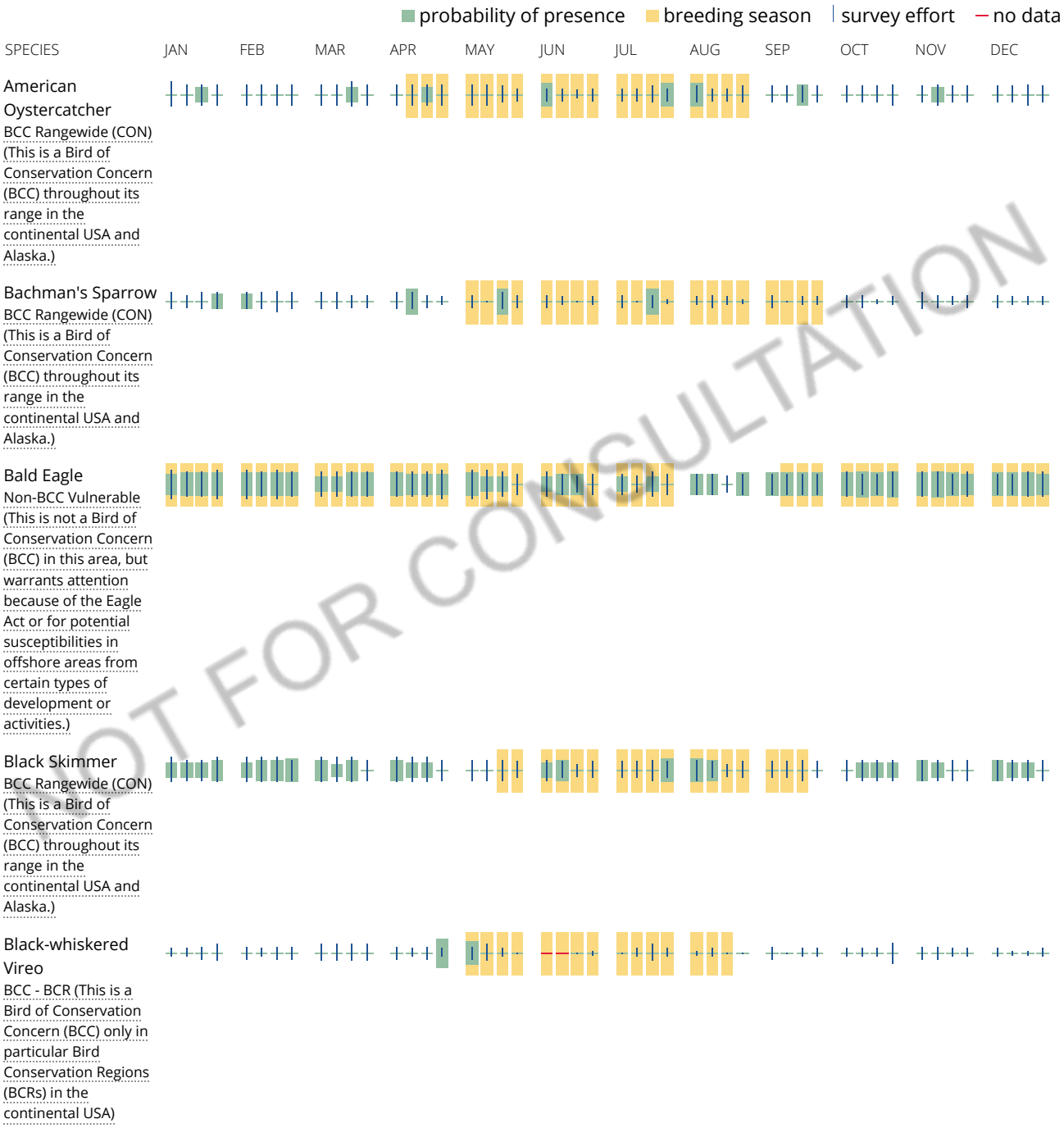
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

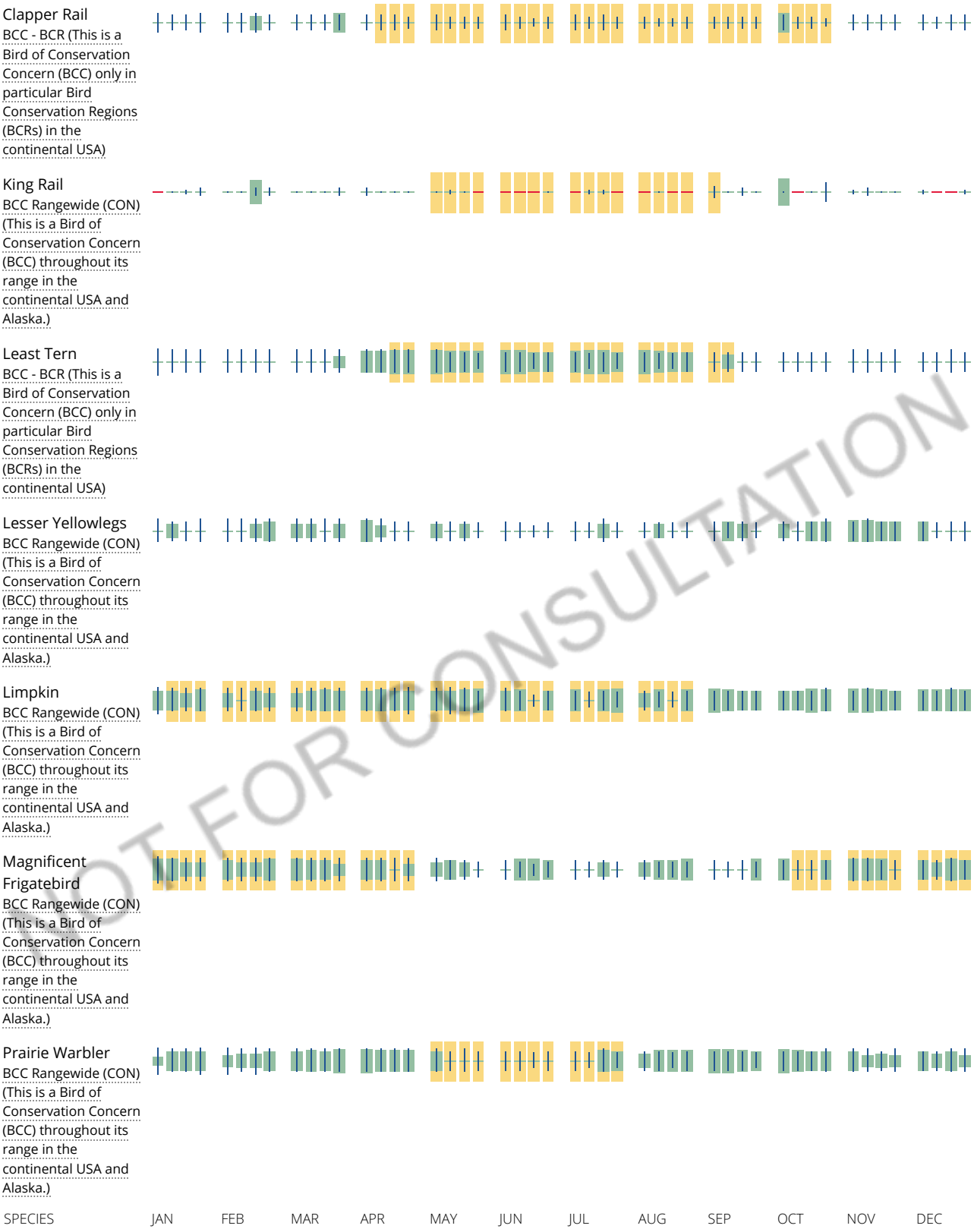
NOT FOR CONSULTATION

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.

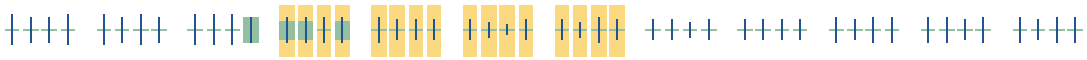


NOT FOR CONSULTATION



NOT FOR CONSULTATION

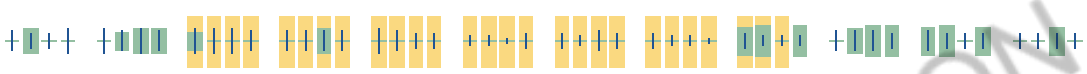
Prothonotary Warbler
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



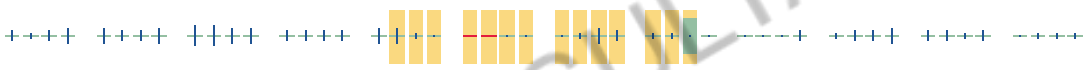
Red-headed Woodpecker
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Reddish Egret
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Seaside Sparrow
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



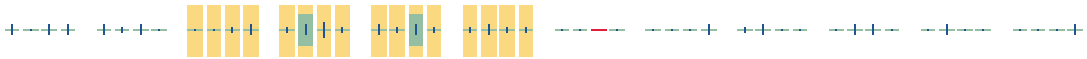
Semipalmated Sandpiper
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Short-billed Dowitcher
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)



Short-tailed Hawk
BCC - BCR (This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA)



NOT FOR CONSULTATION



Swallow-tailed Kite
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Whimbrel
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Willet
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

Wilson's Plover
BCC Rangewide (CON) (This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.)

NOT FOR CONSULTATION

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the counties which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the E-bird Explore Data Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets .

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird entry on your migratory bird species list indicates a breeding season, it is probable that the bird breeds in your project's counties at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the BGEPA should such impacts occur.

NOT FOR CONSULTATION

Marine mammals

Marine mammals are protected under the Marine Mammal Protection Act. Some are also protected under the Endangered Species Act

[1] and the Convention on International Trade in Endangered Species of Wild Fauna and Flora[2].

The responsibilities for the protection, conservation, and management of marine mammals are shared by the U.S. Fish and Wildlife Service [responsible for otters, walruses, polar bears, manatees, and dugongs] and NOAA Fisheries

[3] [responsible for seals, sea lions, whales, dolphins, and porpoises]. Marine mammals under the responsibility of NOAA Fisheries are **not** shown on this list; for additional information on those species please visit the Marine Mammals page of the NOAA Fisheries website.

The Marine Mammal Protection Act prohibits the take (to harass, hunt, capture, kill, or attempt to harass, hunt, capture or kill) of marine mammals and further coordination may be necessary for project evaluation. Please contact the U.S. Fish and Wildlife Service Field Office shown.

1. The Endangered Species Act (ESA) of 1973.
2. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) is a treaty to ensure that international trade in plants and animals does not threaten their survival in the wild.
3. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following marine mammals under the responsibility of the U.S. Fish and Wildlife Service are potentially affected by activities in this location:

NAME

West Indian Manatee Trichechus manatus
https://ecos.fws.gov/ecp/species/4469

NOT FOR CONSULTATION

Facilities

Wildlife refuges and fish hatcheries

REFUGE AND FISH HATCHERY INFORMATION IS NOT AVAILABLE AT THIS TIME

Wetlands in the National Wetlands Inventory

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers

District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

ESTUARINE AND MARINE DEEPWATER

E1UBLx

A full description for each wetland code can be found at the National Wetlands Inventory website: https://ecos.fws.gov/ipac/wetlands/decoder

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

Appendix H

USFWS Standard Protection Measures for The Eastern Indigo Snake

STANDARD PROTECTION MEASURES FOR THE EASTERN INDIGO SNAKE
U.S. Fish and Wildlife Service
August 12, 2013

The eastern indigo snake protection/education plan (Plan) below has been developed by the U.S. Fish and Wildlife Service (USFWS) in Florida for use by applicants and their construction personnel. At least **30 days prior** to any clearing/land alteration activities, the applicant shall notify the appropriate USFWS Field Office via e-mail that the Plan will be implemented as described below (North Florida Field Office: jaxregs@fws.gov; South Florida Field Office: verobeach@fws.gov; Panama City Field Office: panamacity@fws.gov). As long as the signatory of the e-mail certifies compliance with the below Plan (including use of the attached poster and brochure), no further written confirmation or "approval" from the USFWS is needed and the applicant may move forward with the project.

If the applicant decides to use an eastern indigo snake protection/education plan other than the approved Plan below, written confirmation or "approval" from the USFWS that the plan is adequate must be obtained. At least 30 days prior to any clearing/land alteration activities, the applicant shall submit their unique plan for review and approval. The USFWS will respond via e-mail, typically within 30 days of receiving the plan, either concurring that the plan is adequate or requesting additional information. A concurrence e-mail from the appropriate USFWS Field Office will fulfill approval requirements.

The Plan materials should consist of: 1) a combination of posters and pamphlets (see **Poster Information** section below); and 2) verbal educational instructions to construction personnel by supervisory or management personnel before any clearing/land alteration activities are initiated (see **Pre-Construction Activities** and **During Construction Activities** sections below).

POSTER INFORMATION

Posters with the following information shall be placed at strategic locations on the construction site and along any proposed access roads (a final poster for Plan compliance, to be printed on 11" x 17" or larger paper and laminated, is attached):

DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands

and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and above-ground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

PROTECTION UNDER FEDERAL AND STATE LAW: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of $25,000 for civil violations and up to $50,000 and/or imprisonment for criminal offenses, if convicted.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

IF YOU SEE A <u>LIVE</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the live eastern indigo snake sufficient time to move away from the site without interference;
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

IF YOU SEE A <u>DEAD</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, **and** the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

Telephone numbers of USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida Field Office – (904) 731-3336
Panama City Field Office – (850) 769-0552
South Florida Field Office – (772) 562-3909

PRE-CONSTRUCTION ACTIVITIES

1. The applicant or designated agent will post educational posters in the construction office and throughout the construction site, including any access roads. The posters must be clearly visible to all construction staff. A sample poster is attached.

2. Prior to the onset of construction activities, the applicant/designated agent will conduct a meeting with all construction staff (annually for multi-year projects) to discuss identification of the snake, its protected status, what to do if a snake is observed within the project area, and applicable penalties that may be imposed if state and/or federal regulations are violated. An educational brochure including color photographs of the snake will be given to each staff member in attendance and additional copies will be provided to the construction superintendent to make available in the onsite construction office (a final brochure for Plan compliance, to be printed double-sided on 8.5" x 11" paper and then properly folded, is attached). Photos of eastern indigo snakes may be accessed on USFWS and/or FWC websites.

3. Construction staff will be informed that in the event that an eastern indigo snake (live or dead) is observed on the project site during construction activities, all such activities are to cease until the established procedures are implemented according to the Plan, which includes notification of the appropriate USFWS Field Office. The contact information for the USFWS is provided on the referenced posters and brochures.

DURING CONSTRUCTION ACTIVITIES

1. During initial site clearing activities, an onsite observer may be utilized to determine whether habitat conditions suggest a reasonable probability of an eastern indigo snake sighting (example: discovery of snake sheds, tracks, lots of refugia and cavities present in the area of clearing activities, and presence of gopher tortoises and burrows).

2. If an eastern indigo snake is discovered during gopher tortoise relocation activities (i.e. burrow excavation), the USFWS shall be contacted within one business day to obtain further guidance which may result in further project consultation.

3. Periodically during construction activities, the applicant's designated agent should visit the project area to observe the condition of the posters and Plan materials, and replace them as needed. Construction personnel should be reminded of the instructions (above) as to what is expected if any eastern indigo snakes are seen.

POST CONSTRUCTION ACTIVITIES

Whether or not eastern indigo snakes are observed during construction activities, a monitoring report should be submitted to the appropriate USFWS Field Office within 60 days of project completion. The report can be sent electronically to the appropriate USFWS e-mail address listed on page one of this Plan.

Appendix I

Preliminary Long-Range Estimates (LRE)

Date: 9/25/2018 8:27:54 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 440033-1-52-01 **Letting Date:** 01/2099

Description: Historic Downtown Fort Pierce Retrofit Trail Segment includes constructing an approximately 2.3-mile long multi-use paved trail from Georgia Avenue to North Causeway Drive/SR A1A in St. Lucie County

District: 04 **County:** 94 ST. LUCIE **Market Area:** 11 **Units:** English
Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 2.300 MI

Project Manager:

Version 2 Project Grand Total **$379,117.74**
Description: Preferred Downtown Route

Sequence: 1 MIS - Miscellaneous Construction **Net Length:** 0.290 MI
1,531 LF

Description: This segment starts at Georgia Avenue and ends at Citrus Ave and will parallel South 3rd street.
Special Conditions: The proposed project will consist of constructing an 8-14' paved multi-use path. For estimate purposes we will assume 10' average width.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.05	AC	$13,867.17	$14,560.53
	Comment: Sequence length (0.29 miles) X (10' average pavement width + 10' on each side of multi-use path)				
	Earthwork Component Total				$14,560.53

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,382.00	SY	$5.35	$12,743.70
	Comment: Type "B" stabilization 14' in width X constructible length (0.29 miles)				
285-701	OPTIONAL BASE,BASE GROUP 01	1,814.00	SY	$14.15	$25,668.10
	Comment: Optional base group one 10.66' in width X constructible length (0.29 miles)				
339-1	MISCELLANEOUS ASPHALT PAVEMENT	170.00	TN	$231.63	$39,377.10
	Comment: 2" of 100 lb/cy per inch asphalt for a 10' multiuse path X the constructible length (0.29 miles)				
710-11-241	PAINTED PAVT MARK,STD,YELLOW,DOT,6"	0.26	GM	$342.89	$89.15

	Comment: Yellow skip strip used to designate centerline in areas where adequate passing sight distance is available.(90% of constructible length 0.29 miles)			
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.03 GM	$4,252.14	$127.56
	Comment: Used to separate opposite directions of travel where passing is inadvisable and at approaches to intersections.			
	Roadway Component Total			$78,005.61

SHOULDER COMPONENT

User Input Data

Description	**Value**

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,531.00	LF	$1.45	$2,219.95
	Comment: For constructible length				
570-1-1	PERFORMANCE TURF	3,402.00	SY	$1.64	$5,579.28
	Comment: Performance turf to fill in areas that will be cleared and not refilled by multi-use trail.				
	Shoulder Component Total				$7,799.23

DRAINAGE COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
430-173-112	PIPE CULV OPT MATL, ROUND, 12", GD	48.00	LF	$89.93	$4,316.64
	Comment: Proposed 12" pipe culverts at an estimated 4 locations.				
	Drainage Component Total				$4,316.64

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00	AS	$450.57	$1,351.71
	Comment: 4 sign posts every mile in each direction. 0.29 miles X 2 X 4 per mile.				
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00	AS	$1,195.08	$2,390.16
	Comment: 1 sign in each direction of 0.29 mile multi-use				
	Signing Component Total				$3,741.87

Sequence 1 Total	$108,423.88

Sequence: 2 MIS - Miscellaneous Construction **Net Length:** 0.280 MI
1,478 LF

Description: This segment starts at the intersection of AE Backus and 2nd St. and ends when it can be tied into the existing riverwalk (Inside park along Indian River Dr.)

Special Conditions: The proposed project will consist of constructing an 8-14' paved multi-use path. For estimate purposes we will assume 10' average width.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	1.01	AC	$13,867.17	$14,005.84
	Comment: Sequence length (0.28 miles) X (10' average pavement width + 10' on each side of multi-use path)				
	Earthwork Component Total				$14,005.84

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	2,300.00	SY	$5.35	$12,305.00
	Comment: Type "B" stabilization 14' in width X constructible length (0.28 miles)				
285-701	OPTIONAL BASE,BASE GROUP 01	1,751.00	SY	$14.15	$24,776.65
	Comment: Optional base group one 10.66' in width X constructible length (0.28 miles)				
339-1	MISCELLANEOUS ASPHALT PAVEMENT	164.00	TN	$231.63	$37,987.32
	Comment: 2" of 100 lb/cy per inch asphalt for a 10' multiuse path X the constructible length (0.28 miles)				
710-11-241	PAINTED PAVT MARK,STD,YELLOW,DOT,6"	0.28	GM	$342.89	$96.01
	Comment: Yellow skip strip used to designate centerline in areas where adequate passing sight distance is available.(90% of constructible length 0.28 miles)				
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.03	GM	$4,252.14	$127.56
	Comment: Used to separate opposite directions of travel where passing is inadvisable and at approaches to intersections.				
	Roadway Component Total				$75,292.54

SHOULDER COMPONENT

User Input Data

Description	Value

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	1,478.00 LF	$1.45	$2,143.10
	Comment: For constructible length			
570-1-1	PERFORMANCE TURF	3,285.00 SY	$1.64	$5,387.40
	Comment: Performance turf to fill in areas that will be cleared and not refilled by multi-use trail.			
	Shoulder Component Total			$7,530.50

DRAINAGE COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-173-112	PIPE CULV OPT MATL, ROUND, 12", GD	48.00 LF	$89.93	$4,316.64
	Comment: Proposed 12" pipe culverts at an estimated 4 locations.			
	Drainage Component Total			$4,316.64

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	3.00 AS	$450.57	$1,351.71
	Comment: 4 sign posts every mile in each direction. 0.28 miles X 2 X 4 per mile.			
700-1-12	SINGLE POST SIGN, F&I GM, 12-20 SF	2.00 AS	$1,195.08	$2,390.16
	Comment: 1 sign in each direction of 0.28 mile multi-use			
	Signing Component Total			$3,741.87

Sequence 2 Total $104,887.39

Sequence: 3 MIS - Miscellaneous Construction **Net Length:** 0.120 MI
634 LF

Description: This segment starts at the end of the existing riverwalk path on the north side of Seaway Dr. and ends at the intersection of Indian River Dr. and 2nd St

Special Conditions: The proposed project will consist of constructing an 8-14' paved multi-use path. For estimate purposes we will assume 10' average width.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.29	AC	$13,867.17	$4,021.48
	Comment: Sequence length (0.12 miles) X (10' average pavement width + 10' on each side of multi-use path)				
	Earthwork Component Total				$4,021.48

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	985.00	SY	$5.35	$5,269.75
	Comment: Type "B" stabilization 14' in width X constructible length (0.12 miles)				
285-701	OPTIONAL BASE,BASE GROUP 01	750.00	SY	$14.15	$10,612.50
	Comment: Optional base group one 10.66' in width X constructible length (0.08 miles)				
339-1	MISCELLANEOUS ASPHALT PAVEMENT	70.00	TN	$231.63	$16,214.10
	Comment: 2" of 100 lb/cy per inch asphalt for a 10' multiuse path X the constructible length (0.08 miles)				
710-11-241	PAINTED PAVT MARK,STD,YELLOW,DOT,6"	0.10	GM	$342.89	$34.29
	Comment: Yellow skip strip used to designate centerline in areas where adequate passing sight distance is available.(90% of constructible length 0.12 miles)				
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.02	GM	$4,252.14	$85.04
	Comment: Used to separate opposite directions of travel where passing is inadvisable and at approaches to intersections.				
	Roadway Component Total				$32,215.68

SHOULDER COMPONENT

User Input Data

Description	Value

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	634.00 LF	$1.45	$919.30
	Comment: For constructible length			
570-1-1	PERFORMANCE TURF	1,408.00 SY	$1.64	$2,309.12
	Comment: Performance turf to fill in areas that will be cleared and not refilled by multi-use trail.			
	Shoulder Component Total			$3,228.42

DRAINAGE COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-173-112	PIPE CULV OPT MATL, ROUND, 12", GD	16.00 LF	$89.93	$1,438.88
	Comment: Proposed 12" pipe culverts at an estimated 1 locations.			
	Drainage Component Total			$1,438.88

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00 AS	$450.57	$901.14
	Comment: 4 sign posts every mile in each direction. 0.08 miles X 2 X 4 per mile.			
	Signing Component Total			$901.14

Sequence 3 Total $41,805.60

Sequence: 4 MIS - Miscellaneous Construction **Net Length:** 0.128 MI 678 LF

Description: This segment starts at the intersection of Indian River Dr. and Ave H and ends at the intersection of Ave H and US1/FEC ROW

Special Conditions: The proposed project will consist of constructing an 8-14' paved multi-use path. For estimate purposes we will assume 10' average width.

EARTHWORK COMPONENT

User Input Data

Description	Value
Standard Clearing and Grubbing Limits L/R	0.00 / 0.00
Incidental Clearing and Grubbing Area	0.00

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
110-1-1	CLEARING & GRUBBING	0.47	AC	$13,867.17	$6,517.57
	Comment: Sequence length (0.06 miles) X (10' average pavement width + 10' on each side of multi-use path)				
	Earthwork Component Total				$6,517.57

ROADWAY COMPONENT

X-Items

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
160-4	TYPE B STABILIZATION	1,068.00	SY	$5.35	$5,713.80
	Comment: Type "B" stabilization 14' in width X constructible length (0.13 miles)				
285-701	OPTIONAL BASE,BASE GROUP 01	813.00	SY	$14.15	$11,503.95
	Comment: Optional base group one 10.66' in width X constructible length (0.13 miles)				
339-1	MISCELLANEOUS ASPHALT PAVEMENT	76.30	TN	$231.63	$17,673.37
	Comment: 2" of 100 lb/cy per inch asphalt for a 10' multiuse path X the constructible length (0.13 miles)				
710-11-241	PAINTED PAVT MARK,STD,YELLOW,DOT,6"	0.12	GM	$342.89	$41.15
	Comment: Yellow skip strip used to designate centerline in areas where adequate passing sight distance is available.(90% of constructible length 0.12 miles)				
711-15-201	THERMOPLASTIC, STD-OP,YELLOW, SOLID, 6"	0.02	GM	$4,252.14	$85.04
	Comment: Used to separate opposite directions of travel where passing is inadvisable and at approaches to intersections.				
	Roadway Component Total				$35,017.31

SHOULDER COMPONENT

User Input Data

Description	Value

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
104-10-3	SEDIMENT BARRIER	686.00 LF	$1.45	$994.70
	Comment: For constructible length			
570-1-1	PERFORMANCE TURF	1,525.00 SY	$1.64	$2,501.00
	Comment: Performance turf to fill in areas that will be cleared and not refilled by multi-use trail.			
	Shoulder Component Total			$3,495.70

DRAINAGE COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
430-173-112	PIPE CULV OPT MATL, ROUND, 12", GD	32.00 LF	$89.93	$2,877.76
	Comment: Proposed 12" pipe culverts at an estimated 2 locations.			
	Drainage Component Total			$2,877.76

SIGNING COMPONENT

X-Items

Pay item	Description	Quantity Unit	Unit Price	Extended Amount
700-1-11	SINGLE POST SIGN, F&I GM, <12 SF	2.00 AS	$450.57	$901.14
	Comment: 4 sign posts every mile in each direction. 0.13 miles X 2 X 4 per mile.			
	Signing Component Total			$901.14

Sequence 4 Total $48,809.48

Date: 9/25/2018 8:27:55 AM

FDOT Long Range Estimating System - Production

R3: Project Details by Sequence Report

Project: 440033-1-52-01 **Letting Date:** 01/2099

Description: Historic Downtown Fort Pierce Retrofit Trail Segment includes constructing an approximately 2.3-mile long multi-use paved trail from Georgia Avenue to North Causeway Drive/SR A1A in St. Lucie County

District: 04 **County:** 94 ST. LUCIE **Market Area:** 11 **Units:** English
Contract Class: **Lump Sum Project:** N **Design/Build:** N **Project Length:** 2.300 MI

Project Manager:

Version 2 Project Grand Total **$379,117.74**
Description: Preferred Downtown Route

Project Sequences Subtotal			**$303,926.35**
102-1	Maintenance of Traffic	8.00 %	$24,314.11
101-1	Mobilization	10.00 %	$32,824.05
Project Sequences Total			**$361,064.51**
Project Unknowns		0.00 %	$0.00
Design/Build		0.00 %	$0.00

Non-Bid Components:

Pay item	Description	Quantity	Unit	Unit Price	Extended Amount
999-25	INITIAL CONTINGENCY AMOUNT (DO NOT BID)		LS	$18,053.23	$18,053.23
Project Non-Bid Subtotal					**$18,053.23**
Version 2 Project Grand Total					**$379,117.74**

City Commission Regular Meeting **10.c.**

Meeting Date: 04/15/2019

Re: Fair Housing Presentation

SUBJECT:

Fair Housing Presentation

SUMMARY:

This presentation will review the City of Fort Pierce's Fair Housing Ordinance, the Florida Fair Housing Act, and the Federal Fair Housing Act which make it illegal for anyone to refuse to rent, sell or make housing loans because of the following factors: race or color, national origin, religion, sex, familial status, or handicap.

RECOMMENDATION:

No action needed

ALTERNATIVES:

No action needed

RESPONSIBLE STAFF:

Caleta Scott, Manager, Grants Administration Division

COORDINATED WITH:

Caleta Scott, Manager, Grants Administration Division

Fiscal Impact

Budgeted Y/N:	N
Fiscal Year:	2018
Account:	n/a
Amount:	n/a

OTHER INFORMATION:

No fiscal impact

Form Review

Inbox	Reviewed By	Date
Finance Department	Johnna Morris	04/10/2019 09:23 AM
City Manager	Nick Mimms	04/10/2019 10:31 AM
Form Started By: Caleta Scott		Started On: 04/04/2019 01:30 PM
Final Approval Date: 04/10/2019		

City Commission Regular Meeting **10.d.**

Meeting Date: 04/15/2019

Re: Monthly Financial Report for the Month Ending February 28, 2019

Submitted For: Johnna Morris, Finance Director, Finance Department

---

SUBJECT:

Monthly Financial Report for the Month Ending February 28, 2019

SUMMARY:

The Finance Director prepares and presents to the City Commission and Citizens a monthly report on the financial status of the different funds of the City. The financial report for the month ending February 28, 2019, encompasses General, Marina, Solid Waste, Golf Course, Sunrise Theatre, Building & Code, and Fort Pierce Redevelopment Agency Funds.

RECOMMENDATION:

The Finance Department welcomes any suggestions and/or changes to the format.

ALTERNATIVES:

The report can be enhanced or changed.

RESPONSIBLE STAFF:

Finance Director.

COORDINATED WITH:

Finance Department & City Manager.

Fiscal Impact

Budgeted Y/N: Y

Fiscal Year: 2019

OTHER INFORMATION:

Monthly Report on Budgeted Revenue and Expenditures.

Form Review

Inbox	Reviewed By	Date
Finance Department	Karen Logue	04/02/2019 02:46 PM
City Manager	Nick Mimms	04/09/2019 05:44 PM

Form Started By: Queen Thompkins Started On: 04/02/2019 01:14 PM

Final Approval Date: 04/09/2019

City Commission Regular Meeting **11.a.**

Meeting Date: 04/15/2019

Re: Demolition Lien - 108 N 16th Street

Submitted For: Peggy Arraiz, Code Compliance Manager, Code Enforcement

SUBJECT:

Approve waiver of fees in the amount of $10,875.61 associated with the demolition lien against 108 N 16th Street, Fort Pierce, FL 34950, Parcel No. 2409-510-0021-000-0 owned by Juan Antonio Esquivel, 1605 Pine Hollow Drive, Fort Pierce, FL contingent upon payment of $7,200.00 payable in 30 days.

SUMMARY:

Request by applicant to waive administrative fees, interest, and penalties in the amount of $10,875.61. Mr. Esquivel and his brother, Benjamin Esquivel owns 3 adjacent properties and they plan on building on it in the future.

RECOMMENDATION:

Staff recommends waiving interest, penalties, and administrative fees in the amount of $10,875.61 contingent upon payment of balance in the amount of $7,200.00 payable in 30 days.

ALTERNATIVES:

Approve Staff recommendation.
Determine alternative amount.

RESPONSIBLE STAFF:

Colleen Greer, Code Enforcement Clerk.

COORDINATED WITH:

Margaret Arraiz, Code Compliance Manager.
Kathy D'Arton, Accounts Receivable.

Fiscal Impact

Budgeted Y/N: 2018

Amount: 7,200.00

OTHER INFORMATION:

$7,200.00 to the general fund.

Attachments

Request
Breakdown

Property Card
Property Card
Property Card

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	04/09/2019 05:41 PM

Form Started By: Colleen Greer
Started On: 03/25/2019 08:20 AM
Final Approval Date: 04/09/2019

CC 3/4/19 6:30pm
4/17/19

THE SUNRISE CITY
FORT PIERCE
CODE ENFORCEMENT Florida

REQUEST FOR A REDUCTION OR RESCINDMENT OF LOT CLEARING OR DEMOLITION LIEN

Date:	3/19/2019				
Property address:	108. N. 16 ST				
Owner(s) of record:	Juan Antonio Esquivel				
Mailing address:	1605. Pine. Holloaw. dr. Ft Pierce.				
Property tax ID #:	2409-510-0021-000-0				
Original purchase date:		Original purchase price:			
Property is used for:	☐ Single Family	☐ Multi-family	☐ Commercial	☐ Industrial	☑ Vacant Lot
Name of person requesting reduction:	Juan A Esqive Cam	Relationship to owner(s)	Mom		
Telephone #:		Mobile phone #:	772.446 2405		
E-mail:		Preferred contact method:	772.446 2405		
What are owner(s) intentions for property:	To Build on it				
Are there current code violations?	☒ No	☐ Yes	Explain: (please attached notice)		
Is property listed for sale?	☒ No	☐ Yes	If yes, what is listing price?		
Is property under contract for sale?	☒ No	☐ Yes	If yes, what is the sale price?		

City incurred charges (lot clearing, demolition, etc)	$ 7200.00
Administrative fees	$ 100.00
Interest	$ 8980.00
Penalties	$ 1795.61
TOTAL AMOUNT DUE TO CITY	$ 18,075.61
DOLLAR AMOUNT REQUESTING TO BE WAIVED	$ 10875.61
DOLLAR AMOUNT I AGREE TO PAY	$ 7200.00

Juan A Esquivel — 2/13/2019

Signature of Owner or Representative — Date

THE SUNRISE CITY
FORT PIERCE
CODE ENFORCEMENT
Florida

REQUEST FOR REDUCTION OF PENALTY

By completing this form, you are making statements under oath. Failure to be truthful is a violation of Fort Pierce City Code and Florida Statutes pertaining to perjury, which is a felony punishable by up to fifteen (15) years imprisonment.

INSTRUCTIONS:

1. Please fill in blanks completely.
2. Be specific when writing your statement. Use additional pages if necessary.
3. If you are claiming medical or financial hardship, attach supporting documentation (i.e. doctor's statement or proof of income).
4. Complete the appropriate application for lien reduction / rescindment.
5. For lot clearing or demolition liens, contact Kathy D'Arton in the Finance Department (772-467-3076) for cost / fees breakdown.
6. For code enforcement liens (those imposed by a Special Magistrate or Code Enforcement Board), contact Colleen Greer (772-467-3149) for cost / fees breakdown.
7. If you do not have access to a Notary Public, one will be provided to you by the Department at no charge. All forms must be signed in the presence of the Notary to be valid.
8. Return this form, the application and any other pertinent documentation to the Code Enforcement Department.
9. Requests for Reduction / Rescindment of code enforcement liens are governed by Rule 17 of the City's Rules & Regulation for Code Enforcement Board and Special Magistrate.

Property Address: 108 N 16th St.

Property Owner: 1605 Pine Hollow Dr, Ft Pierce 34982

Mailing Address: Juan Esquivel

Telephone #: 772-446-2405 Cell Phone #: _____

E-Mail Address: _____

Is the property in compliance? yes If no, please explain in the narrative of your request.

OWNER / REPRESENTATIVE REQUEST TO PROCESS APPLICATION

Property Address:	108 N 6th St, Ft Pierce, FL

I acknowledge that I have been provided a copy of Rule 17 of the Rules of Procedure for the City of Fort Pierce Code Enforcement Board and Special Magistrates and that I have read the rules and being advised as such make the following request:

☐ I am requesting that my application for lien reduction be processed administratively through the Rules of Procedure Sec. 17(h), I understand the requirements to be met and that I waive my right to a hearing before either the Special Magistrate or Code Enforcement Board.

☒ I am requesting that my application for lien reduction be considered and a determination made by the City Commission of the City of Fort Pierce.

Juan A Esquivel — 3/19/2019

Signature of Owner or Representative — Date

COFP – APPLICATION PROCESS DETERMINATION

☐ Staff has reviewed the request for lien reduction and agrees to process the application as requested by the signing party.

☐ Staff has reviewed the request for lien reduction and does not agree to process the application as requested by the signing party. The matter will be placed before the City Commission for final determination.

Comments:

_____

_____

_____

City Representative — Date

I, Juan Atonio Esquivel do hereby submit this Petition in request for a reduction in the total amount of the penalty imposed and in support offer the following statement:

114. n 16. ST my Property
112 n. 16. ST is my Brother Benjamin Esquivel
is Property in the future we
Plan on building on our property
110. n 16. ST

Signed: Juan A Esquivel Date: 3/19/2019

Print Name: Juan Antonio Esquivel

STATE OF FLORIDA

COUNTY OF ST. LUCIE

PERSONALLY APPEARED before me, the undersigned authority Juan Antonio Esquivel who acknowledged before me that the information contained herein is true and correct He or She is / is not personally known to me and has produced Driver's License as identification.

SWORN TO AND SUBSCRIBED before me this 19th day of MARCH, 2019.

Cynthia L Ricker

Notary Public, State of Florida

Notary Public State of Florida
Cynthia Lee Ricker
My Commission GG 174014
Expires 01/09/2022

MEMORANDUM

TO: The Honorable Mayor and Members of the City Commission

THROUGH: Nicholas Mimms, City Manager

FROM: Colleen Greer, Code Enforcement Clerk

SUBJECT: **DEMOLITION LIEN REDUCTION**
Address: 108 n 16th Street, Fort Pierce, FL
Parcel ID#: 2409-510-0021-000-0
Owner: Juan Antonio Esquivel

DATE: April 15, 2019

The following is a breakdown of the above property:

Description	Costs (General Fund)	Interest & Penalties	Administrative Fees
Demolition Lien	$7,200.00	$10,775.61	$100.00
TOTAL	$7,200.00	$10,775.61	$100.00

CAN BE WAIVED (ALL INTEREST, PENALTIES, AND ADMIN. COSTS) $10,875.61
CANNOT BE WAIVED (ALL DEMOLITION COSTS) $ 7,200.00
$18,075.61

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

Property Identification

Site Address: 110 N 16th ST	Parcel ID: 2409-510-0021-000-0	Account #: 21510	Sec/Town/Range: 09/35S/40E
		Map ID: 24/09N	Zoning: R3
Use Type: 0000	Jurisdiction: Fort Pierce		

Ownership

Juan A Esquivel
Evangelina Esquivel

1605 Pine Hollow Dr
Fort Pierce, FL 34982

Legal Description

KILLER`S S/D BLK A LOTS 20 AND 21 AND N 40 FT OF LOT 22 (OR 1810-2128)

Current Values

Just/Market:	$9,900	Assessed:	$9,050
Exemptions:	$0	Taxable:	$9,050

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2018	$9,900	$9,050	$0	$9,050
2017	$8,500	$8,228	$0	$8,228
2016	$8,100	$7,480	$0	$7,480

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
10-01-2003	1810 / 2128	XX01	TD	Dickerson (Est) Roy	$3,400
01-01-1900					$0

Primary Building Information

Finished Area of this building: 0 SF
Gross Sketched Area: 0 SF

Exterior Data

View:	Roof Cover:	Roof Structure:	Building Type:
Year Built: N/A	Frame:	Grade:	Effective Year: 2014
Primary Wall:	Story Height:	No. Units: 0	Secondary Wall:

Interior Data

Bedrooms: 0	A/C %: 0%	Electric:	Primary Int Wall:
Full Baths: 0	Heated %: N/A%	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Sprinkled %: 0%	Heat Fuel:	Primary Floors:



Image or Sketch unavailable for display

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	0.5
Land Size (SF):	21,700
Total Building Count:	1

Special Features and Yard Items

Type	Qty	Units	Year Blt

This information is believed to be correct at this time but it is subject to change and is not warranted.
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Property Identification

Site Address: 112 N 16th ST	Parcel ID: 2409-510-0020-000-3	Account #: 21509	Sec/Town/Range: 09/35S/40E
		Map ID: 24/09N	Zoning: R3
Use Type: 0100	Jurisdiction: Fort Pierce		

Ownership

Benjamin Esquibel
Irma Esquibel

1806 S 31st St
Fort Pierce, FL 34947

Legal Description

KILLER`S S/D BLK A LOT 19 (OR 666-2372)

Current Values

Just/Market:	$38,700	Assessed:	$33,141	Year	Just/Market	Assessed	Exemptions	Taxable
Exemptions:	$0	Taxable:	$33,141	2018	$38,700	$33,141	$0	$33,141
				2017	$32,600	$30,129	$0	$30,129
				2016	$28,600	$27,390	$0	$27,390

Historical Values 3-year

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
11-30-1989	0666 / 2372	XX00	WD	Alexich Pauline	$28,000
10-01-1987	0562 / 0729	XX01	CV		$0
01-01-1981	0346 / 1362	XX01	CV		$0

Primary Building Information

Finished Area of this building: 1,050 SF
Gross Sketched Area: 1,350 SF

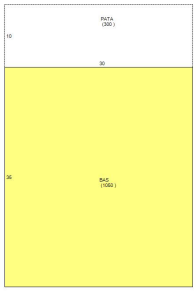
Exterior Data

View:	Roof Cover: Fibrglss Shg	Roof Structure: Gable	Building Type: HD
Year Built: 1973	Frame:	Grade: D	Effective Year: 1978
Primary Wall: Conc Block	Story Height: 1 Story	No. Units: 1	Secondary Wall:

Interior Data

Bedrooms: 2	A/C %: 0%	Electric: AVERAGE	Primary Int Wall:
Full Baths: 1	Heated %: 0%	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Sprinkled %: N/A%	Heat Fuel:	Primary Floors: Terrazo





Total Areas

Finished/Under Air (SF):	1,050
Gross Sketched Area (SF):	1,350
Land Size (acres):	0.18
Land Size (SF):	7,750
Total Building Count:	1

Special Features and Yard Items

Type	Qty	Units	Year Blt
Driv-Concret	1	500	1973
CHAINLINK 4'	1	260	1995

This information is believed to be correct at this time but it is subject to change and is not warranted.
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Property Identification

Site Address: 114 N 16th ST	Parcel ID: 2409-510-0019-000-3	Account #: 21508	Sec/Town/Range: 09/35S/40E
		Map ID: 24/09N	Zoning: R3
Use Type: 0100	Jurisdiction: Fort Pierce		

Ownership

Juan A Esquivel

1605 Pine Hollow Dr
Fort Pierce, FL 34982

Legal Description

KILLER`S S/D BLK A LOT 18 (OR 709-0064)

Current Values

Just/Market:	$39,800	Assessed:	$34,073	Year	Just/Market	Assessed	Exemptions	Taxable
Exemptions:	$0	Taxable:	$34,073	2018	$39,800	$34,073	$0	$34,073
				2017	$33,600	$30,976	$0	$30,976
				2016	$29,400	$28,160	$0	$28,160

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
09-12-1990	0709 / 0064	XX01	WD	Esquibel Juan A	$0
01-06-1989	0618 / 1880	XX00	WD		$30,000

Primary Building Information

Finished Area of this building: 1,050 SF
Gross Sketched Area: 1,324 SF

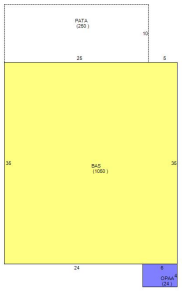
Exterior Data

View:	Roof Cover: Dim Shingle	Roof Structure: Gable	Building Type: HD+
Year Built: 1974	Frame:	Grade: D+	Effective Year: 1978
Primary Wall: Conc Block	Story Height: 1 Story	No. Units: 1	Secondary Wall: Wood/Sheath

Interior Data

Bedrooms: 2	A/C %: 0%	Electric: AVERAGE	Primary Int Wall:
Full Baths: 1	Heated %: 0%	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Sprinkled %: N/A%	Heat Fuel:	Primary Floors: Terrazo





Total Areas

Finished/Under Air (SF):	1,050
Gross Sketched Area (SF):	1,324
Land Size (acres):	0.18
Land Size (SF):	7,750
Total Building Count:	1

Special Features and Yard Items

Type	Qty	Units	Year Blt
Driv-Concret	1	720	1974
CHAINLINK 4'	1	260	1995

This information is believed to be correct at this time but it is subject to change and is not warranted.
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City Commission Regular Meeting **11.b.**

Meeting Date: 04/15/2019

Re: Approval of Johnson-Davis, Inc. Change Order No. 5 - $45,000 - Ref. Bid No. 2017-014

Submitted For: John Andrews, City Engineer, Engineering

SUBJECT:

Approval of a $45,000.00 change order to Johnson-Davis, Inc. to compensate for additional Edwards Road Canal (Canal No. 9) construction services.

SUMMARY:

The City Commission approved a $421,910.00 construction contract to Johnson-Davis, Inc., for emergency construction restoration of a portion of Edwards Road Canal situated between Oleander Avenue and Sunrise Boulevard. Additional work along the Edwards Road Canal is needed in order to avoid overhead utilities, adequately stabilize the canal bank adjacent to the new headwalls, and to provide a sufficient construction site work area.

RECOMMENDATION:

Staff recommends approval

ALTERNATIVES:

Alternative would involve a major relocation of overhead utilites

RESPONSIBLE STAFF:

Engineering

COORDINATED WITH:

USDA Natural Resources Conservation Services

Fiscal Impact

Budgeted Y/N: N/A

Fiscal Year: N/A

Account: 403-4300-538-3490

Amount: $45,000

FISCAL IMPACT:

Payment of the $45,000 will initially encumbered from SMU Revenue Account No. 403-4300-538-3490 with NRCS reimbursement of $33,750 to follow.

Attachments

Johnson-Davis CO 5

Form Review

Inbox	Reviewed By	Date
Finance Department	Johnna Morris	04/10/2019 09:34 AM
City Manager	Nick Mimms	04/10/2019 10:26 AM
Form Started By: Tracy Telle		Started On: 03/26/2019 08:14 AM
Final Approval Date: 04/10/2019		

CHANGE ORDER NO. 5

UNIT PRICE CONTRACT FOR STORMWATER UTILITY INFRASTRUCTURE REPAIRS

Bid No. 2017-024

PROJECT: EDWARDS ROAD CANAL (CANAL NO. 9) EMERGENCY DRAINAGE REPAIRS

DATE: February 28, 2019

CONTRACTOR: Johnson-Davis, Inc.

OWNER: City of Fort Pierce

FY 18/19 ANNUAL CONTRACT AMOUNT	:	$200,000.00
CURRENT CONTRACT AMOUNT INCLUDING PREVIOUS CHANGE ORDERS	:	$ 3,974,536.88
NET CONTRACT AMOUNT **INCREASE** RESULTING FROM THIS CHANGE ORDER	:	**$ 45,000.00**
PROPOSED ANNUAL CONTRACT AMOUNT INCLUDING THIS CHANGE ORDER	:	**$ 4,019,536.88**
PROJECT EXPIRATION DATE	:	July 5, 2019

CHANGES ORDERED:

I. GENERAL:

This Change Order includes compensation for additional work at the Edwards Road Canal Stabilization project. It has been determined that the addition of rip-rap at the new headwall locations is needed in order to adequately stabilize the canal banks in these areas; additional fence removal and relocation services are warranted to provide a proper construction work area; and a 16 LF pipe extension is required in order to avoid utility conflicts with the new headwall. All CONDITIONS, SUPPLEMENTARY CONDITIONS, SPECIFICATIONS, and all parts of the Project Manual listed in Article 1, Definitions, of the GENERAL CONDITIONS, apply to and govern all the Work under this Change Order.

II. REQUIRED CHANGES/COST ADJUSTMENTS:

Description	*Unit*	*Qty*	*Unit Price*	*Amount*
1. Natural Stone Rip-Rap (6"-12") with bedding stone, and geotextile fabric	TN	220	$140.00	$30,800.00
2. Fence Removal and Reinstallation (2 wood, 1 chain-link)	LS	1	$7,000.00	$7,000.00
3. 72" RCP	LF	16	$450.00	$7,200.00
NET INCREASE BY THIS CHANGE ORDER				**$45,000.00**

III. JUSTIFICATION:

The work will aid in the prevention of erosion of the canal banks at the new headwalls and avoid any utility relocation work.

IV. PAYMENT:

This change order work will increase the existing Unit Price Stormwater Infrastructure Repairs Contract by $45,000. **Funding shall be encumbered from SMU Revenue Account No. 403-4300-538-3490 with NRCS reimbursement in the amount of $33,750 (75% of construction cost)**

V. APPROVAL AND CHANGE AUTHORIZATION:

Acknowledgments: The aforementioned change, and work affected thereby, is subject to all provisions of the original contract not specifically changed by this Change Order; and

it is expressly understood and agreed that the approval of the Change Order shall have no effect on the original Contract other than the matters expressly provided herein.

RECOMMENDED BY:

John R. Andrews, P.E.
City Engineer

By: _____
Signature

Date: 3/4/19

APPROVED AS TO FORM AND CORRECTNESS:

Peter J. Sweeney
City Attorney

By: _____
Signature

Date: 3/11/19

APPROVED BY:

Linda Hudson
Mayor

By: _____
Signature

Date: _____

ACCEPTED BY:

Robert Hopler, Vice President
Johnson-Davis, Inc.

By: _____
Signature

Date: 3/04/2019

City Commission Regular Meeting **11.c.**

Meeting Date: 04/15/2019

Re: Ohio Avenue Improvements CEI Services - Culpepper & Terpening SA No. 4 (RFQ 2013-005)

Submitted For: John Andrews, City Engineer, Engineering

SUBJECT:

Approval of Specific Authorization No. 4 in an amount not to exceed $86,414.00 for construction engineering inspection (CEI) services relating to the Ohio Avenue Roadway Improvements construction project.

SUMMARY:

The proposed construction includes the realignment of the roadway, east of U.S. Highway 1 to South 3rd Street, in order to better align the eastern leg with the west leg of Ohio Avenue. The proposed improvements include signalization, drainage improvements, curb & gutter, sidewalks, landscape, and irrigation. The City is required to retain an FDOT certified CEI consultant to oversee construction activities and provide verification testing as needed.

RECOMMENDATION:

Staff recommends approval

ALTERNATIVES:

Negotiate with another continuing service provider on the City's professional consultant list.

RESPONSIBLE STAFF:

Engineering

COORDINATED WITH:

FDOT

Fiscal Impact

Budgeted Y/N:	N
Fiscal Year:	N /A
Account:	10011115196310
Amount:	$86,414.00

FISCAL IMPACT:

The $86,414.00 shall be encumbered from the Road and Bridges Impact Fee Revenue Account.

Attachments

Culpepper and Terpening SA No. 4

Form Review

Inbox	Reviewed By	Date
Finance Department	Johnna Morris	04/10/2019 09:34 AM
City Manager	Nick Mimms	04/10/2019 10:30 AM
Form Started By: Tracy Telle		Started On: 04/02/2019 09:21 AM
Final Approval Date: 04/10/2019		

THE SUNRISE CITY
FORT PIERCE
CITY ATTORNEY'S OFFICE Florida

TO: TRACY TELLE, ASSISTANT CITY ENGINEER

FROM: Peter Sweeney, City Attorney

RE: Ohio Avenue Realignment Construction Engineering Inspection (CEI) Services Culpepper & Terpening, Inc. – Specific Authorization No. 4

CAO RLS File: No. 19-57

DATE: March 28, 2019

I have reviewed the Request for Legal Services related to the Ohio Avenue Realignment – CEI services with Culpepper & Terpening, Inc. (Specific Authorization No. 4). It is approved as to Form and Correctness and I have signed in the appropriate signature spaces.

If you have any further questions, please contact this office via phone or email.

Thank you.

PS/mm

OK
3/28/19

cc: Nicholas C. Mimms, P.E., City Manager
John R. Andrews, P.E., City Engineer
Linda Cox, City Clerk

RECEIVED
MAR 29 2019
CITY OF FORT PIERCE
ENGINEERING DEPARTMENT

Received
MAR 28 2019
City of Fort Pierce
City Manager's Office

ADDITIONAL SERVICES
SPECIFIC AUTHORIZATION No. 4
REFERENCE RFQ No. 2013-005
(3/18/19)

Pursuant to the provisions contained in the "Agreement for Professional Engineering Services" between The City of Ft. Pierce (hereinafter referred to as "CITY") and Culpepper & Terpening, Inc. (hereinafter referred to as "ENGINEER") and this Specific Authorization dated the __ day of ____ 2019, authorizes the ENGINEER to provide service as under the terms and conditions set forth herein and in the AGREEMENT, which is incorporated herein by reference as though set forth in full.

The CITY desires Construction Engineering (CEI) Services related to the construction improvements of the Ohio Avenue Roadway (US 1 to South 3rd Street), hereinafter referred to as the "Project".

Section 1 – Scope of Work

ENGINEER will provide the following services in accordance with this AUTHORIZATION:

Partial CEI Services as described in the attached Exhibit A.

Section 2 – Deliverables

ENGINEER will provide the following Deliverables to CITY:

Please refer to the attached Exhibit A.

Section 3 – Schedule of Services

Please refer to the attached Exhibit A.

Section 4 – Method and Amount of Compensation

4.1 CITY will compensate ENGINEER for services under this AUTHORIZATION in accordance with the payment methods as set forth in Section 6 of the AGREEMENT.

4.2 Please refer to Exhibit A for detailed information

Section 5 – CITY's Responsibilities

CITY hereby designates City Engineer or designee as CITY's representative pursuant to Section 5 of the AGREEMENT.

Section 6 – Other Provisions

All applicable portions of the AGREEMENT not specifically modified herein shall remain in full force and effect and are incorporated by reference herein.

ADDITIONAL SERVICES
SPECIFIC AUTHORIZATION No. 4
REFERENCE RFQ No. 2013-005
(3/18/19)

IN WITNESS WHEREOF, this AGREEMENT, consisting of 2 pages had been fully executed on behalf of ENGINEER by its duly authorized officer, and the CITY has the same to be duly executed in its name and in its behalf, effective as of the date herein above written.

THE CITY OF FORT PIERCE

By: _____
Linda Hudson

Title: Mayor

Date: _____

ENGINEER

By: Sherry Terpening
Sherry T. Terpening

Title: Chief Financial Officer

Date: 3.25.19

APPROVED AS TO FORM & CORRECTNESS:

_____ Date: 3/28/19
~~Peter J. Sweeny~~ Peter J. Sweeney
City Attorney

EXHIBIT "A"

DATE: March 12, 2019

WORK AUTHORIZATION NO. _____

PROJECT: City of Ft. Pierce Ohio Avenue CEI Services

CONSULTANT: Culpepper & Terpening, Inc.

I. Project Description/Objectives:

Partial CEI Services provided to the City of Ft. Pierce for the Ohio Avenue Roadway Improvements project. The project location is defined by the plans prepared by Kimley-Horn, Inc. The scope of services is defined as follows:

II. Scope of Service:

Partial, part-time CEI Inspection Services, including Project Certification. Contract/Project Administration to be performed by the City. The part-time, partial services shall include the following:

- Construction Observation services (part-time) including: daily reports, field coordination, maintenance of traffic field reviews while on-site, quantity tracking for payment, attending progress meetings, photographic documentation, review of construction for compliance with plans and specifications, and other reasonable inspection related tasks. These tasks can only be performed to the extent that the representative is on-site.

- Project Engineer shall perform site visits and review inspection and certified/signed & sealed test information by others to allow project certification. Project Engineer will provide assistance with regard to materials acceptance within the FDOT ROW. MAC entry by others.

CEI Contract and Project Administration services are not included. The following services are not included: holding progress and other meetings, business coordination, submittal review & tracking, RFI tracking, field adjustments, resolution of design issues in the field, schedule reviews, weekly update reports, agency coordination, contractor coordination, correspondence, change order analysis, claims analysis, maintenance of traffic review by P.E., pay request recommendations, final estimates preparation, FDOT Monthly progress reports and all other tasks traditionally covered under contract or project administration.

III. Assumptions/Clarifications:

1. Any needed geotechnical and contaminated water & soils services including testing, protocols and consulting by others.
2. Formal signed & sealed as-built plans are to be performed by others or added to Consultant scope at a mutually agreed-to additional fee. The P.E will certify that the project is constructed in accordance to the

Initial: "JPT": ____ Client: ____

plans based on site visits and signed & sealed as-builts provided by others, or as-builts may be added to Consultant scope at a mutually agreed-to additional fee.

3. Inspection/monitoring of work by parties other than the project construction contractor are not included.
4. Testing - Only verification testing within FDOT ROW is included in proposal cost.

IV. Breakdown of Fees:

Services to be provided by this Consultant pursuant to this Work Authorization (WA) shall be provided in accordance with Section II above, and as follows.

Time & Expense estimated at $86,414.00. See Attachment 1 for breakdown of the proposed fees:

V. Completion Date:

Work completion will depend on the Contractor's construction schedule. Estimated Contract costs are based on an estimated 180 calendar day construction duration, plus one week for start-up and close-out.

VI. Deliverables:

Deliverables shall include turnover to all project files including daily reports, photographs, and final project certification. Deliverables will be provided in electronic format.

Initial: "JPT": ____ Client: ____

EXHIBIT A - ATTACHMENT 1

CEI SERVICES FOR CITY OF FORT PIERCE OHIO AVENUE

CULPEPPER & TERPENING , INC.

3/12/2019

Estimate for services including part-time inspection, project certification and FDOT materials assistance. Contract/project administration is not included.

	Hrs./Week	Total Weeks	Total Hours	Rate/Hr	Total
Sr. Project Engineer/P.A. - Certification	2	26	52	$ 175.00	$ 9,100.00
Start-up/Close-out	4	1	4	$ 175.00	$ 700.00
FDOT Materials Assistance			40	$ 175.00	$ 7,000.00
Sr. Inspector - part-time	24	26	624	$ 95.00	$ 59,280.00
Start-up/Close-out	40	1	40	$ 95.00	$ 3,800.00
Administrative Support	1	26	26	$ 55.00	$ 1,430.00
Start-up/Close-out	3	1	3	$ 55.00	$ 165.00
Testing Budget (VT on FDOT ROW only)					$ 4,939.00
Total =					$ 86,414.00

Notes:
Estimated Contruction Duration of 180 calendar days
RCS payroll/EEO compliance monitoring services not included
Geotechnical and contaminated water and soils services not included
All testing other than VT on FDOT ROW to be by the City
Asphalt Testing not included based on tonange

Initial: "JPT": ____ Client: ____

CONTRACT PLANS

OHIO AVENUE
ROADWAY IMPROVEMENTS

INDEX OF ROADWAY PLANS

SHEET NO.	SHEET DESCRIPTION
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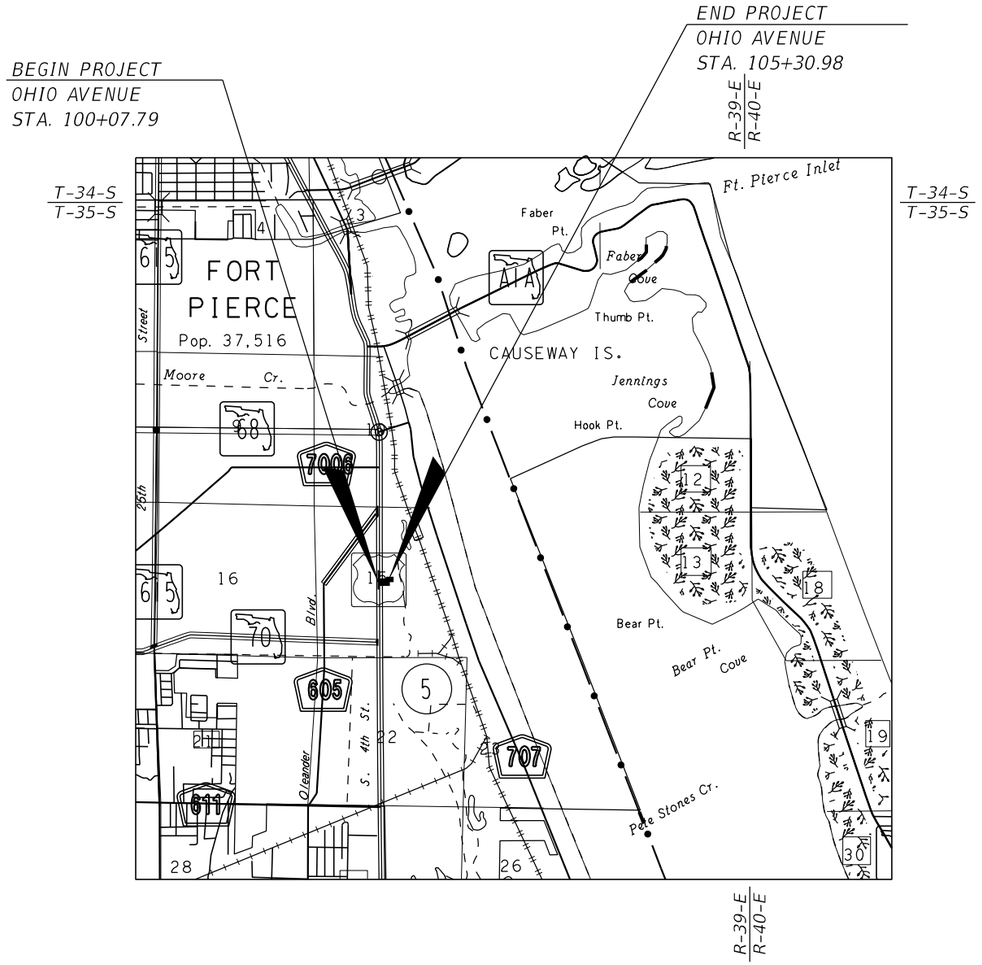
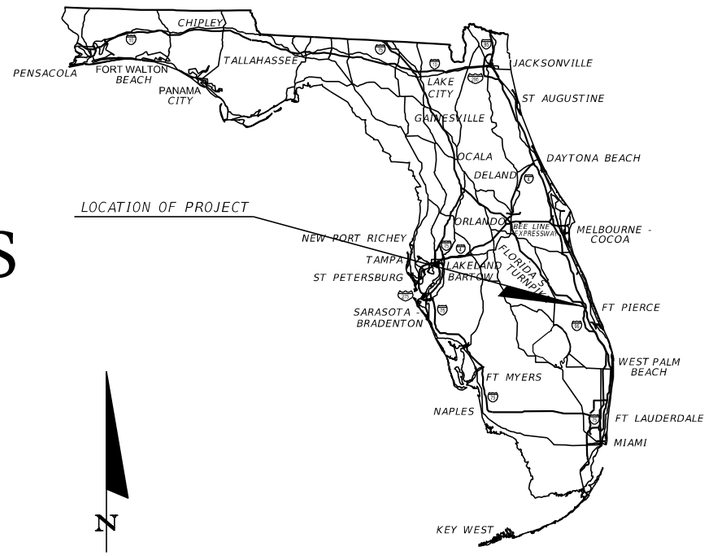
2	SUMMARY OF PAY ITEMS
3	GENERAL NOTES
4	TYPICAL SECTION
5 - 6	HORIZONTAL & VERTICAL CONTROL
7 - 8	PLAN & PROFILE
9 - 10	MISCELLANEOUS DETAILS
11 - 17	OHIO AVENUE CROSS SECTIONS
18	SIGNING & MARKING
18A	GUIDE SIGN DETAIL SHEET
19	LANDSCAPE GENERAL NOTES
20	LANDSCAPE & HARDSCAPE
21	LANDSCAPE DETAILS
21A - 21B	MONUMENT DETAILS
22	IRRIGATION GENERAL NOTES
23	IRRIGATION PLAN
24 - 26	IRRIGATION DETAILS
27	SIGNALIZATION GENERAL NOTES
28 - 28A	SIGNAL PLAN
29	MAST ARM TABULATION
30	STANDARD MAST ARM ASSEMBLIES DATA TABLE
31	GUIDE SIGN WORKSHEET
32	EROSION CONTROL GENERAL NOTES
33	EROSION CONTROL
34-38	TEMPORARY TRAFFIC CONTROL DETAILS

BEGIN PROJECT
OHIO AVENUE
STA. 100+07.79

END PROJECT
OHIO AVENUE
STA. 105+30.98





ROADWAY SHOP DRAWINGS
TO BE SUBMITTED TO:

KIMLEY-HORN AND ASSOCIATES, INC.
BRIAN GOOD, P.E.
445 24th STREET, SUITE 200
VERO BEACH, FLORIDA 32960

PLANS PREPARED BY:

Kimley»Horn

445 24th STREET, SUITE 200
VERO BEACH, FL 32960
TEL (772) 794-4100
PROJECT NUMBER: 047922018
CERTIFICATE OF AUTHORIZATION: 00000696

ROADWAY PLANS
ENGINEER OF RECORD: BRIAN GOOD, P.E.

P.E. NO.: 56939

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

PREPARED FOR:

CITY OF FORT PIERCE

100% SUBMITTAL FEBRUARY 2018

SHEET NO.
1

SUMMARY OF PAY ITEMS

ROADWAY PAY ITEMS			
101-1	MOBILIZATION	LS	1
102-1	MAINTENANCE OF TRAFFIC	LS	1
102-104A	TEMPORARY SIGNALIZATION AND MAINTENANCE, INTERSECTION	LS	1
102-107-1A	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTION	LS	1
104-10-3	SEDIMENT BARRIER (SILT FENCE TYPE III)	LF	775
104-18	INLET PROTECTION SYSTEM	EA	9
110-1-1	CLEARING & GRUBBING	LS	1
108-1	AS-BUILTS/ RECORD DRAWINGS (EXCLUDING POTABLE WATER MAIN)	LS	1
120-1	REGULAR EXCAVATION	CY	1,010
120-6	EMBANKMENT	CY	94
160-4	TYPE "B" STABILIZATION	SY	2,165
285-706	CEMENTED CCQUINA LBR 100 (8")	SY	2,005
334-1-13A	SUPERPAVE ASPHALTIC CONCRETE (TYPE SP-9.5) (TRAFFIC C) (1.0")	TN	111
334-1-13B	SUPERPAVE ASPHALTIC CONCRETE (TYPE SP-12.5) (TRAFFIC C) (1.5")	TN	166
425-1-201	INLETS (CURB) (TYPE P-9) (<10')	EA	4
425-2-62	MANHOLE (P-8) (>10')	EA	2
425-5	MODIFY EXISTING STRUCTURE	EA	1
425-5-1	MANHOLE ADJUST (UTILITIES)	EA	2
425-6	VALVE BOX (ADJUST)	EA	6
430-171-125	CONC. PIPE CULVERT (18" SS) (CLASS III)	LF	237
430-174-124	CONC. PIPE CULVERT (24" SS) (CLASS III)	LF	236
430-175-218	CONC. PIPE CULVERT (14"x23" SS) (CLASS III)	LF	57
430-175-224	CONC. PIPE CULVERT (19"x30" SS) (CLASS III)	LF	71
520-1-10	CONCRETE CURB & GUTTER (TYPE F)	LF	730
520-2-2	CONCRETE CURB (TYPE B)	LF	81
520-2-4	CONCRETE CURB (TYPE D)	LF	484
522-1	CONCRETE SIDEWALK, 4" THICK (FIBER, 1.0 LB/CY)	SY	437
522-2	CONCRETE SIDEWALK, 6" THICK (FIBER, 1.0 LB/CY)	SY	200
523-1	PATTERNED PAVEMENT (8" THICK) (STAMPED CONCRETE)	SY	53
527-2	DETECTABLE WARNINGS	SF	47
1644-800	FIRE HYDRANT RELOCATE	EA	1
700-0-AA	MONUMENT SIGN	LS	1

LANDSCAPE PAY ITEMS			
162-1-13	PREPARED SOIL AMENDMENT	CY	204
570-1-2A	PERFORMANCE TURF, SOD (BAHIA)	SY	112
570-1-2B	PERFORMANCE TURF, SOD (FLORATAM ST. AUGUSTINE)	SY	1,700
580-1-A	MULCH (FLORIMULCH)	CY	22
580-4-392	LIVISTONA CHINENSIS / CHINESE FAN PALM 8' CT	EA	3
580-4-393	LIVISTONA CHINENSIS / CHINESE FAN PALM 10' CT	EA	3
580-5-993	LAGERSTROEMIA X 'MUSKOGEE' / LAVENDER CRAPE MYRTLE	EA	14
580-7-103	MUHLENBERGIA CAPILLARIS / PINK MUHLY	EA	64
580-7-253	FICUS MICROCARPA 'GREEN ISLAND' / GREEN ISLAND FICUS	EA	109
580-7-303	LOROPETALUM CHINESE 'PURPLE PIXIE' / PURPLE PIXIE LOROPETALUM	EA	37
580-7-983	RHAPHIOLEPIS INDICA 'ALBA' / WHITE INDIAN HAWTHORN	EA	27
580-7-993	TULBAGHIA VIOLACEA / SOCIETY GARLIC	EA	414
590-1	IRRIGATION SYSTEM (COMPLETE)	LS	1

SIGNING AND PAVEMENT MARKING PAY ITEMS			
700-1-11	SINGLE POST SIGN (F&I) (<12 SF)	EA	7
700-1-50	SINGLE POST SIGN (RELOCATE)	EA	1
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	73
710-11-290	PAINTED PAVEMENT MARKING (ISLAND NOSE) (YELLOW)	SF	89
711-11-121	THERMOPLASTIC PAVEMENT MARKINGS (6" SOLID) (WHITE)	LF	830
711-11-123	THERMOPLASTIC PAVEMENT MARKINGS (12" SOLID) (WHITE)	LF	75
711-11-125	THERMOPLASTIC PAVEMENT MARKINGS (24" SOLID) (WHITE)	LF	682
711-11-170	THERMOPLASTIC PAVEMENT MARKING (ARROW)	EA	5
711-11-221	THERMOPLASTIC PAVEMENT MARKINGS (6" SOLID) (YELLOW)	LF	762
711-11-224	THERMOPLASTIC PAVEMENT MARKINGS (18" SOLID) (YELLOW)	LF	21
711-16-131B	THERMOPLASTIC PAVEMENT MARKINGS (6" SKIP, 10'-30') (WHITE)	LF	160
711-16-231A	THERMOPLASTIC PAVEMENT MARKINGS (6" SKIP, 6'-10') (YELLOW)	LF	348
711-16-231B	THERMOPLASTIC PAVEMENT MARKINGS (6" SKIP, 2'-4') (YELLOW)	LF	65

SIGNALIZATION PAY ITEMS			
630-2-11	CONDUIT (SIGNAL) (F & I) (OPEN TRENCH)	LF	198
630-2-12	CONDUIT (SIGNAL) (F & I) (DIRECTIONAL BORE)	LF	1,185
632-7-1	CABLE (SIGNAL) (F & I)	PI	1
632-7-6	SIGNAL CABLE (REMOVE) (INTERSECTION)	PI	1
633-1-121	FIBER OPTIC CABLE (F & I) (UNDERGROUND) (12 FIBERS)	LF	270
633-2-31	FIBER OPTIC CONNECTION (INSTALL) (SPLICE)	EA	12
633-2-32	FIBER OPTIC CONNECTION (INSTALL) (TERMINATION)	EA	12
635-2-11	PULL BOX (F & I) (TRAFFIC SIGNAL)	EA	21
635-2-12	PULL BOX (F & I) (FIBER OPTIC) (24" X 36")	EA	1
639-1-112	ELECTRICAL POWER SERVICE (SIGNALS) (ABOVE GROUND) (METER PURCHASED BY CONTRACTO	AS	1
639-1-610	ELECTRICAL POWER SERVICE (REMOVE) (OVERHEAD)	AS	1
639-2-1	ELECTRICAL SERVICE WIRE (F & I)	LS	1
639-3-11	ELECTRICAL SERVICE DISCONNECT (F & I) (POLE MOUNTED)	EA	1
641-2-12	PRESTRESSED CONC. POLE (F & I) (TYPE P-II SERVICE POLE)	EA	1
641-2-80	PRESTRESSED CONCRETE POLE (COMPLETE POLE REMOVAL)	EA	4
646-1-11	ALUMINUM SIGNALS POLE (PEDESTAL)	EA	5
646-1-60	ALUMINUM SIGNALS POLE (REMOVE)	EA	1
649-21-1	STEEL MAST ARM ASSEMBLY (F & I) (SINGLE ARM) (30')	EA	1
649-21-9	STEEL MAST ARM ASSEMBLY (F & I) (DOUBLE ARM) (50' - 50')	EA	1
649-21-10	STEEL MAST ARM ASSEMBLY (F & I) (SINGLE ARM) (60')	EA	1
650-1-24	TRAFFIC SIGNAL (F & I) (POLYCARBONATE W/ ALUM TOP) (3-SECTION) (1-WAY)	AS	4
650-1-29	TRAFFIC SIGNAL (F & I) (POLYCARBONATE W/ ALUM TOP) (5-SECTION) (1-WAY) (CLUSTER)	AS	4
653-1-11	PEDESTRIAN SIGNAL (F & I) (LED-COUNTDOWN) (1-WAY)	AS	8
660-4-11	VEHICLE DETECTION SYSTEM (F & I) (VIDEO) (CABINET EQUIPMENT)	EA	1
660-4-12	VEHICLE DETECTION SYSTEM (F & I) (VIDEO (ABOVE GROUND EQUIPMENT)	EA	4
663-1-111	SIGNAL PRIORITY AND PREEMPTION (F & I) (OPTICAL) (CABINET ELECTRONICS)	EA	1
663-1-112	SIGNAL PRIORITY AND PREEMPTION (F & I) (OPTICAL) (DETECTOR)	EA	4
665-1-11	PEDESTRIAN DETECTOR (F & I) (STANDARD)	EA	8
670-5-111	TRAFFIC CONTROLLER ASSEMBLY (F & I) (NEMA) (ONE PREEMPTION PLAN)	AS	1
670-5-600	TRAFFIC CONTROLLER ASSEMBLY (REMOVE CONTROLLER WITH CABINET)	AS	1
684-1-1	MANAGED FIELD ETHERNET SWITCH (F & I)	EA	1
685-1-11	UNINTERRUPTIBLE POWER SUPPLY (F & I) (LINE INTERACTIVE)	EA	1
700-5-21	INTERNALLY ILLUMINATED SIGN (F & I) (OVERHEAD MOUNT, 12 - 18 SF)	EA	2
700-5-22	INTERNALLY ILLUMINATED SIGN (F & I) (OVERHEAD MOUNT, 12 - 18 SF)	EA	2
715-1-11	LIGHTING CONDUCTORS (F & I) (INSULATED, No. 10 OR <)	LF	1,149
715-5-11	LUMINAIRE & BRACKET ARM (F & I) (ALUMINUM)	EA	3

PAY ITEM FOOTNOTES

101-1	COST TO INCLUDE HYDRO BLASTING ALL CONFLICTING STRIPING
285-706	THE COST OF THE PRIME COAT SHALL BE INCLUDE IN THE PRICE OF THE BASE
334-1-1-13X	THE COST OF THE TACK COAT SHALL BE INCLUDED IN THE PRICE OF THE ASPHALT
570-1-2X	COST TO INCLUDE, SOD, FERTILIZER, MOWING, WATERING AND ALL INCIDENTAL ITEMS NECESSARY
590-1	COST TO INCLUDE, BUT NOT LIMITED TO, PVC CONDUIT, PVC SLEEVES, IRRIGATION HEADS, VALVE BOXES, FLEX PIPE, FITTINGS, PUMP, CONTROLLER, POWER SUPPLY, ETC. AND ALL ITEMS NECESSARY TO PROVIDE A FULLY FUNCTIONAL IRRIGATION SYSTEM.
700-00-AA	COST TO INCLUDE BUT NOT LIMITED TO CONCRETE, STEEL, STUCCO, CORRAL VENEER PAINT, LETTERING, ACRYLIC LOGO SIGNAGE, CAPS, BUILDING PERMIT FEES AND ALL APPURTENANCES
711-XX-XXX	COST TO INCLUDE TEMPORARY PAINT STRIPING

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
2/20/18	EJK	1. PER KHA CLARIFICATION			

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SUMMARY OF PAY ITEMS

SHEET NO. 2

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF FORT PIERCE, FLORIDA STANDARD CONTRACT DOCUMENTS AND SPECIFICATIONS FOR PUBLIC WORK PROJECTS, LATEST ISSUE.

2. CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS FY 2017-2018, LATEST ISSUE.

3. THE INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH BIDS WILL BE BASED.

4. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND OTHER FEATURES AFFECTING HIS/HER WORK PRIOR TO CONSTRUCTION, AND NOTIFY THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT IMMEDIATELY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. THE CONTRACTOR SHALL WORK AS NEEDED TO AVOID CONFLICT WITH EXISTING UTILITIES (NO ADDITIONAL COST SHALL BE PAID FOR THIS WORK). EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER.

PRE-TRENCHING IN THE ALIGNMENT AND GRADE OF PROPOSED PIPES, STRUCTURES, CONDUITS AND/OR SUB-GRADE SHALL BE PERFORMED FOURTEEN DAYS IN ADVANCE OF ITS CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE UNDERGROUND UTILITY OWNERS AND THE CITY WITH A FOURTEEN DAY ADVANCE NOTICE OF ANY CONFLICT WITH PROPOSED CONSTRUCTION. PAYMENT FOR PRE-TRENCHING, SURVEY, AND BACKFILLING SHALL BE INCLUDED IN THE UNIT COST OF THE RELATED BID ITEM FOR WORK BEING DONE.

5. THE CONTRACTOR SHALL COORDINATE WITH UTILITIES TO ARRANGE RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK.

6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT. THE CONTRACTOR WILL RECEIVE NO DIRECT PAYMENT TO SUPPORT AND/OR PROTECT ANY AND ALL UTILITIES. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF THE RELATED BID ITEM FOR WORK BEING DONE.

7. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE TO UTILITY COMPANIES TO PROVIDE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT UTILITIES NOTIFICATION CENTER AT 1-800-432-4770.

8. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION PERMITS PRIOR TO START OF CONSTRUCTION.

9. THE CONTRACTOR SHALL NOTIFY THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT AND CITY'S FIELD REPRESENTATIVE, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY FDOT DISTRICT 4, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WITHIN FDOT RIGHT-OF-WAY, FDOT CONTACT: MR. DANIEL HIDEN, 3601 OLEANDER AVENUE, FORT PIERCE, FL 34982, 772-465-7396.

10. THE CONTRACTOR SHALL CONTACT THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT AND CITY'S FIELD REPRESENTATIVE IMMEDIATELY OF ANY CONFLICT ARISING DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS.

11. B.M. DATA IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

ANY NAVD 88 MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF BEING DAMAGE, NOTIFY:
GEODETIC INFORMATION CENTER
ATTN: MARK MAINTENANCE SECTION N/CG-162
6001 EXECUTIVE BLVD.
ROCKVILLE MARYLAND 20852

12. EXISTING SECTION CORNERS AND 1/4 SECTION CORNERS, AND OTHER LAND MARKERS OR MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE REFERENCED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND RESET AFTER CONSTRUCTION USING REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA.

13. STORM SEWER PIPE LENGTHS SHOWN ARE APPROXIMATE, AND MAY BE ADJUSTED AS REQUIRED UPON APROVAL BY THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT.

14. INSTALLATION OF ALL STORM SEWERS, INLETS, MANHOLES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT AND FDOT DESIGN STANDARDS AS INDICATED ON THE DRAWINGS. ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III PIPE.

15. ALL CATCH BASINS AND PIPE INVERTS SHALL BE AS INDICATED ON THE DRAWINGS.

16. CONTRACTOR SHALL ADJUST ALL UTILITY LIDS AND COVERS TO FINISHED GRADE AS REQUIRED.

17. ALL COMPLETED DRAINAGE STRUCTURES SHALL BE PROTECTED FROM CONTAMINATION BY SILT AND CONSTRUCTION DEBRIS. THE CONTRACTOR SHALL PLACE PLYWOOD ON, OR FILTER FABRIC BETWEEN FRAME AND INLET GRATE UNTIL CONSTRUCTION OPERATIONS ARE COMPLETED. ALL DRAINAGE STRUCTURES (EXISTING AND PROPOSED) WITHIN PROJECT LIMITS SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF THE RELATED BID ITEM FOR WORK BEING DONE.

18. CONTRACTOR TO COORDINATE WITH FDOT DISTRICT 4 CONSTRUCTION ENVIRONMENTAL COORDINATOR FOR LOCATION OF STAGING AND STOCKPILING AREAS.

19. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS SIDEWALKS, ETC. WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE CITY OF FORT PIERCE FIELD ENGINEER OF FDOT FIELD REPRESENTATIVE.

20. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNER.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION, ACCIDENTALLY OR PURPOSELY, CAUSED TO ANY IRRIGATION SYSTEMS, PRIVATE OR PUBLIC. THE CONTRACTOR SHALL REPLACE ANY DAMAGED, REMOVED, OR MODIFIED IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES AT NO ADDITIONAL COST.

22. REGARDING MAIL BOXES, WALLS, FENCES, SECURITY GATE TRACKING, OR OTHER PRIVATE PROPERTY OR IMPROVEMENTS THAT SHALL BE TEMPORARILY RELOCATED AND REPLACED, THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE OWNER. ANY AND ALL COSTS ASSOCIATED WITH COORDINATING, REMOVING, AND REPLACING ANY PROPERTY ITEMS SHALL BE INCLUDED IN THE UNIT COST OF THE RELATED BID ITEM FOR WORK BEING DONE.

23. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC IN ACCORDANCE WITH FDOT INDEX 600 SERIES, MUTCD AND THESE PLANS. THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES VEHICULAR AND PEDESTRIAN ACCESS TO ALL RESIDENCES AND/OR BUSINESS. CONTRACTOR SHALL PROVIDE A PEDESTRIAN DETOUR PLAN UTILIZING VIRGINIA AVENUE AND PARKWAY DRIVE AS ALTERNATE ROUTES.

24. NO TREES ARE TO BE REMOVED OR RELOCATED WITHOUT PRIOR APPROVAL FROM THE CITY OF FORT PIERCE FIELD ENGINEER (CITY PERMIT REQUIRED FOR ANY TREE REMOVAL).

25. COMPLETE 'AS-BUILT' INFORMATION RELATIVE TO LOCATION, SIZE AND DEPTH OF NEW PIPES, MANHOLES, INLETS, ETC., SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR AND SUBMITTED (SIGNED AND SEALED BY A FLORIDA CERTIFIED P.LS.) TO THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT PRIOR TO FINAL ACCEPTANCE OF THE WORK. ALL RECORD INFORMATION ON EXISTING UTILITY CROSSINGS ENCOUNTERED DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO PIPES, INLETS, MANHOLE, ETC., SHALL BE RECORDED BY A FLORIDA REGISTERED SURVEYOR AND SHOWN ON THE RECORD DRAWINGS. THE COST OF SIGNED AND SEALED AS-BUILTS (5 COPIES) SHALL BE INCLUDED IN OVERALL BID AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS OF EXISTING PAVEMENT, SIDEWALKS, PIPES, CONDUITS, CURBS, CABLES, ETC., WHETHER OR NOT SHOWN ON THE PLANS DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS, AND SHALL RESTORE THEM PROMPTLY AT NO ADDITIONAL EXPENSE TO THE OWNER OR THE CITY OF FORT PIERCE OR FDOT. CONTRACTOR SHALL REPORT ANY DAMAGE TO SIDEWALK, DRIVEWAY, ETC., TO THE ENGINEER OF RECORD PRIOR TO BEGINNING WORK IN ANY AREA.

27. ALL DRAINAGE PIPES SHALL BE APPROVED BY CITY OF FORT PIERCE ENGINEERING DEPARTMENT. THE CONTRACTOR SHALL CONSTRUCT A FILTER FABRIC JACKET AT ALL PROPOSED STORM SEWER JOINTS AS PER FDOT STANDARDS. COST OF FILTER FABRIC JACKET SHALL BE INCLUDED IN UNIT PIPE COSTS.

28. EXISTING DRAINAGE STRUCTURES IN CONFLICT WITH PROPOSED DRAINAGE STRUCTURES SHALL BE REMOVED UNLESS OTHERWISE NOTED. ALL OTHER EXISTING DRAINAGE STRUCTUES WITHIN CONSTRUCTION LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED. REMOVAL OF EXISTING DRAINAGE STRUCTURE IS TO INCLUDE ASSOCIATED PIPING TO DOWNSTREAM STRUCTURE OR TO TIE IN WITHIN PROPOSED STORM SEWER PIPING.

29. NO EXISTING BASE MATERIAL REMOVED IN EXCAVATION SHALL BE REUSED AS PROPOSED BASE MATERIAL.

30. STAGING AND MATERIAL STORAGE SHALL NOT BE CONDUCTED ON ABUTTING PRIVATE PROPERTY WITHOUT WRITTEN APPROVAL FROM THE OWNER. STAGING AND STORAGE SHALL BE CONDUCTED WITHIN PUBLIC R/W AND/OR CONSTRUCTION EASEMENTS (ACCESS LICENSE AGREEMENTS).

31. THE CONTRACTOR SHALL REFER TO THE LANDSCAPE PLAN TO DETERMINE IMPACTS TO EXISTING TREES AND VEGETATION. ALL TREES AND VEGETATION DESIGNATED TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER OR THE CITY.

32. PROPOSED DRAINAGE STRUCTURES HAVE BEEN SIZED BASED UPON THE AVAILABLE UTILITY INFORMATON. THE CONTRACTOR SHALL VERIFY THAT PROPOSED DIMENSIONS WILL ACCOMMODATE THE EXISTING AND PROPOSED STORM SEWER CONFIGURATION PRIOR TO SUBMITTING SHOP DRAWINGS. DRAINAGE CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE DRILLED AT THE SPECIFIED INVERT.

33. EXISTING UTILITY CONTACT INFORMATION:

UTILITY COMPANY	CONTACT	PHONE NUMBER	EMAIL
AT&T	MARK GUTIERREZ	772-460-4443	MARK.GUTIERREZ@ATT.COM
FPUA WATER & WASTEWATER	JAMES CARNES	772-466-1600X3472	JCARNES@FPUA.COM
FPUA GAS & ELECTRIC	JASON MITTLER	772-466-1600X630	JMITTLER@FPUA.COM
FORT PIERCE UTILITY AUTHORITY	VALERIE SCHULTE	772-466-1600	VSCHULTE@FPUA.COM
FP&L	ROB MORRIS	772-223-4215	ROB.MORRIS@FPL.COM

33. EROSION CONTROL MEASURES SHALL BE TAKEN BY CONTRACTOR DURING CONSTRUCTION AS PER FDOT STANDARDS:

A. SILT FENCE SHALL BE INSTALLED ALONG THE ENTIRE PERIMETER OF THE PROJECT ADJACENT TO ANY SOIL DISTURBING ACTIVITIES.

B. ALL DRAINAGE STRUCTURES ARE TO BE PROTECTED DURING CONSTRUCTION PER FDOT STANDARDS.

C. ALL FENCING, GRADING, SIGNING AND SODDING SHALL BE MAINTAINED DURING THE CONTRACT LIFE. ALL DAMAGED WORK SHALL BE RESTORED AT NO COST TO THE CITY NOR FDOT.

34. DETECTABLE WARNING SURFACES WITHIN THE U.S. HIGHWAY 1 RIGHT-OF-WAY SHALL CONSIST OF CAST-IN-PLACE COMPOSITE TACTILE UNITS MANUFACTURED BY ADA SOLUTIONS, INC (800-372-0519), OR APPROVED EQUAL. WARNING SURFACES SHALL EXTEND TWO FEET FROM BACK OF CURB AND SPAN RAMP RUN WIDTH. WARNING SURFACE COLOR SHALL BE "BRICK RED".

35. DETECTABLE WARNING SURFACES WITHIN THE CITY OF FORT PIERCE RIGHT-OF-WAY SHALL CONSIST OF A.D.A. TRUNCATED DOME CONCRETE PAVING UNITS (4"X8"X2-3/8") CONSTRUCTED ON CONCRETE SUB-SLAB USING EPOXY GROUT. WARNING SURFACES SHALL EXTEND TWO FEET FROM BACK OF CURB AND SPAN RAMP RUN WIDTH. WARNING SURFACE COLOR SHALL BE "BRICK RED".

36. NON-STRUCTURAL CONCRETE UTILIZED IN CURB AND GUTTER, SIDEWALK AND URBAN FLARED TURNOUT CONSTRUCTION SHALL CONSIST OF 3000 PSI FIBER REINFORCED MIX.

37. SELECT CLEARING AND GRUBBING AREAS ARE DESIGNATED AREAS THAT THE CONTRACTOR SHALL DETERMINE IF CLEARING AND GRUBBING IS NEEDED BUT NOT LIMITED TO GRADING. IF NEEDED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, RESETTING, OR REPLACING LIKE VEGETATION TO EQUAL OR BETTER CONDITION, ALL EXISTING SIDEWALK FALLING IN THIS AREA SHALL BE REMOVED AS SHOWN IN THE PLANS.

38. WORK WITHIN THE FDOT RIGHT OF WAY SHALL BE RESTRICTED TO THE HOURS OF 9:00 AM TO 3:30 PM, (MONDAY-FRIDAY), UNLESS OTHERWISE APPROVED BY THE OPERATIONS ENGINEER, OR DISGNEE.

39. LANE CLOSURES ON THE STATE ROAD SYSTEM MUST BE COORDINATED WITH THE PUBLIC INFORMATION OFFICE AT LEAST TWO WEEKS PRIOR TO THE CLOSURE. THE CONTACT INFORMATION FOR THE PUBLIC INFORMATION OFFICE IS AS FOLLOWS:

BARBARA KELLEHER
FLORIDA DEPARTMENT OF TRANSPORTATION
PUBLIC INFORMATION OFFICE
3400 WEST COMMERCIAL BLVD.
FORT LAUDERDALE, FLORIDA 33309
954-777-4090
Barbara.Kelleher@dot.state.fl.us

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
CERTIFICATE OF AUTHORIZATION: 00000696

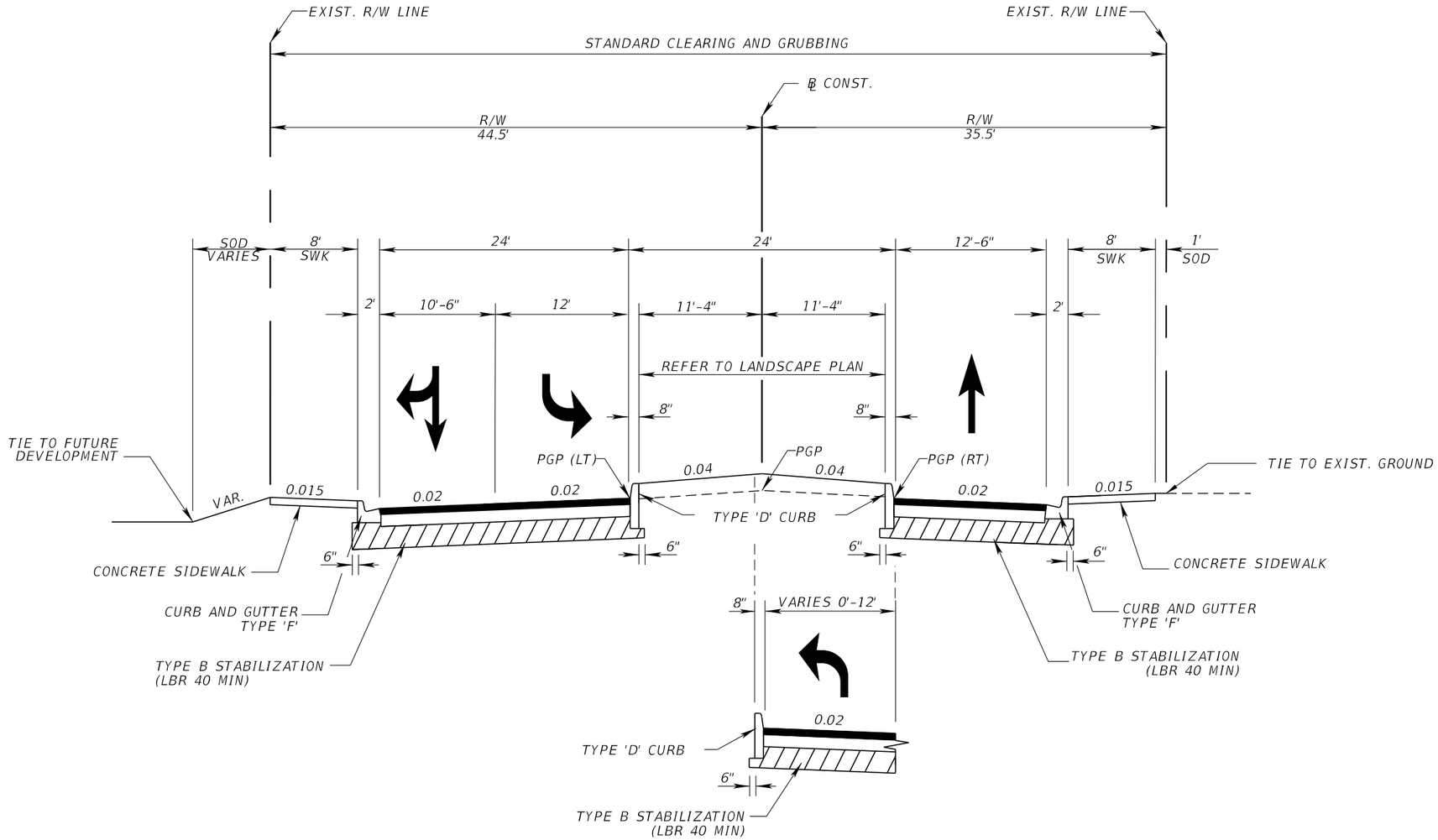
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

GENERAL NOTES

SHEET NO. 3

Mike.Forman 3/22/2018 7:38:07 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\GNNTRD01.DGN



STA. 101+94.85 TO STA. 102+99.91

PAVEMENT DESIGN

TYPE SP-9.5 STRUCTURAL COURSE (TRAFFIC C) (1")
TYPE SP-12.5 STRUCTURAL COURSE (TRAFFIC C) (1.5")
CEMENTED COQUINA (LBR 100) (8")
STABILIZED SUBGRADE TYPE B (12")

POST SPEED = 30 MPH
DESIGN SPEED = 35 MPH

STA. 101+49.53 TO STA. 105+30.98

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

TYPICAL SECTION

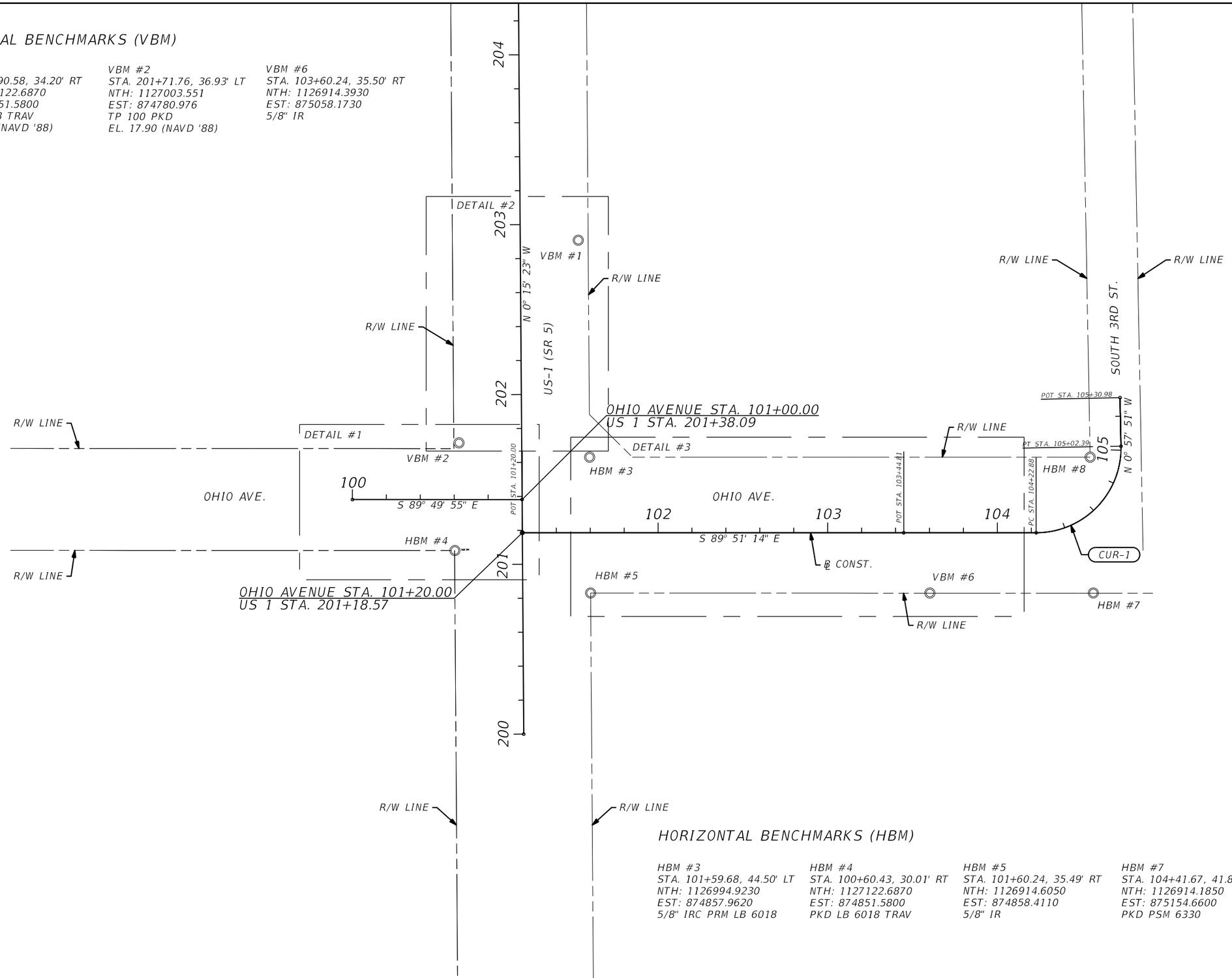
SHEET NO. 4

VERTICAL BENCHMARKS (VBM)

VBM #1
STA. 202+90.58, 34.20' RT
NTH: 1127122.6870
EST: 874851.5800
PKD LB018 TRAV
EL. 17.62 (NAVD '88)

VBM #2
STA. 201+71.76, 36.93' LT
NTH: 1127003.551
EST: 874780.976
TP 100 PKD
EL. 17.90 (NAVD '88)

VBM #6
STA. 103+60.24, 35.50' RT
NTH: 1126914.3930
EST: 875058.1730
5/8" IR



CURVE DATA (CUR-1)
PI STA. = 104+73.86
Δ = 91° 06' 37" (LT)
D = 114° 35' 30"
T = 50.98
L = 79.51
R = 50.00
PC STA. = 104+22.88
PT STA. = 105+02.39

HORIZONTAL BENCHMARKS (HBM)

HBM #3
STA. 101+59.68, 44.50' LT
NTH: 1126994.9230
EST: 874857.9620
5/8" IRC PRM LB 6018

HBM #4
STA. 100+60.43, 30.01' RT
NTH: 1127122.6870
EST: 874851.5800
PKD LB 6018 TRAV

HBM #5
STA. 101+60.24, 35.49' RT
NTH: 1126914.6050
EST: 874858.4110
5/8" IR

HBM #7
STA. 104+41.67, 41.89' RT
NTH: 1126914.1850
EST: 875154.6600
PKD PSM 6330

HBM #8
STA. 104+92.88, 17.71' LT
NTH: 1126914.1820
EST: 875152.9780
IRC 5/8" PRM LB 6018

REVISIONS					
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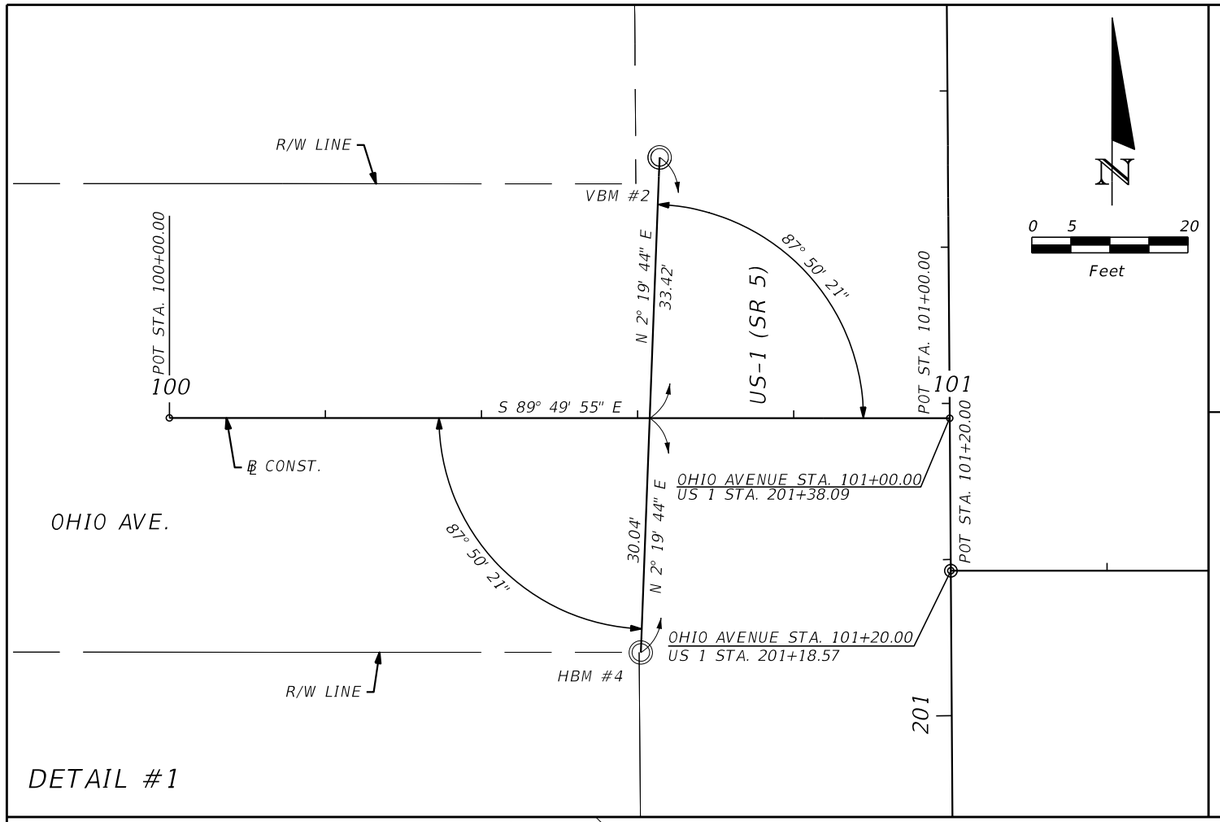
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

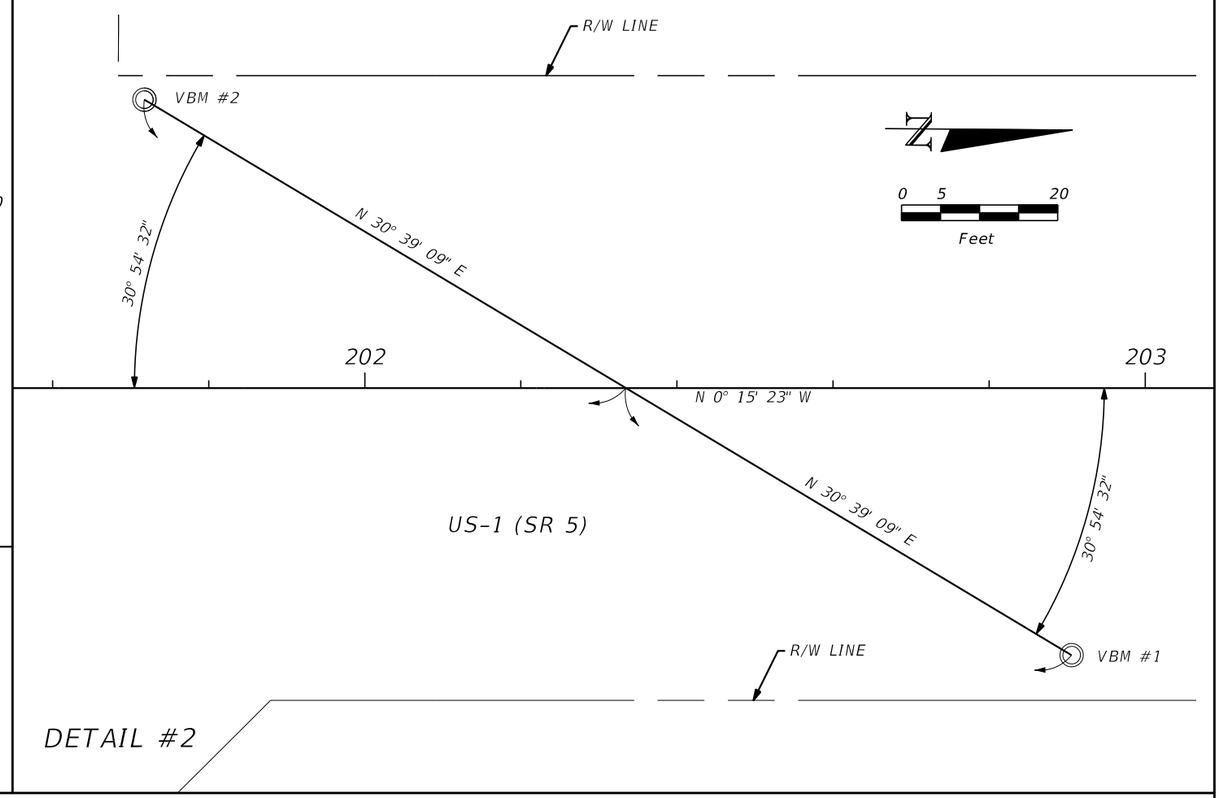
HORIZONTAL & VERTICAL CONTROL

SHEET NO. 5

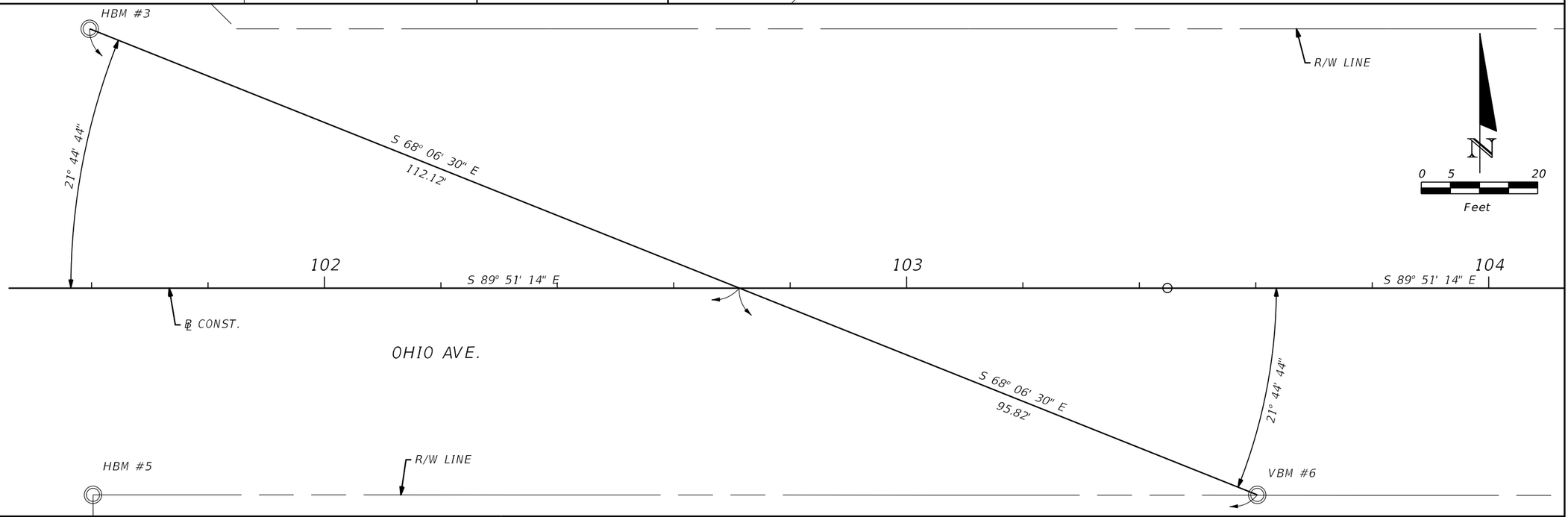
Mike.Forman 3/22/2018 7:38:09 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANHVC01.dgn



DETAIL #1



DETAIL #2



DETAIL #3

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

HORIZONTAL & VERTICAL CONTROL DETAIL

SHEET NO. 6

NOTES:

1. REFER TO IRRIGATION PLAN FOR SLEEVING LOCATION TO BE CONSTRUCTED CONCURRENTLY WITH ROADWAY IMPROVEMENTS.
2. REFER TO SIGNALIZATION PLANS FOR ADDITIONAL INFORMATION.
3. THE CONTRACTOR SHALL COORDINATE WITH THE CITY REGARDING MONUMENT SIGN INSTALLATION LOCATION WITHIN PROPOSED MEDIAN.

LEGEND:

- EXIST. ASPHALT PAVEMENT REMOVAL SEE DETAIL
- STAMPED CONCRETE SEE DETAIL

BEGIN OHIO AVE. IMPROVEMENTS STA. 100+07.79
OHIO AVE. STA. 101+00.00 = US-1 (SR 5) STA. 201+38.09
US-1 (SR 5) STA. 201+18.57 = OHIO AVE. STA. 101+20.00
REFER TO SIGNAL PLANS
BEGIN PGL RT STA. 101+49.53 12.00' RT
TIE TO EXIST PVMT, SAWCUT +49.78, 44.64'RT
TIE TO EXIST. CURB & GUTTER +50.78, 44.63' RT, EL 17.69±
TIE TO EXIST PVMT, SAWCUT +48.92, 64.44'LT
BEGIN PGL LT STA. 101+49.53 12.00' LT
TIE TO EXIST. CURB & GUTTER +49.92, 64.44' LT, EL 17.41±
EXISTING TREES TO REMAIN. (SEE SIDEWALK DETAIL)
BOTTOM OF 14"X23" ERCP = 13.89
TOP OF 8" SS = 13.20±
CONST. TYPE D CURB TIE TO EXIST. ON-SITE CURB +32.66,54.82 LT, EL 17.60±
BOTTOM OF 19"X30" ERCP = 13.08
TOP OF 8" SS = 12.40±
BOTTOM OF 19"X30" ERCP = 13.06
TOP OF 18" FM = 12.40±
10' SWK ESMT.
30'X20' SWK ESMT.
20'X40' LICENSE AGREEMENT
TIE TO EXIST. CURB & GUTTER +30.97,11.18 LT, EL 16.02±
+21.82, 11.18' LT EL 16.10
CONST. TYPE D CURB TIE TO EXIST. ON-SITE CURB +56.68, 54.18 LT, EL 17.60±
CONST. TYPE F CURB & GUTTER
RELOCATE FH SEE DETAIL
MATCHLINE STA. 105+70.00
END PGL END OHIO AVE. IMPROVEMENTS STA. 105+30.98
CONST. 84 LF OF 24" RCP
TIE TO EXIST. ROADWAY +30.98, 11.12 RT, EL 15.94±
EXIST. CURB & GUTTER (TO REMAIN)
CONST. 71 LF OF 19"x30" ERCP
TIE TO EXIST. CURB & GUTTER +94.32, 11.96' RT EL 16.39±
+84.09, 15.51' RT EL 16.49
R/W LINE
+33.81, 34.12' LT EL 16.66
+29.89 11.62' LT
END PGL LT STA. 104+23.24
+90.03 12.00' LT
+76.67 34.50' LT EL 17.14
+12.67 34.50' LT EL 17.36
+79.92, 34.50' LT EL 17.63
+84.85 12.00' LT
+99.91 12.00' LT
+84.85 12.00' RT
+94.85 12.00' RT
+70.78 24.50' RT EL 17.77
+44.85 0.00' LT
+99.91 0.00' LT
+27.20 52.23' RT
+30.64, 25.40' RT EL 17.05
END PGL RT STA. 104+23.24
BEGIN PGL STA. 104+23.24
+60.74
SAWCUT
CONST. 57 LF OF 18" RCP
CONST. TYPE F CURB & GUTTER
CONST. 180 LF OF 18" RCP
CONST. 57 LF OF 14"X23" ERCP
CONST. TYPE B CURB
CONST. TYPE D CURB
CONST. 8' SWK
PROP. MONUMENT SIGN
PROP. D CURB REFER TO DETAIL
CONST. URBAN FLARED TURNOUT, REFER TO DETAIL, TYPICAL
PGL RT
PGL LT
R/W LINE
REFER TO MISC. DETAILS FOR SWK DETAILS (TYP.)
18" RCP
+06.97
+82.87
+42.02
S 89° 49' 55" E
S 89° 51' 14" E
N 0° 15' 23" W
N 0° 57' 51" W
R=20'
R 30'
R 20'
R 35'
R 50'
R 12'
R 6'
CR 45'
CR-C
CR-G
CR-L
S-100
S-101
S-102
S-103
S-104
0 10 40
Feet

S-102
STA. 104+24.44 LT
CONST. TYPE P-9 CURB INLET
INDEX NO. 200 & 214
EP EL = 16.69
AH EL = 13.40
RT EL = 13.80
BOTTOM EL = 11.40

S-103
STA. 104+23.18 RT
CONST. TYPE P-9 CURB INLET
INDEX NO. 200 & 214
EP EL = 17.13
RK EL = 13.55
LT EL = 14.20
BOTTOM EL = 11.55

S-100
STA. 102+40.00 LT
CONST. TYPE P-9 CURB INLET
INDEX NO. 200 & 214
EP EL = 17.17
RT INV = 13.95
BOTTOM EL = 11.95

S-101
STA. 102+40.00 RT
CONST. TYPE P-9 CURB INLET
INDEX NO. 200 & 214
EP EL = 17.61
AH EL = 13.85
LT EL = 13.85
BOTTOM EL = 11.85

S-104
STA. 104+92.07, 26.63' RT
CONST. TYPE P-8 MANHOLE
INDEX NO. 200 & 201
RIM EL = 17.15
AH EL = 12.80
LT EL = 13.30
BOTTOM EL = 10.80

30' RT/LT CROSS-SLOPE TRANSITION
US-1(SR 5) EXIST. GROUND
60' LT CROSS-SLOPE TRANSITION
50' RT CROSS-SLOPE TRANSITION
105' V.C.
50' V.C.
EXIST. GRADE AT ℄ CONST.
PGL RT
PGL LT
EX. MH
18" RCP
14"X23" ERCP
EX. 8" VCP SS.
19"x30" ERCP
EX. 18" DIP FM
EX. 8" VCP SS.
24" RCP
END PGL RT BEGIN PGL STA 104+23.24 EL 17.38
END PGL LT STA 104+23.24 EL 17.14
END PGL STA 105+30.98 EL 16.09±, TIE TO EX. RDWY.
BEGIN PGL RT STA 101+49.53 EL 17.68±
BEGIN PGL LT STA 101+49.53 EL 17.65±
(+) 0.600%
(+) 0.461%
0.000%
(-) 0.283%
(+) 0.300%
(-) 1.007%
(-) 0.270%
(-) 1.700%
(-) 1.549%
PI +79.92 EL. 17.79
PI +19.92 EL. 17.62
PI +40.00 EL. 17.86
PI +44.81 EL. 18.17
PI +44.81 EL. 17.93
PI +97.31
PI +60.00 EL. 17.28
PI +20.00 EL. 16.26
+54.92 EL. 17.67 LT
+04.92 EL. 17.72 LT
+49.53 e=EXIST
+79.92 e=-0.005 RT
+79.92 e=-0.005 LT
+79.92 EL. 17.86 RT
+79.92 EL. 17.79 LT
+19.92 e=-0.02
+40.00 e=-0.02
+92.31
+97.31
+40.00
18.02 RT
18.04 RT
18.05 RT
18.05 RT
18.04 RT
18.02 RT
17.97 RT
17.93 RT
17.86 RT
17.80 RT
17.69 RT
17.65 RT
17.70 LT 17.67 LT
17.73 LT 17.70 LT
17.74 LT 17.73 LT
17.74 LT 17.74 LT
17.73 LT 17.72 LT
17.78 LT 17.73 LT
17.80 LT 17.69 LT
17.81 LT 17.62 LT
17.80 LT 17.56 LT
17.78 LT 17.45 LT
17.73 LT 17.41 LT
18.65
17.70
17.85
18.06
17.92
17.85
17.47
17.04
16.47
15.87
17.65 LT 17.68 RT
17.73 LT 17.86 RT
17.65 LT 17.89 RT
17.80 LT 18.04 RT
17.74 LT 17.98 RT
17.38 LT 17.62 RT
17.31
16.60
102+00
103+00
104+00
105+00
SCALE: 1" = 40' HORIZ.
1" = 2' VERT.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
2/20/18	EJK	1. PER KHA CLAIRIFICATION			

Kimley»Horn
BRIAN A. GOOD, P.E.
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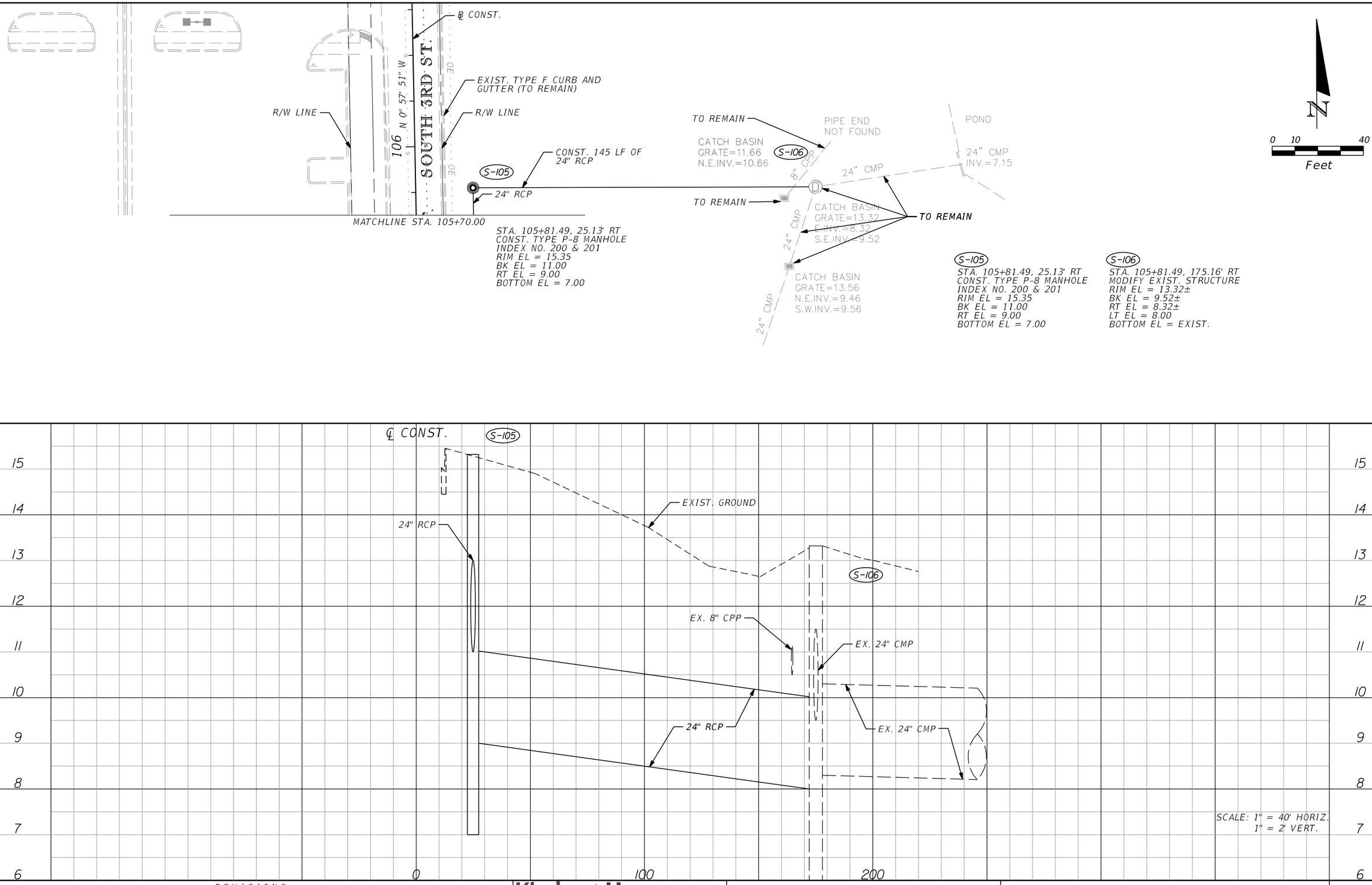
CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

PLAN & PROFILE

SHEET NO. 7

Mike.Forman 3/22/2018 7:38:15 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLPRRD02.dgn



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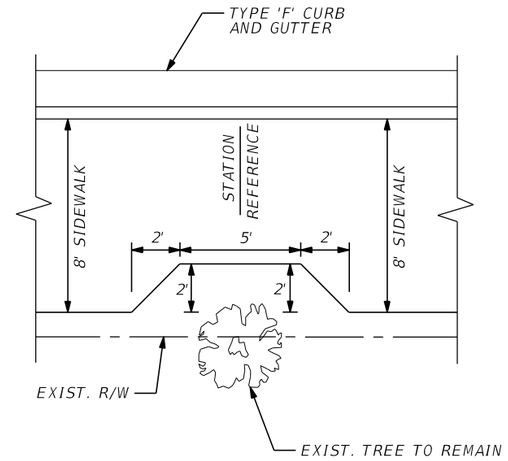
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

PLAN & PROFILE

SHEET NO. 8

Mike.Forman 3/22/2018 7:38:16 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLPRRD03.dgn



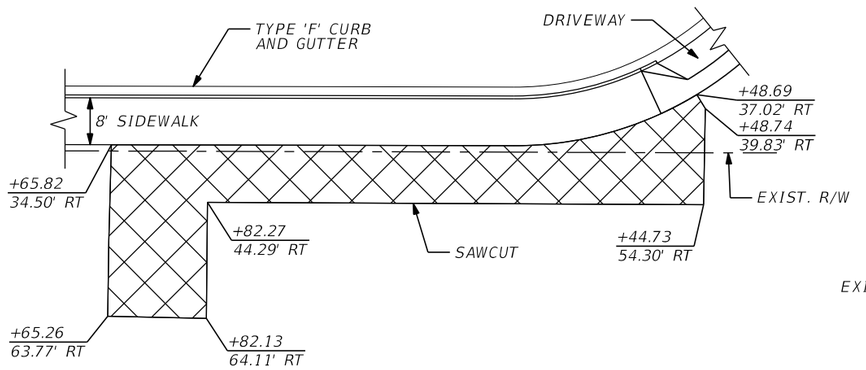
NOTE:

1. CENTERLINE STATION REFERENCE:

   102+26.55, RT
   102+67.08, RT
   103+00.19, RT

A EXIST. TREE DETAIL

N.T.S.

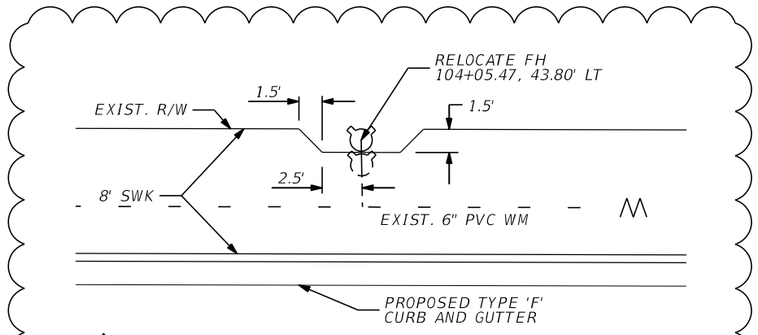


PAVEMENT REMOVAL DETAIL

N.T.S.

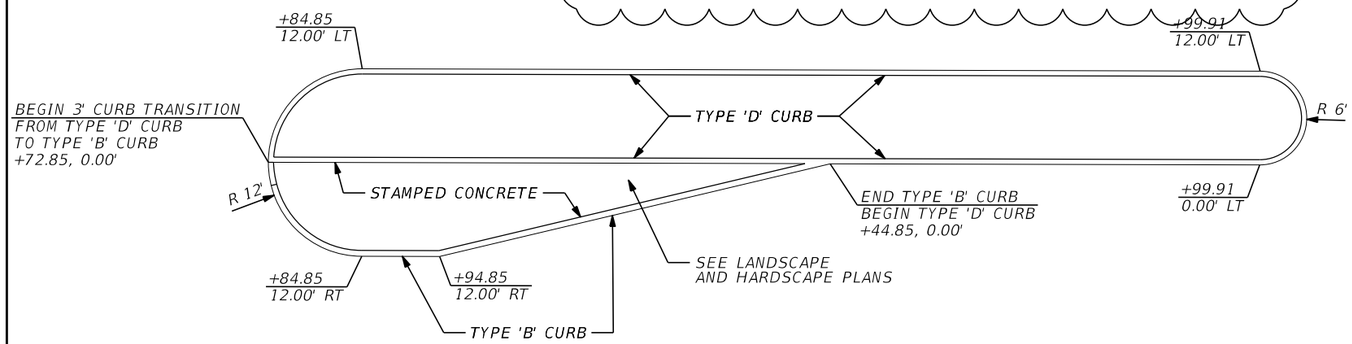
NOTES:

1. THE CONTRACTOR SHALL REMOVE THE EXISTING PAVEMENT TO A DEPTH OF 12" AND BACKFILL WITH TOPSOIL.



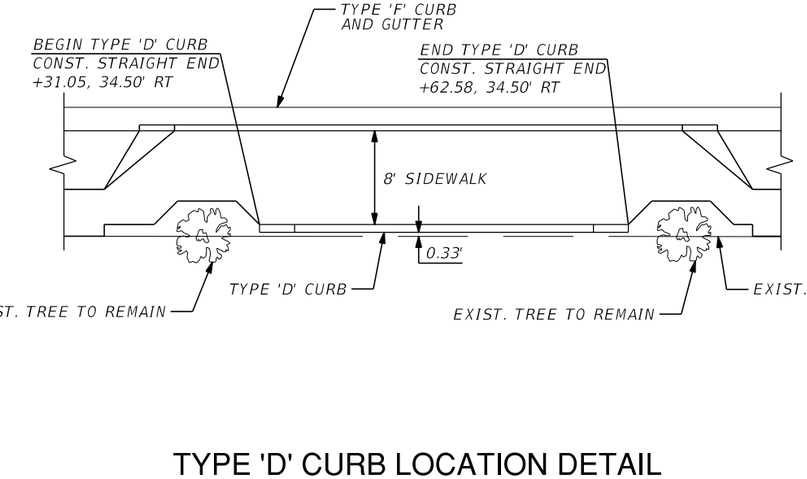
FH RELOCATION DETAIL

N.T.S.



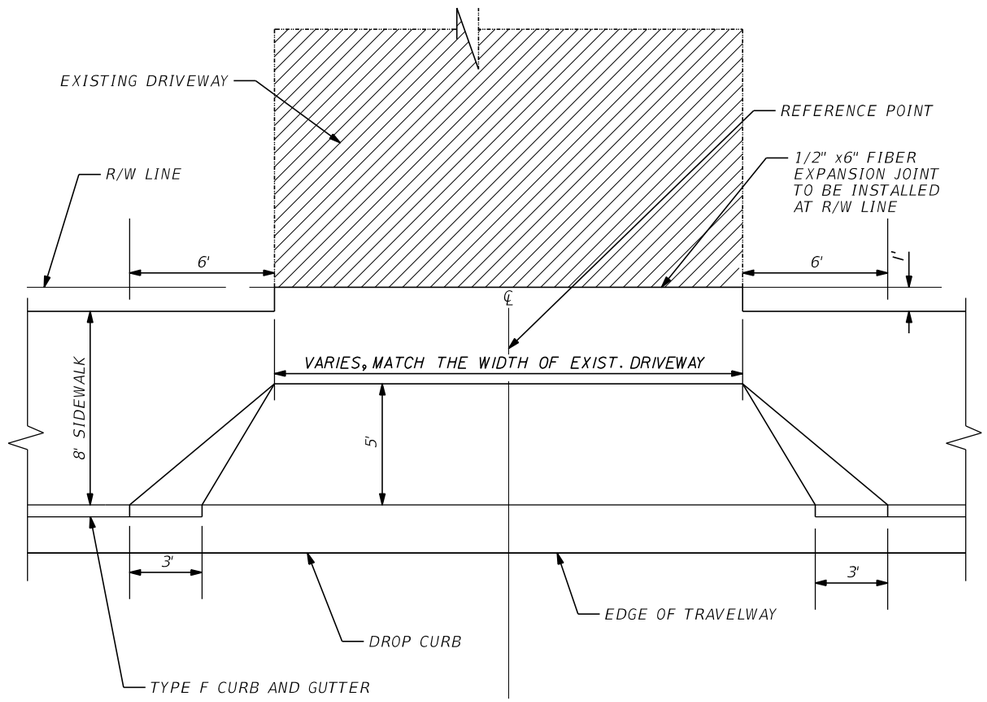
B MEDIAN DETAIL

N.T.S.



TYPE 'D' CURB LOCATION DETAIL

N.T.S.



URBAN FLARED TURNOUT DETAIL

N.T.S.

NOTES:

1. SURFACE SPECIFICATIONS:
   A. CONCRETE DRIVEWAY EXTENDING INTO RIGHT-OF-WAY OR PUBLIC EASEMENT SHALL BE A MINIMUM OF 6" THICK, 3000 P.S.I. CONCRETE INCORPORATING A FLARE AS SHOWN IN THE PLAN VIEW. REINFORCE CONCRETE WITH FIBER MESH @ 1.0 LB/CY. SUBGRADE SHALL BE 12" SAND OR OTHER APPROVED MATERIAL COMPACTED TO 98% AASHTO T-180 MAXIMUM DENSITY.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
2/20/18	EJK	1. PER KHA CLARIFICATION			

Kimley»Horn
BRIAN A. GOOD, P.E.
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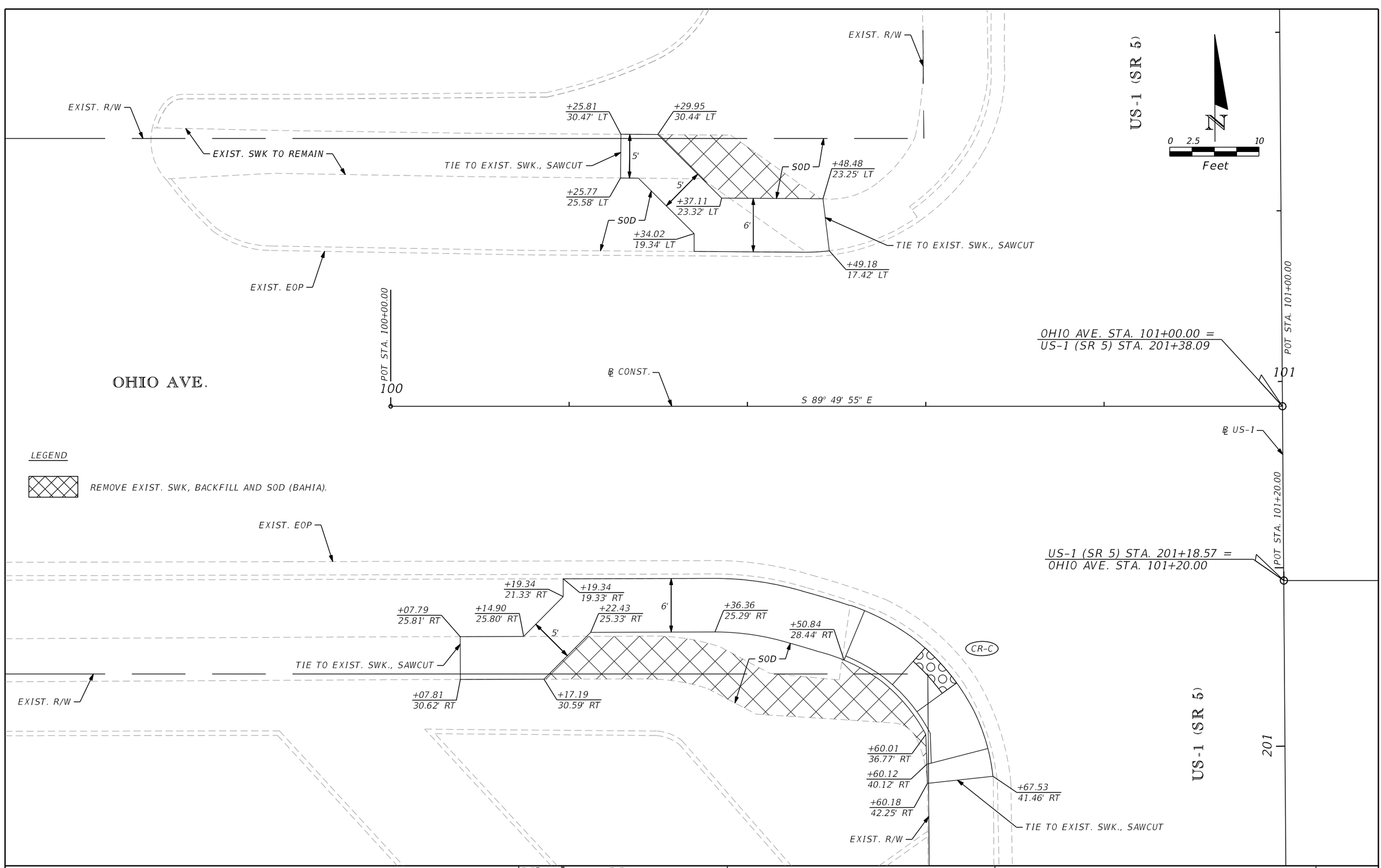
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

MISCELLANEOUS DETAILS

SHEET NO. 9



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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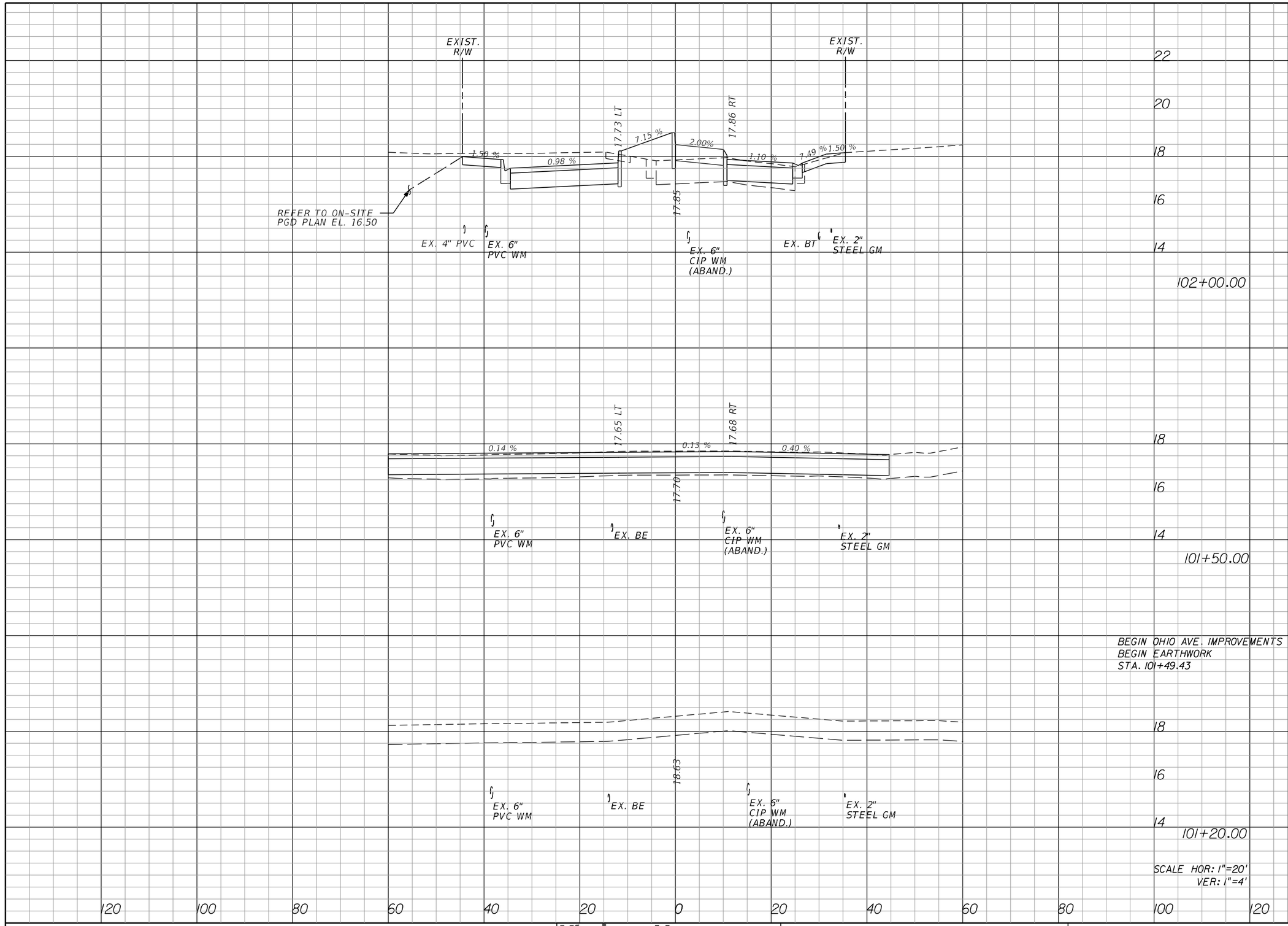
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

MISCELLANEOUS DETAILS

SHEET NO. 10

Mike.Forman 3/22/2018 7:38:17 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\SPDTRD02.DGN



Regular Exc.		Embankment	
A	V	A	V
51	121	11	10
80	2	0	0
80	0	0	0

BEGIN OHIO AVE. IMPROVEMENTS
BEGIN EARTHWORK
STA. 101+49.43

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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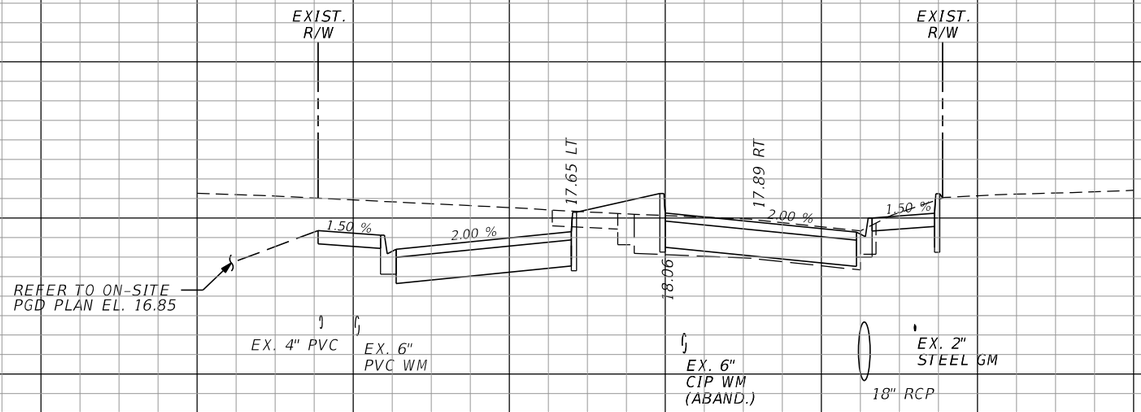
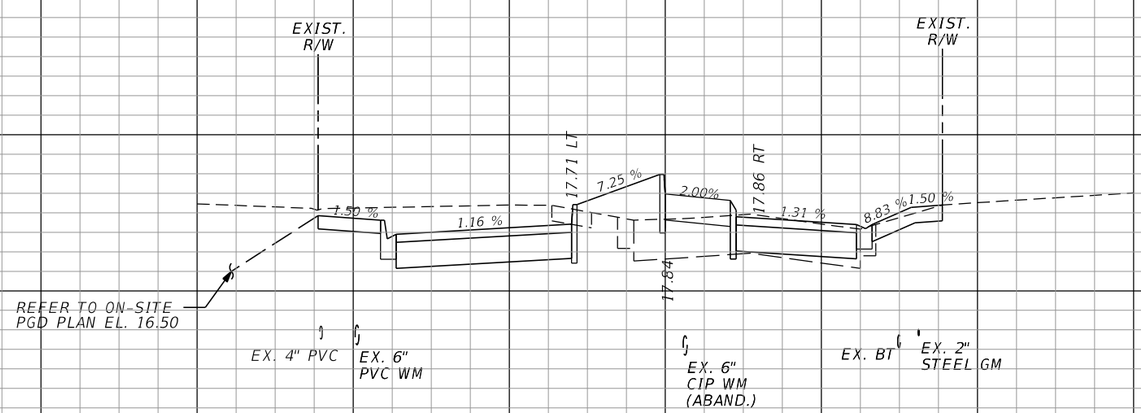
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 11





Regular Exc.		Embankment	
A	V	A	V
83	III	3	10
56	14	3	10

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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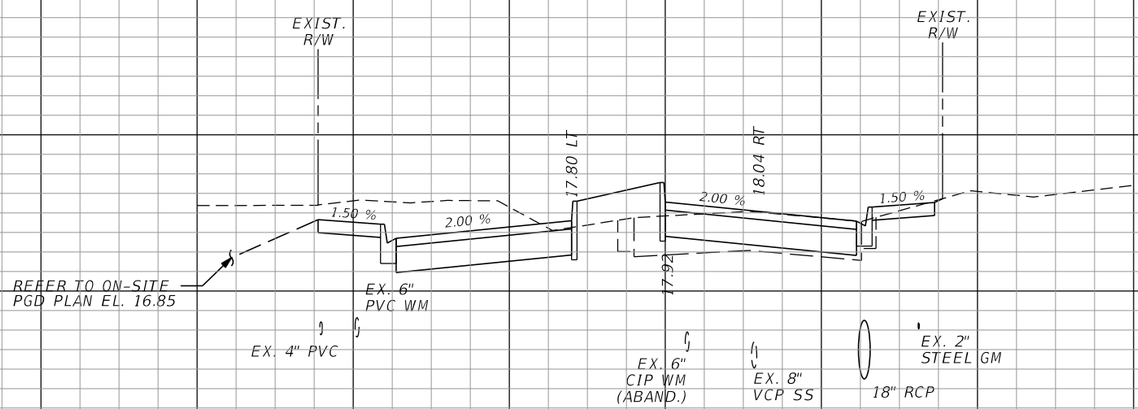
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

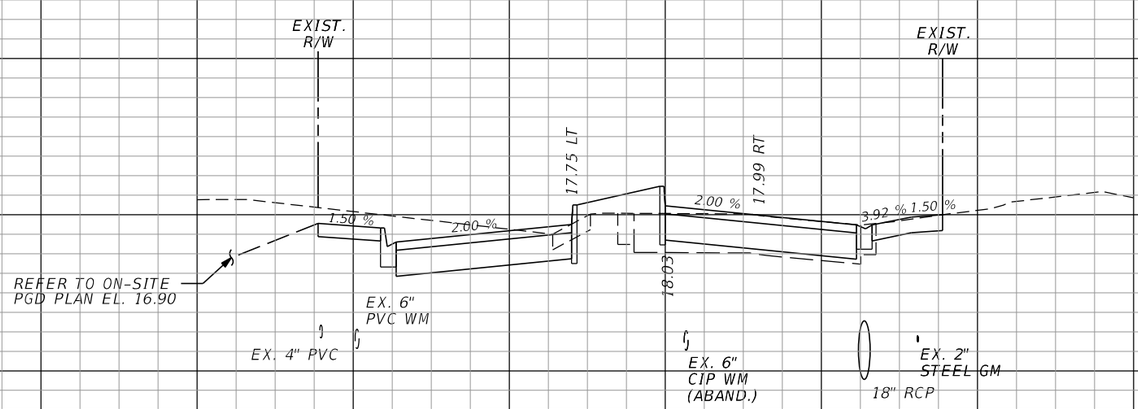
OHIO AVENUE CROSS SECTIONS

SHEET NO. 12

Mike.Forman 3/22/2018 7:38:18 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\RDXSRD01.DGN



103+00.00



102+82.87

120 100 80 60 40 20 0 20 40 60 80 100 120

SCALE HOR: 1"=20'
VER: 1"=4'

Regular Exc.		Embankment	
A	V	A	V
66	40	8	4
59	86	5	5

REVISIONS

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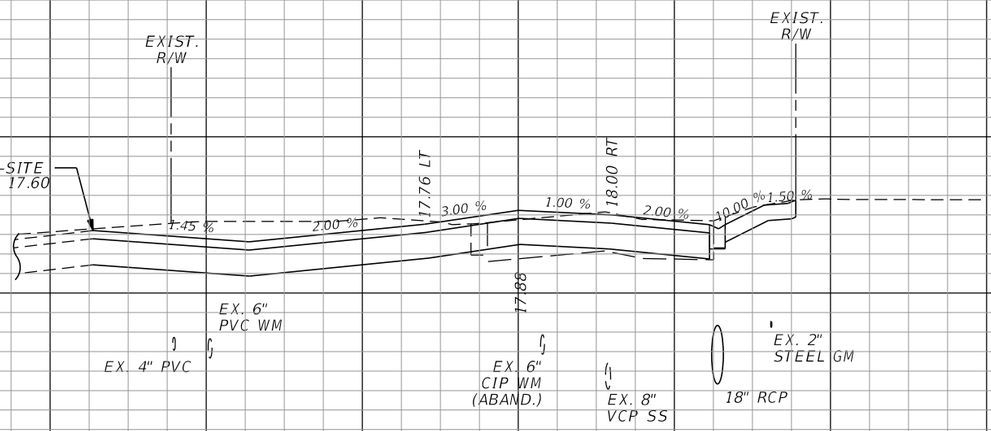
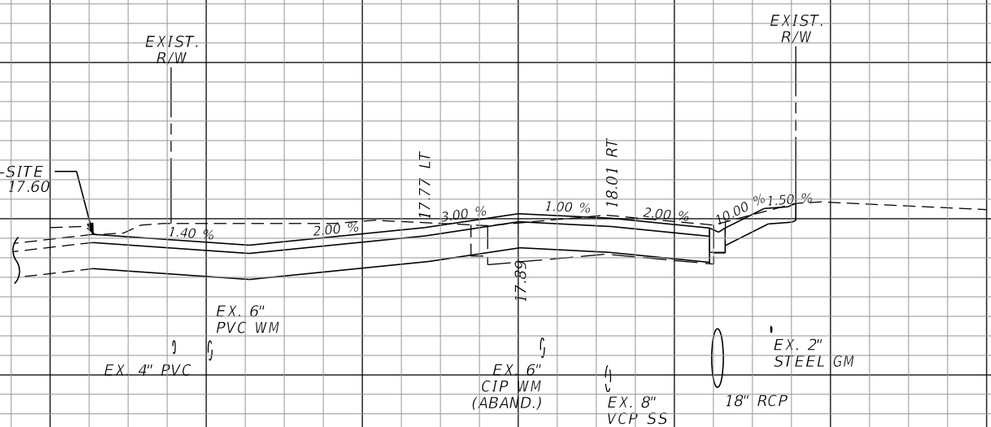
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 13





Regular Exc.		Embankment	
A	V	A	V
74	8	0	0
93	124	0	6

SCALE HOR: 1"=20'
VER: 1"=4'

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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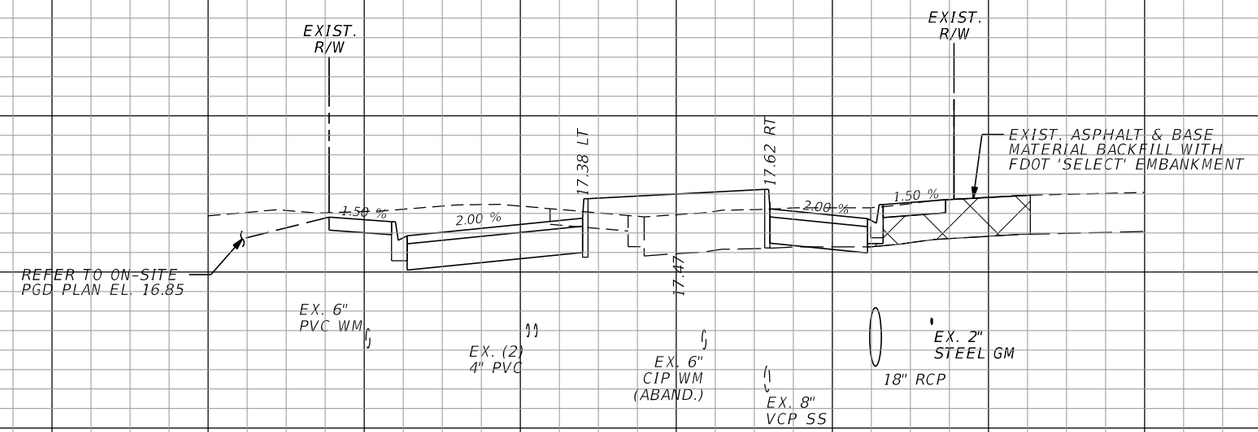
CITY OF FORT PIERCE

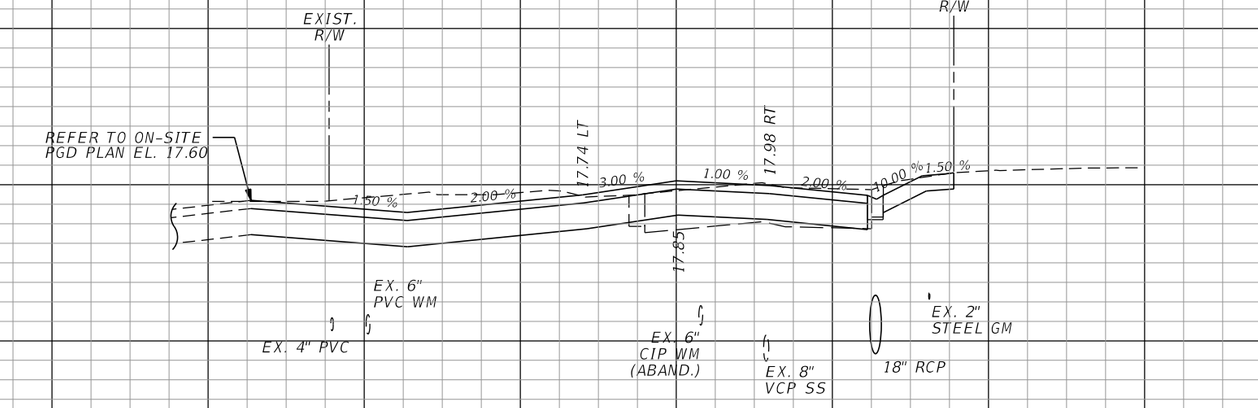
OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 14



104+00.00



103+50.00

SCALE HOR: 1"=20'
VER: 1"=4'

120 100 80 60 40 20 0 20 40 60 80 100 120

Regular Exc.		Embankment	
A	V	A	V
57	131	11	10
84	16	0	0

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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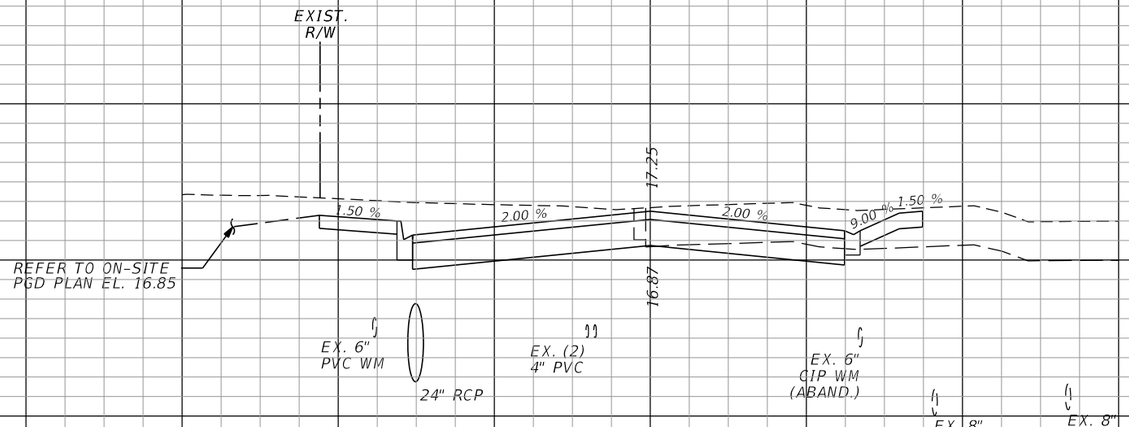
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

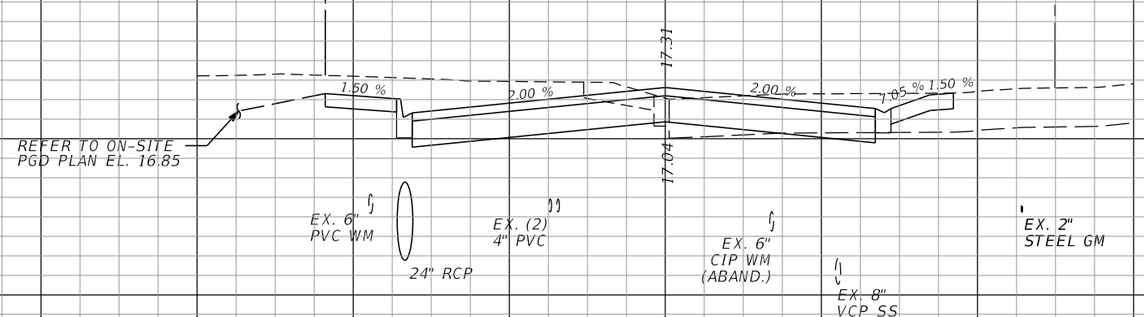
OHIO AVENUE CROSS SECTIONS

SHEET NO. 15

Mike.Forman 3/22/2018 7:38:19 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\RDXSRD01.DGN



104+61.56



104+50.00

SCALE HOR: 1"=20'
VER: 1"=4'

120 100 80 60 40 20 0 20 40 60 80 100 120

Regular Exc.		Embankment	
A	V	A	V
95	36	0	0
74	121	0	10

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

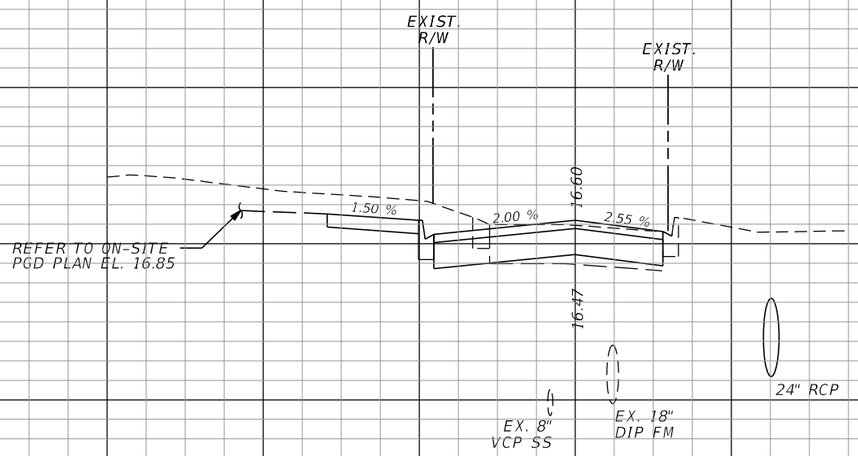
SHEET NO. 16

Mike.Forman 3/22/2018 7:38:19 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\RDXSRD01.DGN

EARTHWORK SUMMARY

REGULAR EXCAVATION = 955 CY

EMBANKMENT = 39 CY



Regular Exc.		Embankment	
A	V	A	V
42	48	0	0
42	98	0	0

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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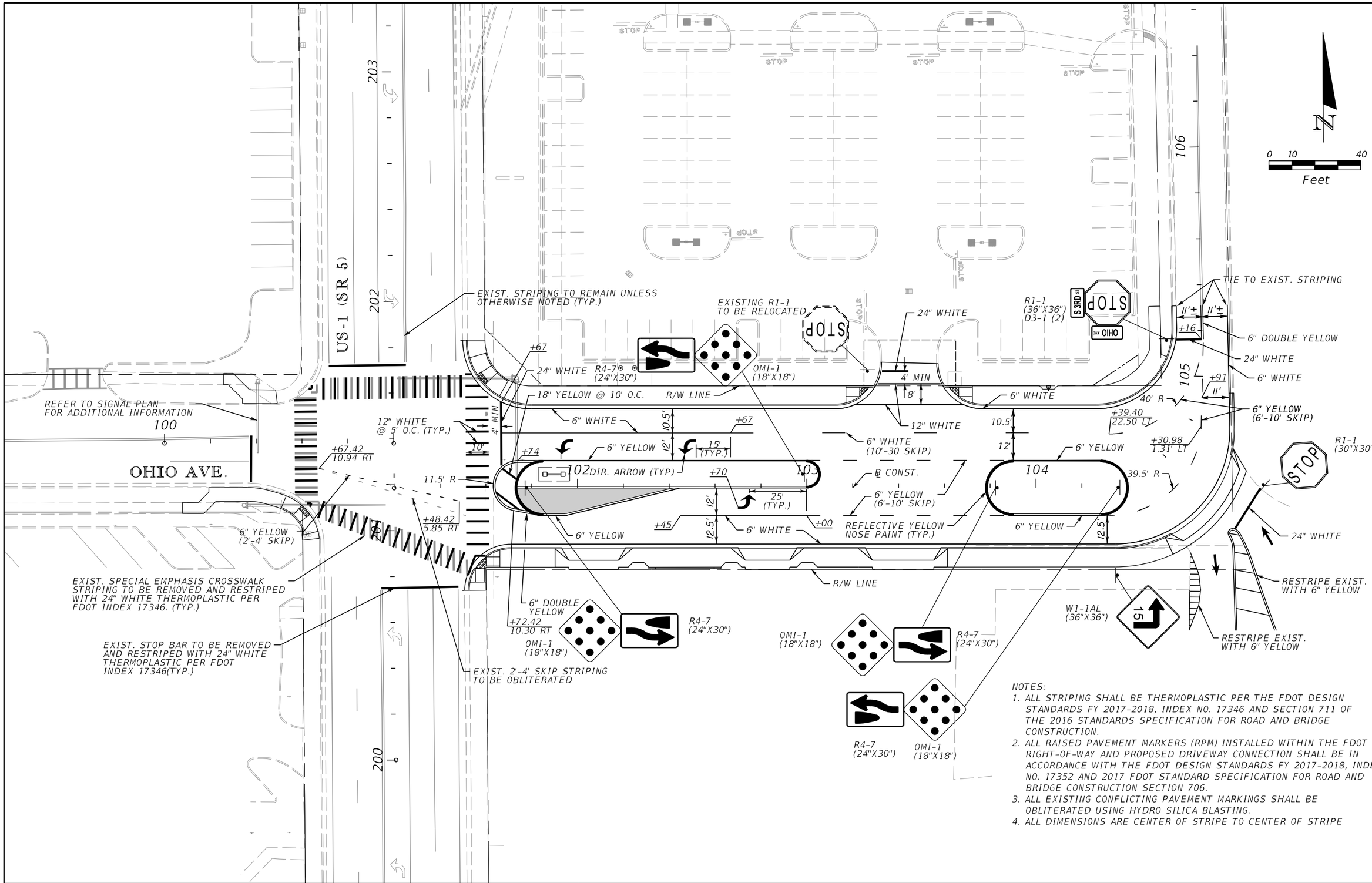
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 17



NOTES:

1. ALL STRIPING SHALL BE THERMOPLASTIC PER THE FDOT DESIGN STANDARDS FY 2017-2018, INDEX NO. 17346 AND SECTION 711 OF THE 2016 STANDARDS SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.
2. ALL RAISED PAVEMENT MARKERS (RPM) INSTALLED WITHIN THE FDOT RIGHT-OF-WAY AND PROPOSED DRIVEWAY CONNECTION SHALL BE IN ACCORDANCE WITH THE FDOT DESIGN STANDARDS FY 2017-2018, INDEX NO. 17352 AND 2017 FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION SECTION 706.
3. ALL EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE OBLITERATED USING HYDRO SILICA BLASTING.
4. ALL DIMENSIONS ARE CENTER OF STRIPE TO CENTER OF STRIPE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SIGNING & MARKING

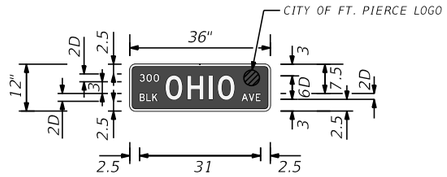
SHEET NO.
18

Mike.Forman 3/22/2018 7:38:22 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_SIGNING\PLANSP01.dgn

SIGN NAME	OHIO	QTY	1	SIGN NO.	STATION(S)
PANEL		BORDER			none
WIDTH	36"	WIDTH	0.5"		
HEIGHT	12"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE		AVERAGE LENGTH



BORDER
R=1.5"
TH=0.5"

Panel Style: CFP.ssi
M.U.T.C.D.: 2009 Edition

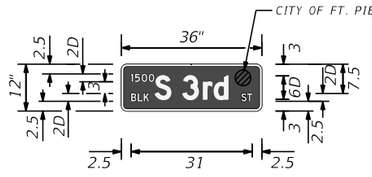
NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY	3	0	0		L																		
SPACE	2.5	4.26	6.08		5																		
COPY	B	L	K		L																		
SPACE	2.5	4.2	5.74		4.64																		
COPY	0	H	I	0		L																		
SPACE	9.18	14.76	20.28	22.56		17.64																		
COPY	A	V	E		L																			
SPACE	28.62	30.44	32.26		4.88																			
COPY																								
SPACE																								
COPY																								
SPACE																								

SIGN NAME	S3RD	QTY	1	SIGN NO.	STATION(S)
PANEL		BORDER			none
WIDTH	36"	WIDTH	0.5"		
HEIGHT	12"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE		AVERAGE LENGTH



BORDER
R=1.5"
TH=0.5"

Panel Style: CFP.ssi
M.U.T.C.D.: 2009 Edition

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY	1	5	0	0		L																	
SPACE	2.5	3.44	5.2	7.02		5.94																	
COPY	B	L	K		L																		
SPACE	2.5	4.2	5.74		4.64																		
COPY	S		3	r	d		L																
SPACE	8.64	12.72	15.72	21	23.76		18.72																
COPY	S	T		L																			
SPACE	30.74	32.26		2.76																			
COPY																							
SPACE																							
COPY																							
SPACE																							

SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE		AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY																							
SPACE																							
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COPY																							
SPACE																							

SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE		AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY																							
SPACE																							
COPY																							
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COPY																							
SPACE																							
COPY																							
SPACE																							

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

GUIDE SIGN DETAIL SHEET

SHEET NO.
18A

LANDSCAPE NOTES

1. ALL LANDSCAPED AREAS ARE TO RECEIVE A MINIMUM OF 12" OF TOPSOIL.

2. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE
.

3. ALL PLANT MATERIAL SHALL BE CONTAINER GROWN OR BALLED AND BUR LAPPED AS INDICATED IN THE PLANT LIST.

4. ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD AND MEET ALL REQUIREMENTS SPECIFIED.

5. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.

6. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.

7. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.

8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT ALL OF ALL OF THE UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY TO MAINTAIN HEALTHY PLANT CONDITIONS.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS UNTIL FINAL ACCEPTANCE

12. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.

13. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR WARRANTY PERIOD. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING NORMAL PLANTING SEASON.

14. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.

15. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.

16. WHERE SHOWN ON THE PLANS AND DETAILS, PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH HARDWOOD MULCH FROM A LOCAL SOURCE HARVESTED IN A SUSTAINABLE MANNER TO A MINIMUM DEPTH OF THREE (3) INCHES.

17. ALL PLANT MATERIAL QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN.

18. ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES, AND SHALL BE FLORIDA NO.1 OR BETTER AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I AND II," STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.

19. ALL INVASIVE/EXOTIC SPECIES AND PROHIBITED TREE SPECIES AND PROHIBITED TREE SPECIES SHALL BE REMOVED FROM SITE, INCLUDING ROOT BALLS TO THE EXTENT POSSIBLE WITH NO DAMAGE TO ADJACENT EXISTING TREES.

20. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE PROJECT SPECIFICATIONS PRIOR TO BIDDING.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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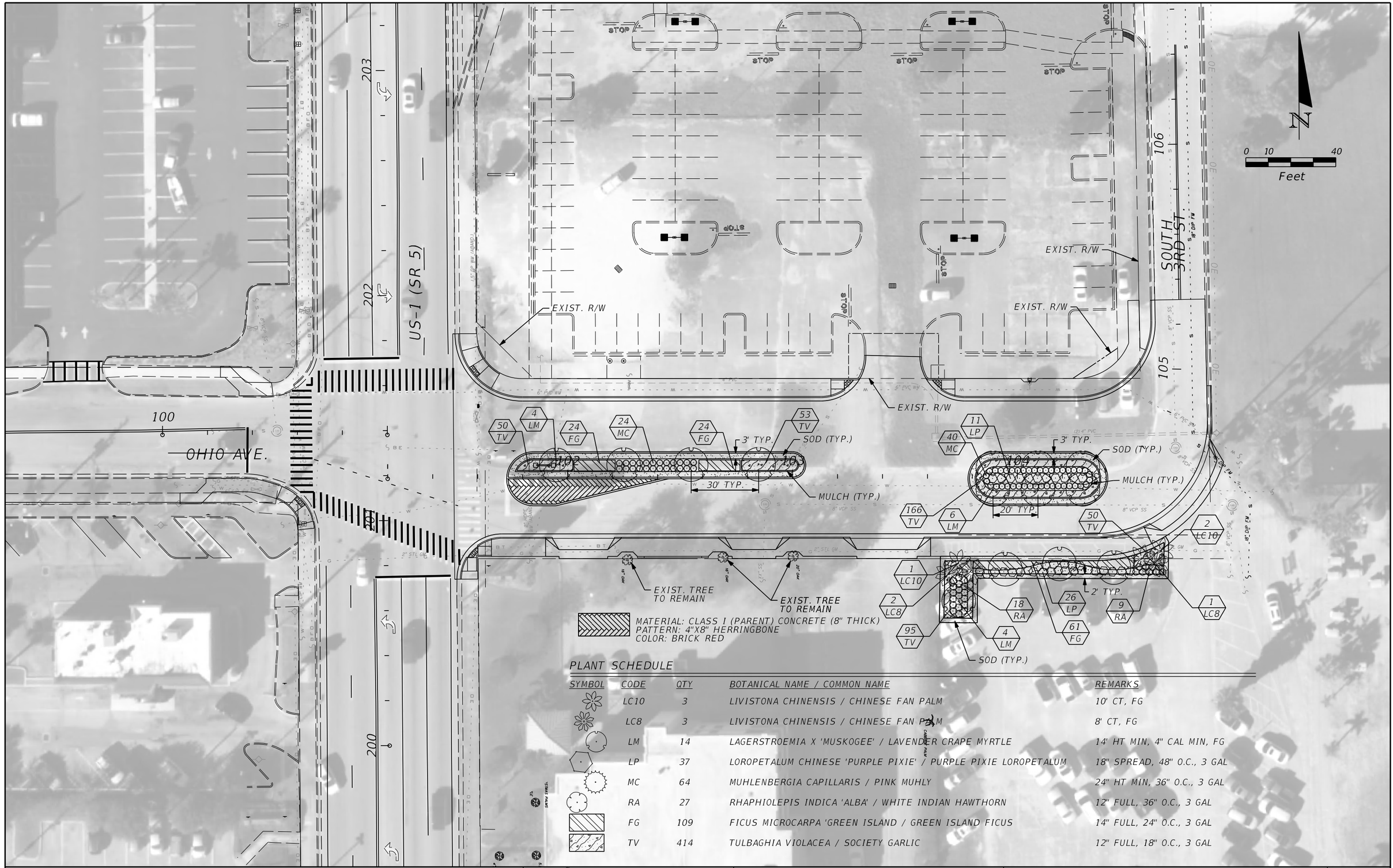
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

LANDSCAPE
GENERAL NOTES

SHEET NO.
19



PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME / COMMON NAME	REMARKS
	LC10	3	LIVISTONA CHINENSIS / CHINESE FAN PALM	10' CT, FG
	LC8	3	LIVISTONA CHINENSIS / CHINESE FAN PALM	8' CT, FG
	LM	14	LAGERSTROEMIA X 'MUSKOGEE' / LAVENDER CRAPE MYRTLE	14' HT MIN, 4" CAL MIN, FG
	LP	37	LOROPETALUM CHINESE 'PURPLE PIXIE' / PURPLE PIXIE LOROPETALUM	18" SPREAD, 48" O.C., 3 GAL
	MC	64	MUHLENBERGIA CAPILLARIS / PINK MUHLY	24" HT MIN, 36" O.C., 3 GAL
	RA	27	RHAPHIOLEPIS INDICA 'ALBA' / WHITE INDIAN HAWTHORN	12" FULL, 36" O.C., 3 GAL
	FG	109	FICUS MICROCARPA 'GREEN ISLAND / GREEN ISLAND FICUS	14" FULL, 24" O.C., 3 GAL
	TV	414	TULBAGHIA VIOLACEA / SOCIETY GARLIC	12" FULL, 18" O.C., 3 GAL

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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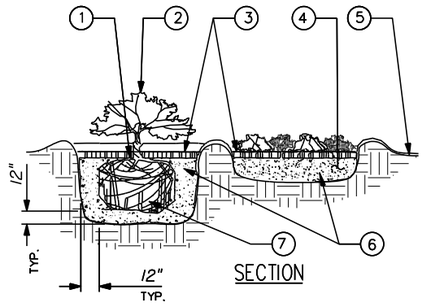
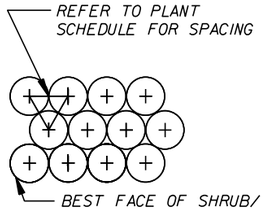
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

LANDSCAPE & HARDSCAPE

SHEET NO. 20

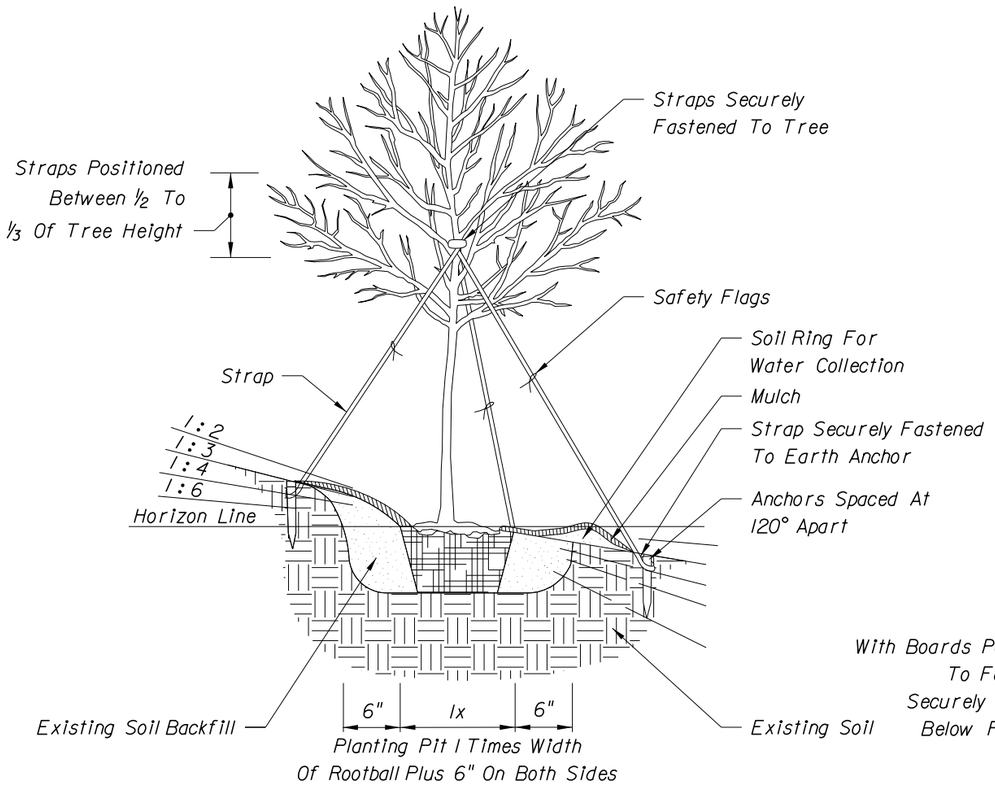




A SHRUB/GROUND COVER PLANTING DETAIL

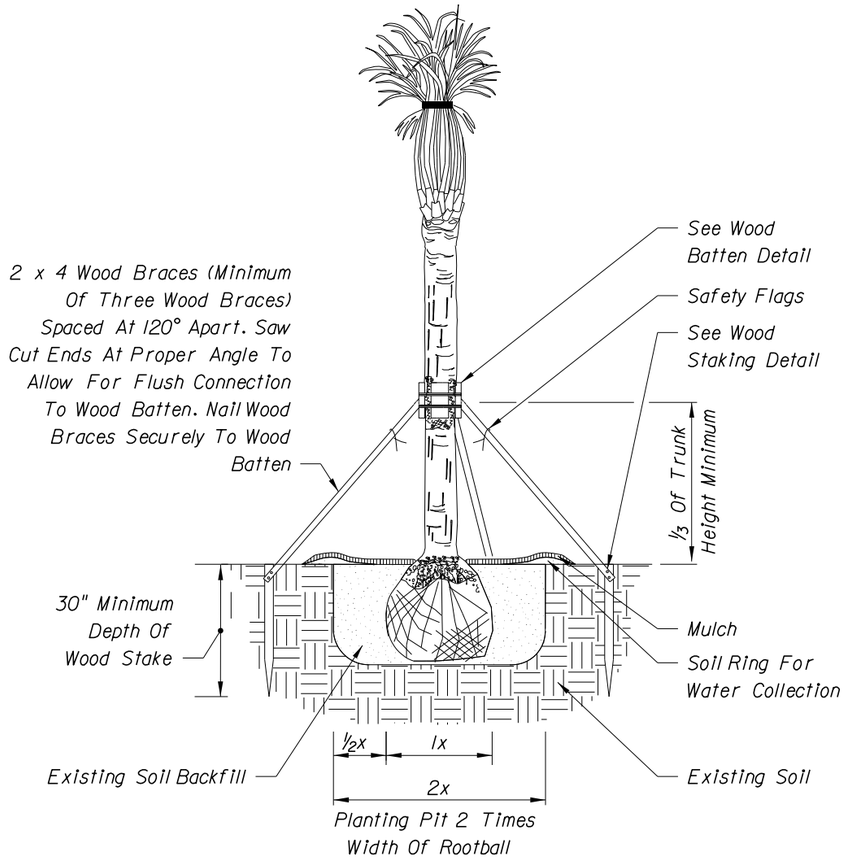
NTS

1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. WHEN USED IN MASSES- PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT
3. 4" MINIMUM OF MULCH COMPACTED OR AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND- COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY ROOTBALL SIDES AND BOTTOM.
8. ROOTBALLS GREATER THAN 4" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING ROOTBALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.



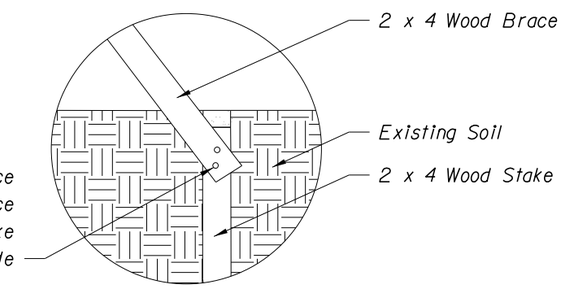
NOTE: Slope Provided As Rise:Run.

4" AND LARGER CALIPER TREE PLANTING ON SLOPE



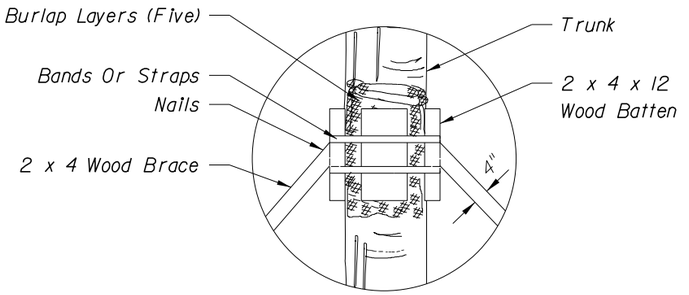
NOTE: For All Other Palms, Use Detail Provided By Landscape Architect In Contract Plans.

CABBAGE PALM PLANTING FOR UP TO 24' CLEAR TRUNK



NOTE: Stake Into Firm, Existing Soil.

WOOD STAKING DETAIL



WOOD BATTEN DETAIL

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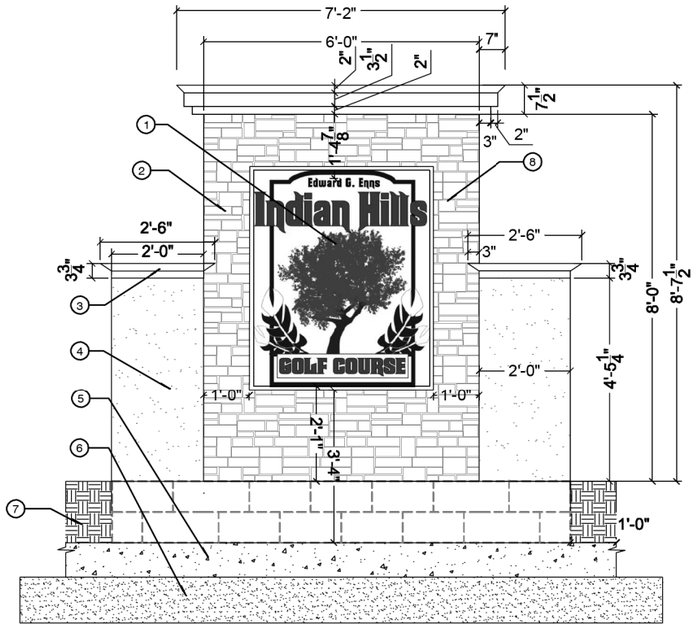
CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

LANDSCAPE DETAILS

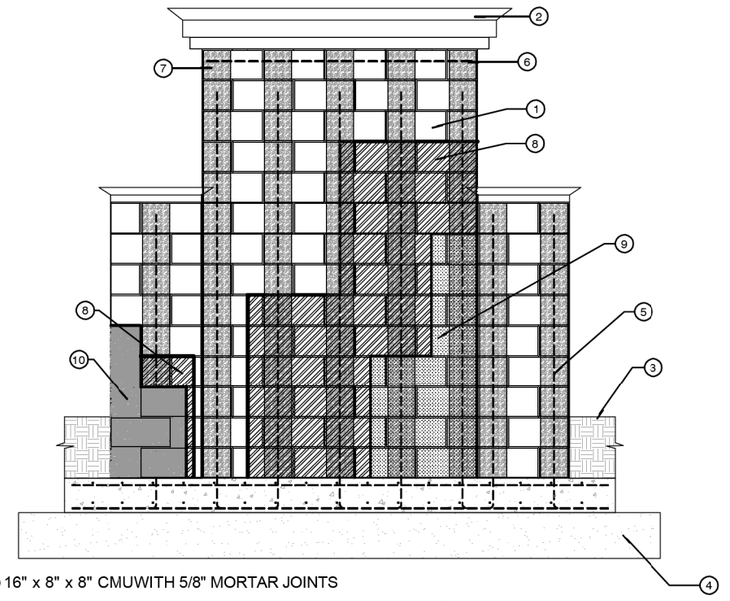
SHEET NO. 21

Mike.Forman 3/22/2018 7:38:42 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\SPDTLD01.DGN



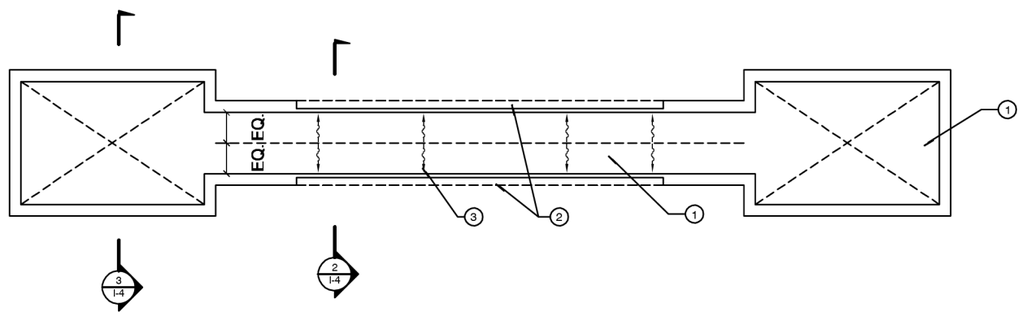
① SIGNAGE TO BE ACRYLIC AND RATED FOR OUTDOOR USE
② WALL FINISH TO BE 1-1/2" CORAL VENEER, SAND COLOR BY J&N STONE (863.422.7369) WWW.JNSTONE.COM
③ COLUMN TO BE CAST IN PLACE (SEE DETAIL X)
④ COLUMN TO BE ROUGH STUCCO FINISH, COLOR SW-7004 "SNOWBOUND"
⑤ CAST IN PLACE CONCRETE FOOTER
⑥ 98% AASHTO T99 COMPACTED SUBGRADE
⑦ FINISHED GRADE
⑧ 1" RECESSED AREA FOR SIGNAGE

1 MONUMENT SIGN FINISHES
NTS



① 16" x 8" x 8" CMUWITH 5/8" MORTAR JOINTS
② 4" THICK, CAST-IN-PLACE PORTLAND CEMENT CONCRETE CAP
③ FINISHED GRADE
④ CAST IN PLACE CONCRETE FOOTER
⑤ #4 REBAR
⑥ #5 REBAR
⑦ BOND BEAM
⑧ CEMENT PLASTER BASE COAT (3/8" - 5/8")
⑨ WALL FINISH TO BE 1-1/2" CORAL VENEER, SAND COLOR BY J&N STONE (863.422.7369) WWW.JNSTONE.COM
⑩ COLUMN TO BE ROUGH STUCCO FINISH, COLOR SW-7004 "SNOWBOUND"

2 MONUMENT SIGN STRUCTURAL
NTS



① 4" THICK, CAST IN PLACE CONCRETE CAP, SMOOTH FINISH, COLOR TO BE SW 7016 "MINDFUL GRAY"
② SIGNAGE TO BE ACRYLIC AND RATED FOR OUTDOOR USE
③ SLOPE FOR DRAINAGE

3 MONUMENT SIGN WALL CAP
NTS

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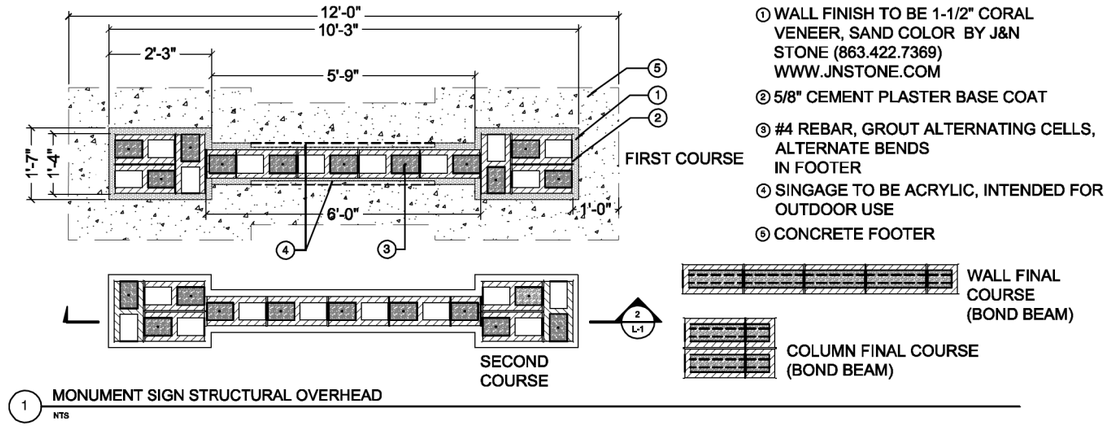
CITY OF FORT PIERCE
OHIO AVENUE
ROADWAY IMPROVEMENTS

MONUMENT DETAILS

SHEET NO.
21A



① WALL FINISH TO BE 1-1/2" CORAL VENEER, SAND COLOR BY J&N STONE (863.422.7369) WWW.JNSTONE.COM

② 5/8" CEMENT PLASTER BASE COAT

③ #4 REBAR, GROUT ALTERNATING CELLS, ALTERNATE BENDS IN FOOTER

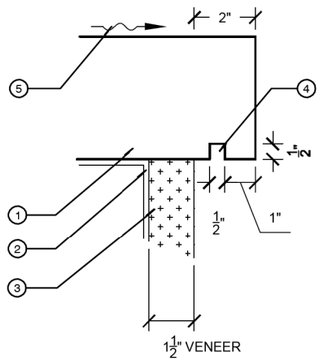
④ SINGAGE TO BE ACRYLIC, INTENDED FOR OUTDOOR USE

⑤ CONCRETE FOOTER

WALL FINAL COURSE (BOND BEAM)

COLUMN FINAL COURSE (BOND BEAM)

1 MONUMENT SIGN STRUCTURAL OVERHEAD
NTS



① CAST IN PLACE CONCRETE CAP

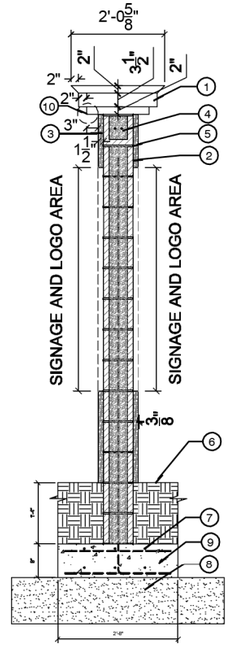
② 5/8" CEMENT PLASTER BASE COAT

③ COLUMN TO BE ROUGH STUCCO FINISH, COLOR SW-7004 "SNOWBOUND"

④ DRIP EDGE

⑤ DRAINAGE AWAY FROM STRUCTURE

4 DRIP EDGE DETAIL
NTS



① CAST IN PLACE CONCRETE WALL CAP

② CEMENT PLASTER BASE COAT (3/8" TO 5/8")

③ WALL FINISH TO BE 1-1/2" CORAL VENEER, SAND COLOR BY J&N STONE (868.422.7369) WWW.JNSTONEVENEER.COM

④ BOND BEAM WITH HORIZONTAL #5 REBAR

⑤ HORIZONTAL JOINT REINFORCEMENT WITH EYE AND PINTLE WALL TIES AT 16" O.C. (TYP.)

⑥ FINISHED GRADE

⑦ #4 REBAR

⑧ 98% AASHTO T99 COMPACTED SUBGRADE

⑨ POURED IN PLACE CONCRETE FOOTER

⑩ (3) L-2

2 WALL CROSS SECTION
NTS

① CAST IN PLACE CONCRETE WALL CAP

② CEMENT PLASTER BASE COAT (3/8" TO 5/8")

③ COLUMN TO BE ROUGH STUCCO FINISH, COLOR SW-7004 "SNOWBOUND"

④ BOND BEAM WITH HORIZONTAL #5 REBAR

⑤ HORIZONTAL JOINT REINFORCEMENT WITH EYE AND PINTLE WALL TIES AT 16" O.C. (TYP.)

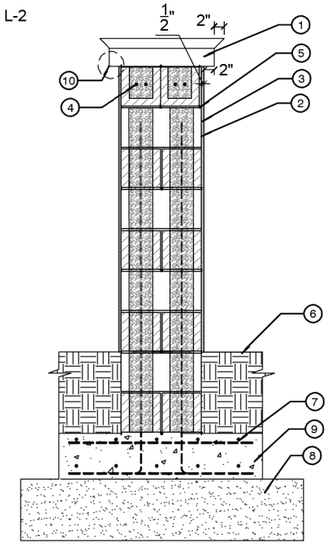
⑥ FINISHED GRADE

⑦ #4 REBAR

⑧ 98% AASHTO T99 COMPACTED SUBGRADE

⑨ POURED IN PLACE CONCRETE FOOTER

⑩ (3) L-2



3 COLUMN CROSS SECTION
NTS

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

MONUMENT DETAILS

SHEET NO.
21B

Mike.Forman 3/22/2018 7:39:02 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\SPDTLD03.DGN

IRRIGATION SYSTEM NOTES:

1. THE IRRIGATION MAINLINE LAYOUT IS DIAGRAMMATIC. ANY CHANGES MADE IN THE IRRIGATION MAINLINE DUE TO FIELD CONDITIONS OR CONTRACTOR'S SUBMITTED DESIGN SHALL BE IN ACCORDANCE WITH THESE STANDARDS.

2. SET SPRAY HEADS 6" AND ROTORS 12" IN FROM BACK OF CURB OR 24" IF PAVEMENT HAS NO CURB.

3. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL NECESSARY MODIFICATIONS REQUIRED TO MEET THE SCHEMATIC INTENT OF THESE PLANS PRIOR TO SUBMITTING PROPOSAL. THESE PLANS OUTLINE THE OVERALL LAYOUT THE SYSTEM AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ZONE THE SYSTEM ACCORDINGLY BASED ON FLOW AND PRESSURE AVAILABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FOLLOWING BUT NOT LIMITED TO AVAILABLE FLOW, AVAILABLE PRESSURE, CONNECTION ASSEMBLY, CAPACITY OF THE SYSTEM.

4. IRRIGATION SHALL NOT BE COMBINED ON A SINGLE ZONE AND SHALL BE ZONED ACCORDING TO IRRIGATION TYPE, PRECIPITATION RATE, AND THE SYSTEM'S AVAILABLE WATER / PRESSURE. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO OWNER FOR REVIEW PRIOR TO INSTALLATION.

5. VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL FIELD VERIFY.

6. CONTRACTOR TO FIELD VERIFY ALL POINT OF CONNECTION SOURCE INFORMATION INCLUDING PSI AND GPM PRIOR TO CONSTRUCTION.

7. INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON-SITE.

8. CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN FOR PLANTER BED AND TREE LOCATIONS TO ENSURE ALL PLANT MATERIAL IS COVERED BY 100% HEAD-TO-HEAD IRRIGATION.

9. CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION BEFORE RECEIVING FINAL PAYMENT.

10. PRODUCTS SHALL BE AS SPECIFIED OR APPROVED EQUAL.

PRE-APPROVED MANUFACTURERS:
1. TORO
2. HUNTER
3. RAINBIRD

13. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION.

14. LOCATE ALL IRRIGATION LINES WITHIN LANDSCAPED AREAS WHENEVER POSSIBLE. ALL LINES UNDER PAVEMENT MUST BE SLEEVED WITHIN SCH. 40 PVC 2X SIZE OF PIPE AND FREE OF STONES/DEBRIS. ALL VALVES SHALL BE LOCATED WITHIN LANDSCAPED AREAS.

15. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.

16. THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR SLEEVING AND DIRECTIONAL BORES.

17. ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF THE SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN FOR WALL PENETRATIONS AND UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN THE PIPE IT CARRIES.

18. ALL PRESSURIZED MAINLINES AND LATERALS UNDER PAVEMENT SHALL BE WITHIN SCH. 40 PVC SLEEVES. WHERE ELECTRIC OR HYDRAULIC VALVE CONTROL LINES PASS THROUGH A SLEEVE WITH OTHER MAIN OR LATERAL LINES THEY SHALL BE CONTAINED WITHIN A SEPARATE, SMALLER CONDUIT.

19. NUMBER THE TOP OF ALL VALVE BOX LIDS WITH MINIMUM 1" HEIGHT BLACK LETTERS TO CORRESPOND TO AUTOMATIC AND GATE VALVE DESIGNATIONS. ALL HOSE BIBB VALVE BOXES SHALL BE LABELED IN A SIMILAR MANNER WITH THE DESIGNATION "HB". LETTER OUTSIDE OF TIME CLOCK CABINETS TO CORRESPOND WITH IRRIGATION CLOCK PROGRAM DESIGNATION.

20. THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES: "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAINLINE.

21. ELECTRIC SERVICE TO THE CONTROLLER SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.

22. ALL 24 VAC WIRING FROM DECODER TO VALVE SHALL BE OF DIRECT BURIAL COPPER WIRE. MAXIMUM LENGTH OF WIRE FROM DECODER TO VALVE SHALL NOT EXCEED 400 FEET. AS FOLLOWS:
CONTROL WIRES - #14
COMMON WIRES - #14

23. ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN NDS VALVE BOXES AS FOLLOWS:

-RECTANGULAR 12"X17" HEAVY DUTY BOX. (PURPLE COVER FOR REUSE TO BE PROVIDED WHERE APPROPRIATE).

24. ALL IRRIGATION HEADS/DRIP TUBING SHALL BE LOCATED ONE (1) FOOT FROM BACK OF CURB WHEN NEXT TO A ROADWAY. (THIS SHALL NOT INCLUDE PARKING AREAS OR DRIVE AISLES).

25. HEADS, LATERALS, EMITTERS, AND VALVES ARE NOT SHOWN, BUT ARE NECESSARY FOR A FULLY FUNCTIONING IRRIGATION SYSTEM.

26. LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. PIPE SIZES ON EITHER SIDE OF SECTION VALVES CONNECTING MAINLINE TO SECTION LATERAL SHALL BE ONE (1) PIPE SIZE LARGER THAN VALVE SIZE. WHERE MAINLINES RUN PARALLEL TO PAVEMENT OR CURBING, THE MAINLINE SHALL BE OFFSET 2'-0" FROM THE EDGE OF PAVEMENT OR CURB.

27. IRRIGATION ZONES SHALL BE SEPARATED FOR HIGH AND LOW WATER USE REQUIREMENTS AND OPERATED ON DIFFERENT WATERING CYCLES. BUBBLERS, DRIPLINE, AND SPRAY HEADS SHALL BE SEPARATED ON DIFFERENT VALVES. AT NO TIME SHALL MULTIPLE IRRIGATION HEAD TYPES BE LOCATED ON THE SAME VALVE.

28. ALL WIRING FOR CONNECTION OF THE VALVES TO THE CONTROLLER SHALL FOLLOW MANUFACTURERS SPECIFICATIONS. IF REQUIRED, ALL WIRING FOR A TWO WIRE PATH SHALL BE WITH RED/BLUE TWISTED PAIR 14 AWG. ELECTRIC CONTROL LINES FROM THE DECODER TO THE SOLENOID VALVES SHALL BE TWISTED PAIR 18 AWG. ALL DECODERS SHALL BE GROUNDED EVERY 1,000 L.F. OR EVERY 10 DEVICES. ALL WIRE SHALL BE FURNISHED IN MINIMUM 2,500' REELS AND SPLICING SHALL BE MINIMIZED. BURY SPLICE KIT. ALL 24 VOLT WIRING SHALL BE DONE IN ACCORDANCE WITH EXISTING CODES. SPLICING SHALL BE IN VALVE BOXES OR CONTROLLERS ONLY. IRRIGATION SYSTEM CONTROL SHALL BE TWO WIRE PATH. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR THIS INSTALLATION. TWO WIRE SYSTEM SHALL HAVE 2-WAY COMMUNICATIONS FIELD PROGRAMMABILITY, STATION SPECIFICATIONS AND INTEGRATED SURGE PROTECTION.

29. ALL CONTROL WIRE SHALL BE INSTALLED IN A 1¼" ELECTRICAL CONDUIT.

30. SMALLEST DIAMETER LATERAL PIPE SHALL BE 3/4".

31. IRRIGATION SYSTEM SHALL BE CAPABLE OF SUPPLYING AN AVERAGE OF 1.05" OF WATER PER WEEK WITHIN WATERING RESTRICTIONS AS APPLICABLE.

32. IRRIGATION SYSTEM SHALL NOT BE INSTALLED THROUGH EXISTING, OR PRESERVED PLANT COMMUNITIES. DO NOT TRENCH THROUGH EXISTING ROOT SYSTEMS OF ANY VEGETATION INTENDED TO BE PRESERVED.

33. CONTRACTOR TO MINIMIZE IRRIGATION OVERTHROW TO IMPERVIOUS AND NATURAL AREAS THROUGH FIELD ADJUSTMENTS TO INDIVIDUAL HEADS.

34. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO THE CONDITION DENOTED ON THE LANDSCAPE PLAN.

35. IRRIGATION PIPING INSTALLED UNDER ROADS AND SIDEWALKS SHALL BE IN SCHEDULE 40 PVC SLEEVING AT 2X THE PIPE SIZE. ALL SLEEVING SHALL BE FREE OF STONES AND DEBRIS.

36. IRRIGATION SOURCE TO BE POTABLE WATER. IRRIGATION CONTRACTOR TO VERIFY SOURCE PRIOR TO DESIGN.

37. POINT OF CONNECTION TO BE FIELD LOCATED. IRRIGATION SYSTEM CONNECTIONS TO THE LOCAL JURISDICTION SERVICE SHALL COMPLY WITH ALL APPLICABLE CODES.

38. IRRIGATION CONNECTION MAY REQUIRE BACKFLOW PREVENTION, VERIFY WITH LOCAL JURISDICTION.

39. IRRIGATION SYSTEM SHALL COMPLY WITH THE LOCAL JURISDICTION LAND DEVELOPMENT CODE

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION GENERAL NOTES

SHEET NO. 22

CONTRACTOR TO AVOID INTERFERENCE WITH ALL UNDERGROUND UTILITIES (EXISTING AND PROPOSED). CONTRACTOR TO COORDINATE WITH OTHER DISCIPLINES FOR LOCATION OF ALL EXISTING AND PROPOSED UTILITIES.

P.O.C. PER LOCAL JURISDICTION REQUIREMENTS. COORDINATE WITH OWNER AND PROJECT LANDSCAPE ARCHITECT FOR FINAL LOCATION. SHOWN HERE FOR CLARITY.

LATERAL SLEEVING (TYP.)

MAIN LINE SLEEVING (TYP.)

CONTRACTOR SHALL LOCATE CONTROLLER WITHIN A STAINLESS STEEL CABINET AND SHALL BE PAD MOUNTED PER DETAIL. CONTROLLER SHALL BE LOCATED THE WITHIN 2' SOD STRIP IN PLANTING BED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE P.O.C. FOR INCLUSION INTO THE SYSTEM (INCLUDES ALL NECESSARY BORING, TRENCHING, ETC.)

CONTRACTOR TO ADJUST ALL OVERHEAD SPRAY HEADS TO ENSURE MINIMAL OVER-SPRAY OCCURS ON ANY HARDSCAPE SURFACE (TYP.)

MAINLINE SHOWN FOR CLARITY. INSTALL MAINLINE AND VALVE 6" FROM B.O.C. WHEN POSSIBLE. COORDINATE WITH OTHER DISCIPLINES TO AVOID CONFLICTS (TYP.)

COORDINATE/DISCUSS PROJECT LIMITS WITH GENERAL CONTRACTOR TO ENSURE ALL IRRIGATION EQUIPMENT IS INSTALLED WITHIN PROJECT AREA.

N

0 10 40
Feet

REVISIONS					
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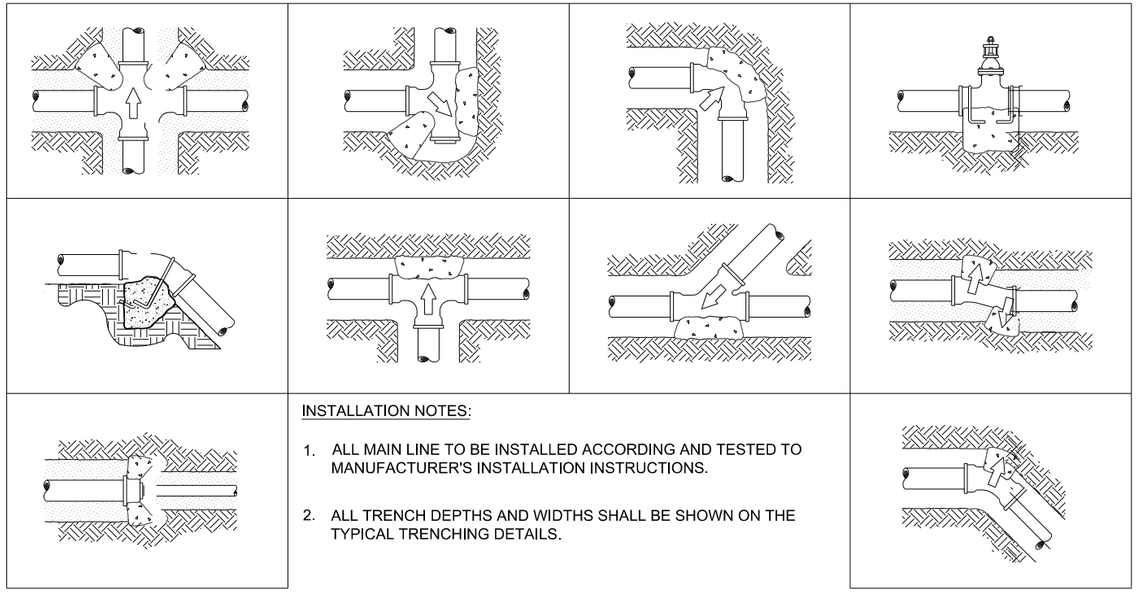
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION PLAN

SHEET NO. 23

Mike.Forman 3/22/2018 7:39:30 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANIR01.dgn

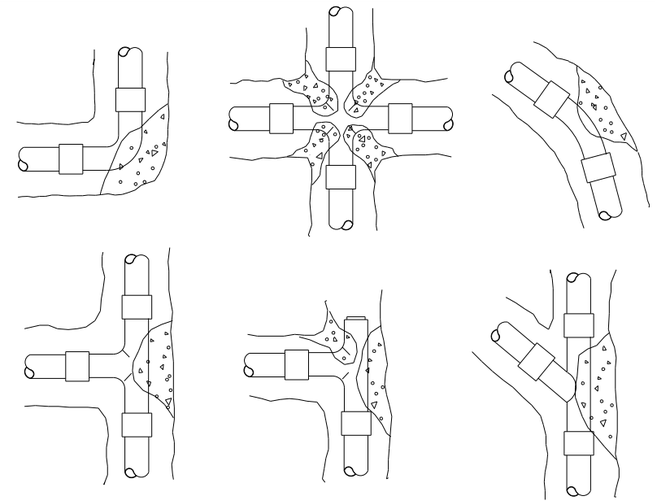


INSTALLATION NOTES:

1. ALL MAIN LINE TO BE INSTALLED ACCORDING AND TESTED TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.

2. ALL TRENCH DEPTHS AND WIDTHS SHALL BE SHOWN ON THE TYPICAL TRENCHING DETAILS.

TYPICAL THRUST BLOCK
SECTION NTS

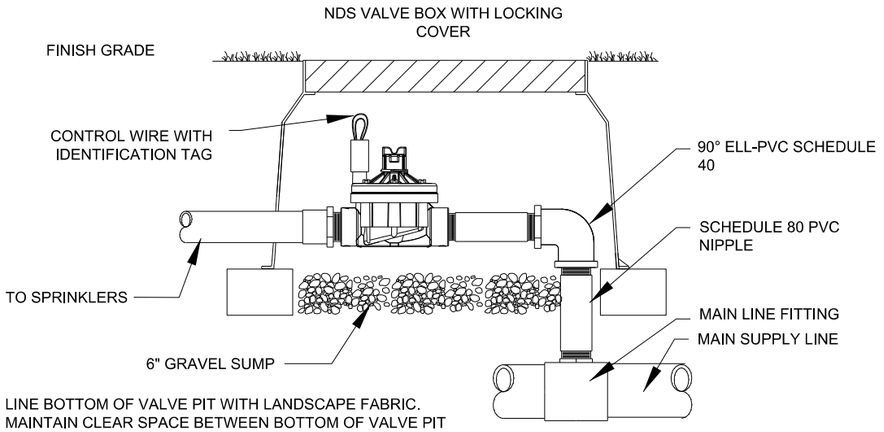


INSTALLATION NOTES

1. 3000 PSI CONCRETE OR BETTER IS TO BE USED FOR THRUST BLOCKS.
2. FOR 45°/90° FITTINGS, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.
3. FOR 22-1/2° FITTINGS, MINIMUM OF 0.5 CUBIC FEET OF CONCRETE TO BE USED.
4. FOR TEES, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED. THRUST

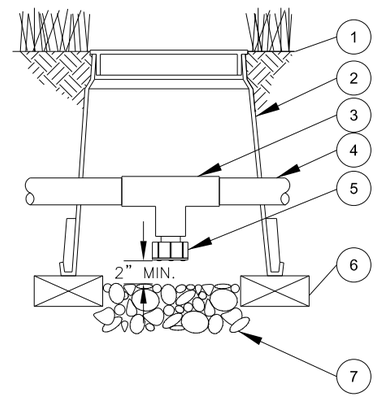
BLOCKS REQUIRED FOR IRRIGATION MAINLINE 2 1/2" AND LARGER.

THRUST BLOCK REINFORCEMENT
SECTION NTS



LINE BOTTOM OF VALVE PIT WITH LANDSCAPE FABRIC. MAINTAIN CLEAR SPACE BETWEEN BOTTOM OF VALVE PIT AND VALVE. DO NOT ALLOW BOX TO REST ON PIPE.

TYPICAL CONTROL VALVE
SECTION NTS



1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER:
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE:
6. BRICK (1 OF 2)
7. 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

DRAIN VALVE
SECTION NTS

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CERTIFICATE OF AUTHORIZATION: 00000696

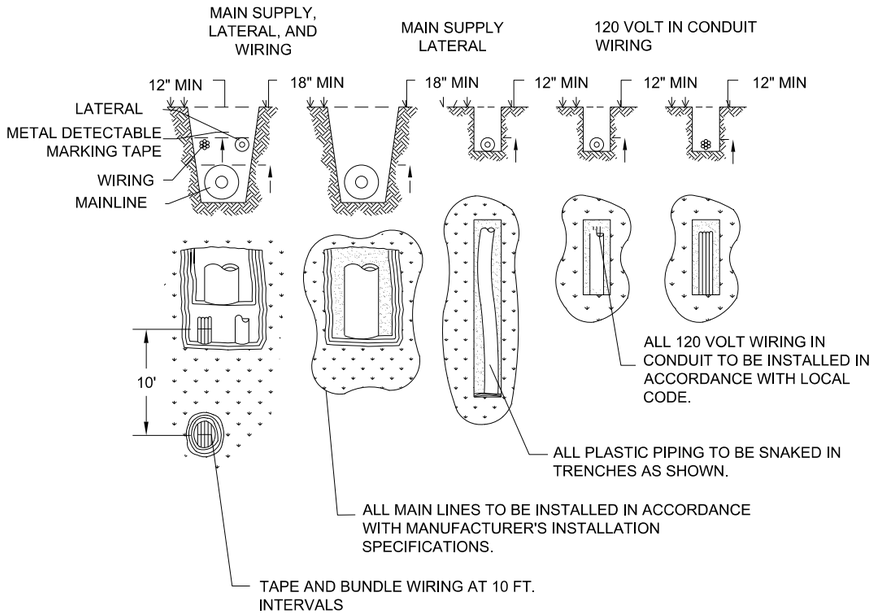
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION DETAILS

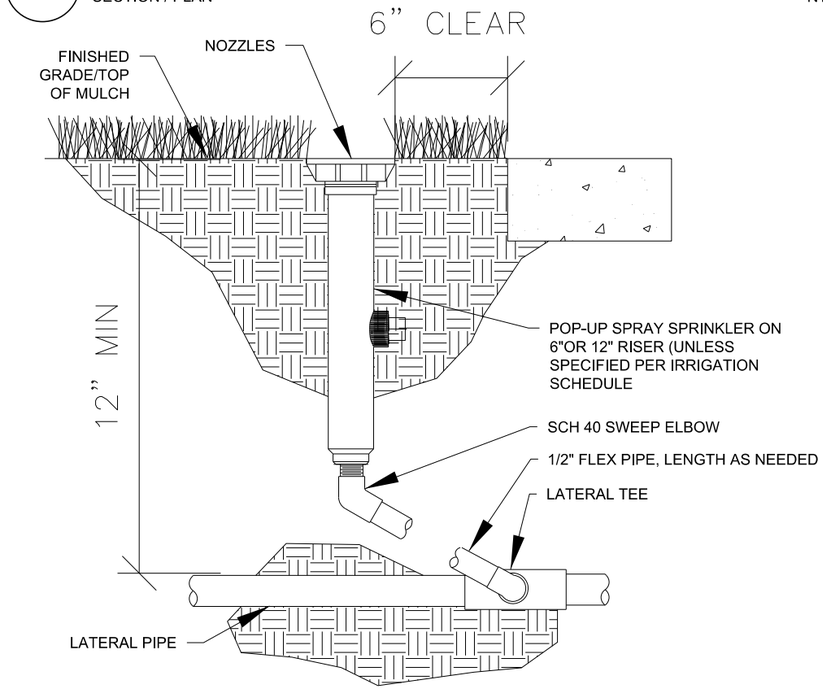
SHEET NO. 24

Mike.Forman 3/22/2018 7:39:31 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\SPDTIR01.DGN



TYPICAL TRENCHING

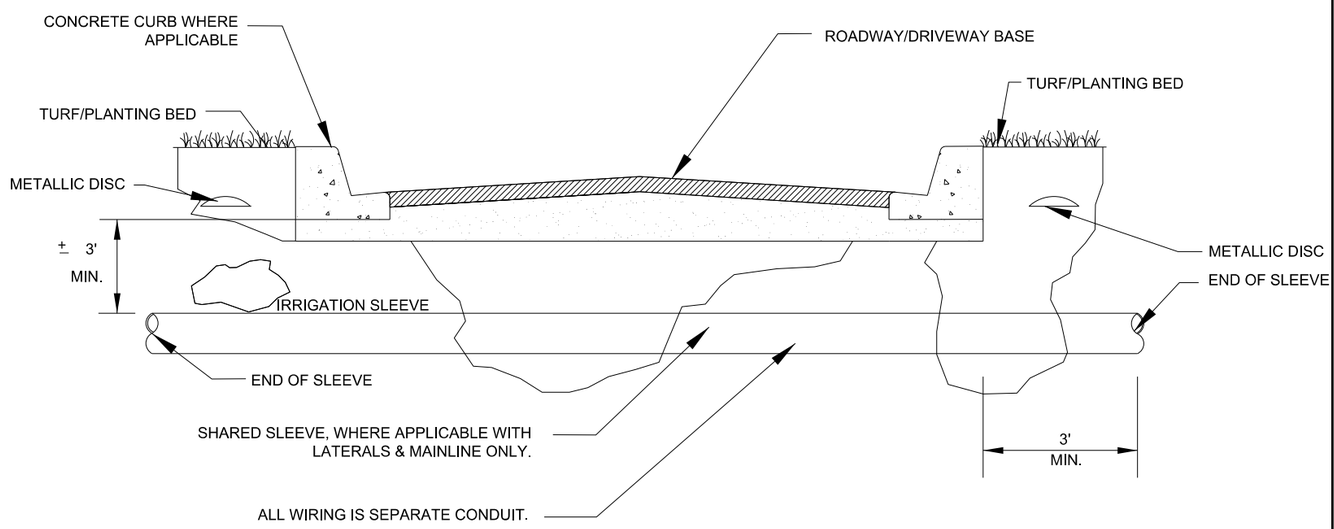
SECTION / PLAN — NTS



TYPICAL SPRAY / ROTAR HEAD

1" = 1"

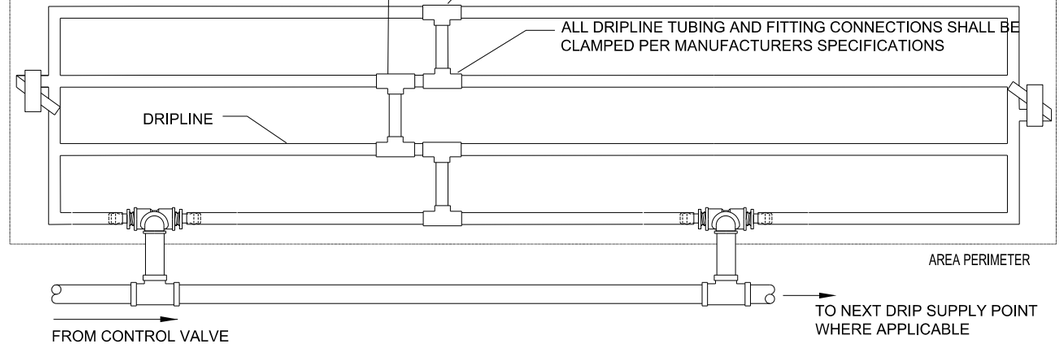
SECTION — NTS



TYPICAL SLEEVING

SECTION — NTS

WHEN DRIPLINE REQUIRES MULTIPLE SUPPLY POINTS EACH POINT SHALL BE CONNECTED UTILIZING RAINBIRD FITTINGS.



CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS. IF NOT SHOWN, INSTALL WITHIN ADJACENT GREEN AREA NOT IN A HIGHLY VISIBLE AREA.

NOTE:

1. DRIP TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 16 INCHES.
2. DRIP TUBING TO BE INSTALLED IN A GRID PATTERN. DRIP TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.
3. CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS (IF SHOWN).

TYPICAL DRIP LINE

PLAN — NTS

REVISIONS					
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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION DETAILS

SHEET NO. 25

Mike.Forman 3/22/2018 7:39:32 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\SPDTIR01.DGN

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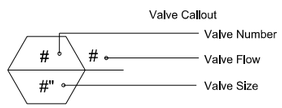
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
LST RST SST	HUNTER MP STRIP PROS-06-PRS40-CV-R TURF ROTATOR, 6" (15.24 CM) POPUP WITH FACTORY INSTALLED CHECK VALVE, RECLAIMED BODY CAP, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE ON PRS40 BODY. LST=IVORY LEFT STRIP, SST=BROWN SIDE STRIP, RST=COPPER RIGHT STRIP.	46	40
M L O	HUNTER MP1000 PROS-12-PRS40-CV SHRUB ROTATOR, 12" (30.48 CM) POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE. M=MAROON ADJ ARC 90 TO 210, L=LIGHT BLUE 210 TO 270 ARC, O=OLIVE 360 ARC ON PRS40 BODY.	27	40
K G R	HUNTER MP2000 PROS-12-PRS40-CV SHRUB ROTATOR, 12" (30.48 CM) POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE. K=BLACK ADJ ARC 90-210, G=GREEN ADJ ARC 210-270, R=RED 360 ARC ON PRS40 BODY.	6	40
●	HUNTER MP CORNER PROS-12-PRS40-CV SHRUB ROTATOR, 12" (30.48 CM) POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE. T=TURQUOISE ADJ ARC 45-105 ON PRS40 BODY.	1	40
LST RST SST	HUNTER MP STRIP PROS-12-PRS40-CV SHRUB ROTATOR, 12" (30.48 CM) POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE. LST=IVORY LEFT STRIP, SST=BROWN SIDE STRIP, RST=COPPER RIGHT STRIP, ON PRS40 BODY.	9	40

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
◔	RAIN BIRD PEB-PRS-D 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH PRESSURE REGULATOR MODULE.	2
C	RAIN BIRD ESP8-LMXE W/ STAINLESS STEEL ENCLOSURE AND PEDESTAL	1
P.O.C	POINT OF CONNECTION 1-1/2" TIE INTO EXISTING MAIN	1
———	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21	1,262 L.F.
— — — —	IRRIGATION MAINLINE: PVC SCHEDULE 40	65.5 L.F.
— — — —	PIPE SLEEVE: PVC SCHEDULE 40 MAINLINE SLEEVE	31.0 L.F.
═══	PIPE SLEEVE: PVC SCHEDULE 40 LATERAL SLEEVE	100.5 L.F.



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	FRICTION LOSS	VALVE LOSS	PSI	PSI @ POC	PRECIP
1	RAIN BIRD PEB-PRS-D	1"	TURF ROTARY	16.06	5.86	2.47	48.33	49.35	1.00 in/h
2	RAIN BIRD PEB-PRS-D	1-1/2"	SHRUB ROTARY	16.81	2.70	3.90	46.60	47.86	0.57 in/h

CRITICAL ANALYSIS

Generated: 2017-09-28 08:56

P.O.C. NUMBER: 01
Water Source Information: TIE INTO EXISTING MAIN

FLOW AVAILABLE
Point of Connection Size: 1-1/2"
Flow Available: 47.66 gpm

PRESSURE AVAILABLE
Static Pressure at POC: 55.00 psi
Pressure Available: 55.00 psi

DESIGN ANALYSIS
Maximum Station Flow: 16.81 gpm
Flow Available at POC: 47.66 gpm
Residual Flow Available: 30.85 gpm

Critical Station: 1
Design Pressure: 40.00 psi
Friction Loss: 5.33 psi
Fittings Loss: 0.53 psi
Elevation Loss: 0.00 psi
Loss through Valve: 2.47 psi
Pressure Req. at Critical Station: 48.33 psi
Loss for Fittings: 0.09 psi
Loss for Main Line: 0.93 psi
Loss for POC to Valve Elevation: 0.00 psi
Loss for Backflow: 0.00 psi
Critical Station Pressure at POC: 49.35 psi
Pressure Available: 55.00 psi
Residual Pressure Available: 5.65 psi

THIS IRRIGATION PLAN IS DESIGN TO THE FOLLOWING STATS: 55 PSI AND 47.66 GPM. CONTRACTOR TO VERIFY WATER AVAILABILITY/PRESSURE AND CONTACT THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION IF A SYSTEM HAS +/- 5 PSI THAN DESIGN PRESSURE.

SYSTEM DEMAND

FLOW TOTALS
Shrub Rotary: 16.8
Turf Rotary: 16.1
Total: 32.9 GPM

IRRIGATION SYSTEM USAGE:
+/- 4,064.4 SF
4,064 SF x .0875 = 355.6 CF (ASSUMING 1.05" OF IRRIGATION PRECIPITATION)
356 CF x 7.854 (GALLONS TO COVER 1.05") = 2,796 GALLONS (COVER SITE WITH 1.05" OF IRRIGATION PRECIPITATION

2,796 GALLONS / 7 DAYS = 399 GALLONS PER DAY (+/-)
399 GALLONS PER DAY x 30.4 = 12,129.6 GALLONS PER MONTH (+/-)
12,130 GALLONS PER MONTH x 12 = 145,560 GALLONS PER YEAR (+/-)

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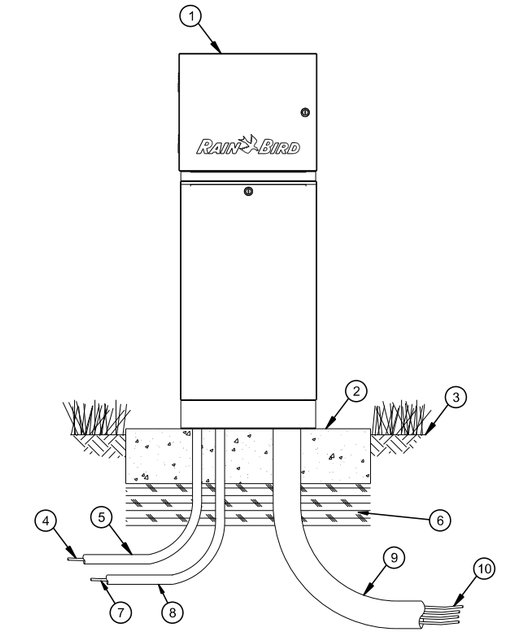
399 GALLONS PER DAY x 30.4 = 12,129.6 GALLONS PER MONTH (+/-)
12,130 GALLONS PER MONTH x 12 = 145,560 GALLONS PER YEAR (+/-)

NOTE:
- FIRST YEAR WATERING SCHEDULE TO BE 1" OF WATER PER WEEK.
- CONTRACTOR TO PROVIDE A LAMINATED IRRIGATION SCHEDULE THAT SHALL BE ATTACHED TO THE IRRIGATION CONTROLLER.



D IRRIGATION CONTROLLER DETAIL

(1) IRRIGATION CONTROLLER: RAIN BIRD IQ ESP-LXME SATELLITE CONTROLLER WITH IQ NCC RS232 CARTRIDGE IN LXMM METAL CABINET AND LXMMPED METAL PEDESTAL. INSTALL CONTROLLER, CABINET AND PEDESTAL PER MANUFACTURER'S RECOMMENDATIONS.

(2) CONCRETE PAD: 6-INCH MINIMUM THICKNESS (3 KSI MIN.)

(3) FINISH GRADE

(4) POWER SUPPLY WIRE

(5) 1-INCH SCH 40 PVC CONDUIT AND FITTINGS AND SWEEP ELL TO POWER SUPPLY

(6) COMPACTED SUBGRADE

(7) RS232 SERIAL CABLE TO IQ CENTRAL CONTROL COMPUTER (MAXIMUM LENGTH 50 FEET)

(8) 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR RS232 SERIAL CABLE TO IQ CENTRAL CONTROL COMPUTER

(9) 3-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR STATION WIRES

(10) WIRES TO REMOTE CONTROL VALVES

NOTES:

1. IQ ESP-LXME CONTROLLER IS AVAILABLE IN 8- OR 12-STATION BASE MODELS. ADDITIONAL MODULES IN 4-, 8- AND 12-STATION VERSIONS MAY BE ADDED TO BRING THE CONTROLLER UP TO 48 STATIONS MAXIMUM.
2. FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 18 AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.
4. USE PE-CABLE WITH SHORT HAUL MODEMS FOR INSTANCES WHERE CONTROLLER IS MORE THAN 50 FEET FROM IQ CENTRAL CONTROL COMPUTER.

REVISIONS

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION DETAILS

SHEET NO. 26

1. CONTRACTOR SHALL CONTACT CITY OF FORT PIERCE PROJECT MANAGER ED SEISSIGER AT (772-460-2200) 24 HOURS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.

2. ALL EQUIPMENT/ MATERIALS TO BE APPROVED BY THE CITY OF FORT PIERCE TRAFFIC OPERATIONS DIVISION.
   A. CITY OF FORT PIERCE IS STANDARDIZED ON ECONOLITE CABINETS, CONTROLLERS, AND VIDEO DETECTION. ALL SIGNAL EQUIPMENT IS TO BE COMPATIBLE WITH EXISTING CITY OF FORT PIERCE CLOSED LOOP SYSTEM. MUST HAVE KNOWLEDGE OF THE ECONOLITE AIRES SYSTEM.

   B. ALL CABINETS TO BE TYPE V-TS2-T1 16 PHASE (8 SIGNAL PHASES, 4 PED AND 4 O/L) AND SHALL HAVE ILLUMINATED SIGN PANEL WITH PHOTOCELL, GENERATOR PANEL WITH TRANSFER SWITCH, DOOR MOUNTED FLEXIBLE LIGHT (GOOSE NECK). HONDA GENERATOR (EU-3000-IS) FOR EMERGENCY POWER.
   US ROBOTICS 56K FAX MODEM WITH A MIN 500W UPS IN ALL MASTER CABINETS.

   C. ELECTRICAL SERVICE TO BE 2-120 VOLTS, ONE WITH A 50 AMP BREAKER AND ONE WITH A 20 AMP BREAKER.

   D. SERVICE RISER-USE 1 1/2" IMC ON SERVICE POLE. CONTRACTOR SHALL INSTALL RIGID CONDUIT STRAPS (ONE AT 18 INCHES ABOVE GRADE AND ONE AT 12 INCHES ABOVE AND/OR BELOW SERVICE CAN. (5 FOOT MAXIMUM SPACING) (DOES NOT APPLY TO MAST ARMS).

   E. WIRING TO BE AS PER CITY RECOMMENDATIONS SHEET. CONTRACTOR SHALL VERIFY CITY OF FORT PIERCE COLOR CODES PRIOR TO ORDERING WIRE.

   F. CONTROLLER BASE AND SERVICE PAD TO BE MONOLITHIC POUR WITH A FINISHED GRADE 18" ABOVE BACK OF CURB.

   G. MAST ARM AND POLES SHALL BE GALVANIZED (AND NOT PAINTED). WITH ELONGATED HANDHOLE COVERS AND 25 POSITIONS STAINLESS STEEL TERMINAL BLOCK SHALL BE MOUNTED MIN.

3. 20 CONDUCTOR SIGNAL CABLE TO EACH MAST ARM MIN. C OR J HOOKS AT ARM WITH HAND HOLE.

4. CITY OF FORT PIERCE WILL REQUIRE AN INSPECTION OF SERVICE PRIOR TO CONTACTING POWER COMPANY FOR HOOK-UP.

5. CONTRACTOR WILL INSURE A MINIMUM OF ONE (1) IMSA CERTIFIED LEVEL II SIGNAL TECHNICIAN IS PRESENT DURING ALL PHASES OF CONSTRUCTION OR IS AVAILABLE WITHIN (2) HOURS NOTICE - 24 HOURS PER DAY / 7 DAYS PER WEEK FROM THE LETTING OF CONTRACT TO FINAL ACCEPTANCE OF COMPLETED PROJECT.

6. THE CONTRACTOR SHALL PROVIDE FOUR COPIES OF MARKED-UP (AS-BUILT) CONSTRUCTION PLANS, AND CAD FILE OF SUCH, AT THE TIME OF SIGNAL ACCEPTANCE INSPECTION BY CITY OF FORT PIERCE. (AS-BUILT SHALL BE ENLARGED A MIN. OF 200%).

7. THE CONTRACTOR SHALL NOTIFY CITY OF FORT PIERCE TRAFFIC OPERATIONS AT LEAST 24-HRS IN ADVANCE OF INSTALLING GROUND RODS OR UNDERGROUND CONDUIT SO THAT THESE OPERATIONS MAY BE OBSERVED. 25 OHM MAX RESISTANCE ON ALL GROUND WIRES.

8. THE CONTRACTOR SHALL MAKE ALL VIDEO DETECTORS INSTALLED AS PART OF THE PROJECT FULLY OPERATIONAL IN ACCORDANCE WITH THEIR ASSOCIATED INTERSECTION SIGNAL TIMING CHART WITHIN 24 HOURS OF THEIR INSTALLATION.

9. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT LEGIBLE, WEATHERPROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE TAGGING SYSTEM PROPOSED SHALL BE SUBMITTED FOR APPROVAL WITH ALL OF THE OTHER EQUIPMENT SUBMITTALS REQUIRED FOR THIS PROJECT.

10. THREE SPARE WIRES ARE REQUIRED PER SIGNAL CABLE. SPARES SHALL BE BOUND AND GROUNDED IN CABINET.

11. CITY OF FORT PIERCE REQUIRES LED COUNTDOWN PEDESTRIAN SIGNAL HEADS WITH (T) BASES AND ALUMINUM-4 1/2" DIA. POLE.

12. ONE EXTRA CONDUIT WITH PULL WIRE AND ONE SPARE CONDUIT ON ALL DIRECTIONAL BORES SHALL BE PROVIDED.

13. ALL ILLUMINATED SIGNS SHALL BE RIGID MOUNT AND LED EDGE-LIT.

14. CONTRACTOR IS RESPONSIBLE FOR ALL LOCATES FROM THE LETTING OF CONTRACT TO FINAL ACCEPTANCE.

15. WHENEVER SIGNAL WORK IS BEING PERFORMED IN AN INTERSECTION (INSTALLING CONDUIT IN THE STREET, REMOVING EXISTING SIGNAL EQUIPMENT, INSTALLING NEW SIGNAL EQUIPMENT, INSTALLING CAMERAS ETC,) AN ENFORCEMENT OFFICER SHALL DIRECT TRAFFIC. THE COST OF THE TRAFFIC CONTROL OFFICER SHALL BE INCLUDED UNDER PAY ITEM 102-1.

16. ALL TRAFFIC SIGNAL HEADS SHALL HAVE BACKPLATES AND SHALL BE LED.

17. THERE SHALL BE A 1-YEAR WARRANTY ON ALL PARTS FROM TIME OF FINAL ACCEPTANCE.

18. A 2 MAN BUCKET SHALL BE PROVIDED AT TIME OF INSPECTION.

19. THE CONTRACTOR SHALL PLACE PORTABLE CHANGEABLE (VARIABLE) MESSAGE SIGNS (PCMS) PRIOR TO CONSTRUCTION ACTIVITIES TO NOTIFY THE TRAVELING PUBLIC OF CONSTRUCTION ACTIVITIES.

20. EXCEPT AS OTHERWISE INDICATED THE FOLLOWING STANDARDS AND SPECIFICATION SHALL APPLY TO CONSTRUCTION AND MATERIALS FOR THIS PROJECT: THE CITY OF FORT PIERCE SPECIFICATIONS, THE FDOT DESIGN STANDARDS DATED FY 2017-2018, THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2017, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION WITH REVISIONS.

21. THE CONTRACTOR SHALL USE CAUTION WHEN WORKING IN OR AROUND AN AREA OF OVERHEAD TRANSMISSION AND UNDERGROUND UTILITIES.

22. TUNNEL VISORS ARE REQUIRED FOR ALL SIGNAL HEADS AND ARE INCLUDED IN PAY ITEMS 650-1-24 AND 650-1-29.

23. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING ITS UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.

24. LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO EXCAVATION.

25. A DISCONNECT SWITCH SHALL BE MOUNTED ON A SEPARATE POLE CLOSE TO THE CONTROLLER.

26. THE CONTROLLER BASE SHALL HAVE TWO (2) CONDUITS FOR COMMUNICATION CABLE IN ADDITION TO TWO (2) SPARES THAT ARE REQUIRED. THEY SHALL BE TERMINATED INTO THE COMMUNICATION PULL BOX.

27. CONTRACTOR SHALL COORDINATE WITH FLORIDA POWER AND LIGHT TO CONNECT ELECTRICAL SERVICE FEED LOCATION.

28. THE CONTROLLER CABINET SHALL BE ORIENTED WITH THE CABINET DOOR OPENING AWAY FROM THE INTERSECTION, SO THAT A TECHNICIAN CAN VIEW THE ENTIRE INTERSECTION WHILE WORKING IN THE CABINET.

29. A CONCRETE TECHNICIAN PAD SHALL BE CONSTRUCTED ADJACENT TO THE CONTROLLER AT SIDEWALK ELEVATION WITH A 6" EYEBOLT PROTRUDING FROM THE CONCRETE AT THE HINGE SIDE OF THE CABINET TO SECURE A GENERATOR.

30. TOP OF MAST ARM FOUNDATIONS WITHIN THE SIDEWALKS SHALL MATCH FINISH CONTOUR AND ELEVATION OF SIDEWALKS WITHOUT JOINTS. CONTRACTOR IS RESPONSIBLE FOR THE PROPER BOLT PROJECTION ABOVE FINISHED SIDEWALK GRADE.

31. OPTICAL VEHICLE DETECTOR SHALL BE ECONOLITE TERRA, AND SHALL BE CAPABLE OF MULTI-ZONE DETECTION. DETECTORS SHALL BE MOUNTED ABOVE THE MAST ARM USING ASTRO BRACKET HARDWARE AT A HEIGHT CAPABLE OF THE REQUIRED DETECTION AND AS RECOMMENDED BY THE SYSTEM MANUFACTURER. SHOP DRAWINGS TO BE SUBMITTED TO THE ST. LUCIE COUNTY TRAFFIC OPERATIONS DIVISION FOR APPROVAL AND MUST COMPLY WITH THE COUNTY'S VIDEO SYSTEM. ALL VIDEO POWER CABLES, PROCESSORS AND EQUIPMENT SHALL BE PROVIDED FOR A COMPLETE AND OPERATIONAL VIDEO DETECTION SYSTEM. MANUFACTURER SHALL BE PRESENT AT TURN ON FOR PROGRAMMING AND SETUP. THE CONTRACTOR SHALL MAKE ALL VIDEO DETECTORS FULLY OPERATIONAL WITHIN 24 HOURS OF THEIR INSTALLATION.

32. ALL PEDESTRIAN PUSH BUTTONS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND FDOT INDEX 17784.

33. ALL ILLUMINATED STREET NAME SIGNS SHALL BE SINGLE SIDED, WITH WHITE LETTERS ON GREEN BACKGROUND, BE RIGIDLY MOUNTED TO THE ARM AND BE WIRED TO A SINGLE PHOTO CELL LOCATED INSIDE THE CONTROLLER CABINET. COST OF PHOTO CELL SHALL BE INCLUDED IN THE COST OF ILLUMINATED SIGNS.

34. ALL NEW CONDUIT RUNS SHOWN ON THE PLANS ARE SCHEMATIC AND MAY REQUIRE FIELD ADJUSTMENT.

35. FINAL LOCATION AND ELEVATION OF ALL TRAFFIC SIGNAL POLE/MAST ARM ASSEMBLY EQUIPMENT SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PROCUREMENT OF POLE/MAST ARM ASSEMBLIES TO VERIFY THAT THE ASSEMBLIES CAN BE INSTALLED IN THE LOCATIONS AS SPECIFIED IN THESE PLANS.

36. ALL SIGNS AND TRAFFIC SIGNAL EQUIPMENT THAT ARE REMOVED SHALL BE TURNED OVER TO CITY OF FORT PIERCE, WHICH IS THE MAINTAINING AGENCY AS DIRECTED BY THE ENGINEER. THE COST OF DELIVERY TO CITY OF FORT PIERCE SHALL BE INCLUDED IN THE REMOVAL OF RELATED SIGNAL PAY ITEM.

37. PULL BOXES ARE TO BE PLACED BEHIND CURB AND GUTTER, UNLESS CURB AND GUTTER ARE NOT PRESENT. IF CURB AND GUTTER ARE NOT PRESENT, PULL BOXES SHALL BE PLACED A MINIMUM OF 4 FEET FROM THE EDGE OF PAVEMENT OR AT THE BACK OF EXISTING RIGHT-OF-WAY, OR AS DIRECTED BY THE ENGINEER TO AVOID EXISTING UTILITIES.

38. THE CONTRACTOR SHALL HAND DIG HOLES FOR CONDUIT OR POLE FOUNDATIONS AT LOCATIONS WHERE THE DEPTH OF ANY UTILITY LINE MAY BE IN CONTACT WITH THE PROPOSED INSTALLATION.

39. REFER TO ROADWAY GENERAL NOTES FOR UTILITY CONTACT INFORMATION.

40. THE CONTROLLER SHALL OPERATE AS SIGNAL OPERATING PLAN 10 (SEE FDOT INDEX 17870) AS SHOWN IN PLANS.

41. SIGNAL TIMING DISPLAYED FOR LOCAL OPERATION ARE SUGGESTED TIMINGS - ACTUAL TIMINGS AND COORDINATION PLANS ARE TO BE DETERMINED BY CITY OF FORT PIERCE TRAFFIC OPERATIONS DIVISION REPRESENTATIVES.

42. NON APL/QPL SIGNALIZATION MATERIALS ARE TO BE SUBMITTED ON FDOT FORM NO. QF-72-01-1 "REQUEST FOR PRODUCT CONSIDERATION" TO FDOT DISTRICT 4 TRAFFIC OPERATIONS FOR APPROVAL.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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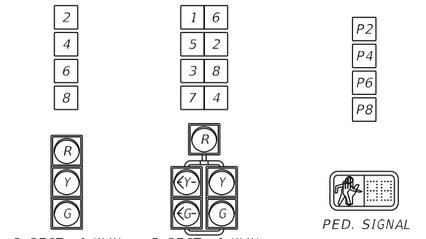
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SIGNALIZATION GENERAL NOTES

SHEET NO. 27

SIGNAL HEAD DETAILS

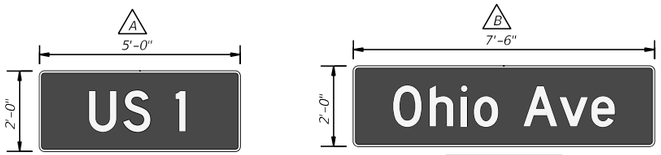


3-SECT., 1-WAY W/ BACKPLATES — 650-1-24 — 4 AS

5-SECT., 1-WAY W/ BACKPLATES — 650-1-29 — 4 AS

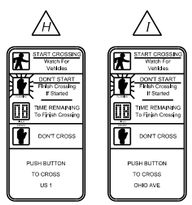
PED. SIGNAL COUNT-DOWN 1-SECT., 1-WAY — 653-1-11 — 8 AS

SIGN DETAILS



700-5-21 (2 EA)

700-5-22 (2 EA)



FTP-68B-06 (4 REQ'D) FTP-68B-06 (4 REQ'D)

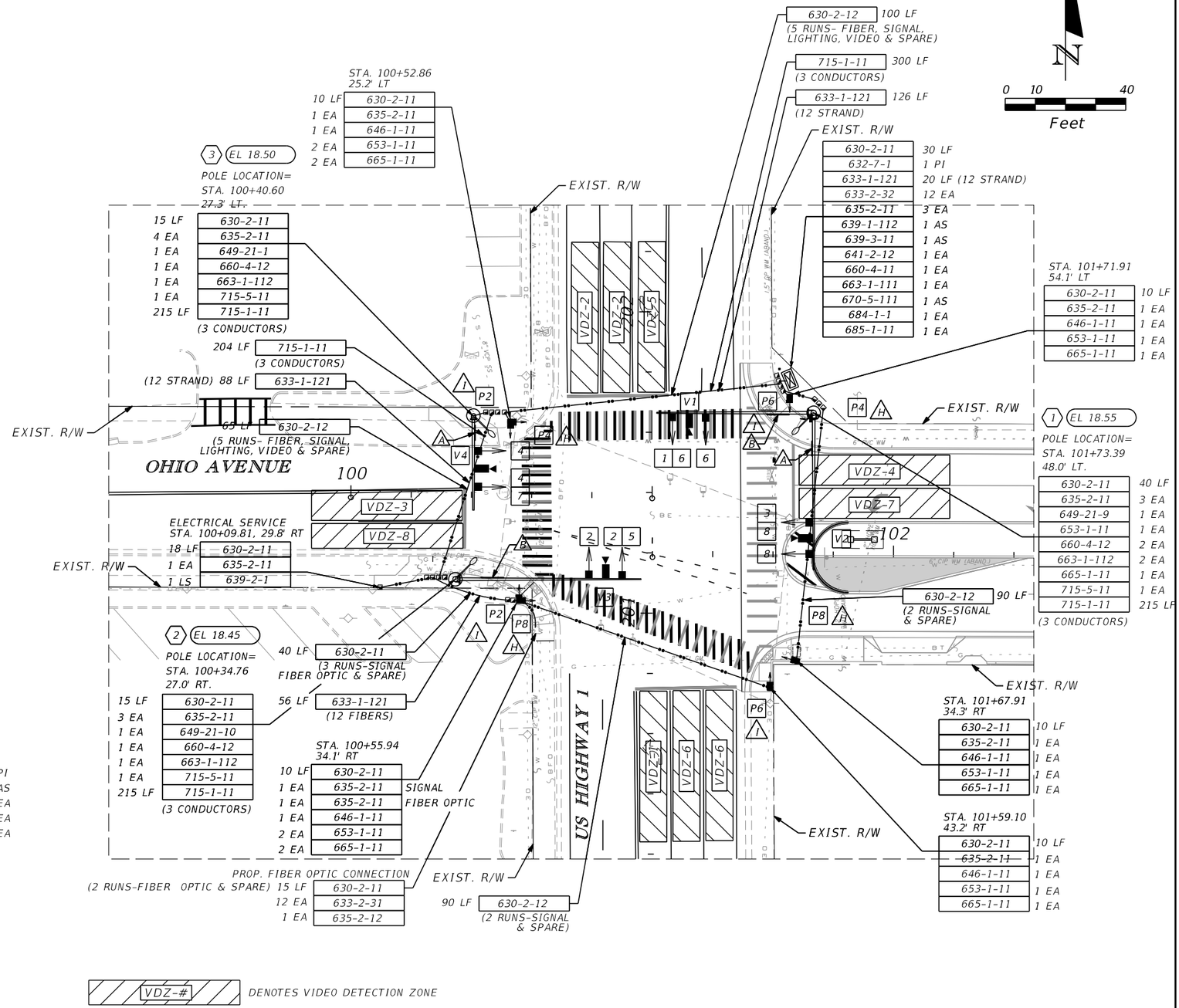
PEDESTRIAN PUSH BUTTON SIGNS FTP-68B-06 INCLUDED IN THE COST OF PAY ITEM 665-1-11.

POSTED SPEED LIMITS:
US HIGHWAY 1 – 45 MPH
OHIO AVENUE – 30 MPH

SEE SHEET 28A FOR NOTES, CONTROLLER TIMINGS, SIGNAL OPERATIONS PLAN, ETC.

REMOVAL ITEMS

632-7-6	1 PI
639-1-610	1 AS
641-2-80	4 EA
646-1-60	1 EA
670-5-600	1 EA



VDZ-# DENOTES VIDEO DETECTION ZONE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
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CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SIGNAL PLANS

SHEET NO. 28

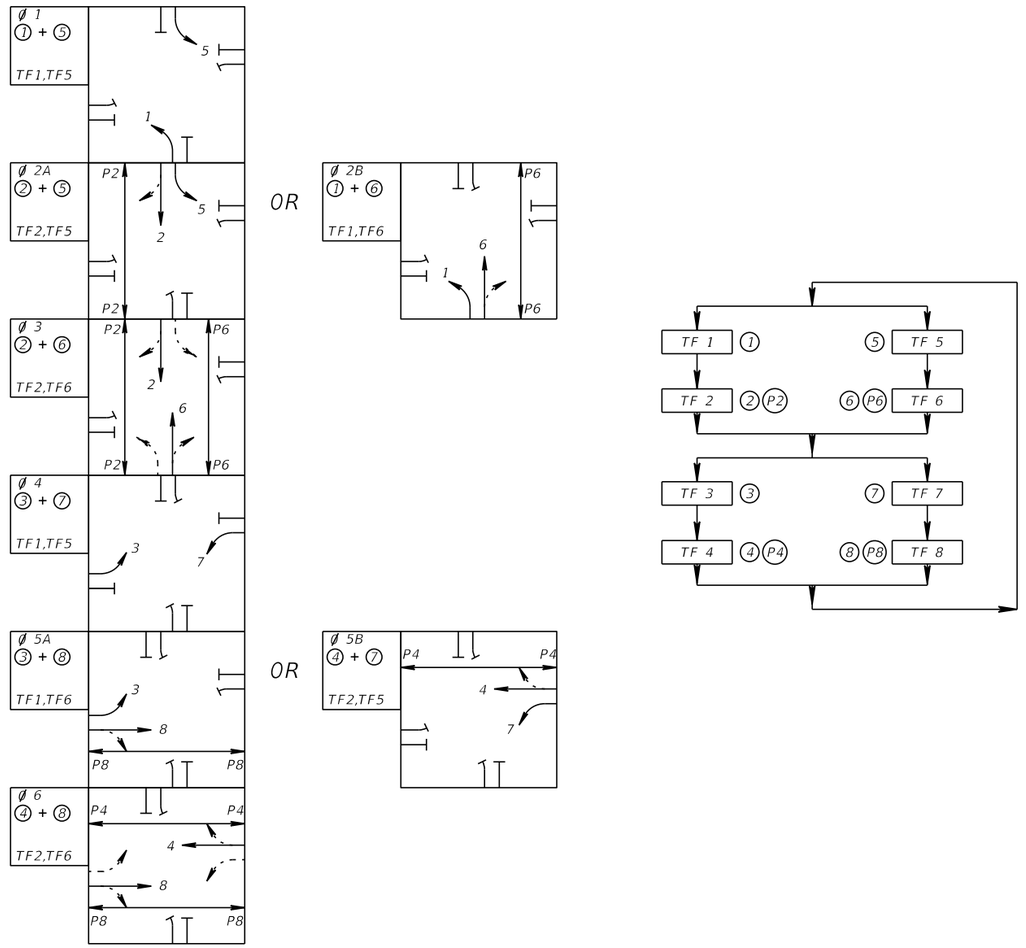
DETECTION CAMERA ASSIGMENTS				
CAMERA NO.	ZONE NO.	DETECTOR OPERATION	TIMING FUNCTION	DELAY TIME (SEC)
V1	1	NORMAL	1	-
	6	NORMAL	6	-
V2	3	NORMAL	3	-
	8	NORMAL	8	-
V3	2	NORMAL	2	-
	5	NORMAL	5	-
V4	4	NORMAL	4	-
	7	NORMAL	7	-

DETECTION CAMERA ASSIGNMENTS AND DETECTION ZONE AREAS ARE PRELIMINARY AND MAY REQUIRE FIELD ADJUSTMENT BY THE CONTRACTOR DURING INSTALLATION. DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

CONTROLLER OPERATIONS

1. MAJOR STREET: US HIGHWAY 1 (MOVEMENTS 2 AND 6)
   MINOR STREET: OHIO AVENUE (MOVEMENTS 4 AND 8)
2. FLASHING OPERATION: MOVEMENTS 2 AND 6 - YELLOW
   MOVEMENTS 4 AND 8 - RED
3. ALL SIGNAL TIMING SHALL BE PROVIDED BY FDOT DISTRICT 4 TRAFFIC ENGINEERING
4. CABINET DOOR SHALL OPEN AWAY FROM THE INTERSECTION.

ASSOCIATED PHASE MOVEMENTS



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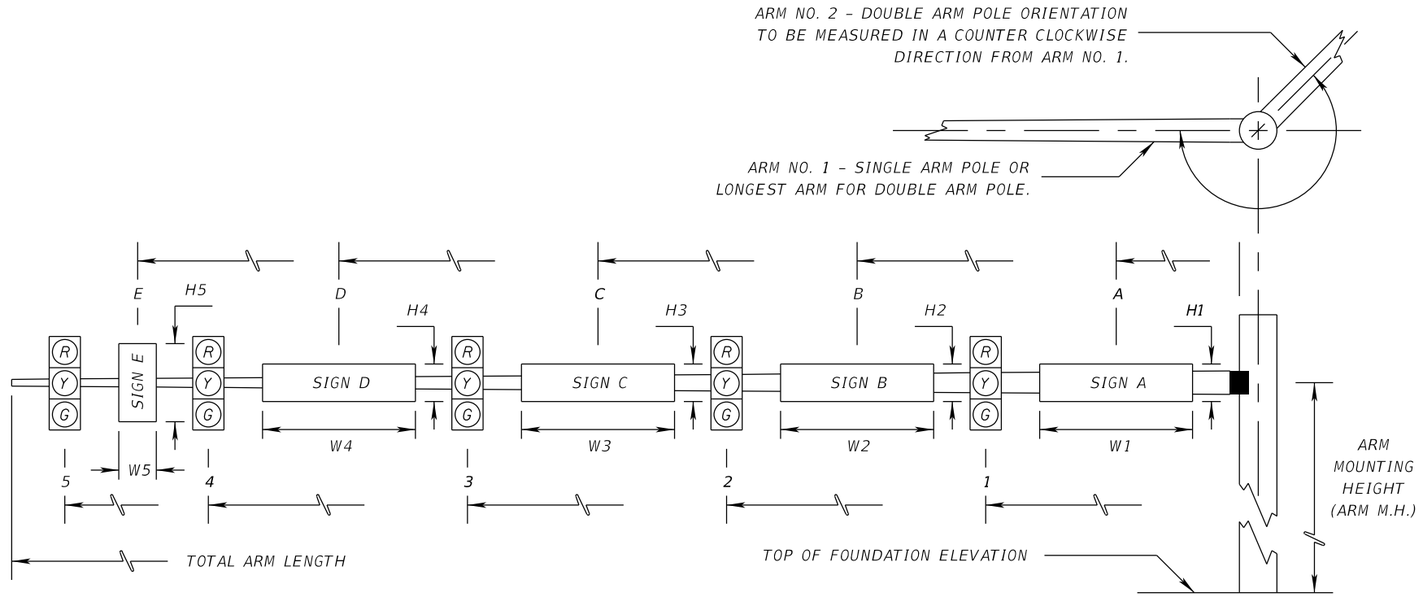
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SIGNAL PLAN

SHEET NO.
28A



MAST ARM TABULATION

* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY

VD DENOTES VIDEO DETECTION CAMERA; CCTV DENOTES CCTV CAMERA

						SIGNAL DATA																SIGN DATA														
									DISTANCE FROM POLE													DISTANCE FROM POLE / HEIGHT AND WIDTH OF SIGN																
ID NO.	SHEET NO.	LOCATION BY STATION	TOP OF FOUNDATION ELEVATION	RDWY ARM NO.	CROWN ELEVATION	SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	1	*	2	*	3	*	4	*	5	*	TOTAL ARM LENGTH	ARM MTG. HEIGHT EL.	ANGLE BETWEEN DUAL ARMS 90/270	A	H1	W1	B	H2	W2	C	H3	W3	D	H4	W4	E	H5	W5	PAINT COLOR
1	28	101+73.40, 48.0' LT	18.55	1	18.25	V	Y	N	34.0	3	45.0	5							50	38.55	90	10.0	2.0	7.5	39.5	VD	VD										GALVANIZED
				2	17.73	V	Y	Y	34.5	5	45.0	3							50	38.55		10.0	2.0	5.0	39.8	VD	VD										GALVANIZED
2	28	100+34.75, 27.0' RT	18.45	1	18.35	V	Y	N	43.0	3	54.0	5							60	38.45		11.0	2.0	7.5	48.5	VD	VD										GALVANIZED
				2																																
3	28	100+40.60, 27.3' LT	18.50	1	17.88	V	Y	N	10.5	3	22.5	5							30	38.50		4.5	2.0	5.0	16.5	VD	VD										GALVANIZED
				2																																
				1																																
				2																																
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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

MAST ARM TABULATION

SHEET NO. 29

STANDARD MAST ARM ASSEMBLIES DATA TABLE

Table Date 11-01-16

STRUCTURE ID NUMBERS	DESIGNATION	FIRST ARM		SECOND ARM		UF (deg)	LL (deg)	POLE			DRILLED SHAFT ID
		ARM ID	FAA (ft.)	ARM ID	SAA (ft.)			POLE ID	UAA (ft.)	UB (ft.)	
1	A50/D-A50/D-P3/D/L	A50/D	-	A50/D	-	90	45	P3/D/L	-	20	DS/14/4.5
2	A60/S-P4/S/L	A60/S	-	-	-	-	45	P4/S/L	-	20	DS/14/4.5
3	A30/S-P1/S/L	A30/S	-	-	-	-	45	P1/S/L	-	20	DS/12/4.5

NOTES [Notes Date 11-01-16]:

1. If an entry appears in column FAA, a shorter arm is required. This is obtained by removing length from the arm tip and the arm length shortened from FA to FAA. SAA Similar.

2. If an entry appears in column UAA, a shorter pole is required. This is obtained by removing length from the pole tip and the pole height shortened from UA to UAA.

3. Arm mounting height UB must be between 18-22 feet.

4. Pole types P2 and larger require a minimum 4.5 foot diameter drilled shaft. Pole types P5 and larger require a minimum 5.0 foot diameter drilled shaft.

5. Work this sheet with the Signal Designer's "Mast Arm Tabulation". See "Mast Arm Tabulation" for special instructions that include non-standard Handhole location, paint color, terminal compartment requirement, and pedestrian features.

6. Work with Index 17743 and 17745.

7. Soil criteria meet the minimum values set forth in IDS Index No. 17743. For geotechnical information refer to "Subsurface Soil Exploration and Geotechnical Engineering Evaluation" by Ardaman & Associates, Inc. (File No. 17-5460) dated September 26, 2017, signed/sealed by Daniel J. Zrallack, P.E. (P.E. No. 63911).

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

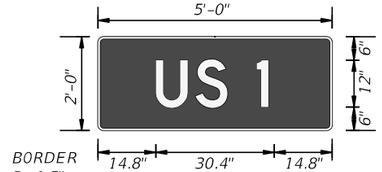
STANDARD MAST ARM ASSEMBLIES DATA TABLE

SHEET NO. 30

SIGN NAME	US 1	QTY	2	SIGN NO.	STATION(S)
PANEL		BORDER			none
WIDTH	5'-0"	WIDTH	0.5"		
HEIGHT	2'-0"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE	AVERAGE LENGTH



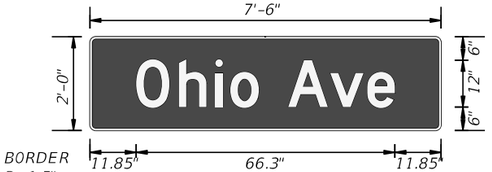
Panel Style: Street Name 12-9in_Overhead.ssi
M.U.T.C.D.: 2009 Edition

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE	AVERAGE LENGTH



Panel Style: Street Name 12-9in_Overhead.ssi
M.U.T.C.D.: 2009 Edition

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY	U	S		1		L																					
SPACE	14.8	25	33.2	40.7		30.4																					
COPY																											
SPACE																											
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SPACE																											

COPY	0	h	i	o		A	v	e		L																	
SPACE	11.9	22.8	32.1	36	43.3	50.8	61.6	71.1		66.3																	
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SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE	AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY																											
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SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE	AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY																											
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REVISIONS					
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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

GUIDE SIGN WORK SHEET

SHEET NO.
31

GENERAL EROSION NOTES

A. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN SPECIFICATIONS, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.

C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS.

D. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR THE CITY.

F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.

G. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.

H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

I. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

J. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

K. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

L. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.

M. STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY CEASED.

N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SODDED. THESE AREAS SHALL BE SODDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.

O. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.

P. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

Q. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.

R. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

S. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

T. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.

U. THE CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND OBTAINING THE NPDES PERMIT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

MAINTENANCE

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.

2. ALL SODDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESODDED AS NEEDED.

3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.

4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.

5. THE TEMPORARY STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE).

6. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN SEVEN CALENDAR DAYS FOLLOWING THE INSPECTION.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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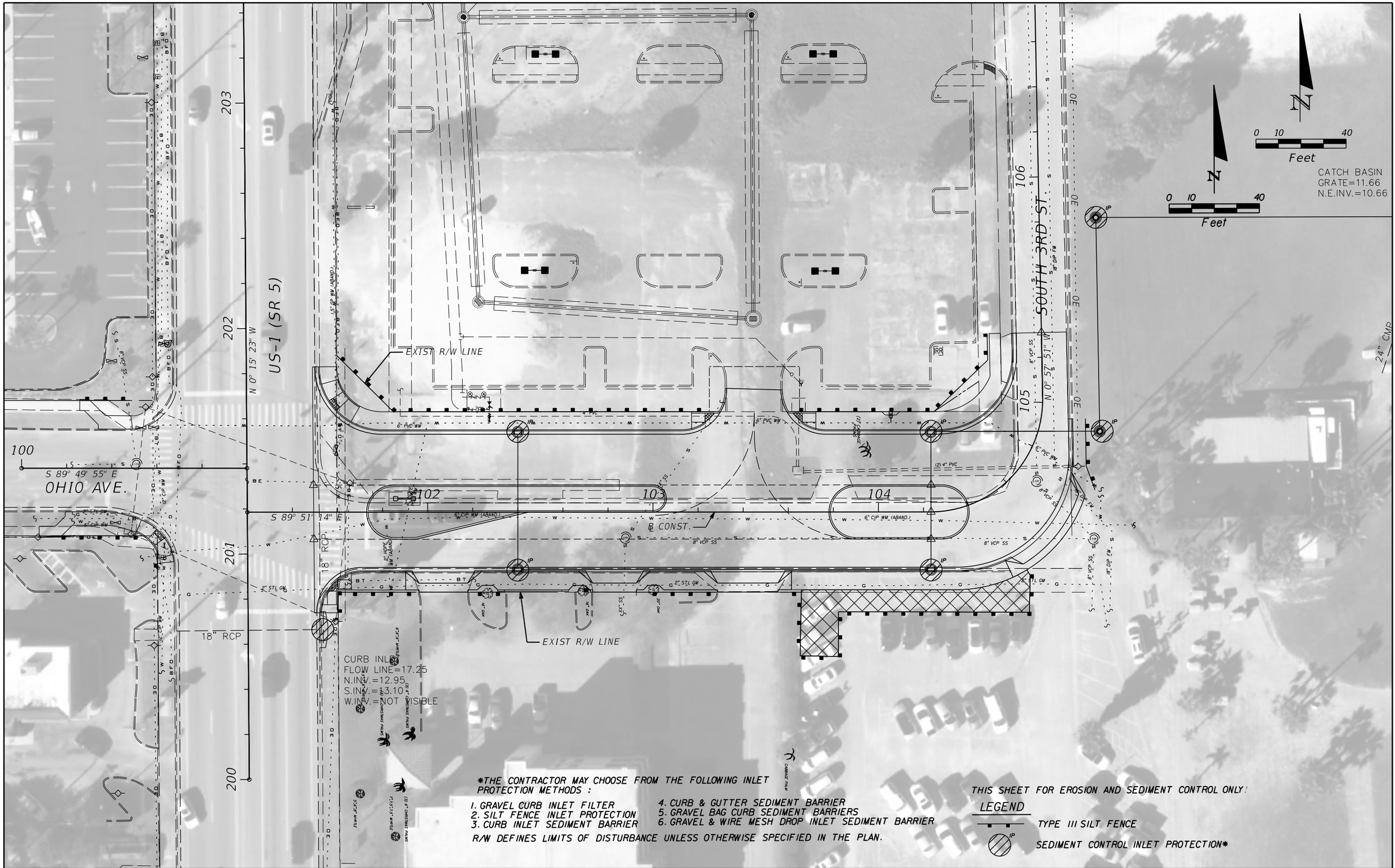
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

EROSION CONTROL
GENERAL NOTES

SHEET NO.
32

Mike.Forman 3/22/2018 7:39:39 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\GNNTEC01.DGN



*THE CONTRACTOR MAY CHOOSE FROM THE FOLLOWING INLET PROTECTION METHODS :

1. GRAVEL CURB INLET FILTER
2. SILT FENCE INLET PROTECTION
3. CURB INLET SEDIMENT BARRIER
4. CURB & GUTTER SEDIMENT BARRIER
5. GRAVEL BAG CURB SEDIMENT BARRIERS
6. GRAVEL & WIRE MESH DROP INLET SEDIMENT BARRIER

R/W DEFINES LIMITS OF DISTURBANCE UNLESS OTHERWISE SPECIFIED IN THE PLAN.

THIS SHEET FOR EROSION AND SEDIMENT CONTROL ONLY!

LEGEND

TYPE III SILT FENCE

SEDIMENT CONTROL INLET PROTECTION*

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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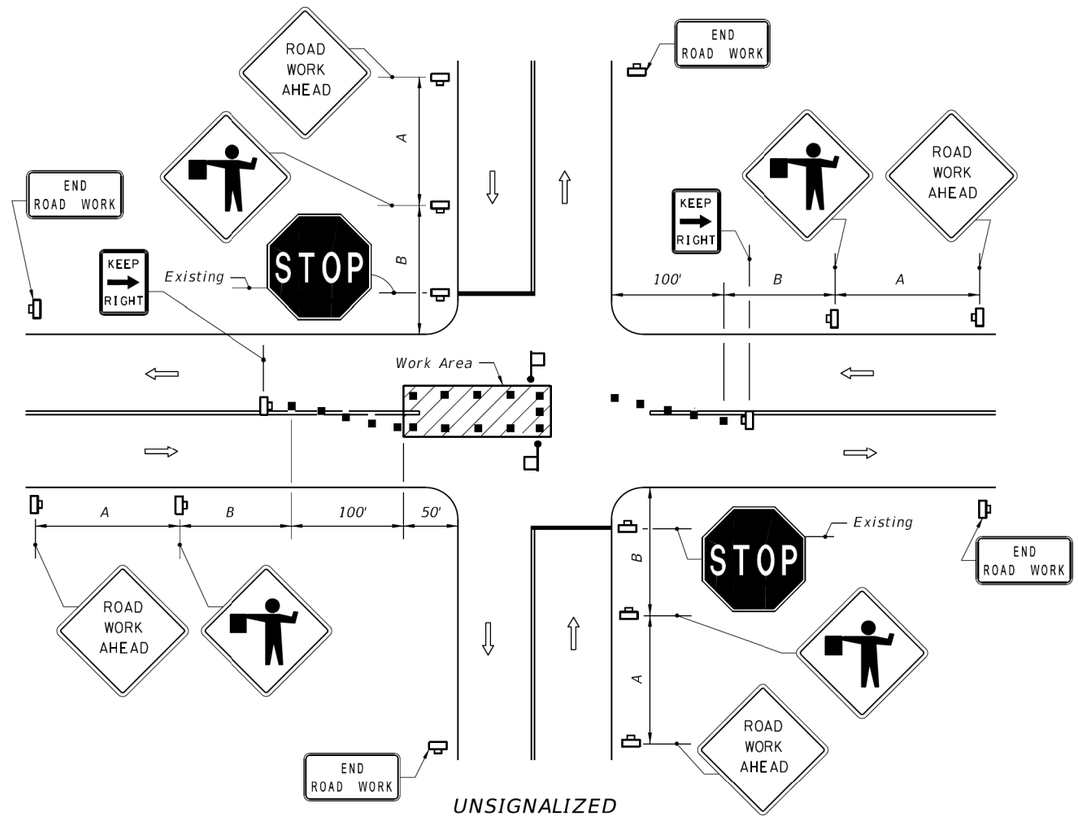
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

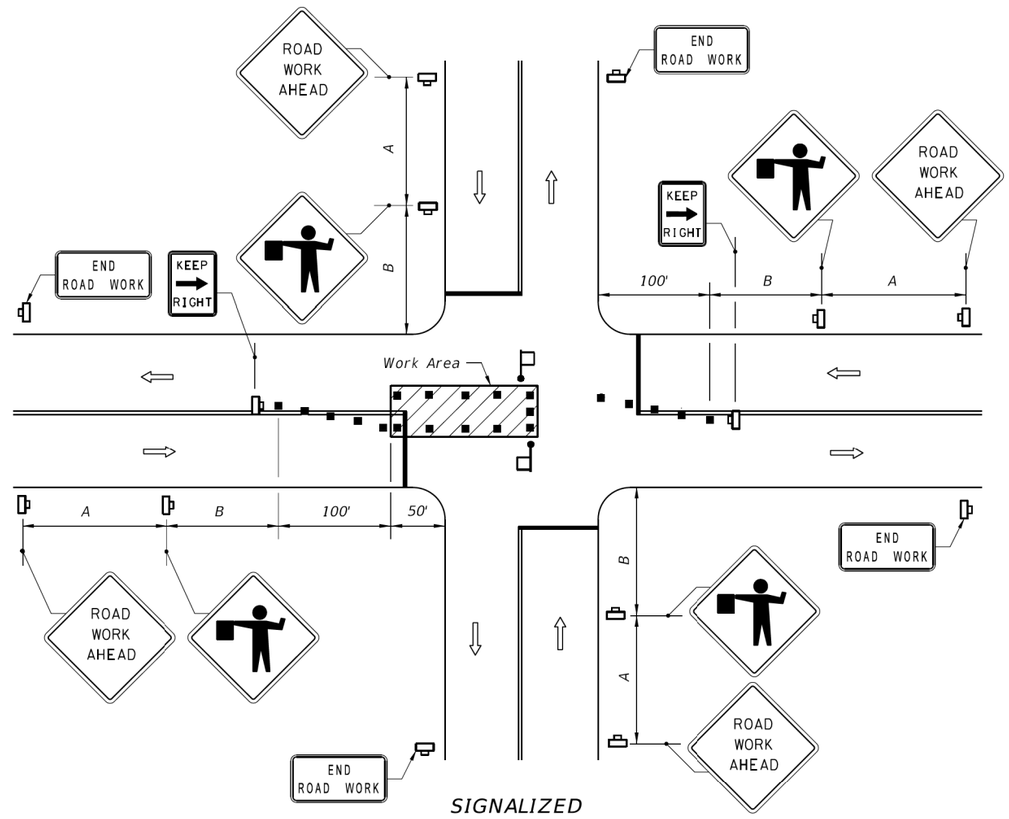
EROSION CONTROL

SHEET NO. 33

Mike.Forman 3/22/2018 7:39:52 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANEC01.dgn



UNSIGNALIZED



SIGNALIZED

SYMBOLS

- Work Area
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Flagger
- Stop Bar
- Lane Identification + Direction of Traffic

GENERAL NOTES

1. The FLAGGER legend sign may be substituted for the symbol sign.
2. When vehicles in a parking zone block the line of sight to TCZ signs, the signs shall be post mounted and located in accordance with Index No. 17302.
3. If the work space extends across a crosswalk, the crosswalk should be closed using the information in Index No. 660.
4. Flaggers shall be located where they can control more than one direction of traffic.

   Flaggers shall be in sight of each other or in direct communication at all times.
5. Maximum spacing between channelizing devices shall be not greater than 20'.
6. Temporary signal phasing modifications are to be approved by the District Traffic Operations Engineer prior to the beginning of work.
7. For general TCZ requirements and additional information, refer to Index No. 600.
8. For unsignalized intersections, use Temporary Raised Rumble Strips in accordance with Index 603. Placement of Rumble Strips and additional signs should begin at FLAGGER sign location.

DURATION NOTES

1. ROAD WORK AHEAD AND END ROAD WORK sign may be omitted if all of the following conditions are met:
   a. Work operations are 60 minutes or less.
   b. Speed is 45 mph or less.
   c. No sight obstructions to vehicles approaching the work area for a distance equal to A plus B.
   d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
   e. Volume and complexity of the roadway has been considered.

DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF A PORTION OF ONE OR MORE TRAFFIC LANES IN AN INTERSECTION.

10/12/2016 1:07:44 PM

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/15			FDOT FY 2017-18 DESIGN STANDARDS	TWO-LANE, TWO-WAY, WORK IN INTERSECTION	604	1 of 1

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

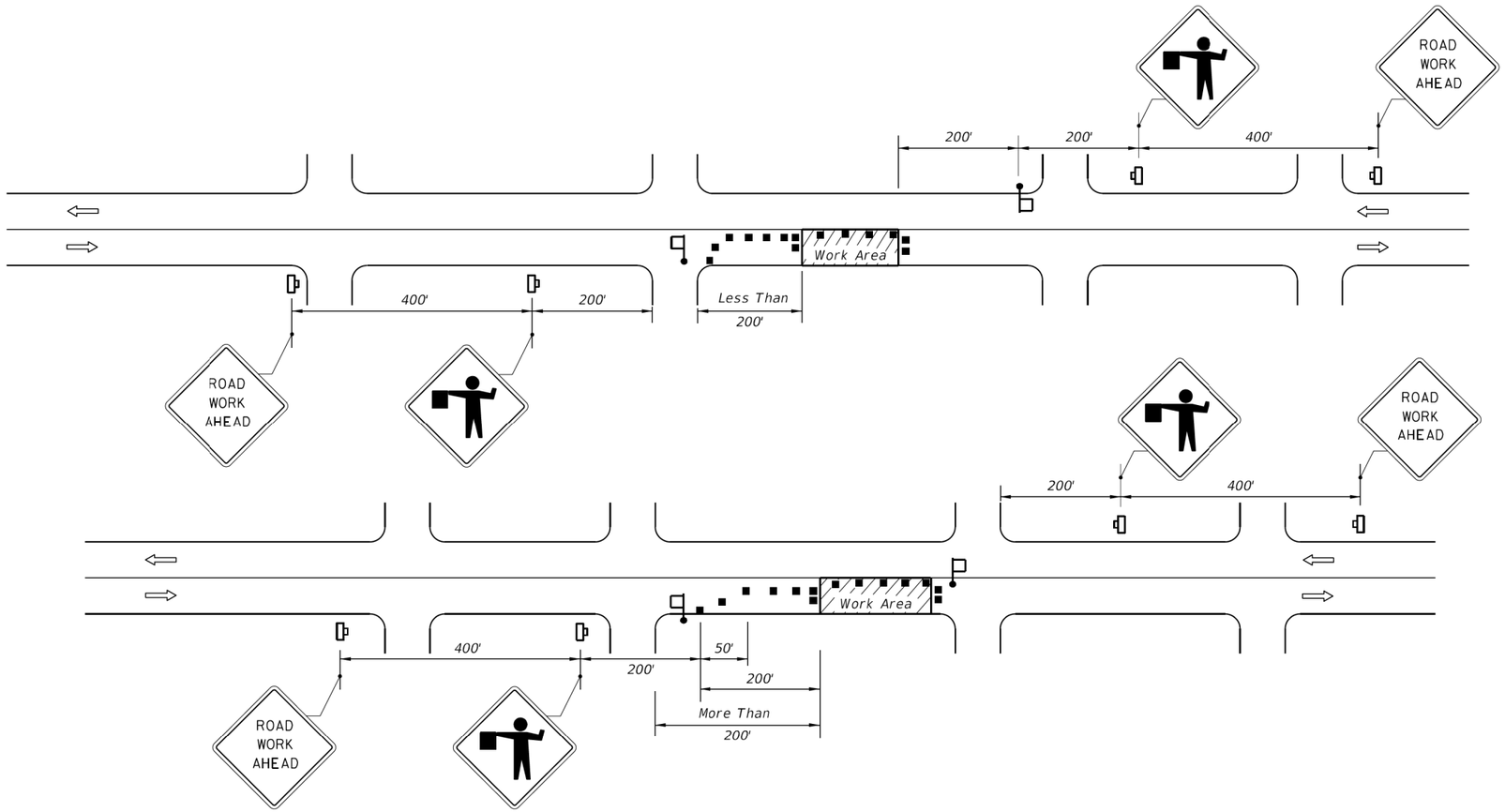
CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 34

Mike.Forman 3/22/2018 7:39:53 AM K:\VRB_Roadway\047922018 – Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn



CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS LESS THAN 200' DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS 200' OR MORE DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

SYMBOLS

- *Work Area*
- *Channelizing Device (See Index No. 600)*
- *Work Zone Sign*
- *Flagger*
- *Lane Identification + Direction of Traffic*

GENERAL NOTES

1. *Work operations shall be confined to one travel lane, leaving the opposing travel lane open to traffic.*
2. *When vehicles in a parking zone block the line of sight to TCZ signs or when TCZ signs encroach on a normal pedestrian walkway, the signs shall be post mounted and located in accordance with Index No. 17302.*
3. *If work area is confined to an outside auxiliary lane, the work area shall be barricaded and the FLAGGER signs replaced by ROAD WORK AHEAD signs. Flaggers are not required.*
4. *Flaggers shall be in sight of each other or in direct communication at all times.*
5. *The FLAGGER legend sign may be substituted for the symbol sign.*
6. *The maximum spacing between devices shall be no greater than 25.'*
7. *For general TCZ requirements and additional information, refer to Index No. 600.*
8. *The two channelizing devices directly in front and directly at the end of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.*
9. *Use Temporary Raised Rumble Strips in accordance with Index 603. Placement of Rumble Strips and additional signs should begin at FLAGGER sign location.*

DURATION NOTES

1. *ROAD WORK AHEAD sign may be omitted if all of the following conditions are met:*
   - *a. Work operations are 60 minutes or less.*
   - *b. Speed is 45 mph or less.*
   - *c. No sight obstructions to vehicles approaching the work area for a distance of 600 feet.*
   - *d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.*
   - *e. Volume and complexity of the roadway has been considered.*

10/12/2016 1:08:53 PM

LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	TWO-LANE, TWO-WAY, WORK NEAR INTERSECTION	INDEX NO.	SHEET NO.
07/01/15					605	1 of 1

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

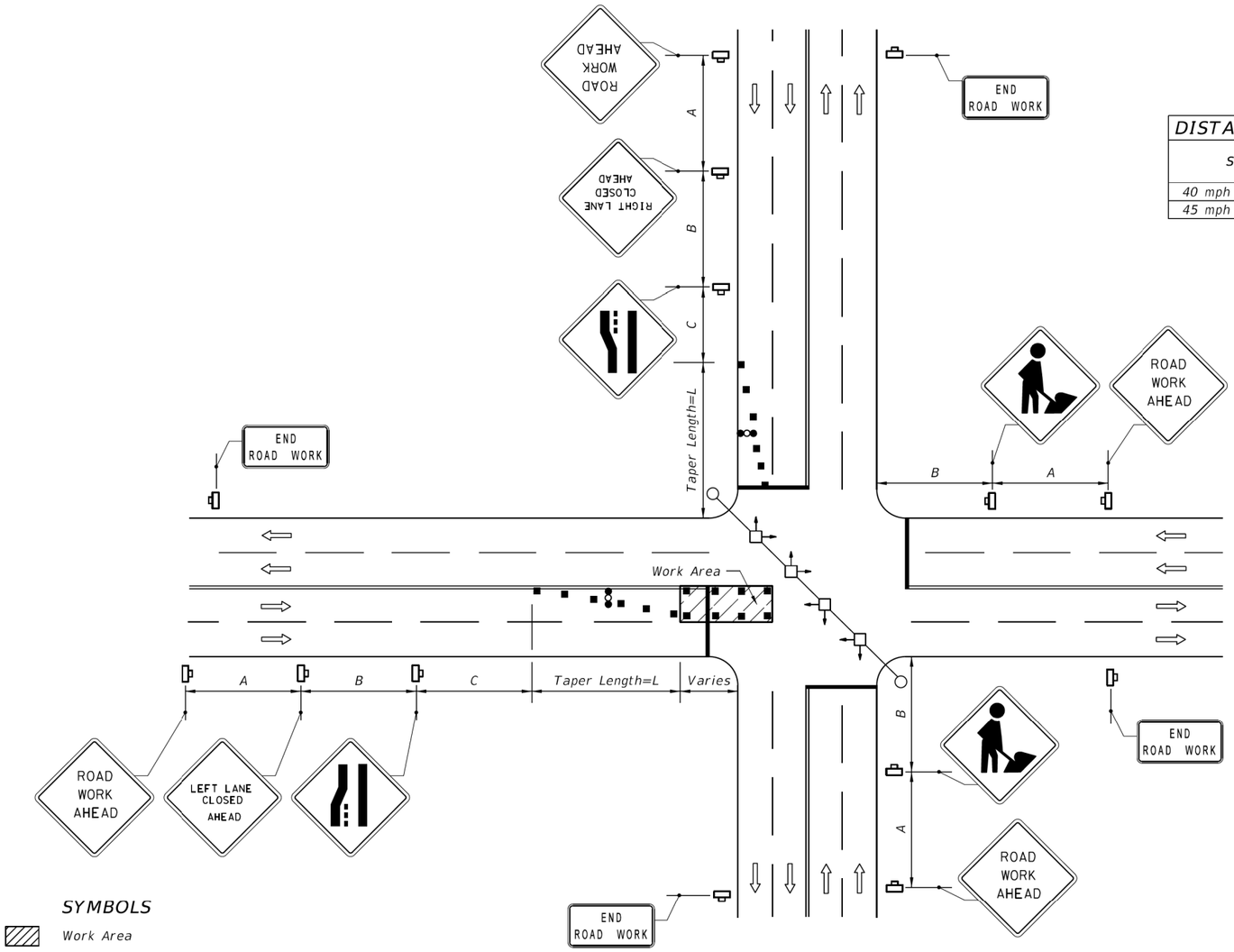
CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 35

Mike.Forman 3/22/2018 7:40:00 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn



DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)		
	A	B	C
40 mph or less	200	200	200
45 mph	350	350	350

Table II
Taper Length - Merge (12' Lateral Transition)

Speed (mph)	L (ft.)	Notes (Merge)
25	125	$L = \frac{WS^2}{60}$
30	180	
35	245	
40	320	
45	540	L=WS

For lateral transitions other than 12', use formula for L shown in the notes column. Where:
L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

GENERAL NOTES

1. The WORKERS legend sign may be substituted for the symbol sign.
2. When vehicles in a parking zone block the line of sight to TCZ signs, the signs shall be post mounted and located in accordance with Index No. 17302.
3. If the work space extends across a crosswalk, the crosswalk should be closed using the information in Index No. 660.
4. Dual signs are required for divided roadways.
5. Maximum spacing between barricades, vertical panels, cones, tubular markers and drums shall not be greater than 25'.
6. Temporary signal phasing modifications are to be approved by the District Traffic Operations Engineer prior to the beginning of work.
7. For general TCZ requirements and additional information, refer to Index No. 600.

SYMBOLS

- Work Area
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Stop Bar
- Advance Warning Arrow Board
- Lane Identification + Direction of Traffic

SIGNALIZED

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF AT LEAST ONE MEDIAN TRAFFIC LANE.

DURATION NOTES

1. Signs and arrow board may be omitted if all of the following conditions are met:
   a. Work operations are 60 minutes or less.
   b. Speed is 45 mph or less.
   c. No sight obstructions to vehicles approaching the work area for a distance equal to twice the taper length.
   d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
   e. Volume and complexity of the roadway has been considered.

10/12/2016 1:11:33 PM

LAST REVISION	REVISION	DESCRIPTION:		INDEX NO.	SHEET NO.
07/01/15			FY 2017-18 DESIGN STANDARDS	615	1 of 1

MULTILANE WORK IN INTERSECTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 36

Mike.Forman 3/22/2018 7:40:08 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn

GENERAL NOTES

1. Work operations shall be confined to either one lane, or lane combinations as follows:

   a. Outside travel lane;
   b. Outside auxiliary lane;
   c. Outside travel lane and adjoining auxiliary lane;
   d. Inside travel lane △;
   e. Inside auxiliary lane △;
   f. Inside travel lane and adjoining auxiliary lane △
   △ See Sheet 3

   If the work area is confined to an auxiliary lane the work area shall be barricaded and the RIGHT (LEFT) LANE CLOSED AHEAD signs replaced by ROAD WORK AHEAD signs, and the merge symbol signs eliminated.

2. When vehicles in a parking zone block the line of sight to TCZ signs, the signs shall be post mounted and located in accordance with Index No. 17302.

3. If the work space extends across a crosswalk, the crosswalk should be closed using the information in Index No. 660.

4. Signs are required on the median side for divided highways.

5. The two channelizing devices directly in front and directly at the end of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.

6. For general TCZ requirements and additional information, refer to Index No. 600.

DURATION NOTES

1. For work operations up to approximately 15 minutes, signs, channelizing devices, and arrow board may be omitted if all of the following conditions are met:

   a. Speed limit is 45 mph or less.
   b. No sight obstructions to vehicles approaching the work area for a distance equal to twice the taper length.
   c. Volume and complexity of the roadway has been considered.
   d. The closed lane is occupied by a class 5 or larger, medium duty truck(s) with a minimum gross weight vehicle rating (GWVR) of 16,001 lb with high-intensity, rotating, flashing, oscillating, or strobe lights mounted above the cab height and operating.

2. For work operations up to 60 minutes, the arrow board may be omitted if conditions a, b, and c in DURATION NOTE 1 are met, and vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

SYMBOLS

- Work Area
- Work Zone Sign
- Advance Warning Arrow Board
- Type III Barricade
- Channelizing Device (See Index No. 600)
- Lane Identification + Direction of Traffic

10/12/2016 1:12:55 PM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2017-18 DESIGN STANDARDS	MULTILANE, WORK NEAR INTERSECTION MEDIAN OR OUTSIDE LANE	INDEX NO.	SHEET NO.
07/01/15						616	1 of 3

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

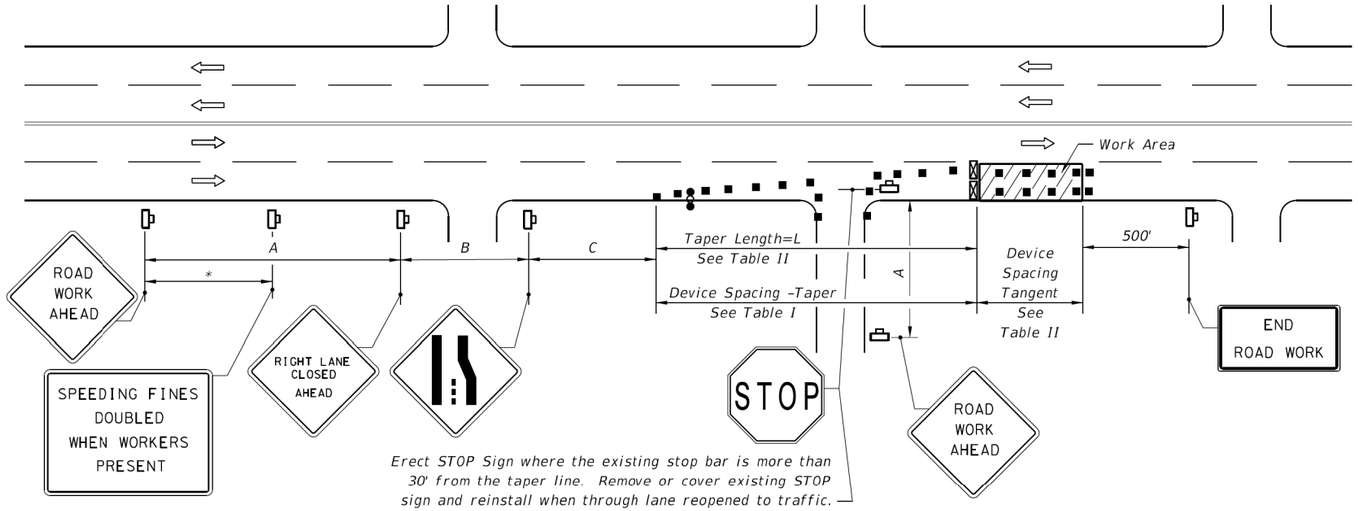
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 37

Mike.Forman 3/22/2018 7:40:16 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn

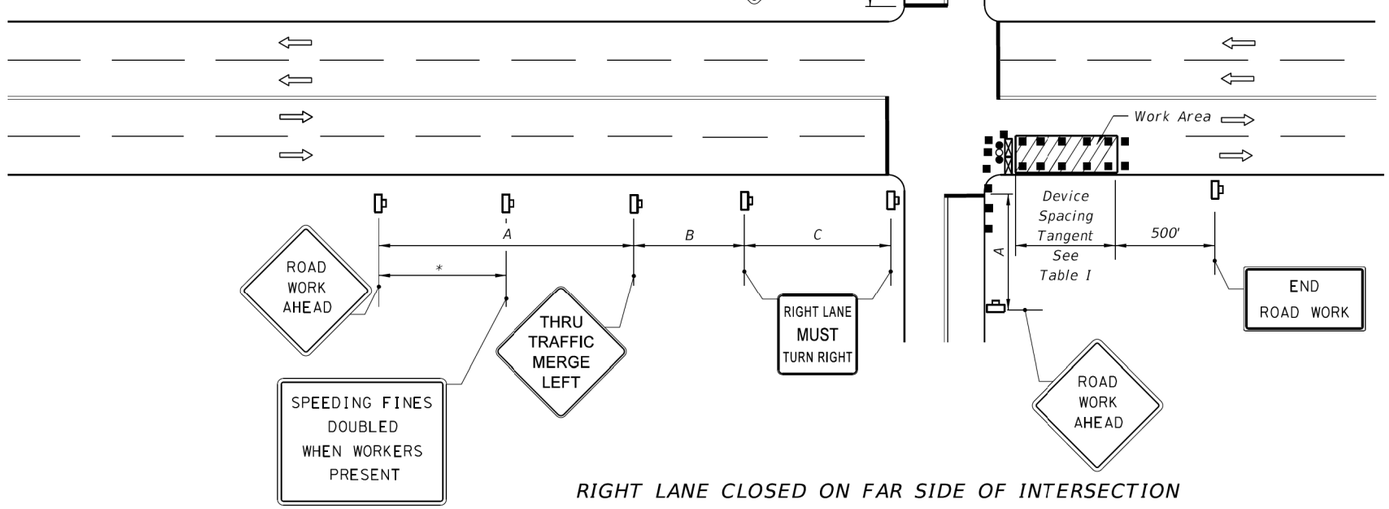


RIGHT LANE CLOSED ON FAR SIDE OF MINOR SIDESTREET

DISTANCE BETWEEN SIGNS			
Speed	Spacing (ft.)		
	A	B	C
40 mph or less	200	200	200
45 mph	350	350	350

* 500' beyond the ROAD WORK AHEAD sign or midway between signs whichever is less.

Table I Device Spacing				
Speed (mph)	Max. Distance Between Devices (ft.)			
	Cones or Tubular Markers		Type I or Type II Barricades or Vertical Panels or Drums	
	Taper	Tangent	Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50



RIGHT LANE CLOSED ON FAR SIDE OF INTERSECTION WITH SIGNIFICANT RIGHT TURNING MOVEMENTS

Table II Taper Length - Merge (12' Lateral Transition)		
Speed (mph)	L (ft)	Notes (Merge)
25	125	$L = \frac{WS^2}{60}$
30	180	
35	245	
40	320	
45	540	L=WS

For lateral transitions other than 12', use formula for L shown in the notes column. Where:
L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

1. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, when this results in the closure of a right lane having significant right turning movements, then the right lane may be restricted to right turns only as shown in this detail.
2. For intersection approaches reduced to a single lane, left turning movements may be prohibited to maintain capacity for through vehicular traffic.

10/12/2016 1:12:58 PM

LAST REVISION 07/01/15	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	MULTILANE, WORK NEAR INTERSECTION MEDIAN OR OUTSIDE LANE	INDEX NO. 616	SHEET NO. 2 of 3

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 38

Mike.Forman 3/22/2018 7:40:23 AM K:\VRB_Roadway\047922018 – Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn

City Commission Regular Meeting **11.d.**

Meeting Date: 04/15/2019

Re: Approval of Florida Boating Improvement Grant Agreement for Moore's Creek Boa Ramp Improvements

Submitted For: John Andrews, City Engineer, Engineering

SUBJECT:

Approval of Florida Boating Improvement Grant No. 18069 for Moore's Creek Boat Ramp Improvements in the amount of $72,500.00.

SUMMARY:

The City has been awarded grant funding in the amount of $72,500.00 for imrovements to the Moore's Creek boat ramp. These improvements as outlined in the grant agreement consist of installation of 3 boat ramp access piers with floating docks and the installation of an 85 foot wooden staging dock adjacent to the boat ramp. The City has also received a matching funds grant from F.I.N.D. in the amount of $78,500.00 for this project.

RECOMMENDATION:

Approval

ALTERNATIVES:

Not accept the grant funding and identify an alternative funding source for the $72,500.00.

RESPONSIBLE STAFF:

Edward Seissiger, Engineering Project Manager

COORDINATED WITH:

Andrea Pelton, FWC Grant Specialist

Fiscal Impact

Budgeted Y/N: n

Fiscal Year: 2018

Account: Gen. Fund

Amount: 72500

FISCAL IMPACT:

These are grant funds for Moore's Creek Boat ramp in the amount of $72,500.00

Attachments

Grant Documentation and Legal review

Form Review

Inbox	Reviewed By	Date
Finance Department	Johnna Morris	04/10/2019 11:13 AM
City Manager	Nick Mimms	04/10/2019 12:30 PM

Form Started By: Ed Seissiger
Started On: 04/03/2019 01:04 PM
Final Approval Date: 04/10/2019

THE SUNRISE CITY
FORT PIERCE
CITY ATTORNEY'S OFFICE Florida

TO: EDWARD SEISSIGER, PROJECT MANAGER

FROM: Peter Sweeney, City Attorney

RE: FWC Grant Agreement No. 18069

CAO RLS File: No. 19-65

DATE: April 02, 2019

I have reviewed the Request for Legal Services related to the FWC Grant Agreement No. 18069. It is approved as to Form and Correctness and I have signed in the appropriate signature spaces.

If you have any further questions, please contact this office via phone or email.

Thank you.

PS/mm

cc: Nicholas C. Mimms, P.E., City Manager
John R. Andrews, P.E. City Engineer
Linda Cox, City Clerk

THE SUNRISE CITY
FORT PIERCE
CITY ATTORNEY'S OFFICE Florida

CITY ATTORNEY USE ONLY

Date Received:	
Assigned To:	
File:	19-65
Due Date:	
Hours:	

RECEIVED
MAR 28 2019
By

Received
MAR 28 2019
City of Fort Pierce
City Manager's Office

REQUEST FOR LEGAL SERVICES

TO: PETE SWEENEY, CITY ATTORNEY

SUBMITTED BY: EDWARD SEISSIGER, PROJECT MANAGER

THROUGH: JOHN R. ANDREWS, P.E., CITY ENGINEER

CITY MANAGER AUTHORIZATION: NICHOLAS C. MIMMS, P.E., CITY MANAGER

RE: FWC GRANT AGREEMENT NO.18069

DATE: MARCH 27, 2019

Service Required: (please circle or underline)

Review Documents	**Draft Document**	**Written Opinion Requested**
Attend Meetings	**Advise**	**Other:** _____

Upon review and/or "Approval as to Form and Correctness," the Department submitting the RLS is responsible for placement of any related item on a Commission or Board Agenda.

1. **Brief statement of the nature of the request or problem:** (Provide description of the issue and what is being requested of the City Attorney's office.) Review of FWC Grant Agreement No. 18069 for form and correctness. This is a matching funds grant for the reconstruction of the Moores Creek boat ramp.

2. **Discussion of the implications and the possible impact if not apparent from preceding information:** (Discuss any issues related to the underlying matter to assist with the City Attorney's analysis.) This FWC grant agreement has be submitted to the City for execution.

3. **Time considerations and their significance:** (Note any deadlines, internal or external, that may affect the timeline for completion of the RLS, or may otherwise be pertinent.) We are placing this on the April 15, 2019 City Commission Agenda for approval.

4. **Are City funds required? If so, list approvals obtained for expenditure of funds:** (e.g., purchasing approval, Commission Approval at [date] Regular Meeting, finance approval.) This is a matching funds grant, the City has also received a matching funds grant form F.I.N.D. under these agreements the City is to provide in kind services.

5. **Factual background:** (Outline the facts related to the underlying matter to provide context for the request.)

    - City received a matching funds grant from both FWC and F.I.N.D.
    - The grant describes all of the City's responsibilities including the scope of work
    - The City has received the permits to perform the work

6. **List and/or attach all related documents and known authorities (e.g., statute, ordinance, resolution, administrative code, legal case, RFP, bidder's response, contract, lease, letter, memorandum, prior legal opinion, deed, etc.):** (Requestor should investigate the issue and gather all documents/information pertaining to the matter from any other related departments *prior* to submitting the request to this office):

    - Grant application – We will place it on the Engineering shared drive under Boat Ramps/ FWC grant.

7. **Identify prior legal assistance on this or a related matter and the attorney who handled it:**

    City Attorney's office approved the FIND grant application

8. **If this is a request for review of a contract, provide the following:**

    List of individuals who have read and approved the business terms and conditions of the contract and confirmed the ability to carry out the terms of the contract as they apply to the City Jack Andrews and Ed Seissiger have reviewed the document. Ed Seissiger worked with the FWC Grant Specialist to develop the scope of work list in the document.

    a. **Insurance requirements that differ from the City's template insurance terms:** (The department should consult with the Risk Manager for each contract to determine whether there are any special insurance requirements.) N/A

CITY ATTORNEY USE ONLY			
Routed for Review	**Date**	**Response Deadline**	**Response**

			Approved as to Form & Correctness City Attorney - Peter J. Sweeney Signed: _____ Date: 4-2-2019

STATE OF FLORIDA
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

AGREEMENT NO. 18069

CFDA Title(s): N/A	**CFDA No(s).:** N/A
Name of Federal Agency(s): N/A	
Federal Award No(s): N/A	**Federal Award Year(s):** N/A
Federal Award Name(s): N/A	
CSFA Title(s).: Florida Boating Improvement Program	**CSFA No(s).:** 77.006
State Award No(s).: 18069	**State Award Year(s):** 2018/2019
State Award Name(s): City of Fort. Pierce - Moore's Creek Boat Ramp Improvements	

This Agreement is entered into by and between the Florida Fish and Wildlife Conservation Commission, whose address is 620 South Meridian Street, Tallahassee, Florida 32399-1600, hereafter "**Commission**," and City of Ft. Pierce, FEID # 59-6000322, whose address is 100 North U.S. Hwy 1, Fort Pierce, FL 34950, hereinafter "**Grantee**."

WHEREAS, the Commission and Grantee have partnered together to design, engineer, permit, and construct three new finger piers and a new fixed dock at Moore's Creek Boat Ramp; and,

WHEREAS, Grantee has been awarded Florida Boating Improvement Program grant# 18069; and,

WHEREAS, such benefits are for the ultimate good of the State of Florida, its resources, wildlife, and public welfare.

NOW THEREFORE, the Commission and the Grantee, for the considerations hereafter set forth, agree as follows:

1. **PROJECT DESCRIPTION.** –

The Grantee shall provide the services and perform the specific responsibilities and obligations, as set forth in the Scope of Work, attached hereto as Attachment A and made a part hereof (hereafter, Scope of Work). The Scope of Work specifically identifies project tasks and accompanying deliverables. These deliverables must be submitted and approved by the Commission prior to any payment. The Commission will not accept any deliverable that does not comply with the specified required minimum level of service to be performed and the criteria for evaluating the successful completion of each deliverable. If this agreement is the result of Grantee responses to the Commission's request for competitive or other grant proposals, the Grantee's response is hereby incorporated by reference.

2. PERFORMANCE.

The Grantee shall perform the activities described in the Scope of Work in a proper and satisfactory manner. Unless otherwise provided for in the Scope of Work, any and all equipment, products or materials necessary or appropriate to perform under this Agreement shall be supplied by the Grantee. Grantee shall obtain all necessary local, state, and federal authorizations necessary to complete this project, and the Grantee shall be licensed as necessary to perform under this Agreement as may be required by law, rule, or regulation; the Grantee shall provide evidence of such compliance to the Commission upon request. The Grantee shall procure all supplies and pay all charges, fees, taxes and incidentals that may be required for the completion of this Agreement. By acceptance of this Agreement, the Grantee warrants that it has the capability in all respects to fully perform the requirements and the integrity and reliability that will assure good-faith performance as a responsible Grantee. Grantee shall immediately notify the Commission's Grant Manager in writing if its ability to perform under the Agreement is compromised in any manner during the term of the Agreement. The Commission shall take appropriate action, including potential termination of this Agreement pursuant to Paragraph eight (8) below, in the event the Grantee's ability to perform under this Agreement becomes compromised.

3. AGREEMENT PERIOD.

A. Agreement Period and Commission's Limited Obligation to Pay. This Agreement is made pursuant to a grant award and shall be effective upon execution by the last Party to sign and shall remain in effect through 09/30/2041. However, as authorized by Rule 68-1.003, F.A.C., referenced grant programs may execute Agreements with a retroactive start date of no more than sixty (60) days, provided that approval is granted from the Executive Director or his/her designee and that it is in the best interest of the Commission and State to do so. For this agreement, the retroactive start date was not approved. The Commission's Grant Manager shall confirm the specific start date of the Agreement by written notice to the Grantee. The Grantee shall not be eligible for reimbursement or compensation for grant activities performed prior to the start date of this Agreement nor after the end date of the Agreement. For this agreement, preaward costs are not eligible for reimbursement. If necessary, by mutual agreement as evidenced in writing and lawfully executed by the Parties, an Amendment to this Agreement may be executed to lengthen the Agreement period.

4. COMPENSATION AND PAYMENTS.

A. Compensation. As consideration for the services rendered by the Grantee under the terms of this Agreement, the Commission shall pay the Grantee on a cost reimbursement basis in an amount not to exceed $72,500.

B. Payments. The Commission shall pay the Grantee for satisfactory performance of the tasks identified in Attachment A, Scope of Work, as evidenced by the completed deliverables, upon submission of invoices, accompanied by supporting documentation sufficient to justify invoiced expenses or fees, and after acceptance of services and deliverables in writing by the Commission's Grant Manager identified in Paragraph ten (10), below. Unless otherwise specified in the Scope of Work, invoices shall be due monthly, commencing from the start date of this Agreement. Invoices must be legible and must clearly reflect the Deliverables that were provided in accordance with the terms of the Agreement for the invoice period. Unless otherwise specified in the Scope of Work, a final invoice shall be submitted to the Commission no later than forty-five (45) days following the expiration date of this Agreement to assure the availability of funds for payment. Further, pursuant to Section 215.971(1)(d), F.S., the Commission may only reimburse the Grantee for allowable costs resulting from obligations incurred during the agreement period specified in Paragraph three (3).

C. **Invoices.** Each invoice shall include the Commission Agreement Number and the Grantee's Federal Employer Identification (FEID) Number. Invoices, with supporting documentation, may be submitted electronically to the attention of the Commission's Grant Manager identified in Paragraph ten (10), below. If submitting hard copies, an original and two (2) copies of the invoice, plus all supporting documentation, shall be submitted. All bills for amounts due under this Agreement shall be submitted in detail sufficient for a proper pre-audit and post-audit thereof. Grantee acknowledges that the Commission's Grant Manager shall reject invoices lacking documentation necessary to justify invoiced expenses.

D. **Match.** Pursuant to grant program guidelines, the Grantee is required to contribute non-federal match towards this Agreement. If applicable, details regarding specific match requirements are included in Attachment A, Scope of Work.

E. **Travel Expenses.** If authorized in Attachment A, Scope of Work, travel expenses shall be reimbursed in accordance with Section 112.061, F.S.

F. **State Obligation to Pay.** The State of Florida's performance and obligation to pay under this Agreement is contingent upon an annual appropriation and authorization to spend by the Legislature. The Parties hereto understand that this Agreement is not a commitment to future appropriations but is subject to appropriation and authority to spend provided by the Legislature. The Commission shall be the final authority as to the availability of funds for this Agreement, and as to what constitutes an "annual appropriation" of funds to complete this Agreement. If such funds are not appropriated or available for the Agreement purpose, such event will not constitute a default on behalf of the Commission or the State. The Commission's Grant Manager shall notify the Grantee in writing at the earliest possible time if funds are not appropriated or available.

G. **Non-Competitive Procurement and Rate of Payment.** Section 216.3475, F.S., requires that under non-competitive procurements, a Grantee may not receive a rate of payment in excess of the competitive prevailing rate for those services unless expressly authorized in the General Appropriations Act. If applicable, Grantee warrants, by execution of this Agreement, that the amount of non-competitive compensation provided in this Agreement is in compliance with Section 216.3475, F.S.

H. **Time Limits for Payment of Invoices.** Payments shall be made in accordance with Sections 215.422 and 287.0585, F.S., which govern time limits for payment of invoices. Section 215.422, F.S. provides that agencies have five (5) working days to inspect and approve Deliverables, unless the Scope of Work specifies otherwise. If payment is not available within forty (40) days, measured from the latter of the date the invoice is received or the Deliverables are received, inspected and approved, a separate interest penalty set by the Department of Financial Services pursuant to Section 55.03(1), F.S., will be due and payable in addition to the invoice amount. Invoices returned to a Grantee due to preparation errors will result in a payment delay. Invoice payment requirements do not start until a properly completed invoice is provided to the agency.

I. **Electronic Funds Transfer.** Grantee agrees to enroll in Electronic Funds Transfer (EFT), offered by the State's Chief Financial Officer, within thirty (30) days of the date the last Party has signed this Agreement. Copies of the Authorization form and a sample blank enrollment letter can be found on the vendor instruction page at:

http://www.fldfs.com/aadir/direct_deposit_web/Vendors.htm

Questions should be directed to the State of Florida's EFT Section at (850) 413-5517. Once enrolled, invoice payments will be made by EFT.

J. **Vendor Ombudsman.** A Vendor Ombudsman, whose duties include acting as an advocate for vendors who may be experiencing problems in obtaining timely payment(s) from a State agency, may be contacted at (850) 413-5516 or by calling the Chief Financial Officer's Hotline, (800) 342-2762.

5. **RETURN OR RECOUPMENT OF FUNDS.**

A. **Overpayment to Grantee.** Pursuant to Section 215.971(1)(e) &(f), F.S., the Grantee shall return to the Commission any overpayments due to unearned funds or funds disallowed pursuant to the terms of this Agreement that were disbursed to Grantee by the Commission. In the event the Grantee or its independent auditor discovers that overpayment has been made, the Grantee shall repay said overpayment within forty (40) calendar days without prior notification from the Commission. In the event the Commission first discovers an overpayment has been made, the Commission will notify the Grantee in writing. Should repayment not be made in a timely manner, the Commission shall be entitled to charge interest at the lawful rate of interest established pursuant to Section 55.03(1), F.S., on the outstanding balance beginning forty (40) calendar days after the date of notification or discovery. Refunds should be sent to the Commission's Grant Manager and made payable to the "The Florida Fish and Wildlife Conservation Commission."

B. **Additional Costs or Monetary Loss Resulting from Grantee Non-Compliance.** If the Grantee's non-compliance with any provision of the Agreement results in additional cost or monetary loss to the Commission or the State of Florida to the extent allowed by Florida Law, the Commission can recoup that cost or loss from monies owed to the Grantee under this Agreement or any other agreement between Grantee and the Commission. In the event the discovery of this cost or loss arises when no monies are available under this Agreement or any other agreement between the Grantee and the Commission, the Grantee will repay such cost or loss in full to the Commission within thirty (30) days of the date of notice of the amount owed, unless the Commission agrees, in writing, to an alternative timeframe. If the Grantee is unable to repay any cost or loss to the Commission, the Commission shall notify the State of Florida, Department of Financial Services, for resolution pursuant to Section 17.0415, F.S.

6. **COMMISSION EXEMPT FROM TAXES, PROPERTY EXEMPT FROM LIEN.**

A. **Commission Exempt from Taxes.** The Grantee recognizes that the State of Florida, by virtue of its sovereignty, is not required to pay any taxes on the services or goods purchased under the terms of this Agreement. Grantee is placed on notice that this exemption generally does not apply to nongovernmental entity recipients, subrecipients, contractors, or subcontractors. Any questions regarding this tax exemption should be addressed to the Commission Grant Manager.

B. **Property Exempt from Lien.** If the Grant involves the improvement of real property titled to the State of Florida, then the following paragraph applies:

> The Grantee acknowledges that Property being improved is titled to the State of Florida and is not subject to lien of any kind for any reason. The Grantee shall include notice of such exemptions in any subcontracts and purchase orders issued hereunder.

7. **MONITORING.**

The Commission's Grant Manager shall actively monitor the Grantee's performance and compliance with the terms of this Agreement. The Commission reserves the right for any Commission staff to make scheduled or unscheduled, announced or unannounced monitoring visits. Specific State and Federal monitoring terms and conditions are found in Attachment B, Audit Requirements. Additionally, monitoring terms, conditions, and schedules may be included in Attachment A, Scope of Work.

8. TERMINATION.

A. Commission Termination. The Commission may unilaterally terminate this Agreement for convenience by providing the Grantee with thirty (30) calendar days of written notice of its intent to terminate. The Grantee shall not be entitled to recover any cancellation charges or lost profits. The Grantee may request termination of the Agreement for convenience.

B. Termination – Fraud or Willful Misconduct. This Agreement shall terminate immediately in the event of fraud or willful misconduct. In the event of such termination, the Commission shall provide the Grantee with written notice of termination.

C. Termination – Other. The Commission may terminate this Agreement if the Grantee fails to: 1.) comply with all terms and conditions of this Agreement; 2.) produce each deliverable within the time specified by the Agreement or extension; 3.) maintain adequate progress, thus endangering the performance of the Agreement; or, 4.) abide by any statutory, regulatory, or licensing requirement. Rule 60A-1.006(3), F.A.C., governs the procedure and consequences for default. The rights and remedies of the Commission in this clause are in addition to any other rights and remedies provided by law or under the Agreement. The Grantee shall not be entitled to recover any cancellation charges or lost profits.

D. Termination - Funds Unavailability. In the event funds to finance this Agreement become unavailable or if federal or state funds upon which this Agreement is dependent are withdrawn or redirected, the Commission may terminate this Agreement upon no less than twenty-four (24) hours' notice in writing to the Grantee. Said notice shall be delivered by certified mail, return receipt requested or in person with proof of delivery. The Commission shall be the final authority as to the availability of funds and will not reallocate funds appropriated for this Agreement to another program thus causing "lack of funds." In the event of termination of this Agreement under this provision, the Grantee will be compensated for any work satisfactorily completed and any non-cancellable obligations properly incurred prior to notification of termination.

E. Grantee Discontinuation of Activities upon Termination Notice. Upon receipt of notice of termination, the Grantee shall, unless the notice directs otherwise, immediately discontinue all activities authorized hereunder. Upon termination of this Agreement, the Grantee shall promptly render to the Commission all property belonging to the Commission. For the purposes of this section, property belonging to the Commission shall include, but shall not be limited to, all books and records kept on behalf of the Commission.

9. REMEDIES.

A. Financial Consequences. In accordance with Sections 215.971(1)(a) &(b), F.S., Attachment A, Scope of Work, contains clearly established tasks in quantifiable units of deliverables that must be received and accepted in writing by the agency before payment. Each deliverable specifies the required minimum level of service to be performed and the criteria for evaluating the successful completion of each deliverable. If the Grantee fails to produce each deliverable within the time frame specified by the Scope of Work, the budget amount allocated for that deliverable will be

deducted from the Grantee's payment. In addition, pursuant to Section 215.971(1)(c), the Commission shall apply any additional financial consequences, identified in the Scope of Work.

B. Cumulative Remedies. The rights and remedies of the Commission in this paragraph are in addition to any other rights and remedies provided by law or under the Agreement.

10. NOTICES AND CORRESPONDENCE.

Any and all notices shall be delivered to the individuals identified below. In the event that either Party designates a different Grant Manager after the execution of this Agreement, the Party will provide written notice of the name, address, zip code, telephone and fax numbers, and email address of the newest Grant Manager, or an individual authorized to receive notice on behalf of that Party, to all other Parties as soon as possible, but not later than five (5) business days after the new Grant Manager has been named. A designation of a new Grant Manager shall not require a formal amendment to the Agreement.

FOR THE COMMISSION:	**FOR THE GRANTEE:**
Grant Manager	Grant Manager
Andrea Pelton	Edward Seissiger
Grant Specialist	Project Manager, Engineering Department
FL Fish and Wildlife Conservation Commission	City of Fort Pierce
620 S Meridian St	100 N. US Hwy 1
Tallahassee, FL 32399	Fort Pierce, FL 34950
(850) 488-5600	(772) 467-3780
(850) 488-9824, Fax	(772) 460-6847, Fax
fbip@myfwc.com	ESeissiger@City-FtPierce.com

11. AMENDMENT.

A. Waiver or Modification. No waiver or modification of this Agreement or of any covenant, condition, or limitation herein contained shall be valid unless in writing and lawfully executed by the Parties.

B. Change Orders. The Commission may, at any time, by written order, make a change to this Agreement. Such changes are subject to the mutual agreement of both Parties as evidenced in writing. Any change which causes an increase or decrease in the Grantee's cost or time shall require an Amendment. Minor changes, such as those updating a Party's contact information, may be accomplished by a Modification.

C. Renegotiation upon Change in Law or Regulation. The Parties agree to renegotiate this Agreement if federal and/or state revisions of any applicable laws or regulations make changes in the Agreement necessary.

12. PROPERTY RIGHTS.

If this Agreement includes Federal funds, the provisions of Sections 200.310-200.316, OMB Uniform Guidance (2 CFR 200), and any language addressing Federal rights, apply.

A. Intellectual and Other Intangible Property.

i. **Grantee's Preexisting Intellectual Property (Proprietary) Rights.** Unless specifically addressed in the Attachment A, Scope of Work, intellectual and other intangible property rights to the Grantee's preexisting property will remain with the Grantee.

ii. **Proceeds Related to Intellectual Property Rights.** Proceeds derived from the sale, licensing, marketing or other authorization related to any intellectual and other intangible property right created or otherwise developed by the Grantee under this Agreement for the Commission shall be handled in the manner specified by the applicable Florida State Statute and/or Federal program requirements.

iii. **Commission Intellectual Property Rights.** Where activities supported by this Agreement produce original writing, sound recordings, pictorial reproductions, drawings or other graphic representations and works of any similar nature, the Commission and the State of Florida have the unlimited, royalty-free, nonexclusive, irrevocable right to use, duplicate and disclose such materials in whole or in part, in any manner, for any purpose whatsoever and to have others acting on behalf of the Commission to do so. If this Agreement is supported by federal funds, the federal awarding agency reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use the work for federal purposes, and to authorize others to do so.

B. Purchase or Improvement of Real Property

This agreement is for the purchase or improvement of real property, therefore the following terms and conditions apply.

i. **Federal Funds.** Any Federal funds provided for the purchase of or improvements to real property are subject to the Property Standards of Sections 200.310 - 200.316, and 200.329, OMB Uniform Guidance (2 CFR 200), as amended.

ii. **Title.** If this agreement is supported by state funds, the Grantee shall comply with Section 287.05805, F.S. This section requires the Grantee to grant a security interest in the property to the State of Florida, the type and details of which are provided for in Attachment A, Scope of Work. Title to state-owned real property remains vested in the state. Title to federally-owned real property remains vested in the Federal government in accordance with the provisions of Section 200.312, OMB Uniform Guidance (2 CFR 200), as amended.

iii. **Use.** Federally-owned real property will be used for the originally authorized purpose as long as needed for that purpose in accordance with Section 200.311, OMB Uniform Guidance (2 CFR 200). State-owned real property will be used as provided in Attachment A, Scope of Work.

C. Non-Expendable Property. The following provisions apply to the extent that the grant allows the acquisition of non-expendable property.

i. **Non-Expendable Property Defined.** For the requirements of this section of the Agreement, "non-expendable property" is the same as "property" as defined in Section 273.02, F.S. (equipment, fixtures, and other tangible personal property of a non-consumable and non-expendable nature, with a value or cost of **$1,000.00** or more, and a normal expected life of one (1) year or more; hardback-covered bound books that are circulated to students or the general public, with a value or cost of **$25.00** or more; and uncirculated hardback-covered bound books, with a value or cost of **$250.00** or more).

ii. **Title to Non-Expendable Property.** Title (ownership) to all non-expendable property acquired with funds from this Agreement shall be vested in the Commission and said property shall be transferred to the Commission upon completion or termination of the

Agreement unless otherwise authorized in writing by the Commission or unless otherwise specifically provided for in Attachment A, Scope of Work.

D. Equipment and Supplies. The following provisions apply to the extent that the grant allows the acquisition of equipment and supplies.

i. **Title - Equipment.** Title to equipment acquired under a Federal award will vest upon acquisition in the non-Federal entity in accordance with Sections 200.313 and 200.314, OMB Uniform Guidance (2 CFR 200).

ii. **Title – Supplies.** Title to supplies will vest in the non-Federal entity upon acquisition. Unused supplies exceeding **$5,000.00** in total aggregate value upon termination or completion of the project or program are subject to Section 200.314, OMB Uniform Guidance.

iii. **Use – Equipment.** Equipment must be used by the non-Federal entity in the program or project for which it was acquired as long as needed

13. RELATIONSHIP OF THE PARTIES.

A. Independent Grantee. The Grantee shall perform as an independent grantee and not as an agent, representative, or employee of the Commission. The Grantee covenants that it presently has no interest and shall not acquire any interest that would conflict in any manner or degree with the performance of services required. Each Party hereto covenants that there is no conflict of interest or any other prohibited relationship between the Grantee and the Commission.

B. Grantee Training and Qualifications. Grantee agrees that all Grantee employees, subcontractors, or agents performing work under the Agreement shall be properly trained technicians who meet or exceed any specified training qualifications. Upon request, Grantee shall furnish a copy of technical certification or other proof of qualification.

C. Commission Security. All employees, subcontractors, or agents performing work under the Agreement must comply with all security and administrative requirements of the Commission. The Commission may conduct, and the Grantee shall cooperate in, a security background check or otherwise assess any employee, subcontractor, or agent furnished by the Grantee. The Commission may refuse access to, or require replacement of, any personnel for cause, including, but not limited to, technical or training qualifications, quality of work, change in security status, or non-compliance with the Commission's other requirements. Such refusal shall not relieve Grantee of its obligation to perform all work in compliance with the Agreement. The Commission, in coordination with the Grantee, may reject and bar from any facility for cause any of Grantee's employees, subcontractors, or agents.

D. Commission Rights to Assign or Transfer. The Grantee agrees that the State of Florida shall at all times be entitled to assign or transfer its rights, duties, or obligations under this Agreement to another governmental agency in the State of Florida, upon giving prior written notice to the Grantee.

E. Commission Rights to Undertake and Award Supplemental Agreements. Grantee agrees that the Commission may undertake or award supplemental agreements for work related to the Agreement. The Grantee and its subcontractors shall cooperate with such other Grantees and the Commission in all such cases.

14. SUBCONTRACTS.

A. Authority. Grantee is permitted to subcontract work under this Agreement, therefore, the following terms and conditions apply. The Grantee shall ensure, and provide assurances to the Commission upon request, that any subcontractor selected for work under this Agreement has the necessary qualifications and abilities to perform in accordance with the terms and conditions of this Agreement. The Grantee must provide the Commission with the names of any subcontractor considered for work under this Agreement; the Commission in coordination with the Grantee reserves the right to reject any subcontractor. The Grantee agrees to be responsible for all work performed and all expenses incurred with the project. Any subcontract arrangements must be evidenced by a written document available to the Commission upon request. The Grantee further agrees that the Commission shall not be liable to the extent allowed by law, to any subcontractor for any expenses or liabilities incurred under the subcontract and the Grantee shall be solely liable to the subcontractor for all expenses and liabilities incurred under the subcontract.

B. Grantee Payments to Subcontractor. If subcontracting is permitted pursuant to Paragraph A, above, Grantee agrees to make payments to the subcontractor upon completion of work and submitted invoice in accordance with the contract between the Grantee and subcontractor. Failure to make payment pursuant to any subcontract will result in a penalty charged against Grantee and paid to the subcontractor in the amount of one-half of one percent (0.50%) of the amount due per day from the expiration of the period allowed herein for payment. Such penalty shall be in addition to actual payments owed and shall not exceed fifteen percent (15%) of the outstanding balance due."

C. Commission Right to Reject Subcontractor Employees. The Commission in coordination with Grantee shall retain the right to reject any of the Grantee's or subcontractor's employees whose qualifications or performance, in the Commission's judgment, are insufficient.

D. Subcontractor as Independent Contractor. If subcontracting is permitted pursuant to Paragraph A above, the Grantee agrees to take such actions as may be necessary to ensure that each subcontractor will be deemed to be an independent contractor and will not be considered or permitted to be an agent, servant, joint venture, or partner of the State of Florida.

15. MANDATORY DISCLOSURE.

These disclosures are required by State law, as indicated, and apply when this Agreement includes State funding; and by Federal law, as indicated, and apply when the Agreement includes a Federal award.

A. Disclosure of Interested State Employees and Conflict of Interest. This Agreement is subject to Chapter 112, F.S. Grantee shall provide the name of any officer, director, employee, or other agent who is affiliated with this project and an employee of the State of Florida. If the Agreement includes a Federal award, then the Agreement is also subject to Section 200.112, OMB Uniform Guidance (2 CFR 200). Grantee must disclose, in writing, any potential conflict of interest to the Commission in accordance with applicable Federal awarding agency policy.

B. Convicted Vendors. Grantee hereby certifies that neither it, nor any person or affiliate of Grantee, has been convicted of a Public Entity Crime as defined in section 287.133, F.S., nor placed on the convicted vendor list. Grantee shall have a continuing obligation to disclose, to the Commission, in writing, if it, its principals, recipient, subrecipient, contractor, or subcontractor, are on the

convicted vendors list maintained by the Florida Department of Management Services pursuant to Section 287.133(3)(d), F.S.

i. **Convicted Vendor List.** Pursuant to Subsection 287.133(2)(a), F.S., a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not be awarded or perform work as a Grantee, supplier, subcontractor or consultant under a contract with any public entity and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, F.S., for Category Two for a period of thirty-six (36) months from the date of being placed on the convicted vendor list. The State of Florida, Department of Management Services, Division of State Purchasing provides listings for convicted, suspended, discriminatory and federal excluded parties, as well as the vendor complaint list at:

http://www.dms.myflorida.com/business_operations/state_purchasing/vendor_information/convicted_suspended_discriminatory_complaints_vendor_lists

ii. **Notice of Conviction of Public Entity Crime.** Any person must notify the Department of Management Services and the Commission, in writing, within thirty (30) days after conviction of a public entity crime applicable to that person or an affiliate of that person as defined in Section 287.133, F.S.

C. **Vendors on Scrutinized Companies List.**

i. **Scrutinized Companies.** Grantee certifies that it and any of its affiliates are not scrutinized companies as identified in Section 287.135, F.S. In addition, Grantee agrees to observe the requirements of Section 287.135, F.S., for applicable sub-agreements entered into for the performance of work under this Agreement. Pursuant to Section 287.135, F.S., the Commission may immediately terminate this Agreement for cause if the Grantee, its affiliates, or its subcontractors are found to have submitted a false certification; or if the Grantee, its affiliates, or its subcontractors are placed on any applicable scrutinized companies list or engaged in prohibited contracting activity during the term of the Agreement. As provided in Subsection 287.135(8), F.S., if federal law ceases to authorize these contracting prohibitions then they shall become inoperative.

D. **Discriminatory Vendors.** Grantee shall disclose to the Commission, in writing, if they, their subrecipient, contractor, or subcontractor, are on the Discriminatory Vendor List maintained by the Florida Department of Management Services pursuant to Section 287.134(3)(d), F.S. "An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity." Section 287.134(2)(a), F.S. Grantee has a continuing duty to disclose to the Commission whether they appear on the discriminatory vendor list.

E. **Prompt Disclosure of Litigation, Investigations, Arbitration, or Administrative Proceedings.** Throughout the term of the Agreement, the Grantee has a continuing duty to promptly disclose to the Commission's Grant Manager, in writing, upon occurrence, all civil or criminal litigation, investigations, arbitration, or administrative proceedings (Proceedings) relating to or affecting the Grantee's ability to perform under this agreement. If the existence of such Proceeding causes the Commission concern that the Grantee's ability or willingness to perform the Agreement is

jeopardized, the Grantee may be required to provide the Commission with reasonable assurances to demonstrate that: a.) the Grantee will be able to perform the Agreement in accordance with its terms and conditions; and, b.) Grantee and/or its employees or agents have not and will not engage in conduct in performing services for the Commission which is similar in nature to the conduct alleged in such Proceeding.

F. Certain Violations of Federal Criminal Law. If this agreement includes a Federal award, then in accordance with Section 200.113, OMB Uniform Guidance (2 CFR 200), Grantee must disclose, in a timely manner, in writing to the Commission all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award.

16. INSURANCE.

The Grantee warrants and represents that it is insured, or self-insured for liability insurance, in accordance with applicable state law and that such insurance or self-insurance offers protection applicable to the Grantee's officers, employees, servants and agents while acting within the scope of their employment with the Grantee.

17. SPONSORSHIP.

As required by Section 286.25, F.S., if any recipient, subrecipient, contractor or subcontractor under this grant is a nongovernmental organization which sponsors a program financed wholly or in part by state funds, including any funds obtained through this Agreement, it shall, in publicizing, advertising, or describing the sponsorship of the program, state: "Sponsored by (Grantee's name) and the State of Florida, Fish and Wildlife Conservation Commission." If the sponsorship reference is in written material, the words "State of Florida, Fish and Wildlife Conservation Commission" shall appear in the same size letters or type as the name of the Grantee's organization. Additional sponsorship requirements may be specified in Attachment A, Scope of Work.

18. PUBLIC RECORDS.

A. This Agreement may be unilaterally canceled by the Commission for refusal by the Grantee to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, F.S., and made or received by the Grantee in conjunction with this Agreement, unless exemption for such records is allowable under Florida law.

B. If the Grantee meets the definition of "Contractor" in Section 119.0701(1)(a) F.S., the Grantee shall comply with the following:

i. **IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF THE CHAPTER 119, FLORIDA STATUES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT: 850-488-6553, RecordsCustodian@myfwc.com, and 620 South Meridian Street, Tallahassee FL 32399**

ii. Keep and maintain public records required by the Commission to perform the service.

iii. Upon request from the Commission's custodian of public records, provide the Commission with a copy of the requested records or allow the records to be inspected

or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, F.S. or as otherwise provided by law.

iv. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Contractor does not transfer the records to the Commission.

v. Upon completion of the contract transfer, at no cost, to the Commission all public records in possession of the Contractor or keep and maintain public records required by the Commission to perform the service. If the Contractor transfers all public records to the Commission upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the Commission, upon request from the Commission's custodian of public records, in a format that is compatible with the information technology systems of the Commission.

19. COOPERATION WITH INSPECTOR GENERAL.

Pursuant to subsection 20.055(5), F.S., Grantee, and any subcontractor to the Grantee, understand and will comply with their duty to cooperate with the Inspector General in any investigation, audit, inspection, review, or hearing. Upon request of the Inspector General or any other authorized State official, the Grantee shall provide any type of information the Inspector General deems relevant to the Grantee's integrity or responsibility. Such information may include, but shall not be limited to, the Grantee's business or financial records, documents, or files of any type or form that refer to or relate to the Agreement. The Grantee agrees to reimburse the State for the reasonable costs of investigation incurred by the Inspector General or other authorized State official for investigations of the Grantee's compliance with the terms of this or any other agreement between the Grantee and the State which results in the suspension or debarment of the Grantee. Such costs shall include but shall not be limited to: salaries of investigators, including overtime; travel and lodging expenses; and expert witness and documentary fees.

20. SECURITY AND CONFIDENTIALITY.

The Grantee shall not divulge to third parties any clearly marked confidential information obtained by the Grantee or its agents, distributors, resellers, subcontractors, officers or employees in the course of performing Grant work. To ensure confidentiality, the Grantee shall take appropriate steps regarding its personnel, agents, and subcontractors. The warranties of this paragraph shall survive the Grant.

21. RECORD KEEPING REQUIREMENTS.

A. **Grantee Responsibilities.** The Grantee shall maintain accurate books, records, documents and other evidence that sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Agreement, in accordance with generally accepted accounting principles.

B. **State Access to Grantee Books, Documents, Papers, and Records.** The Grantee shall allow the Commission, the Chief Financial Officer of the State of Florida, the Auditor General of the State of Florida, the Florida Office of Program Policy Analysis and Government Accountability or authorized representatives of the state or federal government to have access to any of the Grantee's books, documents, papers, and records, including electronic storage media, as they may relate to this Agreement, for the purposes of conducting audits or examinations or making excerpts or transcriptions.

C. **Grantee Records Retention.** Unless otherwise specified in the Scope of Work, these records shall be maintained for five (5) fiscal years following the close of this Agreement, or the period required for this particular type of project by the General Records Schedules maintained by the Florida Department of State (available at: http://dos.myflorida.com/library-archives/records-management/general-records-schedules/), whichever is longer. Grantee shall cooperate with the Commission to facilitate the duplication and transfer of such records upon the Commission's request.

D. **Grantee Responsibility to Include Records Requirements – Subcontractors.** In the event any work is subcontracted under this Agreement, the Grantee shall include the aforementioned audit and record keeping requirements in all subsequent contracts.

E. **Compliance with Federal Funding Accountability and Transparency.** Any federal funds awarded under this Agreement must comply with the Federal Funding Accountability and Transparency Act (FFATA) of 2006. The intent of the FFATA is to empower every American with the ability to hold the government accountable for each spending decision. The result is to reduce wasteful spending in the government. The FFATA legislation requires that information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website: http://www.USASpending.gov. Grant recipients awarded a new Federal grant greater than or equal to **$25,000.00** awarded on or after October 1, 2010 are subject to the FFATA. The Grantee agrees to provide the information necessary, over the life of this Agreement, for the Commission to comply with this requirement.

22. FEDERAL AND FLORIDA SINGLE AUDIT ACT REQUIREMENTS.

Pursuant to the FSAA (or Federal) Vendor / Recipient Determination Checklist, the Grantee has been determined to be a recipient of state financial assistance and/or a subrecipient of a federal award. Therefore, pursuant to Section 215.97, F.S. and/or OMB Uniform Guidance (2 CFR 200), the Grantee may be subject to the audit requirements of the Florida and/or Federal Single Audit Acts. If applicable, the Grantee shall comply with the audit requirements outlined in Attachment B, "Requirements of the Federal and Florida Single Audit Acts," attached hereto and made a part of the Agreement, as applicable.

23. FEDERAL COMPLIANCE.

As applicable, Grantee shall comply with all federal laws, rules, and regulations, including but not limited to:

i. **Clean Air Act and Water Pollution Control Act.** All applicable standards, orders, or requirements issued under the Clean Air Act (42 U.S.C. 7401-7671q), and the Water Pollution Control Act (33 U.S.C. 1251-1387, as amended).
ii. **Lacey Act, 16 U.S.C 3371-3378.** This Act prohibits trade in wildlife, fish and plants have been illegally taken, possessed, transported or sold.
iii. **Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801-1884.** This Act governs marine fisheries in Federal waters.
iv. **Migratory Bird Treaty Act, 16 U.S.C. 703-712.** The Act prohibits anyone, unless permitted, to pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry or cause to be carried by any means whatsoever, receive for shipment, transport of carriage, or export, at any time, or in any manner, any migratory bird, or any part, nest, or egg of such bird.
v. **Endangered Species Act, 16 U.S.C. 1531, et seq.** The Act provides a program for the conservation of threatened and endangered plants and animals and the habitat in which they

are found. The Act also prohibits any action that cause a "taking" of any listed species of endangered fish or wildlife. Also, generally prohibited are the import, export, interstate, and foreign commerce of listed species.

24. FEDERAL FUNDS. No Federal Funds are applied to this Agreement, therefore, the following terms and conditions do not apply.

A. **Prior Approval to Expend Federal Funds to Federal Agency or Employee.** It is understood and agreed that the Grantee is not authorized to expend any federal funds under this Contract to a federal agency or employee without the prior written approval of the awarding federal agency.

B. **Equal Employment Opportunity.** Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR Chapter 60). Applicable, except as otherwise provide under 41 CFR Part 60, to any grant, contract, loan, insurance, or guarantee involving Federal assisted construction.

C. **Davis-Bacon Act.** The Davis-Bacon Act, 40 U.S.C. 3141-3148, as supplemented by Department of Labor regulations at 29 CFR Part 5. Applicable to contractors and subcontractors performing on federally funded or assisted contracts in excess of **$2,000.00** for the construction, alteration, or repair (including painting and decorating) of public buildings or public works. Under this Act, contractors and subcontractors must pay their laborers and mechanics employed under the contract no less than the locally prevailing wages and fringe benefits for corresponding work on similar projects in the area.

D. **Copeland "Anti-Kickback Act.** The Copeland "Anti-Kickback" Act, 40 U.S.C. 3141-3148, and 3146-3148, as supplemented by Department of Labor regulations (29 CFR Part 5). Applicable to contracts awarded by a non-Federal entity in excess of **$100,000.00** that involve employment of mechanics or labors. Under this Act, contractors and subrecipients are prohibited from inducing, by any mean, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.

E. **Contract Work Hours and Safety Standards Act.** Sections 103 and 107 of the Agreement Work Hours and Safety Standards Act (40 U.S.C. 327–330) as supplemented by Department of Labor regulations (29 CFR part 5). Applicable to construction contracts awarded by Contractors and subcontractors in excess of **$2,000.00**, and in excess of **$2,500.00** for other contracts which involve the employment of mechanics or laborers. Under this Act, contractors and subcontractors must compute wages of mechanics and laborers (workers) on the basis of a standard forty (40) hour work week; provide workers no less than time and a half for hours worked in excess of the forty (40) hour work week; and not require workers to work in surroundings or work conditions that are unsanitary, hazardous, or dangerous.

F. **Rights to Inventions Made Under a Contract or Agreement.** 37 CFR Part 401. If the Federal award meets the definition of "funding agreement" under 37 CFR 401.2(a) and the recipient or Subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under the "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

G. Energy Efficiency. Mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94–163, 89 Stat. 871).

H. Debarment and Suspension Contractor Federal Certification. In accordance with Federal Executive Order 12549 and 2 CFR Part 1400 regarding Debarment and Suspension, the Grantee certifies that neither it, nor its principals, is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency; and, that the Grantee shall not knowingly enter into any lower tier contract, or other covered transaction, with a person who is similarly debarred or suspended from participating in this covered transaction.

I. Prohibition against Lobbying.

i. **Grantee Certification – Payments to Influence.** The Grantee certifies that no Federal appropriated funds have been paid or will be paid, on or after December 22, 1989, by or on behalf of the Grantee, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress, in connection with the awarding, renewal, amending or modifying of any Federal contract, grant, or cooperative agreement. The Grantee also certifies that they have not engaged any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on behalf of the Grantee with respect to this Contract and its related federal contract, grant, loan, or cooperative agreement; or, if the Grantee has engaged any registrant with respect to this Contract and its related Federal contract, grant, loan, or cooperative agreement, the Grantee shall, prior to or upon execution of this Contract, provide the Commission Contract Manager a signed declaration listing the name of any said registrant. During the term of this Contract, and at the end of each Calendar quarter in which any event occurs that materially affects the accuracy of this certification or declaration, the Grantee shall file an updated declaration with the Commission's Contract Manager. If any non-federal funds are used for lobbying activities as described above in connection with this Contract, the Grantee shall submit Standard Form-LLL, "Disclosure Form to Report Lobbying", and shall file quarterly updates of any material changes. The Grantee shall require the language of this certification to be included in all subcontracts, and all subcontractors shall certify and disclose accordingly.

ii. **Grantee – Refrain from Subcontracting with Certain Organizations.** Pursuant to the Lobbying Disclosure Act of 1995, the Grantee agrees to refrain from entering into any subcontracts under this Contract with any organization described in Section 501(c)(4) of the Internal Revenue Code of 1986, unless such organization warrants that it does not, and will not, engage in lobbying activities prohibited by the Act as a special condition of the subcontract.

J. Compliance with Office of Management and Budget Circulars. As applicable, Grantee shall comply with the following Office of Management and Budget (OMB) Uniform Guidance (2 CFR 200).

K. Drug Free Workplace. Pursuant to the Drug-Free Workplace Act of 1988, the Grantee attests and certifies that the Grantee will provide a drug-free workplace compliant with 41 U.S.C. 81.

25. CONTRACT-RELATED PROCUREMENT.

A. **PRIDE.** In accordance with Section 946.515(6), F.S., if a product or service required for the performance of this Contract is certified by or is available from Prison Rehabilitative Industries and Diversified Enterprises, Inc. (PRIDE) and has been approved in accordance with Subsection 946.515(2), F.S., the following statement applies:

> It is expressly understood and agreed that any articles which are the subject of, or required to carry out, this contract shall be purchased from [PRIDE] in the same manner and under the same procedures set forth in Subsections 946.515(2) and (4), F.S.; and for purposes of this contract the person, firm or other business entity carrying out the provisions of this contract shall be deemed to be substituted for this agency insofar as dealings with such corporation are concerned.

The above clause is not applicable to subcontractors unless otherwise required by law. Additional information about PRIDE and the products it offers is available at http://www.pride-enterprises.org.

B. **Respect of Florida.** In accordance with Subsection 413.036(3), F.S., if a product or service required for the performance of this Contract is on the procurement list established pursuant to Subsection 413.035(2), F.S., the following statement applies:

> It is expressly understood and agreed that any articles that are the subject of, or required to carry out, this contract shall be purchased from a nonprofit agency for the blind or for the severely handicapped that is qualified pursuant to Chapter 413, F.S., in the same manner and under the same procedures set forth in Subsections 413.036(1) and (2), F.S.; and for purposes of this contract, the person, firm or other business entity carrying out the provisions of this contract shall be deemed to be substituted for the state agency insofar as dealings with such qualified nonprofit agency are concerned.

Additional information about the designated nonprofit agency and the products it offers is available at http://www.respectofflorida.org.

C. **Procurement of Recycled Products or Materials.** Grantee agrees to procure any recycled products or materials which are the subject of or are required to carry out this Contract in accordance with Section 403.7065, F.S.

26. PROFESSIONAL SERVICES.

A. **Architectural, Engineering, Landscape Architectural, or Survey and Mapping.** If this Agreement is for the acquisition of professional architectural, engineering, landscape architectural, or registered surveying and mapping services, and is therefore subject to Section 287.055, F.S., the following provision applies:

> The architect (or registered surveyor and mapper or professional engineer, as applicable) warrants that he or she has not employed or retained any company or person, other than a bona fide employee working solely for the architect (or registered surveyor and mapper, or professional engineer, as applicable) to solicit or secure this Agreement and that he or she has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the architect (or registered surveyor and mapper or professional

engineer, as applicable) any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this contract.

B. **Termination for Breach.** For the breach or violation of this provision, the Commission shall have the right to terminate the Agreement without liability and, at its discretion, to deduct from the Agreement price, or otherwise recover, the full amount of such fee, commission, percentage, gift, or consideration.

27. INDEMNIFICATION.

If Grantee is a state agency or subdivision, as defined in Subsection 768.28(2), F.S., pursuant to Subsection 768.28(19), F.S., neither Party indemnifies nor insures the other Party for the other Party's negligence. If Grantee is not a state agency or subdivision as defined above, Grantee shall be fully liable for the actions of its agents, employees, partners, or subcontractors and shall fully indemnify, defend, and hold harmless the State and the Commission, and their officers, agents, and employees, from suits, actions, damages, and costs of every name and description, including attorneys' fees, arising from or relating to personal injury and damage to real or personal tangible property alleged to be caused in whole or in part by Grantee, its agents, employees, partners, or subcontractors, provided, however, that Grantee shall not indemnify for that portion of any loss or damages proximately caused by the negligent act or omission of the State or the Commission. If this is a Professional Services Agreement as defined in Subsection 725.08 F.S., then notwithstanding the provisions of Subsection 725.06 F.S., the design professional shall only be liable for, and fully indemnify, defend, and hold harmless the State, the Commission, and their officers, agents, and employees, for actions caused in whole or in part, by the negligence, recklessness, or intentionally wrongful conduct of the design professional and other persons employed or utilized by the design professional in the performance of the Agreement.

28. NON-DISCRIMINATION.

No person, on the grounds of race, creed, color, national origin, age, sex, or disability, shall be excluded from participation in, be denied the proceeds or benefits of, or be otherwise subjected to discrimination in performance of this Agreement.

29. SEVERABILITY, CHOICE OF LAW, AND CHOICE OF VENUE.

This Agreement has been delivered in the State of Florida and shall be construed in accordance with the laws of Florida. Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement. Any action in connection herewith, in law or equity, shall be brought in Leon County, Florida, to the exclusion of all other lawful venues.

30. NO THIRD-PARTY RIGHTS.

The Parties hereto do not intend, nor shall this Agreement be construed to grant any rights, privileges or interest to any person not a party to this Agreement.

31. JURY TRIAL WAIVER.

As part of the consideration for this Agreement, the Parties hereby waive trial by jury in any action or proceeding brought by any party against any other party pertaining to any matter whatsoever arising out of

or in any way connected with this Agreement, or with the products or services provided under this Agreement, including but not limited to any claim by the Grantee of *quantum meruit*.

32. PROHIBITION OF UNAUTHORIZED ALIENS.

In accordance with Federal Executive Order 96-236, the Commission shall consider the employment by the Grantee of unauthorized aliens a violation of Section 274A(e) of the Immigration and Nationalization Act. Such violation shall be cause for unilateral cancellation of this Agreement if the Grantee knowingly employs unauthorized aliens.

33. EMPLOYMENT ELIGIBILITY VERIFICATION (E-VERIFY).

A. **Requirement to Use E-Verify.** Executive Order 11-116, signed May 27, 2011, by the Governor of Florida, requires Commission contracts in excess of nominal value to expressly require the Grantee to: 1.) utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by Grantee during the Agreement term; and, 2.) include in all subcontracts under this Agreement, the requirement that subcontractors performing work or providing services pursuant to this Agreement utilize the E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the term of the subcontract.

B. **E-Verify Online.** E-Verify is an Internet-based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of all new employees hired to work in the United States after the effective date of the required Memorandum of Understanding (MOU); the responsibilities and elections of federal contractors, however, may vary, as stated in Article II.D.1.c. of the MOU. There is no charge to employers to use E-Verify. The Department of Homeland Security's E-Verify system can be found online at http://www.dhs.gov/files/programs/gc_1185221678150.shtm

C. **Enrollment in E-Verify.** If Grantee does not have an E-Verify MOU in effect, the Grantee must enroll in the E-Verify system prior to hiring any new employee after the effective date of this Agreement.

D. **E-Verify Recordkeeping.** The Grantee further agrees to maintain records of its participation and compliance with the provisions of the E-Verify program, including participation by its subcontractors as provided above, and to make such records available to the Commission or other authorized state entity consistent with the terms of the Grantee's enrollment in the program. This includes maintaining a copy of proof of the Grantee's and subcontractors' enrollment in the E-Verify Program (which can be accessed from the "Edit Company Profile" link on the left navigation menu of the E-Verify employer's homepage).

E. **Employment Eligibility Verification.** Compliance with the terms of the Employment Eligibility Verification provision is made an express condition of this Agreement and the Commission may treat a failure to comply as a material breach of the Agreement.

34. FORCE MAJEURE AND NOTICE OF DELAY FROM FORCE MAJEURE.

Neither Party shall be liable to the other for any delay or failure to perform under this Agreement if such delay or failure is neither the fault nor the negligence of the Party or its employees or agents and the delay

is due directly to acts of God, wars, acts of public enemies, strikes, fires, floods, or other similar cause wholly beyond the Party's control, or for any of the foregoing that affects subcontractors or suppliers if no alternate source of supply is available. However, in the event of delay from the foregoing causes, the Party shall take all reasonable measures to mitigate any and all resulting delay or disruption in the Party's performance obligation under this Agreement. If the delay is excusable under this paragraph, the delay will not result in any additional charge or cost under the Agreement to either Party. In the case of any delay Agreement believes is excusable under this paragraph, Grantee shall notify the Commission's Grant Manager in writing of the delay or potential delay and describe the cause of the delay either: (1) within ten (10) calendar days after the cause that creates or will create the delay first arose, if Grantee could reasonably foresee that a delay could occur as a result; or (2) within five (5) calendar days after the date Grantee first had reason to believe that a delay could result, if the delay is not reasonably foreseeable. **THE FOREGOING SHALL CONSTITUTE GRANTEE'S SOLE REMEDY OR EXCUSE WITH RESPECT TO DELAY**. Providing notice in strict accordance with this paragraph is a condition precedent to such remedy. The Commission, in its sole discretion, will determine if the delay is excusable under this paragraph and will notify Grantee of its decision in writing. No claim for damages, other than for an extension of time, shall be asserted against the Commission. Grantee shall not be entitled to an increase in the Agreement price or payment of any kind from the Commission for direct, indirect, consequential, impact, or other costs, expenses or damages, including but not limited to costs of acceleration or inefficiency arising because of delay, disruption, interference, or hindrance from any cause whatsoever. If performance is suspended or delayed, in whole or in part, due to any of the causes described in this paragraph, after the causes have ceased to exist, Grantee shall perform at no increased cost, unless the Commission determines, in its sole discretion, that the delay will significantly impair the value of the Agreement to the Commission or the State, in which case, the Commission may do any or all of the following: (1) accept allocated performance or deliveries from Grantee, provided that Grantee grants preferential treatment to the Commission with respect to products or services subjected to allocation; (2) purchase from other sources (without recourse to and by Grantee for the related costs and expenses) to replace all or part of the products or services that are the subject of the delay, which purchases may be deducted from the Agreement quantity; or (3) terminate the Agreement in whole or in part.

35. TIME IS OF THE ESSENCE.

Time is of the essence regarding the performance obligations set forth in this Agreement. Any additional deadlines for performance for Grantee's obligation to timely provide deliverables under this Agreement including but not limited to timely submittal of reports, are contained in the Scope of Work, Attachment A.

36. ENTIRE AGREEMENT.

This Agreement with all incorporated attachments and exhibits represents the entire Agreement of the Parties. Any alterations, variations, changes, modifications or waivers of provisions of this Agreement shall only be valid when they have been reduced to writing, and duly signed by each of the Parties hereto, unless otherwise provided herein. In the event of conflict, the following order of precedence shall prevail; this Agreement and its attachments, the terms of the solicitation and the Grantee's response to the solicitation.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed through their duly authorized signatories on the day and year last written below.

CITY OF FORT PIERCE

_____
SIGNATURE

Name: _____

Title: _____

Date: _____

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

_____
SIGNATURE

Name: _____

Title: _____

Date: _____

Approved as to Form & Correctness
City Attorney - Peter J. Sweeney
Signed: _____
Date: 4/2/2019

Approved as to form and legality by FWC Attorney:

_____
COMMISSION ATTORNEY SIGNATURE

Attachments in this Agreement include the following:

Attachment	A	Scope of Work
Attachment	B	Requirements of the Federal and Florida Single Audit Acts & Exhibit 1
Attachment	C	Cost Reimbursement Contract Payment Requirements Project
Attachment	D	Progress Report Form
Attachment	E	Certification of Completion Form
Attachment	F	Site Dedication Form
Attachment	G	Invoice Form

SCOPE OF WORK

1. PROJECT DESCRIPTION

A. Purpose and Background: The City of Fort Pierce will use grant funds to provide boaters with an accessible and free public boat ramp with launching and staging areas at the Moore's Creek entrance to the Indian River. This project has two stages. The first stage will include design, engineering and permitting. The City of Fort Pierce will be required to submit to the Commission, all required permits prior to the construction phase.

The second stage will include two construction projects. The first construction project includes the construction of three finger piers built in the lanes of the boat ramp. The second construction project will be to build and install a fixed dock with a safety rail and lighting.

B. Project Benefits: These improvements will decrease the possibility of damage to vessels and equipment and enhance everyone's overall experience, which will increase participation and subsequently strengthen the economic viability of the entire area.

C. Cost Reimbursement: This is a cost reimbursement agreement in accordance with Comptroller Contract Payment Requirements as shown in the Department of Financial Services, Bureau of Accounting and Auditing, Voucher Processing Handbook, Chapter 4., C., I., attached hereto and made a part of hereof as Attachment C.

The total approved estimated cost for the Project Phase I –Design, Engineering and Permitting is $12,250. The total approved estimated cost for the Project Phase II –Construction is $60,250. The Commission agrees to reimburse the Grantee for an amount not to exceed $72,500 or 25.94% of the total cost for Phase I and II, whichever is less, for satisfactory completion of the Project. The Grantee agrees to provide a minimum of $206,990 or 74.06% toward completion of the Project, Phase I and II, and shall be responsible for any additional costs that exceed the total approved estimated project cost.

D. Term of Agreement: The term of the Agreement includes three phases: Phase I - Project Design, Engineering, and Permitting; Phase II - Construction and; Phase III - Project Maintenance. During Phase I and Phase II, the City of Fort Pierce (Grantee) shall complete the tasks and provide the deliverables described in this Scope of Work. **All Phase I activities must be completed by 03/31/2020**. The Grantee cannot move to Phase II without written approval from the Commission. **All Phase II activities must be completed by 9/30/2021**. During Phase III, Project Maintenance, the Grantee shall maintain the project sites as recreational boating access facilities open to the public on a first-come, first-served basis. **Phase III ends 09/30/2041**.

2. PROJECT DELIVERABLES

Total payments for all deliverables will not exceed the maximum grant award amount of $72,500.

A. <u>Deliverable 1</u>: Engineering, Design, and Permitting. The Grantee will use funds to procure contracted services to survey, design, engineer, and permit three new finger piers and a new fixed dock with safety railing, and safety lighting.

Deliverable 1 Tasks include but are not limited to:

- Provide project management, administration, survey and Construction, Engineering, and Inspection (CEI);
- Develop pre-design survey and analysis;

SCOPE OF WORK

- Develop site plan record drawing design and design specifications;
- Obtain Conceptional Drawings of the proposed project and submit to the Commission;
- Prepare and submit to the Commission final engineering scaled drawings, technical specifications and special conditions and;
- Procure all necessary state and local regulatory permits as well as building permits, fire department permits and site plan review.

Compensation: Total payment for this deliverable will be $12,250.

Minimum Performance: Completion of all Tasks listed above, but not limited to those in writing. The Grantee shall provide electronic copies of final construction plans in a format compatible with Adobe Acrobat. Copies of all approved required permits.

Documentation: Documentation includes an attestation of activities or services rendered and proof of payment.

Financial Consequences: Only those tasks completed, or items purchased and received in accordance with the scope of work will be eligible for reimbursement. Failure of the Grantee to perform the tasks and provide the deliverable shall be considered non-compliance with terms and payment will not be processed until all deliverables and performances has been documented, reviewed and approved.

B. <u>Deliverable 2</u>: **Construction of Three Finger Piers:** The Grantee will procure contracted services to construct and install three new ADA accessible finger piers made from marine-grade aluminum.

Deliverable 2 Tasks include but are not limited to:

- Provide all labor, equipment and materials to construct finger piers;
- Mobilization and installation of turbidity barrier to maintain project site;
- Install six (6) floating dock guide piles, 12 inches in diameter;
- Install six (6) coned pile caps, and pile wraps on guide piles;
- Construct and install three (3) concrete gangway abutments;
- Install three (3) 4' by 20'aluminum gangways;
- Install three (3) 6' by 30' floating docks and;
- Install twelve (12) Al-mag "S" cleats.

Compensation: Total payment for this deliverable will be $51,795.

Minimum Performance: Completion of all Tasks listed above, but not limited to those in writing. The Grantee shall provide proof of services rendered; invoices; proof of payment; and photographs of the constructed three finger piers.

Documentation: Documentation includes an attestation of activities or services rendered and proof of payment.

Financial Consequences: Only those tasks completed, or items purchased and received in accordance with the scope of work will be eligible for reimbursement. Failure of the Grantee to perform the tasks and provide the deliverable shall be considered non-compliance with terms and payment will not be processed until all deliverables and performances has been documented, reviewed and approved.

SCOPE OF WORK

C. **Deliverable 3: Construction of Fixed Dock:** Utilizing the approved design, engineering plans and permits, the Grantee will procure contracted services to construct and install one new fixed dock, one new heavy aluminum safety railing near the dock and ramp area, and LED lighting in front of the fixed dock area.

Deliverable 3 Tasks include but are not limited to:

- Provide all labor, equipment and materials to complete the construction tasks;
- Construct and install twenty-two (22) dock piles with a 10-inch diameter, pile wraps and coned pile caps;
- Construct 2' by 10' deck framing;
- Install seven hundred and sixty-two (762') square feet of composite Flow Thru decking;
- Install five (5) Al-mag "S" Cleats;
- Install sixty-five (65) linear feet of pedestrian safety handrailing separating the ramp from the dock and;
- Install two (2) overhead LED light poles at the fixed dock.

Compensation: Total payment for this deliverable will be $8,455.

Minimum Performance: Completion of all Tasks listed above, but not limited to those in writing. The Grantee shall provide proof of services rendered; invoices; proof of payment; and photographs of the constructed fixed dock, railing, and lighting.

Documentation: Documentation includes an attestation of activities or services rendered and proof of payment.

Financial Consequences: Only those tasks completed, or items purchased and received in accordance with the scope of work will be eligible for reimbursement. Failure of the Grantee to perform the tasks and provide the deliverable shall be considered non-compliance with terms and payment will not be processed until all deliverables and performances has been documented, reviewed and approved.

3. FINANCIAL CONSEQUENCES

A. **Phase I & II Compliance:** Pursuant to 215.971(1)(c), Florida Statutes, the Commission will withhold payment of Program funds for failure to complete the Project as described herein within the timeframe allowed for Phase I and II, or for failure to correct any Project deficiencies, as noted in the final Project inspection.

B. **Phase III Compliance**: During Phase III of the Project, the Grantee shall repay any Program funds received for Phase I and II for failure to maintain the Project site as a public boating access facility according to the terms and conditions herein for the duration of the Agreement.

4. PERFORMANCE

A. **Permit Requirements**: The Grantee agrees to adhere to all federal, state, county and city permit requirements of the Project.

SCOPE OF WORK

B. Procurement: The Grantee shall procure goods and services through a competitive solicitation process in accordance with Chapter 287, Florida Statutes. The Grantee shall forward one copy of any solicitation to the Commission's Grant Manager for review prior to soliciting for quotations or commencing any work. The Grantee shall forward one copy of the bid tabulation, or similar list of responses to the solicitation, along with the award recommendation to the Commission's Grant Manager, to retain in their own records.

C. Engineering: If applicable, all engineering must be completed by a professional engineer or architect registered in the State of Florida. All work must meet or exceed minimum design standards and guidelines established by all applicable local, state and federal laws.

D. Construction: If applicable, the Contractor shall be certified by the Division of Construction Industry Licensing Board of the Florida Department of Business and Professional Regulation for the duration of this contract and shall provide evidence of such certification upon request.

E. Commencement of Work: The Grantee shall commence work on Phase I of the Project within 90 days of execution of the Agreement. Failure by the Grantee to begin work shall constitute a breach of the Agreement and may result in termination of the Agreement by the Commission.

F. Performance Criteria: The Grantee shall complete the project as described in this Scope of Work and Florida Boating Improvement Program Application 18-004, incorporated herein by reference, according to any bid specifications. Failure to complete the project in a satisfactory manner could result in financial consequences as specified herein.

G. Certificate of Completion: Upon completion of all Project deliverables, the Grantee shall sign and submit to the Commission's grant manager, a Final Progress Report Form, attached hereto and made a part hereof as Attachment D, and a Certification of Completion Form, attached hereto and made a part hereof as Attachment E, which certifies II of the Project was completed in accordance with the provisions herein. Final photographs shall be submitted with the form.

H. Site Dedication: The Grantee agrees to dedicate the Project site as a boat access facility for the use and benefit of the public for the duration of the Agreement. Such dedication must occur before any grant funds are reimbursed. A Site Dedication Form is included as Attachment F as an example for form and content. Land under control other than by ownership by the Grantee (i.e. lease, management agreement, cooperative agreement, inter-local agreement or other similar instrument) shall be managed by the Grantee as a boat access facility for the duration of the Agreement. Title to all improvements shall be retained by the Grantee upon final payment by the Commission.

Should the Grantee convert all or any part of the Project to other than Commission approved uses within the term of the Agreement, the Grantee shall replace the area, facilities, resource or site at its own expense with a project acceptable to the Commission of comparable scope and quality. In the event the Project is converted to use for other purposes during this period and not replaced with a like project acceptable to the Commission, the Grantee agrees to return to the Commission all funds tendered for the original Project.

Site dedication survives any contract termination. If mutually agreed upon by both parties in writing the site dedication may be rescinded. The Commission shall waive the site dedication requirement if no program funds were dispersed.

SCOPE OF WORK

I. **Acknowledgement**: Upon completion of Phase II, the Grantee, at its expense, shall purchase, erect and maintain a permanent sign, not less than three (3) feet by four (4) feet in size, displaying the Commission's logo acknowledging the Commission and the Florida Boating Improvement Program as a funding source for the Project. Any other form of acknowledgement must be approved by the Commission's Grant Manager. Such acknowledgement shall be maintained for the duration of the Agreement. Failure by the Grantee to maintain such acknowledgement shall be considered a breach of the Agreement. The Grantee shall provide a draft copy of the acknowledgement sign for approval by the Commission prior to displaying on site. Language to place on the sign shall include: This Project was funded by the Florida Fish and Wildlife Conservation Commission through the Florida Boating Improvement Program.

J. **Directional Signs:** The Grantee, at its expense, shall purchase, erect and maintain directional signs, approved by the Commission, on main public highways to direct public users to each boating facility funded through the Program regardless of which phase(s) the Program funded. The Grantee agrees to provide and maintain such signs at its expense for the duration of the Agreement. Failure by the Grantee to erect and maintain such signs shall be considered a breach of the Agreement. This requirement can be waived by the Commission's grant manager, in writing, if the Grantee receives a written denial from the Florida Department of Transportation for the installation of the signs.

5. BUDGET

A. **Project Budget**: For satisfactory completion of the tasks and deliverables described in this Scope of Work, by the Grantee under the terms of this Agreement, the Commission shall pay the Grantee on a cost reimbursement basis in an amount not to exceed $72,500. All amounts noted in the budget are estimates based on preliminary quotes or prior project activities from the application amount. Deviations from this budget that exceed ten percent (10%) of the total amount in any budget category/deliverable must be approved by the Commission grant manager in writing prior to the deviation. The Grantee shall be reimbursed only for budgeted expenses incurred during the term of Phase I and II of the Agreement that are directly related to the project. There is no monetary compensation during Phase III.

Deliverable		TOTAL COST	LOCAL SHARE	FBIP SHARE
	Administration &Legal expenses	$21,575	$21,575	$0
1	Regulatory Permits	$9,735	$8,485	$1,250
1	Architectural & Engineering Fees	$11,195	$7,695	$3,500
1	Project Inspection Fees	$30,000	$22,500	$7,500
	Demolition &Removal	$0	$0	$0
	Equipment Purchase (OCO):	$0	$0	$0
	Equipment Rental	$0	$0	$0
	Supplies & Materials	$0	$0	$0
2 & 3	Construction Costs	$206,985	$146,735	$60,250
	TOTAL	**$279,490**	**$206,990**	**$72,500**
	PERCENTAGE	**100%**	**74.06%**	**25.94%**

B. **Cost Share**: The Grantee agrees to provide 74.06% of the cost of the total cost for Phase I and II of the Project as indicated in FBIP Grant Application No. 18-004. The total compensation by the Commission shall be $72,500 or 25.94% of the total cost for Phase I and II, whichever is less.

SCOPE OF WORK

C. **Pre-Award Costs**: No pre-award costs are authorized under the terms of this Agreement.

6. COMPENSATION AND PAYMENT

A. **Fee Schedule**: This section is not applicable

B. **Travel Expenses:** No travel expenses are authorized under the terms of this Agreement.

C. **Cost Reimbursement**: This is a cost reimbursement agreement. The total approved estimated cost for the Project Phase I –Design, Engineering and Permitting is $12,250. The total approved estimated cost for the Project Phase II –Construction is $60,250. The Commission agrees to reimburse the Grantee for an amount not to exceed $72,500 or 25.94% of the total cost for Phase I and II, whichever is less, for satisfactory completion of the Project. The Grantee agrees to provide a minimum of $206,990 or 74.06% toward completion of the Project, Phase I and II, and shall be responsible for any additional costs that exceed the total approved estimated project cost.

D. **Invoice Schedule and Payment**: Invoices may be submitted upon the completion of at least one deliverable listed in the scope of work. The Commission shall have up to 30-days to inspect and approve the Project's deliverables once reported complete by the Grantee. If there are deficiencies noted in the Project inspection, these shall be corrected by the Grantee prior to payment by the Commission. The Commission shall restrict any or all payment of funds pending correction of such deficiencies.

The Grantee shall report the Project complete by submitting the Certification of Completion Form, attached hereto and made a part hereof as Attachment E. Final payment shall be contingent upon the Commission's grant manager receiving and accepting the Certification of Completion Form, Final Progress Report and final inspection of Phase I and II of the Project, as described herein.

Once the final inspection and project deliverables are approved, the Grantee may submit a final request for reimbursement within 30-days after receiving written acceptance by the Commission's grant manager.

E. **Forms and Documentation**: After receiving acceptance of deliverable completion from the Commission's grant manager, the Grantee may submit a request for reimbursement that includes an invoice in a format similar to Attachment G, Sample Invoice Form.

Invoice forms and supporting documentation must clearly identify the dates of services, a description of the specific Agreement deliverables provided during the reporting period, an itemized list of expenditures, the quantity provided, the payment amount specified in the Agreement, the Commission's Agreement Number and the Grantee's Federal Employer Identification (FEID) Number.

The Grantee must submit and maintain original supporting documentation for all funds expended and received under this Agreement in sufficient detail for proper pre- and post-audit and to verify work performed was in accordance with the deliverable(s) and not eligible for payment under and other state or federal funding source. Supporting documentation includes, but is not limited to, quotes, procurement documents, purchase orders, original receipts, invoices, cancelled checks or EFT records, bank statements or copies of general ledgers.

SCOPE OF WORK

The Commission's grant manager shall have up to 10 days to review and approve the invoice for payment. Any errors or insufficient supporting documentation included with the invoice will delay payment and the 30 days to review by the Commission may begin again.

7. MONITORING SCHEDULE

A. **Compliance Monitoring and Corrective Actions:** The Commission will monitor the Grantee's service delivery to determine if the Grantee has achieved the required level of performance. If the Commission at its sole discretion determines that the Grantee failed to meet any of the Terms and Conditions of this Agreement, the Grantee will be sent a formal written notice. The Grantee shall correct all identified deficiencies within forty-five (45) days of notice. Failure to meet 100% compliance with all of the Terms and Conditions of this Agreement or failure to correct the deficiencies identified in the notice within the time frame specified may result in delays in payment or termination of this Agreement in accordance with the Termination section.

B. **Site Inspections:** The Commission may inspect the Project site prior to and, if applicable, during the construction of the Project. The Grantee shall notify the Commission's Grant Manager when the Project has reached substantial completion so that inspection may occur in a timeframe allowing for the timely submission and processing of the final invoice. The Commission's Grant Manager, or designee, shall inspect the work accomplished on the Project and, if deemed complete and in compliance with the terms of the Agreement, approve the request for payment.

   The Grantee shall allow unencumbered access to the Project site to the Commission, its employees or agent for the duration of the Agreement for the purpose of site visit or inspection to verify the facility is being maintained, in operation and is open and available to the public. As part of the inspection, the Commission may request maintenance and use information from the Grantee to validate the condition of the facility.

C. **Phase III, Project Site Management:** During Phase III, the Grantee shall provide and be responsible for any and all costs associated with the ordinary and routine operations and maintenance of the project site, including any and all personnel, equipment or service and supplies costs beyond the costs approved for reimbursement in Phase I and II of this Agreement.

D. **Project Progress Reports:** Starting the first quarter after the date the Agreement is executed, the Grantee shall submit to the Commission, on a quarterly basis, Project Progress Reports outlining the progress of the Project. The report should identify any problems that may have arisen, and actions taken to correct such problems. Such reports shall be submitted on the Project Progress Report Form attached hereto and made a part hereof as Attachment D. Progress report are required until the Certification of Completion is submitted. Reports are due to the Commission's Grant Manager according to the following schedule:

Reporting Period	**Report due by:**
January through March	April 15th
April through June	July 15th
July through September	October 15th
October through December	January 15th

SCOPE OF WORK

E. **Annual Reports:** During Phase III of the Project, the Grantee shall submit to the Commission an annual report on June 30th of each year until the end of Phase III, September 30, 2041. This annual report shall include a description of the condition of any facilities funded with Program funds including any major repairs to the facilities; the amount of revenue collected from any permits or fees for the use of the facilities; and an estimate of the number of users of the facilities.

8. INTELLECTUAL PROPERTY RIGHTS

No additional requirements. Refer to Section 12 of the Agreement.

9. SUBCONTRACTS

No additional requirements. Refer to Section 14 of the Agreement.

10. INSURANCE

No additional requirements. Refer to Section 16 of the Agreement.

11. SECURITY AND CONFIDENTIALITY

No additional requirements. Refer to Section 20 of the Agreement.

12. RECORD KEEPING REQUIREMENTS

Records shall be maintained for ten (10) years following the completion of Phase I of the Project. Completion of Phase I of the Project has occurred when all reporting requirements are satisfied, and final payment has been received by the Grantee. Refer to Section 21 of the Agreement.

13. NON-EXPENDABLE PROPERTY

The Grantee is not authorized to use funds provided herein for the purchase of any non-expendable equipment or personal property valued at $1,000 or more for performance under this Agreement.

14. PURCHASE OR IMPROVEMENT OF REAL PROPERTY

Refer to Section G, Site Dedication, above in Section 2, Performance.

15. SPECIAL PROVISIONS FOR CONSTRUCTION CONTRACTS

A. **Fees:** The Commission reserves the right to review and approve any and all fees proposed for grant project sites, funded in whole or in part by this Program, for the term of the Agreement to ensure that excess collection does not occur and that funds collected are not reallocated or diverted to any non-boating access related purpose.

B. **Drug-Free Workplace Requirement for Construction Contractors:** Pursuant to Section 440.102(15), F.S., any construction contractor regulated under Parts I and II of Chapter 489, F.S., who contracts to perform construction work under a state contract shall implement a drug-free workplace.

SCOPE OF WORK

C. **Contractor Eligibility:** The Contractor shall be certified by the Division of Construction Industry Licensing Board of the Florida Department of Business and Professional Regulation for the duration of this Contract and shall provide evidence of such certification to the Commission upon request.

(Remainder of page left blank intentionally.)

Attachment B
AUDIT REQUIREMENTS

The administration of resources awarded by the Florida Fish and Wildlife Conservation Commission (Commission) to the Grantee may be subject to audits and/or monitoring by the Commission as described in Part II of this attachment regarding State funded activities. If this Agreement includes a Federal award, then Grantee will also be subject to the Federal provisions cited in Part I. If this Agreement includes both State and Federal funds, then all provisions apply.

MONITORING

In addition to reviews of audits conducted in accordance with Sections 200.500-200.521, Uniform Guidance: Cost Principles, Audit, and Administrative Requirements for Federal Awards (2 CFR 200), as revised, hereinafter "OMB Uniform Guidance" and Section 215.97, F.S., as revised (see "AUDITS" below), the Commission may conduct or arrange for monitoring of activities of the Contractor. Such monitoring procedures may include, but not be limited to, on-site visits by the Commission staff or contracted consultants, limited scope audits as defined by Section 200.331, OMB Uniform Guidance and/or other procedures. By entering into this Agreement, the Grantee agrees to comply and cooperate with any monitoring procedures/processes deemed appropriate by the Commission. The Grantee further agrees to comply and cooperate with any inspections, reviews, investigations, or audits deemed necessary by the Florida Department of Financial Services or the Florida Auditor General.

AUDITS

PART I: FEDERALLY FUNDED. If this Agreement includes a Federal award, then the following provisions apply:

A. This part is applicable if the Grantee is a State or local government or a non-profit organization as defined in Sections 200.90, 200.64, or 200.70, respectively, OMB Uniform Guidance.

B. In the event that the Grantee expends **$500,000.00 ($750,000.00** for fiscal years beginning on or after December 26, 2014) or more in Federal awards in its fiscal year, the Grantee must have a single or program-specific audit conducted in accordance with the provisions of the Federal Single Audit Act of 1996 and Sections 200.500-200.521, OMB Uniform Guidance. EXHIBIT 1 to this Attachment indicates Federal resources awarded through the Commission by this Agreement. In determining the Federal awards expended in its fiscal year, the Grantee shall consider all sources of Federal awards, including Federal resources received from the Commission. The determination of amounts of Federal awards expended should be in accordance with the guidelines established by Sections 200.500-200.521, OMB Uniform Guidance. An audit of the Grantee conducted by the Auditor General in the OMB Uniform Guidance, will meet the requirements of this part.

C. In connection with the audit requirements addressed in Part I, paragraph A. herein, the Grantee shall fulfill the requirements relative to auditee responsibilities as provided in Section 200.508, OMB Uniform Guidance. This includes, but is not limited to, preparation of financial statements, a schedule of expenditure of Federal awards, a summary schedule of prior audit findings, and a corrective action plan.

D. If the Grantee expends less than **$500,000.00 ($750,000.00** for fiscal years beginning on or after December 26, 2014) in Federal awards in its fiscal year, an audit conducted in accordance with the provisions of Sections 200.500-200.521, OMB Uniform Guidance, is not required. In the event that the Grantee expends less than **$500,000.00 ($750,000.00** for fiscal years beginning on or after

December 26, 2014) in Federal awards in its fiscal year and elects to have an audit conducted in accordance with the provisions of Sections 200.500-200.521, OMB Uniform Guidance, the cost of the audit must be paid from non-Federal resources (i.e., the cost of such an audit must be paid from Grantee resources obtained from other than Federal entities).

E. Such audits shall cover the entire Grantee's organization for the organization's fiscal year. Compliance findings related to agreements with the Commission shall be based on the agreement requirements, including any rules, regulations, or statutes referenced in the Agreement. The financial statements shall disclose whether or not the matching requirement was met for each applicable agreement. All questioned costs and liabilities due to the Commission shall be fully disclosed in the audit report with reference to the Commission agreement involved. Additionally, the results from the Commission's annual financial monitoring reports must be included in the audit procedures and the Sections 200.500-200.521, OMB Uniform Guidance audit reports.

F. If not otherwise disclosed as required by Section 200.510, OMB Uniform Guidance, the schedule of expenditures of Federal awards shall identify expenditures by contract number for each agreement with the Commission in effect during the audit period.

G. If the Grantee expends less than **$500,000.00** in Federal awards in its fiscal year, an audit conducted in accordance with the provisions of Sections 200.500-200.521, OMB Uniform Guidance, is not required. In the event that the Grantee expends less than **$500,000.00** in Federal awards in its fiscal year and elects to have an audit conducted in accordance with the provisions of Sections 200.500-200.521, OMB Uniform Guidance, the cost of the audit must be paid from non-Federal resources (*i.e.*, the cost of such an audit must be paid from the Grantee's resources obtained from other-than Federal entities).

H. A web site that provides links to several Federal Single Audit Act resources can be found at: http://harvester.census.gov/sac/sainfo.html

PART II: STATE FUNDED. If this Agreement includes State funding, then the following provisions apply:

This part is applicable if the Grantee is a non-state entity as defined by Section 215.97, F.S., (the Florida Single Audit Act).

A. In the event that the Grantee expends a total amount of state financial assistance equal to or in excess of **$750,000.00** (**$500,000.00** in fiscal years prior to July 1, 2016) in any fiscal year of such Grantee, the Grantee must have a State single or project-specific audit for such fiscal year in accordance with Section 215.97, F.S.; applicable rules of the Executive Office of the Governor and the Department of Financial Services; and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General. EXHIBIT 1 to this Attachment indicates state financial assistance awarded through the Commission by this Agreement. In determining the state financial assistance expended in its fiscal year, the Grantee shall consider all sources of state financial assistance, including state financial assistance received from the Commission, other state agencies, and other non-state entities. State financial assistance does not include Federal direct or pass-through awards and resources received by a non-state entity for Federal program matching requirements.

B. In connection with the audit requirements addressed in Part II, paragraph A herein, the Grantee shall ensure that the audit complies with the requirements of Section 215.97(7), F.S. This includes submission of a financial reporting package as defined by Section 215.97(2)(d), F.S., and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General.

C. If the Grantee expends less than **$750,000.00 ($500,000.00** in fiscal years prior to July 1, 2016) in state financial assistance in its fiscal year, an audit conducted in accordance with the provisions of section 215.97, F.S., is not required. In the event that the Grantee expends less than **$750,000.00 ($500,000.00** in fiscal years prior to July 1, 2016) in state financial assistance in its fiscal year and elects to have an audit conducted in accordance with the provisions of section 215.97, F.S., the cost of the audit must be paid from the non-state entity's resources (*i.e.*, the cost of such an audit must be paid from the Grantee's resources obtained from other-than State entities).

D. Additional information regarding the Florida Single Audit Act can be found at: https://apps.fldfs.com/fsaa/.

E. Grantee shall provide a copy of any audit conducted pursuant to the above requirements directly to the following address:

Office of Inspector General
Florida Fish and Wildlife Conservation Commission
Bryant Building
620 S. Meridian St.
Tallahassee, FL 32399-1600

PART III: REPORT SUBMISSION

A. Copies of reporting packages, to include any management letter issued by the auditor, for audits conducted in accordance with Sections 200.500-200.521, OMB Uniform Guidance, and required by Part I of this Attachment shall be submitted by or on behalf of the Grantee directly to each of the following at the address indicated:

1. The Commission at the following address:

   Office of Inspector General
   Florida Fish and Wildlife Conservation Commission
   Bryant Building
   620 S. Meridian St.
   Tallahassee, FL 32399-1600

2. The Federal Audit Clearinghouse designated in Section 200.512, OMB Uniform Guidance (the reporting package required by Section 200.512, OMB Uniform Guidance, should be submitted to the Federal Audit Clearinghouse):

   Federal Audit Clearinghouse
   Bureau of the Census
   1201 East 10th Street
   Jeffersonville, IN 47132

3. Other Federal agencies and pass-through entities in accordance with Section 200.512, OMB Uniform Guidance.

B. Copies of audit reports for audits conducted in accordance with Sections 200.500-200.521, OMB Uniform Guidance, and required by Part I of this Attachment (in correspondence accompanying the

audit report, indicate the date that the Grantee received the audit report); copies of the reporting package described in Section 200.512, OMB Uniform Guidance, and any management letters issued by the auditor; copies of reports required by Part II of this Attachment must be sent to the Commission at the addresses listed in paragraph C. below.

C. Copies of financial reporting packages required by Part II of this Attachment, including any management letters issued by the auditor, shall be submitted by or on behalf of the Grantee directly to each of the following:

1. The Commission at the following address:

   Office of Inspector General
   Florida Fish and Wildlife Conservation Commission
   Bryant Building
   620 S. Meridian St.
   Tallahassee, FL 32399-1600

2) The Auditor General's Office at the following address:

   Auditor General's Office
   G74 Claude Pepper Building
   111 West Madison Street
   Tallahassee, FL 32399-1450

D. Any reports, management letter, or other information required to be submitted to the Commission pursuant to this Agreement shall be submitted timely in accordance with OMB Sections 200.500-200.521, OMB Uniform Guidance, Florida Statutes, and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, as applicable.

Grantees and sub-Grantees, when submitting financial reporting packages to the Commission for audits done in accordance with Sections 200.500-200.521, OMB Uniform Guidance, or Chapters 10.550 (local governmental entities) or 10.650 (non-profit and for-profit organizations), Rules of the Auditor General, should indicate the date that the reporting package was delivered to the Grantee/sub-Grantee in correspondence accompanying the reporting package.

- End of Attachment –

Exhibit 1
FEDERAL AND STATE FUNDING DETAIL

FEDERAL RESOURCES AWARDED TO THE GRANTEE PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

Federal Program(s) Funds		
CFDA #	**CFDA Title**	**Amount**
	Total Federal Awards	

COMPLIANCE REQUIREMENTS APPLICABLE TO THE FEDERAL RESOURCES AWARDED PURSUANT TO THIS AGREEMENT ARE AS FOLLOWS:

Federal Program(s) Compliance Requirements	
CFDA #	**Compliance Requirements**

STATE RESOURCES AWARDED TO THE GRANTEE PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

MATCHING RESOURCES FOR FEDERAL PROGRAMS:

Matching Funds Provided by CFDA		
CFDA #	**CFDA Title**	**Amount of Matching Funds**
	Total Matching Funds Associated with Federal Programs	

SUBJECT TO SECTION 215.97, FLORIDA STATUTES:

State Project(s)		
CSFA #	**CSFA Title**	**Amount**
77.006	Florida Boating Improvement Program	$72,500
	Total State Awards	$72,500

COMPLIANCE REQUIREMENTS APPLICABLE TO STATE RESOURCES AWARDED PURSUANT TO THIS AGREEMENT ARE AS FOLLOWS:

State Project(s) Compliance Requirements	
CSFA #	**Compliance Requirements**
77.006	Recipient must comply with Florida Boating Improvement Program Guidelines, January 2015

NOTE: Section 200.513, OMB Uniform Guidance (2 CFR 200), as revised, and Section 215.97(5), Florida Statutes, require that the information about Federal Programs and State Projects included in Exhibit 1 be provided to the Grantee.

- End of EXHIBIT 1 -

COST REIMBURSEMENT CONTRACT PAYMENT REQUIREMENTS

Pursuant to the February, 2011 *Reference Guide for State Expenditures* published by the Department of Financial Services, invoices for cost reimbursement contracts must be supported by an itemized listing of expenditures by category (salary, travel, expenses, etc.). In addition, supporting documentation must be provided for each amount for which reimbursement is being claimed indicating that the item has been paid. Check numbers may be provided in lieu of copies of actual checks. Each piece of documentation should clearly reflect the dates of service. Only expenditures for categories in the approved contract budget should be reimbursed.

Listed below are examples of types of supporting documentation:

(1) Salaries: A payroll register or similar documentation should be submitted. The payroll register should show gross salary charges, fringe benefits, other deductions and net pay. If an individual for whom reimbursement is being claimed is paid by the hour, a document reflecting the hours worked times the rate of pay will be acceptable.

(2) Fringe Benefits: Fringe Benefits should be supported by invoices showing the amount paid on behalf of the employee (e.g., insurance premiums paid). If the contract specifically states that fringe benefits will be based on a specified percentage rather than the actual cost of fringe benefits, then the calculation for the fringe benefits amount must be shown.

Exception: Governmental entities are not required to provide check numbers or copies of checks for fringe benefits.

(3) Travel: Reimbursement for travel must be in accordance with Section 112.061, Florida Statutes, which includes submission of the claim on the approved State travel voucher or electronic means.

(4) Other direct costs: Reimbursement will be made based on paid invoices/receipts. If nonexpendable property is purchased using State funds, the contract should include a provision for the transfer of the property to the State when services are terminated. Documentation must be provided to show compliance with Department of Management Services Rule 60A-1.017, Florida Administrative Code, regarding the requirements for contracts which include services and that provide for the contractor to purchase tangible personal property as defined in Section 273.02, Florida Statutes, for subsequent transfer to the State.

(5) In-house charges: Charges which may be of an internal nature (e.g., postage, copies, etc.) may be reimbursed on a usage log which shows the units times the rate being charged. The rates must be reasonable.

(6) Indirect costs: If the contract specifies that indirect costs will be paid based on a specified rate, then the calculation should be shown.

Contracts between state agencies may submit alternative documentation to substantiate the reimbursement request that may be in the form of FLAIR reports or other detailed reports. Additionally, the invoice or submitted documentation must evidence the completion of all tasks required to be performed for the deliverable and must show that the provider met the minimum performance standards established in the agreement.

FLORIDA BOATING IMPROVEMENT PROGRAM
PROJECT PROGRESS REPORT

Mail to FWC at 620 South Meridian Street, Tallahassee, FL 32399-1600 or fax to (850) 488-9284.

FWC Contract #_____ **Reporting Period (Month/Year):** _____
(Due 15 days after the end of each quarter)

Grantee: _____

Project Title: _____

Is this a Final Report: _____**Yes** _____**No**

1. **Describe progress of project, including percent completed for each task in the Scope of Work:**

2. **Is project currently on schedule for completion by Phase I due date?** **YES** ☐ **NO** ☐

   Anticipated Phase I completion date: _____

   (If project is not on schedule, please explain any problems encountered and/or possible delays)

3. **Reporting requirements: (Check all that have been submitted to date)**

   - ☐ **Bid package**
   - ☐ **Bid tabulation**
   - ☐ **Progress photographs**
   - ☐ **Final photographs**
   - ☐ **Draft acknowledgement**

_____ _____
Project Manager **Date**

_____ _____
Print Name **Phone**

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

Florida Boating Improvement Program

CERTIFICATION OF COMPLETION STATEMENT

I, _____
(Print Name and Title)

representing _____
(Name of Local Government)

do hereby certify that the Florida Boating Improvement Program project funded by FWC Contract No. _____ has been completed in compliance with all terms and conditions of said Agreement; that all amounts payable for materials, labor and other charges against the project have been paid; and that no liens have been attached against the project.

_____ _____
(Signature) (Date)

WARNING: "Whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his or her official duty shall be guilty of a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083." § 837.06, Florida Statutes.

CERTIFICATE BY COMMISSION

I certify: That, to the best of my knowledge and belief, the work on the above-named project has been satisfactorily completed under the terms of the Agreement.

Division: _____

By: _____ Date: _____

Name: _____

Title: _____

SITE DEDICATION

This Site Dedication gives notice that the Real Property identified as described in Exhibit A, Legal Description, attached hereto, (the "Property") has been developed with financial assistance provided by the Florida Legislature, through the Fish and Wildlife Conservation Commission, under the grant program called the Florida Boating Improvement Program (FBIP). In accordance with Chapter 68-1.003, F.A.C., and the Program Guidelines of the FBIP, the Property is hereby dedicated to the public as a boating access facility for the use and benefit of the general public for a minimum period of twenty (20) years from the date of this dedication.

DEDICATOR

_____	_____
Original signature	Witness
_____	_____
Printed Name	Printed Name
_____	_____
Title	Witness
_____	_____
Date	Printed Name

STATE OF FLORIDA
COUNTY OF _____

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

Stamp:

_____
Notary Public, State of Florida

INVOICE

Billed to:

Fish and Wildlife Conservation Commission
Florida Boating Improvement Program
620 South Meridian Street
Tallahassee, Florida 32399-1600

Remit payment to:

Grantee: _____
FEID #: _____
Address: _____
_____

Invoice No. _____

Invoice Date: _____
FWC Contract #: _____
Amount of Grant Award: $_____

Billing Period/Dates of Service:

From: _____

To : _____

PROJECT COSTS:

In-kind Services – Non-cash expenses:	**Amount**
In-kind service: Administration	$
In-kind service: Project Management	$
In-kind service: Other	$
Deliverables/Services Provided (Scope of Work) – Cash expenditures:	**Amount**
	$
	$
	$
	$
	$
	$

Total Project Cost: $ _____

Grantee Share (_____%): – $ _____

Amount for Reimbursement: $

I hereby certify that the above costs are true and valid costs incurred in accordance with the project Agreement, and that the matching funds, in-kind or cash, were utilized toward the project in this Agreement.

Signed: _____ Date: _____
Project Manager

STATE OF FLORIDA
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

AGREEMENT NO. 18069

CFDA Title(s): N/A	**CFDA No(s).:** N/A
Name of Federal Agency(s): N/A	
Federal Award No(s): N/A	**Federal Award Year(s):** N/A
Federal Award Name(s): N/A	
CSFA Title(s).: Florida Boating Improvement Program	**CSFA No(s).:** 77.006
State Award No(s).: 18069	**State Award Year(s):** 2018/2019
State Award Name(s): City of Fort. Pierce - Moore's Creek Boat Ramp Improvements	

This Agreement is entered into by and between the Florida Fish and Wildlife Conservation Commission, whose address is 620 South Meridian Street, Tallahassee, Florida 32399-1600, hereafter "**Commission**," and City of Ft. Pierce, FEID # 59-6000322, whose address is 100 North U.S. Hwy 1, Fort Pierce, FL 34950, hereinafter "**Grantee**."

WHEREAS, the Commission and Grantee have partnered together to design, engineer, permit, and construct three new finger piers and a new fixed dock at Moore's Creek Boat Ramp; and,

WHEREAS, Grantee has been awarded Florida Boating Improvement Program grant# 18069; and,

WHEREAS, such benefits are for the ultimate good of the State of Florida, its resources, wildlife, and public welfare.

NOW THEREFORE, the Commission and the Grantee, for the considerations hereafter set forth, agree as follows:

1. PROJECT DESCRIPTION.

The Grantee shall provide the services and perform the specific responsibilities and obligations, as set forth in the Scope of Work, attached hereto as Attachment A and made a part hereof (hereafter, Scope of Work). The Scope of Work specifically identifies project tasks and accompanying deliverables. These deliverables must be submitted and approved by the Commission prior to any payment. The Commission will not accept any deliverable that does not comply with the specified required minimum level of service to be performed and the criteria for evaluating the successful completion of each deliverable. If this agreement is the result of Grantee responses to the Commission's request for competitive or other grant proposals, the Grantee's response is hereby incorporated by reference.

2. **PERFORMANCE.**

The Grantee shall perform the activities described in the Scope of Work in a proper and satisfactory manner. Unless otherwise provided for in the Scope of Work, any and all equipment, products or materials necessary or appropriate to perform under this Agreement shall be supplied by the Grantee. Grantee shall obtain all necessary local, state, and federal authorizations necessary to complete this project, and the Grantee shall be licensed as necessary to perform under this Agreement as may be required by law, rule, or regulation; the Grantee shall provide evidence of such compliance to the Commission upon request. The Grantee shall procure all supplies and pay all charges, fees, taxes and incidentals that may be required for the completion of this Agreement. By acceptance of this Agreement, the Grantee warrants that it has the capability in all respects to fully perform the requirements and the integrity and reliability that will assure good-faith performance as a responsible Grantee. Grantee shall immediately notify the Commission's Grant Manager in writing if its ability to perform under the Agreement is compromised in any manner during the term of the Agreement. The Commission shall take appropriate action, including potential termination of this Agreement pursuant to Paragraph eight (8) below, in the event the Grantee's ability to perform under this Agreement becomes compromised.

3. **AGREEMENT PERIOD.**

A. **Agreement Period and Commission's Limited Obligation to Pay.** This Agreement is made pursuant to a grant award and shall be effective upon execution by the last Party to sign and shall remain in effect through 09/30/2041. However, as authorized by Rule 68-1.003, F.A.C., referenced grant programs may execute Agreements with a retroactive start date of no more than sixty (60) days, provided that approval is granted from the Executive Director or his/her designee and that it is in the best interest of the Commission and State to do so. For this agreement, the retroactive start date was not approved. The Commission's Grant Manager shall confirm the specific start date of the Agreement by written notice to the Grantee. The Grantee shall not be eligible for reimbursement or compensation for grant activities performed prior to the start date of this Agreement nor after the end date of the Agreement. For this agreement, preaward costs are not eligible for reimbursement. If necessary, by mutual agreement as evidenced in writing and lawfully executed by the Parties, an Amendment to this Agreement may be executed to lengthen the Agreement period.

4. **COMPENSATION AND PAYMENTS.**

A. **Compensation.** As consideration for the services rendered by the Grantee under the terms of this Agreement, the Commission shall pay the Grantee on a cost reimbursement basis in an amount not to exceed $72,500.

B. **Payments.** The Commission shall pay the Grantee for satisfactory performance of the tasks identified in Attachment A, Scope of Work, as evidenced by the completed deliverables, upon submission of invoices, accompanied by supporting documentation sufficient to justify invoiced expenses or fees, and after acceptance of services and deliverables in writing by the Commission's Grant Manager identified in Paragraph ten (10), below. Unless otherwise specified in the Scope of Work, invoices shall be due monthly, commencing from the start date of this Agreement. Invoices must be legible and must clearly reflect the Deliverables that were provided in accordance with the terms of the Agreement for the invoice period. Unless otherwise specified in the Scope of Work, a final invoice shall be submitted to the Commission no later than forty-five (45) days following the expiration date of this Agreement to assure the availability of funds for payment. Further, pursuant to Section 215.971(1)(d), F.S., the Commission may only reimburse the Grantee for allowable costs resulting from obligations incurred during the agreement period specified in Paragraph three (3).

C. **Invoices.** Each invoice shall include the Commission Agreement Number and the Grantee's Federal Employer Identification (FEID) Number. Invoices, with supporting documentation, may be submitted electronically to the attention of the Commission's Grant Manager identified in Paragraph ten (10), below. If submitting hard copies, an original and two (2) copies of the invoice, plus all supporting documentation, shall be submitted. All bills for amounts due under this Agreement shall be submitted in detail sufficient for a proper pre-audit and post-audit thereof. Grantee acknowledges that the Commission's Grant Manager shall reject invoices lacking documentation necessary to justify invoiced expenses.

D. **Match.** Pursuant to grant program guidelines, the Grantee is required to contribute non-federal match towards this Agreement. If applicable, details regarding specific match requirements are included in Attachment A, Scope of Work.

E. **Travel Expenses.** If authorized in Attachment A, Scope of Work, travel expenses shall be reimbursed in accordance with Section 112.061, F.S.

F. **State Obligation to Pay.** The State of Florida's performance and obligation to pay under this Agreement is contingent upon an annual appropriation and authorization to spend by the Legislature. The Parties hereto understand that this Agreement is not a commitment to future appropriations but is subject to appropriation and authority to spend provided by the Legislature. The Commission shall be the final authority as to the availability of funds for this Agreement, and as to what constitutes an "annual appropriation" of funds to complete this Agreement. If such funds are not appropriated or available for the Agreement purpose, such event will not constitute a default on behalf of the Commission or the State. The Commission's Grant Manager shall notify the Grantee in writing at the earliest possible time if funds are not appropriated or available.

G. **Non-Competitive Procurement and Rate of Payment.** Section 216.3475, F.S., requires that under non-competitive procurements, a Grantee may not receive a rate of payment in excess of the competitive prevailing rate for those services unless expressly authorized in the General Appropriations Act. If applicable, Grantee warrants, by execution of this Agreement, that the amount of non-competitive compensation provided in this Agreement is in compliance with Section 216.3475, F.S.

H. **Time Limits for Payment of Invoices.** Payments shall be made in accordance with Sections 215.422 and 287.0585, F.S., which govern time limits for payment of invoices. Section 215.422, F.S. provides that agencies have five (5) working days to inspect and approve Deliverables, unless the Scope of Work specifies otherwise. If payment is not available within forty (40) days, measured from the latter of the date the invoice is received or the Deliverables are received, inspected and approved, a separate interest penalty set by the Department of Financial Services pursuant to Section 55.03(1), F.S., will be due and payable in addition to the invoice amount. Invoices returned to a Grantee due to preparation errors will result in a payment delay. Invoice payment requirements do not start until a properly completed invoice is provided to the agency.

I. **Electronic Funds Transfer.** Grantee agrees to enroll in Electronic Funds Transfer (EFT), offered by the State's Chief Financial Officer, within thirty (30) days of the date the last Party has signed this Agreement. Copies of the Authorization form and a sample blank enrollment letter can be found on the vendor instruction page at:

http://www.fldfs.com/aadir/direct_deposit_web/Vendors.htm

Questions should be directed to the State of Florida's EFT Section at (850) 413-5517. Once enrolled, invoice payments will be made by EFT.

J. **Vendor Ombudsman.** A Vendor Ombudsman, whose duties include acting as an advocate for vendors who may be experiencing problems in obtaining timely payment(s) from a State agency, may be contacted at (850) 413-5516 or by calling the Chief Financial Officer's Hotline, (800) 342-2762.

5. **RETURN OR RECOUPMENT OF FUNDS.**

A. **Overpayment to Grantee.** Pursuant to Section 215.971(1)(e) &(f), F.S., the Grantee shall return to the Commission any overpayments due to unearned funds or funds disallowed pursuant to the terms of this Agreement that were disbursed to Grantee by the Commission. In the event the Grantee or its independent auditor discovers that overpayment has been made, the Grantee shall repay said overpayment within forty (40) calendar days without prior notification from the Commission. In the event the Commission first discovers an overpayment has been made, the Commission will notify the Grantee in writing. Should repayment not be made in a timely manner, the Commission shall be entitled to charge interest at the lawful rate of interest established pursuant to Section 55.03(1), F.S., on the outstanding balance beginning forty (40) calendar days after the date of notification or discovery. Refunds should be sent to the Commission's Grant Manager and made payable to the "The Florida Fish and Wildlife Conservation Commission."

B. **Additional Costs or Monetary Loss Resulting from Grantee Non-Compliance.** If the Grantee's non-compliance with any provision of the Agreement results in additional cost or monetary loss to the Commission or the State of Florida to the extent allowed by Florida Law, the Commission can recoup that cost or loss from monies owed to the Grantee under this Agreement or any other agreement between Grantee and the Commission. In the event the discovery of this cost or loss arises when no monies are available under this Agreement or any other agreement between the Grantee and the Commission, the Grantee will repay such cost or loss in full to the Commission within thirty (30) days of the date of notice of the amount owed, unless the Commission agrees, in writing, to an alternative timeframe. If the Grantee is unable to repay any cost or loss to the Commission, the Commission shall notify the State of Florida, Department of Financial Services, for resolution pursuant to Section 17.0415, F.S.

6. **COMMISSION EXEMPT FROM TAXES, PROPERTY EXEMPT FROM LIEN.**

A. **Commission Exempt from Taxes.** The Grantee recognizes that the State of Florida, by virtue of its sovereignty, is not required to pay any taxes on the services or goods purchased under the terms of this Agreement. Grantee is placed on notice that this exemption generally does not apply to nongovernmental entity recipients, subrecipients, contractors, or subcontractors. Any questions regarding this tax exemption should be addressed to the Commission Grant Manager.

B. **Property Exempt from Lien.** If the Grant involves the improvement of real property titled to the State of Florida, then the following paragraph applies:

> The Grantee acknowledges that Property being improved is titled to the State of Florida and is not subject to lien of any kind for any reason. The Grantee shall include notice of such exemptions in any subcontracts and purchase orders issued hereunder.

7. **MONITORING.**

The Commission's Grant Manager shall actively monitor the Grantee's performance and compliance with the terms of this Agreement. The Commission reserves the right for any Commission staff to make scheduled or unscheduled, announced or unannounced monitoring visits. Specific State and Federal monitoring terms and conditions are found in Attachment B, Audit Requirements. Additionally, monitoring terms, conditions, and schedules may be included in Attachment A, Scope of Work.

8. TERMINATION.

A. Commission Termination. The Commission may unilaterally terminate this Agreement for convenience by providing the Grantee with thirty (30) calendar days of written notice of its intent to terminate. The Grantee shall not be entitled to recover any cancellation charges or lost profits. The Grantee may request termination of the Agreement for convenience.

B. Termination – Fraud or Willful Misconduct. This Agreement shall terminate immediately in the event of fraud or willful misconduct. In the event of such termination, the Commission shall provide the Grantee with written notice of termination.

C. Termination – Other. The Commission may terminate this Agreement if the Grantee fails to: 1.) comply with all terms and conditions of this Agreement; 2.) produce each deliverable within the time specified by the Agreement or extension; 3.) maintain adequate progress, thus endangering the performance of the Agreement; or, 4.) abide by any statutory, regulatory, or licensing requirement. Rule 60A-1.006(3), F.A.C., governs the procedure and consequences for default. The rights and remedies of the Commission in this clause are in addition to any other rights and remedies provided by law or under the Agreement. The Grantee shall not be entitled to recover any cancellation charges or lost profits.

D. Termination - Funds Unavailability. In the event funds to finance this Agreement become unavailable or if federal or state funds upon which this Agreement is dependent are withdrawn or redirected, the Commission may terminate this Agreement upon no less than twenty-four (24) hours' notice in writing to the Grantee. Said notice shall be delivered by certified mail, return receipt requested or in person with proof of delivery. The Commission shall be the final authority as to the availability of funds and will not reallocate funds appropriated for this Agreement to another program thus causing "lack of funds." In the event of termination of this Agreement under this provision, the Grantee will be compensated for any work satisfactorily completed and any non-cancellable obligations properly incurred prior to notification of termination.

E. Grantee Discontinuation of Activities upon Termination Notice. Upon receipt of notice of termination, the Grantee shall, unless the notice directs otherwise, immediately discontinue all activities authorized hereunder. Upon termination of this Agreement, the Grantee shall promptly render to the Commission all property belonging to the Commission. For the purposes of this section, property belonging to the Commission shall include, but shall not be limited to, all books and records kept on behalf of the Commission.

9. REMEDIES.

A. Financial Consequences. In accordance with Sections 215.971(1)(a) &(b), F.S., Attachment A, Scope of Work, contains clearly established tasks in quantifiable units of deliverables that must be received and accepted in writing by the agency before payment. Each deliverable specifies the required minimum level of service to be performed and the criteria for evaluating the successful completion of each deliverable. If the Grantee fails to produce each deliverable within the time frame specified by the Scope of Work, the budget amount allocated for that deliverable will be

deducted from the Grantee's payment. In addition, pursuant to Section 215.971(1)(c), the Commission shall apply any additional financial consequences, identified in the Scope of Work.

B. **Cumulative Remedies.** The rights and remedies of the Commission in this paragraph are in addition to any other rights and remedies provided by law or under the Agreement.

10. NOTICES AND CORRESPONDENCE.

Any and all notices shall be delivered to the individuals identified below. In the event that either Party designates a different Grant Manager after the execution of this Agreement, the Party will provide written notice of the name, address, zip code, telephone and fax numbers, and email address of the newest Grant Manager, or an individual authorized to receive notice on behalf of that Party, to all other Parties as soon as possible, but not later than five (5) business days after the new Grant Manager has been named. A designation of a new Grant Manager shall not require a formal amendment to the Agreement.

FOR THE COMMISSION:	**FOR THE GRANTEE:**
Grant Manager	Grant Manager
Andrea Pelton	Edward Seissiger
Grant Specialist	Project Manager, Engineering Department
FL Fish and Wildlife Conservation Commission	City of Fort Pierce
620 S Meridian St	100 N. US Hwy 1
Tallahassee, FL 32399	Fort Pierce, FL 34950
(850) 488-5600	(772) 467-3780
(850) 488-9824, Fax	(772) 460-6847, Fax
fbip@myfwc.com	ESeissiger@City-FtPierce.com

11. AMENDMENT.

A. **Waiver or Modification.** No waiver or modification of this Agreement or of any covenant, condition, or limitation herein contained shall be valid unless in writing and lawfully executed by the Parties.

B. **Change Orders.** The Commission may, at any time, by written order, make a change to this Agreement. Such changes are subject to the mutual agreement of both Parties as evidenced in writing. Any change which causes an increase or decrease in the Grantee's cost or time shall require an Amendment. Minor changes, such as those updating a Party's contact information, may be accomplished by a Modification.

C. **Renegotiation upon Change in Law or Regulation.** The Parties agree to renegotiate this Agreement if federal and/or state revisions of any applicable laws or regulations make changes in the Agreement necessary.

12. PROPERTY RIGHTS.

If this Agreement includes Federal funds, the provisions of Sections 200.310-200.316, OMB Uniform Guidance (2 CFR 200), and any language addressing Federal rights, apply.

A. Intellectual and Other Intangible Property.

i. **Grantee's Preexisting Intellectual Property (Proprietary) Rights.** Unless specifically addressed in the Attachment A, Scope of Work, intellectual and other intangible property rights to the Grantee's preexisting property will remain with the Grantee.

ii. **Proceeds Related to Intellectual Property Rights.** Proceeds derived from the sale, licensing, marketing or other authorization related to any intellectual and other intangible property right created or otherwise developed by the Grantee under this Agreement for the Commission shall be handled in the manner specified by the applicable Florida State Statute and/or Federal program requirements.

iii. **Commission Intellectual Property Rights.** Where activities supported by this Agreement produce original writing, sound recordings, pictorial reproductions, drawings or other graphic representations and works of any similar nature, the Commission and the State of Florida have the unlimited, royalty-free, nonexclusive, irrevocable right to use, duplicate and disclose such materials in whole or in part, in any manner, for any purpose whatsoever and to have others acting on behalf of the Commission to do so. If this Agreement is supported by federal funds, the federal awarding agency reserves a royalty-free, nonexclusive and irrevocable right to reproduce, publish, or otherwise use the work for federal purposes, and to authorize others to do so.

B. Purchase or Improvement of Real Property

This agreement is for the purchase or improvement of real property, therefore the following terms and conditions apply.

i. **Federal Funds.** Any Federal funds provided for the purchase of or improvements to real property are subject to the Property Standards of Sections 200.310 - 200.316, and 200.329, OMB Uniform Guidance (2 CFR 200), as amended.

ii. **Title.** If this agreement is supported by state funds, the Grantee shall comply with Section 287.05805, F.S. This section requires the Grantee to grant a security interest in the property to the State of Florida, the type and details of which are provided for in Attachment A, Scope of Work. Title to state-owned real property remains vested in the state. Title to federally-owned real property remains vested in the Federal government in accordance with the provisions of Section 200.312, OMB Uniform Guidance (2 CFR 200), as amended.

iii. **Use.** Federally-owned real property will be used for the originally authorized purpose as long as needed for that purpose in accordance with Section 200.311, OMB Uniform Guidance (2 CFR 200). State-owned real property will be used as provided in Attachment A, Scope of Work.

C. Non-Expendable Property. The following provisions apply to the extent that the grant allows the acquisition of non-expendable property.

i. **Non-Expendable Property Defined.** For the requirements of this section of the Agreement, "non-expendable property" is the same as "property" as defined in Section 273.02, F.S. (equipment, fixtures, and other tangible personal property of a non-consumable and non-expendable nature, with a value or cost of **$1,000.00** or more, and a normal expected life of one (1) year or more; hardback-covered bound books that are circulated to students or the general public, with a value or cost of **$25.00** or more; and uncirculated hardback-covered bound books, with a value or cost of **$250.00** or more).

ii. **Title to Non-Expendable Property.** Title (ownership) to all non-expendable property acquired with funds from this Agreement shall be vested in the Commission and said property shall be transferred to the Commission upon completion or termination of the

Agreement unless otherwise authorized in writing by the Commission or unless otherwise specifically provided for in Attachment A, Scope of Work.

D. Equipment and Supplies. The following provisions apply to the extent that the grant allows the acquisition of equipment and supplies.

i. **Title - Equipment.** Title to equipment acquired under a Federal award will vest upon acquisition in the non-Federal entity in accordance with Sections 200.313 and 200.314, OMB Uniform Guidance (2 CFR 200).

ii. **Title – Supplies.** Title to supplies will vest in the non-Federal entity upon acquisition. Unused supplies exceeding **$5,000.00** in total aggregate value upon termination or completion of the project or program are subject to Section 200.314, OMB Uniform Guidance.

iii. **Use – Equipment.** Equipment must be used by the non-Federal entity in the program or project for which it was acquired as long as needed

13. RELATIONSHIP OF THE PARTIES.

A. Independent Grantee. The Grantee shall perform as an independent grantee and not as an agent, representative, or employee of the Commission. The Grantee covenants that it presently has no interest and shall not acquire any interest that would conflict in any manner or degree with the performance of services required. Each Party hereto covenants that there is no conflict of interest or any other prohibited relationship between the Grantee and the Commission.

B. Grantee Training and Qualifications. Grantee agrees that all Grantee employees, subcontractors, or agents performing work under the Agreement shall be properly trained technicians who meet or exceed any specified training qualifications. Upon request, Grantee shall furnish a copy of technical certification or other proof of qualification.

C. Commission Security. All employees, subcontractors, or agents performing work under the Agreement must comply with all security and administrative requirements of the Commission. The Commission may conduct, and the Grantee shall cooperate in, a security background check or otherwise assess any employee, subcontractor, or agent furnished by the Grantee. The Commission may refuse access to, or require replacement of, any personnel for cause, including, but not limited to, technical or training qualifications, quality of work, change in security status, or non-compliance with the Commission's other requirements. Such refusal shall not relieve Grantee of its obligation to perform all work in compliance with the Agreement. The Commission, in coordination with the Grantee, may reject and bar from any facility for cause any of Grantee's employees, subcontractors, or agents.

D. Commission Rights to Assign or Transfer. The Grantee agrees that the State of Florida shall at all times be entitled to assign or transfer its rights, duties, or obligations under this Agreement to another governmental agency in the State of Florida, upon giving prior written notice to the Grantee.

E. Commission Rights to Undertake and Award Supplemental Agreements. Grantee agrees that the Commission may undertake or award supplemental agreements for work related to the Agreement. The Grantee and its subcontractors shall cooperate with such other Grantees and the Commission in all such cases.

14. SUBCONTRACTS.

A. Authority. Grantee is permitted to subcontract work under this Agreement, therefore, the following terms and conditions apply. The Grantee shall ensure, and provide assurances to the Commission upon request, that any subcontractor selected for work under this Agreement has the necessary qualifications and abilities to perform in accordance with the terms and conditions of this Agreement. The Grantee must provide the Commission with the names of any subcontractor considered for work under this Agreement; the Commission in coordination with the Grantee reserves the right to reject any subcontractor. The Grantee agrees to be responsible for all work performed and all expenses incurred with the project. Any subcontract arrangements must be evidenced by a written document available to the Commission upon request. The Grantee further agrees that the Commission shall not be liable to the extent allowed by law, to any subcontractor for any expenses or liabilities incurred under the subcontract and the Grantee shall be solely liable to the subcontractor for all expenses and liabilities incurred under the subcontract.

B. Grantee Payments to Subcontractor. If subcontracting is permitted pursuant to Paragraph A, above, Grantee agrees to make payments to the subcontractor upon completion of work and submitted invoice in accordance with the contract between the Grantee and subcontractor. Failure to make payment pursuant to any subcontract will result in a penalty charged against Grantee and paid to the subcontractor in the amount of one-half of one percent (0.50%) of the amount due per day from the expiration of the period allowed herein for payment. Such penalty shall be in addition to actual payments owed and shall not exceed fifteen percent (15%) of the outstanding balance due."

C. Commission Right to Reject Subcontractor Employees. The Commission in coordination with Grantee shall retain the right to reject any of the Grantee's or subcontractor's employees whose qualifications or performance, in the Commission's judgment, are insufficient.

D. Subcontractor as Independent Contractor. If subcontracting is permitted pursuant to Paragraph A above, the Grantee agrees to take such actions as may be necessary to ensure that each subcontractor will be deemed to be an independent contractor and will not be considered or permitted to be an agent, servant, joint venture, or partner of the State of Florida.

15. MANDATORY DISCLOSURE.

These disclosures are required by State law, as indicated, and apply when this Agreement includes State funding; and by Federal law, as indicated, and apply when the Agreement includes a Federal award.

A. Disclosure of Interested State Employees and Conflict of Interest. This Agreement is subject to Chapter 112, F.S. Grantee shall provide the name of any officer, director, employee, or other agent who is affiliated with this project and an employee of the State of Florida. If the Agreement includes a Federal award, then the Agreement is also subject to Section 200.112, OMB Uniform Guidance (2 CFR 200). Grantee must disclose, in writing, any potential conflict of interest to the Commission in accordance with applicable Federal awarding agency policy.

B. Convicted Vendors. Grantee hereby certifies that neither it, nor any person or affiliate of Grantee, has been convicted of a Public Entity Crime as defined in section 287.133, F.S., nor placed on the convicted vendor list. Grantee shall have a continuing obligation to disclose, to the Commission, in writing, if it, its principals, recipient, subrecipient, contractor, or subcontractor, are on the

convicted vendors list maintained by the Florida Department of Management Services pursuant to Section 287.133(3)(d), F.S.

i. **Convicted Vendor List.** Pursuant to Subsection 287.133(2)(a), F.S., a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not be awarded or perform work as a Grantee, supplier, subcontractor or consultant under a contract with any public entity and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, F.S., for Category Two for a period of thirty-six (36) months from the date of being placed on the convicted vendor list. The State of Florida, Department of Management Services, Division of State Purchasing provides listings for convicted, suspended, discriminatory and federal excluded parties, as well as the vendor complaint list at:

http://www.dms.myflorida.com/business_operations/state_purchasing/vendor_information/convicted_suspended_discriminatory_complaints_vendor_lists

ii. **Notice of Conviction of Public Entity Crime.** Any person must notify the Department of Management Services and the Commission, in writing, within thirty (30) days after conviction of a public entity crime applicable to that person or an affiliate of that person as defined in Section 287.133, F.S.

C. Vendors on Scrutinized Companies List.

i. **Scrutinized Companies.** Grantee certifies that it and any of its affiliates are not scrutinized companies as identified in Section 287.135, F.S. In addition, Grantee agrees to observe the requirements of Section 287.135, F.S., for applicable sub-agreements entered into for the performance of work under this Agreement. Pursuant to Section 287.135, F.S., the Commission may immediately terminate this Agreement for cause if the Grantee, its affiliates, or its subcontractors are found to have submitted a false certification; or if the Grantee, its affiliates, or its subcontractors are placed on any applicable scrutinized companies list or engaged in prohibited contracting activity during the term of the Agreement. As provided in Subsection 287.135(8), F.S., if federal law ceases to authorize these contracting prohibitions then they shall become inoperative.

D. Discriminatory Vendors. Grantee shall disclose to the Commission, in writing, if they, their subrecipient, contractor, or subcontractor, are on the Discriminatory Vendor List maintained by the Florida Department of Management Services pursuant to Section 287.134(3)(d), F.S. "An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid, proposal, or reply on a contract to provide any goods or services to a public entity; may not submit a bid, proposal, or reply on a contract with a public entity for the construction or repair of a public building or public work; may not submit bids, proposals, or replies on leases of real property to a public entity; may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity; and may not transact business with any public entity." Section 287.134(2)(a), F.S. Grantee has a continuing duty to disclose to the Commission whether they appear on the discriminatory vendor list.

E. Prompt Disclosure of Litigation, Investigations, Arbitration, or Administrative Proceedings. Throughout the term of the Agreement, the Grantee has a continuing duty to promptly disclose to the Commission's Grant Manager, in writing, upon occurrence, all civil or criminal litigation, investigations, arbitration, or administrative proceedings (Proceedings) relating to or affecting the Grantee's ability to perform under this agreement. If the existence of such Proceeding causes the Commission concern that the Grantee's ability or willingness to perform the Agreement is

jeopardized, the Grantee may be required to provide the Commission with reasonable assurances to demonstrate that: a.) the Grantee will be able to perform the Agreement in accordance with its terms and conditions; and, b.) Grantee and/or its employees or agents have not and will not engage in conduct in performing services for the Commission which is similar in nature to the conduct alleged in such Proceeding.

F. Certain Violations of Federal Criminal Law. If this agreement includes a Federal award, then in accordance with Section 200.113, OMB Uniform Guidance (2 CFR 200), Grantee must disclose, in a timely manner, in writing to the Commission all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award.

16. INSURANCE.

The Grantee warrants and represents that it is insured, or self-insured for liability insurance, in accordance with applicable state law and that such insurance or self-insurance offers protection applicable to the Grantee's officers, employees, servants and agents while acting within the scope of their employment with the Grantee.

17. SPONSORSHIP.

As required by Section 286.25, F.S., if any recipient, subrecipient, contractor or subcontractor under this grant is a nongovernmental organization which sponsors a program financed wholly or in part by state funds, including any funds obtained through this Agreement, it shall, in publicizing, advertising, or describing the sponsorship of the program, state: "Sponsored by (Grantee's name) and the State of Florida, Fish and Wildlife Conservation Commission." If the sponsorship reference is in written material, the words "State of Florida, Fish and Wildlife Conservation Commission" shall appear in the same size letters or type as the name of the Grantee's organization. Additional sponsorship requirements may be specified in Attachment A, Scope of Work.

18. PUBLIC RECORDS.

A. This Agreement may be unilaterally canceled by the Commission for refusal by the Grantee to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, F.S., and made or received by the Grantee in conjunction with this Agreement, unless exemption for such records is allowable under Florida law.

B. If the Grantee meets the definition of "Contractor" in Section 119.0701(1)(a) F.S., the Grantee shall comply with the following:

i. **IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF THE CHAPTER 119, FLORIDA STATUES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT: 850-488-6553, RecordsCustodian@myfwc.com, and 620 South Meridian Street, Tallahassee FL 32399**

ii. Keep and maintain public records required by the Commission to perform the service.

iii. Upon request from the Commission's custodian of public records, provide the Commission with a copy of the requested records or allow the records to be inspected

or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, F.S. or as otherwise provided by law.

iv. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the contract term and following completion of the contract if the Contractor does not transfer the records to the Commission.

v. Upon completion of the contract transfer, at no cost, to the Commission all public records in possession of the Contractor or keep and maintain public records required by the Commission to perform the service. If the Contractor transfers all public records to the Commission upon completion of the contract, the Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Contractor keeps and maintains public records upon completion of the contract, the Contractor shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the Commission, upon request from the Commission's custodian of public records, in a format that is compatible with the information technology systems of the Commission.

19. COOPERATION WITH INSPECTOR GENERAL.

Pursuant to subsection 20.055(5), F.S., Grantee, and any subcontractor to the Grantee, understand and will comply with their duty to cooperate with the Inspector General in any investigation, audit, inspection, review, or hearing. Upon request of the Inspector General or any other authorized State official, the Grantee shall provide any type of information the Inspector General deems relevant to the Grantee's integrity or responsibility. Such information may include, but shall not be limited to, the Grantee's business or financial records, documents, or files of any type or form that refer to or relate to the Agreement. The Grantee agrees to reimburse the State for the reasonable costs of investigation incurred by the Inspector General or other authorized State official for investigations of the Grantee's compliance with the terms of this or any other agreement between the Grantee and the State which results in the suspension or debarment of the Grantee. Such costs shall include but shall not be limited to: salaries of investigators, including overtime; travel and lodging expenses; and expert witness and documentary fees.

20. SECURITY AND CONFIDENTIALITY.

The Grantee shall not divulge to third parties any clearly marked confidential information obtained by the Grantee or its agents, distributors, resellers, subcontractors, officers or employees in the course of performing Grant work. To ensure confidentiality, the Grantee shall take appropriate steps regarding its personnel, agents, and subcontractors. The warranties of this paragraph shall survive the Grant.

21. RECORD KEEPING REQUIREMENTS.

A. Grantee Responsibilities. The Grantee shall maintain accurate books, records, documents and other evidence that sufficiently and properly reflect all direct and indirect costs of any nature expended in the performance of this Agreement, in accordance with generally accepted accounting principles.

B. State Access to Grantee Books, Documents, Papers, and Records. The Grantee shall allow the Commission, the Chief Financial Officer of the State of Florida, the Auditor General of the State of Florida, the Florida Office of Program Policy Analysis and Government Accountability or authorized representatives of the state or federal government to have access to any of the Grantee's books, documents, papers, and records, including electronic storage media, as they may relate to this Agreement, for the purposes of conducting audits or examinations or making excerpts or transcriptions.

C. **Grantee Records Retention.** Unless otherwise specified in the Scope of Work, these records shall be maintained for five (5) fiscal years following the close of this Agreement, or the period required for this particular type of project by the General Records Schedules maintained by the Florida Department of State (available at: http://dos.myflorida.com/library-archives/records-management/general-records-schedules/), whichever is longer. Grantee shall cooperate with the Commission to facilitate the duplication and transfer of such records upon the Commission's request.

D. **Grantee Responsibility to Include Records Requirements – Subcontractors.** In the event any work is subcontracted under this Agreement, the Grantee shall include the aforementioned audit and record keeping requirements in all subsequent contracts.

E. **Compliance with Federal Funding Accountability and Transparency.** Any federal funds awarded under this Agreement must comply with the Federal Funding Accountability and Transparency Act (FFATA) of 2006. The intent of the FFATA is to empower every American with the ability to hold the government accountable for each spending decision. The result is to reduce wasteful spending in the government. The FFATA legislation requires that information on federal awards (federal financial assistance and expenditures) be made available to the public via a single, searchable website: http://www.USASpending.gov. Grant recipients awarded a new Federal grant greater than or equal to **$25,000.00** awarded on or after October 1, 2010 are subject to the FFATA. The Grantee agrees to provide the information necessary, over the life of this Agreement, for the Commission to comply with this requirement.

22. FEDERAL AND FLORIDA SINGLE AUDIT ACT REQUIREMENTS.

Pursuant to the FSAA (or Federal) Vendor / Recipient Determination Checklist, the Grantee has been determined to be a recipient of state financial assistance and/or a subrecipient of a federal award. Therefore, pursuant to Section 215.97, F.S. and/or OMB Uniform Guidance (2 CFR 200), the Grantee may be subject to the audit requirements of the Florida and/or Federal Single Audit Acts. If applicable, the Grantee shall comply with the audit requirements outlined in Attachment B, "Requirements of the Federal and Florida Single Audit Acts," attached hereto and made a part of the Agreement, as applicable.

23. FEDERAL COMPLIANCE.

As applicable, Grantee shall comply with all federal laws, rules, and regulations, including but not limited to:

i. **Clean Air Act and Water Pollution Control Act.** All applicable standards, orders, or requirements issued under the Clean Air Act (42 U.S.C. 7401-7671q), and the Water Pollution Control Act (33 U.S.C. 1251-1387, as amended).
ii. **Lacey Act, 16 U.S.C 3371-3378.** This Act prohibits trade in wildlife, fish and plants have been illegally taken, possessed, transported or sold.
iii. **Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. 1801-1884.** This Act governs marine fisheries in Federal waters.
iv. **Migratory Bird Treaty Act, 16 U.S.C. 703-712.** The Act prohibits anyone, unless permitted, to pursue, hunt, take, capture, kill, attempt to take, capture or kill, possess, offer for sale, sell, offer to purchase, deliver for shipment, ship, cause to be shipped, deliver for transportation, transport, cause to be transported, carry or cause to be carried by any means whatsoever, receive for shipment, transport of carriage, or export, at any time, or in any manner, any migratory bird, or any part, nest, or egg of such bird.
v. **Endangered Species Act, 16 U.S.C. 1531, et seq.** The Act provides a program for the conservation of threatened and endangered plants and animals and the habitat in which they

are found. The Act also prohibits any action that cause a "taking" of any listed species of endangered fish or wildlife. Also, generally prohibited are the import, export, interstate, and foreign commerce of listed species.

24. FEDERAL FUNDS. No Federal Funds are applied to this Agreement, therefore, the following terms and conditions do not apply.

A. Prior Approval to Expend Federal Funds to Federal Agency or Employee. It is understood and agreed that the Grantee is not authorized to expend any federal funds under this Contract to a federal agency or employee without the prior written approval of the awarding federal agency.

B. Equal Employment Opportunity. Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR Chapter 60). Applicable, except as otherwise provide under 41 CFR Part 60, to any grant, contract, loan, insurance, or guarantee involving Federal assisted construction.

C. Davis-Bacon Act. The Davis-Bacon Act, 40 U.S.C. 3141-3148, as supplemented by Department of Labor regulations at 29 CFR Part 5. Applicable to contractors and subcontractors performing on federally funded or assisted contracts in excess of **$2,000.00** for the construction, alteration, or repair (including painting and decorating) of public buildings or public works. Under this Act, contractors and subcontractors must pay their laborers and mechanics employed under the contract no less than the locally prevailing wages and fringe benefits for corresponding work on similar projects in the area.

D. Copeland "Anti-Kickback Act. The Copeland "Anti-Kickback" Act, 40 U.S.C. 3141-3148, and 3146-3148, as supplemented by Department of Labor regulations (29 CFR Part 5). Applicable to contracts awarded by a non-Federal entity in excess of **$100,000.00** that involve employment of mechanics or labors. Under this Act, contractors and subrecipients are prohibited from inducing, by any mean, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled.

E. Contract Work Hours and Safety Standards Act. Sections 103 and 107 of the Agreement Work Hours and Safety Standards Act (40 U.S.C. 327–330) as supplemented by Department of Labor regulations (29 CFR part 5). Applicable to construction contracts awarded by Contractors and subcontractors in excess of **$2,000.00**, and in excess of **$2,500.00** for other contracts which involve the employment of mechanics or laborers. Under this Act, contractors and subcontractors must compute wages of mechanics and laborers (workers) on the basis of a standard forty (40) hour work week; provide workers no less than time and a half for hours worked in excess of the forty (40) hour work week; and not require workers to work in surroundings or work conditions that are unsanitary, hazardous, or dangerous.

F. Rights to Inventions Made Under a Contract or Agreement. 37 CFR Part 401. If the Federal award meets the definition of "funding agreement" under 37 CFR 401.2(a) and the recipient or Subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under the "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

G. **Energy Efficiency.** Mandatory standards and policies relating to energy efficiency which are contained in the State energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94–163, 89 Stat. 871).

H. **Debarment and Suspension Contractor Federal Certification.** In accordance with Federal Executive Order 12549 and 2 CFR Part 1400 regarding Debarment and Suspension, the Grantee certifies that neither it, nor its principals, is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency; and, that the Grantee shall not knowingly enter into any lower tier contract, or other covered transaction, with a person who is similarly debarred or suspended from participating in this covered transaction.

I. **Prohibition against Lobbying.**

i. **Grantee Certification – Payments to Influence.** The Grantee certifies that no Federal appropriated funds have been paid or will be paid, on or after December 22, 1989, by or on behalf of the Grantee, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress, in connection with the awarding, renewal, amending or modifying of any Federal contract, grant, or cooperative agreement. The Grantee also certifies that they have not engaged any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on behalf of the Grantee with respect to this Contract and its related federal contract, grant, loan, or cooperative agreement; or, if the Grantee has engaged any registrant with respect to this Contract and its related Federal contract, grant, loan, or cooperative agreement, the Grantee shall, prior to or upon execution of this Contract, provide the Commission Contract Manager a signed declaration listing the name of any said registrant. During the term of this Contract, and at the end of each Calendar quarter in which any event occurs that materially affects the accuracy of this certification or declaration, the Grantee shall file an updated declaration with the Commission's Contract Manager. If any non-federal funds are used for lobbying activities as described above in connection with this Contract, the Grantee shall submit Standard Form-LLL, "Disclosure Form to Report Lobbying", and shall file quarterly updates of any material changes. The Grantee shall require the language of this certification to be included in all subcontracts, and all subcontractors shall certify and disclose accordingly.

ii. **Grantee – Refrain from Subcontracting with Certain Organizations.** Pursuant to the Lobbying Disclosure Act of 1995, the Grantee agrees to refrain from entering into any subcontracts under this Contract with any organization described in Section 501(c)(4) of the Internal Revenue Code of 1986, unless such organization warrants that it does not, and will not, engage in lobbying activities prohibited by the Act as a special condition of the subcontract.

J. **Compliance with Office of Management and Budget Circulars.** As applicable, Grantee shall comply with the following Office of Management and Budget (OMB) Uniform Guidance (2 CFR 200).

K. **Drug Free Workplace.** Pursuant to the Drug-Free Workplace Act of 1988, the Grantee attests and certifies that the Grantee will provide a drug-free workplace compliant with 41 U.S.C. 81.

25. CONTRACT-RELATED PROCUREMENT.

A. **PRIDE.** In accordance with Section 946.515(6), F.S., if a product or service required for the performance of this Contract is certified by or is available from Prison Rehabilitative Industries and Diversified Enterprises, Inc. (PRIDE) and has been approved in accordance with Subsection 946.515(2), F.S., the following statement applies:

> It is expressly understood and agreed that any articles which are the subject of, or required to carry out, this contract shall be purchased from [PRIDE] in the same manner and under the same procedures set forth in Subsections 946.515(2) and (4), F.S.; and for purposes of this contract the person, firm or other business entity carrying out the provisions of this contract shall be deemed to be substituted for this agency insofar as dealings with such corporation are concerned.

The above clause is not applicable to subcontractors unless otherwise required by law. Additional information about PRIDE and the products it offers is available at http://www.pride-enterprises.org.

B. **Respect of Florida.** In accordance with Subsection 413.036(3), F.S., if a product or service required for the performance of this Contract is on the procurement list established pursuant to Subsection 413.035(2), F.S., the following statement applies:

> It is expressly understood and agreed that any articles that are the subject of, or required to carry out, this contract shall be purchased from a nonprofit agency for the blind or for the severely handicapped that is qualified pursuant to Chapter 413, F.S., in the same manner and under the same procedures set forth in Subsections 413.036(1) and (2), F.S.; and for purposes of this contract, the person, firm or other business entity carrying out the provisions of this contract shall be deemed to be substituted for the state agency insofar as dealings with such qualified nonprofit agency are concerned.

Additional information about the designated nonprofit agency and the products it offers is available at http://www.respectofflorida.org.

C. **Procurement of Recycled Products or Materials.** Grantee agrees to procure any recycled products or materials which are the subject of or are required to carry out this Contract in accordance with Section 403.7065, F.S.

26. PROFESSIONAL SERVICES.

A. **Architectural, Engineering, Landscape Architectural, or Survey and Mapping.** If this Agreement is for the acquisition of professional architectural, engineering, landscape architectural, or registered surveying and mapping services, and is therefore subject to Section 287.055, F.S., the following provision applies:

> The architect (or registered surveyor and mapper or professional engineer, as applicable) warrants that he or she has not employed or retained any company or person, other than a bona fide employee working solely for the architect (or registered surveyor and mapper, or professional engineer, as applicable) to solicit or secure this Agreement and that he or she has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the architect (or registered surveyor and mapper or professional

engineer, as applicable) any fee, commission, percentage, gift, or other consideration contingent upon or resulting from the award or making of this contract.

B. **Termination for Breach.** For the breach or violation of this provision, the Commission shall have the right to terminate the Agreement without liability and, at its discretion, to deduct from the Agreement price, or otherwise recover, the full amount of such fee, commission, percentage, gift, or consideration.

27. INDEMNIFICATION.

If Grantee is a state agency or subdivision, as defined in Subsection 768.28(2), F.S., pursuant to Subsection 768.28(19), F.S., neither Party indemnifies nor insures the other Party for the other Party's negligence. If Grantee is not a state agency or subdivision as defined above, Grantee shall be fully liable for the actions of its agents, employees, partners, or subcontractors and shall fully indemnify, defend, and hold harmless the State and the Commission, and their officers, agents, and employees, from suits, actions, damages, and costs of every name and description, including attorneys' fees, arising from or relating to personal injury and damage to real or personal tangible property alleged to be caused in whole or in part by Grantee, its agents, employees, partners, or subcontractors, provided, however, that Grantee shall not indemnify for that portion of any loss or damages proximately caused by the negligent act or omission of the State or the Commission. If this is a Professional Services Agreement as defined in Subsection 725.08 F.S., then notwithstanding the provisions of Subsection 725.06 F.S., the design professional shall only be liable for, and fully indemnify, defend, and hold harmless the State, the Commission, and their officers, agents, and employees, for actions caused in whole or in part, by the negligence, recklessness, or intentionally wrongful conduct of the design professional and other persons employed or utilized by the design professional in the performance of the Agreement.

28. NON-DISCRIMINATION.

No person, on the grounds of race, creed, color, national origin, age, sex, or disability, shall be excluded from participation in, be denied the proceeds or benefits of, or be otherwise subjected to discrimination in performance of this Agreement.

29. SEVERABILITY, CHOICE OF LAW, AND CHOICE OF VENUE.

This Agreement has been delivered in the State of Florida and shall be construed in accordance with the laws of Florida. Wherever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited or invalid under applicable law, such provision shall be ineffective to the extent of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement. Any action in connection herewith, in law or equity, shall be brought in Leon County, Florida, to the exclusion of all other lawful venues.

30. NO THIRD-PARTY RIGHTS.

The Parties hereto do not intend, nor shall this Agreement be construed to grant any rights, privileges or interest to any person not a party to this Agreement.

31. JURY TRIAL WAIVER.

As part of the consideration for this Agreement, the Parties hereby waive trial by jury in any action or proceeding brought by any party against any other party pertaining to any matter whatsoever arising out of

or in any way connected with this Agreement, or with the products or services provided under this Agreement, including but not limited to any claim by the Grantee of *quantum meruit*.

32. PROHIBITION OF UNAUTHORIZED ALIENS.

In accordance with Federal Executive Order 96-236, the Commission shall consider the employment by the Grantee of unauthorized aliens a violation of Section 274A(e) of the Immigration and Nationalization Act. Such violation shall be cause for unilateral cancellation of this Agreement if the Grantee knowingly employs unauthorized aliens.

33. EMPLOYMENT ELIGIBILITY VERIFICATION (E-VERIFY).

A. **Requirement to Use E-Verify.** Executive Order 11-116, signed May 27, 2011, by the Governor of Florida, requires Commission contracts in excess of nominal value to expressly require the Grantee to: 1.) utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by Grantee during the Agreement term; and, 2.) include in all subcontracts under this Agreement, the requirement that subcontractors performing work or providing services pursuant to this Agreement utilize the E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the term of the subcontract.

B. **E-Verify Online.** E-Verify is an Internet-based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of all new employees hired to work in the United States after the effective date of the required Memorandum of Understanding (MOU); the responsibilities and elections of federal contractors, however, may vary, as stated in Article II.D.1.c. of the MOU. There is no charge to employers to use E-Verify. The Department of Homeland Security's E-Verify system can be found online at http://www.dhs.gov/files/programs/gc_1185221678150.shtm

C. **Enrollment in E-Verify.** If Grantee does not have an E-Verify MOU in effect, the Grantee must enroll in the E-Verify system prior to hiring any new employee after the effective date of this Agreement.

D. **E-Verify Recordkeeping.** The Grantee further agrees to maintain records of its participation and compliance with the provisions of the E-Verify program, including participation by its subcontractors as provided above, and to make such records available to the Commission or other authorized state entity consistent with the terms of the Grantee's enrollment in the program. This includes maintaining a copy of proof of the Grantee's and subcontractors' enrollment in the E-Verify Program (which can be accessed from the "Edit Company Profile" link on the left navigation menu of the E-Verify employer's homepage).

E. **Employment Eligibility Verification.** Compliance with the terms of the Employment Eligibility Verification provision is made an express condition of this Agreement and the Commission may treat a failure to comply as a material breach of the Agreement.

34. FORCE MAJEURE AND NOTICE OF DELAY FROM FORCE MAJEURE.

Neither Party shall be liable to the other for any delay or failure to perform under this Agreement if such delay or failure is neither the fault nor the negligence of the Party or its employees or agents and the delay

is due directly to acts of God, wars, acts of public enemies, strikes, fires, floods, or other similar cause wholly beyond the Party's control, or for any of the foregoing that affects subcontractors or suppliers if no alternate source of supply is available. However, in the event of delay from the foregoing causes, the Party shall take all reasonable measures to mitigate any and all resulting delay or disruption in the Party's performance obligation under this Agreement. If the delay is excusable under this paragraph, the delay will not result in any additional charge or cost under the Agreement to either Party. In the case of any delay Agreement believes is excusable under this paragraph, Grantee shall notify the Commission's Grant Manager in writing of the delay or potential delay and describe the cause of the delay either: (1) within ten (10) calendar days after the cause that creates or will create the delay first arose, if Grantee could reasonably foresee that a delay could occur as a result; or (2) within five (5) calendar days after the date Grantee first had reason to believe that a delay could result, if the delay is not reasonably foreseeable. **THE FOREGOING SHALL CONSTITUTE GRANTEE'S SOLE REMEDY OR EXCUSE WITH RESPECT TO DELAY.** Providing notice in strict accordance with this paragraph is a condition precedent to such remedy. The Commission, in its sole discretion, will determine if the delay is excusable under this paragraph and will notify Grantee of its decision in writing. No claim for damages, other than for an extension of time, shall be asserted against the Commission. Grantee shall not be entitled to an increase in the Agreement price or payment of any kind from the Commission for direct, indirect, consequential, impact, or other costs, expenses or damages, including but not limited to costs of acceleration or inefficiency arising because of delay, disruption, interference, or hindrance from any cause whatsoever. If performance is suspended or delayed, in whole or in part, due to any of the causes described in this paragraph, after the causes have ceased to exist, Grantee shall perform at no increased cost, unless the Commission determines, in its sole discretion, that the delay will significantly impair the value of the Agreement to the Commission or the State, in which case, the Commission may do any or all of the following: (1) accept allocated performance or deliveries from Grantee, provided that Grantee grants preferential treatment to the Commission with respect to products or services subjected to allocation; (2) purchase from other sources (without recourse to and by Grantee for the related costs and expenses) to replace all or part of the products or services that are the subject of the delay, which purchases may be deducted from the Agreement quantity; or (3) terminate the Agreement in whole or in part.

35. TIME IS OF THE ESSENCE.

Time is of the essence regarding the performance obligations set forth in this Agreement. Any additional deadlines for performance for Grantee's obligation to timely provide deliverables under this Agreement including but not limited to timely submittal of reports, are contained in the Scope of Work, Attachment A.

36. ENTIRE AGREEMENT.

This Agreement with all incorporated attachments and exhibits represents the entire Agreement of the Parties. Any alterations, variations, changes, modifications or waivers of provisions of this Agreement shall only be valid when they have been reduced to writing, and duly signed by each of the Parties hereto, unless otherwise provided herein. In the event of conflict, the following order of precedence shall prevail; this Agreement and its attachments, the terms of the solicitation and the Grantee's response to the solicitation.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed through their duly authorized signatories on the day and year last written below.

CITY OF FORT PIERCE

SIGNATURE

Name: _____

Title: _____

Date: _____

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

SIGNATURE

Name: _____

Title: _____

Date: _____

Approved as to Form & Correctness
City Attorney - Peter J. Sweeney
Signed: _____
Date: 4-2-2019

Approved as to form and legality by FWC Attorney:

COMMISSION ATTORNEY SIGNATURE

Attachments in this Agreement include the following:

Attachment	A	Scope of Work
Attachment	B	Requirements of the Federal and Florida Single Audit Acts & Exhibit 1
Attachment	C	Cost Reimbursement Contract Payment Requirements Project
Attachment	D	Progress Report Form
Attachment	E	Certification of Completion Form
Attachment	F	Site Dedication Form
Attachment	G	Invoice Form

SCOPE OF WORK

1. PROJECT DESCRIPTION

A. Purpose and Background: The City of Fort Pierce will use grant funds to provide boaters with an accessible and free public boat ramp with launching and staging areas at the Moore's Creek entrance to the Indian River. This project has two stages. The first stage will include design, engineering and permitting. The City of Fort Pierce will be required to submit to the Commission, all required permits prior to the construction phase.

The second stage will include two construction projects. The first construction project includes the construction of three finger piers built in the lanes of the boat ramp. The second construction project will be to build and install a fixed dock with a safety rail and lighting.

B. Project Benefits: These improvements will decrease the possibility of damage to vessels and equipment and enhance everyone's overall experience, which will increase participation and subsequently strengthen the economic viability of the entire area.

C. Cost Reimbursement: This is a cost reimbursement agreement in accordance with Comptroller Contract Payment Requirements as shown in the Department of Financial Services, Bureau of Accounting and Auditing, Voucher Processing Handbook, Chapter 4., C., I., attached hereto and made a part of hereof as Attachment C.

The total approved estimated cost for the Project Phase I –Design, Engineering and Permitting is $12,250. The total approved estimated cost for the Project Phase II –Construction is $60,250. The Commission agrees to reimburse the Grantee for an amount not to exceed $72,500 or 25.94% of the total cost for Phase I and II, whichever is less, for satisfactory completion of the Project. The Grantee agrees to provide a minimum of $206,990 or 74.06% toward completion of the Project, Phase I and II, and shall be responsible for any additional costs that exceed the total approved estimated project cost.

D. Term of Agreement: The term of the Agreement includes three phases: Phase I - Project Design, Engineering, and Permitting; Phase II - Construction and; Phase III - Project Maintenance. During Phase I and Phase II, the City of Fort Pierce (Grantee) shall complete the tasks and provide the deliverables described in this Scope of Work. **All Phase I activities must be completed by 03/31/2020**. The Grantee cannot move to Phase II without written approval from the Commission. **All Phase II activities must be completed by 9/30/2021**. During Phase III, Project Maintenance, the Grantee shall maintain the project sites as recreational boating access facilities open to the public on a first-come, first-served basis. **Phase III ends 09/30/2041**.

2. PROJECT DELIVERABLES

Total payments for all deliverables will not exceed the maximum grant award amount of $72,500.

A. <u>Deliverable 1</u>: Engineering, Design, and Permitting. The Grantee will use funds to procure contracted services to survey, design, engineer, and permit three new finger piers and a new fixed dock with safety railing, and safety lighting.

Deliverable 1 Tasks include but are not limited to:

- Provide project management, administration, survey and Construction, Engineering, and Inspection (CEI);
- Develop pre-design survey and analysis;

SCOPE OF WORK

- Develop site plan record drawing design and design specifications;
- Obtain Conceptional Drawings of the proposed project and submit to the Commission;
- Prepare and submit to the Commission final engineering scaled drawings, technical specifications and special conditions and;
- Procure all necessary state and local regulatory permits as well as building permits, fire department permits and site plan review.

Compensation: Total payment for this deliverable will be $12,250.

Minimum Performance: Completion of all Tasks listed above, but not limited to those in writing. The Grantee shall provide electronic copies of final construction plans in a format compatible with Adobe Acrobat. Copies of all approved required permits.

Documentation: Documentation includes an attestation of activities or services rendered and proof of payment.

Financial Consequences: Only those tasks completed, or items purchased and received in accordance with the scope of work will be eligible for reimbursement. Failure of the Grantee to perform the tasks and provide the deliverable shall be considered non-compliance with terms and payment will not be processed until all deliverables and performances has been documented, reviewed and approved.

B. **Deliverable 2: Construction of Three Finger Piers:** The Grantee will procure contracted services to construct and install three new ADA accessible finger piers made from marine-grade aluminum.

Deliverable 2 Tasks include but are not limited to:

- Provide all labor, equipment and materials to construct finger piers;
- Mobilization and installation of turbidity barrier to maintain project site;
- Install six (6) floating dock guide piles, 12 inches in diameter;
- Install six (6) coned pile caps, and pile wraps on guide piles;
- Construct and install three (3) concrete gangway abutments;
- Install three (3) 4' by 20'aluminum gangways;
- Install three (3) 6' by 30' floating docks and;
- Install twelve (12) Al-mag "S" cleats.

Compensation: Total payment for this deliverable will be $51,795.

Minimum Performance: Completion of all Tasks listed above, but not limited to those in writing. The Grantee shall provide proof of services rendered; invoices; proof of payment; and photographs of the constructed three finger piers.

Documentation: Documentation includes an attestation of activities or services rendered and proof of payment.

Financial Consequences: Only those tasks completed, or items purchased and received in accordance with the scope of work will be eligible for reimbursement. Failure of the Grantee to perform the tasks and provide the deliverable shall be considered non-compliance with terms and payment will not be processed until all deliverables and performances has been documented, reviewed and approved.

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C. **Deliverable 3: Construction of Fixed Dock:** Utilizing the approved design, engineering plans and permits, the Grantee will procure contracted services to construct and install one new fixed dock, one new heavy aluminum safety railing near the dock and ramp area, and LED lighting in front of the fixed dock area.

Deliverable 3 Tasks include but are not limited to:

- Provide all labor, equipment and materials to complete the construction tasks;
- Construct and install twenty-two (22) dock piles with a 10-inch diameter, pile wraps and coned pile caps;
- Construct 2' by 10' deck framing;
- Install seven hundred and sixty-two (762') square feet of composite Flow Thru decking;
- Install five (5) Al-mag "S" Cleats;
- Install sixty-five (65) linear feet of pedestrian safety handrailing separating the ramp from the dock and;
- Install two (2) overhead LED light poles at the fixed dock.

Compensation: Total payment for this deliverable will be $8,455.

Minimum Performance: Completion of all Tasks listed above, but not limited to those in writing. The Grantee shall provide proof of services rendered; invoices; proof of payment; and photographs of the constructed fixed dock, railing, and lighting.

Documentation: Documentation includes an attestation of activities or services rendered and proof of payment.

Financial Consequences: Only those tasks completed, or items purchased and received in accordance with the scope of work will be eligible for reimbursement. Failure of the Grantee to perform the tasks and provide the deliverable shall be considered non-compliance with terms and payment will not be processed until all deliverables and performances has been documented, reviewed and approved.

3. FINANCIAL CONSEQUENCES

A. **Phase I & II Compliance:** Pursuant to 215.971(1)(c), Florida Statutes, the Commission will withhold payment of Program funds for failure to complete the Project as described herein within the timeframe allowed for Phase I and II, or for failure to correct any Project deficiencies, as noted in the final Project inspection.

B. **Phase III Compliance**: During Phase III of the Project, the Grantee shall repay any Program funds received for Phase I and II for failure to maintain the Project site as a public boating access facility according to the terms and conditions herein for the duration of the Agreement.

4. PERFORMANCE

A. **Permit Requirements**: The Grantee agrees to adhere to all federal, state, county and city permit requirements of the Project.

SCOPE OF WORK

B. Procurement: The Grantee shall procure goods and services through a competitive solicitation process in accordance with Chapter 287, Florida Statutes. The Grantee shall forward one copy of any solicitation to the Commission's Grant Manager for review prior to soliciting for quotations or commencing any work. The Grantee shall forward one copy of the bid tabulation, or similar list of responses to the solicitation, along with the award recommendation to the Commission's Grant Manager, to retain in their own records.

C. Engineering: If applicable, all engineering must be completed by a professional engineer or architect registered in the State of Florida. All work must meet or exceed minimum design standards and guidelines established by all applicable local, state and federal laws.

D. Construction: If applicable, the Contractor shall be certified by the Division of Construction Industry Licensing Board of the Florida Department of Business and Professional Regulation for the duration of this contract and shall provide evidence of such certification upon request.

E. Commencement of Work: The Grantee shall commence work on Phase I of the Project within 90 days of execution of the Agreement. Failure by the Grantee to begin work shall constitute a breach of the Agreement and may result in termination of the Agreement by the Commission.

F. Performance Criteria: The Grantee shall complete the project as described in this Scope of Work and Florida Boating Improvement Program Application 18-004, incorporated herein by reference, according to any bid specifications. Failure to complete the project in a satisfactory manner could result in financial consequences as specified herein.

G. Certificate of Completion: Upon completion of all Project deliverables, the Grantee shall sign and submit to the Commission's grant manager, a Final Progress Report Form, attached hereto and made a part hereof as Attachment D, and a Certification of Completion Form, attached hereto and made a part hereof as Attachment E, which certifies II of the Project was completed in accordance with the provisions herein. Final photographs shall be submitted with the form.

H. Site Dedication: The Grantee agrees to dedicate the Project site as a boat access facility for the use and benefit of the public for the duration of the Agreement. Such dedication must occur before any grant funds are reimbursed. A Site Dedication Form is included as Attachment F as an example for form and content. Land under control other than by ownership by the Grantee (i.e. lease, management agreement, cooperative agreement, inter-local agreement or other similar instrument) shall be managed by the Grantee as a boat access facility for the duration of the Agreement. Title to all improvements shall be retained by the Grantee upon final payment by the Commission.

Should the Grantee convert all or any part of the Project to other than Commission approved uses within the term of the Agreement, the Grantee shall replace the area, facilities, resource or site at its own expense with a project acceptable to the Commission of comparable scope and quality. In the event the Project is converted to use for other purposes during this period and not replaced with a like project acceptable to the Commission, the Grantee agrees to return to the Commission all funds tendered for the original Project.

Site dedication survives any contract termination. If mutually agreed upon by both parties in writing the site dedication may be rescinded. The Commission shall waive the site dedication requirement if no program funds were dispersed.

SCOPE OF WORK

I. **Acknowledgement**: Upon completion of Phase II, the Grantee, at its expense, shall purchase, erect and maintain a permanent sign, not less than three (3) feet by four (4) feet in size, displaying the Commission's logo acknowledging the Commission and the Florida Boating Improvement Program as a funding source for the Project. Any other form of acknowledgement must be approved by the Commission's Grant Manager. Such acknowledgement shall be maintained for the duration of the Agreement. Failure by the Grantee to maintain such acknowledgement shall be considered a breach of the Agreement. The Grantee shall provide a draft copy of the acknowledgement sign for approval by the Commission prior to displaying on site. Language to place on the sign shall include: This Project was funded by the Florida Fish and Wildlife Conservation Commission through the Florida Boating Improvement Program.

J. **Directional Signs:** The Grantee, at its expense, shall purchase, erect and maintain directional signs, approved by the Commission, on main public highways to direct public users to each boating facility funded through the Program regardless of which phase(s) the Program funded. The Grantee agrees to provide and maintain such signs at its expense for the duration of the Agreement. Failure by the Grantee to erect and maintain such signs shall be considered a breach of the Agreement. This requirement can be waived by the Commission's grant manager, in writing, if the Grantee receives a written denial from the Florida Department of Transportation for the installation of the signs.

5. BUDGET

A. **Project Budget**: For satisfactory completion of the tasks and deliverables described in this Scope of Work, by the Grantee under the terms of this Agreement, the Commission shall pay the Grantee on a cost reimbursement basis in an amount not to exceed $72,500. All amounts noted in the budget are estimates based on preliminary quotes or prior project activities from the application amount. Deviations from this budget that exceed ten percent (10%) of the total amount in any budget category/deliverable must be approved by the Commission grant manager in writing prior to the deviation. The Grantee shall be reimbursed only for budgeted expenses incurred during the term of Phase I and II of the Agreement that are directly related to the project. There is no monetary compensation during Phase III.

Deliverable		TOTAL COST	LOCAL SHARE	FBIP SHARE
	Administration &Legal expenses	$21,575	$21,575	$0
1	Regulatory Permits	$9,735	$8,485	$1,250
1	Architectural & Engineering Fees	$11,195	$7,695	$3,500
1	Project Inspection Fees	$30,000	$22,500	$7,500
	Demolition &Removal	$0	$0	$0
	Equipment Purchase (OCO):	$0	$0	$0
	Equipment Rental	$0	$0	$0
	Supplies & Materials	$0	$0	$0
2 & 3	Construction Costs	$206,985	$146,735	$60,250
	TOTAL	**$279,490**	**$206,990**	**$72,500**
	PERCENTAGE	**100%**	**74.06%**	**25.94%**

B. **Cost Share**: The Grantee agrees to provide 74.06% of the cost of the total cost for Phase I and II of the Project as indicated in FBIP Grant Application No. 18-004. The total compensation by the Commission shall be $72,500 or 25.94% of the total cost for Phase I and II, whichever is less.

SCOPE OF WORK

C. **Pre-Award Costs**: No pre-award costs are authorized under the terms of this Agreement.

6. **COMPENSATION AND PAYMENT**

A. **Fee Schedule**: This section is not applicable

B. **Travel Expenses:** No travel expenses are authorized under the terms of this Agreement.

C. **Cost Reimbursement**: This is a cost reimbursement agreement. The total approved estimated cost for the Project Phase I –Design, Engineering and Permitting is $12,250. The total approved estimated cost for the Project Phase II –Construction is $60,250. The Commission agrees to reimburse the Grantee for an amount not to exceed $72,500 or 25.94% of the total cost for Phase I and II, whichever is less, for satisfactory completion of the Project. The Grantee agrees to provide a minimum of $206,990 or 74.06% toward completion of the Project, Phase I and II, and shall be responsible for any additional costs that exceed the total approved estimated project cost.

D. **Invoice Schedule and Payment**: Invoices may be submitted upon the completion of at least one deliverable listed in the scope of work. The Commission shall have up to 30-days to inspect and approve the Project's deliverables once reported complete by the Grantee. If there are deficiencies noted in the Project inspection, these shall be corrected by the Grantee prior to payment by the Commission. The Commission shall restrict any or all payment of funds pending correction of such deficiencies.

The Grantee shall report the Project complete by submitting the Certification of Completion Form, attached hereto and made a part hereof as Attachment E. Final payment shall be contingent upon the Commission's grant manager receiving and accepting the Certification of Completion Form, Final Progress Report and final inspection of Phase I and II of the Project, as described herein.

Once the final inspection and project deliverables are approved, the Grantee may submit a final request for reimbursement within 30-days after receiving written acceptance by the Commission's grant manager.

E. **Forms and Documentation**: After receiving acceptance of deliverable completion from the Commission's grant manager, the Grantee may submit a request for reimbursement that includes an invoice in a format similar to Attachment G, Sample Invoice Form.

Invoice forms and supporting documentation must clearly identify the dates of services, a description of the specific Agreement deliverables provided during the reporting period, an itemized list of expenditures, the quantity provided, the payment amount specified in the Agreement, the Commission's Agreement Number and the Grantee's Federal Employer Identification (FEID) Number.

The Grantee must submit and maintain original supporting documentation for all funds expended and received under this Agreement in sufficient detail for proper pre- and post-audit and to verify work performed was in accordance with the deliverable(s) and not eligible for payment under and other state or federal funding source. Supporting documentation includes, but is not limited to, quotes, procurement documents, purchase orders, original receipts, invoices, cancelled checks or EFT records, bank statements or copies of general ledgers.

SCOPE OF WORK

The Commission's grant manager shall have up to 10 days to review and approve the invoice for payment. Any errors or insufficient supporting documentation included with the invoice will delay payment and the 30 days to review by the Commission may begin again.

7. MONITORING SCHEDULE

A. **Compliance Monitoring and Corrective Actions:** The Commission will monitor the Grantee's service delivery to determine if the Grantee has achieved the required level of performance. If the Commission at its sole discretion determines that the Grantee failed to meet any of the Terms and Conditions of this Agreement, the Grantee will be sent a formal written notice. The Grantee shall correct all identified deficiencies within forty-five (45) days of notice. Failure to meet 100% compliance with all of the Terms and Conditions of this Agreement or failure to correct the deficiencies identified in the notice within the time frame specified may result in delays in payment or termination of this Agreement in accordance with the Termination section.

B. **Site Inspections:** The Commission may inspect the Project site prior to and, if applicable, during the construction of the Project. The Grantee shall notify the Commission's Grant Manager when the Project has reached substantial completion so that inspection may occur in a timeframe allowing for the timely submission and processing of the final invoice. The Commission's Grant Manager, or designee, shall inspect the work accomplished on the Project and, if deemed complete and in compliance with the terms of the Agreement, approve the request for payment.

   The Grantee shall allow unencumbered access to the Project site to the Commission, its employees or agent for the duration of the Agreement for the purpose of site visit or inspection to verify the facility is being maintained, in operation and is open and available to the public. As part of the inspection, the Commission may request maintenance and use information from the Grantee to validate the condition of the facility.

C. **Phase III, Project Site Management:** During Phase III, the Grantee shall provide and be responsible for any and all costs associated with the ordinary and routine operations and maintenance of the project site, including any and all personnel, equipment or service and supplies costs beyond the costs approved for reimbursement in Phase I and II of this Agreement.

D. **Project Progress Reports:** Starting the first quarter after the date the Agreement is executed, the Grantee shall submit to the Commission, on a quarterly basis, Project Progress Reports outlining the progress of the Project. The report should identify any problems that may have arisen, and actions taken to correct such problems. Such reports shall be submitted on the Project Progress Report Form attached hereto and made a part hereof as Attachment D. Progress report are required until the Certification of Completion is submitted. Reports are due to the Commission's Grant Manager according to the following schedule:

Reporting Period	Report due by:
January through March	April 15th
April through June	July 15th
July through September	October 15th
October through December	January 15th

SCOPE OF WORK

E. **Annual Reports:** During Phase III of the Project, the Grantee shall submit to the Commission an annual report on June 30th of each year until the end of Phase III, September 30, 2041. This annual report shall include a description of the condition of any facilities funded with Program funds including any major repairs to the facilities; the amount of revenue collected from any permits or fees for the use of the facilities; and an estimate of the number of users of the facilities.

8. INTELLECTUAL PROPERTY RIGHTS

No additional requirements. Refer to Section 12 of the Agreement.

9. SUBCONTRACTS

No additional requirements. Refer to Section 14 of the Agreement.

10. INSURANCE

No additional requirements. Refer to Section 16 of the Agreement.

11. SECURITY AND CONFIDENTIALITY

No additional requirements. Refer to Section 20 of the Agreement.

12. RECORD KEEPING REQUIREMENTS

Records shall be maintained for ten (10) years following the completion of Phase I of the Project. Completion of Phase I of the Project has occurred when all reporting requirements are satisfied, and final payment has been received by the Grantee. Refer to Section 21 of the Agreement.

13. NON-EXPENDABLE PROPERTY

The Grantee is not authorized to use funds provided herein for the purchase of any non-expendable equipment or personal property valued at $1,000 or more for performance under this Agreement.

14. PURCHASE OR IMPROVEMENT OF REAL PROPERTY

Refer to Section G, Site Dedication, above in Section 2, Performance.

15. SPECIAL PROVISIONS FOR CONSTRUCTION CONTRACTS

A. **Fees:** The Commission reserves the right to review and approve any and all fees proposed for grant project sites, funded in whole or in part by this Program, for the term of the Agreement to ensure that excess collection does not occur and that funds collected are not reallocated or diverted to any non-boating access related purpose.

B. **Drug-Free Workplace Requirement for Construction Contractors:** Pursuant to Section 440.102(15), F.S., any construction contractor regulated under Parts I and II of Chapter 489, F.S., who contracts to perform construction work under a state contract shall implement a drug-free workplace.

SCOPE OF WORK

C. **Contractor Eligibility:** The Contractor shall be certified by the Division of Construction Industry Licensing Board of the Florida Department of Business and Professional Regulation for the duration of this Contract and shall provide evidence of such certification to the Commission upon request.

(Remainder of page left blank intentionally.)

Attachment B
AUDIT REQUIREMENTS

The administration of resources awarded by the Florida Fish and Wildlife Conservation Commission (Commission) to the Grantee may be subject to audits and/or monitoring by the Commission as described in Part II of this attachment regarding State funded activities. If this Agreement includes a Federal award, then Grantee will also be subject to the Federal provisions cited in Part I. If this Agreement includes both State and Federal funds, then all provisions apply.

MONITORING

In addition to reviews of audits conducted in accordance with Sections 200.500-200.521, Uniform Guidance: Cost Principles, Audit, and Administrative Requirements for Federal Awards (2 CFR 200), as revised, hereinafter "OMB Uniform Guidance" and Section 215.97, F.S., as revised (see "AUDITS" below), the Commission may conduct or arrange for monitoring of activities of the Contractor. Such monitoring procedures may include, but not be limited to, on-site visits by the Commission staff or contracted consultants, limited scope audits as defined by Section 200.331, OMB Uniform Guidance and/or other procedures. By entering into this Agreement, the Grantee agrees to comply and cooperate with any monitoring procedures/processes deemed appropriate by the Commission. The Grantee further agrees to comply and cooperate with any inspections, reviews, investigations, or audits deemed necessary by the Florida Department of Financial Services or the Florida Auditor General.

AUDITS

PART I: FEDERALLY FUNDED. If this Agreement includes a Federal award, then the following provisions apply:

A. This part is applicable if the Grantee is a State or local government or a non-profit organization as defined in Sections 200.90, 200.64, or 200.70, respectively, OMB Uniform Guidance.

B. In the event that the Grantee expends **$500,000.00** (**$750,000.00** for fiscal years beginning on or after December 26, 2014) or more in Federal awards in its fiscal year, the Grantee must have a single or program-specific audit conducted in accordance with the provisions of the Federal Single Audit Act of 1996 and Sections 200.500-200.521, OMB Uniform Guidance. EXHIBIT 1 to this Attachment indicates Federal resources awarded through the Commission by this Agreement. In determining the Federal awards expended in its fiscal year, the Grantee shall consider all sources of Federal awards, including Federal resources received from the Commission. The determination of amounts of Federal awards expended should be in accordance with the guidelines established by Sections 200.500-200.521, OMB Uniform Guidance. An audit of the Grantee conducted by the Auditor General in the OMB Uniform Guidance, will meet the requirements of this part.

C. In connection with the audit requirements addressed in Part I, paragraph A. herein, the Grantee shall fulfill the requirements relative to auditee responsibilities as provided in Section 200.508, OMB Uniform Guidance. This includes, but is not limited to, preparation of financial statements, a schedule of expenditure of Federal awards, a summary schedule of prior audit findings, and a corrective action plan.

D. If the Grantee expends less than **$500,000.00** (**$750,000.00** for fiscal years beginning on or after December 26, 2014) in Federal awards in its fiscal year, an audit conducted in accordance with the provisions of Sections 200.500-200.521, OMB Uniform Guidance, is not required. In the event that the Grantee expends less than **$500,000.00** (**$750,000.00** for fiscal years beginning on or after

December 26, 2014) in Federal awards in its fiscal year and elects to have an audit conducted in accordance with the provisions of Sections 200.500-200.521, OMB Uniform Guidance, the cost of the audit must be paid from non-Federal resources (i.e., the cost of such an audit must be paid from Grantee resources obtained from other than Federal entities).

E. Such audits shall cover the entire Grantee's organization for the organization's fiscal year. Compliance findings related to agreements with the Commission shall be based on the agreement requirements, including any rules, regulations, or statutes referenced in the Agreement. The financial statements shall disclose whether or not the matching requirement was met for each applicable agreement. All questioned costs and liabilities due to the Commission shall be fully disclosed in the audit report with reference to the Commission agreement involved. Additionally, the results from the Commission's annual financial monitoring reports must be included in the audit procedures and the Sections 200.500-200.521, OMB Uniform Guidance audit reports.

F. If not otherwise disclosed as required by Section 200.510, OMB Uniform Guidance, the schedule of expenditures of Federal awards shall identify expenditures by contract number for each agreement with the Commission in effect during the audit period.

G. If the Grantee expends less than **$500,000.00** in Federal awards in its fiscal year, an audit conducted in accordance with the provisions of Sections 200.500-200.521, OMB Uniform Guidance, is not required. In the event that the Grantee expends less than **$500,000.00** in Federal awards in its fiscal year and elects to have an audit conducted in accordance with the provisions of Sections 200.500-200.521, OMB Uniform Guidance, the cost of the audit must be paid from non-Federal resources (*i.e.*, the cost of such an audit must be paid from the Grantee's resources obtained from other-than Federal entities).

H. A web site that provides links to several Federal Single Audit Act resources can be found at: http://harvester.census.gov/sac/sainfo.html

PART II: STATE FUNDED. If this Agreement includes State funding, then the following provisions apply:

This part is applicable if the Grantee is a non-state entity as defined by Section 215.97, F.S., (the Florida Single Audit Act).

A. In the event that the Grantee expends a total amount of state financial assistance equal to or in excess of **$750,000.00** (**$500,000.00** in fiscal years prior to July 1, 2016) in any fiscal year of such Grantee, the Grantee must have a State single or project-specific audit for such fiscal year in accordance with Section 215.97, F.S.; applicable rules of the Executive Office of the Governor and the Department of Financial Services; and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General. EXHIBIT 1 to this Attachment indicates state financial assistance awarded through the Commission by this Agreement. In determining the state financial assistance expended in its fiscal year, the Grantee shall consider all sources of state financial assistance, including state financial assistance received from the Commission, other state agencies, and other non-state entities. State financial assistance does not include Federal direct or pass-through awards and resources received by a non-state entity for Federal program matching requirements.

B. In connection with the audit requirements addressed in Part II, paragraph A herein, the Grantee shall ensure that the audit complies with the requirements of Section 215.97(7), F.S. This includes submission of a financial reporting package as defined by Section 215.97(2)(d), F.S., and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General.

C. If the Grantee expends less than **$750,000.00** (**$500,000.00** in fiscal years prior to July 1, 2016) in state financial assistance in its fiscal year, an audit conducted in accordance with the provisions of section 215.97, F.S., is not required. In the event that the Grantee expends less than **$750,000.00** (**$500,000.00** in fiscal years prior to July 1, 2016) in state financial assistance in its fiscal year and elects to have an audit conducted in accordance with the provisions of section 215.97, F.S., the cost of the audit must be paid from the non-state entity's resources (*i.e.*, the cost of such an audit must be paid from the Grantee's resources obtained from other-than State entities).

D. Additional information regarding the Florida Single Audit Act can be found at: https://apps.fldfs.com/fsaa/.

E. Grantee shall provide a copy of any audit conducted pursuant to the above requirements directly to the following address:

Office of Inspector General
Florida Fish and Wildlife Conservation Commission
Bryant Building
620 S. Meridian St.
Tallahassee, FL 32399-1600

PART III: REPORT SUBMISSION

A. Copies of reporting packages, to include any management letter issued by the auditor, for audits conducted in accordance with Sections 200.500-200.521, OMB Uniform Guidance, and required by Part I of this Attachment shall be submitted by or on behalf of the Grantee directly to each of the following at the address indicated:

1. The Commission at the following address:

   Office of Inspector General
   Florida Fish and Wildlife Conservation Commission
   Bryant Building
   620 S. Meridian St.
   Tallahassee, FL 32399-1600

2. The Federal Audit Clearinghouse designated in Section 200.512, OMB Uniform Guidance (the reporting package required by Section 200.512, OMB Uniform Guidance, should be submitted to the Federal Audit Clearinghouse):

   Federal Audit Clearinghouse
   Bureau of the Census
   1201 East 10th Street
   Jeffersonville, IN 47132

3. Other Federal agencies and pass-through entities in accordance with Section 200.512, OMB Uniform Guidance.

B. Copies of audit reports for audits conducted in accordance with Sections 200.500-200.521, OMB Uniform Guidance, and required by Part I of this Attachment (in correspondence accompanying the

audit report, indicate the date that the Grantee received the audit report); copies of the reporting package described in Section 200.512, OMB Uniform Guidance, and any management letters issued by the auditor; copies of reports required by Part II of this Attachment must be sent to the Commission at the addresses listed in paragraph C. below.

C. Copies of financial reporting packages required by Part II of this Attachment, including any management letters issued by the auditor, shall be submitted by or on behalf of the Grantee directly to each of the following:

1. The Commission at the following address:

   Office of Inspector General
   Florida Fish and Wildlife Conservation Commission
   Bryant Building
   620 S. Meridian St.
   Tallahassee, FL 32399-1600

2) The Auditor General's Office at the following address:

   Auditor General's Office
   G74 Claude Pepper Building
   111 West Madison Street
   Tallahassee, FL 32399-1450

D. Any reports, management letter, or other information required to be submitted to the Commission pursuant to this Agreement shall be submitted timely in accordance with OMB Sections 200.500-200.521, OMB Uniform Guidance, Florida Statutes, and Chapters 10.550 (local governmental entities) or 10.650 (nonprofit and for-profit organizations), Rules of the Auditor General, as applicable.

Grantees and sub-Grantees, when submitting financial reporting packages to the Commission for audits done in accordance with Sections 200.500-200.521, OMB Uniform Guidance, or Chapters 10.550 (local governmental entities) or 10.650 (non-profit and for-profit organizations), Rules of the Auditor General, should indicate the date that the reporting package was delivered to the Grantee/sub-Grantee in correspondence accompanying the reporting package.

- End of Attachment –

Exhibit 1
FEDERAL AND STATE FUNDING DETAIL

FEDERAL RESOURCES AWARDED TO THE GRANTEE PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

Federal Program(s) Funds		
CFDA #	**CFDA Title**	**Amount**
	Total Federal Awards	

COMPLIANCE REQUIREMENTS APPLICABLE TO THE FEDERAL RESOURCES AWARDED PURSUANT TO THIS AGREEMENT ARE AS FOLLOWS:

Federal Program(s) Compliance Requirements	
CFDA #	**Compliance Requirements**

STATE RESOURCES AWARDED TO THE GRANTEE PURSUANT TO THIS AGREEMENT CONSIST OF THE FOLLOWING:

MATCHING RESOURCES FOR FEDERAL PROGRAMS:

Matching Funds Provided by CFDA		
CFDA #	**CFDA Title**	**Amount of Matching Funds**
	Total Matching Funds Associated with Federal Programs	

SUBJECT TO SECTION 215.97, FLORIDA STATUTES:

State Project(s)		
CSFA #	**CSFA Title**	**Amount**
77.006	Florida Boating Improvement Program	$72,500
	Total State Awards	$72,500

COMPLIANCE REQUIREMENTS APPLICABLE TO STATE RESOURCES AWARDED PURSUANT TO THIS AGREEMENT ARE AS FOLLOWS:

State Project(s) Compliance Requirements	
CSFA #	**Compliance Requirements**
77.006	Recipient must comply with Florida Boating Improvement Program Guidelines, January 2015

NOTE: Section 200.513, OMB Uniform Guidance (2 CFR 200), as revised, and Section 215.97(5), Florida Statutes, require that the information about Federal Programs and State Projects included in Exhibit 1 be provided to the Grantee.

- End of EXHIBIT 1 -

COST REIMBURSEMENT CONTRACT PAYMENT REQUIREMENTS

Pursuant to the February, 2011 *Reference Guide for State Expenditures* published by the Department of Financial Services, invoices for cost reimbursement contracts must be supported by an itemized listing of expenditures by category (salary, travel, expenses, etc.). In addition, supporting documentation must be provided for each amount for which reimbursement is being claimed indicating that the item has been paid. Check numbers may be provided in lieu of copies of actual checks. Each piece of documentation should clearly reflect the dates of service. Only expenditures for categories in the approved contract budget should be reimbursed.

Listed below are examples of types of supporting documentation:

(1) Salaries: A payroll register or similar documentation should be submitted. The payroll register should show gross salary charges, fringe benefits, other deductions and net pay. If an individual for whom reimbursement is being claimed is paid by the hour, a document reflecting the hours worked times the rate of pay will be acceptable.

(2) Fringe Benefits: Fringe Benefits should be supported by invoices showing the amount paid on behalf of the employee (e.g., insurance premiums paid). If the contract specifically states that fringe benefits will be based on a specified percentage rather than the actual cost of fringe benefits, then the calculation for the fringe benefits amount must be shown.

Exception: Governmental entities are not required to provide check numbers or copies of checks for fringe benefits.

(3) Travel: Reimbursement for travel must be in accordance with Section 112.061, Florida Statutes, which includes submission of the claim on the approved State travel voucher or electronic means.

(4) Other direct costs: Reimbursement will be made based on paid invoices/receipts. If nonexpendable property is purchased using State funds, the contract should include a provision for the transfer of the property to the State when services are terminated. Documentation must be provided to show compliance with Department of Management Services Rule 60A-1.017, Florida Administrative Code, regarding the requirements for contracts which include services and that provide for the contractor to purchase tangible personal property as defined in Section 273.02, Florida Statutes, for subsequent transfer to the State.

(5) In-house charges: Charges which may be of an internal nature (e.g., postage, copies, etc.) may be reimbursed on a usage log which shows the units times the rate being charged. The rates must be reasonable.

(6) Indirect costs: If the contract specifies that indirect costs will be paid based on a specified rate, then the calculation should be shown.

Contracts between state agencies may submit alternative documentation to substantiate the reimbursement request that may be in the form of FLAIR reports or other detailed reports. Additionally, the invoice or submitted documentation must evidence the completion of all tasks required to be performed for the deliverable and must show that the provider met the minimum performance standards established in the agreement.

FLORIDA BOATING IMPROVEMENT PROGRAM
PROJECT PROGRESS REPORT

Mail to FWC at 620 South Meridian Street, Tallahassee, FL 32399-1600 or fax to (850) 488-9284.

FWC Contract #_____ **Reporting Period (Month/Year):** _____
(Due 15 days after the end of each quarter)

Grantee: _____

Project Title: _____

Is this a Final Report: _____**Yes** _____**No**

1. **Describe progress of project, including percent completed for each task in the Scope of Work:**

2. **Is project currently on schedule for completion by Phase I due date?** **YES** ☐ **NO** ☐
   Anticipated Phase I completion date: _____
   (If project is not on schedule, please explain any problems encountered and/or possible delays)

3. **Reporting requirements: (Check all that have been submitted to date)**

   ☐ **Bid package**
   ☐ **Bid tabulation**
   ☐ **Progress photographs**
   ☐ **Final photographs**
   ☐ **Draft acknowledgement**

_____ _____
Project Manager **Date**

_____ _____
Print Name **Phone**

FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

Florida Boating Improvement Program

CERTIFICATION OF COMPLETION STATEMENT

I, _____
(Print Name and Title)

representing _____
(Name of Local Government)

do hereby certify that the Florida Boating Improvement Program project funded by FWC Contract No. _____ has been completed in compliance with all terms and conditions of said Agreement; that all amounts payable for materials, labor and other charges against the project have been paid; and that no liens have been attached against the project.

_____ _____
(Signature) (Date)

WARNING: "Whoever knowingly makes a false statement in writing with the intent to mislead a public servant in the performance of his or her official duty shall be guilty of a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083." § 837.06, Florida Statutes.

CERTIFICATE BY COMMISSION

I certify: That, to the best of my knowledge and belief, the work on the above-named project has been satisfactorily completed under the terms of the Agreement.

Division: _____

By: _____ Date: _____

Name: _____

Title: _____

SITE DEDICATION

This Site Dedication gives notice that the Real Property identified as described in Exhibit A, Legal Description, attached hereto, (the "Property") has been developed with financial assistance provided by the Florida Legislature, through the Fish and Wildlife Conservation Commission, under the grant program called the Florida Boating Improvement Program (FBIP). In accordance with Chapter 68-1.003, F.A.C., and the Program Guidelines of the FBIP, the Property is hereby dedicated to the public as a boating access facility for the use and benefit of the general public for a minimum period of twenty (20) years from the date of this dedication.

DEDICATOR

_____	_____
Original signature	Witness
_____	_____
Printed Name	Printed Name
_____	_____
Title	Witness
_____	_____
Date	Printed Name

STATE OF FLORIDA
COUNTY OF _____

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

Stamp:

_____
Notary Public, State of Florida

INVOICE

Billed to:

Fish and Wildlife Conservation Commission
Florida Boating Improvement Program
620 South Meridian Street
Tallahassee, Florida 32399-1600

Remit payment to:

Grantee: _____
FEID #: _____
Address: _____
_____

Invoice No. _____

Invoice Date: _____
FWC Contract #: _____
Amount of Grant Award: $_____

Billing Period/Dates of Service:

From: _____

To : _____

PROJECT COSTS:

In-kind Services – Non-cash expenses:	**Amount**
In-kind service: Administration	$
In-kind service: Project Management	$
In-kind service: Other	$
Deliverables/Services Provided (Scope of Work) – Cash expenditures:	**Amount**
	$
	$
	$
	$
	$
	$

Total Project Cost: $

Grantee Share (_____%): – $

Amount for Reimbursement: $

I hereby certify that the above costs are true and valid costs incurred in accordance with the project Agreement, and that the matching funds, in-kind or cash, were utilized toward the project in this Agreement.

Signed: _____ Date: _____
Project Manager

City Commission Regular Meeting **11.e.**

Meeting Date: 04/15/2019

Re: Award of Ohio Avenue Roadway Improvements Construction Contract to C.W. Roberts Contracting, Inc. (FKA Lynch Paving) - Bid No. 2018-016 Rebid

Submitted For: John Andrews, City Engineer, Engineering

SUBJECT:

Approve award of the Ohio Avenue Roadway Improvements construction contract to the low bidder, C.W.Roberts Contracting, Inc. (FKA as Lynch Paving and Construction Co., Inc.), in an amount not to exceed $1,015,147.20

SUMMARY:

This roadway reconstruction project was advertised for bids on two seperate ocassions. The first bid opening had one responder with a bid exceeding the City's construction budget. The second bid opening saw two responders both of which provided bids greater than the project's available funding. The construction venture was put on hold while a request for additional funds was reviewed and approved by FDOT and a subsequent amendment to the existing Joint Participation Agreement (JPA) was created and approved by the City and the State.

The proposed construction work includes shifting Ohio Avenue roadway, east of US Highway 1, to the north in order to better align with the western leg of Ohio Avenue. Improvements include the installation of three (3) mast arms, associated signalization equipment, and the complete reconstruction between US Highway 1 and South 3rd Street to provide a boulevard style roadway complete with drainage facilities, curb & gutter, sidewalks, landscape, and irrigation. The bid has been reviewed and approved by FDOT.

RECOMMENDATION:

Staff recommends award of the construction contract to C.W. Roberts Contracting, Inc.

ALTERNATIVES:

Re-bid the project

RESPONSIBLE STAFF:

Engineering

COORDINATED WITH:

FDOT

Fiscal Impact

Budgeted Y/N: N

Fiscal Year: N/A

Account: See Below

Amount: $1,015,147.20

FISCAL IMPACT:

The $1,015,147.20 project will be funded from the following:

1) FDOT Agreement No. 441862-1-58-01 - $250,000
2) Road and Bridges Impact Fee Revenue Account No. 100-1111-519-6310 - $571,253.45
3) Stormwater Impact Fee Revenue Account No. 100-0000-363-2000 - $77,560.00
4) FPUA - $5,900
5) Aldi Sidewalk Contribution - $5,737.50
6) Stormwater Management Utility Revenue Account No. 403-4300-538-3490 - $104,696.25

Attachments

Lynch Bid and Email Confirmation

CWR Bill of Sale

Acquisition Letter

Construction Plans

Form Review

Inbox	Reviewed By	Date
Finance Department	Johnna Morris	04/10/2019 09:34 AM
City Manager	Nick Mimms	04/10/2019 10:30 AM
Form Started By: Tracy Telle		Started On: 03/26/2019 03:52 PM
Final Approval Date: 04/10/2019		

RE: Email 1 - Ohio Avenue Realignment - Bid No. 2018-016 RebidBob Gent to: Tracy Telle 03/15/2019 02:38 PM
Cc: "Gelencia Carter"
From: "Bob Gent" <bgent@cwrcontracting.com>
To: "Tracy Telle" <TTelle@City-FtPierce.Com>
Cc: "Gelencia Carter" <gcarter@city-ftpierce.com>

We would be pleased to work with the city of Fort Pierce on this project.
Thank you, Bob Gent

From: Tracy Telle <TTelle@City-FtPierce.Com>
Sent: Tuesday, March 12, 2019 12:29 PM
To: Bob Gent <bgent@.cwrcontracting.com>
Cc: Gelencia Carter <gcarter@city-ftpierce.com>
Subject: Email 1 - Ohio Avenue Realignment - Bid No. 2018-016 Rebid

Bob,

My original email did not go through as the attachment was too big, so you are going to receive two emails. Please respond to the request noted below.

Tracy S. Telle | Assistant City Engineer | City of Fort Pierce
Engineering Department
Phone: 772.467.3776 Fax: 772.460-6847 100 North U.S. 1 Fort Pierce, FL 34950

Website| Facebook| Survey

THE SUNRISE CITY FORT PIERCE Florida

From: Tracy Telle/cfp
To: bgent@cwrcontracting.com
Cc: Gelencia Carter/cfp@cfp
Date: 03/12/2019 11:34 AM
Subject: Ohio Avenue Realignment - Bid No. 2018-016 Rebid

Bob,

The City of Fort Pierce has secured funding for the above referenced construction project and would like to proceed with this work. Please confirm that you will honor your bid as submitted on June 20, 2018 under Bid No. 2018-016 Rebid, attached for your reference.

Tracy S. Telle | Assistant City Engineer | City of Fort Pierce

Engineering Department
Phone: 772.467.3776 Fax: 772.460-6847 100 North U.S. 1 Fort Pierce, FL 34950

Website| Facebook| Survey

THE SUNRISE CITY
FORT PIERCE
Florida

Please Note: Florida has very broad public records laws. Under Florida law, e-mail addresses are public records. If you do not want your e-mail address released in response to a public-records request, do not send electronic mail to this entity. Your e-mail communications will be subject to public disclosure unless an exemption applies to the communication. If you received this email in error, please immediately notify the sender by reply e-mail and delete the e-mail and any associated materials from all devices.

CITY OF FORT PIERCE BIDDER'S CHECKLIST

This checklist is provided to assist each Bidder in the preparation of their bid response. Included in this checklist are important requirements, which is the responsibility of each Bidder to submit with their response in order to make their response fully compliant. This checklist is only a guideline, it is the responsibility of each Bidder to read and comply with the Invitation to Bid in its entirety.

Check "Yes" or "No" to each of the following:	**YES**	**NO**
Is Invitation to Bid cover page (page 1) completed, signed and attached?	✓	
Is Bid Response Form completed, signed and attached?	✓	
W-9 Form completed, signed and attached?	✓	
All prices have been reviewed for mathematical accuracy, all price corrections initialed, and all price extensions and totals thoroughly checked.	✓	
Include proof of proper licensing as stated in bid documents.	✓	
Include proof of proper insurance as stated in bid documents.	✓	
Bid envelope is marked accordingly.	✓	
Is Drug-Free Work Place form signed and enclosed?	✓	
Are three (3) complete bid packages included (1 original and 2 copies)?	✓	
Is each Bid Addendum (when issued) signed and included?	✓	

PLEASE SIGN AND RETURN WITH BID Robert P. Hart

COPY

DELIVER TO: City of Fort Pierce Purchasing Division, Room 101 100 North U.S. #1 Fort Pierce, FL 34950 **MAIL TO:** City of Fort Pierce Purchasing Division, Room 101 P.O. Box 1480 Fort Pierce, FL 34954-1480	**INVITATION TO BID** **and** **BIDDER ACKNOWLEDGMENT**
Contact: Gelencia Carter, 772-467-3748	Bid No: 2018-016 - REBID
Mandatory Pre-Bid Conference: 10:00AM, FRIDAY, JUNE 8, 2018	Bid Title: OHIO AVENUE ROADWAY IMPROVEMENTS
Mandatory Pre-Bid Conference Location: City of Ft. Pierce , Engineering Conference Room, Room 102A 100 North U.S. #1 Ft. Pierce, Florida 34950	Bid Opening Location: City of Ft. Pierce Purchasing Division, Room 101 100 North U.S. #1 Ft. Pierce, Florida 34950
Bid Due Date & Time: 3:00 PM, WEDNESDAY, JUNE 20, 2018	If you need any reasonable accommodation for any type of disability in order to participate in this procurement, please contact this department as soon as possible.
Bidder Name: Lynch Paving and Construction Co., Inc Mailing Address: P.O. Box 1994 Okeechobee, Florida 34973	*I hereby certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a bid for the same materials, supplies or equipment, and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this bid and certify that I am authorized to sign this bid for the bidder.* x Robert P. Gent Authorized Signature (Manual)
City, State, Zip Code: OKeechobee, Florida 34973	Typed or Printed Name: Robert P. Gent
Type of Entity (Circle One): (Corporation) Partnership Proprietorship	Title: Vice President
Incorporated in the State of: FL Year: 2007	Delivery in _____ days, ARO
Phone Number: 863-763-7373	Payment Terms: Net 30 Days
Fax Number: 863-763-7379	FEIN or SS Number: 20-8610437
E-Mail Address: bgent@lynchpaving.com	Local Business: X Y ___N MWBE: ___Y X N
Bid Security is attached, when required, in the amount of $ 10% of bid amount F.O.B. DESTINATION	If returning as a "No Bid" state reason:
THIS PAGE MUST BE COMPLETED AND RETURNED WITH YOUR BID	

EXHIBIT "D"

BID FORMS

SECTION 001
BID FORM

PROPOSAL TO

THE CITY OF FORT PIERCE

FOR THE CONSTRUCTION OF OHIO AVENUE ROADWAY IMPROVEMENTS
(U.S. HIGHWAY 1 TO SOUTH 3RD STREET)

NAME OF BIDDER: Lynch Paving and Construction Co., Inc

MAILING ADDRESS: P.O. Box 1994 Okeechobee, Florida 34973

STREET ADDRESS: 806 NW 9th St. Okeechobee, Florida ZIP CODE 34972

PHONE NUMBER: 863-763-7373

To the: City of Fort Pierce

Pursuant to and in compliance with your notice inviting sealed proposals (Call for Bids), Instructions to Bidders, and the other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the Contract Documents, local conditions affecting the performance of the contract, and the cost of the Work at the place where the Work is to be done, hereby proposes and agrees to perform within the time stipulated in the Contract, including all of its component parts and everything required to be performed, and to provide and furnish any and all utility and transportation services necessary to perform the contract and complete in a workmanlike manner, all of the Work required in connection with the construction of said Work, all in strict conformity with the plans and/or details, specifications and other related Contract Documents included herein.

The undersigned Bidder acknowledges receipt of the following Addenda, which have been considered in preparation of this Bid:

No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____

The undersigned Bidder agrees that the Work shall be completed within 180 calendar days according to the schedule and the Notice to Proceed set forth in these Documents.

The undersigned Bidder further agrees to pay liquidated damages as described herein and engineering and field inspection expenses, due to overtime work and avoidable delays, which shall be in addition to such other amounts for actual delay damages.
Bidder has stated all prices in numerals in accordance with Section 11.2 of the Instruction to Bidders in the blank space(s) provided for that purpose. Bidder has completed all portions of the

EXHIBIT "D"

BID FORMS

Bid to avoid disqualification.

The undersigned, as Bidder, declares that the Bid is made in good faith; that this proposal is made without collusion with any person, firm, or corporation; and he proposes and agrees, if the proposal is accepted, that he will execute a contract with the City in the form set forth in the Contract Documents; that he will furnish the Contract Security Insurance Certificates; that he is aware that failure to properly comply with the requirements set out in the INSTRUCTIONS TO BIDDERS and elsewhere in the Contract Documents may result in a finding that the Bidder is non-responsive and a forfeiture of the Bid Security.

The undersigned Bidder agrees to furnish the required bonds and insurance and to enter into a contract within 10 days after receipt of Notice of Award and further agrees to complete the Work within the time period specified in the Notice to Proceed for each individual project.

The undersigned declares that he has had prior experiences in the type of Work required and has the necessary finances, personnel, working organization, and equipment available to execute the proposed Work.

Bids shall only be considered from those Bidders who have obtained these Contract Documents directly from the City either electronically or from Demand Star.

LIST OF MAJOR SUBCONTRACTORS

1. If awarded a contract as a result of this Bid, the major subcontractors used in the prosecution of the Work will be those listed below, and

2. The following list includes all subcontractors who will perform Work, and

3. The Bidder represents that the subcontractors listed below are financially responsible and are qualified to do the Work required, and

4. 60% of Work must be done by the General Contractor's entity.

If no major subcontractors are to be used, so state on this form.

Work to be Done	Name of Subcontractor	Address
Drainage	Johnson Davis	604 Hillbrath Drive Lantana, FL 33462
Signalization	Carr Construction	2968 Hwy 710 okeechobee, FL 34974
Landscape	Nature's Keeper	3795 Sneed Road Fort Pierce, FL 34945

Notice to Proceed shall be issued by the City with the specified Work to be completed as described in Section 8 of the General Conditions, within the number of days stated when each Project Contract Time begins to run as specified in the Notice to Proceed.

Work shall be completed, ready for final payment in accordance with Section 8 and 9 of the General Conditions.

Time is of the essence of this Contract and Contractor recognizes that the City will suffer financial loss if the Work, or portions authorized, is not completed within the number of days stated above. Accordingly, Contractor agrees to pay City the liquidated damages stated in the Agreement for each day after the time specified above that the Work is not complete in accordance with Sections 8 and 9 of the General Conditions and with the Agreement.

These liquidated damages are cumulative and additive and represent a reasonable estimate of City's expenses for extended delays. Furthermore, Contractor agrees to pay City expenses for inspection, engineering services, and administrative costs associated with such delay.

In addition to these amounts, there may be additional other amounts for delay damages incurred by City as a result of delays by Contractor. These actual delay damages will include, but not be limited to, delay damage settlements or awards, penalties, and professional fees incurred in connection with such settlements, awards, or penalties and fines imposed by regulatory agencies, contract damages, and loss of use.

ACCOMPANYING THIS PROPOSAL IS bidder's bond
(Insert the word(s) "cashier's check," "bidder's bond," "certified check," or other security as provided by law, as the case may be), in an amount equal to at least 10% of the total amount of the bid, payable to the CITY OF FORT PIERCE the undersigned deposits above-named security as a proposal guarantee and agrees that it shall be forfeited to the City as liquidated damages in case this proposal is accepted by the City and the undersigned fails to execute a contract with the City as specified in the Contract Documents, accompanied by the required payment and faithful performance bonds, with sureties satisfactory to the City, and accompanied by the required certificates of insurance coverage and endorsements. Should the City be required to engage the services of an attorney in connection with the enforcement of this bid, bidder promises to pay City reasonable attorneys' fees and costs (including attorneys' fees and costs on appeals), incurred with or without suit.

EXHIBIT "D"

BID FORMS

The Work shall be performed under a State of Florida Contractor's License. Contract shall not be awarded unless proof of valid license(s) is provided, and license shall be appropriate for the nature of the Work.

The Bidder certifies that the following documents are included in the Bid and are complete:

1. Bid form, list of Addenda received, and authorized signatures.
2. Bid Bond with Power of Attorney attached.
3. Affidavit of Non-Collusion.
4. Trench Safety Act Form.

The Bidder further certifies that he will submit within ten (10) days of notification of the Apparent Successful Bidder:

1. List of Major Subcontractors
2. Payment Bond
3. Performance Bond
4. Agreement
5. Certificates of Insurance

EXHIBIT "D"

BID FORMS

SECTION 002
BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, Lynch Paving & Construction Company, Inc. _____, as Principal, and _____ Travelers Casualty and Surety Company of America _____, as Surety, are held and firmly bound unto the City of Fort Pierce, hereinafter called the CITY, in the penal sum of Ten Percent of Bid Amount _____ Dollars ($10% of Bid Amount), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents. The Bid Bond amount shall be ten (10) percent of the Base Bid amount as entered on the Bid Form.

The condition of this obligation is such that whereas the principal has submitted the accompanying bid dated 6/20/2018, for the Bid No. 2018-016-REBID, Ohio Avenue Roadways Improvements _____

NOW, THEREFORE, if the Principal shall not withdraw said bid within the period of time set forth in the Contract Documents, and shall within ten (10) calendar days after receipt of the Notice of Award enter into a written contract with the City in accordance with the bid as accepted, and if the Principal shall give the required bonds with good and sufficient sureties for the faithful performance and proper fulfillment of such contract and for the protection of subcontractors, laborers and material men, and if the Principal has provided the required evidence of insurance as set forth in the Contract Documents and complied with the Florida Department of Transportation (FDOT) certifications and requirements, and all other contract provisions, or in the event of withdrawal of said bid within the periods specified, or the failure to enter into said contract, or failure to comply with FDOT requirements, or otherwise, if the Principal shall within sixty (60) days after request by the City to pay to the City the difference between the amount specified in said bid and the amount for which the City may procure the required work, if the latter amount be in excess of the former, then the above obligation shall be void and of no effect, otherwise to remain in full force and effect.

It is further agreed that if the City is required to utilize legal counsel to recover on this bond, it may also recover its costs relating thereto, including a reasonable amount for attorneys' fees and costs, including attorneys' fees and costs in appellate proceedings.

EXHIBIT "D"

BID FORMS

IN WITNESS WHEREOF, the above parties have executed this instrument under their several seals this 20th day of June, 2018, the name and corporate seal of each corporate party being hereto affixed, and these presents duly signed by its undersigned representative pursuant to authority of its governing body.

WITNESSES
(if individual
or partnership)

_____

_____

PRINCIPAL

Lynch Paving & Construction Company, Inc.

By: Robert P. Gent
(Signature)

Name: Robert P. Gent

Title: Vice President

ATTEST (if corporation)

By: Jackie Palmer
(Signature)

Name: Jackie Palmer

Title: Office Manager

(Corporate Seal)

SURETY

Travelers Casualty and Surety Company of America

By: George G. Powers
(Signature)

Name: George G. Powers

Title: Attorney-in-Fact

(Surety Seal)

EXHIBIT "D"

BID FORMS

Attach a certified copy of Power of Attorney appointing individual Attorney-in-Fact for execution of Bid Bond on behalf of Surety.

Any Claims under this bond may be addressed to:

Name of Surety Travelers Casualty and Surety Company of America

Mailing Address 350 Granite Street, Braintree, MA 02184

Street Address 350 Granite Street, Braintree, MA 02184

Name and Mailing and Street 350 Granite Street, Braintree, MA 02184

Address of Agent or The Driscoll Agency

Representative in Florida Dennis W. Driscoll

(if different than above) 93 Longwater Circle

Norwell MA 02061

Telephone Number of Surety 781-817-8441

and Agent or Representative 781-681-6656

in Florida 781-681-6656

END OF SECTION

TRAVELERS

Travelers Casualty and Surety Company of America
Travelers Casualty and Surety Company
St. Paul Fire and Marine Insurance Company

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS: That Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company are corporations duly organized under the laws of the State of Connecticut (herein collectively called the "Companies"), and that the Companies do hereby make, constitute and appoint **George G Powers** of **Norwell**, **Massachusetts**, their true and lawful Attorney-in-Fact to sign, execute, seal and acknowledge any and all bonds, recognizances, conditional undertakings and other writings obligatory in the nature thereof on behalf of the Companies in their business of guaranteeing the fidelity of persons, guaranteeing the performance of contracts and executing or guaranteeing bonds and undertakings required or permitted in any actions or proceedings allowed by law.

IN WITNESS WHEREOF, the Companies have caused this instrument to be signed, and their corporate seals to be hereto affixed, this **3rd** day of **February, 2017.**

State of Connecticut

City of Hartford ss.

By: _____
Robert L. Raney, Senior Vice President

On this the **3rd** day of **February, 2017**, before me personally appeared **Robert L. Raney**, who acknowledged himself to be the Senior Vice President of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, and that he, as such, being authorized so to do, executed the foregoing instrument for the purposes therein contained by signing on behalf of the corporations by himself as a duly authorized officer.

In Witness Whereof, I hereunto set my hand and official seal.

My Commission expires the **30th** day of **June, 2021**

Marie C. Tetreault
Marie C. Tetreault, Notary Public

This Power of Attorney is granted under and by the authority of the following resolutions adopted by the Boards of Directors of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, which resolutions are now in full force and effect, reading as follows:

RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President, any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary may appoint Attorneys-in-Fact and Agents to act for and on behalf of the Company and may give such appointee such authority as his or her certificate of authority may prescribe to sign with the Company's name and seal with the Company's seal bonds, recognizances, contracts of indemnity, and other writings obligatory in the nature of a bond, recognizance, or conditional undertaking, and any of said officers or the Board of Directors at any time may remove any such appointee and revoke the power given him or her; and it is

FURTHER RESOLVED, that the Chairman, the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President may delegate all or any part of the foregoing authority to one or more officers or employees of this Company, provided that each such delegation is in writing and a copy thereof is filed in the office of the Secretary; and it is

FURTHER RESOLVED, that any bond, recognizance, contract of indemnity, or writing obligatory in the nature of a bond, recognizance, or conditional undertaking shall be valid and binding upon the Company when (a) signed by the President, any Vice Chairman, any Executive Vice President, any Senior Vice President or any Vice President, any Second Vice President, the Treasurer, any Assistant Treasurer, the Corporate Secretary or any Assistant Secretary and duly attested and sealed with the Company's seal by a Secretary or Assistant Secretary; or (b) duly executed (under seal, if required) by one or more Attorneys-in-Fact and Agents pursuant to the power prescribed in his or her certificate or their certificates of authority or by one or more Company officers pursuant to a written delegation of authority; and it is

FURTHER RESOLVED, that the signature of each of the following officers: President, any Executive Vice President, any Senior Vice President, any Vice President, any Assistant Vice President, any Secretary, any Assistant Secretary, and the seal of the Company may be affixed by facsimile to any Power of Attorney or to any certificate relating thereto appointing Resident Vice Presidents, Resident Assistant Secretaries or Attorneys-in-Fact for purposes only of executing and attesting bonds and undertakings and other writings obligatory in the nature thereof, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be valid and binding upon the Company and any such power so executed and certified by such facsimile signature and facsimile seal shall be valid and binding on the Company in the future with respect to any bond or understanding to which it is attached.

I, **Kevin E. Hughes**, the undersigned, Assistant Secretary of Travelers Casualty and Surety Company of America, Travelers Casualty and Surety Company, and St. Paul Fire and Marine Insurance Company, do hereby certify that the above and foregoing is a true and correct copy of the Power of Attorney executed by said Companies, which remains in full force and effect.

Dated this 20th day of June 2018.

Kevin E. Hughes, Assistant Secretary

To verify the authenticity of this Power of Attorney, please call us at 1-800-421-3880.
Please refer to the above-named Attorney-in-Fact and the details of the bond to which the power is attached.

EXHIBIT "D"

BID FORMS

SECTION 010

BIDDER'S QUALIFICATIONS QUESTIONNAIRE

All questions must be answered and the data given must be clear and comprehensive. This statement must be notarized. If necessary, questions may be answered on separate attached sheets. The Bidder may submit any additional information he desires. Qualifications Questionnaire must be submitted with the Proposal.

1. Name of Bidder. Lynch Paving and Construction Co., Inc
2. Permanent Main Office address. P.O. Box 1994 / 806 NW 9th St. Okeechobee, FL 34973
3. When organized? March 2007
4. If a corporation, where incorporated? Florida
5. How many years have you been engaged in construction under this present firm or trade name? 11 yrs 3 mos
6. Contracts on hand: (Schedule of these, showing gross amount of each contract and the appropriate anticipated dates of completion.) See attached current contract list
7. General character of work performed by you. Heavy Highway Road Construction
8. Have you ever failed to complete any work awarded to you? If so, where and why? No
9. Have you ever defaulted on a contract? If so, where and why?
   No
10. List the more important contracts recently completed by you, stating approximate gross costs of each and the month and year completed. Include the name and telephone number of contact in company for which you provided work. See attached Project History List
11. List your major equipment available for this contract. See Attached Equipment List
12. Experience in general construction work similar in scope to this project. (If additional space is needed or required, it may be attached to this sheet.) More than 30 years of Heavy Highway Construcion experience
13. Background and experience of the principal members of your company, including the officers. See attached personnel resume's
14. Give bank reference. Bank of America, Stephen Bernardo, 508-676-7584
15. You will furnish a detailed financial statement and, upon request, any other information that may be required by the City of Fort Pierce.
16. The Undersigned hereby authorizes and requests any person, firm, or corporation to furnish any information requested by the City of Fort Pierce in the County of St. Lucie

EXHIBIT "D"

BID FORMS

in verification of the recitals comprising this Bidder's Qualifications Questionnaire.

Dated at Okeechobee, FL this 20th day of June, 2018.

Contractor:

Lynch Paving and Construction Co., Inc

By Robert P. Gent

Robert P. Gent, Vice President
(Name & Title)

County of Okeechobee
State of Florida

Robert P. Gent, being duly sworn, deposes and says that he is Vice President of Lynch Paving and Construction Co., Inc, and that the answers to the foregoing questions and all statements contained therein are true and correct.

Subscribed and sworn to before me this 20th day of June, 2018.

Jacqueline J. Palmer
Notary Public

My Commission Expires:

September 11, 2018 (Seal)

JACQUELINE J PALMER
MY COMMISSION #FF159428
EXPIRES September 11, 2018
(407) 398-0153 FloridaNotaryService.com

END OF SECTION

EXHIBIT "D"

BID FORMS

SECTION 011

NON-COLLUSION AFFIDAVIT
FOR PRIME BIDDER

STATE OF Florida

COUNTY OF Okeechobee

Robert P. Gent, being first duly sworn, deposes and says:

That he/she is Vice President of Lynch Paving & Construction Co., Inc.
(a partner or officer of the firm of, etc.)

the party making the foregoing proposal or bid, that such proposal or bid is genuine and not collusive or sham; that said bidder has not colluded, conspired, connived or agreed directly or indirectly with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly sought by agreement or collusion, or communication or conference with any person, to fix the bid price of affiant or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against the City of Fort Pierce, of the County of St. Lucie, or any person interested in the proposed contract; and that all statements in said proposal or bid are true.

Lynch Paving and Construction Co., Inc
(Firm Name)

By: Robert P. Gent Robert P. Gent

Title: Vice President

Subscribed and sworn to before me this 20th
day of June, 2018

Jacqueline J. Palmer
Notary Public

My Commission expires: (Seal)
September 11, 2018

JACQUELINE J PALMER
MY COMMISSION #FF159428
EXPIRES September 11, 2018
(407) 398-0153 FloridaNotaryService.com

END OF SECTION

EXHIBIT "D"

BID FORMS

SECTION 012

PUBLIC ENTITY CRIMES AFFIDAVIT

SWORN STATEMENT UNDER SECTION 287.133(3)(a),
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This sworn statement is submitted with Bid No. 2018-016 – REBID for
.

2. This sworn statement is submitted by Lynch Paving and Construction Co., Inc
(name of entity submitting sworn statement)
whose business address is P.O. Box 1994 Okeechobee, Florida 34973
and (if applicable) its Federal Employer Identification Number (FEIN) is 20-8610437
(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____.)

3. My name is Robert P. Gent my relationship to the entity
(please print name of individual signing)
named above is Vice President.

4. I understand that a "public entity crime" as defined in Paragraph 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

5. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

6. I understand that an "affiliate" as defined in paragraph 287.133(1)(a), Florida Statutes, means:
   1. A predecessor or successor of a person convicted of a public entity crime: or
   2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders,

employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima tacie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.

7. I understand that a "person" as defined in Paragraph 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement.
(Please indicate which statement applies.)

X___ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, nor any affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989, AND **(Please indicate which additional statement applies.)**

_____ There has been a proceeding concerning the conviction before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. **(Please attach a copy of the final order.)**

_____ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. **(Please attach a copy of the final order.)**

_____ The person or affiliate has not been placed on the convicted vendor list. **(Please describe any action taken by or pending with the Department of General Services.)**

EXHIBIT "D"

BID FORMS

Signature: Robert P. Gent

Date: June 20, 2018

STATE OF Florida

COUNTY OF Okeechobee

PERSONALLY APPEARED BEFORE ME, the undersigned authority,

Robert P. Gent who, after first being sworn by me, affixed his/her signature in (name of individual signing) the space provided above on this 20th day of June, 2018.

Jacqueline J. Palmer

NOTARY PUBLIC SEAL:

NOTARY PUBLIC STATE OF FLORIDA
JACQUELINE J PALMER
MY COMMISSION #FF159428
EXPIRES September 11, 2018
(407) 398-0153 FloridaNotaryService.com

My commission expires: September 11, 2018

END OF SECTION

EXHIBIT "D"

BID FORMS

SECTION 013

CERTIFICATION OF NON-SEGREGATED FACILITIES

The Bidder certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control where segregated facilities are maintained. The Bidder certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments, and that he will not permit his employees to perform their services at any location under his control where segregated facilities are maintained. The Bidder agrees that a breach of this certification will be a violation of the Equal Opportunity clause in any contract resulting from acceptance of this Bid. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants, and other eating areas, time clocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or otherwise. The Bidder agrees that (except where he has obtained identical certification from proposed subcontractors for specific time periods) he will obtain identical certifications from proposed subcontractors, exempt from the provisions of the Equal Opportunity clause, and that he will retain such certification in his files.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

DATE: June 20 , 2018

Official Address
(Including Zip Code):

P.O. Box 1994

Okeechobee, Florida 34973

By: Robert P. Gent

Vice President
(Title)

END OF SECTION

EXHIBIT "D"

BID FORMS

SECTION 014

TRENCH SAFETY ACT COMPLIANCE STATEMENT
BID NO. 2018-016 – REBID

Instructions:

Chapter 90-96 of the Laws of Florida requires all contractors engaged by the City of Fort Pierce to comply with Occupational Safety and Health Administration Standard 29 C.F.R. s. 1926.650 Subpart P. All prospective contractors are required to sign the compliance statement and provide compliance cost information where indicated below. The costs for complying with the Trench Safety Act must be incorporated into this project's base bid.

Certify this form in the presence of a notary public or other officer authorized to administer oaths.

Certification:

1. I understand that Chapter 90-96 of the Laws of Florida (The Trench Safety Act) requires me to comply with OSHA Standard 29 C.F.R. s. 1926.650 Subpart P. I will comply with The Trench Safety Act and I will design and provide trench safety systems at all trench excavations in excess of five feet in depth for this project.

2. The estimated cost imposed by compliance with The Trench Safety Act will be:

   Three Thousand Five Dollars and Zero Cents Dollars
   (Written)

   $3,005.00
   (Figures)

3. The amount listed above has been included within the Base Bid.

Certified: Lynch Paving and Construction Co., Inc
(Company-Contractor)
By: Robert P. Gent
Vice President's Signature)
Robert P. Gent
Vice President's Typed or Printed Name)

Notarization:

Sworn to and subscribed before me in Okeechobee County, Florida on the 20th day of June, 2018.

Notary Public: Jacqueline J. Palmer (affix seal) My Commission Expires: September 11, 2018

END OF SECTION

JACQUELINE J PALMER
MY COMMISSION #FF159428
EXPIRES September 11, 2018
(407) 398-0153 FloridaNotaryService.com

SECTION 015

DRUG-FREE WORK PLACE FORM

The undersigned vendor in accordance with Florida Statute 287.087 hereby certifies that Lynch Paving and Construction Co., Inc does:
(Name of Business)

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.

2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation, and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.

3. Give each employee engaged in providing the commodities or contractual services that are proposed a copy of the statement specified in subsection (1).

4. In the statement specified in subsection (1), notify the employees that, as a condition of working on the commodities or contractual services that are under bid, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893 or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.

5. Impose a sanction on, or require the satisfactory participation in a drug abuse assistance or rehabilitation program if such is available in the employee's community, by any employee who is so convicted.

6. Make a good faith effort to continue to maintain a drug-free workplace thorough implementation of this section.

As the person authorized to sign the statement, I certify that this firm complies fully with the above requirements.

Robert P. Scott
Proposer's Signature

June 20, 2018
Date

END OF SECTION

EXHIBIT "D"
SECTION 016 ~ BID FORM

Ohio Avenue Roadway Reconstruction – U.S. 1 to S. 3rd Street

ROADWAY AND DRAINAGE					
Item No.	**Description**	**Units**	**Quantity**	**Unit Price**	**Amount**
101-1	MOBILIZATION	LS	1	$194,875.00	$194,875.00
101-2A	MATERIAL TESTING	LS	1	$14,300.00	$14,300.00
102-1	MAINTENANCE OF TRAFFIC	LS	1	$46,695.00	$46,695.00
104-2	PREVENTION, CONTROL & ABATEMENT OF EROSION AND WATER POLLUTION	LS	1	$3,500.00	$3,500.00
108-1	CONSTRUCTION LAYOUT/RECORD DRAWINGS	LS	1	$14,025.00	$14,025.00
110-1-1	CLEARING & GRUBBING	LS	1	$21,582.00	$21,582.00
120-2	REGULAR EXCAVATION	CY	1,010	$19.40	$19,594.00
120-7	EMBANKMENT	CY	94	$50.00	$4,700.00
160-4	STABILIZATION, TYPE "B"	SY	2,165	$13.50	$29,227.50
285-706	CEMENTED COQUINA LBR 100 (8")	SY	2,005	$14.25	$28,571.25
334-1-13A	SUPERPAVE ASPHALTIC CONCRETE (SP 9.5) (TRAFFIC C) (1")	TN	111	$137.30	$15,240.30
334-1-13B	SUPERPAVE ASPHALTIC CONCRETE (SP 12.5) (TRAFFIC C) (1.5")	TN	166	$137.30	$22,791.80
425-1-201	INLETS (CURB TYPE 9) (<10')	EA	4	$4,850.00	$19,400.00
425-2-62	MANHOLE (P-8) (STORM)	EA	2	$6,400.00	$12,800.00
425-5	DRAINAGE STRUCTURE - MODIFY EXISTING	EA	1	$1,850.00	$1,850.00
425-5-1	MANHOLE ADJUST (UTILITIES)	EA	2	$550.00	$1,100.00
425-6	VALVE BOX (ADJUST)	EA	6	$300.00	$1,800.00
430-171-125	CONCRETE PIPE CULVERT (18" RCP)	LF	237	$100.00	$23,700.00
430-174-124	CONCRETE PIPE CULVERT (24" RCP)	LF	237	$110.00	$26,070.00
430-175-224	CONCRETE PIPE CULVERT (19" X30" ERCP)	LF	71	$150.00	$10,650.00
430-175-218	CONCRETE PIPE CULVERT (14'X23" ERCP)	LF	57	$120.00	$6,840.00

EXHIBIT "D"
SECTION 016 ~ BID FORM

ROADWAY AND DRAINAGE (CONT)					
Item No.	**Description**	**Units**	**Quantity**	**Unit Price**	**Amount**
520-1-01	CONCRETE CURB & GUTTER (TYPE F)	LF	730	$20.80	$15,184.00
520-2-1	CONCRETE CURB & GUTTER (TYPE A)	LF	81	$24.80	$2,008.80
520-2-4	CONCRETE CURB & GUTTER (TYPE D)	LF	484	$15.50	$7,502.00
522-1	CONCRETE SIDEWALK, 4" THICK, FIBER	SY	437	$48.90	$21,369.30
522-2	CONCRETE SIDEWALK, 6" THICK, FIBER	SY	200	$68.75	$13.750.00
523-1	PATTERNED STAMPED CONCRETE, 8" THICK	SY	53	$79.00	$4,187.00
527-2	DETECTABLE WARNING (CONCRETE BRICK PAVERS – BRICK RED COLOR)	SF	47	$30.00	$1,410.00
570-1-2	PERFORMANCE TURF (SOD) (BAHIA)	SY	112	$23.50	$2,632.00
1644-800	FIRE HYDRANT RELOCATE	EA	1	$3,000.00	$3,000.00

MONUMENT SIGNAGE, SIGNING, AND MARKING					
Item No.	**Description**	**Units**	**Quantity**	**Unit Price**	**Amount**
700-0-AA	MONUMENT SIGN	LS	1	$8,000.00	$8,000.00
700-20-11	SINGLE POST STOP/STREET SIGN (FURNISH & INSTALL) (LESS THAN 12 SF)	EA	7	$690.00	$4,830.00
700-1-50	SINGLE POST SIGN (RELOCATE)	EA	1	$150.00	$150.00
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	73	$4.25	$310.25
710-11-290	PAVEMENT MARKING (ISLAND NOSE) (YELLOW)	SF	89	$2.75	$244.75
711-11-121	THERMOPLASTIC (STD) (WHITE) (SOLID) (6")	LF	830	$1.00	$830.00
711-11-123	THERMOPLASTIC (STD) (WHITE) (SOLID) (12")	LF	75	$2.00	$150.00
711-11-125	THERMOPLASTIC (STD) (WHITE) (SOLID) (24")	LF	682	$15.75	$10,741.50
711-11-170	THERMOPLASTIC MARKING (ARROW)	EA	5	$100.00	$500.00

EXHIBIT "D"
SECTION 016 ~ BID FORM

MONUMENT SIGNAGE, SIGNING, AND MARKING					
Item No.	**Description**	**Units**	**Quantity**	**Unit Price**	**Amount**
711-11-221	THERMOPLASTIC (STD) (YELLOW) (SOLID) (6")	LF	762	$1.00	$762.00
711-11-224	THERMOPLASTIC (STD) (YELLOW) (SOLID) (18")	LF	21	$3.10	$65.10
711-16-131	THERMOPLASTIC (STD)(WHITE)(SKIP, 10'-30')(6")	LF	160	$1.00	$160.00
711-16-231A	THERMOPLASTIC (STD)(YELLOW)(SKIP, 6'-10')(6")	LF	348	$1.00	$348.00
711-16-231B	THERMOPLASTIC (STD)(YELLOW)(SKIP, 2'-4')(6")	LF	65	$1.00	$65.00
SIGNALIZATION					
Item No.	**Description**	**Units**	**Quantity**	**Unit Price**	**Amount**
630-2-11	CONDUIT (SIGNAL) (F& I) (OPEN TRENCH)	LF	198	$11.00	$2,178.00
630-2-12	CONDUIT (SIGNAL) (F& I) (DIRECTIONAL BORE)	LF	1,185	$27.50	$32,587.50
632-7-1	CABLE (SIGNAL) (F & I)	PI	1	$7,370.00	$7,370.00
632-7-6	CABLE (SIGNAL) (REMOVE) (INTERSECTION)	PI	1	$1,760.00	$1,760.00
633-1-121	FIBER OPTIC CABLE (F & I) (UG) (12 FIBERS)	LF	270	$4.15	$1,120.50
633-2-31	FIBER OPTIC CONNECTION (INSTALL) (SPLICE)	EA	12	$50.00	$600.00
633-2-32	FIBER OPTIC CONNECTION (INSTALL) (TERMIN.)	EA	12	$66.00	$792.00
635-2-11	PULL BOX (F & I) (TRAFFIC SIGNAL)	EA	21	$600.00	$12,600.00
635-2-12	PULL BOX (F & I) (FIBER OPTIC) (24"X36")	EA	1	$1,380.00	$1,380.00
639-1-112	ELECTRICAL POWER SERVICE (SIGNALS) (ABOVE GROUND) (METER PURCHASED BY GC)	AS	1	$1,830.00	$1,830.00
639-1-610	ELECTRICAL POWER SERVICE (REMOVE) (OVERHEAD)	AS	1	$330.00	$330.00

EXHIBIT "D"
SECTION 016 ~ BID FORM

SIGNALIZATION (CONTINUES)					
Item No.	**Description**	**Units**	**Quantity**	**Unit Price**	**Amount**
639-2-1	ELECTRICAL SERVICE WIRE (F &I)	LS	1	$1,060.00	$1,060.00
639-3-11	ELECTRICAL SERVICE DISCONNECT (F & I) (POLE MOUNTED)	EA	1	$1,190.00	$1,190.00
641-2-12	PRESTRESSED CONCRETE POLE (F & I) (TYPE P-II SERVICE POLE)	EA	1	$950.00	$950.00
641-2-80	PRESTRESSED CONCRETE POLE (POLE REMOVAL)	EA	4	$5,280.00	$21,120.00
646-1-11	ALUMINUM SIGNALS POLE (PEDESTAL)	EA	5	$1,500.00	$7,500.00
646-1-60	ALUMINUM SIGNALS POLE (REMOVE)	EA	1	$330.00	$330.00
649-21-1	STEEL MAST ARM ASSEMBLY (F & I) (SINGLE)(30')	EA	1	$32,600.00	$32,600.00
649-21-9	STEEL MAST ARM ASSEMBLY (F & I) (DOUBLE) (50')	EA	1	$59,840.00	$59,840.00
649-21-10	STEEL MAST ARM ASSEMBLY (F & I) (SINGLE ARM) (60')	EA	1	$47,200.00	$47,200.00
650-1-24	TRAFFIC SIGNAL (F & I) (POLYCARBONATE W/ ALUM TOP) (3-SECTION) (1-WAY)	AS	4	$1,065.00	$4,260.00
650-1-29	TRAFFIC SIGNAL (F & I) (POLYCARBONATE W/ ALUM TOP) (5-SECTION) (1-WAY) (CLUSTER)	EA	4	$1,700.00	$6,800.00
653-1-11	PEDESTRIAN SIGNAL (F & I) (LED COUNTDOWN) (1-WAY)	AS	8	$750.00	$6,000.00
660-4-11	VEHICLE DETECTION SYSTEM (F & I) (VIDEO) (CABINET EQUIPMENT)	EA	1	$4,325.00	$4,325.00
660-4-12	VEHICLE DETECTION SYSTEM (F & I) (VIDEO) (ABOVE GROUND EQUIPMENT)	EA	4	$7,040.00	$28,160.00
663-1-111	SIGNAL PRIORITY AND PREEMPTION (F & I) (OPTICAL) (CABINET ELECTRONICS)	EA	1	$2,310.00	$2,310.00
663-1-112	SIGNAL PRIORITY AND PREEMPTION (F & I) (OPTICAL) (DETECTOR)	EA	4	$1,320.00	$5,280.00
665-1-11	PEDESTRIAN DETECTOR (F & I (STANDARD)	EA	8	$155.00	$1,240.00

EXHIBIT "D"
SECTION 016 ~ BID FORM

SIGNALIZATION (CONTINUES)					
Item No.	**Description**	**Units**	**Quantity**	**Unit Price**	**Amount**
670-5-111	TRAFFIC CONTROLLER ASSEMBLY (F & I) (NEMA) (ONE PREEMPTION PLAN)	AS	1	$26,350.00	$26,350.00
670-5-600	TRAFFIC CONTROLLER ASSEMBLY (REMOVE CONTROLLER W/ CABINET)	AS	1	$1,320.00	$1,320.00
684-1-1	MANAGED FIELD ETHERNET SWITCH (F & I)	EA	1	$1,900.00	$1,900.00
685-1-11	UNINTERRUPTIBLE POWER SUPPLY (F & I) (LINE INTERACTIVE)	EA	1	$6,765.00	$6,765.00
700-5-21	INTERNALLY ILLUMINATED SIGN (F & I) (OVERHEAD MOUNT, 12 – 18 SF)	EA	2	$2,145.00	$4,290.00
700-5-22	INTERNALLY ILLUMINATED SIGN (F & I) (OVERHEAD MOUNT, 12 – 18 SF)	EA	2	$2,620.00	$5,240.00
715-1-11	LIGHTING CONDUCTORS (F & I) (INSULATED, NO. 10 OR <)	LF	1,149	$1.10	$1,263.90
715-5-11	LUMINAIRE & BRACKET ARM (F & I) (ALUMINUM)	EA	3	$1,320.00	$3,960.00
LANDSCAPE AND IRRIGATION					
Item No.	**Description**	**Units**	**Quantity**	**Unit Price**	**Amount**
570-1-2	PERFORMANCE TURF SOD (FLORATAM ST. AUGUSTINE)	SY	1,700	$5.00	$8,500.00
580-1-A	MULCH (FLORIMULCH)	CY	22	$130.00	$2,860.00
580-4-392	LIVISTONA CHINENSIS/CHINESE FAN PALM 8' CT	EA	3	$860.00	$2,580.00
580-4-393	LIVISTONA CHINENSIS/CHINESE FAN PALM 10' CT	EA	3	$960.00	$2,880.00
580-5-993	LAGERSTROEMIA X'MUSKOGEE'/LAVENDER CRAPE MYRTLE	EA	14	$1,000.00	$14,000.00
580-7-103	MUHLENBERGIA CAPILLARIS/PINK MUHLY	EA	64	$10.00	$640.00
580-7-253	FICUS MICROCARPA 'GREEN ISLAND'/GREEN ISLAND FICUS	EA	109	$11.00	$1,199.00
580-7-303	LOROPETALUM CHINESE 'PURPLE PIXIE'/PURPLE PIXIE LOROPETALUM	EA	37	$15.25	$564.25

EXHIBIT "D"
SECTION 016 ~ BID FORM

LANDSCAPE AND IRRIGATION (CONTINUES)					
Item No.	**Description**	**Units**	**Quantity**	**Unit Price**	**Amount**
580-7-983	RHAPHIOLEPIS INDICA 'ALBA'/WHITE INDIAN HAWTHORN	EA	27	$11.00	$297.00
580-7-993	TULBAGHIA VIOLACEA/SOCIETY GARLIC	EA	414	$15.25	$6,313.50
590-1	IRRIGATION SYSTEM (COMPLETE)	LS	1	$14,000.00	$14,000.00
TOTAL FINAL BID $ 1,015,147.20					

EXHIBIT "D"

BID FORM

SECTION 017

FORT PIERCE, FLORIDA

PROJECT TITLE: OHIO AVENUE ROADWAY IMPROVEMENTS (U.S. 1 TO S. 3RD STREET)

BID NO. 2018-016 - REBID

SUBSTITUTION SHEET

DESCRIPTION OR BID ITEM NO.	MAKE SPECIFIED	PROPOSED SUBSTITUTION	ADD	DEDUCT
None			$_____	$_____
			$_____	$_____
			$_____	$_____
			$_____	$_____
			$_____	$_____
			$_____	$_____

SECTION 018

FORT PIERCE, FLORIDA
SEALED BID NO. 2018-016 - REBID

PROJECT TITLE: OHIO AVENUE ROADWAY IMPROVEMENTS (U.S. 1 TO S. 3RD STREET)

CONTRACTOR VERIFICATION FORM

THE FOLLOWING IS TO COMPLETED BY PRIME BIDDER:

Name of Firm: Lynch Paving and Construction Co., Inc

Corporate Title: Lynch Paving and Construction Co., Inc

Address: P.O. Box 1994 Okeechobee, Florida 34973

(Zip Code)

By: Robert P. Gent (Print name) Vice President (Print title)

Robert P. Gent
(Authorized Signature)

Telephone: (863) 763-7373

Fax: (863) 763-7379

State Contractor License # CGC1507091 **(ATTACH COPY)**

County Contractor License # 25086 **(ATTACH COPY)**

Florida Department of Transportation Certification # See attached **(ATTACH COPY)**

City License: **(ATTACH PROOF OF REGISTRATION WITH THE CITY)**

Type of License: Certified General Contractor #

Unlimited Yes (yes/no)

If "NO", Limited to what trade? _____

END OF SECTION

EXHIBIT "D"

BID FORMS

SECTION 019

FORT PIERCE/ST. LUCIE COUNTY, FLORIDA

SEALED BID NO. 2018-016 - REBID

PROJECT TITLE: OHIO AVENUE ROADWAY IMPROVEMENTS (U.S. 1 TO S. 3RD STREET)

LIST OF REFERENCES

OWNER'S NAME/ ADDRESS	PROJECT	CONTACT PERSON	TELEPHONE NUMBER
See attached project history for references			

END OF SECTION

EXHIBIT "D"

BID FORM

SECTION 020

FORT PIERCE, FLORIDA
SEALED BID NO. 2018-016 -REBID

PROJECT TITLE: OHIO AVENUE ROADWAY IMPROVEMENTS (U.S. 1 TO S. 3RD STREET)

E-VERIFY

Bid No.: 2018-016

Project Description: Ohio Avenue Roadway Improvements (U.S. 1 to S. 3rd Street)

Vendor/Consultant acknowledges and agrees to the following:

1. Vendor/Consultant shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Vendor/Consultant during the term of the contract; and
2. shall expressly require any subcontractors performing work or providing services pursuant to this contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term.

Company/Firm: Lynch Paving and Construction Co., Inc

Authorized Signature: Robert P. Lynch

Title: Vice President

Date: June 20, 2018

END OF SECTION

Form **W-9**
(Rev. December 2014)
Department of the Treasury
Internal Revenue Service

Request for Taxpayer Identification Number and Certification

Give Form to the requester. Do not send to the IRS.

Print or type
See Specific Instructions on page 2.

1 Name (as shown on your income tax return). Name is required on this line; do not leave this line blank.
Lynch Paving & Construction Co., Inc.

2 Business name/disregarded entity name, if different from above

3 Check appropriate box for federal tax classification; check only **one** of the following seven boxes:
☐ Individual/sole proprietor or single-member LLC ☑ C Corporation ☐ S Corporation ☐ Partnership ☐ Trust/estate
☐ Limited liability company. Enter the tax classification (C=C corporation, S=S corporation, P=partnership) ▶
Note. For a single-member LLC that is disregarded, do not check LLC; check the appropriate box in the line above for the tax classification of the single-member owner.
☐ Other (see instructions) ▶

4 Exemptions (codes apply only to certain entities, not individuals; see instructions on page 3):
Exempt payee code (if any)
Exemption from FATCA reporting code (if any)
(Applies to accounts maintained outside the U.S.)

5 Address (number, street, and apt. or suite no.)
P.O. Box 1994

Requester's name and address (optional)
City of Fort Pierce
100 North U.S. #1
Fort Pierce, Florida 34950

6 City, state, and ZIP code
Okeechobee, Florida 34974

7 List account number(s) here (optional)

Part I Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid backup withholding. For individuals, this is generally your social security number (SSN). However, for a resident alien, sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities, it is your employer identification number (EIN). If you do not have a number, see *How to get a TIN* on page 3.

Note. If the account is in more than one name, see the instructions for line 1 and the chart on page 4 for guidelines on whose number to enter.

Social security number
			–			–				

or

Employer identification number
2	0	–	8	6	1	0	4	3	7

Part II Certification

Under penalties of perjury, I certify that:

1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
3. I am a U.S. citizen or other U.S. person (defined below); and
4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions on page 3.

Sign Here Signature of U.S. person ▶ Jackie Palmer Date ▶ 6/20/18

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. Information about developments affecting Form W-9 (such as legislation enacted after we release it) is at *www.irs.gov/fw9*.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following:

- Form 1099-INT (interest earned or paid)
- Form 1099-DIV (dividends, including those from stocks or mutual funds)
- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See *What is backup withholding?* on page 2.

By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
2. Certify that you are not subject to backup withholding, or
3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and
4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting?* on page 2 for further information.

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 6/20/2018

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
The Driscoll Agency
93 Longwater Circle
Norwell MA 02061

CONTACT NAME: Ted Matthews
PHONE (A/C, No, Ext): 781-421-2464 **FAX (A/C, No):** 781-421-2465
E-MAIL ADDRESS: tmatthews@driscollagency.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Old Republic General Ins Corp.	24139
INSURER B : Travelers Indemnity Co of CT	25682
INSURER C : Starr Indemnity & Liability Co.	38318
INSURER D : Illinois Union Ins. Co.	
INSURER E :	
INSURER F :	

INSURED 3130
Lynch Paving & Construction Co Inc
Okeechobee Asphalt & Ready Mixed Concrete Inc
Lawrence-Lynch Corp
503 NW 9th Street
Okeechobee FL 34973

COVERAGES **CERTIFICATE NUMBER:** 1081945855 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY [ ] CLAIMS-MADE [X] OCCUR X X,C,U Incl X Blkt Contractual GEN'L AGGREGATE LIMIT APPLIES PER: [ ] POLICY [X] PRO-JECT [X] LOC [ ] OTHER:	Y	Y	A2CG99941807	4/1/2018	4/1/2019	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG $	$1,000,000 $100,000 $10,000 $1,000,000 $2,000,000 $2,000,000
A	AUTOMOBILE LIABILITY X ANY AUTO [ ] OWNED AUTOS ONLY [ ] SCHEDULED AUTOS X HIRED AUTOS ONLY [X] NON-OWNED AUTOS ONLY	Y	Y	A2CA99951807 (FL)	4/1/2018	4/1/2019	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Comp & Coll Deductib	$1,000,000 $ $ $ $1,000
C	[ ] UMBRELLA LIAB [X] OCCUR X EXCESS LIAB [ ] CLAIMS-MADE [ ] DED [X] RETENTION $0	Y	Y	1000585026181	4/1/2018	4/1/2019	EACH OCCURRENCE AGGREGATE $	$10,000,000 $10,000,000
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) Y/N [N] If yes, describe under DESCRIPTION OF OPERATIONS below	N/A	Y	A2CW99941807	4/1/2018	4/1/2019	X PER STATUTE X OTH-ER E.L. EACH ACCIDENT E.L. DISEASE - EA EMPLOYEE E.L. DISEASE - POLICY LIMIT	USL&H $1,000,000 $1,000,000 $1,000,000
B D	Contractors Equipment Pollution Liab			QT660739X9338-TCT-18 OO G71112901 001	4/1/2018 4/1/2018	4/1/2019 4/1/2019	Max per item $500,000 per occ. and aggregat	$500,000 $3,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Bid No. 2018-016-REBID
Ohio Avenue Roadway Improvements

CERTIFICATE HOLDER

City of Fort Pierce
Attn: Purchasing Department
100 North US Highway 1
Fort Pierce FL 34950

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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FDOT

Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

MIKE DEW
SECRETARY

August 1, 2017

LYNCH PAVING & CONSTRUCTION CO
503 NW 9TH ST
OKEECHOBEE FL 34973-1994

RE: CERTIFICATE OF QUALIFICATION

Dear Sir/Madam:

The Department of Transportation has qualified your company for the type of work indicated below. Unless your company is notified otherwise, this Certificate of Qualification will expire 9/30/2018. However, the new application is due 7/31/2018.

In accordance with S.337.14 (1) F.S. your next application must be filed within (4) months of the ending date of the applicant's audited annual financial statements.

If your company's maximum capacity has been revised, you can access it by logging into the Contractor Prequalification Application System via the following link: HTTPS://fdotwp1.dot.state.fl.us/ContractorPreQualification/

Once logged in, select "View" for the most recently approved application, and then click the "Manage" and "Application Summary" tabs.

FDOT APPROVED WORK CLASSES:
DRAINAGE, FLEXIBLE PAVING, GRADING, HOT PLANT-MIXED BITUM. COURSES, SIDEWALK

You may apply for a Revised Certificate of Qualification at any time prior to the expiration date of this certificate according to Section 14-22.0041(3), Florida Administrative Code (F.A.C.), by accessing your most recently approved application as shown above and choosing "Update" instead of "View." If certification in additional classes of work is desired, documentation is needed to show that your company has done such work with your own forces and equipment or that experience was gained with another contractor and that you have the necessary equipment for each additional class of work requested.

All prequalified contractors are required by Section 14-22.006(3), F.A.C., to certify their work underway monthly in order to adjust maximum bidding capacity to available bidding capacity. You can find the link to this report at the website shown above.

Sincerely,

Alan Autry, Manager
Contracts Administration Office

AA:cj

STATE OF FLORIDA
DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION
CONSTRUCTION INDUSTRY LICENSING BOARD

LICENSE NUMBER	
CGC1507091	

The GENERAL CONTRACTOR
Named below IS CERTIFIED
Under the provisions of Chapter 489 FS.
Expiration date: AUG 31, 2018

FISK, ASA FRANCIS III
LYNCH PAVING & CONSTRUCTION CO INC
4640 SW 42ND TERRACE
FORT LAUDERDALE FL 33314

ISSUED: 06/26/2016

DISPLAY AS REQUIRED BY LAW

SEQ # L1606260001136

City of Fort Pierce, Florida
100 N. US Highway 1
Fort Pierce, FL 34950
(772) 467-3065

Amount Paid: $0.00 Issued: October 05, 2017

Comp Card Expires:	September 30, 2018
State License Expires:	CGC1507091 08/31/18
Worker's Comp Expires:	A2CW99941706 04/01/18
Liability Ins. Expires:	A2CG99941706 04/01/18

City of Fort Pierce, Florida
Certificate of Competency

GENERAL CONTRACTOR (CERTIFIED)

Control #0044402 License # 18-00026572

LYNCH PAVING & CONST. CO., INC
FISK, ASA F
P.O. BOX 1994
OKEECHOBEE FL 34973

St. Lucie County

County Certification Number: 25086

Planning & Development Services
Building & Code Regulation Division
2300 Virginia Ave
Ft Pierce, FL 34982
Phone: (772) 462-1672 Fax: (772) 462-1148
http://www.stlucieco.org/planning/contract_licen.htm

Gent, Robert P
Lynch Paving & Construction Co Inc
P.O Box 1994
Okeechobee, FL 34973

Class Code: PAVING

License Type: COUNTY CERTIFICATION

This Competency Card, issued by the St. Lucie County Contractor Certification Division, authorizes work for the Class Code stated, for the unincorporated areas of St. Lucie County. It does not authorize work for the City of Ft. Pierce, St. Lucie Village or the City of Port St. Lucie. It is the Contractor's responsibility to **maintain** this card in a current status by providing a Certificate of Insurance, current address and telephone information, and renewing this card annually as required.

Expiration Date: 9/30/2018

Danielle Williams

Wallet Contractor ID Card

Cut to fit, then fold in half

IDENTIFICATION CARD

St. Lucie County

County Certification Number 25086
Class Code: PAVING

This is to certify that GENT, ROBERT P, LYNCH PAVING & CONSTRUCTION CO INC has been issued a County Certificate in St. Lucie County, beginning on 4/4/2008 and ending on 9/30/2018, unless license is revoked.

Danielle Williams
Authorized Licensing Official

Contractor Licensing:	(772) 462-1672
Contractor Fax LIne:	(772) 462-1148
Automated Inspection Line:	(866) 284-1280
Inspection Line:	(772) 462-2172

Lynch Paving & Construction Equipment List

Year	Description	Truck Number	Driver	Date Purchased	Vin / Serial #	Tag Number	Tag Renewal
1982	Ingersoll-Rand Trailer	CP-82		3/30/2007	125879U81957	H675XA	6/30/2017
1989	Aero Tack Sprayer	TS-89		7/10/2007	1264	I674MI	6/30/2017
1989	Champion Motor Grader	GR-89			200589	EQUIPMENT	
1991	International Dump Truck	TA-91	Ashpalt Plant	2/25/2013	1HTSAZRN1MH352989		
1995	Dodge MOT Pickup	P95-1	Shop Truck	7/27/2007	1B6MF36W5SS281415	I6787MI	12/31/2016
1996	King Construction Trailer	TRL-96	20 ton trailer	4/1/2011	1TKC02821TM104095	J100RD	6/30/2017
1997	Roadtec SB2500	MTV-97					
1998	Advanced Mixer	M-98	Chris Jernigan		1M9MAC6M6WS184316	N8376L	12/31/2016
1999	International Water Truck	WT-91		8/31/2016	1HTSDAAN0TH316892	N0473Y	12/31/2016
2000	Chrysler Town & Country Van	P00-2		8/20/2012	1C4GP54L5YB602257	I638WG	6/30/2017
2000	Rosco Maximizer Tack Truck	TT-00		8/31/2016	1FV6HFAA7YHF21413	N0474Y	12/31/2016
2004	Broce Broom RJ350	BB-1			405835	EQUIPMENT	
2004	Advanced Mixer	M-04	Jason Maupin	11/21/2007	5DG8AC4T340010094	N8373L	12/31/2016
2004	Milling Head for CAT 272	CP-04		7/25/2008	405835	EQUIPMENT	
2005	Gradall XL4300II	GA-05		10/1/2013	0210017449	EQUIPMENT	
2005	Ford F-150	P05	Ryan Bittmann				
2005	Ford F-350 XL Diesel-Mechanic Truck	P05-1		7/18/2009	1FDWF36PX5EB18349	183MIF	12/31/2016
2005	Leeboy 420 Pneumatic Roller (Rubber Tire)	RTR-1			420-44824	EQUIPMENT	
2006	Volvo Dump Truck	TA-06	Sam Orsini	10/4/2007	4V5KC9GH56N417514	N8377L	12/31/2016
2006	Volvo Dump Truck - Trailer	TK-40RB	Jeff Barkley		1TKC02821TM104095	J100RD	6/30/2017
2006	Ford F450 Diesel Truck - Crew	P06-1		2/18/2015	1FDXW46P26ED06214	017RJW	12/31/2016
2006	CAT Vibratory Roller CB224E	VR-06		4/3/2007	22401754	EQUIPMENT	
2006	Advanced Mixer	M-06	LaCedric Stovall	4/3/2013	5DG8AU4T960011663	N6765T	12/31/2016
2006	Volvo Loader - L90E	L90E		9/28/2007	67737	EQUIPMENT	
2006	Leeboy Power Box 8500 Low Deck Paver	PB-06			48245	EQUIPMENT	
2007	Chevrolet Silverado 3500	P07-01		4/18/2007	1GBJK34U97E131300	H674XA	12/31/2016
2007	Advanced Mixer	M-07	Teddy Mays	7/31/2014	5DG8AU4T470012057	N4687V	12/31/2016
2007	40' Boomlift	BL-07		12/23/2014	0300116985		
2008	Ford F-150	P08-1	Jeff Barkley				
2008	Leeboy Tack Trailer	TS-08		4/1/2011	1B9AA142581309561	L456XG	6/30/2017
2008	Chevrolet Colorado Pickup	P08-2	Jason Burliss	4/24/2012	1GCCS19E488164019	629PNJ	6/30/2017
2008	Broce Broom BR8300A	BB-08		8/16/2016	408300	EQUIPMENT	
2010	Rolling Straight Edge with Trailer	TRL-10-2		2/12/2010	NOVIN0200922913	AKTZ76	6/30/2017
2010	Chevrolet Silverado 1500	P10-1		2/28/2014	3GCRCSEA3AG158633	924PUZ	12/31/2016
2010	CTRA Core Trailer	TRL-10	Core Trailer		4YMUL0613AG122091	DVAR44	6/30/2017
2010	Wielder W-430 Road Widener	RW-10		10/18/2013		EQUIPMENT	
2010	Ford F150 Truck	P10-2	Shawn Lindquist	7/6/2016	1FTFW1CV0AFC75663	EKPH09	12/31/2016
2011	Kaufman Equipment Tilt Trailer	TRL-11		5/18/2011	5VGFD2228BL001814	ATFE15	6/30/2017
2011	CAT Motor Grader	GR-11		7/12/2017	B9C01003	EQUIPMENT	
2011	CAT 272C Skid Steer	SS-11			RED02322	EQUIPMENT	
2012	Ford F150 Pickup	P12-1	Pete Ramsdell	8/6/2012	1FTEX1CM3CFB12363	292PFF	6/30/2017
2012	Ford F550 Service Truck	P12-2		11/20/2015	1FDUF5GT2CEB23301	183MIF	12/31/2016
2012	Snapper Mower	SM-12		2012	2014516498	EQUIPMENT	
2012	Hamm Roller 14VV (54")	VR-12-1		7/17/2013	H2010896	EQUIPMENT	
2012	Hamm Roller 90/10	VR-12-2				EQUIPMENT	
2013	Triple Crown Trailer	TRL-13		4/15/2013	1XNC18107D1041188	BLAT67	6/30/2017
2013	Sakai Dirt Roller - SV505D	VR-13		8/26/2015	VSV16-50738	EQUIPMENT	
2013	Case Backhoe	BH-13		10/15/2013	NDC591252	EQUIPMENT	
2013	Rex Mixer	RM-1		9/24/2013	HK1475	EQUIPMENT	
2013	Advanced Mixer	M-13	Jeff Pummell	4/18/2016	5DG8AD4T0D0012696	N7687W	12/31/2016
2013	Brose Broom RJ350	BB-13					
2014	Kaufman Equipment Trailer	TRL-14		5/18/2011	5VGFD2224EL001846	3819PH	6/30/2017
2014	Ford F450 Flatbed	P14-1		6/18/2014	1FD0W4GTXEEB09884	CXIJ79	12/31/2016
2014	Ford F150 Pickup	P14-2	Ryan Bittmann	11/21/2014	1FTEX1CM4EFC13317	BBXT78	12/31/2016
2014	Bomag BW11RH Compactor	TR-14		4/1/2014	901A22231091	EQUIPMENT	
2014	Cat Cold Planer - 299D track skid steer	SS-14		8/19/2015	0GTC00766	EQUIPMENT	
2014	Milling Head for CAT 299	CP-14		8/19/2017	424-7130	EQUIPMENT	
2014	LeeBoy 8510C HD Paver	PB_14		8/15/2014	107136	EQUIPMENT	
2014	Kenworth Water Truck	WT-14		11/8/2016	2NKHHM7X9EM396511	N9731Y	12/22/2016
2015	Volvo Wheel Loader - L110H			7/22/2015	L110H10411	EQUIPMENT	
2015	Sakai Vibratory Roller - SW770ND	VR15-1		10/7/2015	4SW48-10130	EQUIPMENT	
2015	Sakai SW850 Compactor	VR-15-2		5/31/2016	4SW56-50202	EQUIPMENT	
2015	Light Tower	LT1		11/25/2015	1109476	EQUIPMENT	
2015	Light Tower	LT2		11/25/2015	1109474	EQUIPMENT	
2015	Lark United Trailer	TRL-15		10/29/2015	SRTBE1625GD049429	EQUIPMENT	
2016	Ford F150	P16-2	Bob Gent	5/17/2016	1FTEW1CG3GFA51258		
2016	Ford F350	P16-1		10/14/2015	1FD8X3H66GEB06924	EKPC72	12/31/2016
2016	Peterbuilt Dump Truck	TA-16	Arnold Zonfrilli	2/23/2016	1NPCX7EX7GD369070	N4813X	12/31/2016
2016	RoadTec Paver	PM-16		3/17/2016	RP190E	EQUIPMENT	
2017	Kaufman Trailer 25 ton equipment trailer	TRL-17		6/26/2017	5VGAP3039HL005883	IFBP17	7/3/2017
2017	Ford F350	P17-1	Peter Gent	6/22/2017	1FT8W3BT9HED56178	437TSR	6/23/2017
2017	Phoenix Mixer	M-17	Tom Steele	8/1/2016	1Z9M8GK47HV162477	N0467Y	12/31/2016
	CAT 272C Bucket				EQ15063	EQUIPMENT	
	CAT 272C Planer				CI2108	EQUIPMENT	
	Hyster Double Drum Roller					EQUIPMENT	

LYNCH PAVING & CONSTRUCTION COMPANY-CURRENT

JOB #	PRIME OR SUB	CLASS OF WORK	NAME LOCATION DESCRIPTION OF PROJECT	NTO ORDERED	DATE OF CONTRACT	CONTRACT AMOUNT	LAST DAY ON JOB	Final Price W/chg Orders	# OF CHG ORDERS	OWNER'S NAME AND ADDRESS	OWNER CONTACT INFORMATION	GENERAL CONTRACTOR'S NAME & ADDRESS	CONTACT INFORMATION	PROJECT MANAGER
16-61	Prime	Hot Mix	Ranger Construction Various Road Maintenance		12/12/2016	$12,000.00				Ranger Construction 1200 Elboc Way Winter Garden, FL 34787	Stacy Barber 407-656-9255	Ranger Construction 1200 Elboc Way Winter Garden, FL 34787	Pete Ramsdell 863-763-7373	Pete
17-003	Sub	Hot Mix	FDOT SR 66 Contract No. T1672 Fin Project # 436600-1-52-01 Highlands County, FL		2/22/2017	$5,457,714.22				State of Florida DOT 605 Suwannee Street Tallahassee, FL 32399	Joe Michael 863-471-4863	Lawrence-Lynch Corp PO Box 913 Falmouth, MA 02541	Kevin Trost 863-763-7373	Kevin
17-55	Prime	Improvements	Okeechobee BOCC 34th Avenue Improvements							Okeechobee County BOCC 304 NW 2nd Street Room 109 Okeechobee, FL 34972	863-763-6441	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-01	Prime	Hot Mix	City of PSL (2 Year/2 Year Option) Various Road Maintenance - Ongoing(16-44) #20150080		6/1/2015	$314,250.00				City of Port St. Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Gina Jolly 772-344-4055	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-06	Prime	Paving	Martin County CR714 Widening & Lane Shift		2/7/2018	$418,359.55				Martin Co Board of County Comm 2401 SE Monterey Road Stuart, FL 34996	1-772-288-5481	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin
18-07	Prime	Hot Mix	Okeechobee County BOCC Varios Locations-Ongoing (14-36) (16-35)		Ongoing 14-36					Okeechobee County BOCC 304 NW 2nd Street Room 109 Okeechobee, FL 34972	Lee Everet 763-3514	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-16	Prime	Paving	GHD Construction Service Inc. The Towns of Okeechobee NW 22nd Lane		3/30/2018	$60,556.00				GHD Construction Services Inc. 215 49th Street South St. Petersburg, FL 33707	Brian Smith 1-727-323-5119	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-20	Prime	Pavers	City of Ft. Pierce Crosswalk Replacements		4/16/2018	$57,120.00				City of Ft. Pierce 100 North U.S. 1 Ft. Pierce, FL 34950	Tracy Telle 1-772-467-3776 1-772-460-6847	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-23	Prime	Paving	City of Port St. Lucie Tulip Boulevard Sidewalk Construction Project, LAP Funded			$506,525.35				City of Port St. Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Edith Majewski 1-772-344-4291	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin
18-25	Prime	Paving	Seminole Tribe of Florida Big Cypress Gas Station aka Frankie's LLC		6/4/2018	$23,777.00				Seminole Tribe of Florida 650 Harney Pond Road Okeechobee, FL 34974	Ronald Rudner 1-863-824-6050 1-863-447-7210	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-26	Prime	Improvemens	City of Pahokee Commissioner's Park		6/4/2018	$501,980.00				City of Pahokee 207 Begonia Drive Pahokee, FL 33476	Jongelene Adams 1-561-924-5534 1-561-924-8140	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin

LYNCH PAVING & CONSTRUCTION COMPANY-PROJECT HISTORY

JOB #	PRIME OR SUB	CLASS OF WORK	NAME LOCATION DESCRIPTION OF PROJECT	NTO ORDERED	DATE OF CONTRACT	CONTRACT AMOUNT	LAST DAY ON JOB	Final Price W/chg Orders	# OF CHG ORDERS	OWNER'S NAME AND ADDRESS	OWNER CONTACT INFORMATION	GENERAL CONTRACTOR'S NAME & ADDRESS	CONTACT INFORMATION	PROJECT MANAGER
18-01	Prime	Hot Mix	City of PSL (2 Year/2 Year Option) Various Road Maintenance #20150080		6/1/2015	$314,250.00				City of Port St. Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Gina Jolly 772-344-4055	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-02	Prime	Paving	Blue Cypress Golf & RV Resort		1/8/2018	$5,525.00	2/8/2018	$3,460.00	1	Blue Cypress Golf & RV Resort 13801 Hwy 441 SE Lot 288 Okeechobee, FL 34974	Nadine Leap 863-467-5774	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
18-03	Prime	Paving	Southern Underground Inc Kestor Drive Port St Lucie		2/9/2018	$4,358.00	2/21/2018	$6,358.00	1	Southern Underground Inc. 2598 SW Aberdeen Street Port St Lucie, FL 34953	Mr. Kevin Bush 1-772-418-0803	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
18-04	Prime	Paving	Southern Underground Inc 2840 SE Eagle Drive Pt St Lucie		1/22/2018	$4,486.00	1/26/2018	$147.46	1	Southern Underground Inc. 2598 SW Aberdeen Street Port St Lucie, FL 34953	Mr. Kevin Bush 1-772-418-0803	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
18-05	Prime	Paving	A Shaping Inc. The Storage Buildings at SW 24th Avenue Phase II		2/1/2018	$29,988.00	3/9/2018	$30,918.00	1	A Shaping Inc. 11828 NE 112th Street Okeechobee, FL 34972	Mr. Gary Anderson 634-4944	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-06	Prime	Paving	Martin County CR714 Widening & Lane Shift		2/7/2018	$418,359.55				Martin Co Board of County Comm 2401 SE Monterey Road Stuart, FL 34996	1-772-288-5481	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin
18-07	Prime	Hot Mix	Okeechobee County BOCC Varios Locations-Ongoing (14-36)		Ongoing 14-36					Okeechobee County BOCC	Lee Everet 763-3514	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-08	Prime	Paving	Okeechobee County BOCC County Cemetery		2/15/2018	$18,362.00	3/9/2018	$18,362.00	0	Okeechobee County BOCC 707 NW 6th Street Okeechobee, FL 34972	Russell Rowland 863-697-0121	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-09	Prime	Paving	Natures Keeper Sneed Road, Ft. Pierce FL		2/7/2018	$10,065.00	5/2/2018	$10,065.00	0	Natures Keeper 3795 Sneed Road Ft. Pierce, FL 34945	Stewart Faketa	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-10	Prime	Paving	City of Clewiston 2018 Overlay Paving Project		2/15/2018	$114,143.55	4/4/2018	$104,892.75	0	City of Clewiston 115 West Ventura Avenue Clewiston, FL 33440	Al Perry 1-863-983-1484 1-863-983-4055-F	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-11	Prime	Paving	Turtle Cove Park Buckhead Ridge, FL		3/5/2018	$67,280.00	5/9/2018	$71,120.00	1	Turtle Cove Park 1213 Linda Lane Buckhead Ridge, FL 34974	Carl Waugh	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
18-12	Prime	Paving	Southern Underground Inc. SW Belmont Circle Port St Lucie, FL		3/7/2018	$4,644.00	3/19/2018	$4,644.00	0	Southern Underground Inc, 2598 SW Aberdeen Street Port St. Lucie, FL 34953	Mr. Kevin Bush 1-772-418-0803 1-772-340-7099	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
18-13	Prime	Paving	AP Construction Contractor, LLC Family Dollar, Ft. Pierce, FL		3/12/2018	$138,368.00	4/4/2018	$140,488.00	1	AP Construction Contractor, LLC 235 Live Oak Boulevard Casselberry, FL 32707	Mr. Bryan Pagan 1-407-455-1612	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-14	Prime	Paving	Smith Company Inc. Riverland Office Compound at Tradition		1/25/2018	$16,427.00	4/9/2018	$16,427.00	0	Smith Company Inc. 1940 SE Port St. Lucie Blvd. Port St. Lucie, FL 34952	Philip Darling 1-772-777-2662 1-561-723-9977	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-15	Prime	Paving	Southern Underground Inc. SW Earnest Street Port St Lucie, FL		3/28/2018	$4,556.00	4/19/2018	$4,556.00	0	Southern Underground Inc. 2598 SW Aberdeen Street Port St. Lucie, FL 34953	Kevin Bush Mary Oehler 1-772-418-0803	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
18-16	Prime	Paving	GHD Construction Service Inc. The Towns of Okeechobee NW 22nd Lane		3/30/2018	$60,556.00				GHD Construction Services Inc. 215 49th Street South St. Petersburg, FL 33707	Brian Smith 1-727-323-5119	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-17	Prime	Paving	Isle of Madeira H.O.A. Roadways located in Kings Isle		4/2/2018	$111,169.00	5/1/2018	$105,814.00	0	Isle of Madeira H.O.A. 905 N.W. Sarria Court Port St. Lucie, FL 34986	Raymond Morin 1-772-336-9916 1-772-349-2117	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-18	Prime	Paving	Center Mass Indoor Gun Range		4/3/2018	$3,811.00	5/2/2018	$3,811.00	0	Center Mass Indoor Gun Range 1934 Center Street Okeechobee, FL 34974	Bob Kreitz 863-532-8247	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
18-19	Prime	Paving	Guettler Construction Tradition		4/10/2018	$9,477.00	cancelled job			Guettler Construction 4401 Whiteway Dairy Road Ft. Pierce, FL 34947	Ben Guettler 1-772-461-8345	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-20	Prime	Pavers	City of Ft. Pierce Crosswalk Replacements		4/16/2018	$57,120.00				City of Ft. Pierce 100 North U.S. 1 Ft. Pierce, FL 34950	Tracy Telle 1-772-467-3776 1-772-460-6847	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob

18-21	Prime	Paving	Pro Site Contracting LLC 725 SW California Street; Pt St Lucie		4/24/2018	$2,542.00	4/30/2018	$2,542.00	0	Pro Site Contracting LLC 372 Backloop Road Havana, FL 32333	Gene Smith 1-850-4087206	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-22	Prime	Paving	Concept Construction & Demolition FDOT Project #T1690 RDQ		4/26/2018	$14,017.00	6/11/2018	$15,717.00	1	Concept Construction & Demolition 597 Sparrow Branch Circle Jacksonville, FL 32259	Steve Britton 1-904-497-3214	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-23	Prime	Paving	City of Port St. Lucie Tulip Boulevard Sidewalk Construction Project, LAP Funded			$506,525.35				City of Port St. Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Edith Majewski 1-772-344-4291	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin
18-24	Prime	Paving	Walpole Inc. Pot hole in front of office		5/17/2018	$676.00	5/18/2018	$676.00	0	Keith Walpole PO Box 1177 Okeechobee, FL 34973-1177	Keith Walpole	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-25	Prime	Paving	Seminole Tribe of Florida Big Cypress Gas Station aka Frankie's LLC		6/4/2018	$23,777.00				Seminole Tribe of Florida 650 Harney Pond Road Okeechobee, FL 34974	Ronald Rudner 1-863-824-6050 1-863-447-7210	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
18-26	Prime	Improvemens	City of Pahokee Commissioner's Park		6/4/2018	$501,980.00				City of Pahokee 207 Begonia Drive Pahokee, FL 33476	Jongelene Adams 1-561-924-5534 1-561-924-8140	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin

LYNCH PAVING & CONSTRUCTION COMPANY-PROJECT HISTORY

JOB #	PRIME OR SUB	CLASS OF WORK	NAME LOCATION DESCRIPTION OF PROJECT	NTO ORDERED	DATE OF CONTRACT	CONTRACT AMOUNT	LAST DAY ON JOB	Final Price W/chg Orders	# OF CHG ORDERS	OWNER'S NAME AND ADDRESS	OWNER CONTACT INFORMATION	GENERAL CONTRACTOR'S NAME & ADDRESS	CONTACT INFORMATION	PROJECT MANAGER
17-01	Prime	Hot Mix	Total Roadside Services 3176 FL 710 NW 10th Ave Okeechobee, FL		1/6/2017	$11,350.00	1/11/2017	$11,800.00	1	Total Roadside 3176 FL 710 Okeechobee, FL 34974	Jeromy LaRu 863-634-7708	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-02	Prime	Hot Mix	Walpole MiscAsphalt Repairs Okeechobee,FL		1/16/2017	$25,373.00	2/24/2017	$25,373.00	0	Walpole, Inc. Okeechobee, FL	Jay Walpole	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-03	Sub	Hot Mix	BroadSpectrum, Inc 3176 FL 710 NW 10th Ave Okeechobee, FL		1/16/2017	$15,285.00	2/7/2017	$15,285.00	0	Martin County 1701 Blount Road Ste C Pompano Beach,FL	John Kikaid 9549789558	Broadspectrum, Inc. 1701 Blount Road Ste C Pompano Beach,FL	Pete Ramsdell 863-763-7373	Pete
17-04	Prime	Hot Mix	Okeechobee County School Board North Elementary Parent Pick Up Loop PO#9151700170 3000 NW 10th Terrace, Okeechobee, FL 34972		1/9/2017	$21,758.00	3/17/2017	$21,758.00	0	OCSB 700 SW 2nd Avenue Okeechobee, FL 34974	Brian Barrett 8634625000	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-05	Sub	Hot Mix	Southern Underground NW California BLVD Port St. Lucie, FL		1/27/2017	$3,835.00	2/8/2017	$3,835.00	0	City of Port St Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Mary Oehler 772-418-0803	Southern Underground 2598 SW Aberdeen St PSL, FL 34953	Pete Ramsdell 863-763-7373	Pete
17-06	Sub	Hot Mix	Mohawk Construction Okeechobee Health Care Facility Okeechobee, FL		2/18/2017	$54,838.00	11/10/2017	$49,038.00	1	Okeechobee Healthcare Facility 265 NE 19th Drive Okeechobee, FL	Josh Williams	Mohawk Construction 1307 SW 18th Terrace Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
17-07	Prime	Hot Mix	Florida Dept of Corrections 3420 NE 168th Street Okeechobee, FL		1/20/2017	$8,329.00	2/10/2017	$8,329.00	0	Florida Dept of Corrections 3420 NE 168th Street Okeechobee, FL	Gene Brummet 634-3871	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-08	Prime	Hot Mix	Town of Jupiter Contract 2017-03 Jupiter, FL		2/7/2017	$607,441.48		$607,441.48	0	Town of Jupiter 210 Military Trail Jupiter, FL 33458	Thomas Driscoll 561-741-2372	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-09	Sub	Hot Mix	Southern Underground SE Eagle Drive Port St. Lucie, FL		2/22/2017	$4,530.00	2/24/2017	$4,530.00	0	City of Port St Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Mary Oehler 772-418-0803	Southern Underground 2598 SW Aberdeen St PSL, FL 34953	Pete Ramsdell 863-763-7373	Pete
17-10	Sub	Hot Mix	MCM Midway Road Fort Pierce, FL		2/24/2017	$22,797.78	2/24/2017	$22,797.78	0		Isis Amador 305-541-0000 x 149	MCM 6201 SW 70 St Miami, FL 33143	Bob Gent 863-763-7373	Bob
17-11	Prime	Hot Mix	Seacoast National Bank 1409 N Parrott Avenue Okeechobee, FL		2/27/2017	$5,036.00	3/7/2017	$5,818.00	1	Seacoast National Bank 1835 SE Hwy 441 Okeechobee, FL 34974	Mike	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-12	Prime	Hot Mix	Gilbert Ford 3175 US Highway 441 Okeechobee, FL 34974		2/28/2017	$36,984.00	3/10/2017	$36,948.00	0	Gilbert Ford 3175 US Highway 441 Okeechobee, FL 34974	Lowery Markham 863-763-2121	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-13	Prime	Hot Mix	Starlite RV Park 60 SE 30th Lane Roadway Okeechobee, FL 34974		3/2/2017	$35,308.00	5/12/2017	$35,483.00	1	StarLight RV Park 60 SE 30th Lane Roadway Okeechobee, FL 34974	Doug Laskey	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-14	Sub	Hot Mix	Higgins Brothers US 1 Savannah Plaza & Huffman Lane 8589 US 1, Port St.Lucie, FL		3/2/2017	$5,449.00	3/6/2017	$5,000.00	1	City of Port St Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Barry Higgins 772-342-2587	Higgins Brothers Construction, I 1361 Buckingham Terrace Port St. Lucie, FL 34953	Pete Ramsdell 863-763-7373	Pete
17-15	Sub	Hot Mix	PRP Construction Indianwood Indiantown, FL		3/3/2017	$64,632.00	3/9/2017	$58,632.00	1	Indiawood Indiantown Golf Course 14007 SW Golf Club Dr Indiantown, FL 34956	Ron Larowe 772-597-6923	PRP 7600 SW Springhaven Avenue Indiantown, FL 34956	Pete Ramsdell 863-763-7373	Pete
17-16	Sub	Hot Mix	Southern Underground Mariana Road Port St. Lucie, FL		3/16/2017	$4,832.00	3/25/2017	$4,832.00	0	City of Port St Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Mary Oehler 772-418-0803	Southern Underground 2598 SW Aberdeen St PSL, FL 34953	Pete Ramsdell 863-763-7373	Pete
17-17	Prime	Hot Mix	Kings Isle Homeowners Association 100 NW Kings Isle Blvd Club House Parking Lot Port St. Lucie, FL		3/17/2017	$26,823.00	4/7/2017	$26,823.00	0	Kings Isle Homeowners Association 100 NW Kings Isle Blvd Port St. Lucie, FL	Richard Setnan	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-18	Prime	Hot Mix	Marvin Kelly Driveway 11600 Twin Creeks Driveway Fort Pierce, FL		3/23/2017	$10,179.00	4/4/2017	$10,179.00	0	Mr. Marvin Kelly 11600 Twin Creeks Drive FortPierce,FL 34945	Marvin Kelly 772-464-6122 772-201-2089	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-19	Prime	Hot Mix	City of Port St. Lucie Selvitz Road Sidewalk Project Port St. Lucie, FL		6/5/2017	$169,289.86	9/12/2017	$169,320.18	1	City of Port St Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-20	Prime	Hot Mix	Hudson Insurance Highlands County Guardrail Improvements E1P16; Fin Project 432726-1-72-29		3/31/2017	$127,330.03	4/13/2017	$127,330.03	0	State of Florida DOT 605 Suwannee Street Tallahassee, FL 32399	Rick Davis 813-654-1481	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-003	Sub	Hot Mix	FDOT SR 66 Contract No. T1672 Fin Project # 436600-1-52-01 Highlands County, FL		2/22/2017	$5,457,714.22				State of Florida DOT 605 Suwannee Street Tallahassee, FL 32399	Joe Michael 863-471-4863	Lawrence-Lynch Corp PO Box 913 Falmouth, MA 02541	Kevin Trost 863-763-7373	Kevin
17-21	Sub	Hot Mix	Southern Underground SW Lady Bug Drive		4/11/2017	$4,897.00	4/21/2017	$4,897.00	0	City of Port St Lucie 121 SW Port St. Lucie Blvd	Kevin Bush 772-418-0803	Southern Underground 2598 SW Aberdeen St	Pete Ramsdell 863-763-7373	Pete

			Port St. Lucie, FL							Port St. Lucie, FL 34984		PSL, FL 34953		
17-22	Sub	Hot Mix	Thalle Construction HHD C5 and C5A							US Army Corps Jacksonville, FL		Thalle Construction 900 NC Hwy 86 N Hillsborough, NC	Bob Gent 863-763-7373	Bob
17-23	Sub	Hot Mix	R. Mossel Wearhouse Parking Lot		4/15/2017	$42,576.00	6/30/2017	$42,576.00	0		Roland Mossell 863-634-7722	R Mossell 13632 NW 160th Street Okeechobee, FL 34972	Bob Gent 863-763-7373	Bob
17-24	Prime	Hot Mix	John Stevens 3501 Hunter Drive (Driveway) Okeechobee FL 34974		4/19/2017	$16,283.00	6/13/2017	$16,283.00	0	John Stevens 3501 Hunter Drive Okeechobee, FL 34974	John Stevens 7725973501	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-25	Prime	Hot Mix	Oak Lake Villas Entrance 3 Okeechobee, FL		4/19/2017	$32,000.00	6/2/2017	$32,000.00	0	Oak Lake Villas HOA 2201 SW 28th Street Okeechobee, FL 34974		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-26	Prime	Hot Mix	City of PSL 6 Speed Tables Carter Ave		5/25/2017	$79,810.00	9/22/2017	$77,590.00	0	City of Port St. Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Gina Jolly 772-344-4055	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-27	Prime	Hot Mix	Gilbert Ford 3175 US Highway 441 Okeechobee, FL 34974		5/8/2017	$96,154.00	7/24/2017	$96,154.00	0	Gilbert Ford 3175 US Highway 441 Okeechobee, FL 34974	Lowery Markham 863-763-2121	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-28	Sub	Hot Mix	PRP Construction W & W Lumber Okeechobee, FL		5/9/2017	$14,960.00	5/11/2017	$14,260.00	1	W & W Lumber 1601 SR 70 E Okeechobee, FL 34974	Rick	PRP Construction PO BOX 1830 Indiantown, FL 34956	Bob Gent 863-763-7373	Bob
17-30	Prime	Hot Mix	Jay Walpole SW Martin County		5/26/2017	$5,654.00	6/12/2017	$5,654.00	0	Jay Walpole 30501 SW Martin Highway Okeechobee, FL	Jay Walpole	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-31	Prime	Hot Mix	Pilot Travel Center#096 Truck Parking Lot Repairs Yeehaw Jt, Okeechobee, FL		6/6/2017	$13,610.00	6/12/2017	$13,610.00	0	Pilot Flying J 5508 Lonas Road Knoxville, TN 37909	Doug Waters 423-790-5649	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-32	Prime	Hot Mix	Venture III Office 10701 Ocean Drive S Jensen Beach, FL		6/6/2017	$3,850.00	6/19/2017	$3,850.00	0	Venture III Office 10701 Ocean Drive S Jensen Beach, FL		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-33	Prime	Hot Mix	City of Ft. Pierce Housing Authority PO Box 1480 (7th Street) Fort Pierce, FL		6/13/2017	$17,266.00	6/16/2017	$17,266.00	0	City of Ft. Pierce Housing Authority PO Box 1480 (7th Street) Fort Pierce, FL		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-34	Prime	Hot Mix	Tom Peer Oak Lake Villas, Unit 39 Okeechobee, FL		6/15/2017	$2,052.00	6/20/2017	$2,052.00	0	Tom Peer 2201 SW 28th Street Unit 39 Okeechobee, FL 34973	Tom Peer 863-763-4014	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-35	Prime	Hot Mix	FDOT US 98/441 Contract No. T1682		6/27/2017	$1,775,436.71	2/7/2018	$1,662,553.51	1	FDOT , District 1 PO Box 1249 Bartow, FL 33831-1249		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin
17-36	Prime	Hot Mix	City of Ft. Pierce Misc Repairs Fort Pierce, FL		4/5/2017	$250,000.00	8/10/2017	$607,012.21	2	City of Ft. Pierce PO Box 1480 Fort Pierce, FL		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-37	Prime	Hot Mix	Southern Underground SW Idol Avenue between SE Gagnon and Tabor Port St. Lucie, FL		7/11/2017	$4,832.00	8/7/2017	$4,832.00	0	Southern Underground, Inc. 2598 SW Aberdeen Street Port St. Lucie, FL 34953	Mr. Kevin Bush 1-772-418-0803	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-38	Prime	Hot Mix	Southern Underground 1219-1225 SW Sun Terrace Circle Port St. Lucie, FL		7/25/2017	$4,358.00	8/2/2017	$4,358.00	0	Southern Underground, Inc. 2598 SW Aberdeen Street Port St. Lucie, FL 34953	Mr. Kevin Bush 1-772-418-0803	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-39	Prime	Hot Mix	Southern Underground Westmoreland Blvd and Santa Anita Street Port St. Lucie, FL		7/25/2017	$5,684.00	8/2/2017	$22,747.00	1	Southern Underground, Inc. 2598 SW Aberdeen Street Port St. Lucie, FL 34953	Mr. Kevin Bush 1-772-418-0803	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-40	Prime	Milling & Resurfacing Parkway	City of Port St. Lucie Veterans Memorial Parkway		8/15/2017	$1,759,073.25	12/20/2017	$1,783,849.13	1	City of Port St. Lucie 121 SW Port Saint Lucie Blvd Port Saint Lucie, FL 34984-5099	Public Works Dep Heath Stocton 1-772-344-4290	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-41	Prime	Paving work	Linquist Plumbing 1100 North Parrott Avenue Okeechobee, FL		1/27/2017	$3,932.00	080/08/17	$3,932.00	0	Lindquist Plumbing 3231 Oleander Avenue Ft. Pierce, FL 34945	Wade Case 1-772-201-2664	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-42	Prime	Pave Existing Asphalt Roadway	Cassablanca RV & Mobile Home Park		7/26/2017	$7,930.00	8/11/2017	$7,930.00	0	Casablanca R.V. & Mobile Home Park 9441 W. Hwy 78 Okeechobee, FL 34974	George Hatton 1-772-708-8804	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-43	Sub	Paving work	MXP Services, Inc. 90th Avenue & McDonalds Vero Beach, FL		8/24/2017	$52,162.00	8/31/2017	$63,385.00	0	MXP Services, Inc. 9116 Cypresswood Circle Tampa, FL 33647	Bubba Pelon 1-813-917-5161	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-44	Prime	Paving work	Southern Underground SW Xavier Street & SW Tumble Street Port St. Lucie, FL		9/5/2017	$9,689.00	9/6/2017	$9,689.00	0	Southern Underground, Inc. 2598 SW Aberdeen Street Port St. Lucie, FL 34953	Kevin Bush 1-772-418-0803	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-45	Prime	Paving work	K.A. Driggers - Brighton Reservation		9/5/2017	$6,642.00	10/27/2017	$6,954.00	1	K.A. Driggers & Sons Inc. 113 NW 11th Avenue Okeechobee, FL 34974	Keith Driggers 1-813-363-2304	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete

17-46	Prime	Paving work	3590 Reality LLC		8/29/2017	$12,262.00	10/10/2017	$14,043.69	1	3590 Reality LLC 3590 SE 37th Court Okeechobee, FL 34974	Lowry Markham 1-863-634-1871	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-47	Prime	Paving work	Ranger Construction - Rucks Dairy Road		9/27/2017	$30,021.52	10/10/2017	$30,021.52	0	Ranger Construction Industries Inc. PO Box 14589 Ft. Pierce, FL 34979-4589	Larry Verk 1-772-464-6460	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-48	Prime	Paving work	Okeechobee BOCC SW 3rd Terrace		5/11/2017	$402,005.00	1/31/2018	$399,651.00	1	Okeechobee County BOCC 304 NW 2nd Street Room 109 Okeechobee, FL 34972	863-763-6441	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-49	Prime	Paving work	Ms. Leyla Mustafa 2503 Avenue N Ft. Pierce, FL		10/5/2017	$10,790.00	10/18/2017	$10,790.00	0	Ms. Leyla Mustafa 1726 Okeechobee Road Ft. Pierce, FL 34947	Leyla Mustafa	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-50	Prime	Paving work	AJAX Paving Pot Hole Hwy 70		10/5/2017	$2,480.00	10/6/2017	$2,480.00	0	AJAX Paving Industries of Florida One Ajax Drive North Venice, FL 34275	Felipe Jaramillo 1-941-486-6900	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-51	Prime	Paving work	Kiewit Infrastructure South Co. The Herbert Hoover Dike Rehabilitation Project called S-267 (C-6)		10/18/2017	$45,180.00	1/5/2018	$46,430.00	1	Kiewit Infrastructure South Co. 4000 SW 99th Drive Okeechobee, FL 34974	Lucas Stevenson 1-407-212-8410	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-52	Prime	Paving work	Oderbrecht Company Herbert Hoover Dike located in Moore Haven, FL		10/23/2017	$7,841.00	11/14/2017	$33,116.00	1	Oderbrech Company 222 Pennbright Dr., Suite 300 Houston, TX 77090	Jerry 1-305-613-5728	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-53	Prime	Paving work	Mr. Albert J. Gamot Jr. 2341 NE 128th Avenue located on Berman Road in Okeechobee, FL		10/24/2017	$25,822.00	11/20/2017	$27,427.00	1	Mr. Albert J. Gamot Jr. 2701 PGA Blvd. Suite C Palm Beach Gardens, FL	Albert J. Gamot, Jr. 1-561-832-5500 1-863-824-0034	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-54	Prime	Driveway	Walpole Ft. Drum Corporation		7/13/2017	$2,341.00	3/12/2018	$2,341.00	0	Keith Walpole PO Box 1177 Okeechobee, FL 34973-1177	Keith Walpole	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-55	Prime	Improvements	Okeechobee BOCC 34th Avenue Improvements							Okeechobee County BOCC 304 NW 2nd Street Room 109 Okeechobee, FL 34972	863-763-6441	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin
17-56	Prime	Paving work	Oderbrecht Company Uncle Joes Boat Ramp in Moore Haven, FL		11/15/2017	$9,843.00	12/18/2017	$9,843.00	0	Oderbrech Company 222 Pennbright Dr., Suite 300 Houston, TX 77090	Jerry 1-305-613-5728	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-57	Prime	Paving work	City of Port St. Lucie Emergency Repair Del Rio		12/1/2017	$11,031.00	12/4/2017	$11,031.00	0	City of Port St. Lucie 450 SW Thornhill Drive Port St. Lucie, FL 34984	Steve	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-58	Prime	Paving work	Close Construction LLC 2300 Virginia Avenue, Ft. Pierce, FL		11/21/2017	$39,478.00	1/8/2018	$39,478.00	0	Close Construction, LLC 301 NW 4th Avenue Okeechobee, FL 34972	Chris Rossi 634-4604 467-0831	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
17-59	Prime	Paving work	Leighton-McGinn Company Warfield Blvd. Indiantown, FL		12/6/2017	$4,947.00	12/15/2017	$4,947.00	0	Leighton-McGinn Company 1983 PGA Blvd. #104 North Palm Beach, FL 33408	Shawn S. Smith	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-60	Prime	Paving work	Mid Port Place H.O.A. Phase 1		12/11/2017	$334,202.00	3/28/2018	$334,202.00	0	Mid Port Place H.O.A. 1509 S.E. Royal Green Port St. Lucie, FL 34952	Lonnie Bright	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
17-61	Prime	Paving work	Loren Jock Trucking, Inc. Starbucks		12/18/2017	$16,415.00	12/22/2017	$18,035.00	1	Loren Jock Trucking, Inc. 6776 SW Chase Ct. Stuart, FL 34997	Sam Brink 1-772-370-3172 c 1-772-888-3614 o	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob

LYNCH PAVING & CONSTRUCTION COMPANY-PROJECT HISTORY

JOB #	PRIME OR SUB	CLASS OF WORK	NAME LOCATION DESCRIPTION OF PROJECT	NTO ORDERED	DATE OF CONTRACT	CONTRACT AMOUNT	LAST DAY ON JOB	Final Price W/chg Orders	# OF CHG ORDERS	OWNER'S NAME AND ADDRESS	OWNER CONTACT INFORMATION	GENERAL CONTRACTOR'S NAME & ADDRESS	CONTACT INFORMATION	PROJECT MANAGER
16-01	Sub	Hot Mix	Classic Asphalt Gilbert Chevrolet Patching/Hotmix Okeechobee, FL		1/25/2016	$29,322.00	2/11/2016	$29,322.00	0	Gilbert Chevrolet 3550 US Highway 441 South Okeechobee, FL 34974	Gil Culbreth	Classic Asphalt 208 SW 5th Street Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
16-02	Sub	Hot Mix, Patching	B & B Site Development, Inc. Seacoast National Bank Okeechobee, FL		1/22/2016	$575.00	1/29/2016	$575.00	0	Seacoast National Bank 1409 S Parrott Avenue Okeechobee, FL 34974	863-467-5330	B & B Site 1505 S Parrott Okeechobee, FL 34974	Bob Gent 863-763-7373	Bob
16-03	Prime	Hot Mix	Kirby Thompson Road Glades County Proj #14-1816		1/27/2016	$1,679,114.66	10/19/2016	$1,689,420.35	2	Glades County BOCC 500 Ave J SW Moore Haven, FL 33471	Kathy Hanagan 239-334-0046	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Jim Demarco 863-763-7373	Jim
16-04	Sub	Hot Mix	Odebrecht Construction, Inc-Culverts 1 and 1A Herbert Hoover Dike Rehabilitation Project Glades County, FL		2/8/2016	$71,252.00	2/12/2016	$35,626.00	2	USA Engineer District Jacksonville, FL	Tom Colavecchio 832-593-3270	Odebrecht Construction 27107 S US Hwy 27 Moore Haven, FL 33471	Bob Gent 863-763-7373	Bob
16-05	Prime	Hotmix/Overlay	Lincoln Property Company Cattle and Range Building South Parking Lot Brighton, FL		2/8/2016	$31,898.00	2/19/2016	$32,393.00	1	Seminole Tribe of Florida, Inc. 2550 N 64th Ave Hollywood, FL 33024	Pamela Richards 954-967-3780	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
16-003	Sub	Hotmix	FDOT - Asphalt Repair, Milling and Resurfacing CR 68 Contract No: E1O45 (NW 160th St from US 98 to 441 (SR 15)) Financial Proj No 431603-1-52-01 & 431603-1-52-02		12/9/2015	$5,243,826.45	3/6/2017			FDOT , District 1 PO Box 1249 Bartow, FL 33831-1249	Rolando Luis 863-471-4862	Lawrence-Lynch Corp PO Box 913 Falmouth, MA 02541	Jim Demarco 863-763-7373	Jim
16-06	Prime	Hotmix	Coastal Marine Construction 7600 SR 710 Okeechobee Nubbin Slough-Bridge 910097		2/10/2016	$2,887.00	2/18/2016	$2,887.00	0	FDOT /ICA 6395 Tower Lane Sarasota, FL 34240	941-341-9300	Coastal Marine Construction 625 Tamiami Trail Venic, FL 34258	Larry Norris 941-928-9053	Bob/Pete
16-07	Prime	Hotmix, Patching	VFW South Post Parking Lot 3912 SE 441 Parking Lot Repairs and Patching Okeechobee, FL		2/11/2016	$7,410.00	2/23/2016	$7,410.00	0	VFW South Post 3912 SE 441 Okeechobee, FL 34974	Jim Benoit 863-697-2929	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-08	Prime	Hotmix	Parent Management Company MLK Terrace Apartments (Road, Parking Lots, Entrance) Sebring, FL		2/11/2016	$109,674.00	3/2/2016	$109,674.00	0	Parent Management Company/MLK PO Box 492228 Leesburg, FL 34749	Dave Magalski 863-382-1467	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
16-10	Sub	Hotmix	Seminole Design Build Osprey Road Repair/Patching Brighton, FL		2/24/2016	$12,201.00	3/2/2016	$12,201.00	0	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084		Seminole Design Build 701 NE 3rd Street Okeechobee, FL 34972	Pete Ramsdell 863-763-7373	Pete
16-11	Prime	Hot Mix	City of PSL Tiffany Avenue Sidewalk Project 20150142		1/12/2016	$144,596.00	5/13/2016	$154,782.00	2	City of Port St. Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Gina Jolly 772-344-4055	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-12	Prime	Hot Mix	Jonathan's Landing Jupiter Driving Range Off A1A		3/8/2016	$18,029.00	4/7/2016	$18,029.00	0	Jonathan's Landing Golf Club 18505 SE Clubhouse Dr Jupiter, FL 33478	Donald Taylor 561-401-1121	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-14	Prime	Hot Mix	Walpole Flea Market Okeechobee, FL		3/1/2016	$8,057.50	3/3/2016	$8,057.50	0	Walpole, Inc.		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-15	Prime	Hot Mix	Parent Management Company Speed Tables at Parking Lot Sebring, FL		3/16/2016	$4,190.00	4/21/2016	$4,190.00	0	Parent Management Company/MLK PO Box 492228 Leesburg, FL 34749	Dave Magalski 863-382-1467	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin
16-16	Prime	Hot Mix	Taylor Creek Condominiums Parking Lot Repair Okeechobee, FL		3/16/2016	$1,567.00	4/5/2016	$1,567.00	0	Taylor Creek Condominiums 3124 Hwy 441 SE Okeechobee, FL 34974	Debby Bailey 863-467-2022	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin
16-17	Prime	Hot Mix	Okeechobee Utility Authority PO 8564 Repairs-SR 70 & 26th Avenue, 28th Avenue Okeechobee, FL		3/24/2016	$3,467.00	4/5/2016	$3,467.00	0	OUA 100 SW 5th Avenue Okeechobee, FL 34974	Travis Baugh Maintenance 863-467-1599	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
16-18	Prime	Hot Mix/Repair	Oak Lake Villas SW 24th Avenue, New Pavement & Patching Okeechobee, FL		4/5/2016	$41,472.00	5/12/2016	$41,472.00	0	Oak Lake Villas Homeowners Association 2201 SW 28th Street Okeechobee, FL 34974	Greg Kennedy	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-19	Prime	Hot Mix	City of Ft. Pierce 13 th Street Track Location Fort Pierce, FL		4/6/2016	$31,395.00	6/1/2016	$31,395.00	0	City of Fort Pierce 100 N US Hwy 1 Fort Pierce, FL 34950	Tracy Telle 772-467-3776	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-20	Prime	Hot Mix	Okeechobee County BOCC Ok Softball Field Parking Lot & Drainage Improvements #2016-02 Okeechobee, FL		3/29/2016	$253,078.26	7/14/2016	$269,253.16	1	Okeechobee County BOCC 1700 NW 9th Avenue Okeechobee, FL 34974	Robbie Chartier	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-21	Prime	Hot Mix	Florida Department of Environmental Protection Kissimmee Prairie State Park-Emergency Entrance Road Repairs Okeechobee, FL Order# AED4D6		4/19/2016	$18,120.00	6/27/2016	$18,120.00	0	DEP Kissimmee Prairie Preserve Park 33104 NW 192nd Avenue Okeechobee , FL 34972	Rebecca Hale 850-245-2367	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-22	Prime	Hot Mix	Isle of Capri HOA in Kings Isle Pinnacle Association Management, LLC Port St. Lucie, FL		4/19/2016	$121,165.00	5/13/2016	$121,165.00	0	Isle of Capri C/O Pinnacle Association 430 NW Lake Whitney Place Port St. Lucie, FL 34986	Beth Miller 772-871-0004	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-23	Prime	Hot Mix	City of Okeechobee Drainage Improvements		4/21/2016	$89,490.20	6/27/2016	$96,909.30	1	City of Okeechobee 55 Southeast 3rd Avenue	David Allen 863-763-3372	Lynch Paving & Const PO Box 1994	Bob Gent 863-763-7373	Bob

			Okeechobee, FL							Okeechobee, FL 34974		Okeechobee, FL 34973			
16-24	Prime	Hot Mix	ITS Telecom Office Paving 15925 SW Warfield Blvd Indiantown, FL		4/21/2016	$14,788.00	5/9/2016	$14,788.00	0	ITS Telecom 15925 SW Warfield Blvd Indiantown FL 34956	David Morris 7725973773	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob	
16-25	Prime	Hot Mix	Pilot Travel Center#096 Parking Lot Repair Contract 109785-0-MR Yeehaw Jt, Okeechobee, FL		5/4/2016	$18,750.00	SUB	$18,750.00	0	Pilot Flying J 5508 Lonas Road Knoxville, TN 37909	Doug Waters 423-790-5649	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete	
16-27	Prime	Concrete	Pilot Travel Center#096 Truncated Domes 7300 W Okeechobee Rd Okeechobee, FL		5/24/2016	$1,880.00	6/25/2016	$1,880.00	0	Pilot Flying J 5508 Lonas Road Knoxville, TN 37909	Doug Waters 423-790-5649	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete	
16-28	Prime	Hot Mix	Okeechobee Livestock Market New Area Paving 1055 Hwy 98 N Okeechobee, FL		6/1/2016	$18,150.00	7/27/2016	$8,745.60	1	Okeechobee Livestock Market 1055 Hwy 98 N Okeechobee, FL 34974	Joey Davis 863-763-3127	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin	
16-29	Prime	Hot Mix	Ocean Dunes HOA Parking lot Repair 10980 S Ocean Drive, Jensen Beach, FL		6/14/2016	$43,782.00	8/5/2016	$45,775.00	1	Ocean Dunes HOA 10980 S Ocean Drive Jensen Beach, FL 34957	Brett Long	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob	
16-30	Prime	Hot Mix	Pilot Travel Center#096 North Parking Lot Catch Basin Yeehaw Jt, Okeechobee, FL		7/26/2016	$4,900.00	7/26/2016	$4,900.00	0	Pilot Flying J 5508 Lonas Road Knoxville, TN 37909	Doug Waters 423-790-5649	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete	
16-31	Prime	Hot Mix	OUA Pine Ridge Asphalt Repair Okeechobee, FL		6/27/2016	$8,832.00	7/18/2016	$8,832.00	0	OUA 100 SW 5th Avenue Okeechobee, FL 34974	Travis Baugh Maintenance 863-467-1599	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete	
16-32	Sub	Hot Mix	B & B Site Development, Inc. Taco Bell Parking Lot Sebring, FL		6/29/2016	$36,620.00	7/30/2016	$36,620.00	0	B & B Site 1505 S Parrott Okeechobee, FL 34974	Phil Baughman 863-763-6053	B & B Site 1505 S Parrott Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete	
16-33	Prime	Hot Mix	Glades County Road Dept Chobee Loop & Chobee Street Repairs Asphalt Patching		6/21/2016	$87,280.00	7/21/2016	$87,280.00	0	Glades County Road Department 4883 FL 78 Moore Haven, FL 33471	Avant Brown 863-946-0771	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob	
16-34	Prime	Hot Mix	Glades County Road Dept Oak & Apache Avenue Asphalt Patching		6/21/2016	$169,480.00	8/1/2016	$179,125.00	1	Glades County Road Department 4883 FL 78 Moore Haven, FL 33471	Avant Brown 863-946-0771	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob	
16-35	Prime	Hot Mix	Okeechobee County BOCC Varios Locations-Ongoing (14-36)		18-07 is the new Job #					Okeechobee County BOCC	Lee Everet 763-3514	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob	
16-36	Prime	Hot Mix	Jupiter Hills HOA Concrete/Striping Jupiter, FL		7/1/2016	$4,500.00	8/31/2016	$4,250.00	1	Jupiter Hills Village Home Owners Assoc 17813 SE Village Circle Tequesta, FL 33469	Craig Kunckle 561-575-1619	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob	
16-37	Sub	Hot Mix	PRP Construction-Bay State Milling Asphalt Patching 2 PHASES		8/1/2016	$92,461.00	8/13/2016	$92,461.00	0	PRP Construction 7600 SW Springhaven Ave Indiantown, FL	Rick Sheltra 772-597-6923	PRP Construction 7600 SW Springhaven Ave Indiantown, FL	Bob Gent 863-763-7373	Bob	
16-38	Prime	Hot Mix	OUA Basswood 36th Street Okeechobee, FL		8/1/2016	$7,672.00	9/14/2016	$7,672.00	0	OUA 100 SW 5th Avenue Okeechobee, FL 34974	Travis Baugh Maintenance 863-467-1599	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete	
16-39	Prime	Hot Mix	Glades County Road Dept Boat Ramp Parking Lot Asphalt Patching		8/9/2016	$159,769.00	10/21/2016	$159,769.00	0	Glades County Road Department 4883 FL 78 Moore Haven, FL 33471	Avant Brown 863-946-0771	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob	
16-40	Prime	Hot Mix	OUA SW 21st Street & SW 22nd Terrace Okeechobee, FL		8/1/2016	$4,686.00	9/15/2016	$4,686.00	0	OUA 100 SW 5th Avenue Okeechobee, FL 34974	Travis Baugh Maintenance 863-467-1599	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete	
16-41	Sub	Hot Mix	Barar Quality Contracting Loggerhead Subdivision Asphalt Palm City, FL		8/2/2016	$18,900.00				Barar Contracting 139 Loquat Drive NE Lake Placid, FL		Barar Contracting 139 Loquat Drive NE Lake Placid, FL	Kevin Trost 863-763-7373	Kevin	
16-42	Prime	Hot Mix	Gilbert Ford 3175 Hwy 441 Lot Okeechobee, FL		8/24/2016	$31,122.00	9/9/2016	$31,122.00	0	Gilbert Ford 3175 US Hwy 441 Okeechobee, FL 34974	Lowery Markham 863-763-2121	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete	
16-43	Prime	Hot Mix	Oak Lake Villas 2201 SW 28th Street Entrance 4 Drive 3		8/22/2016	$6,620.00	10/4/2016	$6,620.00	0	Oak Lake Villas 2201 SW 28th Street Okeechobee, FL 34974	Greg Kennedy	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete	
16-44	Prime	Hot Mix	City of PSL (2 Year/2 Year Option) Various Road Maintenance #20150080		6/1/2015	$314,250.00	18-01 is the new Job #			City of Port St. Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Gina Jolly 772-344-4055	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob	
16-45	Sub	Hot Mix	Broadspectrum, Inc. US 1 in Stuart to Salerno Rd Intersection Stuart FL		9/26/2016	$17,421.00	10/14/2016	$17,086.00	1	Martin County 1701 Blount Road Ste C Pompano Beach,FL	John Kikaid 9549789558	Broadspectrum, Inc. 1701 Blount Road Ste C Pompano Beach,FL	Bob Gent 863-763-7373	Bob	
16-46	Sub	Hot Mix	Barar Quality Contracting Horshoe Point Driveway Palm City, FL		9/21/2016	$11,780.00	10/17/2016	$11,780.00	0	Barar Contracting 139 Loquat Drive NE Lake Placid, FL		Barar Contracting 139 Loquat Drive NE Lake Placid, FL	Kevin Trost 863-763-7373	Kevin	
16-47	Sub	Hot Mix	Southern Site Development Circle K US 441 N		9/29/2016	$15,031.00	10/14/2016	$18,268.00	1	Circle K 3761 US 441	Kevin Stringer 863-644-8285	Southern Site Dev 2500 Drane Field Rd Ste 209	Pete Ramsdell 863-763-7373	Pete	

			Okeechobee FL							Okeechobee,FL		Lakeland FL33811		
16-48	Sub	Hot Mix	MCM Lakeside Ranch		9/28/2016	$22,808.00	10/25/2016	$22,808.00	1	SFWMD Lake Side Ranch	Isis Amador 305-541-0000 x 149	MCM 6201 SW 70 St Miami, FL 33143	Bob Gent 863-763-7373	Bob
16-49	Prime	Hot Mix	Oak Tree Place HOA Okeechobee FL		10/4/2016	$433.00	10/4/2016	$433.00	0	Oak Tree Place PO Box 242 Okeechobee,FL	PJ Rader 561-329-8260	Oak Tree Place HOA PO Box 242 Okeechobee,FL	Pete Ramsdell 863-763-7373	Pete
16-50	Sub	Hot Mix	Southern Underground Milburn Circle E101 Canal PSL, FL		10/11/2016	$4,407.00	10/25/2016	$4,407.00	0			Southern Underground 2598 SW Aberdeen St Port St. Lucie,FL 34953	Pete Ramsdell 863-763-7373	Pete
16-51	Sub	Hot Mix	Southern Site Development Circle K US 441 N Additional Patch Okeechobee FL		10/12/2016	$3,237.00	10/25/2016	$3,237.00	0	Circle K 3761 US 441 Okeechobee,FL	Kevin Stringer 863-644-8285	Southern Site Dev 2500 Drane Field Rd Ste 209 Lakeland FL33811	Pete Ramsdell 863-763-7373	Pete
16-52	Prime	Hot Mix	FDOT - Asphalt Repair, Milling and ResurfacingKanner Highway Kanner Highway T-44431,3 Martin County, FL		9/28/2016	$1,312,213.59	6/2/2017			FDOT , District 1 PO Box 1249 Bartow, FL 33831-1249	Mark Freeman 772-429-4904	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-53	Prime	Hot Mix	Seacoast National Bank 500 N Parrott Ave Okeechobee, FL		10/21/2016	$9,536.00	10/25/2016	$9,536.00	0	Seacoast National Bank 1835 SE Hwy 441 Okeechobee, FL 34974		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
16-54	Prime	Hot Mix	Luihn Companies-Taco Bell 3498 US Hwy 441 N Asphalt Repair Okeechobee, FL		10/28/2016	$3,290.00	12/15/2016	$3,290.00	0	Luihn Companies 2950 Gateway Center Blvd Morrisville, NC 27560	Billy Fields 919-439-0894	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
16-55	Prime	Hot Mix	Martin County BOCC CR 708 SW Bridge Road Resurfacing Martin County FL		11/4/2016	$686,240.71	1/18/2017	$732,844.37	1	Martin County 2401 SE Monterey Road Stuart, FL		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin
16-56	Prime	Hot Mix	Walpole 269 NW 9th Street Okeechobee, FL		11/15/2016	$6,630.00	12/27/2016	$6,630.00	0	Walpole, Inc. 269 NW 9th Street Okeechobee, FL 34974		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-57	Prime	Hot Mix	Oak Tree Place HOA Okeechobee, FL		11/2/2016	$1,332.00	1/4/2017	$1,332.00	0	Oak Tree Place PO Box 242 Okeechobee,FL	PJ Rader 561-329-8260	Oak Tree Place HOA PO Box 242 Okeechobee,FL	Pete Ramsdell 863-763-7373	Pete
16-58	Prime	Hot Mix	Oak Lake Villas 2201 SW 28th Street Patching		11/11/2016	$4,861.00	1/4/2017	$4,861.00	0	Oak Lake Villas 2201 SW 28th Street Okeechobee, FL 34974	Greg Kennedy	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
16-59	Prime	Hot Mix	B & B Site Development, Inc. Murray Insurance Okeechobee, FL		12/6/2016	$6,655.00	12/14/2016	$6,655.00	0	B & B Site 1505 S Parrott Okeechobee, FL 34974	Phil Baughman 863-763-6053	B & B Site 1505 S Parrott Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
16-60	Prime	Hot Mix	Prince of Peace Peace Lutheran Church 220 NW Federal Highway Stuart, FL		12/6/2016	$9,452.00	1/13/2017	$14,412.00	0	Prince ofPeace Lutheran 2200 NW Federal Highway Stuart, FL 34994	Jane Richez	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
16-61	Prime	Hot Mix	Ranger Construction Various Road Maintenance		12/12/2016	$150,000.00				Ranger Construction 1200 Elboc Way Winter Garden, FL 34787	Stacy Barber 407-656-9255	Ranger Construction 1200 Elboc Way Winter Garden, FL 34787	Pete Ramsdell 863-763-7373	Pete
16-62	Prime	Hot Mix	City of Fort Pierce Melody Lane		11/21/2016	$213,657.60				City of Fort Pierce 100 N US Hwy 1 Fort Pierce, FL 34950	Tracy Telle 772-467-3776	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
16-63	Prime	Hot Mix	Florida Department of Transportation Contract No: E1P84 SR 15/Fin Proj#434940-1-52-01 Okeechobee		12/21/2016	$2,940,435.50	8/24/2017	$2,924,839.37	1	FDOT , District 1 PO Box 1249 Bartow, FL 33831-1249		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Kevin Trost 863-763-7373	Kevin

LYNCH PAVING & CONSTRUCTION COMPANY-JOB HISTORY

JOB #	PRIME OR SUB	CLASS OF WORK	NAME LOCATION DESCRIPTION OF PROJECT	NTO ORDERED	DATE OF CONTRACT	CONTRACT AMOUNT	LAST DAY ON JOB	Final Price W/chg Orders	# OF CHG ORDERS	OWNER'S NAME AND ADDRESS	OWNER CONTACT INFORMATION	GENERAL CONTRACTOR'S NAME & ADDRESS	CONTACT INFORMATION	PROJECT MANAGER
15-01	Prime	Hot Mix	Jupiter Hills Village Jupiter Hills Overlay		5/29/2015	$370,690.95	7/10/2015	$365,764.70	1	Jupiter Hills Village Home Owners Assoc 17813 SE Village Circle Tequesta, FL 33469	Craig Kunckle 561-575-1619	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
15-02	Sub	Hot Mix	Matt's Paving Francis Mobile Estates Paving Sebring, Florida		3/5/2015	$19,637.00	3/31/2015	$24,637.00	1	Francis Mobile Estates 29 Mimi Street Sebring, FL 33870		Matt's Paving 3231 Lockman Blvd Sebring, FL 33875	Matt O'Brien 863-214-3174	Pete
15-03	Sub	Hot Mix	Valor Construction VCM Culverts 11, 16, & Service Road VCM Contract #VCM-46-13 Prime #771-S15/10013		5/22/2015	$94,660.20	9/23/2015	$76,451.11	1	Valor Construction 137 East Main Street Pahokee, FL 33476		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
15-04	Prime	Hot Mix	Seminole Tribe of Florida - Public Works North Horshoe Road 13 patches PO # 10-92405		1/22/2015	$19,135.00	5/8/2015	$20,897.00	1	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-05	Sub	Hot Mix	Vicki & Joe Paige -Driveway Paving-Circular Driveway 501 NE 6th Avenue Okeechobee, FL		12/29/2014	$5,744.00	5/7/2015	$5,744.00	0	Joe & Vicky Paige 501 NE 6th Avenue Okeechobee, FL 34974	Joe and Vicki 863-763-6788	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-06	Sub	Hot Mix	OUA Trench Repair Buckhead Ridge (4 locations) SR 78 West PO #0000008152		4/14/2015	$8,822.00	5/7/2015	$8,822.00	0	Okeechobee Utility Authority 100 SW 5th Avenue Okeechobee, FL 34974	Travis Baugh 863-467-1599	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-07	Sub	Hot Mix	Seacoast National Bank Paving/Repair Trench 1835 SE HWY 441 Okeechobee, FL		4/22/2015	$1,722.00	5/1/2015	$1,722.00	0	Seacoast National Bank 1835 S.E. US 441 Okeechobee, FL	Mike Mikousky 863-697-1962	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-08	Sub	Hot Mix	B & B Site Development Osprey Road		1/7/2015	$37,430.00	10/28/2015	$38,930.50	2	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084		B & B Site Dev, Inc. 1505-C South Parrot Ave. Okeechobee, FL 34974	Phil Baughman (863) 763-6053	Bob
15-10	Prime	Hot Mix	City of Port St Lucie California Turn Lanes PO#20150392-00		4/29/2015	$189,213.59	7/8/2015	$209,322.60	2	City of Port St. Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Gina Jolly 772-344-4055	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
15-11	Prime	Hot Mix	Jonathan's Landing Golf Club The Hills GC 3 & 5		11/13/2014	$17,980.00	5/20/2015	$17,980.00	0	Jonathan's Landing Golf Club 18505 SE Clubhouse Dr Jupiter, FL 33478	Donald Taylor Debbie A/P	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
15-12	Sub	Hot Mix	Beck Construction 1830 CR 833 Clewiston, Florida		5/5/2015	$7,825.00	7/2/2015	$7,825.00	0			Beck Construction 14296 E SR 78 Okeechobee, FL 34974	Bob Gent 863-763-7373	Bob
15-13	Prime	Hot Mix	Seminole Tribe of Florida - Public Works 17146 Knots Landing PO#10-93709		4/17/2015	$3,622.00	6/5/2015	$3,622.00	0	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084	Mark McPartland 954-214-8290	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-13	Prime	Hot Mix	Seminole Tribe of Florida - Public Works 17375 Reservation Road PO#10-94573		6/2/2015	$2,330.00	6/5/2015	$3,622.00	0	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084	Mark McPartland 954-214-8290	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-14	Prime	Hot Mix	Coral Cove Shorewinds Paving Project-Flotilla Terrace		5/21/2015	$120,003.00	8/5/2015	$118,003.00	1	Coral Cove Shorewinds, LLC. 234 Bermuda Beach Drive Ft. Pierce, FL 34949	Cindy Williams	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
15-15	Prime	Hot Mix	Florida Outdoors Paving Project-RV Parking Lot		5/22/2015	$2,435.00	6/5/2015	$2,435.00	0	Florida Outdoors 4300 US Highway 441 S Okeechobee, FL 34974	Mike Schriver 863-623-4689	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-16	Prime	Hot Mix	South Indian River Water Control District Drainage Crossings		6/5/2015	$3,217.00	6/12/2015	$3,217.00	0	South Indian River Water Control 15600 Jupiter Farms Road Jupiter, FL 33478	Mike Dillon Dillon@SIRWCD.ORG	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
15-17	Prime	Hot Mix	City of PSL (2 Year/2 Year Option) Various Road Maintenance #20150080		6/1/2015	$314,250.00				City of Port St. Lucie 121 SW Port St. Lucie Blvd Port St. Lucie, FL 34984	Gina Jolly 772-344-4055	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
15-18	Prime	Hot Mix	Pilot Flying J - Parking lot repairs Yeehaw Junction		6/15/2015	$12,695.00	0723/2015	$12,695.00	0	Pilot Flying J, LLC 5508 Lomas Rd Knoxville, TN 37939	Doug Waters 423-790-5649	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-19	Prime	Hot Mix	Signature Properties-Tarpon Bay Yacht Club Repairs 738 Colorado Avenue, Stuart, FL Repair Culvert & Areas by building E & F		6/21/2015	$11,905.00	10/1/2015	$11,905.00	0	Signature Property Management, LLC 738 Colorado Avenue Stuart, FL 34994	James Hayman	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
15-20	Sub	Hot Mix, Patching	Beck Construction Patching Clewiston Citrus Plant Clewiston, FL		7/13/2015	$4,302.00	7/23/2015	$4,302.00	0	Clewiston Citrus Plant Clewiston Florida		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-21	Sub	Hot Mix, Patching	Central Southern Construction KRR-Kissimmee River Restoration-Patching Repair		7/13/2015	$16,860.00	7/29/2015	$17,360.00	1	USACE	Domini Bucci 904-503-2353	Lynch Paving & Const PO Box 1994	Pete Ramsdell 863-763-7373	Pete

			Okeechobee, FL							Jacksonville, FL		Okeechobee, FL 34973		
15-22	Prime	Hot Mix, Patching	Okeechobee County School Board Seminole Elementary Patching PO#9151600025 Everglades Elementary Patching PO #9151600026		7/14/2015	$22,780.00	11/28/2015	$22,780.00	0	Okeechobee County School Board 700 SW 2nd Ave Okeechobee, FL 34974	Brian Barret Faye Hickman 462-5000	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-23	Prime	Hot Mix, Patching	Seminole Tribe of Florida - Public Works Big Cypress Road Restorations PO#10-95704 Big Cypress Indian Reservation, FL		7/24/2015	$8,422.00	9/24/2015	$8,422.00	0	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084	Mark McPartland 954-214-8290	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
15-24	Prime	Hot Mix, Patching	Silver Palms RV Resort Phase II Recreation Center Repairs & Paving Okeechobee, FL		7/28/2015	$20,650.00	9/23/2015	$21,864.00	1	Silver Palms RV Resort PO Box 9025 Lajolia, CA 92038	Kim Campbell 858-456-9201	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
15-015	Sub	Hot Mix Repair, Milling & Resurfacing	FDOT - Asphalt Repair, Milling and Resurfacing State Highwaysin Glades Contract No: T1614 SR 78 Southeasterly Financial Proj No 428145 1 52 01 Fed Aid No 8886427A		6/24/2015	$678,213.59	1/15/2016	$676,248.20	1	FDOT , District 1 PO Box 1249 Bartow, FL 33831-1249	Susan Hindman 8634714865	Lawrence-Lynch Corp PO Box 913 Falmouth, MA 02541	Bob Gent 863-763-7373	Bob
15-25	Prime	Hot Mix Repair, Milling & Resurfacing	Pirates Cove RV Resort Asphalt Repair Okeechobee, Florida		8/4/2015	$7,946.00	8/12/2015	$10,046.00	1	Okeechobe Resorts 9751 SR 78 W Okeechobee, FL 34974		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-26	Prime	Hot Mix Repair, Milling & Resurfacing	South Florida Water Management District Asphalt Repair and Sealcoat Parking area 1000 NE 40th Avenue, Okeechobee, FL		8/3/2015	$26,182.00	8/29/2015	$26,182.00	0	South Florida Water Management PO Box 24680 West Palm Beach, FL 33416	Mike	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-27	Sub	Hot Mix Repair, Milling & Resurfacing	Wharton-Smith, Inc. WWTP AKA Site #2 Tack Coat and Asphalt Brighton WWTP, Okeechobee FL		7/28/2015	$4,280.00	8/12/2015	$4,280.00	0	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084	James (561) 748-5956	Wharton-Smith, Inc. 125 Indiantown Road, Ste201 Jupiter, FL 33458	Pete Ramsdell 863-763-7373	Pete
15-27B	Sub	Hot Mix, Patching	Wharton-Smith, Inc. WWTP AKA Site #1 Tack Coat and Asphalt Brighton WWTP, Okeechobee FL		9/2/2015	$4,712.00	10/27/2015	$4,712.00	0	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084		Wharton-Smith, Inc. 125 Indiantown Road, Ste201 Jupiter, FL 33458	Bob Gent 863-763-7373	Pete
15-28	Prime	Hot Mix, Patching	Glades Electric Moore Haven Turn Lanes Moore Haven, FL Turn Lane and Parking Lot Paving/Repair		9/15/2015	$106,776.40	11/3/2015	$106,776.40	0	Glades Electric Co-op 26733 N US Hwy 27 Moore Have, FL 33471	Tim Lowman 863-946-6000	Johnson Prewitt and Assoc. PO Box 1029 Clewiston, FL 3340	Kevin Trost 863-763-7373	Kevin
15-30	Prime	Hot Mix, Patching	Pirates Cove RV Resort Asphalt Repair Okeechobee, Florida		9/9/2015	$10,545.00	10/13/2015	$10,545.00	0	Okeechobe Resorts 9751 SR 78 W Okeechobee, FL 34974		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-31	Prime	Hot Mix, Patching	Environmental Land Development Asphalt Repair SR60		9/25/2015	$25,134.00	10/12/2015	$25,134.00	0	Environmental Land Development 201 Campbell Road Fort Pierce, FL	Will Tindall 772-519-6278	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-32	Prime	Hot Mix, Patching	Pilot Flying J - Parking lot repairs Asphalt Repair Okeechobee, Florida		10/6/2015	$11,521.00	10/12/2015	$11,521.00	0	Pilot Flying J, LLC 5508 Lomas Rd Knoxville, TN 37939	Doug Waters 8654743388	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-33	Prime	Hot Mix, Patching	OUA Patchwork PO # 8345 Asphalt Repair (Arby's SE 5th Street) & Basswood (NW 36th Street) Okeechobee, Florida		10/8/2015	$9,381.00	11/11/2015	$9,381.00	0	OUA 100 SW 5th Avenue Okeechobee, FL 34974	Travis Baugh Maintenance	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-018	Sub	Hot Mix Repair, Milling & Resurfacing	FDOT - Asphalt Repair, Milling and Resurfacing State Highwaysin Glades Contract No: T1560 SR 78 Financial Proj No 429101 1 52 01 Fed Aid No 4371015P		8/21/2015	$4,883,159.85	8/13/2016	$4,581,603.46	1	FDOT , District 1 PO Box 1249 Bartow, FL 33831-1249	Susan Hindman 8634714865	Lawrence-Lynch Corp PO Box 913 Falmouth, MA 02541	Kevin Trost 863-763-7373	Kevin/Jim
15-34	Prime	Hot Mix, Patching	Classic Asphalt Sealing & Striping Sprint Store Okeechobee, Florida		10/16/2015	$8,850.00	10/27/2015	$8,850.00	0	Sprint 204 N Parrott Avenue Okeechobee, FL 34974	Joey Hoover	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-35	Prime	Hot Mix, Patching	Mohawk Construction Resurface Dorchester Auto Okeechobee, Florida		10/19/2015	$13,750.00	10/27/2015	$13,750.00	0	Dorchester Auto 441 South Okeechobee, FL 34974	Josh Williams (863) 634-9486	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-36	Prime	Hot Mix, Patching	Signature Properties-Tarpon Bay Yacht Club Repairs (PIPE) 738 Colorado Avenue, Stuart, FL Repair Culvert & Areas by building E & F		11/3/2015	$7,633.00	12/1/2015	$7,633.00	0	Signature Property Management, LLC 738 Colorado Avenue Stuart, FL 34994	James Hayman 772-219-4474	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-37	Prime	Hot Mix, Patching	Wharton-Smith, Inc. Brighton Water Treatment Plant Sealcoat Brighton WWTP, Okeechobee FL		11/13/2015	$3,600.00	11/19/2015	$3,600.00	0	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084	James Telson (561) 748-5956	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-38	Prime	Hot Mix, Patching	Okeechobee County School Board OMS Asphalt Project Okeechobee, FL		11/10/2015	$29,752.00	12/21/2015	$29,752.00	0	Okeechobee County School Board 700 SW 2nd Ave Okeechobee, FL 34974	Brian Barret 863-462-5000	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Bob
15-39	Prime	Hot Mix, Patching	Okeechobee County School Board NES Asphalt Project Okeechobee, FL		11/10/2015	$87,036.00	12/25/2015	$87,036.00	0	Okeechobee County School Board 700 SW 2nd Ave Okeechobee, FL 34974	Brian Barret 863-462-5000	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-40	Prime	Hot Mix, Patching	Soundslinger Sundance Trails Okeechobee, FL		11/30/2015	$25,622.00	2/16/2016	$23,522.00	1	Soundslinger 2665 South Bayshore Drive Miami, FL	Chris Norman	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete

15-41	Prime	Hot Mix, Patching	B & B Site Development Buddhist Temple Okeechobee, FL		12/4/2015	$8,214.00	12/18/2015	$8,214.00	0	B & B Site 1505 S Parrott Okeechobee, FL 34974	Phil Baughman 863-763-6053	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete
15-43	Prime	Hot Mix, Patching	Palm Grove HOA Phase II Travlers Way Ft. Pierce, FL		12/10/2015	$75,854.00	4/28/2016	$75,854.00	0	Palm Grove HOA 6019 Travelers Way Fort Pierce, FL	John Zila	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Bob Gent 863-763-7373	Bob
15-44	Prime	Hot Mix, Patching	Okeechobee County School Board OHS Track Okeechobee, FL		11/10/2015	$55,952.00	8/10/2016	$55,952.00	0	Okeechobee County School Board 700 SW 2nd Ave Okeechobee, FL 34974	Brian Barret 863-462-5000	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Bob Gent 863-763-7373	Bob
15-45	Prime	Hot Mix, Patching	OUA SE 10th Street and 70 E Patching Okeechobee, FL		12/16/2015	$2,994.00	12/28/2015	$2,994.00	0	OUA 100 SW 5th Avenue Okeechobee, FL 34974	Travis Baugh Maintenance	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34974	Pete Ramsdell 863-763-7373	Pete

LYNCH PAVING & CONSTRUCTION COMPANY-JOB HISTORY

JOB #	PRIME OR SUB	CLASS OF WORK	NAME LOCATION DESCRIPTION OF PROJECT	NTO ORDERED	DATE OF CONTRACT	CONTRACT AMOUNT	LAST DAY ON JOB	Final Price W/chg Orders	# OF CHG ORDERS	OWNER'S NAME AND ADDRESS	OWNER CONTACT INFORMATION	GENERAL CONTRACTOR'S NAME & ADDRESS	CONTACT INFORMATION	PROJECT MANAGER
14-01	PRIME	HOT MIX	Jonathan's Landing Golf Club Cart Path Paving	N/A	4/3/2014	$8,707.00	4/11/2014	$14,652.00	1	Jonathan's Landing Golf Club 16823 Captain Kirle Dr Jupiter, FL 33477	Steven Schimpf 561-744-4290	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-02	PRIME	HOT MIX	Inspired Technologies Trench Repair at 707 NW 6th St, Okeechobee, FL	N/A	4/3/2014	$1,600.00	5/4/2014	$1,600.00	0	Inspired Technologies 2700 Blairstone Rd Suite E Tallahassee, FL 32301	Rodney Goodson 850-402-3743	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-03	PRIME	Hot Mix Repair Pavement	Okeechobee County School Board Okeechobee High School Pavement Repair	N/A	4/16/2014	$1,824.00	7/24/2014	$1,824.00	0	Okeechobee County School Board 700 SW 2nd Ave Okeechobee, FL 34974	Dale Barrett 863-697-2685	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-04	PRIME	Hot Mix / Repair Parking lot	Pilot Flying J Pilot Store located in Yeehaw Junction Repair parking lot	PD before NTO sent	4/14/2014	$4,514.00	4/28/2014	$4,514.00	0	Pilot Flying J, LLC 5508 Lomas Rd Knoxville, TN 37939	Doug Waters 423-790-5649	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
14-05	PRIME	Hot Mix / Repair Parking lot	Palm Grove Association Palm Grove Phase I, Travelers Way, Pony Tail Lane, Adonidia Place Alexandria Cr, Banana Lane and Petticoat Ln.	PD before NTO sent	5/20/2014	$142,660.00	6/5/2014	$147,260.00	1	Palm Grove Association, Inc. 5951 Travelers Way Ft Pierce, FL 34982	Barbara 772-461-6381	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Bob
14-06	Sub	Paving work	Dickerson FL, Inc (Bond # 105965464) Contract #S5342203, Fin: PUR01-2014-006 Widening of Bureau of Indian Affairs (BNA) Route 1300 Harney Pond Rd Brighton Seminole Indian Reservation Glades County DFI #3968	7/25/2014	5/27/2014	$292,782.80	10/23/2014	$371,795.56	1	Seminole Tribe of Florida, Inc. 6300 Stirling Rd Hollywood, FL 33024	954-966-6300	Dickerson Florida, Inc. PO Box 910 Ft Pierce, FL 34954	Larry Dale 772-429-4444	Bob
14-07	PRIME	Hot Mix	City of Okeechobee Asphalt Resurfacing & New Rd Construction	Municipality		$3,000,000.00				City of Okeechobee 55 Southeast 3rd Avenue Okeechobee, FL 34974	Patty Burnette 863-763-3372	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-697-2621	Bob
14-006	Sub	Rd & Bridge Construction	FL Dept of Transportation (Bond No 106075959) Okeechobee Trailhead at Lost - Lock 7 Contract # T-1566 Fin # 200105-7-52-01 Fed Aid # 8886332A	Municipality	6/4/2014	$171,028.00	7/3/2015	$171,028.00	0	Florida Department of Transporation 605 Suwannee St Tallahassee, FL 32399-0450	Juanita Moore	Lawrence-Lynch Corp PO Box 913 Falmouth, MA 02541	Ben Baummier 772-263-2805	Ben
14-08	SUB	Parking Lot Repairs	B & B Site Development Lucky Lanes, Okeechobee FL	7/2/2014	5/27/2014	$17,818.00	6/11/2014	$17,818.00	0	Lucky Lanes Okeechobee, FL		B & B Site Dev, Inc. 1505-C S Parrott Ave Okeechobee, FL 34974	Phil Baughman 863-634-4326	Bob
14-09	PRIME	Hot Mix & Concrete Repairs	Jupiter Hills Village Home Owners Association Jupiter Hills Village Asphalt & Concrete Repairs - SE Village Dr, the Maintenance Rd, Back Entrance, Behind the Office & Others	N/A	5/12/2014	$94,099.00	6/20/2014	$109,407.40	1	Jupiter Hills Village Home Owners Assoc 17813 SE Village Circle Tequesta, FL 33469	Craig Kunkle	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-697-2621	Bob
14-10	PRIME	Concrete / Sidewalks	City of Fort Pierce - 31st Street Sidewalk Improvements Okeechobee to Tennessee, RFB # 2014-020; LAP Project Federal Aid Funding 8886-275-A; Financial Project Id: 427613-1-58-01 Bond 106111923	Municipality	6/16/2014	$228,278.00	10/6/2014	$228,278.00	0	City of Fort Pierce PO Box 1480 Fort Pierce, FL 34954-1480	Gelencia Carter 772-467-3776	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-697-2621	Jim
14-11	PRIME	Base Rock, Hot Mix	Walpole, Inc. 9th Street Okeechobee, FL	no per Bob 7/31/14	7/9/2014	$18,609.00	7/17/2014	$18,609.00	0	Walpole, Inc 269 nW 9th St Okeechobee, FL 34972	Keith Walpole	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-697-2621	Bob
14-009	SUB	Construct Scenic Trail	FDOT - Lake Okeechobee Scenic Trail Contract # T1582 dated 7/15/14 From N of the Herbert Hoover Dike to BR to the Br E of CR 721 Bond #:	10/22/2014	7/15/2014	$156,643.00	1/23/2015	$156,643.00	0	Florida Department of Transporation 605 Suwannee St Tallahassee, FL 32399-0450	Susan Hindman 863-273-1656	Lawrence-Lynch Corp PO Box 913 Falmouth, MA 02541	Ben Baummier 772-263-2805	Ben
14-12	SUB	Hot Mix	Native American Construction Brighton Charter School 100 E Harney Pond Rd, Brighton Fl 34974	7/25/2014	7/11/2014	$24,600.00	2/2/2015	$24,600.00	0	Seminole Tribe of Florida, Inc. 2550 N 64th Ave Hollywood, FL 33024	Yenny Coile 954-894-1050	Native American Const, LLC 2971 SW 3rd Terr Okeechobee, FL 34974	Rick Wilhelm 863-824-3478	Bob
14-13	PRIME	Hot Mix	Oak Lake Villas Patching roadways throughout the development Okeechobee, FL	PD before NTO sent	6/6/2014	$2,708.00	7/24/2014	$2,708.00	0	Oak Lake Villas 2201 SW 28th St Okeechobee, FL 34972	Mike Long	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
14-14	PRIME	Hot Mix	Indiantown Cogeneration Plant Parking lot repairs Indiantown, FL	9/17/2014	8/11/2014	$13,217.00	9/11/2014	$13,217.00	0	Indiantown Cogeneration, L.P. PO Box 1799 Indiantown, FL 34956	Lisa Sutton 772-597-6500	LYNCH PAVING PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Bob
14-15	PRIME	Hot Mix	Okeechobee County Jail Okeechobee, FL	N/A	8/15/2014	$43,980.00	11/5/2014	$43,980.00	0	Okeechobee County Jail 1700 NW 9th Avenue, Ste. C Okeechobee, FL 34972	Donald Oden 863-763-0805	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Bob
14-16	Sub	Hot Mix	Ajax Paving - Intersection of Del Prado Blvd N & US 41, Fort Myers From Littleton Rd to the Charlotte County Line T1572 SR 45 (US 41) Lee 429547/425132/429099 Ajax Job # 209114	8/27/2014	8/21/2014	$27,530.00	9/16/2014	$64,600.00	1	Florida Department of Transporation 605 Suwannee St Tallahassee, FL 32399-0450	Susan Hindman 863-273-1656	Ajax Paving Ind. of Fl, LLC 510 Gene Green Rd Nokomis, FL 34275-3624	Garrett Fons 239-936-9444 239-707-0079 c	Bob
14-17	Sub		Thalle Construction Co., Inc. - Herbert Hoover Dike Rehab Structure Repl. S-273 (C-10) and S-275 (C-12) Rock Infrastructure, Palm Beach County, FL Contract No: 13-971-SC-021		8/25/2014	Cancelled		Cancelled		Department of the Army, Usace - Herbert Hoover Dike Resident Office - 12783 W Forest Hill Blvd, Ste 9E, Wellington, FL 33414		Thalle Const. Co., Inc. 900 NC 86 N Hillsborough, NC 27278	919-245-1490P 919-245-1516 F	
14-18	PRIME		Florida Fish & Wildlife Conservation Commission Road Improvements in Hungryland WEA	N/A	9/8/2014	$214,920.00	3/23/2015	$214,920.00	0	Florida Fish & Wildlife Conservation Com. 620 S Meridan Street Room 364 Tallahassee, FL 32399-1600	850-488-3427	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	
14-19	PRIME	Hot Mix	Christ Fellowship Church 701 S Parrott Ave, Okeechobee, FL Paving work in parking lot	10/1/2014	9/8/2014	$3,202.00	9/25/2014	$3,202.00	0	Christ Fellowship Church 701 S Parrott Ave Okeechobee, FL 34974	Jim St. John 561-352-7768	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
14-20	PRIME	Hot Mix	Florida Metro Construction Co., Inc SFWMD Pump Station S127 - 6 Access Road, Buckhead Ridge, FL PO #4500082391	pd same day	9/8/2014	$3,506.00	9/25/2014	$3,506.00	0	S Florida Water Mgmt District 3301 Gun Club Road West Palm Beach, FL 33406	561-682-2516	Fl Metro Const. Co., Inc 140 SW 1st Ave Dania Beach, FL 33004	Heather Green 954-921-8967	Pete

LYNCH PAVING & CONSTRUCTION COMPANY-JOB HISTORY

14-21	PRIME	Hot Mix	Harbour Ridge - Golden Marsh Cart Path Resurfacing	**10/1/2014**	9/9/2014	$172,347.20	10/30/2014	$238,408.75	1	Harbour Ridge Yacht & Country Club 12600 Harbour Ridge Blvd Palm City, FL 34990	Tim Cann or Russell Reed 772-873-6048	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-22	PRIME	Hot Mix	Jim Byrd, Paving 10628 Hwy 441 S, Okeechobee,	**10/1/2014**	9/4/2014	$17,890.00	9/26/2014	$17,890.00	0	Jimmie Clint Byrd 10628 US Hwy 441 S Okeechobee, FL 34974	Larry Houser 863-763-5519 863-597-6130c	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
14-23	PRIME	Patching	Okeechobee Utility Authority Various Intersections	**10/1/2014**	9/16/2014	$6,701.00	9/25/2014	$6,701.00	0	Okeechobee Utility Authority 370 Hwy 78 W Okeechobee, FL 34972	Travis Baugh 863-467-1599	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
14-24	PRIME	Patching	Walpole, Inc. Patch 6 areas	**10/1/2014**	9/16/2014	$6,095.00	9/26/2014	$6,095.00	0	Walpole, Inc 269 NW 9th St Okeechobee, FL 34972	Keith Walpole	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Bob
14-015	Sub	Hot Mix Repair, Milling & Resurfacing	FDOT - Asphalt Repair, Milling and Resurfacing State Highways in Highand & Okeechobee County / Contract No: E1001 Bond # 106136304 Financial Proj No 43272617222		9/22/2014	$57,336.75	2/25/2016	$230,510.13	1	FDOT 801 N Broadway Ave Bartow, FL 33830	Juan Carrillo 239-985-7884	Lawrence-Lynch Corp PO Box 913 Falmouth, MA 02541	Jim Niemchak 863-697-3419	Jim
14-25	Prime	Hot Mix Repairs	Housing Authority of the City of Fort Pierce - PO #16916 AMP 301 - Parking lot pavement repairs at BBC Acct Code: 301-443000-000000-000-009	**10/22/2014**	9/26/2014	$34,999.00	10/9/2014	$34,999.00	0	Housing Auth of Fort Pierce 511 Orange Ave Fort Pierce, FL 34950	Corey Paul 772-429-6435	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
14-26	Prime	Hot Mix	Jonathan's Landing Golf Club - Maintenance Facility located off Long Pond Terrace	**10/22/2014**	10/1/2014	$64,113.59	10/17/2014	$72,298.59	1	Jonathan's Landing Golf Club 18505 SE Clubhouse Dr Jupiter, FL 33478	Donald Taylor	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-27	Prime	Sidewalk	FDOT - Bond #106136313 Sidewalk from W of Hardee Street to Main St in Labelle Fin #: 430893-1-52-01 Contract #: T1A11	**FDOT**	10/28/2014	$116,590.79	2/2/2015	$116,590.79	0	FDOT 2981 NE Pine Island Rd Cape Coral, FL 33909	Juan Carrillo 239-985-7884	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Jim Niemchak 863-697-3419	Jim
14-28	Prime	Sidewalk	FDOT - Bond #106136313 Sidewalk from SWC Own Ave to Arroyo Ave in Clewiston Fin #: 430894-1-52-01 Contract #: T1A11	**FDOT**	10/28/2014	$122,622.80	2/2/2015	$122,622.80	0	FDOT 2981 NE Pine Island Rd Cape Coral, FL 33909	Juan Carrillo 239-985-7884	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Jim Niemchak 863-697-3419	Jim
14-29	Sub	Mill & Pave Parking Lot	J. Ranck Electric, Inc. Tesla Supercharging Station - Fort Drum Turnpike Service Station Contract No: 214135-002 Job #: 214135	**11/7/2014**	10/20/2014	$9,657.00	11/18/2014	$9,657.00	0			J. Ranck Electric, Inc. 1993 Gover Parkway Mt Pleasant, MI 48858	Adam Gohs 800-792-3822	Pete
14-30	Prime	Sidewalk	City of Port St Lucie - Contract #20140102 / PO #20150216-00 Bayshore Blvd Sidewalk Construction Project - from Prima Vista Blvd North to Selvitz Rd. LPA Funded / Bond #: 106179487	**1/20/2015**	12/26/2014	$526,951.60	4/23/2015	$461,707.06	2	City of Port St Lucie 121 SW Port St Lucie Blvd Port St Lucie, FL 34984	Robyn Holder 772-871-5223	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Ben Baummier 772-263-2805	Ben
14-31	Prime	Parking Lot Repairs	Pilot Flying J, LLC Parking lot repairs in Yeehaw Junction	**PD before NTO sent**	11/4/2014	$2,922.00	11/5/2014	$2,922.00	0	Pilot Flying J, LLC 5508 Lomas Rd Knoxville, TN 37939	Doug Waters 423-790-5649	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
14-32	Prime	Parking Lot Repairs	OCSB - Everglades Elementary School (PO # 9151500163 $723.00) Okeechobee High School parking lot repairs (PO# 9151500162 $4385.00) Seminole Elementary School (PO # 151500164 $623.00)		11/3/2014	$5,731.00	3/16/2015	$5,731.00	0	Okeechobee County School Board 700 SW 2nd Ave Okeechobee, FL 34974	Faye Hickman 863-462-5000	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-33	Prime		Isle of Grenada Home Owner's Association Zanzibar Place and Catania Circle , Port St Lucie	**PD before NTO sent**	11/7/2014	$82,211.00	11/12/2014	$82,211.00	0	Isle of Grenada Home Owner's Association 233 Zanzibar Cir Port St Lucie, FL	Murray Babbitt	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-34	Prime	Mill and Pave	Wilson Petroleum Equipment Texaco - 7280 N Military Trail, Riviera Beach, FL NE Corner of Blue Heron Blvd & Military Trail	**1/20/2015**	11/13/2014	$52,190.00	12/17/2014	$53,235.00	1	Wilson Petroleum Equipment, Inc. 1803 S 31st Street Fort Pierce, FL 34947	Robert Kennedy 772-468-3689	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-35	Prime	Base Rock, Gravel	Jonathan's Landing Golf Club Construct Gravel Path	**1/20/2015**	12/6/2014	$20,580.00	12/23/2014	$20,580.00	0	Jonathan's Landing Golf Club 18505 SE Clubhouse Dr Jupiter, FL 33478	Steven Schimpf 561-744-4290	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-36	Prime	Hot Mix, Patching, Repairs	Okeechobee County BOCC Various Road Maintenance							Okeechobee County BOCC	Donnie Oden 763-6441	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-37	Prime	Mill & Pave Roadways	Lake Charles HOA Mill and pave roadways.		12/16/2014	$2,367.00	1/15/2015	$2,617.00	1	Lake Charles HOA 3055 Cardinal Dr, Suite 200 Vero Beach, FL 32963	Erika Turner 772-214-7123	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-38	Prime	Prime / Tack & Pave	Gator Environmental Sitework Starbucks in Cocoa - 2nd Prime - tack and pave only	Cancelled	12/16/2014	7,600.00	Cancelled			Gator Environmental Sitework, LLC 7290 Waelti Dr Melbourne, FL 32940	L.A. Waelti 321-639-2583	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-38	Prime	Mill & Hot Mix	Hendry County - CR 78, Phase III, Crescent Ave SW to Nobles Rd, & Phase VI, Crescent Ave SW to Old N River Rd. Bond # 106179491 / FM 431886-1-58-01 & 428157-1-58-01 Contract #: 2014-18		1/22/2015	$1,295,987.40	8/22/2016	$1,263,055.69	2	Hendry County PO Box 2340 LaBelle, FL 33975	Kelly O'Nan 863-675-5222	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Jim
14-38B	Prime	Mill & Hot Mix	Hendry County - CR 78, Phase IV, Crescent Ave SW to Nobles Rd, & Phase VI, Crescent Ave SW to Old N River Rd. Bond # 106179491 / FM 431886-1-58-01 & 428157-1-58-01 Contract #: 2014-18		1/22/2015	$2,379,871.45	8/22/2016	$2,429,305.37	2	Hendry County PO Box 2340 LaBelle, FL 33975	Kelly O'Nan 863-675-5222	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Jim
14-39	Sub	Mill & Hot Mix	B & B Site Development USPS - Okeechobee FL MPO - Replace Pavement 1000 SR 70 East, Okeechobee, FL 34972 Contract #: E17529 Bond #: 92916577	**1/28 OARMC**	1/2/2015	$256,778.00	4/10/2015	$256,778.00	0	United States Postal Service 44715 Prenctice Dr, Room 2110 Dulles, VA 20101-9998	703-406-6332	B & B Site Dev, Inc. 1505-C South Parrot Ave. Okeechobee, FL 34974	Phil Baughman (863) 763-6053	Bob
14-40	Sub	Hot Mix	B & B Site Development Brighton Town Homes		1/19/2015	$72,990.00	3/13/2015	$67,380.40	2	Seminole Tribe of Florida, Inc. 2550 N 64th Ave		B & B Site Dev, Inc. 1505-C South Parrot Ave.	Phil Baughman (863) 763-6053	Bob

LYNCH PAVING & CONSTRUCTION COMPANY-JOB HISTORY

									Hollywood, FL 33024		Okeechobee, FL 34974		
14-41	Prime	Mill & Hot Mix	Palm Grove HOA Phase III Travelers Way Plus 6 Side Streets		3/26/2015	$160,909.50	6/2/2015	$160,909.50	0	Palm Grove Home Owner's Association 5951 Travelers Way Fort Pierce, FL 34982	John Zila 772-461-6381	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-42	Prime	Mill / Hot Mix / Underground	Glades County BOCC CR 720 / Glades County Roadway Improvements, Glades County Fin Project ID: 430210-1-58-01		2/10/2015	$713,994.66	5/6/2015	$739,655.97	1	Glades County BOCC 500 Ave J SW Moore Haven, FL 33471	Kathy Hanagan 239-334-0046	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Ben
14-43	Prime	Mill & Hot Mix	Seminole Tribe of Florida - Public Works Paving on Jones Rd PO # 10-90048		1/26/2015	$4,927.00	2/3/2015	$4,927.00	0	Seminole Tribe of Florida PO Box 840939 Pembrooke Pines, FL 33084	Mark McPartland 954-214-8290	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Pete
14-44	Prime	Milling, Drainage, Hot Mix, Concrete Curbs	SR 66 Highlands County Adding turn lanes, milling and resurfacing, widening, shoulder treatment, drainage improvements, curb and gutters @ SR 66 intersection of SR 25 (US 27) Fin No: 430060-1-52-01, Contract #: E1N71		2/23/2015	$567,386.59	8/14/2015	$532,743.59	3	Florida DOT 801 N Broadway Bartow, FL 33830	Amy Richey 863-519-2559	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-45	Prime	Speed Table	City of Port St Lucie - Contract #: 20150038 Construction of 2 Speed Tables on Trenton Lane		5/25/2014	$22,500.00	3/17/2015	$22,500.00	0	Florida DOT 801 N Broadway Bartow, FL 33830		Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-46	Prime	Hot Mix	Ray Fuller 1821 SE 6th Lane, Okeechobee, FL Patch 2 damaged areas		2/4/2015	$6,850.00	2/24/2015	$6,850.00	0	Ray Fuller 1821 SE 6th Lane Okeechobee, FL 34974	Ray Fuller 863-763-3015	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete
14-47	Sub	Hot Mix	Hubbard Construction SR 710, MP 2.0 to SW Fox Brown Line FDOT #E4P15 GFA #: 15-0387-00 Patch 2 damaged areas		2/23/2015	$1,807,729.00	7/28/2016	$1,787,955.12	2	Hubbard Construction 1030 Wallace Dr Ste C Delray Beach, FL	Edwin Jacobs 954-790-6511	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Bob Gent 863-763-7373	Bob
14-48	Prime	Hot Mix	Pilot Flying J - Parking lot repairs Yeehaw Junction PO # 674435		3/9/2015	$4,258.00	3/10/2015	$4,258.00	0	Pilot Flying J, LLC 5508 Lomas Rd Knoxville, TN 37939	Doug Waters 423-790-5649	Lynch Paving & Const PO Box 1994 Okeechobee, FL 34973	Pete Ramsdell 863-763-7373	Pete

BILL OF SALE AND ASSIGNMENT

This **BILL OF SALE AND ASSIGNMENT** (this "Bill of Sale") is made this 28 day of Feb, 2019, by and among (i) **C. W. Roberts Contracting, Incorporated**, a Florida corporation (the "Purchaser"), and (ii) **Lynch Paving & Construction Co., Inc.**, a Florida corporation, and **Okeechobee Asphalt & Ready Mixed Concrete, Inc.**, a Florida corporation (each, a "Seller," and together, the "Sellers").

Recital

WHEREAS, the Purchaser and the Sellers, together with Lawrence-Lynch Corp., a Massachusetts corporation, have entered into that certain Asset Purchase Agreement, dated as of February 28, 2019 (the "Purchase Agreement"), pursuant to which, upon the terms and subject to the conditions set forth therein, the Sellers have agreed to sell, assign, convey, transfer and deliver to the Purchaser, and the Purchaser has agreed to purchase and acquire from the Sellers, the Purchased Assets, as defined in the Purchase Agreement.

Agreement

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Purchaser and the Sellers hereby agree as follows:

1. Sale, Transfer and Assignment. Subject to the terms and conditions of this Bill of Sale and the Purchase Agreement, the Sellers hereby irrevocably and unconditionally sell, assign, transfer and deliver to the Purchaser all of the Sellers' right, title and interest in and to the Purchased Assets that constitute personal property, and the Purchaser hereby accepts such sale, assignment, transfer and delivery.

2. No Modification. This Bill of Sale is made pursuant to, and is subject to the terms and conditions of, the Purchase Agreement. Nothing contained in this Bill of Sale is intended to or shall be deemed to limit, restrict, modify, alter, amend or otherwise change in any manner any of the representations, warranties, rights or obligations of the Sellers or the Purchaser under the Purchase Agreement, and in the event of any conflict between the terms and provisions hereof and the terms and provisions of the Purchase Agreement, the terms and provisions of the Purchase Agreement shall control.

3. Counterparts. This Bill of Sale may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.

[Signature page follows.]

IN WITNESS WHEREOF, this Bill of Sale has been duly executed and delivered by a duly authorized representative of each of the undersigned parties as of the date first above written.

PURCHASER:

C.W. Roberts Contracting, Incorporated

By: R. Alan Palmer

Printed Name: R. ALAN PALMER

Title: VICE PRESIDENT

SELLERS:

Lynch Paving & Construction Co., Inc.

By: _____

Printed Name: Christopher M. Lynch

Title: President

Okeechobee Asphalt & Ready Mixed Concrete, Inc.

By: _____

Printed Name: Christopher M. Lynch

Title: President

CORPORATE OFFICE
3372 Capital Circle NE
Tallahassee, Florida 32308
Phone: (850) 385-5060 • Fax: (850) 385-5420

HOSFORD OFFICE
P.O. Box 188
Hosford, Florida 32334
Phone: (850) 379-8116 • Fax: (850) 379-8188

FREEPORT OFFICE
160 Industrial Park Road
Freeport, Florida 32439
Phone: (850) 835-3500 • Fax: (850) 835-3519

CONTRACTING, INC.

WILDWOOD OFFICE
4208 County Road 124-A
Wildwood, Florida 34785
Phone: (352) 330-2540 • Fax: (352) 330-2609

PANAMA CITY OFFICE
1603 Bay Avenue
Panama City, Florida 32405
Phone: (850) 769-6640 • Fax: (850) 769-7775

PLANT CITY OFFICE
2102 Jim Johnson Road
Plant City, Florida 33566
Phone: (813) 756-2009 • Fax: (813) 659-4436

March 1, 2019

RE: Acquisition of Lynch Paving & Construction Co., Inc., and Okeechobee Asphalt & Ready Mixed Concrete, Inc.

To Whom It May Concern:

This letter will confirm that, effective February 28, 2019, C.W. Roberts Contracting, Incorporated, a Florida corporation, acquired all of the assets and ongoing operations of Lynch Paving & Construction Co., Inc., a Florida corporation, and Okeechobee Asphalt & Ready Mixed Concrete, Inc., a Florida corporation. Please feel free to contact me if any additional information is needed regarding this transaction.

Sincerely,

R. Alan Palmer
Vice President
C.W. Roberts Contracting, Incorporated

CONTRACT PLANS

OHIO AVENUE
ROADWAY IMPROVEMENTS

INDEX OF ROADWAY PLANS

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7 - 8	PLAN & PROFILE
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18	SIGNING & MARKING
18A	GUIDE SIGN DETAIL SHEET
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22	IRRIGATION GENERAL NOTES
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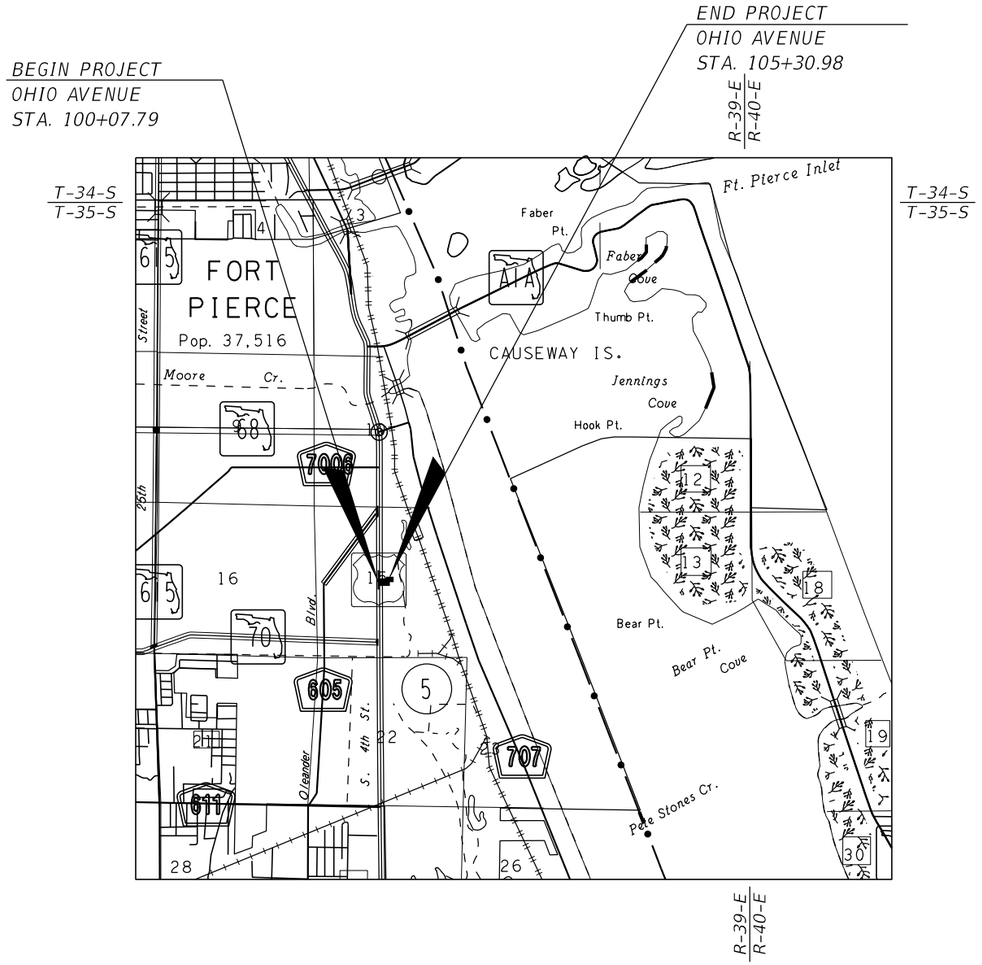
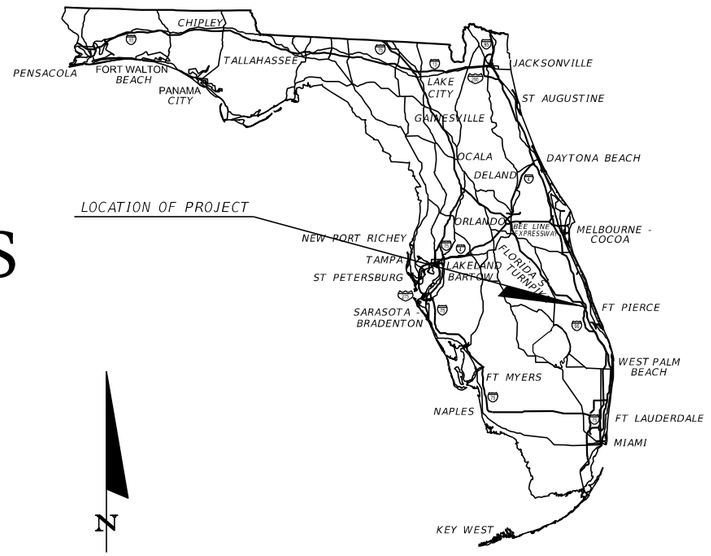
34-38	TEMPORARY TRAFFIC CONTROL DETAILS

BEGIN PROJECT
OHIO AVENUE
STA. 100+07.79

END PROJECT
OHIO AVENUE
STA. 105+30.98





ROADWAY SHOP DRAWINGS
TO BE SUBMITTED TO:

KIMLEY-HORN AND ASSOCIATES, INC.
BRIAN GOOD, P.E.
445 24th STREET, SUITE 200
VERO BEACH, FLORIDA 32960

PLANS PREPARED BY:

Kimley»Horn

445 24th STREET, SUITE 200
VERO BEACH, FL 32960
TEL (772) 794-4100
PROJECT NUMBER: 047922018
CERTIFICATE OF AUTHORIZATION: 00000696

ROADWAY PLANS
ENGINEER OF RECORD: BRIAN GOOD, P.E.

P.E. NO.: 56939

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGED DUE TO REPRODUCTION.

PREPARED FOR:

CITY OF FORT PIERCE

100% SUBMITTAL FEBRUARY 2018

SHEET NO.
1

SUMMARY OF PAY ITEMS

ROADWAY PAY ITEMS			
101-1	MOBILIZATION	LS	1
102-1	MAINTENANCE OF TRAFFIC	LS	1
102-104A	TEMPORARY SIGNALIZATION AND MAINTENANCE, INTERSECTION	LS	1
102-107-1A	TEMPORARY TRAFFIC DETECTION AND MAINTENANCE, INTERSECTION	LS	1
104-10-3	SEDIMENT BARRIER (SILT FENCE TYPE III)	LF	775
104-18	INLET PROTECTION SYSTEM	EA	9
110-1-1	CLEARING & GRUBBING	LS	1
108-1	AS-BUILTS/ RECORD DRAWINGS (EXCLUDING POTABLE WATER MAIN)	LS	1
120-1	REGULAR EXCAVATION	CY	1,010
120-6	EMBANKMENT	CY	94
160-4	TYPE "B" STABILIZATION	SY	2,165
285-706	CEMENTED CCQUINA LBR 100 (8")	SY	2,005
334-1-13A	SUPERPAVE ASPHALTIC CONCRETE (TYPE SP-9.5) (TRAFFIC C) (1.0")	TN	111
334-1-13B	SUPERPAVE ASPHALTIC CONCRETE (TYPE SP-12.5) (TRAFFIC C) (1.5")	TN	166
425-1-201	INLETS (CURB) (TYPE P-9) (<10')	EA	4
425-2-62	MANHOLE (P-8) (>10')	EA	2
425-5	MODIFY EXISTING STRUCTURE	EA	1
425-5-1	MANHOLE ADJUST (UTILITIES)	EA	2
425-6	VALVE BOX (ADJUST)	EA	6
430-171-125	CONC. PIPE CULVERT (18" SS) (CLASS III)	LF	237
430-174-124	CONC. PIPE CULVERT (24" SS) (CLASS III)	LF	236
430-175-218	CONC. PIPE CULVERT (14"x23" SS) (CLASS III)	LF	57
430-175-224	CONC. PIPE CULVERT (19"x30" SS) (CLASS III)	LF	71
520-1-10	CONCRETE CURB & GUTTER (TYPE F)	LF	730
520-2-2	CONCRETE CURB (TYPE B)	LF	81
520-2-4	CONCRETE CURB (TYPE D)	LF	484
522-1	CONCRETE SIDEWALK, 4" THICK (FIBER, 1.0 LB/CY)	SY	437
522-2	CONCRETE SIDEWALK, 6" THICK (FIBER, 1.0 LB/CY)	SY	200
523-1	PATTERNED PAVEMENT (8" THICK) (STAMPED CONCRETE)	SY	53
527-2	DETECTABLE WARNINGS	SF	47
1644-800	FIRE HYDRANT RELOCATE	EA	1
700-0-AA	MONUMENT SIGN	LS	1

LANDSCAPE PAY ITEMS			
162-1-13	PREPARED SOIL AMENDMENT	CY	204
570-1-2A	PERFORMANCE TURF, SOD (BAHIA)	SY	112
570-1-2B	PERFORMANCE TURF, SOD (FLORATAM ST. AUGUSTINE)	SY	1,700
580-1-A	MULCH (FLORIMULCH)	CY	22
580-4-392	LIVISTONA CHINENSIS / CHINESE FAN PALM 8' CT	EA	3
580-4-393	LIVISTONA CHINENSIS / CHINESE FAN PALM 10' CT	EA	3
580-5-993	LAGERSTROEMIA X 'MUSKOGEE' / LAVENDER CRAPE MYRTLE	EA	14
580-7-103	MUHLENBERGIA CAPILLARIS / PINK MUHLY	EA	64
580-7-253	FICUS MICROCARPA 'GREEN ISLAND' / GREEN ISLAND FICUS	EA	109
580-7-303	LOROPETALUM CHINESE 'PURPLE PIXIE' / PURPLE PIXIE LOROPETALUM	EA	37
580-7-983	RHAPHIOLEPIS INDICA 'ALBA' / WHITE INDIAN HAWTHORN	EA	27
580-7-993	TULBAGHIA VIOLACEA / SOCIETY GARLIC	EA	414
590-1	IRRIGATION SYSTEM (COMPLETE)	LS	1

SIGNING AND PAVEMENT MARKING PAY ITEMS			
700-1-11	SINGLE POST SIGN (F&I) (<12 SF)	EA	7
700-1-50	SINGLE POST SIGN (RELOCATE)	EA	1
706-3	RETRO-REFLECTIVE PAVEMENT MARKERS	EA	73
710-11-290	PAINTED PAVEMENT MARKING (ISLAND NOSE) (YELLOW)	SF	89
711-11-121	THERMOPLASTIC PAVEMENT MARKINGS (6" SOLID) (WHITE)	LF	830
711-11-123	THERMOPLASTIC PAVEMENT MARKINGS (12" SOLID) (WHITE)	LF	75
711-11-125	THERMOPLASTIC PAVEMENT MARKINGS (24" SOLID) (WHITE)	LF	682
711-11-170	THERMOPLASTIC PAVEMENT MARKING (ARROW)	EA	5
711-11-221	THERMOPLASTIC PAVEMENT MARKINGS (6" SOLID) (YELLOW)	LF	762
711-11-224	THERMOPLASTIC PAVEMENT MARKINGS (18" SOLID) (YELLOW)	LF	21
711-16-131B	THERMOPLASTIC PAVEMENT MARKINGS (6" SKIP, 10'-30') (WHITE)	LF	160
711-16-231A	THERMOPLASTIC PAVEMENT MARKINGS (6" SKIP, 6'-10') (YELLOW)	LF	348
711-16-231B	THERMOPLASTIC PAVEMENT MARKINGS (6" SKIP, 2'-4') (YELLOW)	LF	65

SIGNALIZATION PAY ITEMS			
630-2-11	CONDUIT (SIGNAL) (F & I) (OPEN TRENCH)	LF	198
630-2-12	CONDUIT (SIGNAL) (F & I) (DIRECTIONAL BORE)	LF	1,185
632-7-1	CABLE (SIGNAL) (F & I)	PI	1
632-7-6	SIGNAL CABLE (REMOVE) (INTERSECTION)	PI	1
633-1-121	FIBER OPTIC CABLE (F & I) (UNDERGROUND) (12 FIBERS)	LF	270
633-2-31	FIBER OPTIC CONNECTION (INSTALL) (SPLICE)	EA	12
633-2-32	FIBER OPTIC CONNECTION (INSTALL) (TERMINATION)	EA	12
635-2-11	PULL BOX (F & I) (TRAFFIC SIGNAL)	EA	21
635-2-12	PULL BOX (F & I) (FIBER OPTIC) (24" X 36")	EA	1
639-1-112	ELECTRICAL POWER SERVICE (SIGNALS) (ABOVE GROUND) (METER PURCHASED BY CONTRACTO	AS	1
639-1-610	ELECTRICAL POWER SERVICE (REMOVE) (OVERHEAD)	AS	1
639-2-1	ELECTRICAL SERVICE WIRE (F & I)	LS	1
639-3-11	ELECTRICAL SERVICE DISCONNECT (F & I) (POLE MOUNTED)	EA	1
641-2-12	PRESTRESSED CONC. POLE (F & I) (TYPE P-II SERVICE POLE)	EA	1
641-2-80	PRESTRESSED CONCRETE POLE (COMPLETE POLE REMOVAL)	EA	4
646-1-11	ALUMINUM SIGNALS POLE (PEDESTAL)	EA	5
646-1-60	ALUMINUM SIGNALS POLE (REMOVE)	EA	1
649-21-1	STEEL MAST ARM ASSEMBLY (F & I) (SINGLE ARM) (30')	EA	1
649-21-9	STEEL MAST ARM ASSEMBLY (F & I) (DOUBLE ARM) (50' - 50')	EA	1
649-21-10	STEEL MAST ARM ASSEMBLY (F & I) (SINGLE ARM) (60')	EA	1
650-1-24	TRAFFIC SIGNAL (F & I) (POLYCARBONATE W/ ALUM TOP) (3-SECTION) (1-WAY)	AS	4
650-1-29	TRAFFIC SIGNAL (F & I) (POLYCARBONATE W/ ALUM TOP) (5-SECTION) (1-WAY) (CLUSTER)	AS	4
653-1-11	PEDESTRIAN SIGNAL (F & I) (LED-COUNTDOWN) (1-WAY)	AS	8
660-4-11	VEHICLE DETECTION SYSTEM (F & I) (VIDEO) (CABINET EQUIPMENT)	EA	1
660-4-12	VEHICLE DETECTION SYSTEM (F & I) (VIDEO (ABOVE GROUND EQUIPMENT)	EA	4
663-1-111	SIGNAL PRIORITY AND PREEMPTION (F & I) (OPTICAL) (CABINET ELECTRONICS)	EA	1
663-1-112	SIGNAL PRIORITY AND PREEMPTION (F & I) (OPTICAL) (DETECTOR)	EA	4
665-1-11	PEDESTRIAN DETECTOR (F & I) (STANDARD)	EA	8
670-5-111	TRAFFIC CONTROLLER ASSEMBLY (F & I) (NEMA) (ONE PREEMPTION PLAN)	AS	1
670-5-600	TRAFFIC CONTROLLER ASSEMBLY (REMOVE CONTROLLER WITH CABINET)	AS	1
684-1-1	MANAGED FIELD ETHERNET SWITCH (F & I)	EA	1
685-1-11	UNINTERRUPTIBLE POWER SUPPLY (F & I) (LINE INTERACTIVE)	EA	1
700-5-21	INTERNALLY ILLUMINATED SIGN (F & I) (OVERHEAD MOUNT, 12 - 18 SF)	EA	2
700-5-22	INTERNALLY ILLUMINATED SIGN (F & I) (OVERHEAD MOUNT, 12 - 18 SF)	EA	2
715-1-11	LIGHTING CONDUCTORS (F & I) (INSULATED, No. 10 OR <)	LF	1,149
715-5-11	LUMINAIRE & BRACKET ARM (F & I) (ALUMINUM)	EA	3

PAY ITEM FOOTNOTES

101-1	COST TO INCLUDE HYDRO BLASTING ALL CONFLICTING STRIPING
285-706	THE COST OF THE PRIME COAT SHALL BE INCLUDE IN THE PRICE OF THE BASE
334-1-1-13X	THE COST OF THE TACK COAT SHALL BE INCLUDED IN THE PRICE OF THE ASPHALT
570-1-2X	COST TO INCLUDE, SOD, FERTILIZER, MOWING, WATERING AND ALL INCIDENTAL ITEMS NECESSARY
590-1	COST TO INCLUDE, BUT NOT LIMITED TO, PVC CONDUIT, PVC SLEEVES, IRRIGATION HEADS, VALVE BOXES, FLEX PIPE, FITTINGS, PUMP, CONTROLLER, POWER SUPPLY, ETC. AND ALL ITEMS NECESSARY TO PROVIDE A FULLY FUNCTIONAL IRRIGATION SYSTEM.
700-00-AA	COST TO INCLUDE BUT NOT LIMITED TO CONCRETE, STEEL, STUCCO, CORRAL VENEER PAINT, LETTERING, ACRYLIC LOGO SIGNAGE, CAPS, BUILDING PERMIT FEES AND ALL APPURTENANCES
711-XX-XXX	COST TO INCLUDE TEMPORARY PAINT STRIPING

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
2/20/18	EJK	1. PER KHA CLARIFICATION			

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SUMMARY OF PAY ITEMS

SHEET NO. 2

GENERAL NOTES

1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO APPLICABLE STANDARDS AND SPECIFICATIONS OF THE CITY OF FORT PIERCE, FLORIDA STANDARD CONTRACT DOCUMENTS AND SPECIFICATIONS FOR PUBLIC WORK PROJECTS, LATEST ISSUE.

2. CONSTRUCTION DETAILS SHALL BE IN ACCORDANCE WITH STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN STANDARDS FY 2017-2018, LATEST ISSUE.

3. THE INFORMATION PROVIDED IN THESE DRAWINGS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF CONDITIONS WHICH WILL BE ENCOUNTERED DURING THE COURSE OF WORK. THE CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSION REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH BIDS WILL BE BASED.

4. LOCATIONS, ELEVATIONS AND DIMENSIONS OF EXISTING UTILITIES AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND OTHER FEATURES AFFECTING HIS/HER WORK PRIOR TO CONSTRUCTION, AND NOTIFY THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT IMMEDIATELY WHEN CONFLICT BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED. THE CONTRACTOR SHALL WORK AS NEEDED TO AVOID CONFLICT WITH EXISTING UTILITIES (NO ADDITIONAL COST SHALL BE PAID FOR THIS WORK). EXISTING UTILITIES SHALL BE MAINTAINED IN SERVICE DURING CONSTRUCTION UNLESS OTHERWISE APPROVED BY THE UTILITY OWNER.

PRE-TRENCHING IN THE ALIGNMENT AND GRADE OF PROPOSED PIPES, STRUCTURES, CONDUITS AND/OR SUB-GRADE SHALL BE PERFORMED FOURTEEN DAYS IN ADVANCE OF ITS CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE UNDERGROUND UTILITY OWNERS AND THE CITY WITH A FOURTEEN DAY ADVANCE NOTICE OF ANY CONFLICT WITH PROPOSED CONSTRUCTION. PAYMENT FOR PRE-TRENCHING, SURVEY, AND BACKFILLING SHALL BE INCLUDED IN THE UNIT COST OF THE RELATED BID ITEM FOR WORK BEING DONE.

5. THE CONTRACTOR SHALL COORDINATE WITH UTILITIES TO ARRANGE RELOCATION AND TEMPORARY SUPPORT OF UTILITY FEATURES, ETC. AS NECESSARY TO COMPLETE THE WORK.

6. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT. THE CONTRACTOR WILL RECEIVE NO DIRECT PAYMENT TO SUPPORT AND/OR PROTECT ANY AND ALL UTILITIES. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF THE RELATED BID ITEM FOR WORK BEING DONE.

7. THE CONTRACTOR SHALL GIVE AT LEAST 48 HOURS NOTICE TO UTILITY COMPANIES TO PROVIDE FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT UTILITIES NOTIFICATION CENTER AT 1-800-432-4770.

8. THE CONTRACTOR IS REQUIRED TO OBTAIN ALL APPLICABLE CONSTRUCTION PERMITS PRIOR TO START OF CONSTRUCTION.

9. THE CONTRACTOR SHALL NOTIFY THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT AND CITY'S FIELD REPRESENTATIVE, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY FDOT DISTRICT 4, AT LEAST 48 HOURS PRIOR TO CONSTRUCTION WITHIN FDOT RIGHT-OF-WAY, FDOT CONTACT: MR. DANIEL HIDEN, 3601 OLEANDER AVENUE, FORT PIERCE, FL 34982, 772-465-7396.

10. THE CONTRACTOR SHALL CONTACT THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT AND CITY'S FIELD REPRESENTATIVE IMMEDIATELY OF ANY CONFLICT ARISING DURING CONSTRUCTION OF ANY IMPROVEMENTS SHOWN ON THESE DRAWINGS.

11. B.M. DATA IS NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

ANY NAVD 88 MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF BEING DAMAGE, NOTIFY:
GEODETIC INFORMATION CENTER
ATTN: MARK MAINTENANCE SECTION N/CG-162
6001 EXECUTIVE BLVD.
ROCKVILLE MARYLAND 20852

12. EXISTING SECTION CORNERS AND 1/4 SECTION CORNERS, AND OTHER LAND MARKERS OR MONUMENTS LOCATED WITHIN PROPOSED CONSTRUCTION ARE TO BE REFERENCED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND RESET AFTER CONSTRUCTION USING REGISTERED LAND SURVEYOR LICENSED IN THE STATE OF FLORIDA.

13. STORM SEWER PIPE LENGTHS SHOWN ARE APPROXIMATE, AND MAY BE ADJUSTED AS REQUIRED UPON APROVAL BY THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT.

14. INSTALLATION OF ALL STORM SEWERS, INLETS, MANHOLES AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT AND FDOT DESIGN STANDARDS AS INDICATED ON THE DRAWINGS. ALL REINFORCED CONCRETE PIPE SHALL BE CLASS III PIPE.

15. ALL CATCH BASINS AND PIPE INVERTS SHALL BE AS INDICATED ON THE DRAWINGS.

16. CONTRACTOR SHALL ADJUST ALL UTILITY LIDS AND COVERS TO FINISHED GRADE AS REQUIRED.

17. ALL COMPLETED DRAINAGE STRUCTURES SHALL BE PROTECTED FROM CONTAMINATION BY SILT AND CONSTRUCTION DEBRIS. THE CONTRACTOR SHALL PLACE PLYWOOD ON, OR FILTER FABRIC BETWEEN FRAME AND INLET GRATE UNTIL CONSTRUCTION OPERATIONS ARE COMPLETED. ALL DRAINAGE STRUCTURES (EXISTING AND PROPOSED) WITHIN PROJECT LIMITS SHALL BE CLEANED PRIOR TO FINAL ACCEPTANCE. PAYMENT FOR THIS WORK SHALL BE INCLUDED IN THE UNIT COST OF THE RELATED BID ITEM FOR WORK BEING DONE.

18. CONTRACTOR TO COORDINATE WITH FDOT DISTRICT 4 CONSTRUCTION ENVIRONMENTAL COORDINATOR FOR LOCATION OF STAGING AND STOCKPILING AREAS.

19. THE CONTRACTOR SHALL REPLACE ALL PAVING, STABILIZING EARTH, DRIVEWAYS SIDEWALKS, ETC. WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE CITY OF FORT PIERCE FIELD ENGINEER OF FDOT FIELD REPRESENTATIVE.

20. THE CONTRACTOR SHALL NOT ENCROACH INTO PRIVATE PROPERTY WITH PERSONNEL, MATERIAL OR EQUIPMENT WITHOUT WRITTEN PERMISSION FROM THE PROPERTY OWNER.

21. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE, REMOVAL OR MODIFICATION, ACCIDENTALLY OR PURPOSELY, CAUSED TO ANY IRRIGATION SYSTEMS, PRIVATE OR PUBLIC. THE CONTRACTOR SHALL REPLACE ANY DAMAGED, REMOVED, OR MODIFIED IRRIGATION PIPES, SPRINKLER HEADS OR OTHER PERTINENT APPURTENANCES AT NO ADDITIONAL COST.

22. REGARDING MAIL BOXES, WALLS, FENCES, SECURITY GATE TRACKING, OR OTHER PRIVATE PROPERTY OR IMPROVEMENTS THAT SHALL BE TEMPORARILY RELOCATED AND REPLACED, THE CONTRACTOR SHALL COORDINATE WITH THE APPROPRIATE OWNER. ANY AND ALL COSTS ASSOCIATED WITH COORDINATING, REMOVING, AND REPLACING ANY PROPERTY ITEMS SHALL BE INCLUDED IN THE UNIT COST OF THE RELATED BID ITEM FOR WORK BEING DONE.

23. CONTRACTOR SHALL PROVIDE MAINTENANCE OF TRAFFIC IN ACCORDANCE WITH FDOT INDEX 600 SERIES, MUTCD AND THESE PLANS. THE CONTRACTOR SHALL MAINTAIN AT ALL TIMES VEHICULAR AND PEDESTRIAN ACCESS TO ALL RESIDENCES AND/OR BUSINESS. CONTRACTOR SHALL PROVIDE A PEDESTRIAN DETOUR PLAN UTILIZING VIRGINIA AVENUE AND PARKWAY DRIVE AS ALTERNATE ROUTES.

24. NO TREES ARE TO BE REMOVED OR RELOCATED WITHOUT PRIOR APPROVAL FROM THE CITY OF FORT PIERCE FIELD ENGINEER (CITY PERMIT REQUIRED FOR ANY TREE REMOVAL).

25. COMPLETE 'AS-BUILT' INFORMATION RELATIVE TO LOCATION, SIZE AND DEPTH OF NEW PIPES, MANHOLES, INLETS, ETC., SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR AND SUBMITTED (SIGNED AND SEALED BY A FLORIDA CERTIFIED P.LS.) TO THE CITY OF FORT PIERCE, ENGINEERING DEPARTMENT PRIOR TO FINAL ACCEPTANCE OF THE WORK. ALL RECORD INFORMATION ON EXISTING UTILITY CROSSINGS ENCOUNTERED DURING CONSTRUCTION, INCLUDING BUT NOT LIMITED TO PIPES, INLETS, MANHOLE, ETC., SHALL BE RECORDED BY A FLORIDA REGISTERED SURVEYOR AND SHOWN ON THE RECORD DRAWINGS. THE COST OF SIGNED AND SEALED AS-BUILTS (5 COPIES) SHALL BE INCLUDED IN OVERALL BID AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

26. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE INTEGRITY OF AND MAKING THE REPAIRS OF EXISTING PAVEMENT, SIDEWALKS, PIPES, CONDUITS, CURBS, CABLES, ETC., WHETHER OR NOT SHOWN ON THE PLANS DAMAGED AS A RESULT OF THE CONTRACTORS OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS, AND SHALL RESTORE THEM PROMPTLY AT NO ADDITIONAL EXPENSE TO THE OWNER OR THE CITY OF FORT PIERCE OR FDOT. CONTRACTOR SHALL REPORT ANY DAMAGE TO SIDEWALK, DRIVEWAY, ETC., TO THE ENGINEER OF RECORD PRIOR TO BEGINNING WORK IN ANY AREA.

27. ALL DRAINAGE PIPES SHALL BE APPROVED BY CITY OF FORT PIERCE ENGINEERING DEPARTMENT. THE CONTRACTOR SHALL CONSTRUCT A FILTER FABRIC JACKET AT ALL PROPOSED STORM SEWER JOINTS AS PER FDOT STANDARDS. COST OF FILTER FABRIC JACKET SHALL BE INCLUDED IN UNIT PIPE COSTS.

28. EXISTING DRAINAGE STRUCTURES IN CONFLICT WITH PROPOSED DRAINAGE STRUCTURES SHALL BE REMOVED UNLESS OTHERWISE NOTED. ALL OTHER EXISTING DRAINAGE STRUCTUES WITHIN CONSTRUCTION LIMITS SHALL BE REMOVED UNLESS OTHERWISE NOTED. REMOVAL OF EXISTING DRAINAGE STRUCTURE IS TO INCLUDE ASSOCIATED PIPING TO DOWNSTREAM STRUCTURE OR TO TIE IN WITHIN PROPOSED STORM SEWER PIPING.

29. NO EXISTING BASE MATERIAL REMOVED IN EXCAVATION SHALL BE REUSED AS PROPOSED BASE MATERIAL.

30. STAGING AND MATERIAL STORAGE SHALL NOT BE CONDUCTED ON ABUTTING PRIVATE PROPERTY WITHOUT WRITTEN APPROVAL FROM THE OWNER. STAGING AND STORAGE SHALL BE CONDUCTED WITHIN PUBLIC R/W AND/OR CONSTRUCTION EASEMENTS (ACCESS LICENSE AGREEMENTS).

31. THE CONTRACTOR SHALL REFER TO THE LANDSCAPE PLAN TO DETERMINE IMPACTS TO EXISTING TREES AND VEGETATION. ALL TREES AND VEGETATION DESIGNATED TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR AT NO ADDITIONAL EXPENSE TO THE OWNER OR THE CITY.

32. PROPOSED DRAINAGE STRUCTURES HAVE BEEN SIZED BASED UPON THE AVAILABLE UTILITY INFORMATON. THE CONTRACTOR SHALL VERIFY THAT PROPOSED DIMENSIONS WILL ACCOMMODATE THE EXISTING AND PROPOSED STORM SEWER CONFIGURATION PRIOR TO SUBMITTING SHOP DRAWINGS. DRAINAGE CONNECTIONS TO EXISTING STRUCTURES SHALL BE CORE DRILLED AT THE SPECIFIED INVERT.

33. EXISTING UTILITY CONTACT INFORMATION:

UTILITY COMPANY	CONTACT	PHONE NUMBER	EMAIL
AT&T	MARK GUTIERREZ	772-460-4443	MARK.GUTIERREZ@ATT.COM
FPUA WATER & WASTEWATER	JAMES CARNES	772-466-1600X3472	JCARNES@FPUA.COM
FPUA GAS & ELECTRIC	JASON MITTLER	772-466-1600X630	JMITTLER@FPUA.COM
FORT PIERCE UTILITY AUTHORITY	VALERIE SCHULTE	772-466-1600	VSCHULTE@FPUA.COM
FP&L	ROB MORRIS	772-223-4215	ROB.MORRIS@FPL.COM

33. EROSION CONTROL MEASURES SHALL BE TAKEN BY CONTRACTOR DURING CONSTRUCTION AS PER FDOT STANDARDS:

A. SILT FENCE SHALL BE INSTALLED ALONG THE ENTIRE PERIMETER OF THE PROJECT ADJACENT TO ANY SOIL DISTURBING ACTIVITIES.

B. ALL DRAINAGE STRUCTURES ARE TO BE PROTECTED DURING CONSTRUCTION PER FDOT STANDARDS.

C. ALL FENCING, GRADING, SIGNING AND SODDING SHALL BE MAINTAINED DURING THE CONTRACT LIFE. ALL DAMAGED WORK SHALL BE RESTORED AT NO COST TO THE CITY NOR FDOT.

34. DETECTABLE WARNING SURFACES WITHIN THE U.S. HIGHWAY 1 RIGHT-OF-WAY SHALL CONSIST OF CAST-IN-PLACE COMPOSITE TACTILE UNITS MANUFACTURED BY ADA SOLUTIONS, INC (800-372-0519), OR APPROVED EQUAL. WARNING SURFACES SHALL EXTEND TWO FEET FROM BACK OF CURB AND SPAN RAMP RUN WIDTH. WARNING SURFACE COLOR SHALL BE "BRICK RED".

35. DETECTABLE WARNING SURFACES WITHIN THE CITY OF FORT PIERCE RIGHT-OF-WAY SHALL CONSIST OF A.D.A. TRUNCATED DOME CONCRETE PAVING UNITS (4"X8"X2-3/8") CONSTRUCTED ON CONCRETE SUB-SLAB USING EPOXY GROUT. WARNING SURFACES SHALL EXTEND TWO FEET FROM BACK OF CURB AND SPAN RAMP RUN WIDTH. WARNING SURFACE COLOR SHALL BE "BRICK RED".

36. NON-STRUCTURAL CONCRETE UTILIZED IN CURB AND GUTTER, SIDEWALK AND URBAN FLARED TURNOUT CONSTRUCTION SHALL CONSIST OF 3000 PSI FIBER REINFORCED MIX.

37. SELECT CLEARING AND GRUBBING AREAS ARE DESIGNATED AREAS THAT THE CONTRACTOR SHALL DETERMINE IF CLEARING AND GRUBBING IS NEEDED BUT NOT LIMITED TO GRADING. IF NEEDED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING, RESETTING, OR REPLACING LIKE VEGETATION TO EQUAL OR BETTER CONDITION, ALL EXISTING SIDEWALK FALLING IN THIS AREA SHALL BE REMOVED AS SHOWN IN THE PLANS.

38. WORK WITHIN THE FDOT RIGHT OF WAY SHALL BE RESTRICTED TO THE HOURS OF 9:00 AM TO 3:30 PM, (MONDAY-FRIDAY), UNLESS OTHERWISE APPROVED BY THE OPERATIONS ENGINEER, OR DISGNEE.

39. LANE CLOSURES ON THE STATE ROAD SYSTEM MUST BE COORDINATED WITH THE PUBLIC INFORMATION OFFICE AT LEAST TWO WEEKS PRIOR TO THE CLOSURE. THE CONTACT INFORMATION FOR THE PUBLIC INFORMATION OFFICE IS AS FOLLOWS:

BARBARA KELLEHER
FLORIDA DEPARTMENT OF TRANSPORTATION
PUBLIC INFORMATION OFFICE
3400 WEST COMMERCIAL BLVD.
FORT LAUDERDALE, FLORIDA 33309
954-777-4090
Barbara.Kelleher@dot.state.fl.us

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
CERTIFICATE OF AUTHORIZATION: 00000696

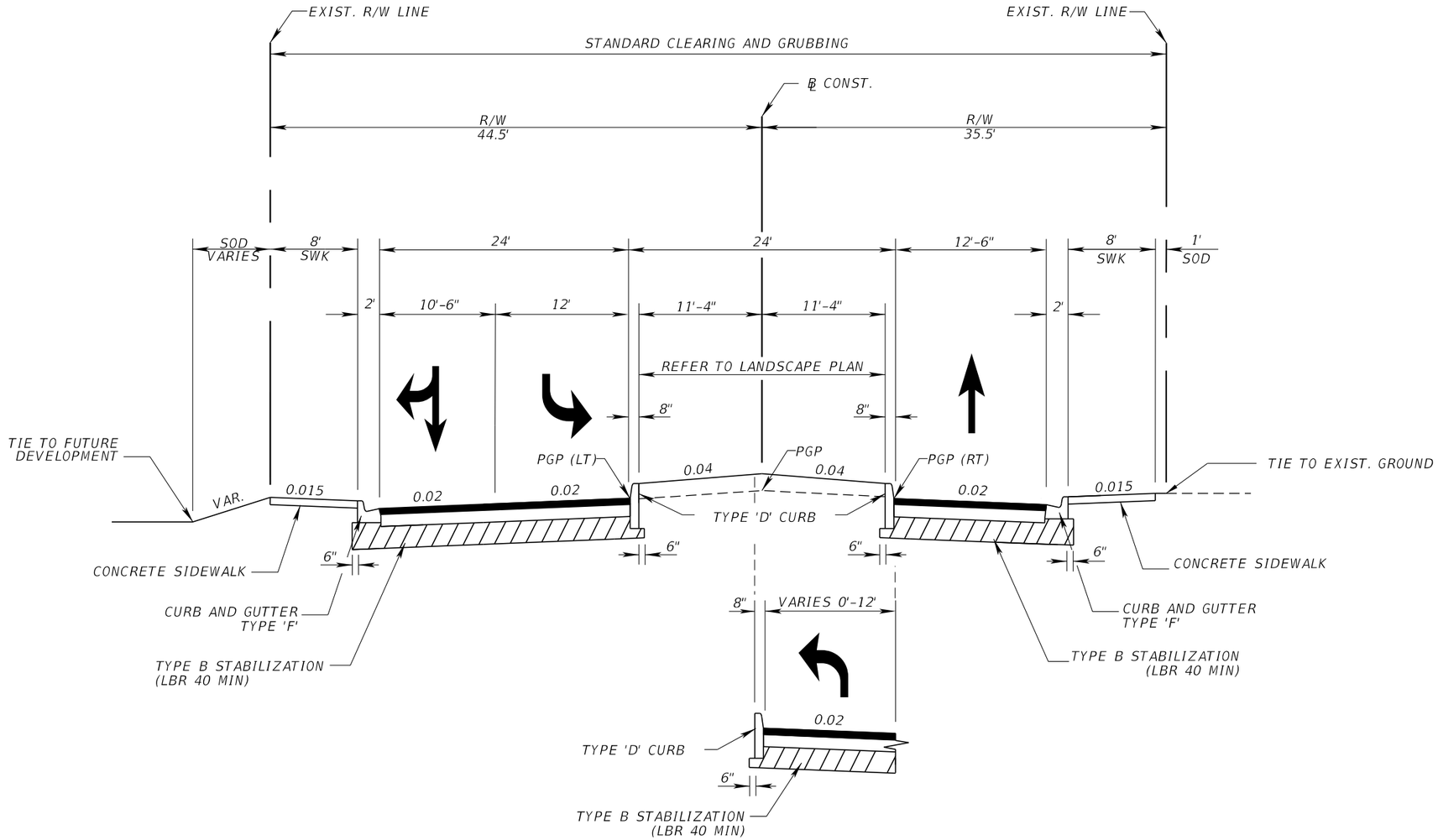
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

GENERAL NOTES

SHEET NO. 3

Mike.Forman 3/22/2018 7:38:07 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\GNNTRD01.DGN



STA. 101+94.85 TO STA. 102+99.91

PAVEMENT DESIGN

TYPE SP-9.5 STRUCTURAL COURSE (TRAFFIC C) (1")
TYPE SP-12.5 STRUCTURAL COURSE (TRAFFIC C) (1.5")
CEMENTED COQUINA (LBR 100) (8")
STABILIZED SUBGRADE TYPE B (12")

POST SPEED = 30 MPH
DESIGN SPEED = 35 MPH

STA. 101+49.53 TO STA. 105+30.98

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

TYPICAL SECTION

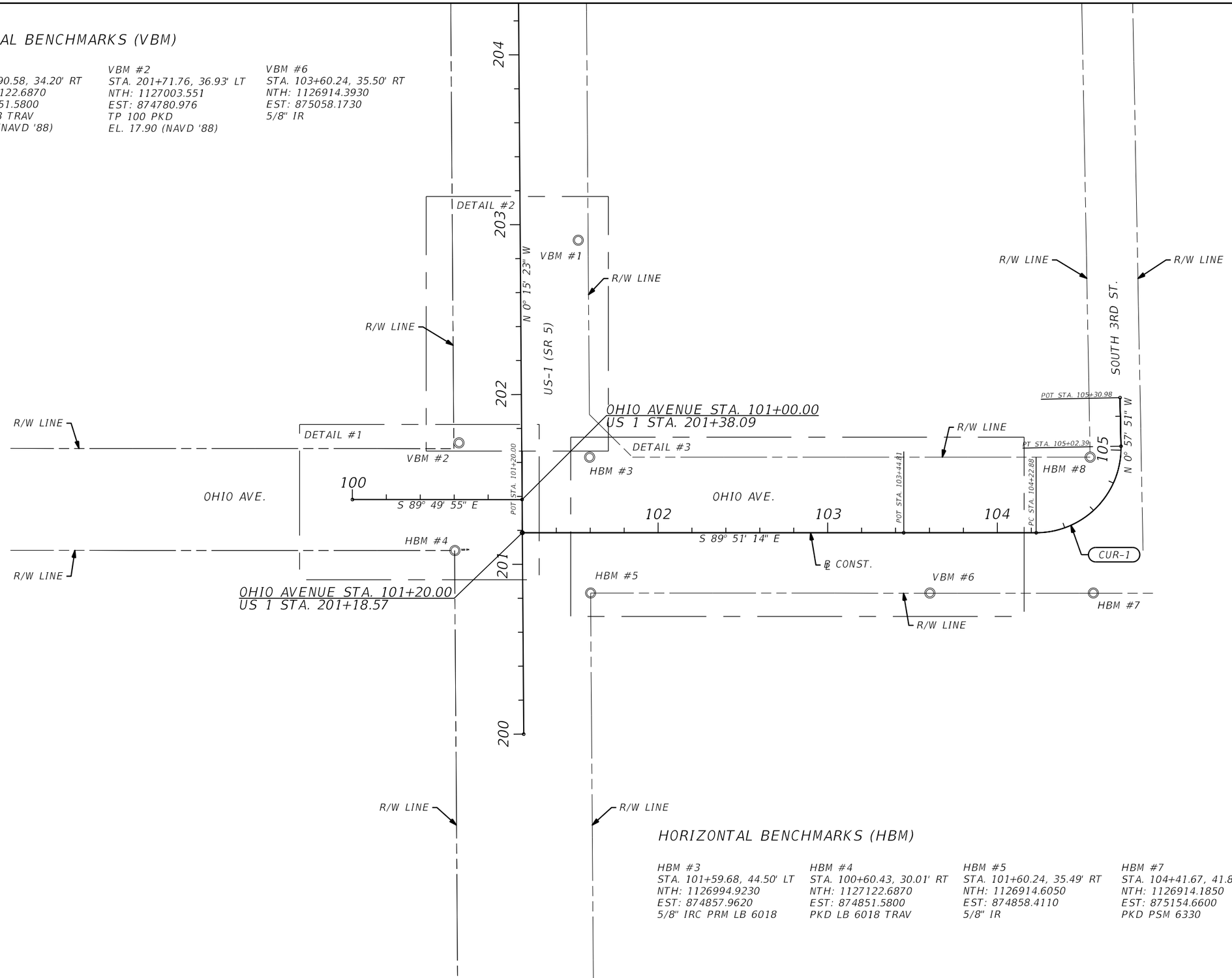
SHEET NO. 4

VERTICAL BENCHMARKS (VBM)

VBM #1
STA. 202+90.58, 34.20' RT
NTH: 1127122.6870
EST: 874851.5800
PKD LB018 TRAV
EL. 17.62 (NAVD '88)

VBM #2
STA. 201+71.76, 36.93' LT
NTH: 1127003.551
EST: 874780.976
TP 100 PKD
EL. 17.90 (NAVD '88)

VBM #6
STA. 103+60.24, 35.50' RT
NTH: 1126914.3930
EST: 875058.1730
5/8" IR



CURVE DATA (CUR-1)
PI STA. = 104+73.86
Δ = 91° 06' 37" (LT)
D = 114° 35' 30"
T = 50.98
L = 79.51
R = 50.00
PC STA. = 104+22.88
PT STA. = 105+02.39

HORIZONTAL BENCHMARKS (HBM)

HBM #3
STA. 101+59.68, 44.50' LT
NTH: 1126994.9230
EST: 874857.9620
5/8" IRC PRM LB 6018

HBM #4
STA. 100+60.43, 30.01' RT
NTH: 1127122.6870
EST: 874851.5800
PKD LB 6018 TRAV

HBM #5
STA. 101+60.24, 35.49' RT
NTH: 1126914.6050
EST: 874858.4110
5/8" IR

HBM #7
STA. 104+41.67, 41.89' RT
NTH: 1126914.1850
EST: 875154.6600
PKD PSM 6330

HBM #8
STA. 104+92.88, 17.71' LT
NTH: 1126914.1820
EST: 875152.9780
IRC 5/8" PRM LB 6018

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
CERTIFICATE OF AUTHORIZATION: 00000696

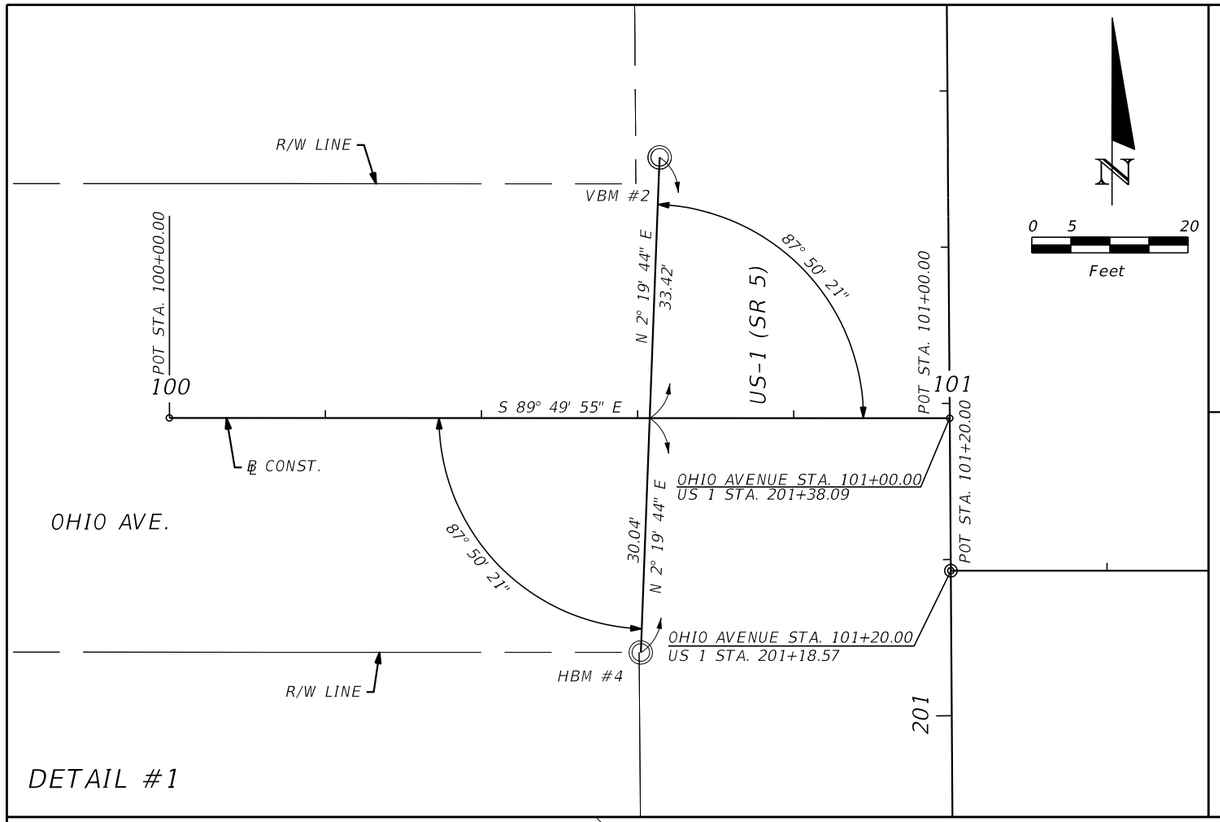
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

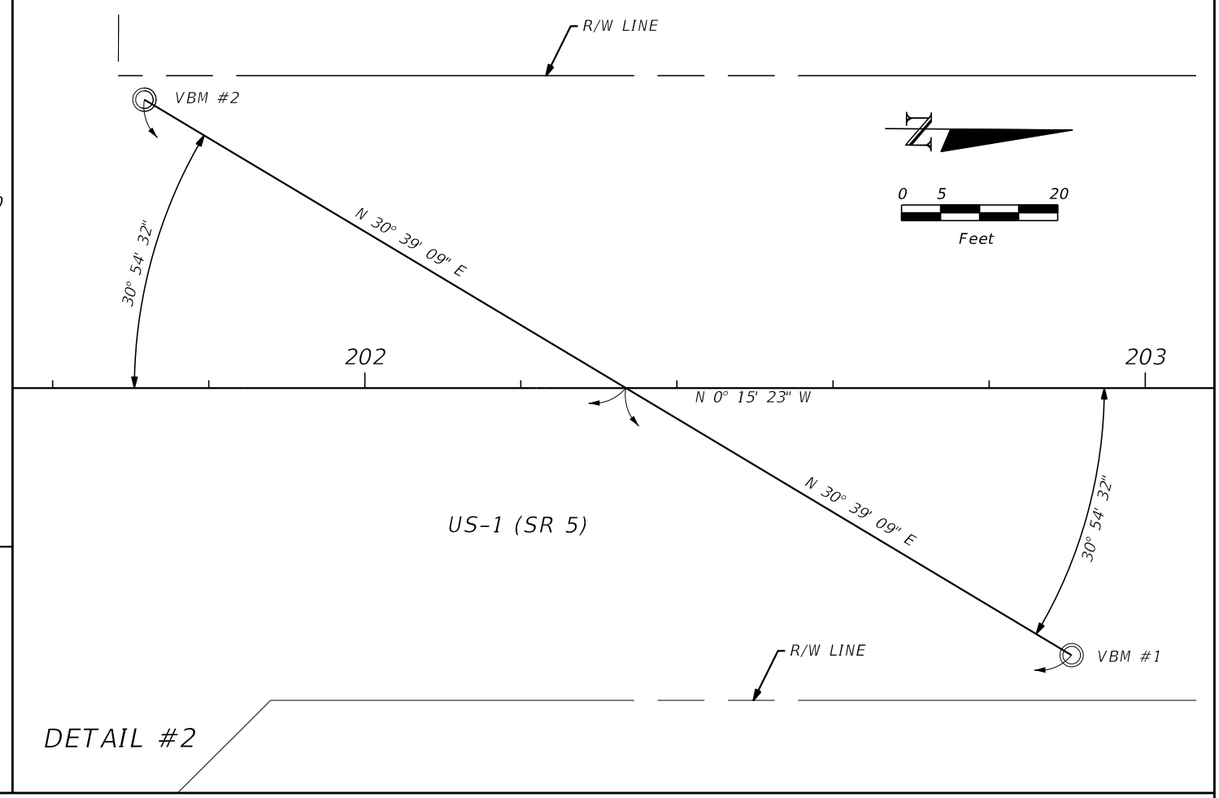
HORIZONTAL & VERTICAL CONTROL

SHEET NO. 5

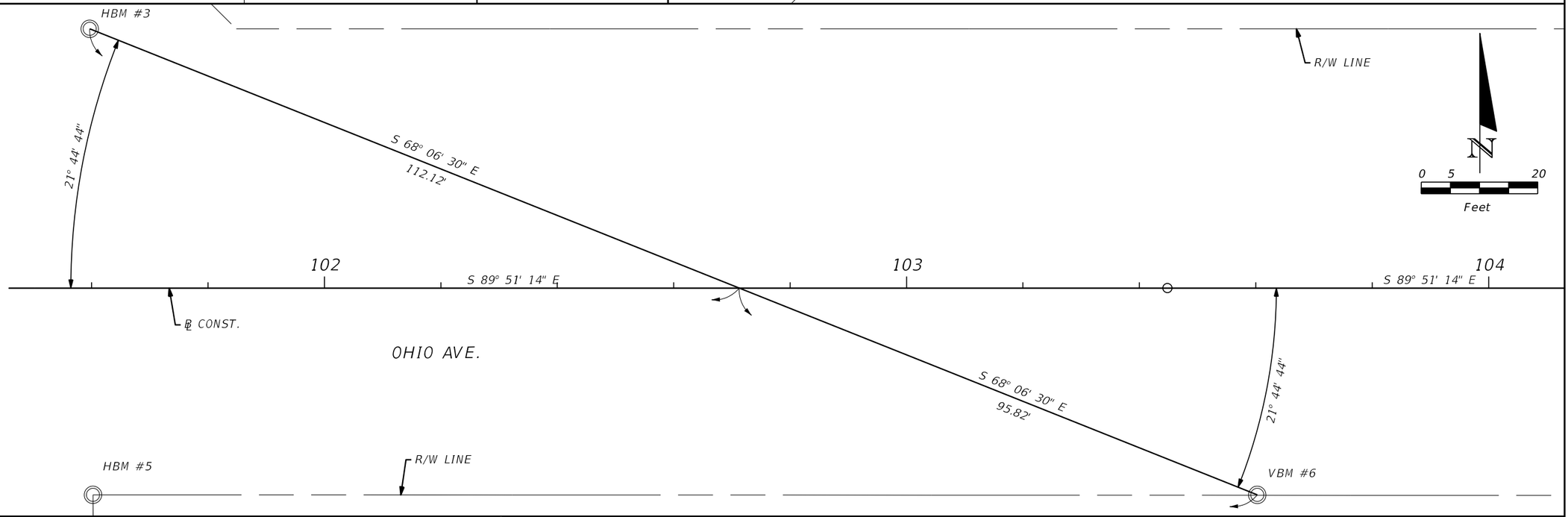
Mike.Forman 3/22/2018 7:38:09 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANHVC01.dgn



DETAIL #1



DETAIL #2



DETAIL #3

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

HORIZONTAL & VERTICAL CONTROL DETAIL

SHEET NO. 6

NOTES:

1. REFER TO IRRIGATION PLAN FOR SLEEVING LOCATION TO BE CONSTRUCTED CONCURRENTLY WITH ROADWAY IMPROVEMENTS.
2. REFER TO SIGNALIZATION PLANS FOR ADDITIONAL INFORMATION.
3. THE CONTRACTOR SHALL COORDINATE WITH THE CITY REGARDING MONUMENT SIGN INSTALLATION LOCATION WITHIN PROPOSED MEDIAN.

LEGEND:

- EXIST. ASPHALT PAVEMENT REMOVAL SEE DETAIL
- STAMPED CONCRETE SEE DETAIL

BEGIN OHIO AVE. IMPROVEMENTS STA. 100+07.79
OHIO AVE. STA. 101+00.00 = US-1 (SR 5) STA. 201+38.09
US-1 (SR 5) STA. 201+18.57 = OHIO AVE. STA. 101+20.00
REFER TO SIGNAL PLANS
BEGIN PGL RT STA. 101+49.53 12.00' RT
TIE TO EXIST PVMT, SAWCUT +49.78, 44.64'RT
TIE TO EXIST. CURB & GUTTER +50.78, 44.63' RT, EL 17.69±
TIE TO EXIST PVMT, SAWCUT +48.92, 64.44'LT
BEGIN PGL LT STA. 101+49.53 12.00' LT
TIE TO EXIST. CURB & GUTTER +49.92, 64.44' LT, EL 17.41±
EXISTING TREES TO REMAIN. (SEE SIDEWALK DETAIL)
BOTTOM OF 14"X23" ERCP = 13.89
TOP OF 8" SS = 13.20±
CONST. TYPE D CURB TIE TO EXIST. ON-SITE CURB +32.66,54.82 LT, EL 17.60±
BOTTOM OF 19"X30" ERCP = 13.08
TOP OF 8" SS = 12.40±
BOTTOM OF 19"X30" ERCP = 13.06
TOP OF 18" FM = 12.40±
10' SWK ESMT.
30'X20' SWK ESMT.
20'X40' LICENSE AGREEMENT
TIE TO EXIST. CURB & GUTTER +30.97,11.18 LT, EL 16.02±
+21.82, 11.18' LT EL 16.10
CONST. TYPE D CURB TIE TO EXIST. ON-SITE CURB +56.68, 54.18 LT, EL 17.60±
CONST. TYPE F CURB & GUTTER
RELOCATE FH SEE DETAIL
MATCHLINE STA. 105+70.00
END PGL END OHIO AVE. IMPROVEMENTS STA. 105+30.98
CONST. 84 LF OF 24" RCP
TIE TO EXIST. ROADWAY +30.98, 11.12 RT, EL 15.94±
EXIST. CURB & GUTTER (TO REMAIN)
CONST. 71 LF OF 19"x30" ERCP
TIE TO EXIST. CURB & GUTTER +94.32, 11.96' RT EL 16.39±
+84.09, 15.51' RT EL 16.49
R/W LINE
+33.81, 34.12' LT EL 16.66
+29.89 11.62' LT
END PGL LT STA. 104+23.24
+90.03 12.00' LT
+76.67 34.50' LT EL 17.14
+12.67 34.50' LT EL 17.36
+79.92, 34.50' LT EL 17.63
+84.85 12.00' LT
+99.91 12.00' LT
+84.85 12.00' RT
+94.85 12.00' RT
+70.78 24.50' RT EL 17.77
+44.85 0.00' LT
+99.91 0.00' LT
+27.20 52.23' RT
+30.64, 25.40' RT EL 17.05
END PGL RT STA. 104+23.24
BEGIN PGL STA. 104+23.24
+60.74
SAWCUT
CONST. 57 LF OF 18" RCP
CONST. TYPE F CURB & GUTTER
CONST. 180 LF OF 18" RCP
CONST. 57 LF OF 14"X23" ERCP
CONST. TYPE B CURB
CONST. TYPE D CURB
CONST. 8' SWK
PROP. MONUMENT SIGN
PROP. D CURB REFER TO DETAIL
CONST. URBAN FLARED TURNOUT, REFER TO DETAIL, TYPICAL
PGL RT
PGL LT
R/W LINE
REFER TO MISC. DETAILS FOR SWK DETAILS (TYP.)
18" RCP
+06.97
+82.87
+42.02
S 89° 49' 55" E
S 89° 51' 14" E
N 0° 15' 23" W
N 0° 57' 51" W
R=20'
R 30'
R 20'
R 35'
R 50'
R 12'
R 6'
CR 45'
CR-C
CR-G
CR-L
S-100
S-101
S-102
S-103
S-104
0 10 40
Feet

S-102
STA. 104+24.44 LT
CONST. TYPE P-9 CURB INLET
INDEX NO. 200 & 214
EP EL = 16.69
AH EL = 13.40
RT EL = 13.80
BOTTOM EL = 11.40

S-103
STA. 104+23.18 RT
CONST. TYPE P-9 CURB INLET
INDEX NO. 200 & 214
EP EL = 17.13
RK EL = 13.55
LT EL = 14.20
BOTTOM EL = 11.55

S-100
STA. 102+40.00 LT
CONST. TYPE P-9 CURB INLET
INDEX NO. 200 & 214
EP EL = 17.17
RT INV = 13.95
BOTTOM EL = 11.95

S-101
STA. 102+40.00 RT
CONST. TYPE P-9 CURB INLET
INDEX NO. 200 & 214
EP EL = 17.61
AH EL = 13.85
LT EL = 13.85
BOTTOM EL = 11.85

S-104
STA. 104+92.07, 26.63' RT
CONST. TYPE P-8 MANHOLE
INDEX NO. 200 & 201
RIM EL = 17.15
AH EL = 12.80
LT EL = 13.30
BOTTOM EL = 10.80

30' RT/LT CROSS-SLOPE TRANSITION
US-1(SR 5) EXIST. GROUND
60' LT CROSS-SLOPE TRANSITION
50' RT CROSS-SLOPE TRANSITION
105' V.C.
50' V.C.
EXIST. GRADE AT ℄ CONST.
PGL RT
PGL LT
EX. MH
18" RCP
14"X23" ERCP
EX. 8" VCP SS.
19"x30" ERCP
EX. 18" DIP FM
EX. 8" VCP SS.
24" RCP
END PGL RT BEGIN PGL STA 104+23.24 EL 17.38
END PGL LT STA 104+23.24 EL 17.14
END PGL STA 105+30.98 EL 16.09±, TIE TO EX. RDWY.
BEGIN PGL RT STA 101+49.53 EL 17.68±
BEGIN PGL LT STA 101+49.53 EL 17.65±
(+) 0.600%
(+) 0.461%
0.000%
(-) 0.283%
(+) 0.300%
(-) 1.007%
(-) 0.270%
(-) 1.700%
(-) 1.549%
PI +79.92 EL. 17.79
PI +19.92 EL. 17.62
PI +40.00 EL. 17.86
PI +44.81 EL. 18.17
PI +44.81 EL. 17.93
PI +97.31
PI +60.00 EL. 17.28
PI +20.00 EL. 16.26
+54.92 EL. 17.67 LT
+04.92 EL. 17.72 LT
+49.53 e=EXIST
+79.92 e=-0.005 RT
+79.92 e=-0.005 LT
+79.92 EL. 17.86 RT
+79.92 EL. 17.79 LT
+19.92 e=-0.02
+40.00 e=-0.02
+92.31
+97.31
+40.00
18.02 RT
18.04 RT
18.05 RT
18.05 RT
18.04 RT
18.02 RT
17.97 RT
17.93 RT
17.86 RT
17.80 RT
17.69 RT
17.65 RT
17.70 LT 17.67 LT
17.73 LT 17.70 LT
17.74 LT 17.73 LT
17.74 LT 17.74 LT
17.73 LT 17.72 LT
17.78 LT 17.73 LT
17.80 LT 17.69 LT
17.81 LT 17.62 LT
17.80 LT 17.56 LT
17.78 LT 17.45 LT
17.73 LT 17.41 LT
18.65
17.70
17.85
18.06
17.92
17.85
17.47
17.04
16.47
15.87
17.65 LT 17.68 RT
17.73 LT 17.86 RT
17.65 LT 17.89 RT
17.80 LT 18.04 RT
17.74 LT 17.98 RT
17.38 LT 17.62 RT
17.31
16.60
102+00
103+00
104+00
105+00
SCALE: 1" = 40' HORIZ.
1" = 2' VERT.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
2/20/18	EJK	1. PER KHA CLAIRIFICATION			

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
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CERTIFICATE OF AUTHORIZATION: 00000696

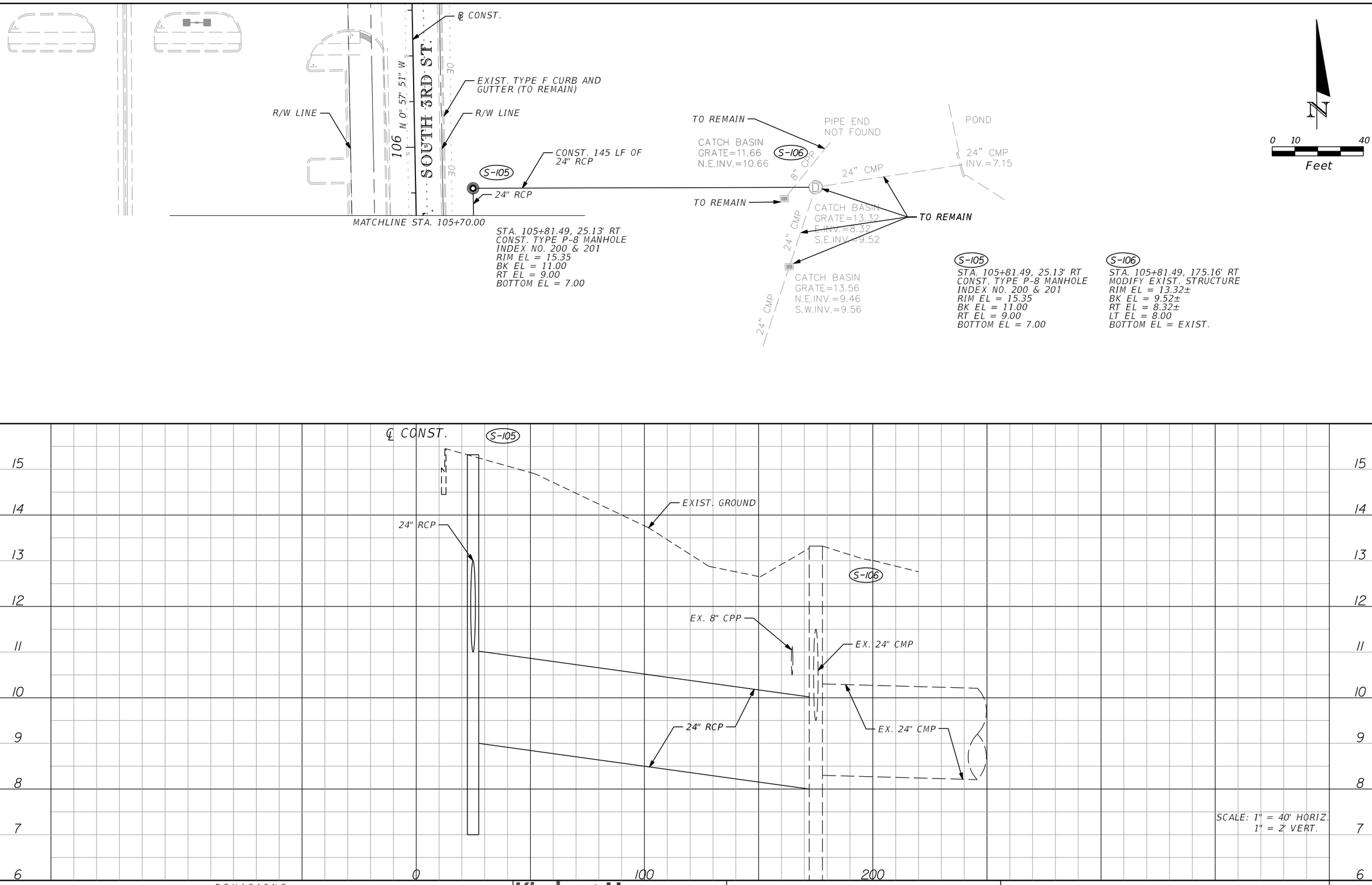
CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

PLAN & PROFILE

SHEET NO. 7

Mike.Forman 3/22/2018 7:38:15 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLPRRD02.dgn



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
VERO BEACH, FL 32960
(772) 794-4100
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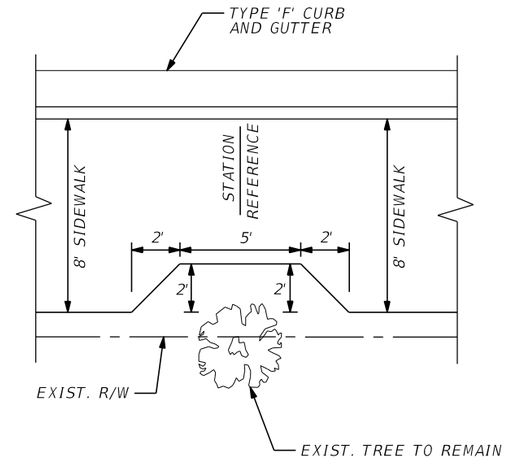
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

PLAN & PROFILE

SHEET NO. 8

Mike.Forman 3/22/2018 7:38:16 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLPRRD03.dgn



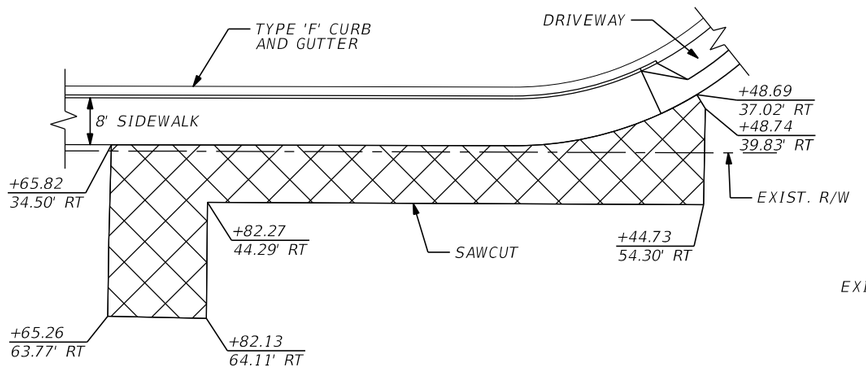
NOTE:

1. CENTERLINE STATION REFERENCE:

   102+26.55, RT
   102+67.08, RT
   103+00.19, RT

A EXIST. TREE DETAIL

N.T.S.

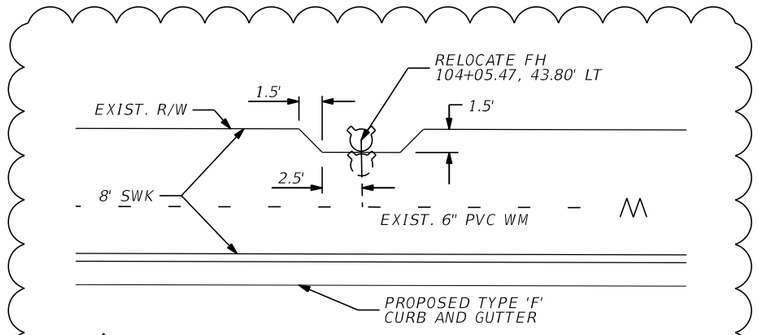


PAVEMENT REMOVAL DETAIL

N.T.S.

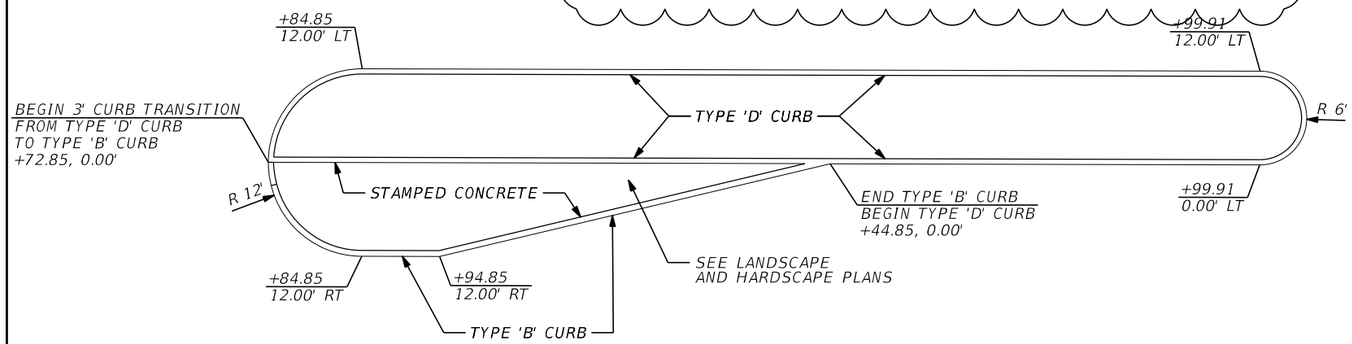
NOTES:

1. THE CONTRACTOR SHALL REMOVE THE EXISTING PAVEMENT TO A DEPTH OF 12" AND BACKFILL WITH TOPSOIL.



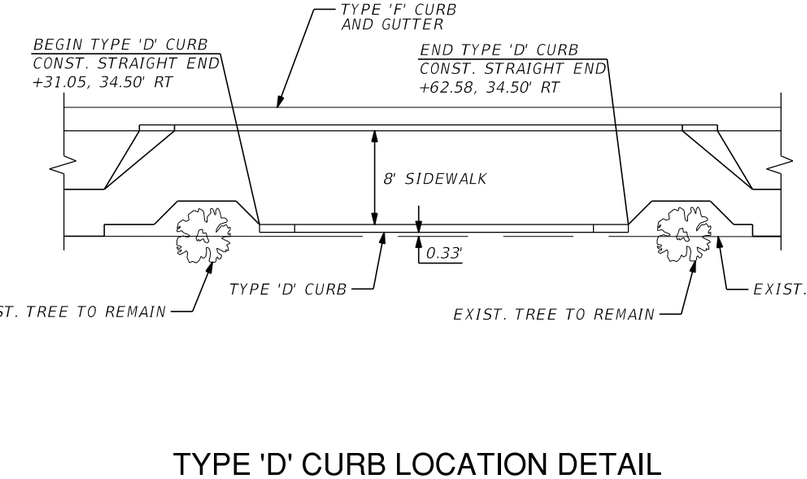
FH RELOCATION DETAIL

N.T.S.



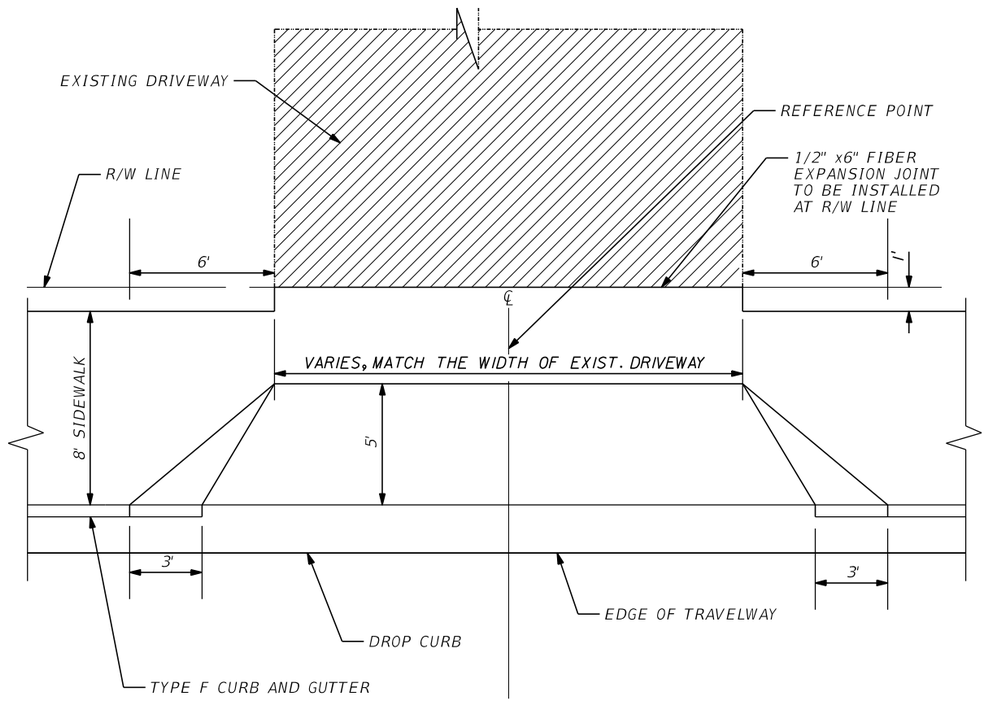
B MEDIAN DETAIL

N.T.S.



TYPE 'D' CURB LOCATION DETAIL

N.T.S.



URBAN FLARED TURNOUT DETAIL

N.T.S.

NOTES:

1. SURFACE SPECIFICATIONS:
   A. CONCRETE DRIVEWAY EXTENDING INTO RIGHT-OF-WAY OR PUBLIC EASEMENT SHALL BE A MINIMUM OF 6" THICK, 3000 P.S.I. CONCRETE INCORPORATING A FLARE AS SHOWN IN THE PLAN VIEW. REINFORCE CONCRETE WITH FIBER MESH @ 1.0 LB/CY. SUBGRADE SHALL BE 12" SAND OR OTHER APPROVED MATERIAL COMPACTED TO 98% AASHTO T-180 MAXIMUM DENSITY.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION
2/20/18	EJK	1. PER KHA CLARIFICATION			

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
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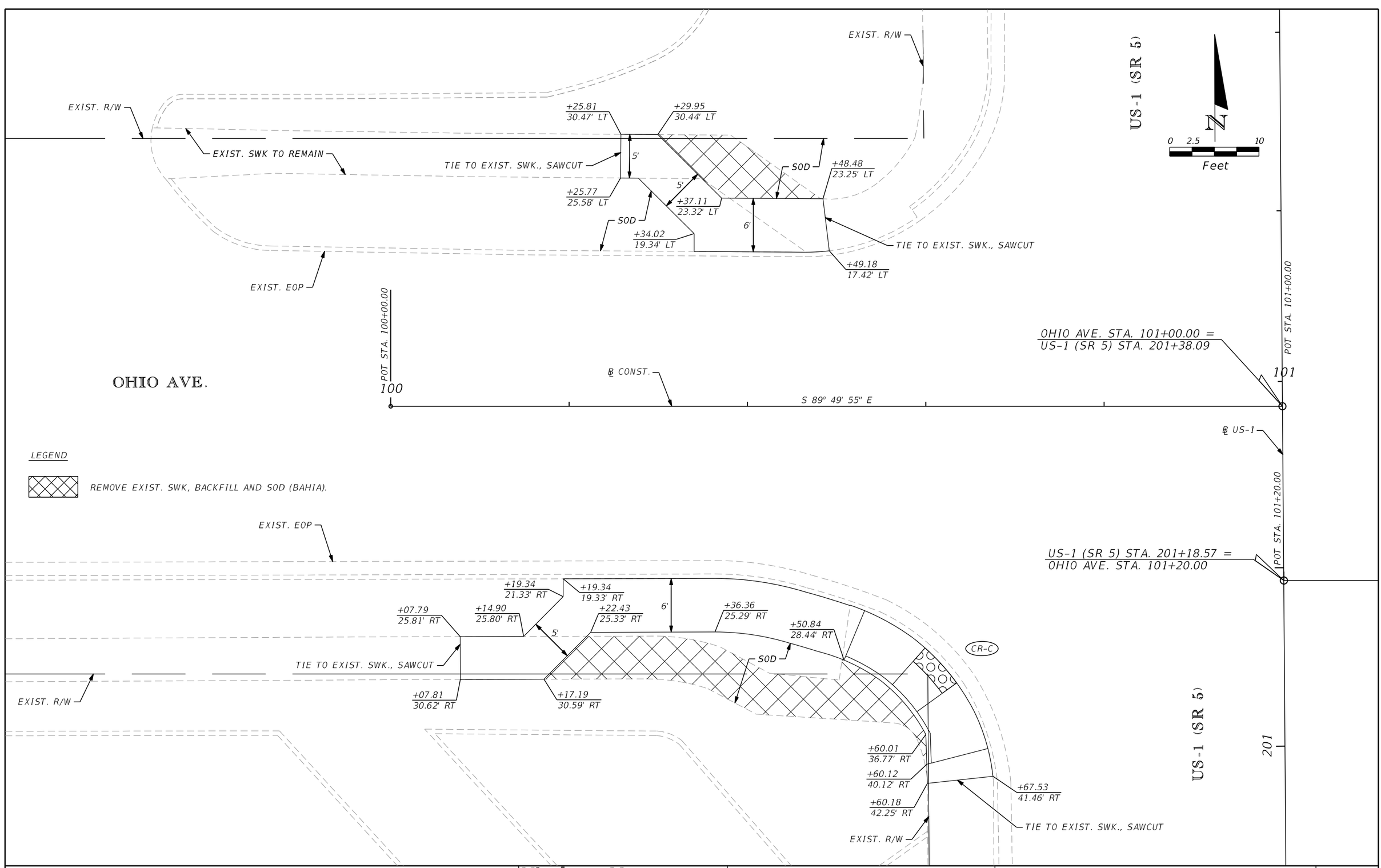
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

MISCELLANEOUS DETAILS

SHEET NO. 9



REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
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445 24th STREET, SUITE 200
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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

MISCELLANEOUS DETAILS

SHEET NO. 10

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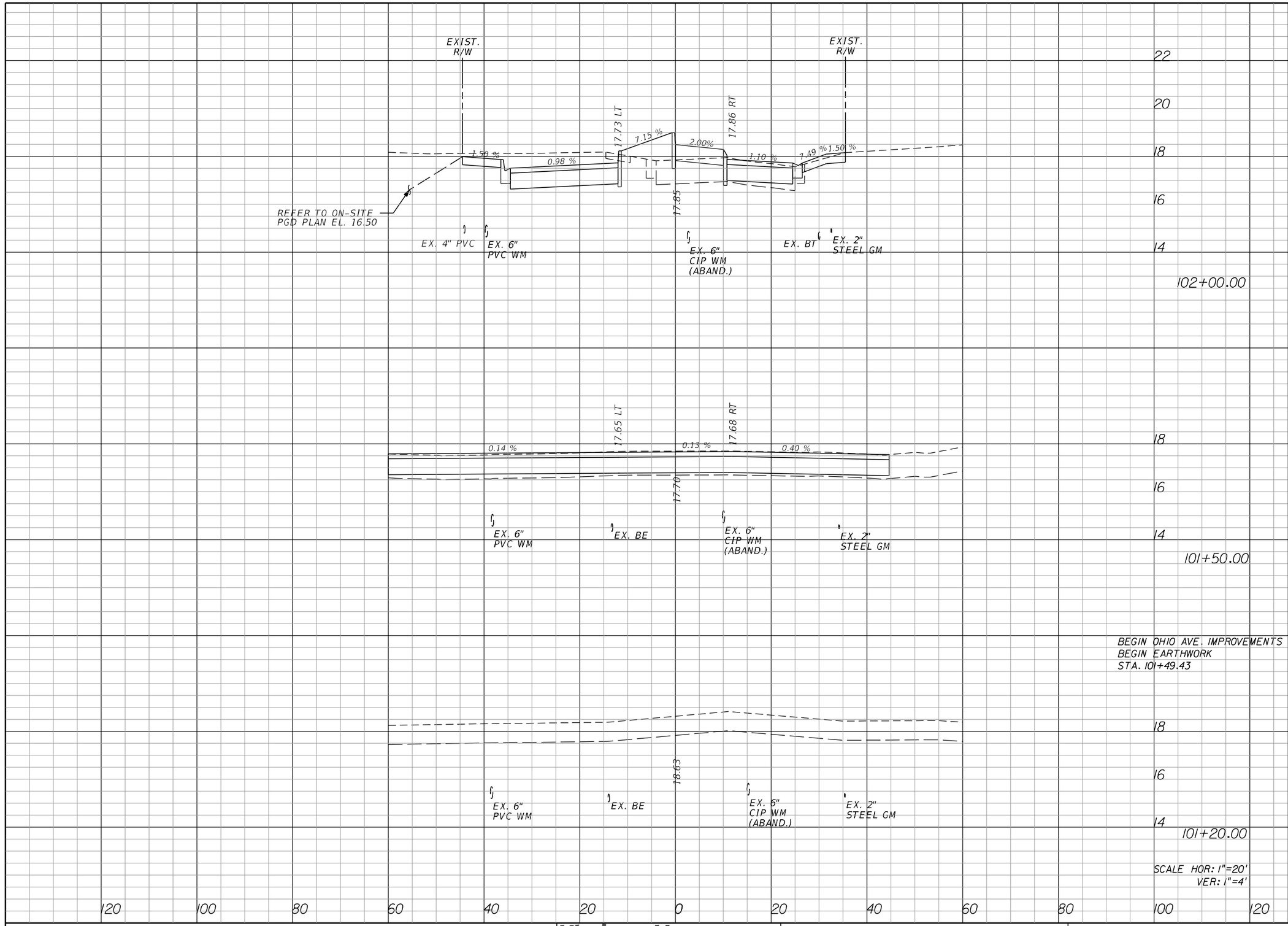

Regular Exc.		Embankment	
A	V	A	V
51	121	11	10
80	2	0	0
80	0	0	0

BEGIN OHIO AVE. IMPROVEMENTS
BEGIN EARTHWORK
STA. 101+49.43

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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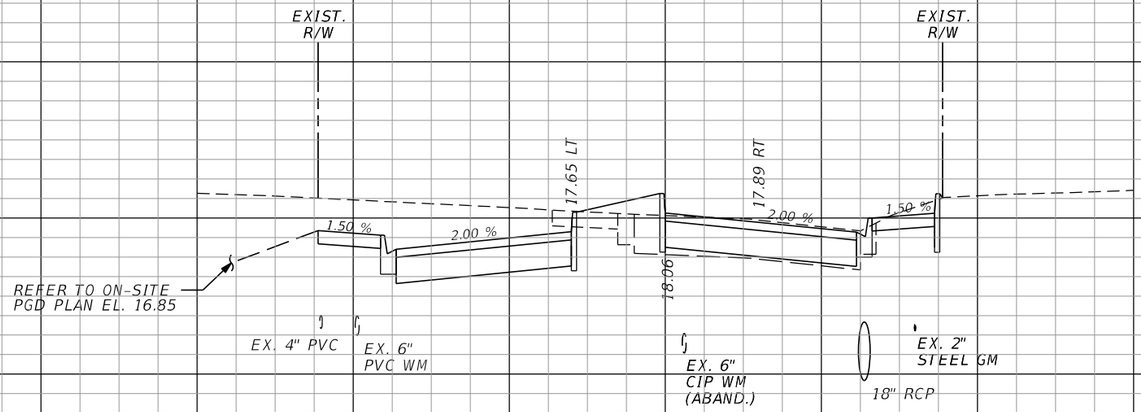
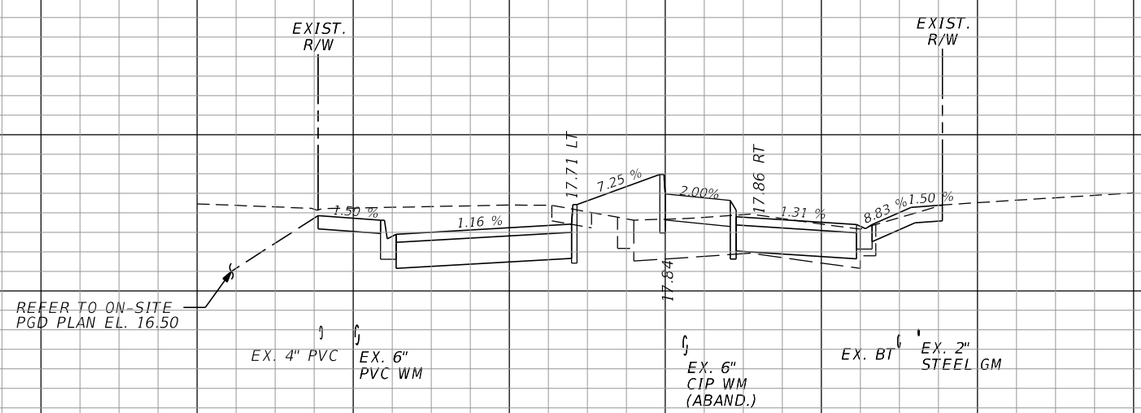
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 11





Regular Exc.		Embankment	
A	V	A	V
83	III	3	10
56	14	3	10

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 12

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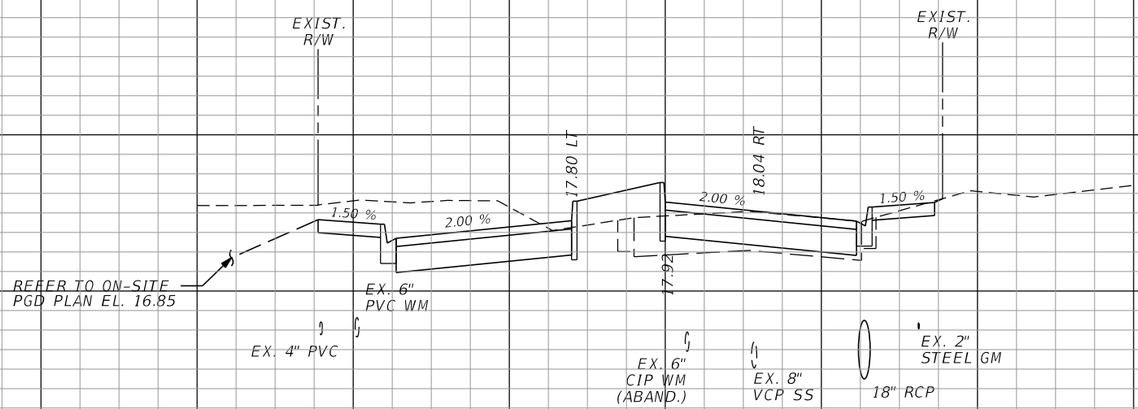
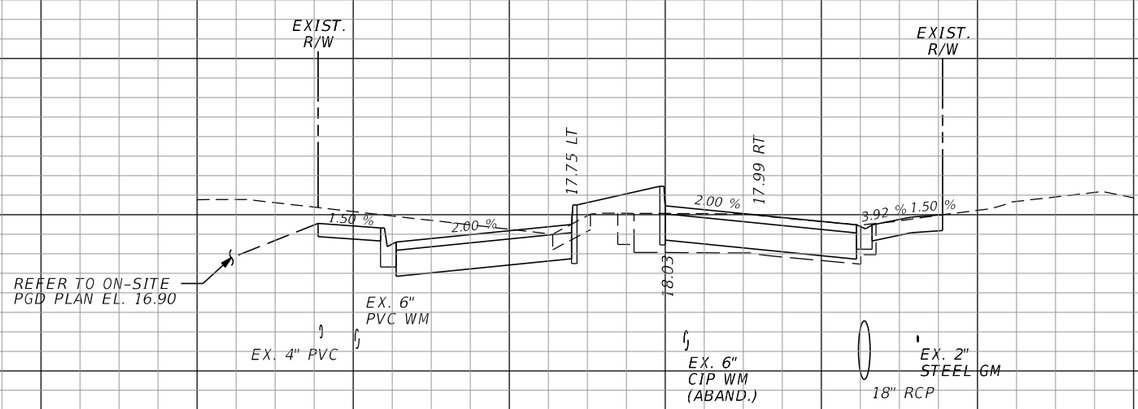


103+00.00



102+82.87

120 100 80 60 40 20 0 20 40 60 80 100 120

SCALE HOR: 1"=20'
VER: 1"=4'

Regular Exc.		Embankment	
A	V	A	V
66	40	8	4
59	86	5	5

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24TH STREET, SUITE 200
VERO BEACH, FL 32960
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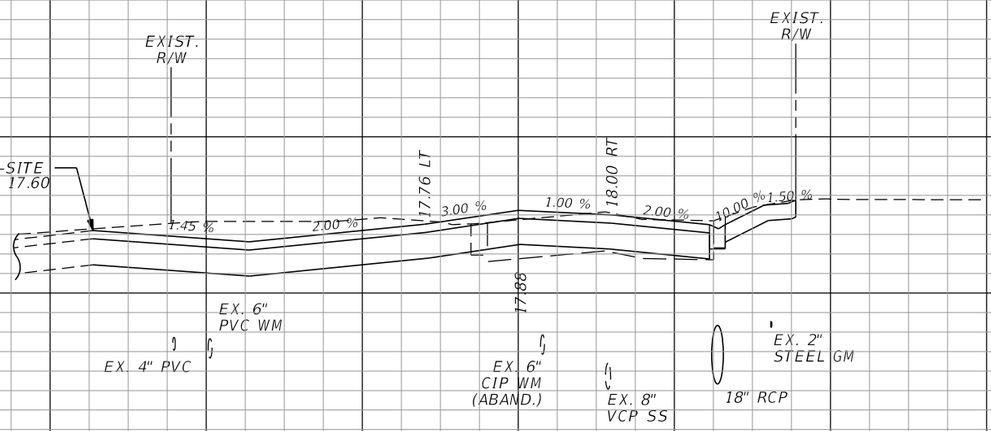
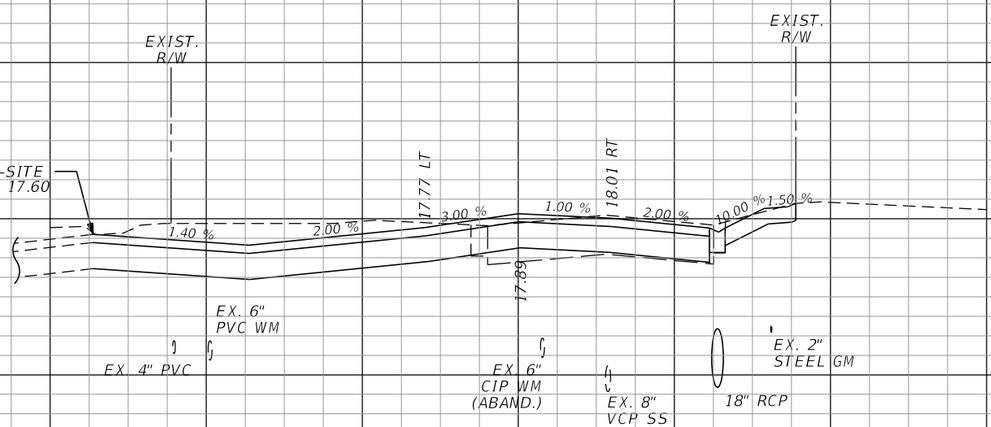
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 13





Regular Exc.		Embankment	
A	V	A	V
74	8	0	0
93	124	0	6

SCALE HOR: 1"=20'
VER: 1"=4'

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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BRIAN A. GOOD, P.E.
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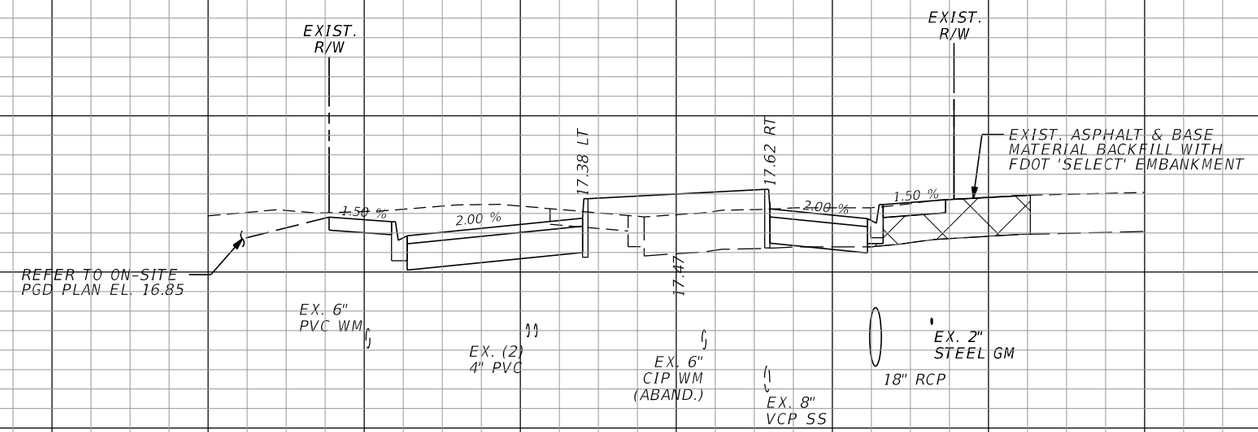
CITY OF FORT PIERCE

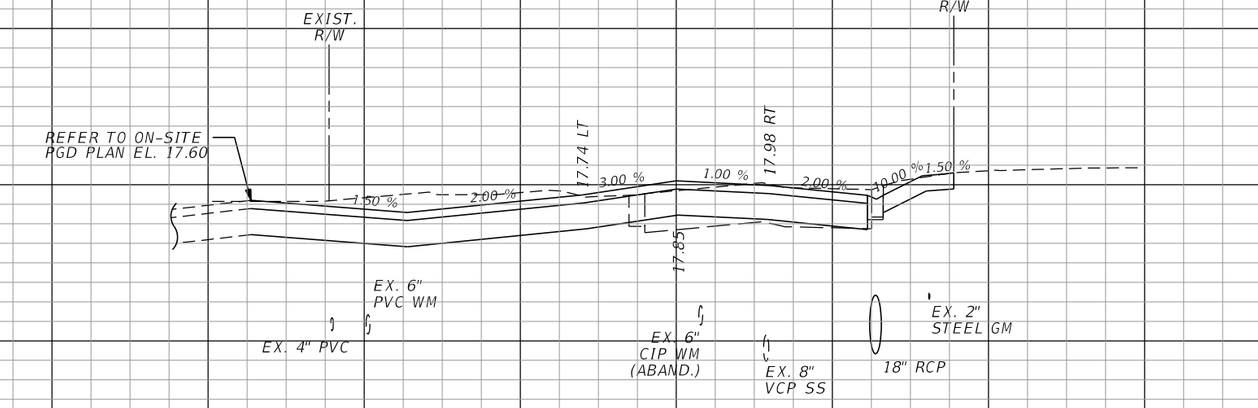
OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 14



104+00.00



103+50.00

SCALE HOR: 1"=20'
VER: 1"=4'

120 100 80 60 40 20 0 20 40 60 80 100 120

Regular Exc.		Embankment	
A	V	A	V
57	131	11	10
84	16	0	0

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
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CERTIFICATE OF AUTHORIZATION: 00000696

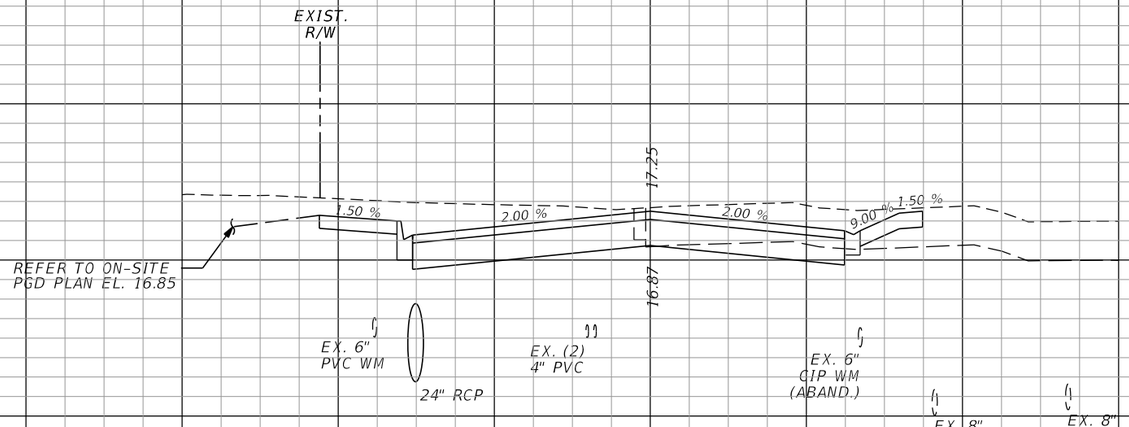
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 15

Mike.Forman 3/22/2018 7:38:19 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\RDXSRD01.DGN



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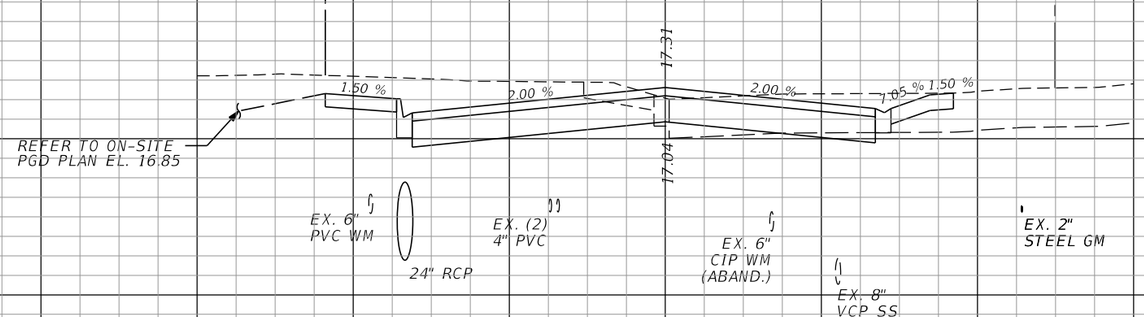

104+50.00

SCALE HOR: 1"=20'
VER: 1"=4'

120 100 80 60 40 20 0 20 40 60 80 100 120

Regular Exc.		Embankment	
A	V	A	V
95	36	0	0
74	121	0	10

REVISIONS

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

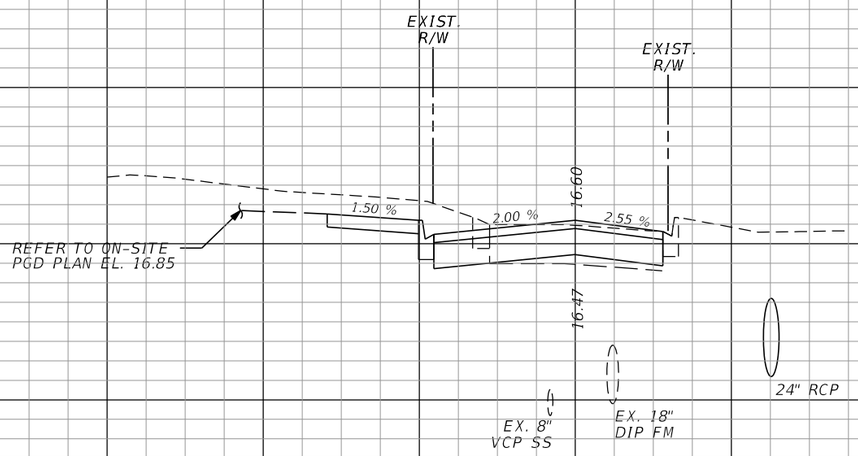
SHEET NO. 16

Mike.Forman 3/22/2018 7:38:19 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\RDXSRD01.DGN

EARTHWORK SUMMARY

REGULAR EXCAVATION = 955 CY

EMBANKMENT = 39 CY



Regular Exc.		Embankment	
A	V	A	V
42	48	0	0
42	98	0	0

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DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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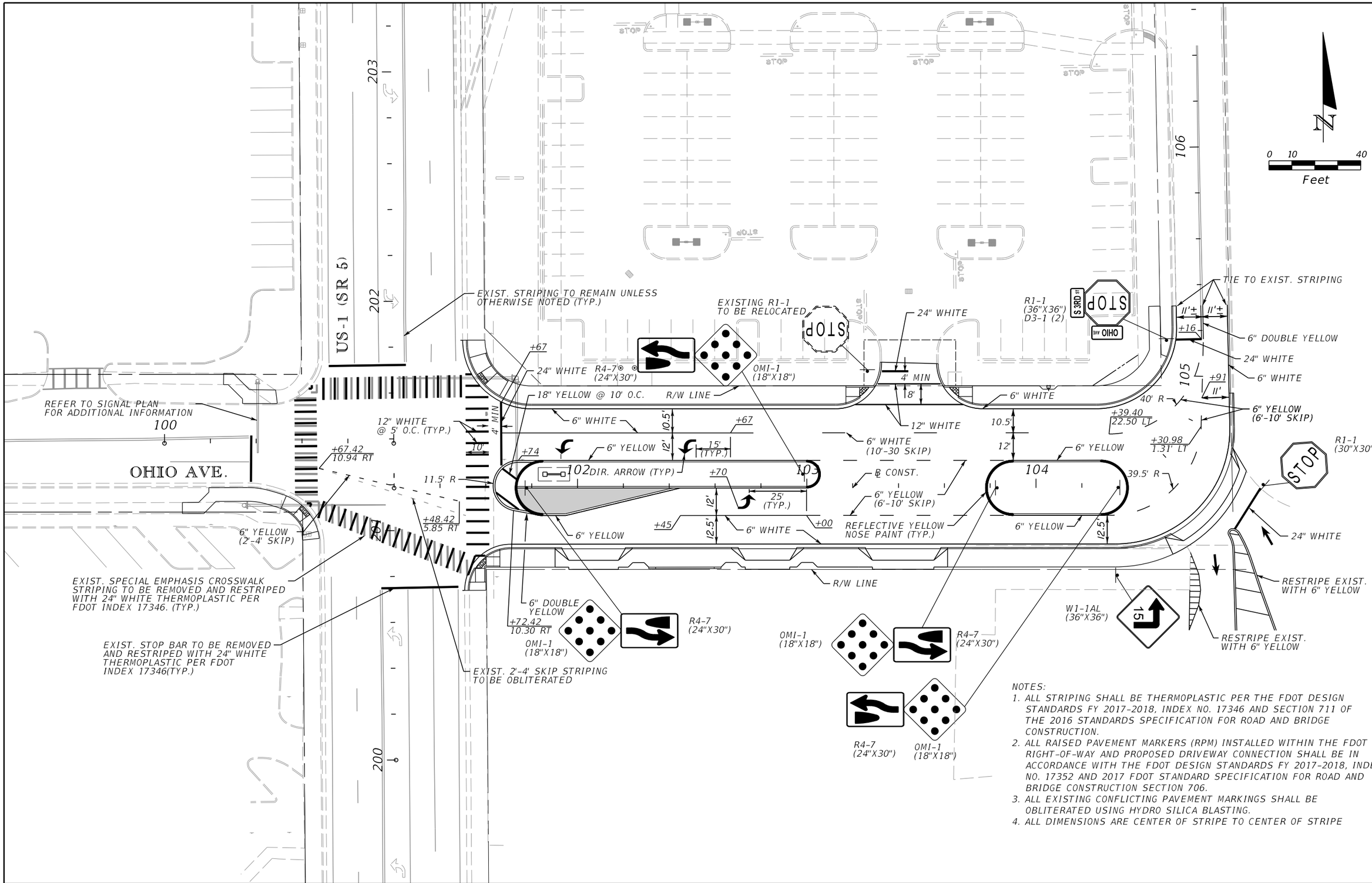
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

OHIO AVENUE CROSS SECTIONS

SHEET NO. 17



NOTES:

1. ALL STRIPING SHALL BE THERMOPLASTIC PER THE FDOT DESIGN STANDARDS FY 2017-2018, INDEX NO. 17346 AND SECTION 711 OF THE 2016 STANDARDS SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION.
2. ALL RAISED PAVEMENT MARKERS (RPM) INSTALLED WITHIN THE FDOT RIGHT-OF-WAY AND PROPOSED DRIVEWAY CONNECTION SHALL BE IN ACCORDANCE WITH THE FDOT DESIGN STANDARDS FY 2017-2018, INDEX NO. 17352 AND 2017 FDOT STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION SECTION 706.
3. ALL EXISTING CONFLICTING PAVEMENT MARKINGS SHALL BE OBLITERATED USING HYDRO SILICA BLASTING.
4. ALL DIMENSIONS ARE CENTER OF STRIPE TO CENTER OF STRIPE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SIGNING & MARKING

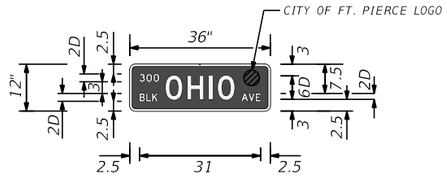
SHEET NO.
18

Mike.Forman 3/22/2018 7:38:22 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_SIGNING\PLANSP01.dgn

SIGN NAME	OHIO	QTY	1	SIGN NO.	STATION(S)
PANEL		BORDER			none
WIDTH	36"	WIDTH	0.5"		
HEIGHT	12"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE		AVERAGE LENGTH



BORDER
R=1.5"
TH=0.5"

Panel Style: CFP.ssi
M.U.T.C.D.: 2009 Edition

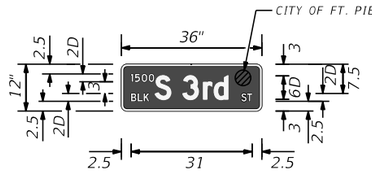
NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY	3	0	0		L																		
SPACE	2.5	4.26	6.08		5																		
COPY	B	L	K		L																		
SPACE	2.5	4.2	5.74		4.64																		
COPY	0	H	I	0		L																		
SPACE	9.18	14.76	20.28	22.56		17.64																		
COPY	A	V	E		L																			
SPACE	28.62	30.44	32.26		4.88																			
COPY																								
SPACE																								
COPY																								
SPACE																								

SIGN NAME	S3RD	QTY	1	SIGN NO.	STATION(S)
PANEL		BORDER			none
WIDTH	36"	WIDTH	0.5"		
HEIGHT	12"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE		AVERAGE LENGTH



BORDER
R=1.5"
TH=0.5"

Panel Style: CFP.ssi
M.U.T.C.D.: 2009 Edition

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY	1	5	0	0		L																	
SPACE	2.5	3.44	5.2	7.02		5.94																	
COPY	B	L	K		L																		
SPACE	2.5	4.2	5.74		4.64																		
COPY	S		3	r	d		L																
SPACE	8.64	12.72	15.72	21	23.76		18.72																
COPY	S	T		L																			
SPACE	30.74	32.26		2.76																			
COPY																							
SPACE																							
COPY																							
SPACE																							

SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE		AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY																							
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SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE		AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

COPY																							
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SPACE																							

REVISIONS					
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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

GUIDE SIGN DETAIL SHEET

SHEET NO.
18A

LANDSCAPE NOTES

1. ALL LANDSCAPED AREAS ARE TO RECEIVE A MINIMUM OF 12" OF TOPSOIL.

2. ALL PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, AND FREE OF PESTS AND DISEASE
.

3. ALL PLANT MATERIAL SHALL BE CONTAINER GROWN OR BALLED AND BUR LAPPED AS INDICATED IN THE PLANT LIST.

4. ALL TREES SHALL HAVE A STRAIGHT TRUNK AND FULL HEAD AND MEET ALL REQUIREMENTS SPECIFIED.

5. ALL MATERIALS ARE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT BEFORE, DURING, AND AFTER INSTALLATION.

6. ALL TREES MUST BE GUYED OR STAKED AS SHOWN IN THE DETAILS.

7. ALL PLANTING AREAS SHALL BE COMPLETELY MULCHED AS SPECIFIED.

8. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING ALL UNDERGROUND UTILITIES AND SHALL AVOID DAMAGE TO ALL UTILITIES DURING THE COURSE OF THE WORK. LOCATIONS OF EXISTING BURIED UTILITY LINES SHOWN ON THE PLANS ARE BASED UPON BEST AVAILABLE INFORMATION AND ARE TO BE CONSIDERED APPROXIMATE. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR 1) TO VERIFY THE LOCATIONS OF UTILITY LINES AND ADJACENT TO THE WORK AREA 2) TO PROTECT ALL OF ALL OF THE UTILITY LINES DURING THE CONSTRUCTION PERIOD 3) TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, STRUCTURES, SITE APPURTENANCES, ETC. WHICH OCCURS AS A RESULT OF THE CONSTRUCTION.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL QUANTITIES SHOWN ON THESE PLANS BEFORE PRICING THE WORK.

10. CONTRACTOR SHALL BE RESPONSIBLE FOR DELIVERY SCHEDULE AND PROTECTION BETWEEN DELIVERY TO MAINTAIN HEALTHY PLANT CONDITIONS.

11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FULLY MAINTAINING (INCLUDING BUT NOT LIMITED TO: WATERING, SPRAYING, MULCHING, FERTILIZING, ETC.) ALL OF THE PLANT MATERIALS UNTIL FINAL ACCEPTANCE

12. ANY PLANT MATERIAL WHICH IS DISEASED, DISTRESSED, DEAD, OR REJECTED (PRIOR TO SUBSTANTIAL COMPLETION) SHALL BE PROMPTLY REMOVED FROM THE SITE AND REPLACED WITH MATERIAL OF THE SAME SPECIES, QUANTITY, AND SIZE AND MEETING ALL PLANT LIST SPECIFICATIONS.

13. THE CONTRACTOR SHALL COMPLETELY GUARANTEE ALL PLANT MATERIAL FOR WARRANTY PERIOD. THE CONTRACTOR SHALL PROMPTLY MAKE ALL REPLACEMENTS DURING NORMAL PLANTING SEASON.

14. AFTER BEING DUG AT THE NURSERY SOURCE, ALL TREES IN LEAF SHALL BE ACCLIMATED FOR TWO (2) WEEKS UNDER A MIST SYSTEM PRIOR TO INSTALLATION.

15. STANDARDS SET FORTH IN "AMERICAN STANDARD FOR NURSERY STOCK" REPRESENT GUIDELINE SPECIFICATIONS ONLY AND SHALL CONSTITUTE MINIMUM QUALITY REQUIREMENTS FOR PLANT MATERIAL.

16. WHERE SHOWN ON THE PLANS AND DETAILS, PLANTING BEDS ARE TO BE COMPLETELY COVERED WITH HARDWOOD MULCH FROM A LOCAL SOURCE HARVESTED IN A SUSTAINABLE MANNER TO A MINIMUM DEPTH OF THREE (3) INCHES.

17. ALL PLANT MATERIAL QUANTITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLETE COVERAGE OF ALL PLANTING BEDS AT SPACING SHOWN.

18. ALL LANDSCAPING SHALL BE INSTALLED ACCORDING TO SOUND NURSERY PRACTICES, AND SHALL BE FLORIDA NO.1 OR BETTER AS GIVEN IN "GRADES AND STANDARDS FOR NURSERY PLANTS, PARTS I AND II," STATE OF FLORIDA, DEPARTMENT OF AGRICULTURE.

19. ALL INVASIVE/EXOTIC SPECIES AND PROHIBITED TREE SPECIES AND PROHIBITED TREE SPECIES SHALL BE REMOVED FROM SITE, INCLUDING ROOT BALLS TO THE EXTENT POSSIBLE WITH NO DAMAGE TO ADJACENT EXISTING TREES.

20. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING A COPY OF THE PROJECT SPECIFICATIONS PRIOR TO BIDDING.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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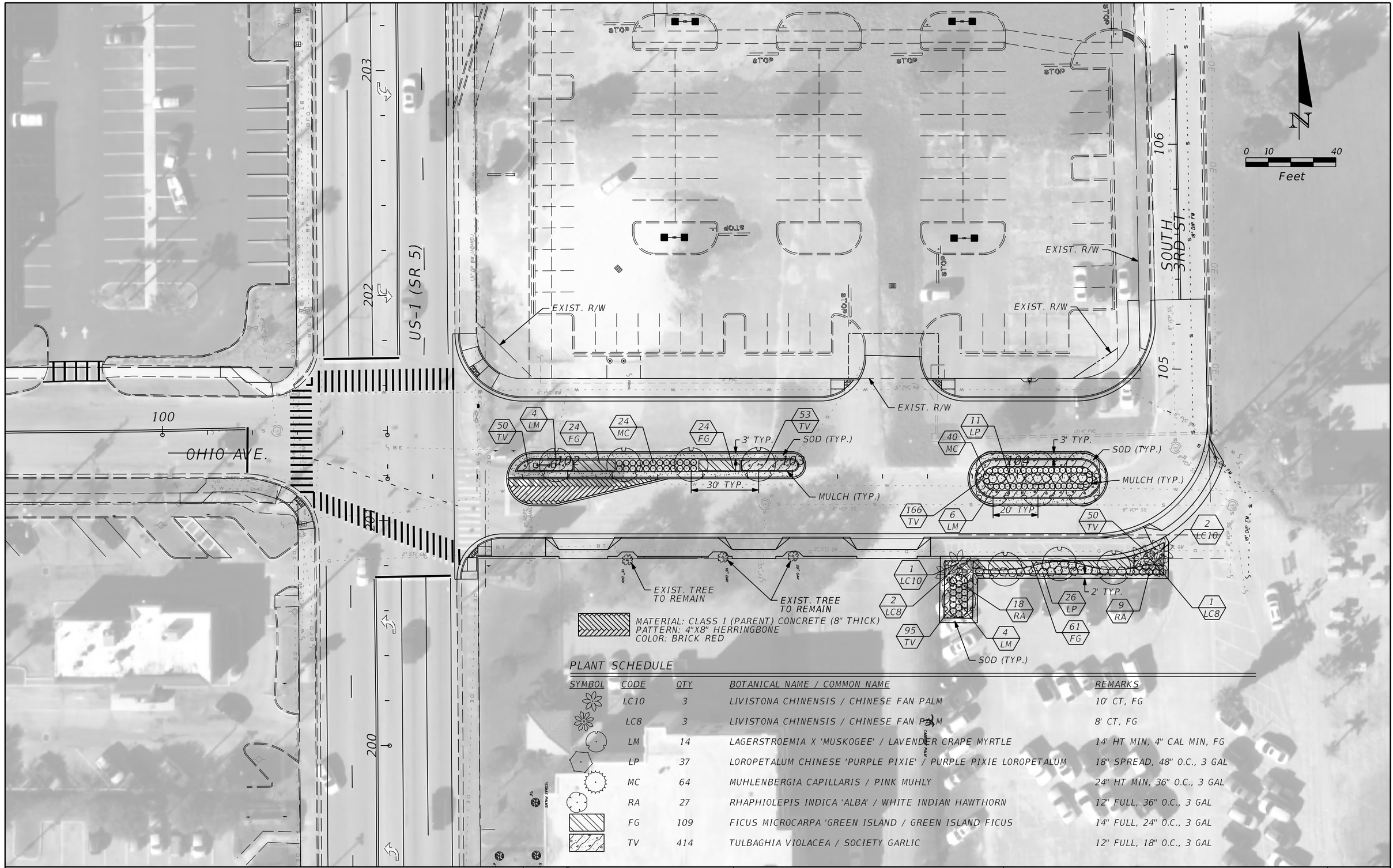
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

LANDSCAPE
GENERAL NOTES

SHEET NO.
19



PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL NAME / COMMON NAME	REMARKS
	LC10	3	LIVISTONA CHINENSIS / CHINESE FAN PALM	10' CT, FG
	LC8	3	LIVISTONA CHINENSIS / CHINESE FAN PALM	8' CT, FG
	LM	14	LAGERSTROEMIA X 'MUSKOGEE' / LAVENDER CRAPE MYRTLE	14' HT MIN, 4" CAL MIN, FG
	LP	37	LOROPETALUM CHINESE 'PURPLE PIXIE' / PURPLE PIXIE LOROPETALUM	18" SPREAD, 48" O.C., 3 GAL
	MC	64	MUHLENBERGIA CAPILLARIS / PINK MUHLY	24" HT MIN, 36" O.C., 3 GAL
	RA	27	RHAPHIOLEPIS INDICA 'ALBA' / WHITE INDIAN HAWTHORN	12" FULL, 36" O.C., 3 GAL
	FG	109	FICUS MICROCARPA 'GREEN ISLAND / GREEN ISLAND FICUS	14" FULL, 24" O.C., 3 GAL
	TV	414	TULBAGHIA VIOLACEA / SOCIETY GARLIC	12" FULL, 18" O.C., 3 GAL

REVISIONS

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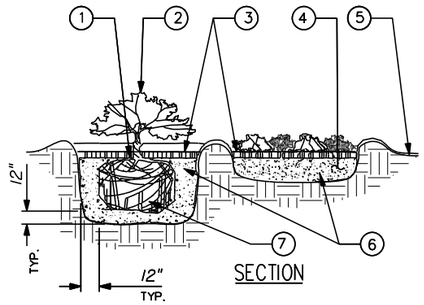
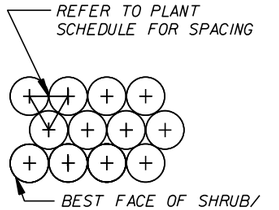
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

LANDSCAPE & HARDSCAPE

SHEET NO. 20

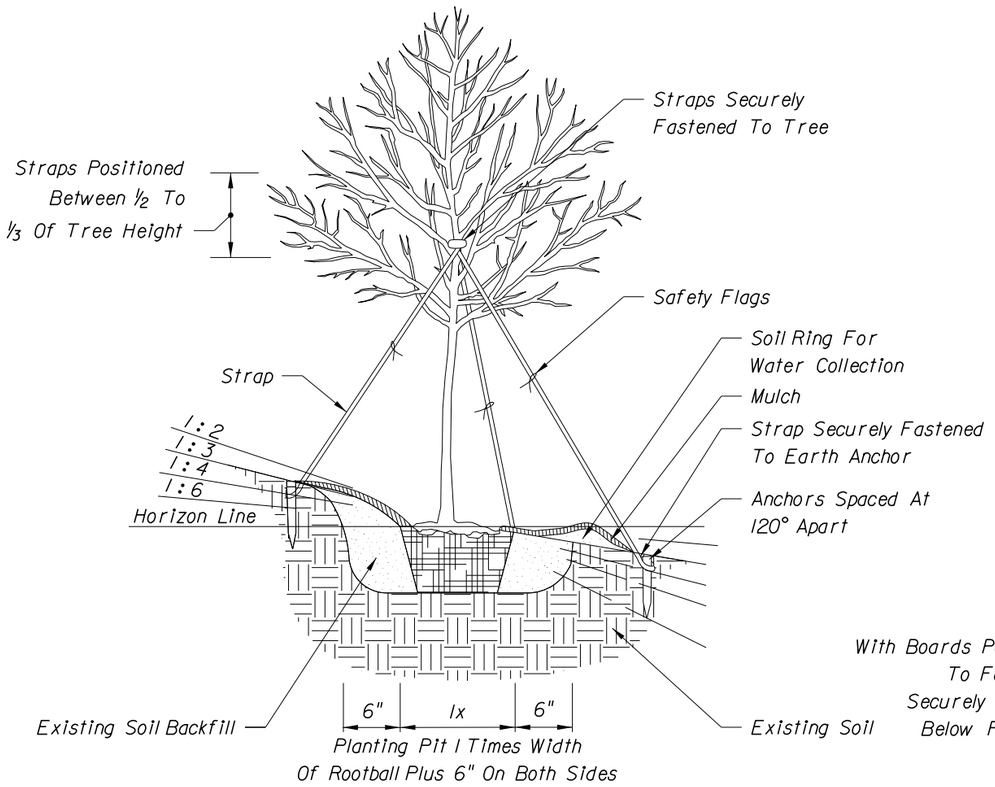




A SHRUB/GROUND COVER PLANTING DETAIL

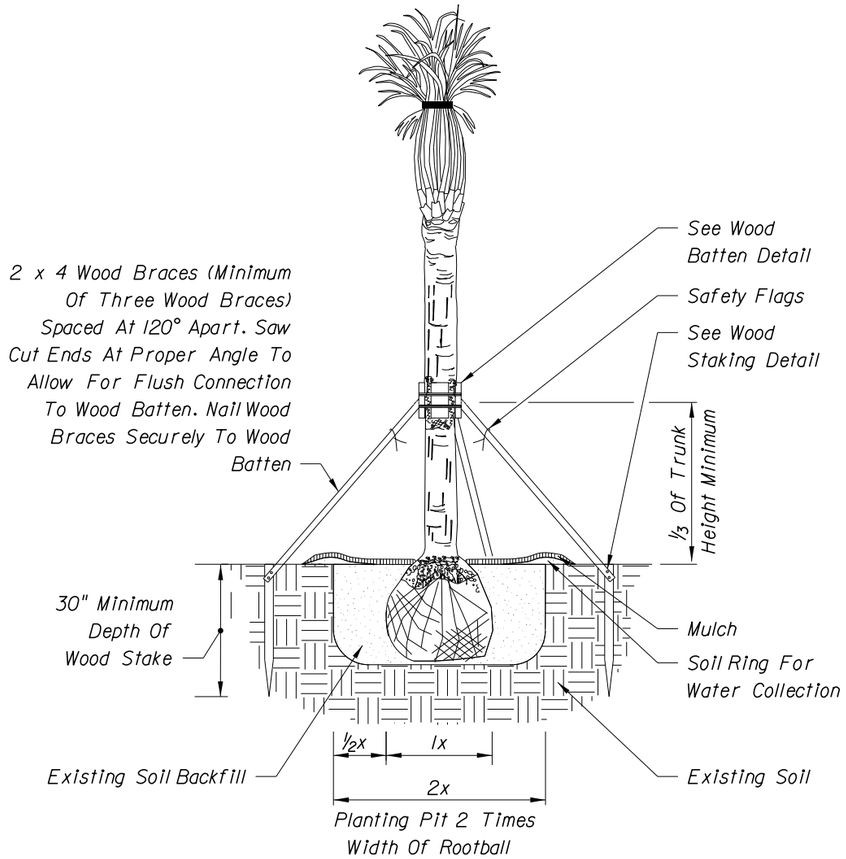
NTS

1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. WHEN USED IN MASSES- PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT
3. 4" MINIMUM OF MULCH COMPACTED OR AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND- COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY ROOTBALL SIDES AND BOTTOM.
8. ROOTBALLS GREATER THAN 4" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING ROOTBALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.



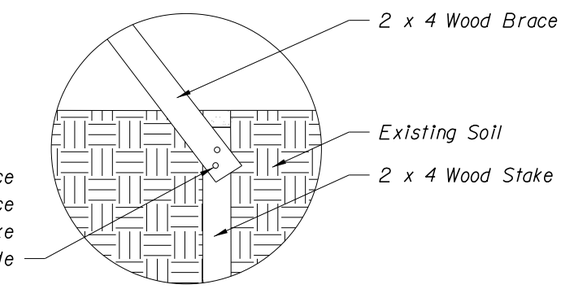
NOTE: Slope Provided As Rise:Run.

4" AND LARGER CALIPER TREE PLANTING ON SLOPE



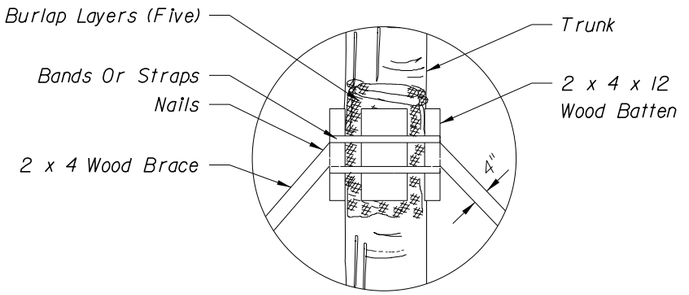
NOTE: For All Other Palms, Use Detail Provided By Landscape Architect In Contract Plans.

CABBAGE PALM PLANTING FOR UP TO 24' CLEAR TRUNK



NOTE: Stake Into Firm, Existing Soil.

WOOD STAKING DETAIL



WOOD BATTEN DETAIL

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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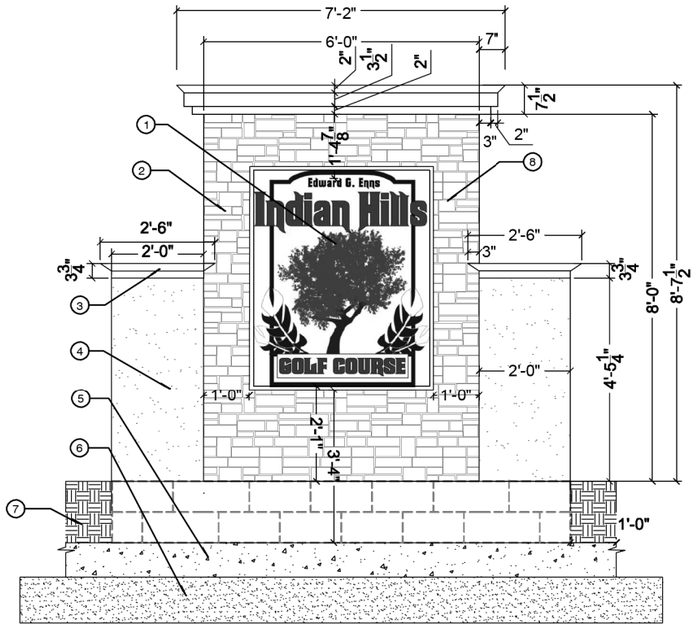
CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

LANDSCAPE DETAILS

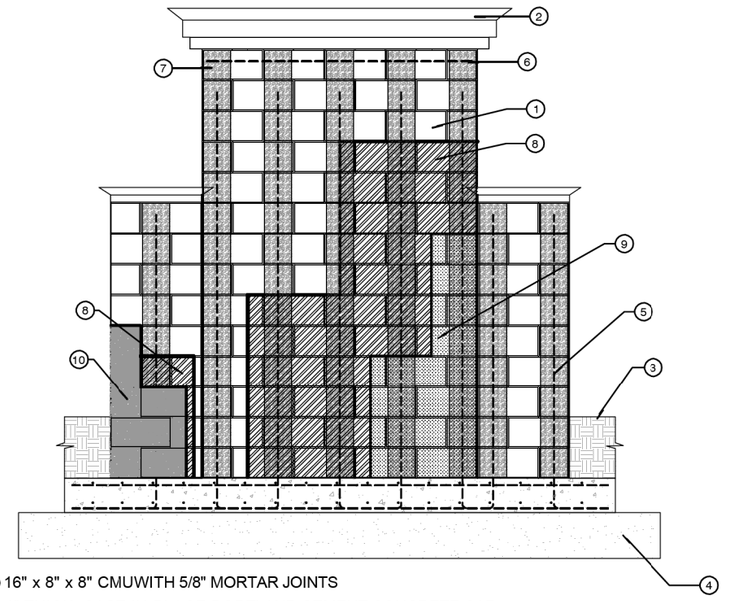
SHEET NO. 21

Mike.Forman 3/22/2018 7:38:42 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\SPDTLD01.DGN



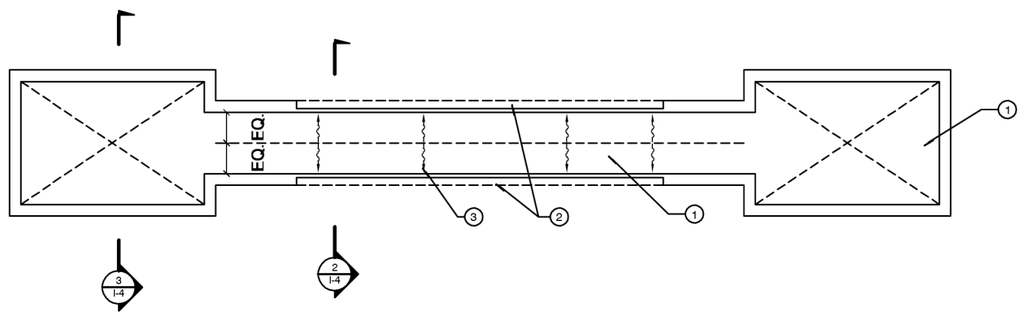
① SIGNAGE TO BE ACRYLIC AND RATED FOR OUTDOOR USE
② WALL FINISH TO BE 1-1/2" CORAL VENEER, SAND COLOR BY J&N STONE (863.422.7369) WWW.JNSTONE.COM
③ COLUMN TO BE CAST IN PLACE (SEE DETAIL X)
④ COLUMN TO BE ROUGH STUCCO FINISH, COLOR SW-7004 "SNOWBOUND"
⑤ CAST IN PLACE CONCRETE FOOTER
⑥ 98% AASHTO T99 COMPACTED SUBGRADE
⑦ FINISHED GRADE
⑧ 1" RECESSED AREA FOR SIGNAGE

1 MONUMENT SIGN FINISHES
NTS



① 16" x 8" x 8" CMUWITH 5/8" MORTAR JOINTS
② 4" THICK, CAST-IN-PLACE PORTLAND CEMENT CONCRETE CAP
③ FINISHED GRADE
④ CAST IN PLACE CONCRETE FOOTER
⑤ #4 REBAR
⑥ #5 REBAR
⑦ BOND BEAM
⑧ CEMENT PLASTER BASE COAT (3/8" - 5/8")
⑨ WALL FINISH TO BE 1-1/2" CORAL VENEER, SAND COLOR BY J&N STONE (863.422.7369) WWW.JNSTONE.COM
⑩ COLUMN TO BE ROUGH STUCCO FINISH, COLOR SW-7004 "SNOWBOUND"

2 MONUMENT SIGN STRUCTURAL
NTS



① 4" THICK, CAST IN PLACE CONCRETE CAP, SMOOTH FINISH, COLOR TO BE SW 7016 "MINDFUL GRAY"
② SIGNAGE TO BE ACRYLIC AND RATED FOR OUTDOOR USE
③ SLOPE FOR DRAINAGE

3 MONUMENT SIGN WALL CAP
NTS

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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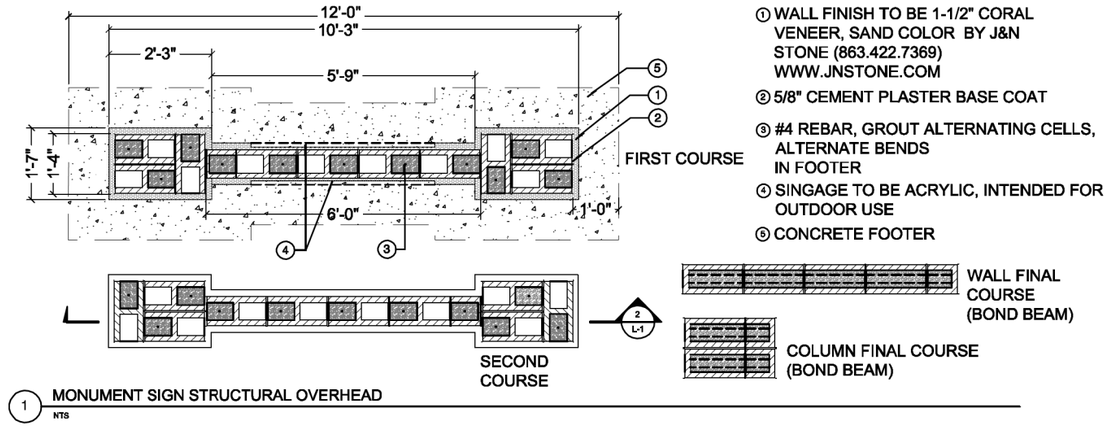
CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF FORT PIERCE
OHIO AVENUE
ROADWAY IMPROVEMENTS

MONUMENT DETAILS

SHEET NO.
21A



① WALL FINISH TO BE 1-1/2" CORAL VENEER, SAND COLOR BY J&N STONE (863.422.7369) WWW.JNSTONE.COM

② 5/8" CEMENT PLASTER BASE COAT

③ #4 REBAR, GROUT ALTERNATING CELLS, ALTERNATE BENDS IN FOOTER

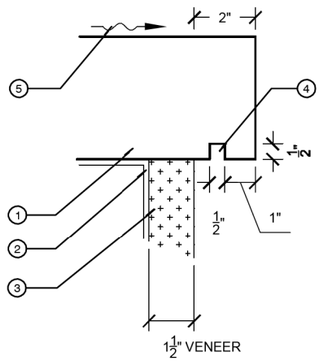
④ SINGAGE TO BE ACRYLIC, INTENDED FOR OUTDOOR USE

⑤ CONCRETE FOOTER

WALL FINAL COURSE (BOND BEAM)

COLUMN FINAL COURSE (BOND BEAM)

1 MONUMENT SIGN STRUCTURAL OVERHEAD
NTS



① CAST IN PLACE CONCRETE CAP

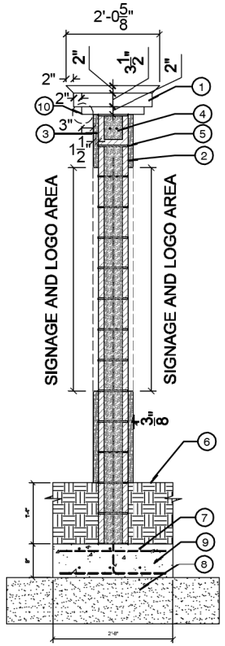
② 5/8" CEMENT PLASTER BASE COAT

③ COLUMN TO BE ROUGH STUCCO FINISH, COLOR SW-7004 "SNOWBOUND"

④ DRIP EDGE

⑤ DRAINAGE AWAY FROM STRUCTURE

4 DRIP EDGE DETAIL
NTS



① CAST IN PLACE CONCRETE WALL CAP

② CEMENT PLASTER BASE COAT (3/8" TO 5/8")

③ WALL FINISH TO BE 1-1/2" CORAL VENEER, SAND COLOR BY J&N STONE (868.422.7369) WWW.JNSTONEVENEER.COM

④ BOND BEAM WITH HORIZONTAL #5 REBAR

⑤ HORIZONTAL JOINT REINFORCEMENT WITH EYE AND PINTLE WALL TIES AT 16" O.C. (TYP.)

⑥ FINISHED GRADE

⑦ #4 REBAR

⑧ 98% AASHTO T99 COMPACTED SUBGRADE

⑨ POURED IN PLACE CONCRETE FOOTER

⑩ (3) L-2

2 WALL CROSS SECTION
NTS

① CAST IN PLACE CONCRETE WALL CAP

② CEMENT PLASTER BASE COAT (3/8" TO 5/8")

③ COLUMN TO BE ROUGH STUCCO FINISH, COLOR SW-7004 "SNOWBOUND"

④ BOND BEAM WITH HORIZONTAL #5 REBAR

⑤ HORIZONTAL JOINT REINFORCEMENT WITH EYE AND PINTLE WALL TIES AT 16" O.C. (TYP.)

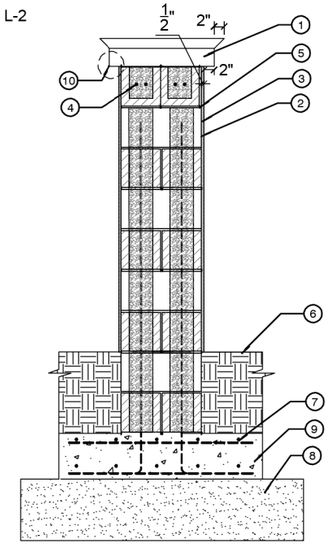
⑥ FINISHED GRADE

⑦ #4 REBAR

⑧ 98% AASHTO T99 COMPACTED SUBGRADE

⑨ POURED IN PLACE CONCRETE FOOTER

⑩ (3) L-2



3 COLUMN CROSS SECTION
NTS

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

MONUMENT DETAILS

SHEET NO.
21B

IRRIGATION SYSTEM NOTES:

1. THE IRRIGATION MAINLINE LAYOUT IS DIAGRAMMATIC. ANY CHANGES MADE IN THE IRRIGATION MAINLINE DUE TO FIELD CONDITIONS OR CONTRACTOR'S SUBMITTED DESIGN SHALL BE IN ACCORDANCE WITH THESE STANDARDS.

2. SET SPRAY HEADS 6" AND ROTORS 12" IN FROM BACK OF CURB OR 24" IF PAVEMENT HAS NO CURB.

3. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PERFORMING ALL NECESSARY MODIFICATIONS REQUIRED TO MEET THE SCHEMATIC INTENT OF THESE PLANS PRIOR TO SUBMITTING PROPOSAL. THESE PLANS OUTLINE THE OVERALL LAYOUT THE SYSTEM AND IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ZONE THE SYSTEM ACCORDINGLY BASED ON FLOW AND PRESSURE AVAILABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE FOLLOWING BUT NOT LIMITED TO AVAILABLE FLOW, AVAILABLE PRESSURE, CONNECTION ASSEMBLY, CAPACITY OF THE SYSTEM.

4. IRRIGATION SHALL NOT BE COMBINED ON A SINGLE ZONE AND SHALL BE ZONED ACCORDING TO IRRIGATION TYPE, PRECIPITATION RATE, AND THE SYSTEM'S AVAILABLE WATER / PRESSURE. CONTRACTOR TO SUBMIT SHOP DRAWINGS TO OWNER FOR REVIEW PRIOR TO INSTALLATION.

5. VERIFY LOCATIONS OF ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF IRRIGATION SYSTEM. ALL UTILITIES AND STRUCTURES MAY NOT BE SHOWN ON THESE PLANS-CONTRACTOR SHALL FIELD VERIFY.

6. CONTRACTOR TO FIELD VERIFY ALL POINT OF CONNECTION SOURCE INFORMATION INCLUDING PSI AND GPM PRIOR TO CONSTRUCTION.

7. INSTALLATION OF WORK SHALL BE COORDINATED WITH OTHER CONTRACTORS IN SUCH A MANNER AS TO ALLOW FOR A SPEEDY AND ORDERLY COMPLETION OF ALL WORK ON-SITE.

8. CONTRACTOR SHALL COORDINATE WITH THE PLANTING PLAN FOR PLANTER BED AND TREE LOCATIONS TO ENSURE ALL PLANT MATERIAL IS COVERED BY 100% HEAD-TO-HEAD IRRIGATION.

9. CONTRACTOR SHALL PROVIDE "AS-BUILT" DRAWINGS OF THE FINAL INSTALLATION TO OWNER AT SUBSTANTIAL COMPLETION BEFORE RECEIVING FINAL PAYMENT.

10. PRODUCTS SHALL BE AS SPECIFIED OR APPROVED EQUAL.

PRE-APPROVED MANUFACTURERS:
1. TORO
2. HUNTER
3. RAINBIRD

13. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS FOR THE WORK PRIOR TO COMMENCEMENT OF HIS OPERATIONS ON-SITE. COPIES OF THE PERMITS SHALL BE SENT TO THE OWNER/GENERAL CONTRACTOR. WORK IN THE R.O.W. SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF LOCAL AND/OR STATE JURISDICTION.

14. LOCATE ALL IRRIGATION LINES WITHIN LANDSCAPED AREAS WHENEVER POSSIBLE. ALL LINES UNDER PAVEMENT MUST BE SLEEVED WITHIN SCH. 40 PVC 2X SIZE OF PIPE AND FREE OF STONES/DEBRIS. ALL VALVES SHALL BE LOCATED WITHIN LANDSCAPED AREAS.

15. MAINLINE SHALL NOT BE LOCATED WITHOUT PRIOR APPROVAL OF THE OWNER'S REPRESENTATIVE.

16. THE IRRIGATION CONTRACTOR SHALL BE DIRECTLY RESPONSIBLE FOR SLEEVING AND DIRECTIONAL BORES.

17. ALL SLEEVES UTILIZED BY THE IRRIGATION CONTRACTOR WHETHER INSTALLED BY HIM OR NOT, SHALL BE LOCATED ON THE "AS-BUILT" DRAWINGS. THE DEPTH BELOW FINISH GRADE, TO THE NEAREST FOOT OF EACH END OF THE SLEEVE SHALL BE NOTED AT EACH SLEEVE LOCATION ON THE "AS-BUILT" DRAWINGS. ALL SLEEVES ON PLAN FOR WALL PENETRATIONS AND UNDER SIDEWALKS SHALL BE SIZED TWO PIPE SIZES GREATER THAN THE PIPE IT CARRIES.

18. ALL PRESSURIZED MAINLINES AND LATERALS UNDER PAVEMENT SHALL BE WITHIN SCH. 40 PVC SLEEVES. WHERE ELECTRIC OR HYDRAULIC VALVE CONTROL LINES PASS THROUGH A SLEEVE WITH OTHER MAIN OR LATERAL LINES THEY SHALL BE CONTAINED WITHIN A SEPARATE, SMALLER CONDUIT.

19. NUMBER THE TOP OF ALL VALVE BOX LIDS WITH MINIMUM 1" HEIGHT BLACK LETTERS TO CORRESPOND TO AUTOMATIC AND GATE VALVE DESIGNATIONS. ALL HOSE BIBB VALVE BOXES SHALL BE LABELED IN A SIMILAR MANNER WITH THE DESIGNATION "HB". LETTER OUTSIDE OF TIME CLOCK CABINETS TO CORRESPOND WITH IRRIGATION CLOCK PROGRAM DESIGNATION.

20. THE IRRIGATION CONTRACTOR SHALL INSTALL A COLOR CODED METAL DETECTABLE MARKING TAPE WHICH CLEARLY NOTES: "CAUTION: IRRIGATION LINE BURIED BELOW." THE TAPE SHALL BE INSTALLED THE FULL LENGTH OF THE IRRIGATION MAINLINE.

21. ELECTRIC SERVICE TO THE CONTROLLER SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.

22. ALL 24 VAC WIRING FROM DECODER TO VALVE SHALL BE OF DIRECT BURIAL COPPER WIRE. MAXIMUM LENGTH OF WIRE FROM DECODER TO VALVE SHALL NOT EXCEED 400 FEET. AS FOLLOWS:
CONTROL WIRES - #14
COMMON WIRES - #14

23. ALL VALVES, SPLICES WITHIN CONTROL LINES, AND QUICK COUPLERS SHALL BE LOCATED WITHIN NDS VALVE BOXES AS FOLLOWS:

-RECTANGULAR 12"X17" HEAVY DUTY BOX. (PURPLE COVER FOR REUSE TO BE PROVIDED WHERE APPROPRIATE).

24. ALL IRRIGATION HEADS/DRIP TUBING SHALL BE LOCATED ONE (1) FOOT FROM BACK OF CURB WHEN NEXT TO A ROADWAY. (THIS SHALL NOT INCLUDE PARKING AREAS OR DRIVE AISLES).

25. HEADS, LATERALS, EMITTERS, AND VALVES ARE NOT SHOWN, BUT ARE NECESSARY FOR A FULLY FUNCTIONING IRRIGATION SYSTEM.

26. LOCATE ALL VALVES IN PLANTING BEDS WITH A MINIMUM OF 3'-0" FROM BACK OF CURB OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED. PIPE SIZES ON EITHER SIDE OF SECTION VALVES CONNECTING MAINLINE TO SECTION LATERAL SHALL BE ONE (1) PIPE SIZE LARGER THAN VALVE SIZE. WHERE MAINLINES RUN PARALLEL TO PAVEMENT OR CURBING, THE MAINLINE SHALL BE OFFSET 2'-0" FROM THE EDGE OF PAVEMENT OR CURB.

27. IRRIGATION ZONES SHALL BE SEPARATED FOR HIGH AND LOW WATER USE REQUIREMENTS AND OPERATED ON DIFFERENT WATERING CYCLES. BUBBLERS, DRIPLINE, AND SPRAY HEADS SHALL BE SEPARATED ON DIFFERENT VALVES. AT NO TIME SHALL MULTIPLE IRRIGATION HEAD TYPES BE LOCATED ON THE SAME VALVE.

28. ALL WIRING FOR CONNECTION OF THE VALVES TO THE CONTROLLER SHALL FOLLOW MANUFACTURERS SPECIFICATIONS. IF REQUIRED, ALL WIRING FOR A TWO WIRE PATH SHALL BE WITH RED/BLUE TWISTED PAIR 14 AWG. ELECTRIC CONTROL LINES FROM THE DECODER TO THE SOLENOID VALVES SHALL BE TWISTED PAIR 18 AWG. ALL DECODERS SHALL BE GROUNDED EVERY 1,000 L.F. OR EVERY 10 DEVICES. ALL WIRE SHALL BE FURNISHED IN MINIMUM 2,500' REELS AND SPLICING SHALL BE MINIMIZED. BURY SPLICE KIT. ALL 24 VOLT WIRING SHALL BE DONE IN ACCORDANCE WITH EXISTING CODES. SPLICING SHALL BE IN VALVE BOXES OR CONTROLLERS ONLY. IRRIGATION SYSTEM CONTROL SHALL BE TWO WIRE PATH. CONTRACTOR SHALL FOLLOW ALL MANUFACTURER'S REQUIREMENTS FOR THIS INSTALLATION. TWO WIRE SYSTEM SHALL HAVE 2-WAY COMMUNICATIONS FIELD PROGRAMMABILITY, STATION SPECIFICATIONS AND INTEGRATED SURGE PROTECTION.

29. ALL CONTROL WIRE SHALL BE INSTALLED IN A 1¼" ELECTRICAL CONDUIT.

30. SMALLEST DIAMETER LATERAL PIPE SHALL BE 3/4".

31. IRRIGATION SYSTEM SHALL BE CAPABLE OF SUPPLYING AN AVERAGE OF 1.05" OF WATER PER WEEK WITHIN WATERING RESTRICTIONS AS APPLICABLE.

32. IRRIGATION SYSTEM SHALL NOT BE INSTALLED THROUGH EXISTING, OR PRESERVED PLANT COMMUNITIES. DO NOT TRENCH THROUGH EXISTING ROOT SYSTEMS OF ANY VEGETATION INTENDED TO BE PRESERVED.

33. CONTRACTOR TO MINIMIZE IRRIGATION OVERTHROW TO IMPERVIOUS AND NATURAL AREAS THROUGH FIELD ADJUSTMENTS TO INDIVIDUAL HEADS.

34. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO THE CONDITION DENOTED ON THE LANDSCAPE PLAN.

35. IRRIGATION PIPING INSTALLED UNDER ROADS AND SIDEWALKS SHALL BE IN SCHEDULE 40 PVC SLEEVING AT 2X THE PIPE SIZE. ALL SLEEVING SHALL BE FREE OF STONES AND DEBRIS.

36. IRRIGATION SOURCE TO BE POTABLE WATER. IRRIGATION CONTRACTOR TO VERIFY SOURCE PRIOR TO DESIGN.

37. POINT OF CONNECTION TO BE FIELD LOCATED. IRRIGATION SYSTEM CONNECTIONS TO THE LOCAL JURISDICTION SERVICE SHALL COMPLY WITH ALL APPLICABLE CODES.

38. IRRIGATION CONNECTION MAY REQUIRE BACKFLOW PREVENTION, VERIFY WITH LOCAL JURISDICTION.

39. IRRIGATION SYSTEM SHALL COMPLY WITH THE LOCAL JURISDICTION LAND DEVELOPMENT CODE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION GENERAL NOTES

SHEET NO. 22

CONTRACTOR TO AVOID INTERFERENCE WITH ALL UNDERGROUND UTILITIES (EXISTING AND PROPOSED). CONTRACTOR TO COORDINATE WITH OTHER DISCIPLINES FOR LOCATION OF ALL EXISTING AND PROPOSED UTILITIES.

P.O.C. PER LOCAL JURISDICTION REQUIREMENTS. COORDINATE WITH OWNER AND PROJECT LANDSCAPE ARCHITECT FOR FINAL LOCATION. SHOWN HERE FOR CLARITY.

LATERAL SLEEVING (TYP.)

MAIN LINE SLEEVING (TYP.)

CONTRACTOR SHALL LOCATE CONTROLLER WITHIN A STAINLESS STEEL CABINET AND SHALL BE PAD MOUNTED PER DETAIL. CONTROLLER SHALL BE LOCATED THE WITHIN 2' SOD STRIP IN PLANTING BED. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE P.O.C. FOR INCLUSION INTO THE SYSTEM (INCLUDES ALL NECESSARY BORING, TRENCHING, ETC.)

CONTRACTOR TO ADJUST ALL OVERHEAD SPRAY HEADS TO ENSURE MINIMAL OVER-SPRAY OCCURS ON ANY HARDSCAPE SURFACE (TYP.)

MAINLINE SHOWN FOR CLARITY. INSTALL MAINLINE AND VALVE 6" FROM B.O.C. WHEN POSSIBLE. COORDINATE WITH OTHER DISCIPLINES TO AVOID CONFLICTS (TYP.)

COORDINATE/DISCUSS PROJECT LIMITS WITH GENERAL CONTRACTOR TO ENSURE ALL IRRIGATION EQUIPMENT IS INSTALLED WITHIN PROJECT AREA.

N

0 10 40
Feet

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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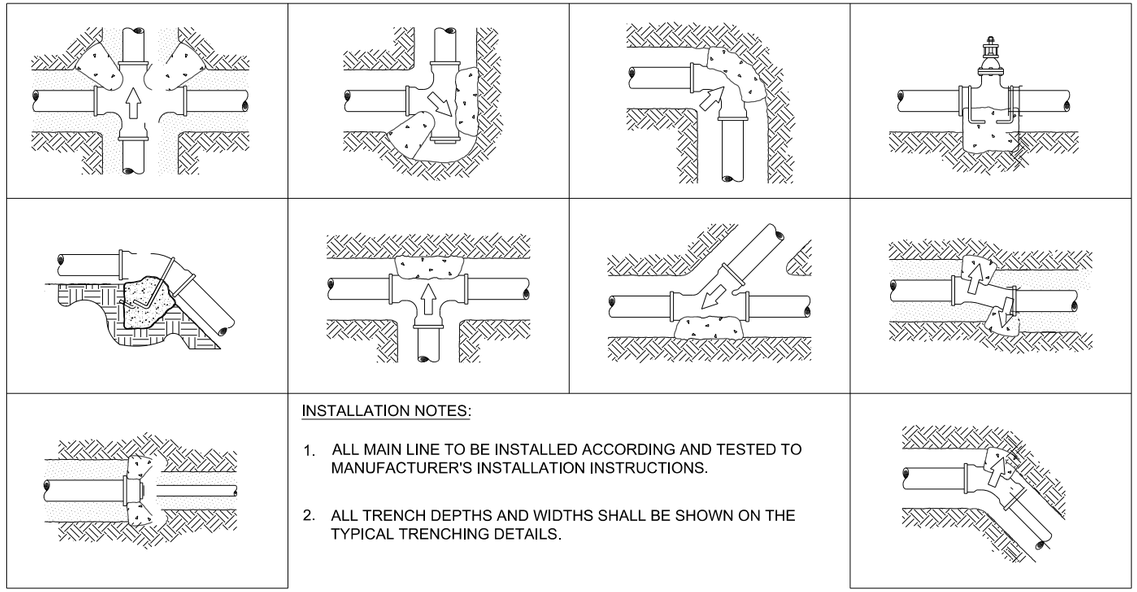
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION PLAN

SHEET NO. 23

Mike.Forman 3/22/2018 7:39:30 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANIR01.dgn

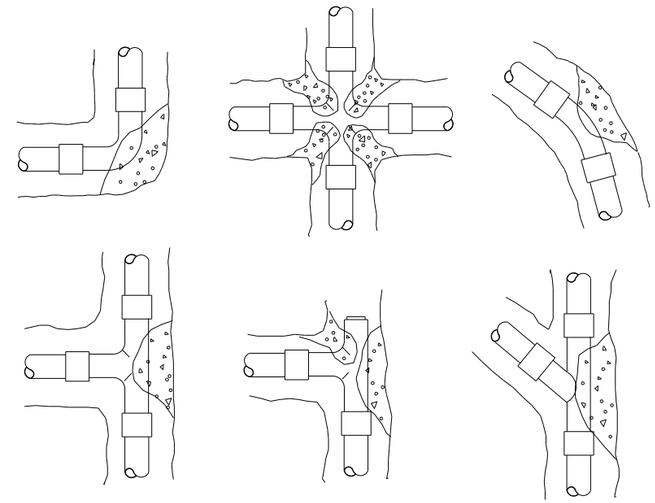


INSTALLATION NOTES:

1. ALL MAIN LINE TO BE INSTALLED ACCORDING AND TESTED TO MANUFACTURER'S INSTALLATION INSTRUCTIONS.

2. ALL TRENCH DEPTHS AND WIDTHS SHALL BE SHOWN ON THE TYPICAL TRENCHING DETAILS.

TYPICAL THRUST BLOCK
SECTION NTS

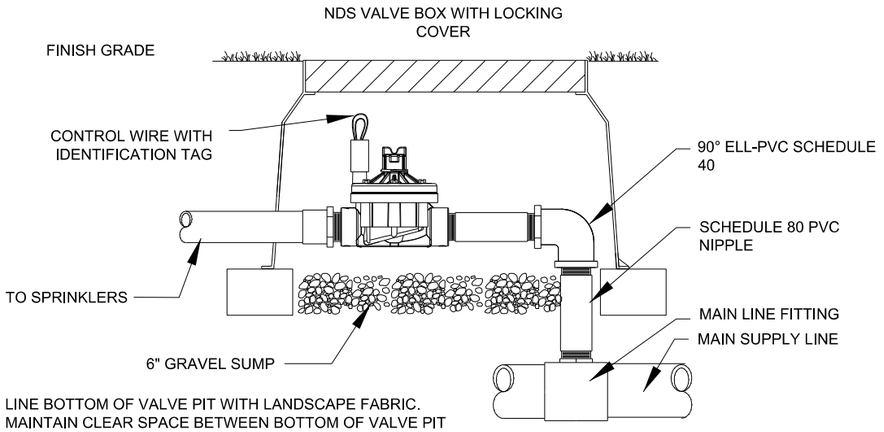


INSTALLATION NOTES

1. 3000 PSI CONCRETE OR BETTER IS TO BE USED FOR THRUST BLOCKS.
2. FOR 45°/90° FITTINGS, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED.
3. FOR 22-1/2° FITTINGS, MINIMUM OF 0.5 CUBIC FEET OF CONCRETE TO BE USED.
4. FOR TEES, MINIMUM OF 2 CUBIC FEET OF CONCRETE TO BE USED. THRUST

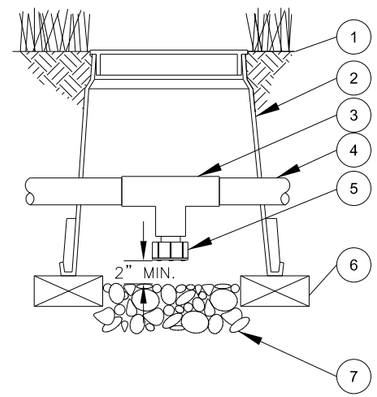
BLOCKS REQUIRED FOR IRRIGATION MAINLINE 2 1/2" AND LARGER.

THRUST BLOCK REINFORCEMENT
SECTION NTS



LINE BOTTOM OF VALVE PIT WITH LANDSCAPE FABRIC. MAINTAIN CLEAR SPACE BETWEEN BOTTOM OF VALVE PIT AND VALVE. DO NOT ALLOW BOX TO REST ON PIPE.

TYPICAL CONTROL VALVE
SECTION NTS



1. FINISH GRADE/TOP OF MULCH
2. VALVE BOX WITH COVER:
3. PVC SCH 40 TEE
4. PVC LATERAL PIPE
5. FILTERED DRAIN VALVE:
6. BRICK (1 OF 2)
7. 6-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

DRAIN VALVE
SECTION NTS

REVISIONS					
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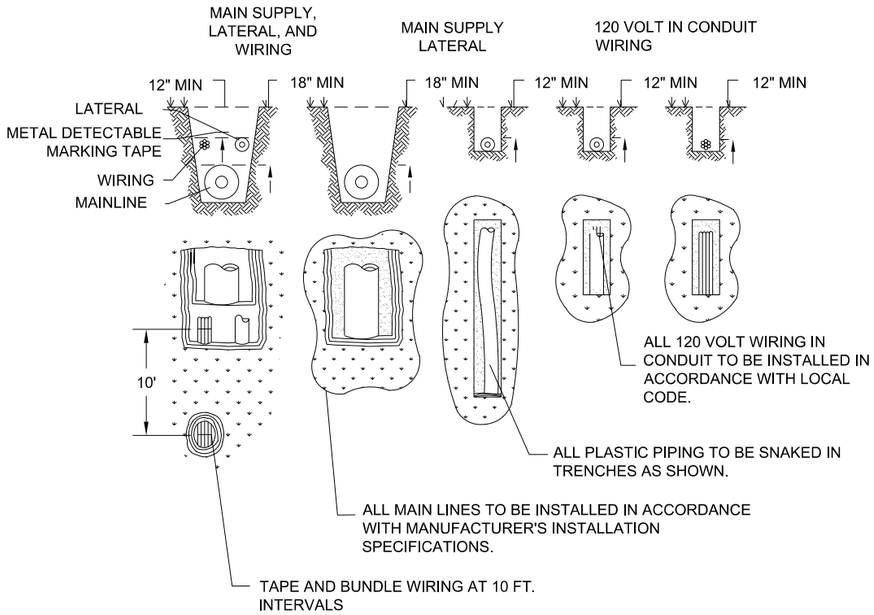
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION DETAILS

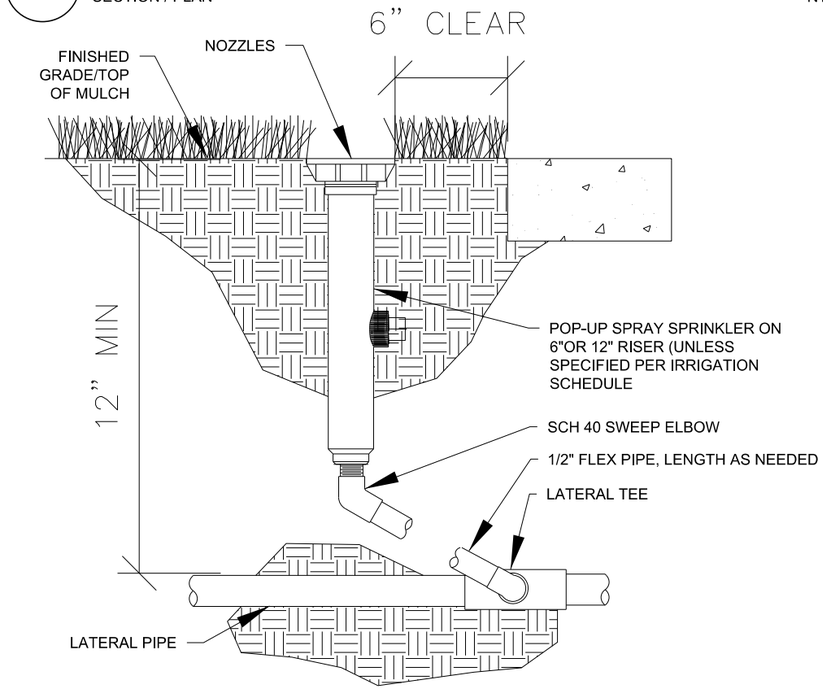
SHEET NO. 24

Mike.Forman 3/22/2018 7:39:31 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\SPDTIR01.DGN



TYPICAL TRENCHING

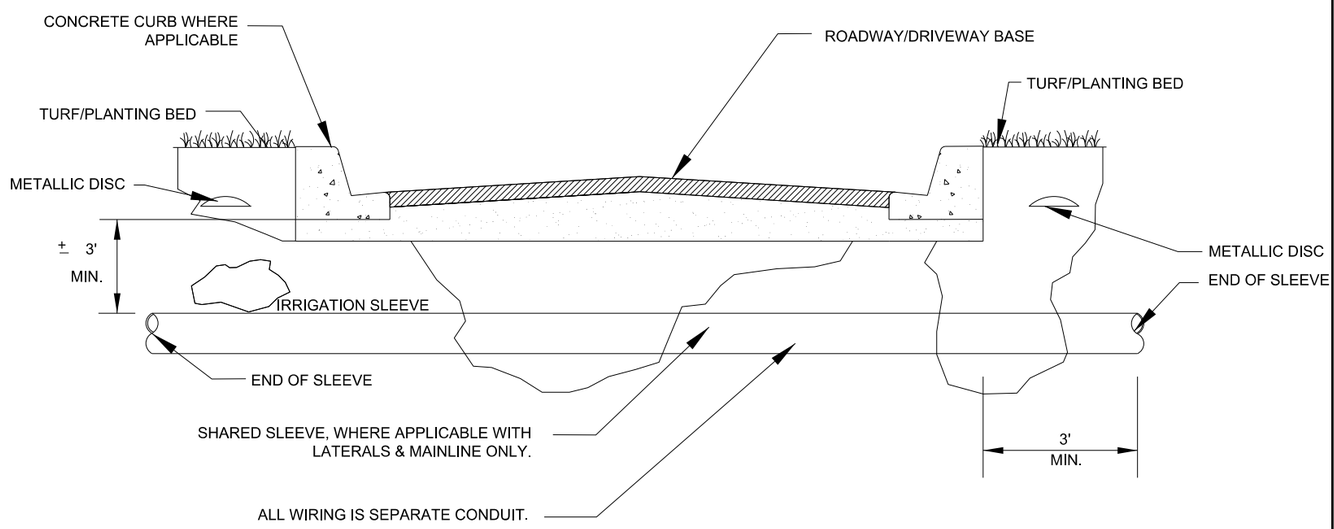
SECTION / PLAN — NTS



TYPICAL SPRAY / ROTAR HEAD

1" = 1"

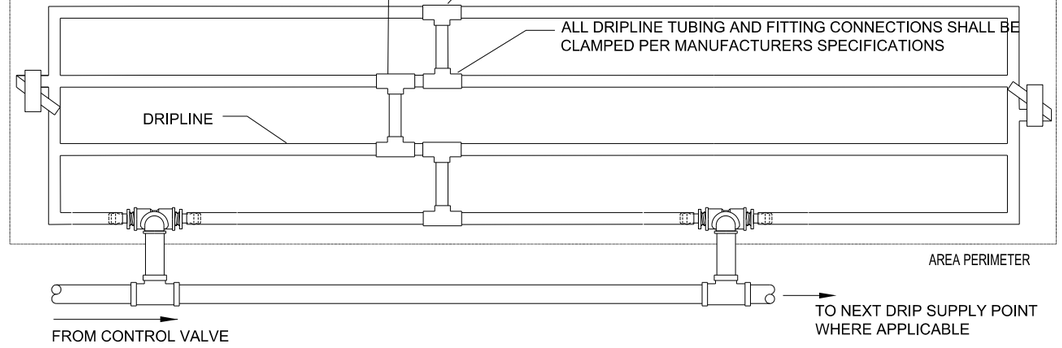
SECTION — NTS



TYPICAL SLEEVING

SECTION — NTS

WHEN DRIPLINE REQUIRES MULTIPLE SUPPLY POINTS EACH POINT SHALL BE CONNECTED UTILIZING RAINBIRD FITTINGS.



CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS. IF NOT SHOWN, INSTALL WITHIN ADJACENT GREEN AREA NOT IN A HIGHLY VISIBLE AREA.

NOTE:

1. DRIP TUBING TO BE ROUTED IN THE PLANT MATERIAL BED WITH AT MAXIMUM LATERAL SPACING OF 16 INCHES.
2. DRIP TUBING TO BE INSTALLED IN A GRID PATTERN. DRIP TUBING SHALL NOT BE INSTALLED IN A LONG CONTINUOUS RUN.
3. CONTRACTOR TO REFER TO IRRIGATION PLAN FOR LOCATION OF CONTROL VALVES THAT UTILIZE MULTIPLE DRIPLINE SUPPLY CONNECTIONS (IF SHOWN).

TYPICAL DRIP LINE

PLAN — NTS

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION DETAILS

SHEET NO. 25

Mike.Forman 3/22/2018 7:39:32 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\SPDTIR01.DGN

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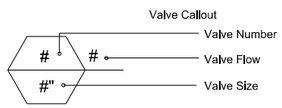
SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY	PSI
LST RST SST	HUNTER MP STRIP PROS-06-PRS40-CV-R TURF ROTATOR, 6" (15.24 CM) POPUP WITH FACTORY INSTALLED CHECK VALVE, RECLAIMED BODY CAP, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE ON PRS40 BODY. LST=IVORY LEFT STRIP, SST=BROWN SIDE STRIP, RST=COPPER RIGHT STRIP.	46	40
M L O	HUNTER MP1000 PROS-12-PRS40-CV SHRUB ROTATOR, 12" (30.48 CM) POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE. M=MAROON ADJ ARC 90 TO 210, L=LIGHT BLUE 210 TO 270 ARC, O=OLIVE 360 ARC ON PRS40 BODY.	27	40
K G R	HUNTER MP2000 PROS-12-PRS40-CV SHRUB ROTATOR, 12" (30.48 CM) POP-UP WITH CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE. K=BLACK ADJ ARC 90-210, G=GREEN ADJ ARC 210-270, R=RED 360 ARC ON PRS40 BODY.	6	40
●	HUNTER MP CORNER PROS-12-PRS40-CV SHRUB ROTATOR, 12" (30.48 CM) POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE. T=TURQUOISE ADJ ARC 45-105 ON PRS40 BODY.	1	40
LST RST SST	HUNTER MP STRIP PROS-12-PRS40-CV SHRUB ROTATOR, 12" (30.48 CM) POP-UP WITH FACTORY INSTALLED CHECK VALVE, PRESSURE REGULATED TO 40 PSI (2.76 BAR), MP ROTATOR NOZZLE. LST=IVORY LEFT STRIP, SST=BROWN SIDE STRIP, RST=COPPER RIGHT STRIP, ON PRS40 BODY.	9	40

SYMBOL	MANUFACTURER/MODEL/DESCRIPTION	QTY
◔	RAIN BIRD PEB-PRS-D 1", 1-1/2", 2" PLASTIC INDUSTRIAL VALVES. LOW FLOW OPERATING CAPABILITY, GLOBE CONFIGURATION. WITH PRESSURE REGULATOR MODULE.	2
C	RAIN BIRD ESP8-LMXE W/ STAINLESS STEEL ENCLOSURE AND PEDESTAL	1
P.O.C	POINT OF CONNECTION 1-1/2" TIE INTO EXISTING MAIN	1
———	IRRIGATION LATERAL LINE: PVC CLASS 200 SDR 21	1,262 L.F.
— — — —	IRRIGATION MAINLINE: PVC SCHEDULE 40	65.5 L.F.
— — — —	PIPE SLEEVE: PVC SCHEDULE 40 MAINLINE SLEEVE	31.0 L.F.
═══	PIPE SLEEVE: PVC SCHEDULE 40 LATERAL SLEEVE	100.5 L.F.



VALVE SCHEDULE

NUMBER	MODEL	SIZE	TYPE	GPM	FRICTION LOSS	VALVE LOSS	PSI	PSI @ POC	PRECIP
1	RAIN BIRD PEB-PRS-D	1"	TURF ROTARY	16.06	5.86	2.47	48.33	49.35	1.00 in/h
2	RAIN BIRD PEB-PRS-D	1-1/2"	SHRUB ROTARY	16.81	2.70	3.90	46.60	47.86	0.57 in/h

CRITICAL ANALYSIS

Generated: 2017-09-28 08:56

P.O.C. NUMBER: 01
Water Source Information: TIE INTO EXISTING MAIN

FLOW AVAILABLE
Point of Connection Size: 1-1/2"
Flow Available: 47.66 gpm

PRESSURE AVAILABLE
Static Pressure at POC: 55.00 psi
Pressure Available: 55.00 psi

DESIGN ANALYSIS
Maximum Station Flow: 16.81 gpm
Flow Available at POC: 47.66 gpm
Residual Flow Available: 30.85 gpm

Critical Station: 1
Design Pressure: 40.00 psi
Friction Loss: 5.33 psi
Fittings Loss: 0.53 psi
Elevation Loss: 0.00 psi
Loss through Valve: 2.47 psi
Pressure Req. at Critical Station: 48.33 psi
Loss for Fittings: 0.09 psi
Loss for Main Line: 0.93 psi
Loss for POC to Valve Elevation: 0.00 psi
Loss for Backflow: 0.00 psi
Critical Station Pressure at POC: 49.35 psi
Pressure Available: 55.00 psi
Residual Pressure Available: 5.65 psi

THIS IRRIGATION PLAN IS DESIGN TO THE FOLLOWING STATS: 55 PSI AND 47.66 GPM. CONTRACTOR TO VERIFY WATER AVAILABILITY/PRESSURE AND CONTACT THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION IF A SYSTEM HAS +/- 5 PSI THAN DESIGN PRESSURE.

SYSTEM DEMAND

FLOW TOTALS
Shrub Rotary: 16.8
Turf Rotary: 16.1
Total: 32.9 GPM

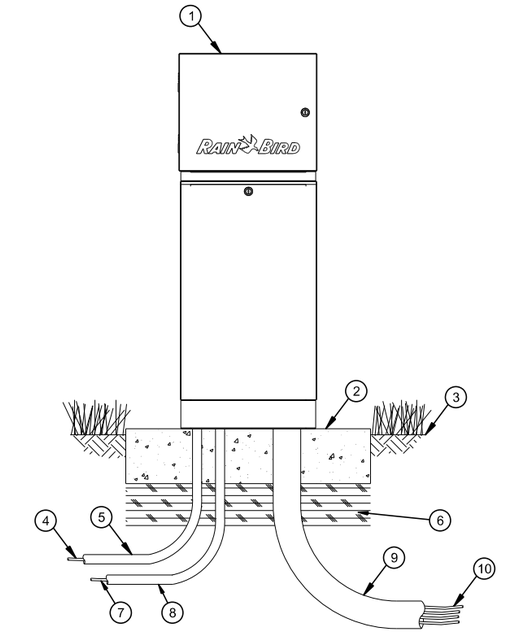
IRRIGATION SYSTEM USAGE:
+/- 4,064.4 SF
4,064 SF x .0875 = 355.6 CF (ASSUMING 1.05" OF IRRIGATION PRECIPITATION)
356 CF x 7.854 (GALLONS TO COVER 1.05") = 2,796 GALLONS (COVER SITE WITH 1.05" OF IRRIGATION PRECIPITATION

2,796 GALLONS / 7 DAYS = 399 GALLONS PER DAY (+/-)
399 GALLONS PER DAY x 30.4 = 12,129.6 GALLONS PER MONTH (+/-)
12,130 GALLONS PER MONTH x 12 = 145,560 GALLONS PER YEAR (+/-)

IRRIGATION SYSTEM USAGE:
+/- 4,064.4 SF
4,064 SF x .0875 = 355.6 CF (ASSUMING 1.05" OF IRRIGATION PRECIPITATION)
356 CF x 7.854 (GALLONS TO COVER 1.05") = 2,796 GALLONS (COVER SITE WITH 1.05" OF IRRIGATION PRECIPITATION

2,796 GALLONS / 7 DAYS = 399 GALLONS PER DAY (+/-)
399 GALLONS PER DAY x 30.4 = 12,129.6 GALLONS PER MONTH (+/-)
12,130 GALLONS PER MONTH x 12 = 145,560 GALLONS PER YEAR (+/-)

NOTE:
- FIRST YEAR WATERING SCHEDULE TO BE 1" OF WATER PER WEEK.
- CONTRACTOR TO PROVIDE A LAMINATED IRRIGATION SCHEDULE THAT SHALL BE ATTACHED TO THE IRRIGATION CONTROLLER.



D IRRIGATION CONTROLLER DETAIL

(1) IRRIGATION CONTROLLER: RAIN BIRD IQ ESP-LXME SATELLITE CONTROLLER WITH IQ NCC RS232 CARTRIDGE IN LXMM METAL CABINET AND LXMMPED METAL PEDESTAL. INSTALL CONTROLLER, CABINET AND PEDESTAL PER MANUFACTURER'S RECOMMENDATIONS.

(2) CONCRETE PAD: 6-INCH MINIMUM THICKNESS (3 KSI MIN.)

(3) FINISH GRADE

(4) POWER SUPPLY WIRE

(5) 1-INCH SCH 40 PVC CONDUIT AND FITTINGS AND SWEEP ELL TO POWER SUPPLY

(6) COMPACTED SUBGRADE

(7) RS232 SERIAL CABLE TO IQ CENTRAL CONTROL COMPUTER (MAXIMUM LENGTH 50 FEET)

(8) 1-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR RS232 SERIAL CABLE TO IQ CENTRAL CONTROL COMPUTER

(9) 3-INCH SCH 40 PVC CONDUIT, FITTINGS AND SWEEP ELL FOR STATION WIRES

(10) WIRES TO REMOTE CONTROL VALVES

NOTES:

1. IQ ESP-LXME CONTROLLER IS AVAILABLE IN 8- OR 12-STATION BASE MODELS. ADDITIONAL MODULES IN 4-, 8- AND 12-STATION VERSIONS MAY BE ADDED TO BRING THE CONTROLLER UP TO 48 STATIONS MAXIMUM.
2. FOR EASE OF INSTALLATION INTO A CONTROLLER WITH MORE THAN 24 STATIONS, INSTALL A JUNCTION BOX AT THE BASE OF CONTROLLER AND TRANSITION LARGER VALVE AND COMMON WIRES FROM FIELD TO 18 AWG MULTI CONDUCTOR WIRE TO BE USED IN CONTROLLER.
3. PROVIDE PROPER GROUNDING COMPONENTS TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.
4. USE PE-CABLE WITH SHORT HAUL MODEMS FOR INSTANCES WHERE CONTROLLER IS MORE THAN 50 FEET FROM IQ CENTRAL CONTROL COMPUTER.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

IRRIGATION DETAILS

SHEET NO. 26

1. CONTRACTOR SHALL CONTACT CITY OF FORT PIERCE PROJECT MANAGER ED SEISSIGER AT (772-460-2200) 24 HOURS PRIOR TO BEGINNING ANY WORK AT THE INTERSECTION.

2. ALL EQUIPMENT/ MATERIALS TO BE APPROVED BY THE CITY OF FORT PIERCE TRAFFIC OPERATIONS DIVISION.
   A. CITY OF FORT PIERCE IS STANDARDIZED ON ECONOLITE CABINETS, CONTROLLERS, AND VIDEO DETECTION. ALL SIGNAL EQUIPMENT IS TO BE COMPATIBLE WITH EXISTING CITY OF FORT PIERCE CLOSED LOOP SYSTEM. MUST HAVE KNOWLEDGE OF THE ECONOLITE AIRES SYSTEM.

   B. ALL CABINETS TO BE TYPE V-TS2-T1 16 PHASE (8 SIGNAL PHASES, 4 PED AND 4 O/L) AND SHALL HAVE ILLUMINATED SIGN PANEL WITH PHOTOCELL, GENERATOR PANEL WITH TRANSFER SWITCH, DOOR MOUNTED FLEXIBLE LIGHT (GOOSE NECK). HONDA GENERATOR (EU-3000-IS) FOR EMERGENCY POWER.
   US ROBOTICS 56K FAX MODEM WITH A MIN 500W UPS IN ALL MASTER CABINETS.

   C. ELECTRICAL SERVICE TO BE 2-120 VOLTS, ONE WITH A 50 AMP BREAKER AND ONE WITH A 20 AMP BREAKER.

   D. SERVICE RISER-USE 1 1/2" IMC ON SERVICE POLE. CONTRACTOR SHALL INSTALL RIGID CONDUIT STRAPS (ONE AT 18 INCHES ABOVE GRADE AND ONE AT 12 INCHES ABOVE AND/OR BELOW SERVICE CAN. (5 FOOT MAXIMUM SPACING) (DOES NOT APPLY TO MAST ARMS).

   E. WIRING TO BE AS PER CITY RECOMMENDATIONS SHEET. CONTRACTOR SHALL VERIFY CITY OF FORT PIERCE COLOR CODES PRIOR TO ORDERING WIRE.

   F. CONTROLLER BASE AND SERVICE PAD TO BE MONOLITHIC POUR WITH A FINISHED GRADE 18" ABOVE BACK OF CURB.

   G. MAST ARM AND POLES SHALL BE GALVANIZED (AND NOT PAINTED). WITH ELONGATED HANDHOLE COVERS AND 25 POSITIONS STAINLESS STEEL TERMINAL BLOCK SHALL BE MOUNTED MIN.

3. 20 CONDUCTOR SIGNAL CABLE TO EACH MAST ARM MIN. C OR J HOOKS AT ARM WITH HAND HOLE.

4. CITY OF FORT PIERCE WILL REQUIRE AN INSPECTION OF SERVICE PRIOR TO CONTACTING POWER COMPANY FOR HOOK-UP.

5. CONTRACTOR WILL INSURE A MINIMUM OF ONE (1) IMSA CERTIFIED LEVEL II SIGNAL TECHNICIAN IS PRESENT DURING ALL PHASES OF CONSTRUCTION OR IS AVAILABLE WITHIN (2) HOURS NOTICE - 24 HOURS PER DAY / 7 DAYS PER WEEK FROM THE LETTING OF CONTRACT TO FINAL ACCEPTANCE OF COMPLETED PROJECT.

6. THE CONTRACTOR SHALL PROVIDE FOUR COPIES OF MARKED-UP (AS-BUILT) CONSTRUCTION PLANS, AND CAD FILE OF SUCH, AT THE TIME OF SIGNAL ACCEPTANCE INSPECTION BY CITY OF FORT PIERCE. (AS-BUILT SHALL BE ENLARGED A MIN. OF 200%).

7. THE CONTRACTOR SHALL NOTIFY CITY OF FORT PIERCE TRAFFIC OPERATIONS AT LEAST 24-HRS IN ADVANCE OF INSTALLING GROUND RODS OR UNDERGROUND CONDUIT SO THAT THESE OPERATIONS MAY BE OBSERVED. 25 OHM MAX RESISTANCE ON ALL GROUND WIRES.

8. THE CONTRACTOR SHALL MAKE ALL VIDEO DETECTORS INSTALLED AS PART OF THE PROJECT FULLY OPERATIONAL IN ACCORDANCE WITH THEIR ASSOCIATED INTERSECTION SIGNAL TIMING CHART WITHIN 24 HOURS OF THEIR INSTALLATION.

9. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT LEGIBLE, WEATHERPROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE TAGGING SYSTEM PROPOSED SHALL BE SUBMITTED FOR APPROVAL WITH ALL OF THE OTHER EQUIPMENT SUBMITTALS REQUIRED FOR THIS PROJECT.

10. THREE SPARE WIRES ARE REQUIRED PER SIGNAL CABLE. SPARES SHALL BE BOUND AND GROUNDED IN CABINET.

11. CITY OF FORT PIERCE REQUIRES LED COUNTDOWN PEDESTRIAN SIGNAL HEADS WITH (T) BASES AND ALUMINUM-4 1/2" DIA. POLE.

12. ONE EXTRA CONDUIT WITH PULL WIRE AND ONE SPARE CONDUIT ON ALL DIRECTIONAL BORES SHALL BE PROVIDED.

13. ALL ILLUMINATED SIGNS SHALL BE RIGID MOUNT AND LED EDGE-LIT.

14. CONTRACTOR IS RESPONSIBLE FOR ALL LOCATES FROM THE LETTING OF CONTRACT TO FINAL ACCEPTANCE.

15. WHENEVER SIGNAL WORK IS BEING PERFORMED IN AN INTERSECTION (INSTALLING CONDUIT IN THE STREET, REMOVING EXISTING SIGNAL EQUIPMENT, INSTALLING NEW SIGNAL EQUIPMENT, INSTALLING CAMERAS ETC,) AN ENFORCEMENT OFFICER SHALL DIRECT TRAFFIC. THE COST OF THE TRAFFIC CONTROL OFFICER SHALL BE INCLUDED UNDER PAY ITEM 102-1.

16. ALL TRAFFIC SIGNAL HEADS SHALL HAVE BACKPLATES AND SHALL BE LED.

17. THERE SHALL BE A 1-YEAR WARRANTY ON ALL PARTS FROM TIME OF FINAL ACCEPTANCE.

18. A 2 MAN BUCKET SHALL BE PROVIDED AT TIME OF INSPECTION.

19. THE CONTRACTOR SHALL PLACE PORTABLE CHANGEABLE (VARIABLE) MESSAGE SIGNS (PCMS) PRIOR TO CONSTRUCTION ACTIVITIES TO NOTIFY THE TRAVELING PUBLIC OF CONSTRUCTION ACTIVITIES.

20. EXCEPT AS OTHERWISE INDICATED THE FOLLOWING STANDARDS AND SPECIFICATION SHALL APPLY TO CONSTRUCTION AND MATERIALS FOR THIS PROJECT: THE CITY OF FORT PIERCE SPECIFICATIONS, THE FDOT DESIGN STANDARDS DATED FY 2017-2018, THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION DATED 2017, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) 2009 EDITION WITH REVISIONS.

21. THE CONTRACTOR SHALL USE CAUTION WHEN WORKING IN OR AROUND AN AREA OF OVERHEAD TRANSMISSION AND UNDERGROUND UTILITIES.

22. TUNNEL VISORS ARE REQUIRED FOR ALL SIGNAL HEADS AND ARE INCLUDED IN PAY ITEMS 650-1-24 AND 650-1-29.

23. THE APPROPRIATE UTILITY COMPANY SHALL BE NOTIFIED BY THE CONTRACTOR FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY EXCAVATION INVOLVING ITS UTILITIES SO THAT A COMPANY REPRESENTATIVE CAN BE PRESENT.

24. LOCATIONS OF UTILITIES SHOWN ON THE PLANS ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO EXCAVATION.

25. A DISCONNECT SWITCH SHALL BE MOUNTED ON A SEPARATE POLE CLOSE TO THE CONTROLLER.

26. THE CONTROLLER BASE SHALL HAVE TWO (2) CONDUITS FOR COMMUNICATION CABLE IN ADDITION TO TWO (2) SPARES THAT ARE REQUIRED. THEY SHALL BE TERMINATED INTO THE COMMUNICATION PULL BOX.

27. CONTRACTOR SHALL COORDINATE WITH FLORIDA POWER AND LIGHT TO CONNECT ELECTRICAL SERVICE FEED LOCATION.

28. THE CONTROLLER CABINET SHALL BE ORIENTED WITH THE CABINET DOOR OPENING AWAY FROM THE INTERSECTION, SO THAT A TECHNICIAN CAN VIEW THE ENTIRE INTERSECTION WHILE WORKING IN THE CABINET.

29. A CONCRETE TECHNICIAN PAD SHALL BE CONSTRUCTED ADJACENT TO THE CONTROLLER AT SIDEWALK ELEVATION WITH A 6" EYEBOLT PROTRUDING FROM THE CONCRETE AT THE HINGE SIDE OF THE CABINET TO SECURE A GENERATOR.

30. TOP OF MAST ARM FOUNDATIONS WITHIN THE SIDEWALKS SHALL MATCH FINISH CONTOUR AND ELEVATION OF SIDEWALKS WITHOUT JOINTS. CONTRACTOR IS RESPONSIBLE FOR THE PROPER BOLT PROJECTION ABOVE FINISHED SIDEWALK GRADE.

31. OPTICAL VEHICLE DETECTOR SHALL BE ECONOLITE TERRA, AND SHALL BE CAPABLE OF MULTI-ZONE DETECTION. DETECTORS SHALL BE MOUNTED ABOVE THE MAST ARM USING ASTRO BRACKET HARDWARE AT A HEIGHT CAPABLE OF THE REQUIRED DETECTION AND AS RECOMMENDED BY THE SYSTEM MANUFACTURER. SHOP DRAWINGS TO BE SUBMITTED TO THE ST. LUCIE COUNTY TRAFFIC OPERATIONS DIVISION FOR APPROVAL AND MUST COMPLY WITH THE COUNTY'S VIDEO SYSTEM. ALL VIDEO POWER CABLES, PROCESSORS AND EQUIPMENT SHALL BE PROVIDED FOR A COMPLETE AND OPERATIONAL VIDEO DETECTION SYSTEM. MANUFACTURER SHALL BE PRESENT AT TURN ON FOR PROGRAMMING AND SETUP. THE CONTRACTOR SHALL MAKE ALL VIDEO DETECTORS FULLY OPERATIONAL WITHIN 24 HOURS OF THEIR INSTALLATION.

32. ALL PEDESTRIAN PUSH BUTTONS SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT AND FDOT INDEX 17784.

33. ALL ILLUMINATED STREET NAME SIGNS SHALL BE SINGLE SIDED, WITH WHITE LETTERS ON GREEN BACKGROUND, BE RIGIDLY MOUNTED TO THE ARM AND BE WIRED TO A SINGLE PHOTO CELL LOCATED INSIDE THE CONTROLLER CABINET. COST OF PHOTO CELL SHALL BE INCLUDED IN THE COST OF ILLUMINATED SIGNS.

34. ALL NEW CONDUIT RUNS SHOWN ON THE PLANS ARE SCHEMATIC AND MAY REQUIRE FIELD ADJUSTMENT.

35. FINAL LOCATION AND ELEVATION OF ALL TRAFFIC SIGNAL POLE/MAST ARM ASSEMBLY EQUIPMENT SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PROCUREMENT OF POLE/MAST ARM ASSEMBLIES TO VERIFY THAT THE ASSEMBLIES CAN BE INSTALLED IN THE LOCATIONS AS SPECIFIED IN THESE PLANS.

36. ALL SIGNS AND TRAFFIC SIGNAL EQUIPMENT THAT ARE REMOVED SHALL BE TURNED OVER TO CITY OF FORT PIERCE, WHICH IS THE MAINTAINING AGENCY AS DIRECTED BY THE ENGINEER. THE COST OF DELIVERY TO CITY OF FORT PIERCE SHALL BE INCLUDED IN THE REMOVAL OF RELATED SIGNAL PAY ITEM.

37. PULL BOXES ARE TO BE PLACED BEHIND CURB AND GUTTER, UNLESS CURB AND GUTTER ARE NOT PRESENT. IF CURB AND GUTTER ARE NOT PRESENT, PULL BOXES SHALL BE PLACED A MINIMUM OF 4 FEET FROM THE EDGE OF PAVEMENT OR AT THE BACK OF EXISTING RIGHT-OF-WAY, OR AS DIRECTED BY THE ENGINEER TO AVOID EXISTING UTILITIES.

38. THE CONTRACTOR SHALL HAND DIG HOLES FOR CONDUIT OR POLE FOUNDATIONS AT LOCATIONS WHERE THE DEPTH OF ANY UTILITY LINE MAY BE IN CONTACT WITH THE PROPOSED INSTALLATION.

39. REFER TO ROADWAY GENERAL NOTES FOR UTILITY CONTACT INFORMATION.

40. THE CONTROLLER SHALL OPERATE AS SIGNAL OPERATING PLAN 10 (SEE FDOT INDEX 17870) AS SHOWN IN PLANS.

41. SIGNAL TIMING DISPLAYED FOR LOCAL OPERATION ARE SUGGESTED TIMINGS - ACTUAL TIMINGS AND COORDINATION PLANS ARE TO BE DETERMINED BY CITY OF FORT PIERCE TRAFFIC OPERATIONS DIVISION REPRESENTATIVES.

42. NON APL/QPL SIGNALIZATION MATERIALS ARE TO BE SUBMITTED ON FDOT FORM NO. QF-72-01-1 "REQUEST FOR PRODUCT CONSIDERATION" TO FDOT DISTRICT 4 TRAFFIC OPERATIONS FOR APPROVAL.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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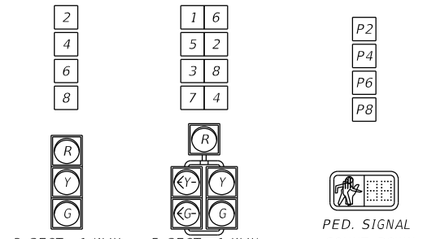
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SIGNALIZATION GENERAL NOTES

SHEET NO. 27

SIGNAL HEAD DETAILS

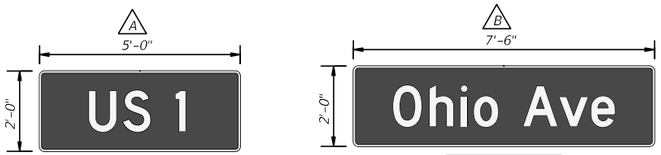


3-SECT., 1-WAY W/ BACKPLATES — 650-1-24 — 4 AS

5-SECT., 1-WAY W/ BACKPLATES — 650-1-29 — 4 AS

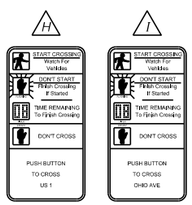
PED. SIGNAL COUNT-DOWN 1-SECT., 1-WAY — 653-1-11 — 8 AS

SIGN DETAILS



700-5-21 (2 EA)

700-5-22 (2 EA)



FTP-68B-06 (4 REQ'D) FTP-68B-06 (4 REQ'D)

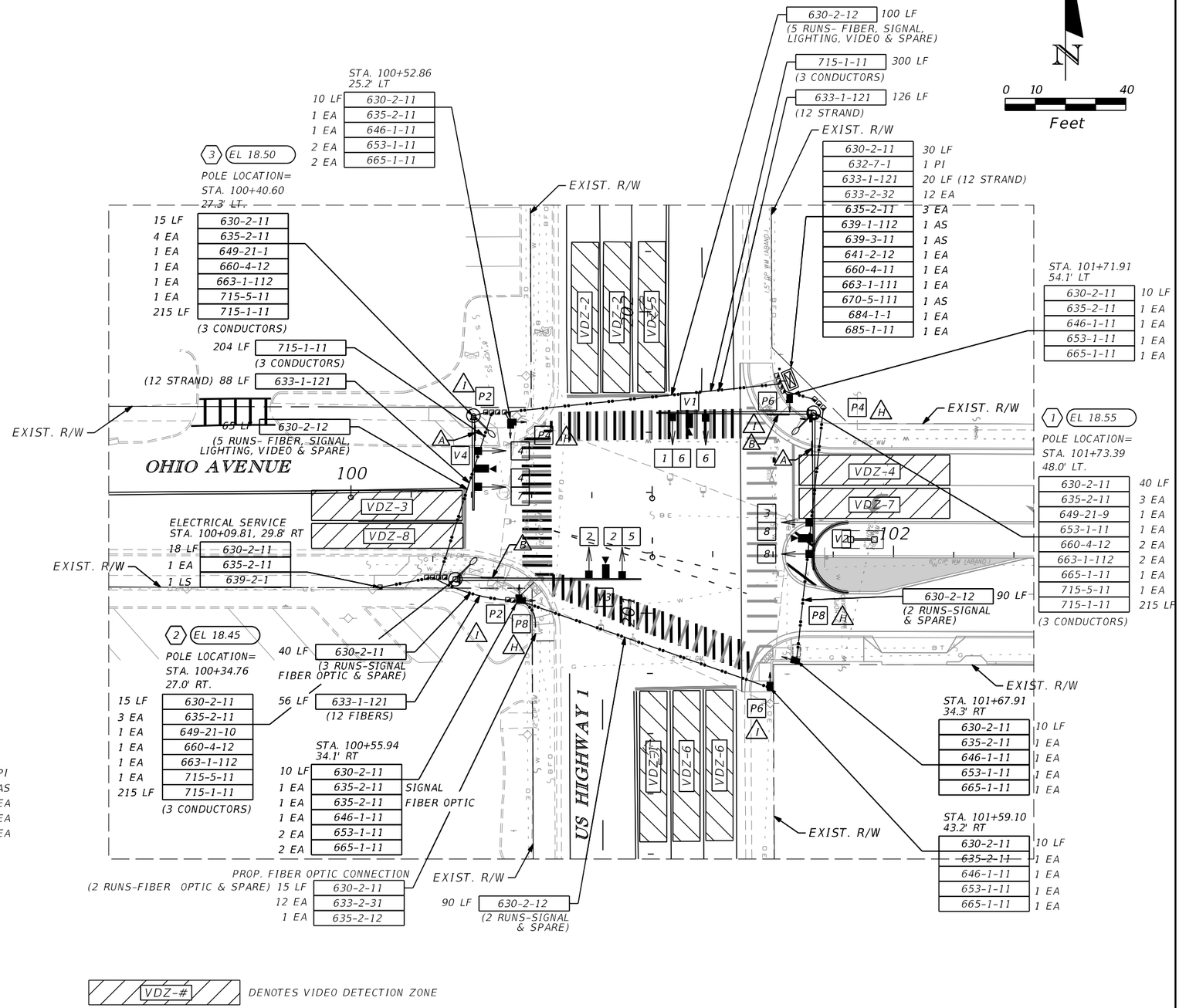
PEDESTRIAN PUSH BUTTON SIGNS FTP-68B-06 INCLUDED IN THE COST OF PAY ITEM 665-1-11.

POSTED SPEED LIMITS:
US HIGHWAY 1 – 45 MPH
OHIO AVENUE – 30 MPH

SEE SHEET 28A FOR NOTES, CONTROLLER TIMINGS, SIGNAL OPERATIONS PLAN, ETC.

REMOVAL ITEMS

632-7-6	1 PI
639-1-610	1 AS
641-2-80	4 EA
646-1-60	1 EA
670-5-600	1 EA



VDZ-# DENOTES VIDEO DETECTION ZONE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SIGNAL PLANS

SHEET NO. 28

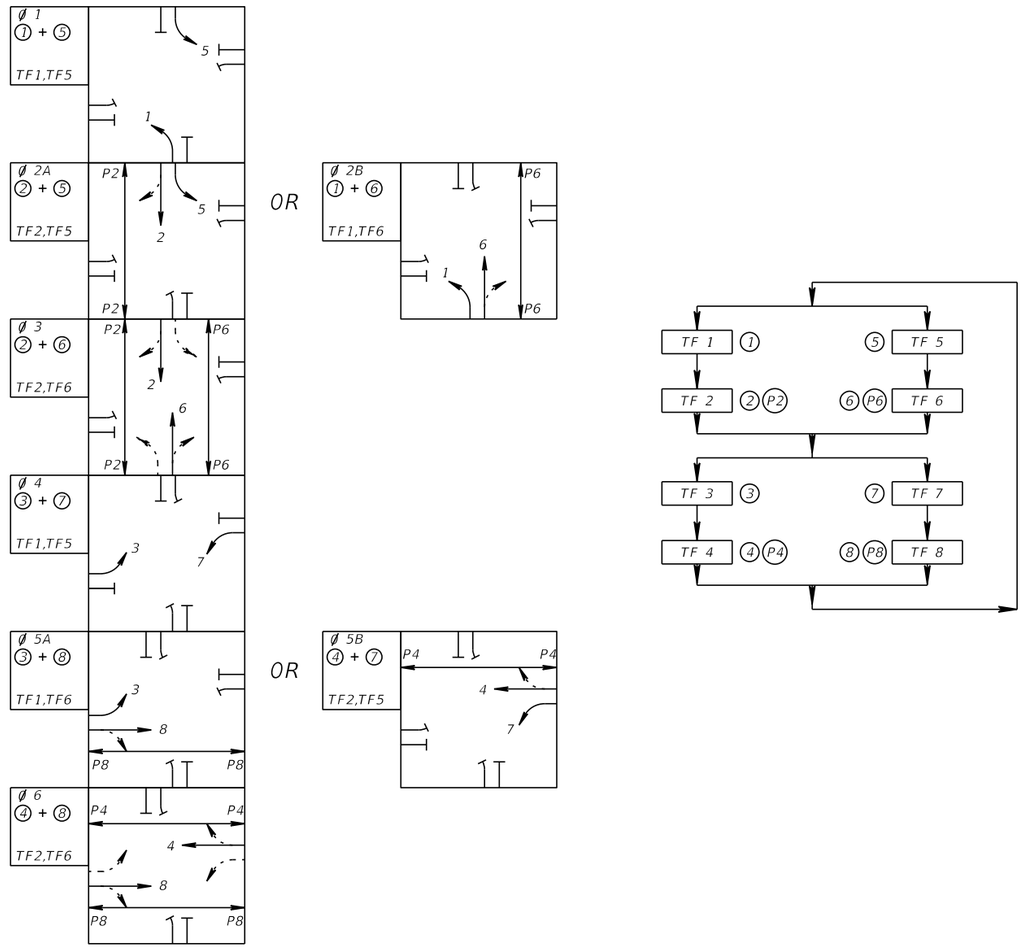
DETECTION CAMERA ASSIGMENTS				
CAMERA NO.	ZONE NO.	DETECTOR OPERATION	TIMING FUNCTION	DELAY TIME (SEC)
V1	1	NORMAL	1	-
	6	NORMAL	6	-
V2	3	NORMAL	3	-
	8	NORMAL	8	-
V3	2	NORMAL	2	-
	5	NORMAL	5	-
V4	4	NORMAL	4	-
	7	NORMAL	7	-

DETECTION CAMERA ASSIGNMENTS AND DETECTION ZONE AREAS ARE PRELIMINARY AND MAY REQUIRE FIELD ADJUSTMENT BY THE CONTRACTOR DURING INSTALLATION. DELAY TIME IS INITIAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

CONTROLLER OPERATIONS

1. MAJOR STREET: US HIGHWAY 1 (MOVEMENTS 2 AND 6)
   MINOR STREET: OHIO AVENUE (MOVEMENTS 4 AND 8)
2. FLASHING OPERATION: MOVEMENTS 2 AND 6 - YELLOW
   MOVEMENTS 4 AND 8 - RED
3. ALL SIGNAL TIMING SHALL BE PROVIDED BY FDOT DISTRICT 4 TRAFFIC ENGINEERING
4. CABINET DOOR SHALL OPEN AWAY FROM THE INTERSECTION.

ASSOCIATED PHASE MOVEMENTS



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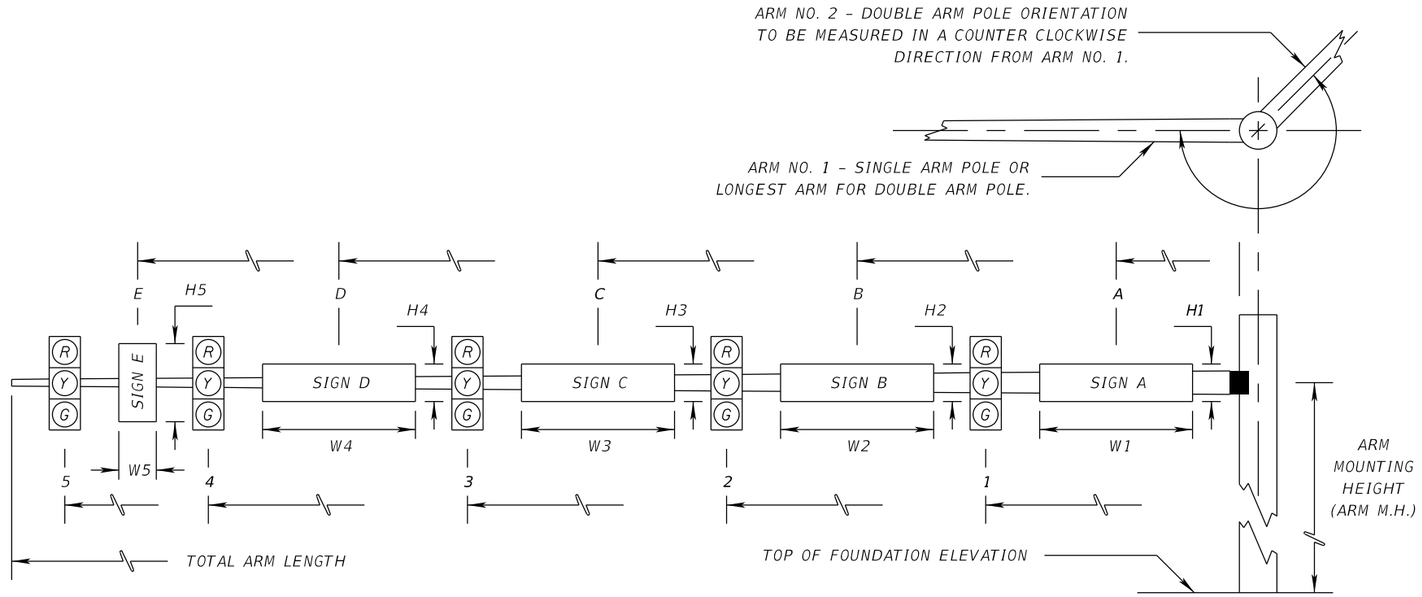
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

SIGNAL PLAN

SHEET NO.
28A



MAST ARM TABULATION

* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY

VD DENOTES VIDEO DETECTION CAMERA; CCTV DENOTES CCTV CAMERA

						SIGNAL DATA																SIGN DATA														
									DISTANCE FROM POLE													DISTANCE FROM POLE / HEIGHT AND WIDTH OF SIGN																
ID NO.	SHEET NO.	LOCATION BY STATION	TOP OF FOUNDATION ELEVATION	RDWY ARM NO.	CROWN ELEVATION	SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	1	*	2	*	3	*	4	*	5	*	TOTAL ARM LENGTH	ARM MTG. HEIGHT EL.	ANGLE BETWEEN DUAL ARMS 90/270	A	H1	W1	B	H2	W2	C	H3	W3	D	H4	W4	E	H5	W5	PAINT COLOR
1	28	101+73.40, 48.0' LT	18.55	1	18.25	V	Y	N	34.0	3	45.0	5							50	38.55	90	10.0	2.0	7.5	39.5	VD	VD										GALVANIZED
				2	17.73	V	Y	Y	34.5	5	45.0	3							50	38.55		10.0	2.0	5.0	39.8	VD	VD										GALVANIZED
2	28	100+34.75, 27.0' RT	18.45	1	18.35	V	Y	N	43.0	3	54.0	5							60	38.45		11.0	2.0	7.5	48.5	VD	VD										GALVANIZED
				2																																
3	28	100+40.60, 27.3' LT	18.50	1	17.88	V	Y	N	10.5	3	22.5	5							30	38.50		4.5	2.0	5.0	16.5	VD	VD										GALVANIZED
				2																																
				1																																
				2																																
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REVISIONS					
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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

MAST ARM TABULATION

SHEET NO. 29

STANDARD MAST ARM ASSEMBLIES DATA TABLE

Table Date 11-01-16

STRUCTURE ID NUMBERS	DESIGNATION	FIRST ARM		SECOND ARM		UF (deg)	LL (deg)	POLE			DRILLED SHAFT ID
		ARM ID	FAA (ft.)	ARM ID	SAA (ft.)			POLE ID	UAA (ft.)	UB (ft.)	
1	A50/D-A50/D-P3/D/L	A50/D	-	A50/D	-	90	45	P3/D/L	-	20	DS/14/4.5
2	A60/S-P4/S/L	A60/S	-	-	-	-	45	P4/S/L	-	20	DS/14/4.5
3	A30/S-P1/S/L	A30/S	-	-	-	-	45	P1/S/L	-	20	DS/12/4.5

NOTES [Notes Date 11-01-16]:

1. If an entry appears in column FAA, a shorter arm is required. This is obtained by removing length from the arm tip and the arm length shortened from FA to FAA. SAA Similar.

2. If an entry appears in column UAA, a shorter pole is required. This is obtained by removing length from the pole tip and the pole height shortened from UA to UAA.

3. Arm mounting height UB must be between 18-22 feet.

4. Pole types P2 and larger require a minimum 4.5 foot diameter drilled shaft. Pole types P5 and larger require a minimum 5.0 foot diameter drilled shaft.

5. Work this sheet with the Signal Designer's "Mast Arm Tabulation". See "Mast Arm Tabulation" for special instructions that include non-standard Handhole location, paint color, terminal compartment requirement, and pedestrian features.

6. Work with Index 17743 and 17745.

7. Soil criteria meet the minimum values set forth in IDS Index No. 17743. For geotechnical information refer to "Subsurface Soil Exploration and Geotechnical Engineering Evaluation" by Ardaman & Associates, Inc. (File No. 17-5460) dated September 26, 2017, signed/sealed by Daniel J. Zrallack, P.E. (P.E. No. 63911).

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn
BRIAN A. GOOD, P.E.
P.E. LICENSE NUMBER 56939
445 24th STREET, SUITE 200
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CERTIFICATE OF AUTHORIZATION: 00000696

CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

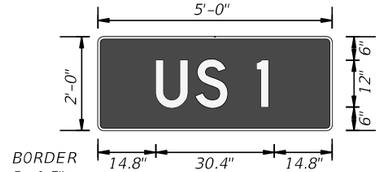
STANDARD MAST ARM ASSEMBLIES DATA TABLE

SHEET NO. 30

SIGN NAME	US 1	QTY	2	SIGN NO.	STATION(S)
PANEL		BORDER			none
WIDTH	5'-0"	WIDTH	0.5"		
HEIGHT	2'-0"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE	AVERAGE LENGTH



Panel Style: Street Name 12-9in_Overhead.ssi
M.U.T.C.D.: 2009 Edition

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
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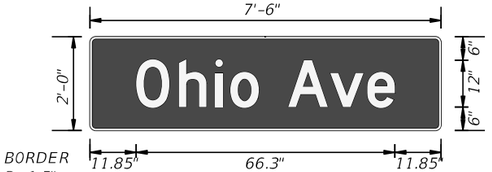
SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE	AVERAGE LENGTH



Panel Style: Street Name 12-9in_Overhead.ssi
M.U.T.C.D.: 2009 Edition

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SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE	AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

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SIGN NAME		QTY		SIGN NO.	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NO.	NO. OF POSTS	EDGE OF LANE CLEARANCE	COLUMN SIZE	AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		PHOTOMETRIC CURVE		WATT		VOLTAGE	

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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

GUIDE SIGN WORK SHEET

SHEET NO.
31

GENERAL EROSION NOTES

A. THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN SPECIFICATIONS, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.

B. ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF FLORIDA NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.

C. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS.

D. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR THE CITY.

F. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.

G. GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.

H. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.

I. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.

J. DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.

K. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

L. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.

M. STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY CEASED.

N. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SODDED. THESE AREAS SHALL BE SODDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.

O. IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.

P. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.

Q. CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.

R. ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.

S. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.

T. DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, ETC.) TO PREVENT EROSION.

U. THE CONTRACTOR IS RESPONSIBLE FOR APPLYING FOR AND OBTAINING THE NPDES PERMIT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

MAINTENANCE

ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

1. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.

2. ALL SODDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESODDED AS NEEDED.

3. SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.

4. THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.

5. THE TEMPORARY STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE).

6. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN SEVEN CALENDAR DAYS FOLLOWING THE INSPECTION.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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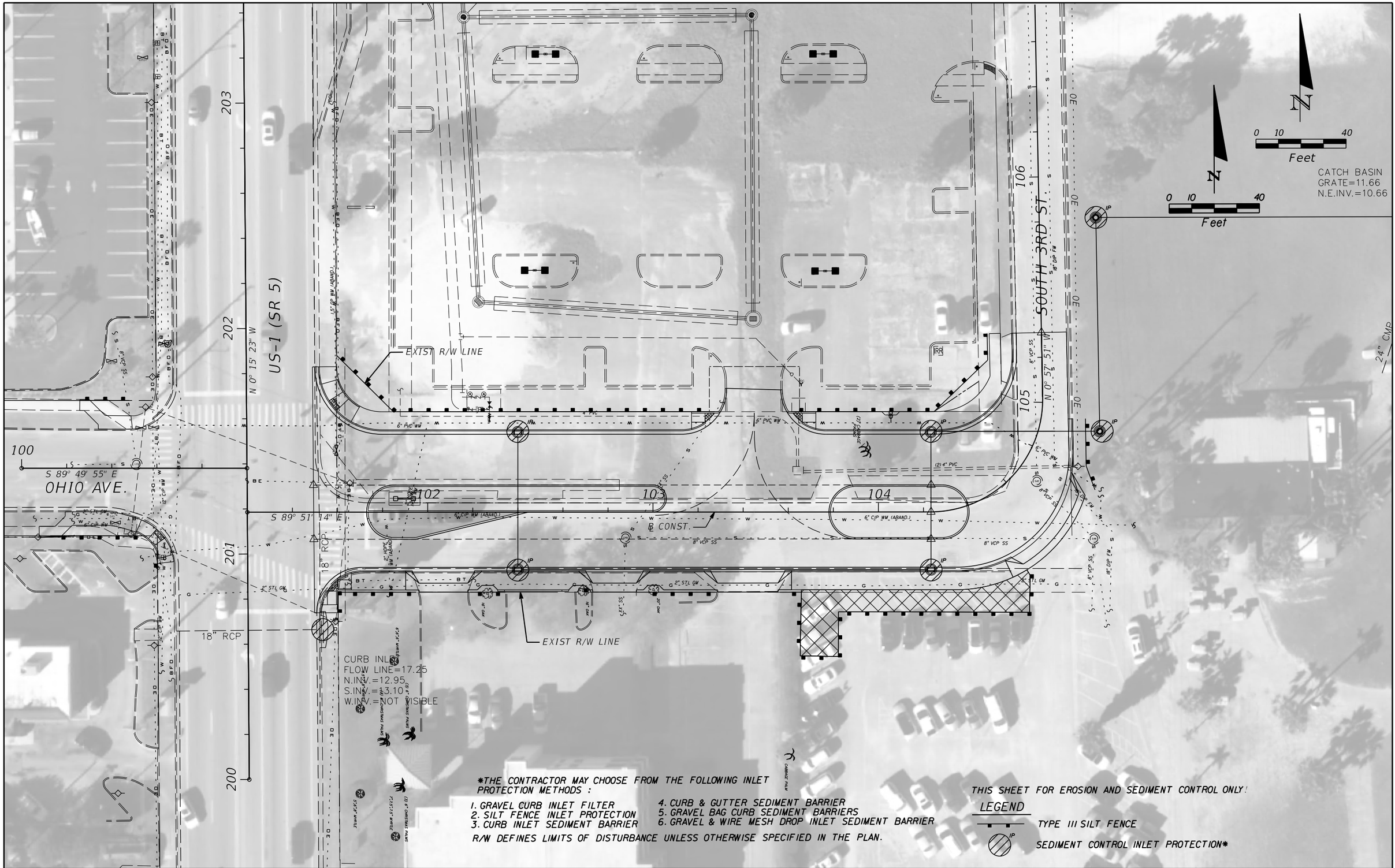
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

EROSION CONTROL
GENERAL NOTES

SHEET NO.
32

Mike.Forman 3/22/2018 7:39:39 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\GNNTEC01.DGN



*THE CONTRACTOR MAY CHOOSE FROM THE FOLLOWING INLET PROTECTION METHODS :

1. GRAVEL CURB INLET FILTER
2. SILT FENCE INLET PROTECTION
3. CURB INLET SEDIMENT BARRIER
4. CURB & GUTTER SEDIMENT BARRIER
5. GRAVEL BAG CURB SEDIMENT BARRIERS
6. GRAVEL & WIRE MESH DROP INLET SEDIMENT BARRIER

R/W DEFINES LIMITS OF DISTURBANCE UNLESS OTHERWISE SPECIFIED IN THE PLAN.

THIS SHEET FOR EROSION AND SEDIMENT CONTROL ONLY!

LEGEND

TYPE III SILT FENCE

SEDIMENT CONTROL INLET PROTECTION*

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

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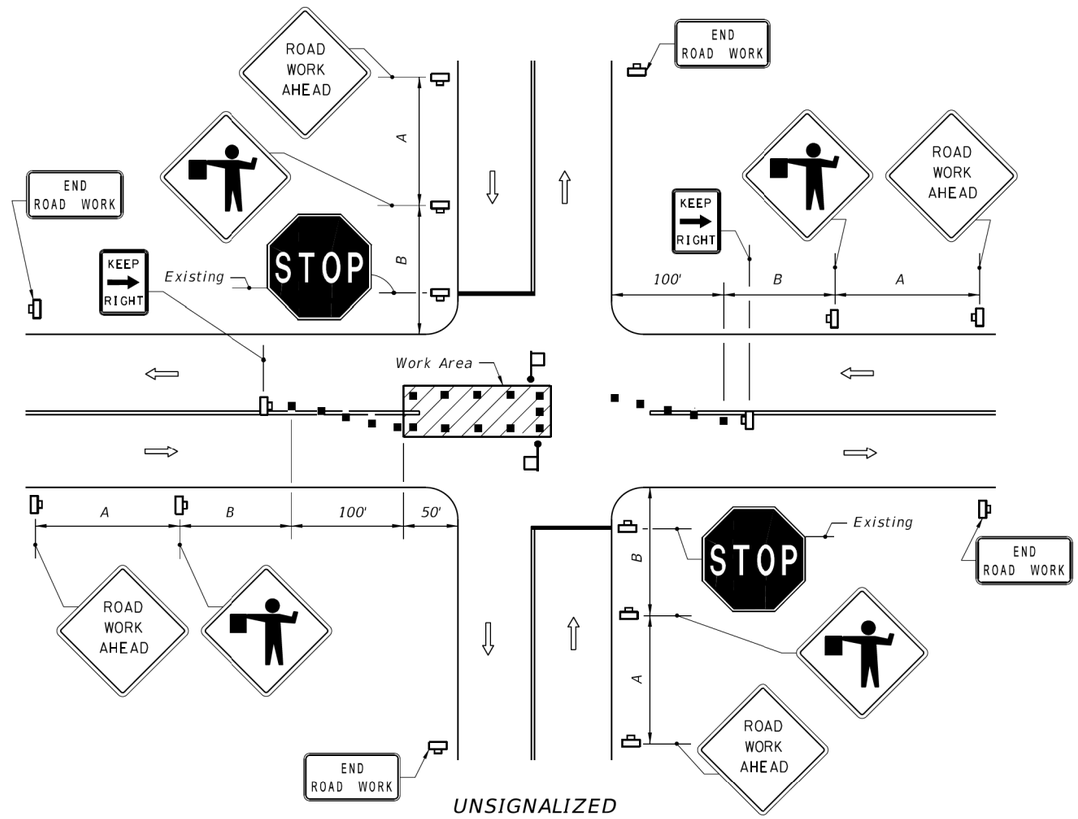
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

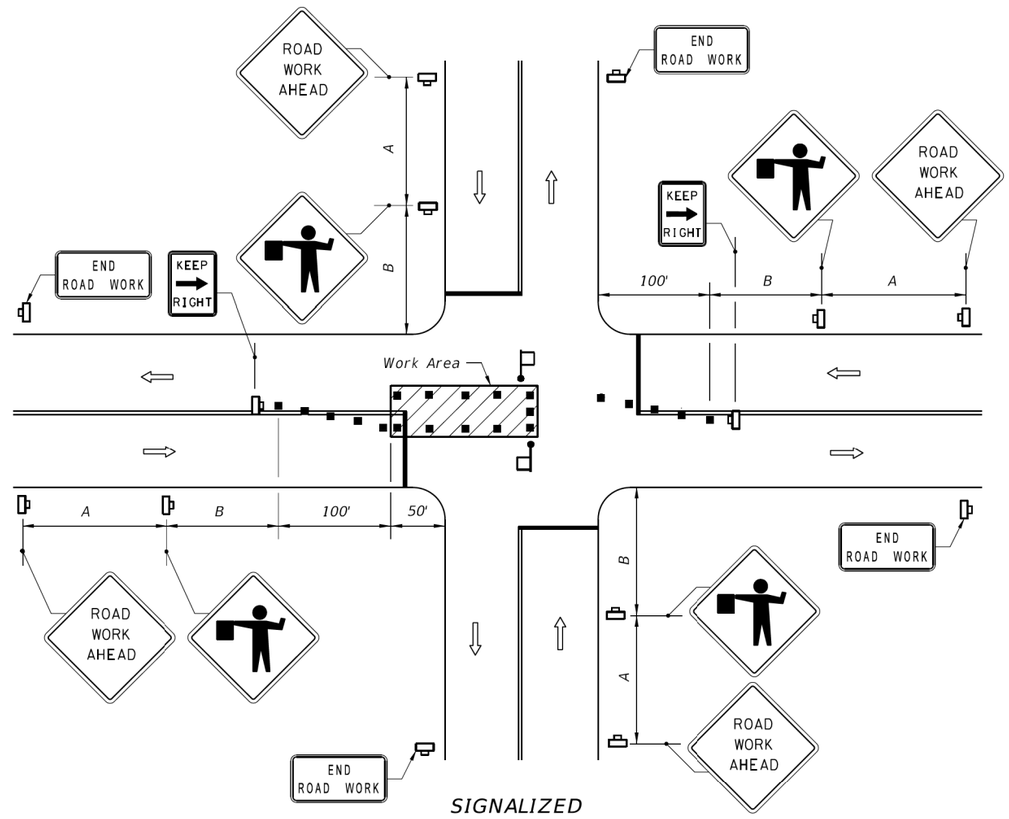
EROSION CONTROL

SHEET NO. 33

Mike.Forman 3/22/2018 7:39:52 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANEC01.dgn



UNSIGNALIZED



SIGNALIZED

SYMBOLS

- Work Area
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Flagger
- Stop Bar
- Lane Identification + Direction of Traffic

GENERAL NOTES

1. The FLAGGER legend sign may be substituted for the symbol sign.
2. When vehicles in a parking zone block the line of sight to TCZ signs, the signs shall be post mounted and located in accordance with Index No. 17302.
3. If the work space extends across a crosswalk, the crosswalk should be closed using the information in Index No. 660.
4. Flaggers shall be located where they can control more than one direction of traffic.

   Flaggers shall be in sight of each other or in direct communication at all times.
5. Maximum spacing between channelizing devices shall be not greater than 20'.
6. Temporary signal phasing modifications are to be approved by the District Traffic Operations Engineer prior to the beginning of work.
7. For general TCZ requirements and additional information, refer to Index No. 600.
8. For unsignalized intersections, use Temporary Raised Rumble Strips in accordance with Index 603. Placement of Rumble Strips and additional signs should begin at FLAGGER sign location.

DURATION NOTES

1. ROAD WORK AHEAD AND END ROAD WORK sign may be omitted if all of the following conditions are met:
   a. Work operations are 60 minutes or less.
   b. Speed is 45 mph or less.
   c. No sight obstructions to vehicles approaching the work area for a distance equal to A plus B.
   d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
   e. Volume and complexity of the roadway has been considered.

DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)	
	A	B
40 mph or less	200	200
45 mph	350	350

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF A PORTION OF ONE OR MORE TRAFFIC LANES IN AN INTERSECTION.

10/12/2016 1:07:44 PM

LAST REVISION	REVISION	DESCRIPTION:			INDEX NO.	SHEET NO.
07/01/15			FDOT FY 2017-18 DESIGN STANDARDS	TWO-LANE, TWO-WAY, WORK IN INTERSECTION	604	1 of 1

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

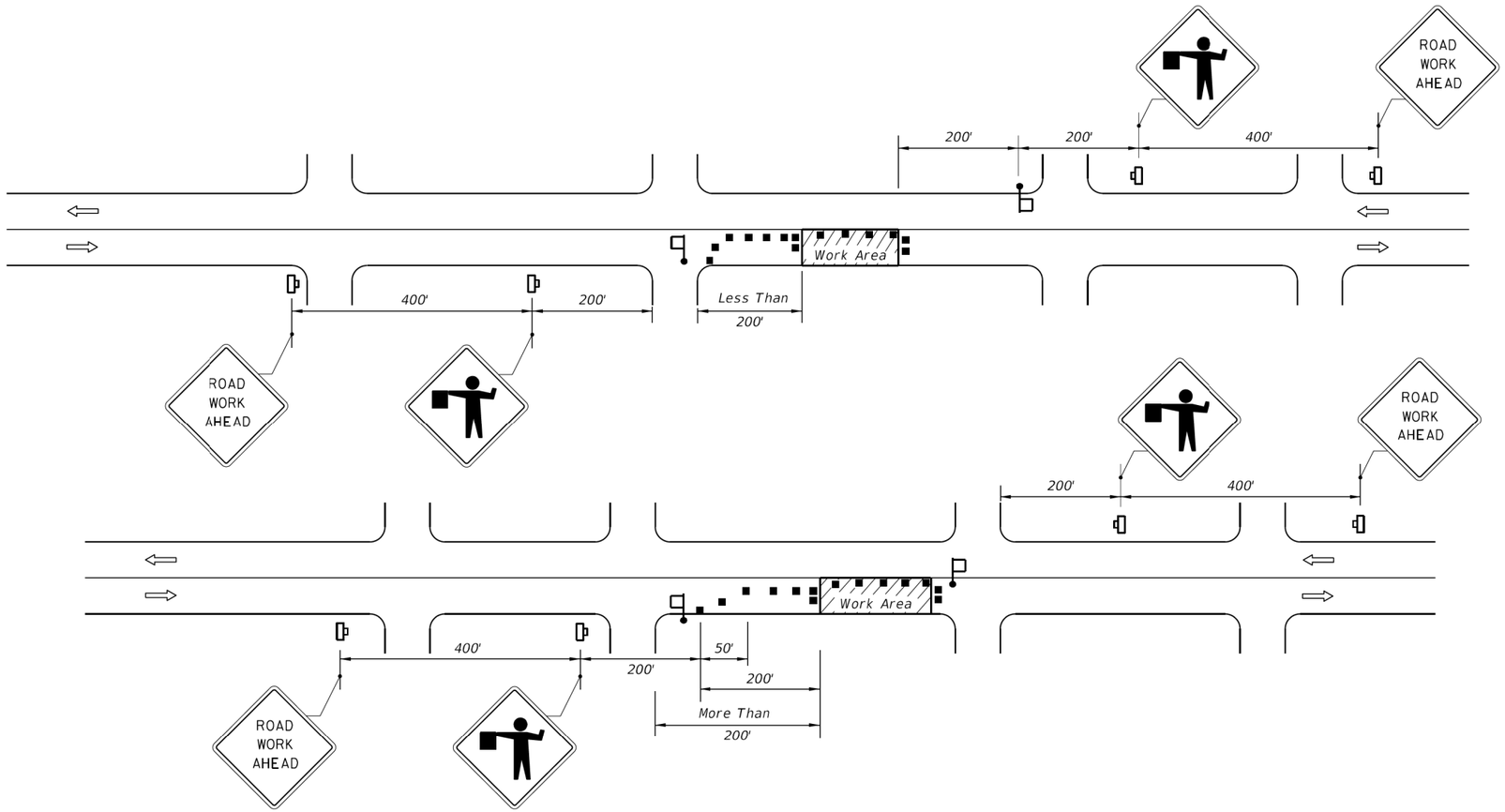
CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 34

Mike.Forman 3/22/2018 7:39:53 AM K:\VRB_Roadway\047922018 – Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn



CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS LESS THAN 200' DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF ONE TRAFFIC LANE, FOR WORK AREAS 200' OR MORE DOWNSTREAM FROM AN INTERSECTION FOR A PERIOD OF MORE THAN 60 MINUTES.

SYMBOLS

- *Work Area*
- *Channelizing Device (See Index No. 600)*
- *Work Zone Sign*
- *Flagger*
- *Lane Identification + Direction of Traffic*

GENERAL NOTES

1. *Work operations shall be confined to one travel lane, leaving the opposing travel lane open to traffic.*
2. *When vehicles in a parking zone block the line of sight to TCZ signs or when TCZ signs encroach on a normal pedestrian walkway, the signs shall be post mounted and located in accordance with Index No. 17302.*
3. *If work area is confined to an outside auxiliary lane, the work area shall be barricaded and the FLAGGER signs replaced by ROAD WORK AHEAD signs. Flaggers are not required.*
4. *Flaggers shall be in sight of each other or in direct communication at all times.*
5. *The FLAGGER legend sign may be substituted for the symbol sign.*
6. *The maximum spacing between devices shall be no greater than 25.'*
7. *For general TCZ requirements and additional information, refer to Index No. 600.*
8. *The two channelizing devices directly in front and directly at the end of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.*
9. *Use Temporary Raised Rumble Strips in accordance with Index 603. Placement of Rumble Strips and additional signs should begin at FLAGGER sign location.*

DURATION NOTES

1. *ROAD WORK AHEAD sign may be omitted if all of the following conditions are met:*
   - *a. Work operations are 60 minutes or less.*
   - *b. Speed is 45 mph or less.*
   - *c. No sight obstructions to vehicles approaching the work area for a distance of 600 feet.*
   - *d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.*
   - *e. Volume and complexity of the roadway has been considered.*

10/12/2016 1:08:53 PM

LAST REVISION	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	TWO-LANE, TWO-WAY, WORK NEAR INTERSECTION	INDEX NO.	SHEET NO.
07/01/15					605	1 of 1

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

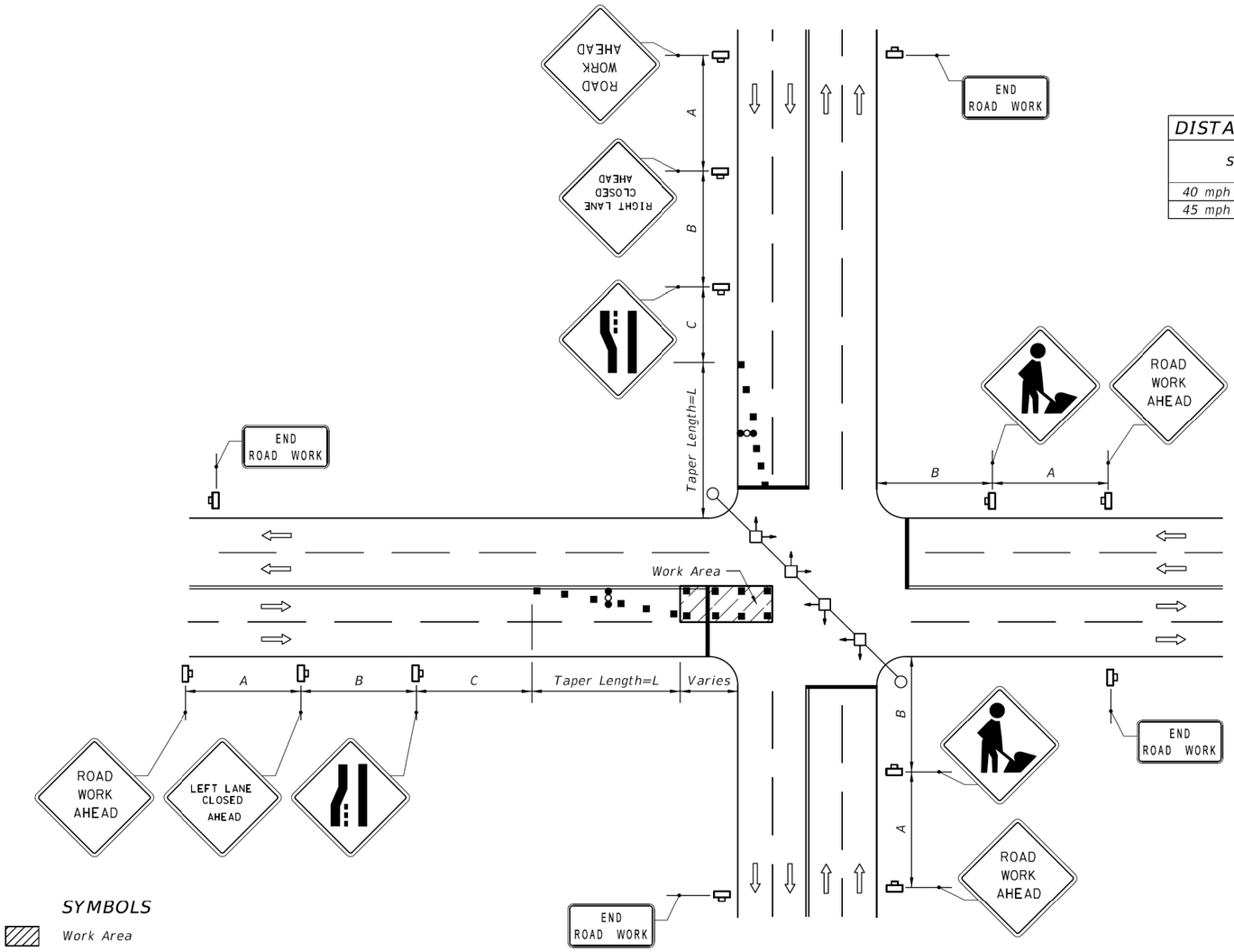
CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 35

Mike.Forman 3/22/2018 7:40:00 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn



DISTANCE BETWEEN SIGNS

Speed	Spacing (ft.)		
	A	B	C
40 mph or less	200	200	200
45 mph	350	350	350

Table II
Taper Length - Merge (12' Lateral Transition)

Speed (mph)	L (ft.)	Notes (Merge)
25	125	$L = \frac{WS^2}{60}$
30	180	
35	245	
40	320	
45	540	L=WS

For lateral transitions other than 12', use formula for L shown in the notes column. Where:
L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

GENERAL NOTES

1. The WORKERS legend sign may be substituted for the symbol sign.
2. When vehicles in a parking zone block the line of sight to TCZ signs, the signs shall be post mounted and located in accordance with Index No. 17302.
3. If the work space extends across a crosswalk, the crosswalk should be closed using the information in Index No. 660.
4. Dual signs are required for divided roadways.
5. Maximum spacing between barricades, vertical panels, cones, tubular markers and drums shall not be greater than 25'.
6. Temporary signal phasing modifications are to be approved by the District Traffic Operations Engineer prior to the beginning of work.
7. For general TCZ requirements and additional information, refer to Index No. 600.

SYMBOLS

- Work Area
- Channelizing Device (See Index No. 600)
- Work Zone Sign
- Stop Bar
- Advance Warning Arrow Board
- Lane Identification + Direction of Traffic

SIGNALIZED

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCROACH ON THE PAVEMENT REQUIRING THE CLOSURE OF AT LEAST ONE MEDIAN TRAFFIC LANE.

DURATION NOTES

1. Signs and arrow board may be omitted if all of the following conditions are met:
   a. Work operations are 60 minutes or less.
   b. Speed is 45 mph or less.
   c. No sight obstructions to vehicles approaching the work area for a distance equal to twice the taper length.
   d. Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.
   e. Volume and complexity of the roadway has been considered.

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LAST REVISION	REVISION	DESCRIPTION:		INDEX NO.	SHEET NO.
07/01/15			FY 2017-18 DESIGN STANDARDS	615	1 of 1

MULTILANE WORK IN INTERSECTION

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 36

Mike.Forman 3/22/2018 7:40:08 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn

GENERAL NOTES

1. Work operations shall be confined to either one lane, or lane combinations as follows:

   a. Outside travel lane;
   b. Outside auxiliary lane;
   c. Outside travel lane and adjoining auxiliary lane;
   d. Inside travel lane △;
   e. Inside auxiliary lane △;
   f. Inside travel lane and adjoining auxiliary lane △
   △ See Sheet 3

   If the work area is confined to an auxiliary lane the work area shall be barricaded and the RIGHT (LEFT) LANE CLOSED AHEAD signs replaced by ROAD WORK AHEAD signs, and the merge symbol signs eliminated.

2. When vehicles in a parking zone block the line of sight to TCZ signs, the signs shall be post mounted and located in accordance with Index No. 17302.

3. If the work space extends across a crosswalk, the crosswalk should be closed using the information in Index No. 660.

4. Signs are required on the median side for divided highways.

5. The two channelizing devices directly in front and directly at the end of the work area may be omitted provided vehicles in the work area have high-intensity rotating, flashing, oscillating, or strobe lights operating.

6. For general TCZ requirements and additional information, refer to Index No. 600.

DURATION NOTES

1. For work operations up to approximately 15 minutes, signs, channelizing devices, and arrow board may be omitted if all of the following conditions are met:

   a. Speed limit is 45 mph or less.
   b. No sight obstructions to vehicles approaching the work area for a distance equal to twice the taper length.
   c. Volume and complexity of the roadway has been considered.
   d. The closed lane is occupied by a class 5 or larger, medium duty truck(s) with a minimum gross weight vehicle rating (GWVR) of 16,001 lb with high-intensity, rotating, flashing, oscillating, or strobe lights mounted above the cab height and operating.

2. For work operations up to 60 minutes, the arrow board may be omitted if conditions a, b, and c in DURATION NOTE 1 are met, and vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

SYMBOLS

- Work Area
- Work Zone Sign
- Advance Warning Arrow Board
- Type III Barricade
- Channelizing Device (See Index No. 600)
- Lane Identification + Direction of Traffic

10/12/2016 1:12:55 PM

LAST REVISION	REVISION	DESCRIPTION:	FDOT	FY 2017-18 DESIGN STANDARDS	MULTILANE, WORK NEAR INTERSECTION MEDIAN OR OUTSIDE LANE	INDEX NO.	SHEET NO.
07/01/15						616	1 of 3

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

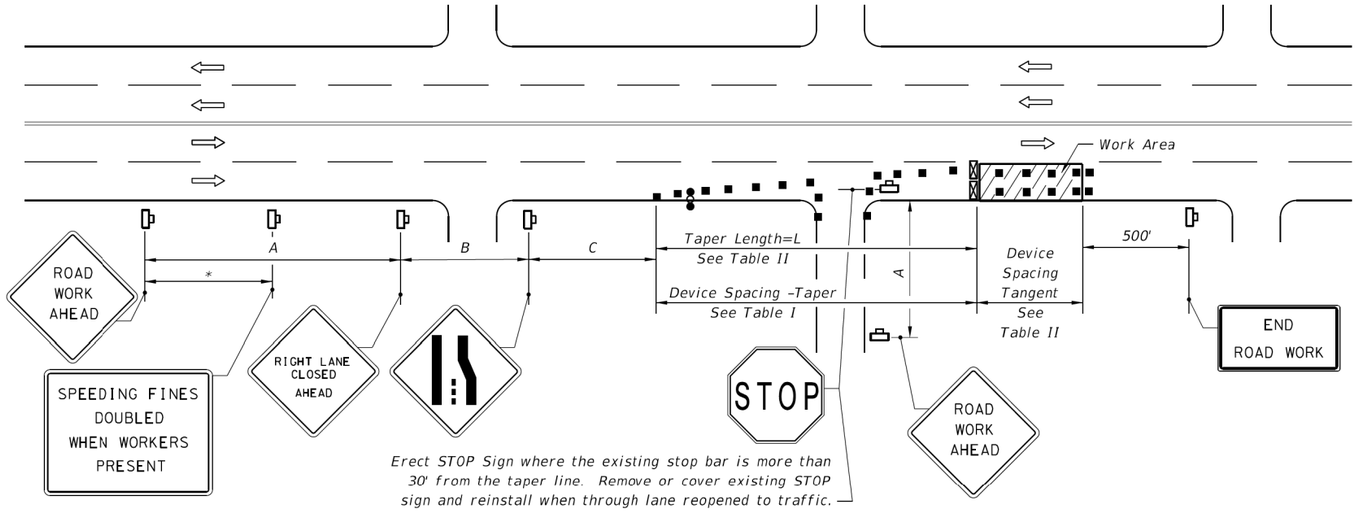
CITY OF FORT PIERCE

OHIO AVENUE
ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 37

Mike.Forman 3/22/2018 7:40:16 AM K:\VRB_Roadway\047922018 - Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn

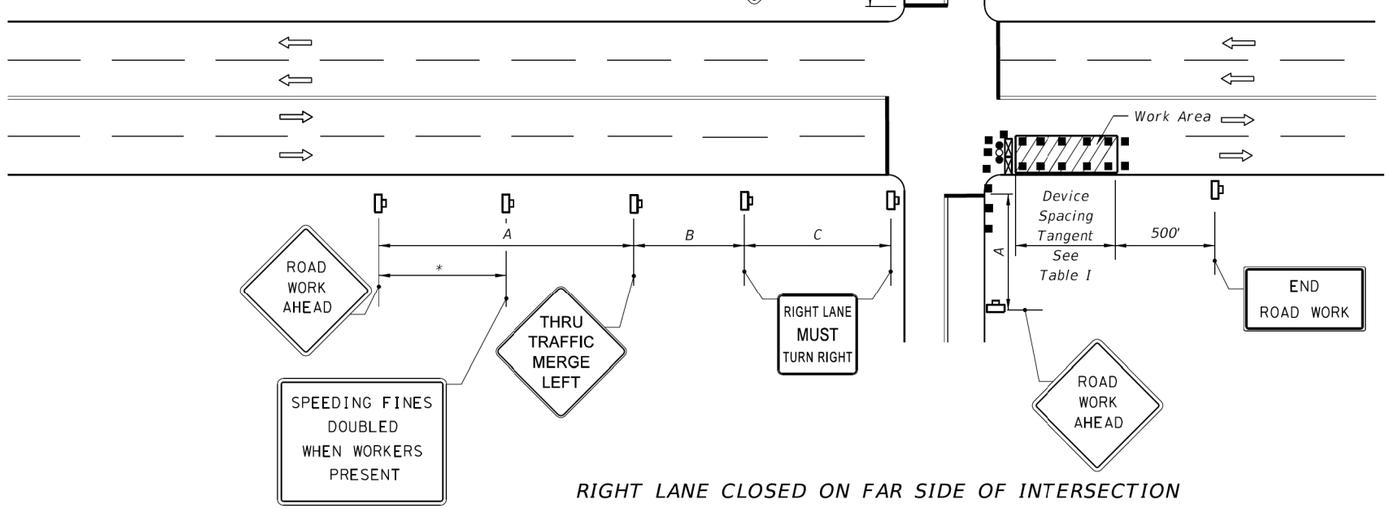


RIGHT LANE CLOSED ON FAR SIDE OF MINOR SIDESTREET

DISTANCE BETWEEN SIGNS			
Speed	Spacing (ft.)		
	A	B	C
40 mph or less	200	200	200
45 mph	350	350	350

* 500' beyond the ROAD WORK AHEAD sign or midway between signs whichever is less.

Table I Device Spacing				
Speed (mph)	Max. Distance Between Devices (ft.)			
	Cones or Tubular Markers		Type I or Type II Barricades or Vertical Panels or Drums	
	Taper	Tangent	Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50



RIGHT LANE CLOSED ON FAR SIDE OF INTERSECTION WITH SIGNIFICANT RIGHT TURNING MOVEMENTS

Table II Taper Length - Merge (12' Lateral Transition)		
Speed (mph)	L (ft)	Notes (Merge)
25	125	$L = \frac{WS^2}{60}$
30	180	
35	245	
40	320	
45	540	L=WS

For lateral transitions other than 12', use formula for L shown in the notes column. Where:
L = Length of taper in feet
W = Width of lateral transition in feet
S = Posted speed limit (mph)

1. The normal procedure is to close on the near side of the intersection any lane that is not carried through the intersection. However, when this results in the closure of a right lane having significant right turning movements, then the right lane may be restricted to right turns only as shown in this detail.
2. For intersection approaches reduced to a single lane, left turning movements may be prohibited to maintain capacity for through vehicular traffic.

10/12/2016 1:12:58 PM

LAST REVISION 07/01/15	REVISION	DESCRIPTION:	FDOT FY 2017-18 DESIGN STANDARDS	MULTILANE, WORK NEAR INTERSECTION MEDIAN OR OUTSIDE LANE	INDEX NO. 616	SHEET NO. 2 of 3

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Kimley»Horn

CITY OF FORT PIERCE

OHIO AVENUE ROADWAY IMPROVEMENTS

TEMPORARY TRAFFIC CONTROL DETAILS

SHEET NO. 38

Mike.Forman 3/22/2018 7:40:23 AM K:\VRB_Roadway\047922018 – Ohio Avenue Roadway Improvements\Cadd\Roadway\PLANS_ROADWAY\PLANTC01.dgn

City Commission Regular Meeting **11.f.**

Meeting Date: 04/15/2019

Re: FY2019 Law Enforcement Trust Fund Contributions

Submitted For: Diane Hobley-Burney, Chief of Police, Police Department

SUBJECT:

Approve the following contributions from the Fort Pierce Police Department (FPPD) Law Enforcement Trust Fund: $1,000 to Parents of Murdered Children, Incorporated, $2,500 to the Boys and Girls Clubs of Saint Lucie County, and $2,000 to the Florida Office of Attorney General National Conference on Preventing Crime through the Derrick Brooks Charities.

SUMMARY:

According to Florida State Statute 932.7055, the Police Department is required to spend twenty-five percent (25%) of Law Enforcement Trust Fund revenues from forfeitures and seizures each year in support of crime prevention activities. The requested contributions will be applied to meet the obligation for FY 2019 and provide meaningful support to community based activities. This expenditure meets the requirements of Florida State Statute 932.7055.

RECOMMENDATION:

Approve the requested contributions.

ALTERNATIVES:

Deny the requested contributions.

RESPONSIBLE STAFF:

Melissa Alexander, Senior Accounting Clerk

COORDINATED WITH:

Rose Smith, Executive Assitant to the Chief of Police and Robert Ridle, Acting Deputy Chief

Fiscal Impact

Budgeted Y/N:	N
Fiscal Year:	2019
Account:	102.3003.521.4830
Amount:	5,500

OTHER INFORMATION:

$5,500 from the Law Enforcement Trust Fund 102.3003.521.4830.

Attachments

Letters of Request

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	04/09/2019 05:43 PM

Form Started By: Robert Ridle
Started On: 03/28/2019 10:20 AM
Final Approval Date: 04/09/2019

GREAT FUTURES START HERE.

BOYS & GIRLS CLUBS
OF ST. LUCIE COUNTY

BOARD OF DIRECTORS
Richard Del Toro
Board President
Leslie Kristof
President Elect
Sarah Pride
Vice President
Jay McBee
Treasurer
Angelique Lyons
Secretary
Sean Baldwin
Linda Bartz
Diane Hobley- Burney
Judy Cruz
Charles Cuomo
Doug Farrell
Lori Finkel
Brian Hester
Dr. Martin Lesin
Shannon Martin
Nick Mimms
Dr. Kevin Perry
Michael Piazza
Nate Spera
Mark Tremblay
Darrin Waldkoetter
Dr. Pamela Welmon
William Armstead
Chief Executive Officer

PROUDLY SUPPORTED BY:

Children's Services Council ST. LUCIE COUNTY
Our children. Our community. Our future.

United Way
United Way of St. Lucie County

THE HOUSING AUTHORITY OF THE CITY OF FORT PIERCE

February 27, 2019

RECEIVED
MAR 5 – 2019
CHIEFS OFFICE/FPPD

Chief Diane Hobley-Burney
Fort Pierce Police Department
920 S. US Highway 1
Fort Pierce, FL 34950

Dear Chief Hobley-Burney,

For the past 24 years, Boys & Girls Clubs of St. Lucie County has been in the forefront of youth development, working with young people from disadvantaged economic, social and family circumstances. The Club serves 15,000 youth, ages 5- 18 in Fort Pierce and Port St. Lucie. Our members, who come from a variety of backgrounds, participate in daily programs at our five Clubhouses that are strategically located in neighborhoods where we are most needed and in 14 school-based sites.

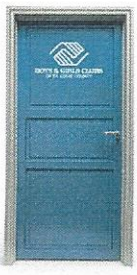
We are requesting a donation from the Police Department Law Enforcement Trust Fund to support our youth development programs focused on crime prevention.

By providing a safe place to learn and grow, as well as life enhancing programs and character developing experiences; the Club enables all members, especially those who need us most, to realize their full potential as caring, responsible and productive citizens.

Sincerely,

William Armstead
CEO

Boys & Girls Club of St. Lucie County is a non-profit 501(c)(3) – EIN #65-0505369



For over 15,000 St. Lucie County Youth,
GREAT FUTURES START HERE.

BOYS & GIRLS CLUBS
OF ST. LUCIE COUNTY

(772) 460-9918 | 3104 Avenue J, Fort Pierce, Fl. 34947

National Organization of
Parents Of Murdered Children, Inc.
For the families and friends of those who have died by violence
TRI-COUNTY CHAPTER OF MURDERED CHILDREN, INC.
P.O. Box 4022 Fort Pierce, Florida
Linda Jones, Chapter Leader * lcooolj.5@gmail.com (772)882-0755
Betty Bradwell, Co-Chapter Leader (772)882-2676

RECEIVED
JAN 31 2019
CHIEFS OFFICE/FPPD

Dear Friends,

The National Organization of Parents of Murdered Children Inc, local Chapter Tri County Chapter ,

a non -profit organization, has as its mission the bringing together of parents and families

to pay tribute and honor to our nation's murder victims and surviving families and friends.

We rely on organizations and other support services in assisting us in providing services to these families.

We believe by reaching out to the surviving families with love and mercy, we can become more

effective in enchancing the condition of our neighborhoods, our communities, and our county.

We would like to solicit your assistance in donating to our organization. These donations will assist

Us in completing our National Conference Training arrangements and our National Day of Remembrance

in September 25th each year. Please make your check to: Tri County Chapter of Parents of Murdered Children

and our mailing address P. Q. Box 4022, Fort Pierce FL 34948.

We meet monthly to provide support for the surviving families and to walk in true healing and love.

We are excited to be working with the Lincoln Park Council of Ministers to see the Garden of Hope

And Prayer Memorial Wall come to fruition. We believe this Garden will be an extended arm of our organization

to help bring families together and create a better community.

Any assistance you provide will be greatly appreciated. If you have any questions, please feel free to contact

me or any members of the Tri County Chapter of POMC.

Sincerely,

Linda Jones

Chapter Leader

DERRICK BROOKS CHARITIES
YOUTH PROGRAMS

January 24, 2019

Dear Business Owner:

For many years Florida Attorney General Pam Bondi along with the Florida Consortium of Urban League Affiliates and Derrick Brooks Charities have sponsored the National Conference on Preventing Crime in the Black Community. We are pleased to announce that we will continue this tradition under our newly elected Attorney General Ashley Moody.

We have changed the name of the conference to the *National Conference on Preventing Crime* to involve more law enforcement and community engagement for everyone. Sheriff Chad Chronister and the Hillsborough County Sheriff's Office are chairing a committee of organizations in the Tampa Bay area that are hosting the conference. It is designed to bring together community leaders, law enforcement officials, and professionals from juvenile justice, corrections, education, victim services and other local, state and federal government agencies. A major goal of the conference is to foster communication and action among practitioners through the sharing of innovative ideas and prevention strategies that have been successful in communities nationwide. The 2018 conference, which was held in Jacksonville, was a tremendous success with approximately 1500 participants from twenty states.

Members of the host committee have been asked to secure necessities for the conference to provide free of charge to adult and youth attendees, including but not limited to: food for the command post and hospitality suite; book bags for youth; beverages; and souvenir items. All items donated by your organization will be deeply appreciated. Your organization might be interested in being a vendor at the conference. You can find more information at www.preventcrimeconference.com.

The conference host committee also sponsors several events during the conference including a Welcoming Session, educational sessions and other activities. To cover the costs of these events, all host agencies are asked to make a financial contribution or secure donations from friendly business partners. All donations should be documented and sent to Derrick Brooks Charities. Checks should be made payable to: "Derrick Brooks Charities" and mailed to Director Darrell Daniels, 3402 North 22nd Street, Suite 228, Tampa, Florida 33605. If a W-9 form is needed, Derrick Brooks Charities can provide that information.

We look forward to your participation. Should you have any questions or would like to get involved; I can be reached by phone at (813) 241-1415 or by email at derrickbrookscharities@gmail.com.

Sincerely,

Darrell Daniels
Derrick Brooks Charities

City Commission Regular Meeting **11.g.**

Meeting Date: 04/15/2019

Re: Encroachment Permit - Sailfish

Submitted For: Linda Cox, City Clerk, City Clerk

SUBJECT:

Approval of Supplemental Revocable Encroachment Permit between the City of Fort Pierce and Kraaz & Kraaz Finance, LLC to provide for the installation of a storage silo for the benefit of Sailfish Brewery adjacent to the existing loading dock along with application to Historic Preservation Board.

SUMMARY:

The extension of the existing Encroachment Permit will provide the additional space needed by Sailfish Brewery to store vegetative matter used in the craft brewing process.

RECOMMENDATION:

Approve the revocable encroachment permit.

ALTERNATIVES:

Do not approve or approve with modifcations.

RESPONSIBLE STAFF:

Planning Department

COORDINATED WITH:

City Attorney and City Clerk

Fiscal Impact

OTHER INFORMATION:

No fiscal impact.

Attachments

Encroachment Permit

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	04/09/2019 05:44 PM

Form Started By: Linda Cox Started On: 04/03/2019 05:11 PM

Final Approval Date: 04/09/2019

THE SUNRISE CITY
FORT PIERCE
CITY ATTORNEY'S OFFICE Florida

TO : Rebecca Grohall, AICP

FROM : Benjamin Bryan, City Attorney BZB

RE : Supplemental Revocable Encroachment Permit

DATE : December 14, 2018

The attached Permit have been approved as to Legal Form and Correctness.

BB/mm

cc: Nicholas C. Mimms, P.E., City Manager

Received
DEC 14 2018
City of Fort Pierce
City Manager's Office

OK
12/14/18

THE SUNRISE CITY
FORT PIERCE
CITY ATTORNEY'S OFFICE Florida

CITY ATTORNEY USE ONLY

Date Received:	
Assigned To:	
File:	
Due Date:	
Hours:	

RECEIVED
DEC 13 2018
BY

REQUEST FOR LEGAL SERVICES

Received
DEC 13 2018
City of Fort Pierce
City Manager's Office

TO: CITY ATTORNEY BJB

SUBMITTED BY: REBECCA GROHALL, AICP

CITY MANAGER AUTHORIZATION: NICHOLAS C. MIMMS, P.E., CITY MANAGER NCM

RE: SUPPLEMENTAL REVOCABLE ENCROACHMENT PERMIT

DATE: DECEMBER 13, 2018

Service Required: (please circle or underline)

Review Documents **Draft Document** **Written Opinion Requested**

Attend Meetings **Advise** **Other:** _____

Upon review and/or "Approval as to Form and Correctness," the Department submitting the RLS is responsible for placement of any related item on a Commission or Board Agenda.

1. **Brief statement of the nature of the request or problem:** (Provide description of the issue and what is being requested of the City Attorney's office.)

Request to review the draft document (drafted by Speedy Fee) to extend the existing encroachment behind Sailfish Brewery at 130 N 2nd Street.

2. **Discussion of the implications and the possible impact if not apparent from preceding information:** (Discuss any issues related to the underlying matter to assist with the City Attorney's analysis.)

The City in previous years approved a revocable encroachment for the building for a loading dock at the rear of the property that is not contained within their property. They are asking for an extension of the length of that to accommodate a large grain silo that would be outside of their property line.

If legal is amenable to the form and correctness of the agreement, we will start routing it through the Technical Review Committee for department comments.

CITY ATTORNEY USE ONLY			
Routed for Review	**Date**	**Response Deadline**	**Response**

FEE, YATES & FEE, PLLC

A Partnership of Professional Corporations

ATTORNEYS AT LAW

SINCE 1905

FEE & FEE, PLLC
FRANK H. FEE, III
FRANK "HANK" FEE, IV
E. CLAYTON YATES, P.A.
E. CLAYTON YATES

Writer's Email:
ffee@feeyateslaw.com

HISTORIC POPPELL HOUSE

426 AVENUE A

FORT PIERCE, FLORIDA 34950

FRED FEE (1888-1939)
FRANK FEE (1913-1983)

TELEPHONE
(772) 461-5020
FACSIMILE
(772) 468-8461

November 28, 2018

Rebecca Grohall, Planning Director
City of Fort Pierce
100 North U.S. Highway 1
Fort Pierce, Florida 34950
Via Email: rgrohall@city-ftpierce.com

RE: Supplemental Revocable Encroachment Permit

Dear Ms. Grohall:

As invited to do by Linda Cox, I am transmitting a Supplemental Revocable Encroachment Permit to expand the prior permit issued to Kraaz & Kraaz Finance, LLC, to include a 5.8' x 12' concrete slab encroachment for silo storage. The terms of the Supplemental Revocable Permit are precisely the same as those included by Mr. Messer in the earlier document.

At your convenience I would appreciate you processing this Supplemental Permit for execution by the Mayor. By copy of this message, including the Supplemental Permit, interim City Attorney Buck Bryan is kept informed and he is asked to proof the document and approve it as to form.

Thanks to both of you for your assistance.

Very truly yours,

Frank H. Fee, III

FHF:llb
Enclosure
cc: Ben L. Bryan, Jr., Esq. via
Email: mmcclendon@city-ftpierce.com

Prepared by and when recorded return to:
Frank H. Fee, III, Esq.
Fee, Yates & Fee, PLLC
426 Avenue A
Fort Pierce, Florida 34950
Telephone: 772-461-5020

Parcel ID Number: 2410-503-0055-000-9

Property Legal Description: AARON LEE'S MAP OF FORT PIERCE BLK G N 95 FT OF LOTS 1 AND 2 AND ALL LOT 3 (MAP 24/10B) (OR 3818-2574)

Site Address: 130 N 2nd St., Fort Pierce, FL 34950

Present Owner(s) of Record: Kraaz & Kraaz Finance Inc

SUPPLEMENTAL REVOCABLE ENCROACHMENT PERMIT

City of Fort Pierce

THIS SUPPLEMENTAL REVOCABLE ENCROACHMENT PERMIT ("Supplemental Permit") is issued by the City of Fort Pierce, a Florida municipal corporation ("City"), to Kraaz & Kraaz Finance, LLC ("Permitee"). This Supplemental Permit expands the permit for encroachment heretofore granted by the City for Permitee to maintain and utilize a loading dock, recorded in O.R. Book 4206, Page 2993 of the Public Records of St. Lucie County, Florida, as depicted on Exhibit "A" attached hereto ("Original Permit"). This Supplemental Permit extends the area allocated to Permitee by an additional 5.8' x 12' concrete slab adjacent to the East building wall, permitting such slab to encroach in, over, upon or under the City's property for the additional purpose of installing and maintaining silo(s) for the storage of vegetative material utilized in the brewing process. The Supplemental Permit area is further depicted on Exhibit "A" and is for the benefit of Permitee's property located at street address 130 North 2nd Street, Fort Pierce, Florida 34950, and more fully described as follows:

> The North 95 feet of Lots 1 & 2 and all of Lot 3, Block G, AARON LEE'S MAP OF FORT PIERCE, FLORIDA, according to the plat thereof as recorded in Plat Book 1, Page 189, of the Public Records of St. Lucie County, Florida

This Supplemental Permit is subject to the following requirements, conditions, restrictions, limitations and obligations (all further references to "Permit" shall refer to both the original Permit and the Supplemental Permit):

1. ENCROACHMENT. Permitee shall maintain for its use only those improvements that are depicted and more fully described in the attached Exhibit "A" for the purpose of using and maintaining a loading dock and for the installation of storage silo(s), which encroach upon City's existing property.

2. TERM/REVOCATION. This Permit shall run with the land and the terms and conditions set forth herein, and all of the duties and liabilities created hereby, shall be a benefit to and a burden upon the owners and occupants of the land, their assigns, and their successors in interest. The permission granted by City for shared use of the existing described lands *is subject to revocation* by City upon written notice to the property owner of record, as listed in the public

tax records. Revocation is effective at the time the written notice is issued. Furthermore, this Permit neither conveys to Permitee any right, title or interest in or to any of the legal or equitable property rights of City, nor serves as City's abandonment of its rights in and to the property being encroached upon.

If City exercises its right to revoke this Permit and provides Permitee with written notice of such revocation, Permitee and/or any successors, assigns or future holders of interest in the land shall be responsible for the removal of the encroachment(s), obstruction(s), or structure(s) and the restoration of the terrain, at Permitee's sole cost and expense, within thirty (30) days of Permitee's receipt of City's written notice of revocation, unless the emergency of the situation requires the removal of the encroachment to be accomplished in a shorter period of time. Said written notice of City's revocation of this Permit shall be made by certified mail, return receipt requested, hand-delivery or personal service. In the event that removal of the encroachment(s) and restoration are not accomplished within thirty (30) days after Permitee's receipt of City's notice of revocation, City shall be hereby authorized to remove the encroachment(s). Permitee agrees to immediately reimburse City for any and all costs incurred for said removal and restoration. The City shall have the right to make an assessment against the real property and collect the costs of removal and restoration. The City shall have the right to make an assessment against the real property and collect the costs of removal and restoration in the same manner as general taxes are collected under state and local laws.

3. INDEMNIFICATION. Permitee releases, waives, relinquishes, discharges, holds harmless, and will indemnify City, its officers, elected officials, employees, agents, successors and assigns, from and against any and all claims, actions, damages, costs, losses, expenses, causes of action, demands and liabilities of any nature and character whatsoever, that Permitee may have, known or unknown, arising in any manner from or related to Permitee's construction, maintenance, repair, removal, or utilization of the above-described encroachment(s). The types of claims, actions, causes of action, demands and liabilities that are released, waived discharged, relinquished, and will be indemnified herein include, but are not limited to, claims for any future revocation of this Permit by City, or acts of Permitee's contractors, agents, employees, members, invitees, and consultants. Further, Permitee understands that this release, hold harmless and indemnification agreement detailed in this paragraph shall inure to the benefit of City, its officers, elected officials, employees, agents, successors, and assigns, and that it shall bind Permitee and Permitee's heirs, legal representatives, members, assigns and successors in interest.

4. PRIORITY OF USE. This Permit is made subordinate to the right of City to use said property area for any purpose. It is understood and agreed that if City subsequently determines, in its sole discretion, to use or occupy the area of the encroachment, then the encroachment hereby authorized may be modified or removed completely. The public use and/or condition of the encroachment area shall be restored by spreading material uniformly over the site, and seed and sod as necessary, at Permitee's sole cost and expense, and to the satisfaction of the Public Works Director/City Engineer or City Manager. City's decision as to the necessity of restoring such public use, occupancy, or improvements shall be final and binding upon Permitee and Permitee's heirs, legal representatives, members, assigns and successors in interest.

5. NO PRECEDENT ESTABLISHED. This Permit is issued with the understanding that any action herein is not to be considered as establishing a precedent, as to the utility or the

acceptability, of any permit to any other or future situation. Each approval of a Revocable Encroachment Permit will be determined on a case-by-case basis.

6. PERMITEE'S ACCEPTANCE OF PERMIT TERMS. As evidenced by the attached Exhibit "B," which is incorporated herein, Permitee agrees to and accepts the above terms, conditions and restrictions of this Revocable Encroachment Permit and acknowledges that said terms, conditions and restrictions shall run with Permitee's real property and be binding upon Permitee's heirs, legal representatives, members, assigns, and successors in interest.

CITY:

Signed in the Presence of:

By:_____
Linda Hudson, Mayor

_____
Witness
Print Name: _____

_____
Witness
Print Name: _____

APPROVED AS TO FORM AND
CORRECTNESS:

By _____
Ben L. Bryan, Jr., Interim City Attorney

STATE OF FLORIDA
COUNTY OF ST. LUCIE

I HEREBY CERTIFY that on this _____ day of _____, 2018, Linda Hudson as Mayor of the City of Fort Pierce, a Florida Municipal corporation, and authorized to act on behalf of the City of Fort Pierce, who is personally known to me, executed the foregoing instrument for the purposes therein expressed.

Witness my hand and official seal at City Hall, in the County and State last aforesaid on this _____ day of _____, 2018.

Notary SEAL/STAMP

_____
Notary Signature

_____
Notary Printed Name

Notary Public, State of _____
My Commission expires _____

Date Of Field Work - 12/02/2015 | Drawn By - KC | Order # - 502 | Revision 2 - | Revision 3 -

LEGAL DESCRIPTION:

NORTH 95 FEET OF LOTS 1 AND 2, AND ALL OF LOT 3, BLOCK G, AARON LEE'S MAP OF FORT PIERCE, FLORIDA, AS RECORDED IN PLAT BOOK 1, PAGE 189, OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY.

CERTIFIED TO:

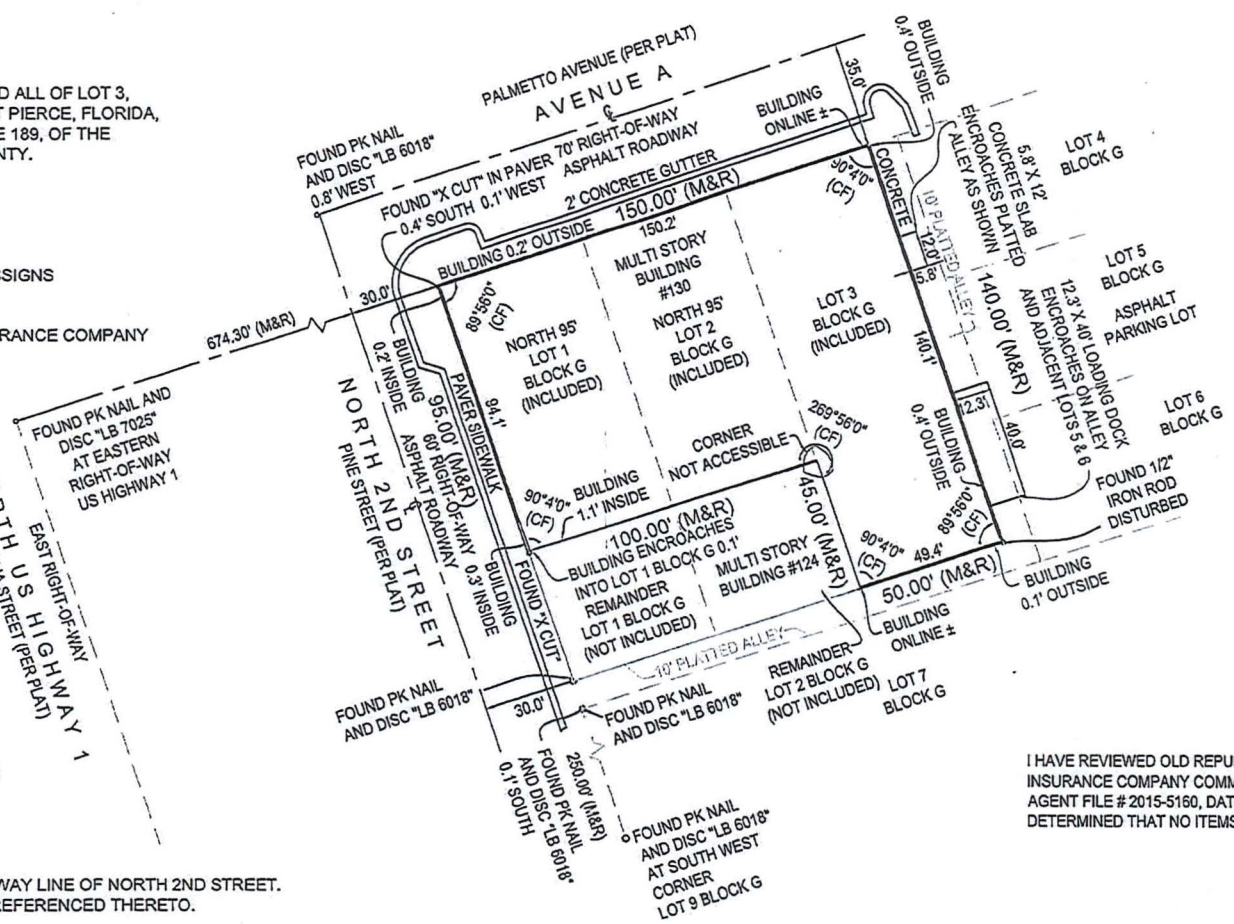
M&T BANK, ITS SUCCESSORS AND ASSIGNS
KRAAZ AND KRAAZ FINANCE, LLC
ALLAN FALK P.A.
OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY

FLOOD ZONE:

ZONE: B
PANEL: 12111C-0179J-J
EFFECTIVE: 2/16/2012

SITE ADDRESS:

130 NORTH 2ND STREET
FORT PIERCE, FL
34950





AERIAL PHOTOGRAPH
(NOT-TO-SCALE)

SCALE:1"=40'

EXHIBIT A

SURVEY NOTES:
- BUILDING ENCROACHES BEYOND BOUNDARY LINE AS SHOWN

I HAVE REVIEWED OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY COMMITMENT, SCHEDULE B-2, AGENT FILE # 2015-5160, DATED 10/16/2015 AND HAVE DETERMINED THAT NO ITEMS WERE PLOTTABLE.

BEARING REFERENCE: NORTH RIGHT-OF-WAY LINE OF NORTH 2ND STREET.
ALL ANGLES SHOWN HEREON REFERENCED THERETO.

LB 8111
NEXGEN SURVEYING, LLC
1973 PGA BLVD SUITE C
NORTH PALM BEACH, FL 33408
www.NexGenSurveying.com
PHONE: 561.508.6272
FAX: 561.508.6309

Boundary Survey

of
130 NORTH 2ND STREET
FORT PIERCE, FLORIDA 34950
for
KRAAZ AND KRAAZ FINANCE, LLC

C - CALCULATED
R - RECORD
M - MEASURED
P - PLATTED
WM - WATER METER
XXX TOPOGRAPHIC ELEVATION
ASPHALT
CONCRETE
PAVER/BRICK
WOOD
UTILITY POLE
MANHOLE
℄ CENTER LINE
CATCH BASIN
FIRE HYDRANT
LIGHT POLE
WELL
WATER VALVE

Clyde McNeal

Digitally signed by Clyde McNeal
DN: cn=Clyde McNeal, o=NexGen Surveying, LLC, ou=Licensed Surveyor, email=clyde@nexgensurveying.com, c=US
Date: 2015.12.09 21:29:37 Z

REVOCABLE ENCROACHMENT PERMIT

Property Owner of Record: Kraaz & Kraaz Finance Inc
Property Address: 130 N 2nd St., Fort Pierce, FL 34950

Exhibit "B"

Permitee hereby represents that it is the owner of the property for which the Revocable Encroachment Permit ("Permit") is being issued, and after reviewing the terms, conditions and restrictions of the Permit, accepts this Permit for which it has applied, and that it has read and knows the contents thereof, and for itself and its heirs, assigns and successors in interest, as owners or occupants of the parcel of land therein described, agree to abide by and be bound by all of the terms, conditions, restrictions and provisions thereof.

If Permittee is a corporation or a limited liability company, Permitee also warrants, represents, covenants, and agrees that it is duly organized, validly existing and in good standing under the laws of the state of its incorporation or organization and is duly authorized and in good standing to conduct business in the State of Florida, that it has all necessary power and has received all necessary approvals to execute and deliver this Agreement, and the individual executing this Agreement on behalf of Permitee has been duly authorized to act for and bind Permitee.

Dated this 25 day of March, 2018. 9

PERMITTEE:

By: _____
Print Name: Hans Kraaz

Signed in the Presence of:

Nicole Friedrich
Witness
Print Name: Nicole Friedrich

Rebecca Weachbrook
Witness
Print Name: Rebecca Weachbrook

STATE OF FLORIDA
COUNTY OF ST. LUCIE

I HEREBY CERTIFY that on this 25 day of March, 2018, 9 before me, an officer duly authorized to administer oaths and take acknowledgments, appeared Hans Kraaz, personally known to me or proven by producing the following identification DL to be the person described in and who executed the foregoing instrument freely and voluntarily for the purposes therein expressed.

Witness my hand and official seal in the County and State last aforesaid on this 25 day of March, ~~2016~~. 2019

Notary SEAL/STAMP

NIKKI BATES
MY COMMISSION #FF991939
EXPIRES: SEP 10, 2020
Bonded through 1st State Insurance

Notary Signature
Nikki Bates
Notary Printed Name

Notary Public, State of FL
My Commission expires 9/10/20

City Commission Regular Meeting **11.h.**

Meeting Date: 04/15/2019

Re: Purchase Refuse Collection Vehicle, Piggybacking Florida Sheriff's Association Cooperative Purchasing Agreement FSA18-VEH18-VEL 26.0

Submitted For: Mike Reals, Public Works Manager, Public Works

SUBJECT:

Approve purchase of one (1) 2019 Peterbilt refuse collection trucks, piggybacking the Florida Sheriff's Association Cooperative Purchasing Agreement FSA18-VEH18-VEL 26.0 for the Solid Waste Division in an amount not to exceed $273,974.00.

SUMMARY:

The Public Works Department is seeking to purchase one (1) 2019 Peterbilt 520 Sideloader refuse truck with a Heil body from Palm Peterbilt Truck Centers through the Florida Sheriffs Association FSA18-VEH18-VEL 26.0, Specification #16 Cooperative Purchasing Agreement. Palm Peterbilt has a dealership and service center in Fort Pierce.

Approving the requested purchase will allow the Fleet Management Division to begin an in house refurbishiing program to bring older trucks back to a like new condition. The current service load and the need for available trucks when frontline trucks are being serviced does not allow for this program to begin.

RECOMMENDATION:

The Public Works Department recommends approval of the requested purchase.

ALTERNATIVES:

Staff will proceed as directed by the Commission.

RESPONSIBLE STAFF:

Public Works Department

COORDINATED WITH:

Purchasing Department
Finance Department

Fiscal Impact

Budgeted Y/N:	N
Fiscal Year:	2019
Account:	40242005346430
Amount:	273,974.00

FISCAL IMPACT:

Retained earnings will be utilized for this purchase.

Attachments

2019 Peterbilt

Form Review

Inbox	Reviewed By	Date
Finance Department	Johnna Morris	04/10/2019 09:23 AM
City Manager	Nick Mimms	04/10/2019 10:32 AM
Form Started By: Mike Reals		Started On: 04/03/2019 01:42 PM
Final Approval Date: 04/10/2019		

PALM
PETERBILT TRUCK CENTERS
Est. 1965

City of Ft. Pierce
52 Savannah Rd.
Fort Pierce, Florida 34954
Att. Chuck Penachino

April 2, 2019

One (1) Peterbilt Model 520, Per Florida Sheriffs Association
Bid No: FSA18-VEH18-VEL 26.0 Specification # 16

(1) 2019 Peterbilt Model 520 - Cab & Chassis only Painted White	$135,685.
Options Added:	
1. 380 HP with C-Brake by Jacobs	2,672.
2. Front 425 R22.5 296 Bridge Stone M864	987.
3. Rear tires 12R22.5 Bridge Stone M853	2,276.
4. Right Hand Drive	1,333.
5. Shock Absorbers for HMX Suspension	427.
Sub Total	$ 143,380.
One New Heil Dura-Pack Side Loader 28 cu. yd.	**130,594.**
Double Camera System,20 Lb. Fire Extinguisher, all Standard, Features	
12 Month Warranty	
Total Price Per Unit	**$273,974.**
WARRANTY OPTIONS:	
Cummins ISX12 Protection Plan 1 & Aftertreatment Coverage 5Year/300, Miles	2,610.
Allison Transmission 2+3=5 Year Warranty	1,241.

Thank you for the opportunity to quote the Peterbilt product and we are looking forward to your most valued order.

Prepared By:
Rudy Mangino Jr.

P19-117A 520RH X12 4500 Fleet

,
Phone:
Fax:
Contact Email:
Prepared for:

Vehicle Summary

Unit

Model:	Model 520
Type:	Full Truck
Description:	P19-117A 520RH X12 4500 Fleet

Application

Intended Serv.:	Refuse/Landfill
Commodity:	Refuse, Scrap, Recycling

Body

Type:	Automated Side Loader
Length (ft):	20
Height (ft):	8.0
Max Laden Weight (lbs):	17000

Trailer

No. of Trailer Axles:	0
Type:	
Length (ft):	0
Height (ft):	0.0
Kingpin Inset (in):	0
Corner Radius (in):	0

Restrictions

Length (ft):	40
Width (in):	102
Height (ft):	13.5

Chassis

Fr Axle Load (lbs):	20000
Rr Axle Load (lbs)	46000
G.C.W. (lbs):	66000
Road Conditions:	
Class A (Highway)	90
Class B (Hwy/Mtn)	10
Class C (Off-Hwy)	0
Class D (Off-Road)	0
Maximum Grade:	6
Wheelbase (in):	215
Overhang (in):	110
Fr Axle to BOC (in):	0.1
Cab to Axle (in):	214.9
Cab to EOF (in):	324.9
Overall Comb. Length (in):	382

Special Req.

California Registry

Approved by: _____ **Date:** _____

Note: All sales are F.O.B. designated plant of manufacture.

PACCAR FINANCIAL

Ask your dealer for a quote today, or visit our website @ www.paccarfinancial.com.

PACCAR Financial offers innovative finance, lease and insurance programs customized to meet your needs.

Unpublished options may require review/approval.
Dimensional and performance data for unpublished options may vary from that displayed in PROSPECTOR.

Complete

Model Number:	Model 520
Quote/DTPO/CO:	Q05304584
Version Number:	35.20

P19-117A 520RH X12 4500 Fleet

,
Phone:
Fax:
Contact Email:
Prepared for:

	Description	Weight
Base Model		
	Model 520	16,475
	Refuse, Scrap, Recycling	0
	Refuse/Landfill Truck which picks up refuse or recycled material from curbside containers in residential areas. Operation typically includes very frequent stops and starts. Unloading can be at transfer station or at landfill (may enter landfill).	0
	Automated Side Loader	0
	California Registry Required for all vehicles that will be registered in the State of California.	0
Configuration		
	Not Applicable Secondary Manufacturer	0
Frame & Equipment		
	10-3/4in Steel Rails 343-450in 10.75x3.5x.375 Dimension, 2,136,000 RBM; Yield Strength: 120,000 psi. Section Modulus: 17.8 cubic inches. Weight: 1.74 lbs/inch pair	351
	Full Steel Inner Liner	774
	Zinc Coated Anti Corrosion Treated Frame Rails Requires Frame Rail Code. Zinc Phosphate coating will replace the standard frame rail primer and provide added corrosion prevention for your customer's operating in severe conditions or in climates where vehicle rust is common.	0
	FEPTO Provision 4-7/8in Bumper Extension Includes 1350 Series Front Drive PTO Attachment Provision, Radiator with PTO Cut-Out in Grille, Radiator Protection Sleeve, and Bumper Extension	45
	EOF Square without Xmbr For use with body builder installed crossmember.	0
	Peterbilt Rear Mudflaps and Straight Hangers	25
	(2) Solid Mount Cable Hooks	0
Front Axle & Equipment		

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Complete

Model Number:	Model 520
Quote/DTPO/CO:	Q05304584
Version Number:	35.20

	Description	Weight
	Meritor MFS20 20,000 lb, 3.74 in Drop Axle is designed for applications with a gross axle weight rating (GAWR) of 20,000 pounds. Axle includes special low-friction bushings, double draw keys and integral thrust bearing and seal design for durability, low maintenance and ease of service. Combination of Meritor Easy Steer king pin bushings, computer-designed and optimized I-beam construction and stiff axle assembly delivering a tight turning radius, superior vehicle control and longer tire life.	-4
	Taper Leaf Springs, Shocks 20,000 lb Standard with Heavy Resistance Shocks.	0
	Power Steering Sheppard SD110 Dual For use with 22,000 lb. axle ratings. Glidekote splines on steering shaft extend service life of components.	40
	PHP10 Iron PreSet PLUS Hubs	84
	Meritor 5in Drop IPO 3.5in, Front Axle 5" drop (127MM) provides lower chassis suspension and profile.	0
	Meritor Wide Track IPO Standard, Front Axle MFS+ 3.5" Drop / MFS 3.74" Drop. 71in KPI IPO 69in with MFS and MFS+ axles For improved turning radius.	5
	Meritor Q+ Air Cam Front Drum Brakes 16.5x7 Not RSD compliant.	0
	Long Stroke Brakes, Front Axle	0
Rear Axle & Equipment		
	Meritor RT46-160 46,000 lb Interaxle diff lock air rocker occupies space of one gauge. Laser factory axle alignment to improve handling & reduce tire wear. Magnetic rear axle oil drain plug captures & holds any metal fragments in drive axle lube to extend service life. Parking brakes on all drive axles for optimal performance. Cognis EMGARD® FE 75W-90 synthetic axle lube provides over 1% fuel economy improvement. Reduces wear & extends maintenance intervals, resulting in increased uptime. Provides improved fluid flow to protect components in extreme cold conditions & withstand the stress from high temperatures, extending component life.	0
	PHP10 Iron PreSet PLUS Hubs	0
	Long Stroke Parking Brakes, Drive Axle(s)	0
	Optional Longer Studs For Hub Piloted Whl System For use with F/O installed aluminum wheels with cast drums.	0
	Bendix Smart ATC Traction Control	2
	Refuse Service Brakes, Steer And Drive Axles	0
	Rear Brake Camshaft Reinforcement	9
	Lube Pump, Drive Axle(s)	36

	Description	Weight
	SBM Valve Full trucks require a spring brake modulation (SBM) system for emergency braking application. This system requires an SBM valve and a relay valve with spring brakes on the rear axles. The SBM valve allows the foot valve to operate the rear axle spring brakes if a failure exists in the rear air system.	0
	Meritor Q+ Air Cam Rear Drum Brakes 16.5x8.625	0
	Anti-Lock Braking System (ABS) 6S6M ABS-6. Includes air braking system.	35
	Synthetic Axle Lubricant All Axles Peterbilt heavy duty models include Fuel Efficient Cognis EMGARD FE75W-90 which provides customers performance advantages over current synthetic lubricants with reduced gear wear and extended maintenance intervals, resulting in increased uptime. In addition, the lubricant provides improved fluid flow to protect gears in extreme cold conditions and withstand the stress from high temperatures, extending component life.	0
	Ratio 4.89 Rear Axle	0
	Hendrickson Haulmaax HMX460 46,000 lb, 54in Axle Spacing, 60K Creep Rating	-15
	Shock Absorbers For HMX Suspension	31
	HMX Double Rebound Strap Kit	6
Engine & Equipment		
	ISX12 350R 350@1800 GOV@2100 1450@1100 Refuse Service (2013 Emissions) Includes aluminum flywheel housing. Chevron Delo LE SAE 10W30 engine oil is specially formulated for new low emissions engines. Magnetic engine oil drain plug captures and holds any metal fragments in engine oil to extend service life. N21320 N205 120..Standard Maximum Speed Limit [LSL] N21330 N207 0....Expiration Distance N21340 P112 120..Hard Maximum Speed Limit N21350 P001 65...Maximum Accelerator Pedal Vehicle Speed N21370 P059 65...Maximum Cruise Speed N21400 N203 252..Reserve Speed Function Reset Distance N21410 N202 0....Maximum Cycle Distance N21420 N206 10...Maximum Active Distance N21430 N201 0....Reserve Speed Limit Offset N21440 P015 YES..Engine Protection Shutdown N21450 P026 NO...Gear Down Protection N21460 P046 1400.Max PTO Speed N21470 P062 NO...Cruise Control Auto Resume N21480 P068 NO...Auto Engine Brake in Cruise N21500 N209 0....Expiration Distance N21510 P520 YES..Enable Idle Shutdown Park Brake Set N21520 P030 5....Timer Setting N21530 P233 YES..Enable Impending Shutdown Warning N21540 P234 60...Timer For Impending Shutdown Warning N21550 P516 35...Engine Load Threshold N21570 P031 NO...Idle Shutdown Manual Overrule	1,030

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Complete

Model Number:	Model 520
Quote/DTPO/CO:	Q05304584
Version Number:	35.20

	Description	Weight
	N21590 P230 YES..Enable Hot Ambient Automatic Overrule N21610 P172 40...Low Ambient Temperature Threshold N21620 P173 60...Intermediate Ambient Temperature Threshold N21630 P171 80...High Ambient Temperature Threshold	
	Engine Idle Shutdown Timer Enabled	0
	Enable EIST Ambient Temp Overrule	0
	Eff EIST NA Expiration Miles	0
	Effective VSL Setting NA	0
	Remote PTO And Throttle Provision	0
	CARB Engine Idling Compliance PACCAR PX-7, PX-9 and MX, Cummins ISL, ISM and ISX diesel engines will include the required factory installed serialized sticker on the drivers door to identify them as meeting the NOx idling standard.	0
	160 Amp Alternator, 36 SI Brushless	10
	Remote Voltage Sense Wiring	0
	Immersion Type Block Heater 110-120V Standard location is center left hand under cab and includes a weather-proof cover that protects the receptacle. This pre-heater keeps the coolant in the engine block from freezing when the engine is not running.	2
	Delco 39MT Starter, Overcrank Protectio n	0
	3 PACCAR Premium 12V Dual Purpose Batt 2190 CCA Threaded stud type terminal. Stranded copper battery cables are double aught (00) or larger to reduce resistance.	0
	Kissling Battery Disconnect Switch Mounted on battery box	3
	2-Speed Fan Clutch For Frequent Start/Stops	0
	18.7 CFM Air Compressor N/A X15. Furnished on engine. Teflon lined stainless steel braided compressor discharge line.	0
	C-Brake By Jacobs, ISX12, ISX12-G Includes 2 switches: A 2-position on/off engine switch. As well as a 3-position up, down, hold range selector switch.	0
	DAVCO 382 Fuel/Water Separator	0
	No Fluid Heat Option for Fuel Filter	0
	12V and 120V Heat for Fuel Filter	0
	Engine Protection Shutdown Includes oil pressure, oil temperature, coolant temperature, and intake manifold temperature.	0

	Description	Weight
	High Efficiency Cooling System Cooling module is a combination of steel and aluminum components, with aluminum connections to maximize performance and cooling capability. Silicone radiator & heater hoses enhance value, durability, & reliability. Constant tension band clamps reduce leaks. ClimaTech extended life coolant extends maintenance intervals which reduces maintenance costs. Anti-freeze effective to -30 degrees F helps protect the engine. Low coolant level sensor warns of low coolant condition to prevent engine damage. Radiator Size by Model: 587: 1330 sq in, 579/367 FEPTO 1325 sq in, 567/365/367: 1440 sq in, 384/386: 1301 sq in, 365 FEPTO: 1184 sq in, 389/367 HH: 1669 sq in, 348: 1000 sq in, 320: 1242 sq in.	0
	Bugscreen-Removable Type Grill Mtd Additional clips at bottom of bugscreen.	0
	Stainless Steel Grille	0
	Heavy Duty Air Cleaner Molded rubber air intake connections with lined stainless steel clamps seal to prevent contaminants in air intake.	0
	Exhaust Vertical LH DPF/SCR transverse mounted (ISX12 Only).	0
	Curved Tip Standpipe(s)	0
	18in Ht, 5in Dia Chrome, Clear Coat Standpipe(s)	-2
Transmission & Equipment		
	Allison 4500 RDS-P Transmission, Gen 5 Rugged Duty Series. Includes Rear Transmission Support except on MX engines, TranSynd Transmission Fluid, and Water Oil Heat Exchange. Also includes features that monitor the transmission fluid, filter and clutch condition. Will display percent life remaining for the transmission fluid, filter and clutches on the shift selector. This information may be displayed using the Mode and Up and Down buttons. A wrench icon will also be included to indicate when the transmission fluid, filter or clutches need servicing. (Suited for vehicles operating on/off highway and/or requiring PTO operation) Forward Ratios: 1st-4.70, 2nd-2.21, 3rd-1.53, 4th-1.00, 5th-0.76, 6th-0.67 / Reverse Ratios: DR-(5.55)	365
	1810 HD Driveline, 1 Midship Bearing 4.5in x .180 wall tubing	70
	Allison FuelSense Basic Includes 5th Generation Controls, EcoCal and Dynamic Shift Sensing. For additional information see Product Portfolio.	0
	Console Mounted Push Button Shifter Allison transmissions	0
	Allison 6-Speed Configuration, Wide Ratio Gears Allison 4500 Transmission Only	0

	Description	Weight
	Allison Output Function S Neutral Indicator For PTO. Required on Refuse Packer Applications. With this configuration NEUTRAL only, PTO engagement is permitted only when the transmission is in Neutral. Once the transmission is in Neutral, the PTO is automatically engaged and fast idle is initiated when the PTO switch is switched On. Also, with this configuration Pack-on-the-fly, the PTO is automatically engaged and fast idle is initiated when the PTO switch is On concurrently with shifting of the transmission to Neutral.	0
	Allison Transmission Fluid Test Port Remote coupler. The fluid test port provides easy access to transmission fluid for testing from its location under the hood on the right-hand frame rail.	0
	Rolling Direction Change Shift Inhibit Feature Allison Transmissions. A programmable feature that keeps the transmission from shifting from Drive to Reverse or from Reverse to Drive above a preset speed.This wireless function is enabled when a switch is closed to complete the circuit between input wire 101 and ground. Frequently the function is interfaced with a switch indicating activation of another vehicle function, such as application of the service brakes. When the function is enabled, the TCM will recognize the request for a direction change shift, Reverse-to-Drive or Drive-to-Reverse. If all other operating conditions are acceptable, the TCM will command the requested shift. The enable remains in effect until the switch is opened, followed by the selection of a different direction, Reverse or Drive, at the shift selector. This could be used for doc spotters and refuse. If the function is not enabled, any shift which results in a change of direction is inhibited.	0
Air & Trailer Equipment		
	Bendix AD-IS EP Air Dryer with Heater And Coalescing Filter; Extended Purge	0
	Air Tank Valve Guards	0
	Nylon Chassis Hose	0
	Compressor Discharge Line Test Valve	0
	Steel Painted Air Tanks All air tanks are steel with painted finish except when Code 4543330 Polish Aluminum Air Tanks is also selected (then exposed air tanks outside the frame rails will be polished aluminum). Peterbilt will determine the optimal size and location of required air tanks. Narratives requesting a specific air tank size or location will not be accepted for factory installation. See ECAT to determine number or location of air tanks installed.	0
	Clear Outside Frame of All Air System Components RH BOC	0
Tires & Wheels		
	FF: BR 20ply 315/80R22.5 M860A Diameter = 42.8 inches; SLR = 19.9 inches	-4

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Complete

Model Number:	Model 520
Quote/DTPO/CO:	Q05304584
Version Number:	35.20

	Description	Weight
	RR: BR 20ply 315/80R22.5 M860A Diameter = 42.8 inches; SLR = 19.9 inches	376
	Code-rear Tire Qty 08	0
	FF: Alcoa 89U637 22.5X9.00 Clean Buff Finish Aluminum, Ultra ONE wheels with MagnaForce alloy.	-70
	RR: Alcoa 89U647 22.5X9.00 Clean Buff Finish Aluminum. Ultra ONE wheels with MagnaForce alloy.	-216
	Code-rear Rim Qty 08	0
Fuel Tanks		
	26in Aluminum 80 Gallon Fuel Tank LH BOC Paddle handle filler cap with threadless filler neck. Top draw fuel plumbing reduces chance of introducing air into the fuel system during low fuel level conditions due to the central placement of fuel pickup tube. Wire braid fuel lines increase durability & reduce potential for leaks.	13
	Location LH BOC Rear-Most 80 Gallon	0
	Fuel Cooler Required with single fuel tank.	0
	Top Of Fuel Tank 5in Below Top Of Frame	33
	DEF Tank Mounted LH BOC Models 210, 220 and 320 mounted LH cab fender.	0
	Standard DEF To Fuel Ratio 2:1 Or Greater	0
	DEF Tank 520	0
Battery Box & Bumper		
	Aluminum Space Saver Battery Box LH Back Of Cab	-11
	Rubber Battery Pad In Bottom Of (1) Battery Box (Mat in box that holds batteries only)	2
	Mount Space Saver Battery Box Top Of Box 8in Below top of frame	0
	Steel Bumper Swept Back Painted Requires bumper extension. Includes two front tow eyes with pins.	2
	Notched Top Flange Of Bumper	0
Cab & Equipment		

Description	Weight
53in LCF ProBilt Cab RH Drive Use with auto trans. Includes steel frames with alum and fiberglass panels, all alum doors, dual door stops, door locks, tinted safety glass thru-out, cab and door mounted entry grab handles, 65 degree hydraulic tilt, stainless steel grille, dual rear cab fenders, service module BOC (cab tilt pump, oil fill and dipstick, coolant fill and check, fluid fill and dipstick for auto trans), door mounted armrests, power windows, full insulation, rubber floor mats, ergonomic center control console, removable instrument panel, Driver Information Display, LED backlit gauges, pull down windshield sunshade, 16in steering wheel with integrated horn button, tilt/telescopic adjustable column, over-door storage, driver and passenger side cup holders, USB charging port and 12VDC charging outlet, header includes HVAC controls, rear cab corner windows, 18in bolt-on step on each side, self-canceling turn signals and Front Directional and Side Mounted Turn Signals.	0
Key All Units Alike Please add your 3 digit key code number in the key code field.	0
KEY G479	0
4.5 Inch Rubber Flares on Cab and Wheel Well Fenders	0
Sears C2 Driver Seat	0
Peterbilt Passenger Seat	0
Seat Belt Color Orange IPO Standard Black	0
Air Ride Driver	0
Mid Back Driver	0
Fabric Driver	0
Non-Air Ride Passenger	0
Low Back Passenger	0
Vinyl Passenger	0
Gray Interior Color Includes ABS gray headliner & rear cab panel, gray vinyl engine tunnel cover.	0
Adjustable Steering Column - Tilt/Telescope	0
Steering Wheel with Peterbilt Logo Steering Wheel with embossed Peterbilt logo over horn button.	0
Rear Window Back of Cab Standard Tint 18.5in X 54in	0
Two Piece Flat Windshield	0
Combo Fresh Air Heater/Air Conditioner With radiator mounted condenser, dedicated side window defrosters, Bi-Level Heater/Defroster Controls, 54,500 BTU/HR, and silicone heater hoses.	0

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Complete

Model Number:	Model 520
Quote/DTPO/CO:	Q05304584
Version Number:	35.20

	Description	Weight
	Mirrors SSTL Each Side Heated and Motorized with Switch on Door. Right Click on option to See Picture in Product Portfolio.	-7
	(2) Convex 8 Inch SS Mirror Center mounted under mirror bracket. If rear view mirrors are heated, the convex mirrors will be heated. Option includes dual door stops.	2
	(1) Air Horn 15in Painted Mounted under cab.	0
	ConcertClass w/CD, Bluetooth Phone and Audio Includes AM/FM, WB, USB and MP3.	10
	Midlevel Speaker Package For Cab (4) Speakers	6
	Radio Mute when Allison Transmission in reverse - requires option 8140690 for 520 only.	0
	SmartLINQ Remote Diagnostics SmartLINQ is Peterbilt's proprietary remote diagnostics service which monitors the engine and aftertreatment for diagnostic codes providing real-time code analysis maximizing vehicle uptime and strengthening the fleets partnership with their dealer. SmartLINQ provides fault coverage for over 800 codes, a customizable email notification for 116 codes plus a web portal to manage your entire fleet included at no additional charge. SmartLINQ is compatible with any telematics system and doesn't require a specific fleet management system. For those whose customers utilize PeopleNet, the pre-wire with remote diagnostics will provide a more integrated solution utilizing the existing SmartLINQ modem. For those whose customers utilize other fleet services products, the existing pre-wire option for the other fleet service devices will continue to be available.. SmartLINQ is standard with MX-13 engines and available on the models 587,579,567,389,367 and 365.	0
	Pre-Wire Cab 3rd Eye Vision System	0
	Pre-wire Chassis for 3rd Eye Vision System	0
	Cab Tilt Pump Air Assist	0
	Rain Gutters Over Driver and Passenger Doors	8
	Peterbilt Pantograph Windshield Wipers With intermittent feature.	0
	Triangle Reflector Kit Shipped Loose	13
	Ecco DS-1500 Reverse Motion Sensor Use with backup alarm.	0
	Backup Alarm (87-112 Decibels) Self Adjusting	6
	Engine Oil Temperature Gauge Located in Driver Information Display	0
	Main Transmission Oil Temperature Gauge Located in Driver Information Display	0

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Complete

Model Number:	Model 520
Quote/DTPO/CO:	Q05304584
Version Number:	35.20

	Description	Weight
	Air Restriction Indicator Mounted on air cleaner,intake piping, or firewall.	0
	Warning Light Battery Disconnect, Switch Engaged (Marker light) external mounted.	0
	Indicator Light For F/O PTO Controls Located in Driver Information Display	0
	Headlights Single Rectangular Halogen	0
	(5) Light Guards On Marker Lights	2
	(5) LED Clearance With (2) LED Marker Lights Includes (5) lights mounted on roof of cab and (1) cab side marker light mounted in front of each cab door.	0
	None Furnished Stop/Tail/Backup Lights Available with Full Truck only. Not available with Tractor.	0
	Daytime Running Lights (Required on Canadian units)	0
	Brake Lights Activated by Park Brake Requires Option 7726010	0
Paint		
	Standard Paint Color Selection	0
	(1) Color Axalta Two Stage - Cab/Hood Base Coat/Clear Coat N85020 A - L0006EB WHITE - STAND N85500 CAB ROOF L0006EB WHITE - STAND N85200 FRAME N0001EA BLACK N85700 BUMPER N0001EA BLACK	0
Miscellaneous		
	2017 EPA Emissions Engine Warranty Only	0
Total Weight		19542

Prices and Specifications Subject to Change Without Notice.

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Complete

Model Number:	Model 520
Quote/DTPO/CO:	Q05304584
Version Number:	35.20

City Commission Regular Meeting **12.a.**

Meeting Date: 04/15/2019

Re: 608 S 6th Street - Request for Demolitoin

Submitted For: Peggy Arraiz, Code Compliance Manager, Code Enforcement

---

SUBJECT:

Resolution No.19-R16 and Quasi-Judicial Hearing – A hearing to allow the owners and/or parties of interest in the property identified as 608 S 6th Street to show cause why the structure located on the premises should not be condemned and demolished.

SUMMARY:

- Code Enforcement action initiated in 2009 for a vacant structure. Lien for non-compliance filed in 2010.
- Code Enforcement action initiated in 2012 for roof damage. Lien for non-compliance filed in 2013 and continues to accrue.
- Code Enforcement action initiated in 2017 due to roof collapse following Hurricane Irma.
- Due to no action taken by the owner, condemnation of the property initiated September 6, 2018.
- Due to no action taken by the owner, the request for demolition is brought before the City Commission.

RECOMMENDATION:

Staff recommends the City Commission approve Resolution No. 19-R16 declaring that the structure located at 608 S 6th Street be condemned and demolished in accordance with the Rules of Procedure for Condemnation and Demolition as adopted by the City Commission.

ALTERNATIVES:

Amend Resolution No. 19-R16
Deny Resolution No. 19-R16

RESPONSIBLE STAFF:

Margaret M. Arraiz, Code Compliance Manager

COORDINATED WITH:

Richard Jefferson, Building Deparment Inspector
Legal Department

Fiscal Impact

OTHER INFORMATION:

Cost of demolition will be funded by the Clean & Safe Initiative

OTHER INFORMATION:

If demolition is conducted by the City of Fort Pierce, the cost will be funded by the Clean & Safe Initiative.

Attachments

Resolution 19-R16
Affidavit of Unsafe Building
Certified mail documents
Posting documents
Photos - November 2017
Photos - April 2019
Code Enforcement History
Overhead map
Property Appraiser Card
Property Maintenance Inspection Report

Form Review

Inbox	Reviewed By	Date
City Manager	Peggy Arraiz	03/21/2019 08:08 AM
City Manager	Peggy Arraiz	04/09/2019 02:41 PM
City Manager	Nick Mimms	04/09/2019 05:41 PM

Form Started By: Peggy Arraiz Started On: 03/21/2019 08:05 AM
Final Approval Date: 04/09/2019

RESOLUTION NO. 19-R16

A RESOLUTION DETERMINING THAT A CERTAIN BUILDING OR STRUCTURE LOCATED AT **608 S 6TH ST** IN FORT PIERCE, FLORIDA 34950 IS UNSAFE AND A NUISANCE THAT CONSTITUTES A MENACE TO THE BUSINESS, HEALTH AND SAFETY OF THE COMMUNITY; AND THAT SAID BUILDING OR STRUCTURE **SHALL BE CONDEMNED AND DEMOLISHED**; DECLARING THE PARTIES OF INTEREST WERE PROVIDED THE OPPORTUNITY TO BE HEARD AND ARE RESPONSIBLE FOR THE REMOVAL OF THE BUILDING OR STRUCTURE; AND ORDERING THE CITY OF FORT PIERCE TO PROCEED WITH SUCH REMOVAL AND PLACE A LIEN UPON THE PROPERTY IDENTIFIED IF COMPLETED BY THE CITY OF FORT PIERCE; PROVIDING FOR APPEAL; PROVIDING FOR NOTICE TO ALL PARTIES; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, The Charter for the City of Fort Pierce, Florida provides the City Commission the authority to declare a building or structure unsafe and require its removal or destruction; and

WHEREAS, a public hearing was held before the City Commission on this date, April 15, 2019 to determine if the building or structure located at 608 S 6TH ST, FORT PIERCE, FLORIDA is unsafe and a nuisance that constitutes a menace to the business, health and safety of the community; and

WHEREAS, all parties with interest to the property were properly provided notice of the hearing and given the opportunity to show cause why the structure should not be condemned;

NOW, THEREFORE, BE IT RESOLVED by the City Commission of the City of Fort Pierce, Florida;

SECTION 1. That the City Commission determines that the building or structure located on the said lot, tract, or parcel of land within the City of Fort Pierce, St. Lucie County, Florida, described as follows:

608 S 6TH ST
WOODBINE S/D LOT 12 (MAP 24/10F)(OR 2125-2549)
2410-715-0012-000/7

is unsafe and a nuisance that constitutes a menace to the business, health and safety of the community and shall be condemned in accordance with the Charter of the City of Fort Pierce and order its removal by demolition in accordance with the time frames and regulations outlined in the Rules of Procedure for Condemnation and Demolition as adopted by the City Commission.

SECTION 2. The owners, agents, or any person, firm or corporation having a lien on, or interest in, said building or structure, which lien or interest is a matter of record in the public records of St. Lucie County, Florida, were provided the opportunity to be heard and to show cause why said building or structure should not be condemned and its removal or destruction required.

ISABELLE & THOMAS SCHILLO
298 PONCE DELEON ST
WEST PALM BEACH, FL, 33411

SECTION 3. The hereinbefore named persons, firms, or corporations are responsible for the removal or demolition of the building or structure and should such parties fail to demolish the building or structure as required by order of the City Commission, the City of Fort Pierce shall provide for its removal or destruction, the cost of which shall constitute a lien upon said property.

SECTION 4. The hereinbefore named persons, firms, or corporations shall have the right to appeal this resolution to the Circuit Court of St. Lucie County, within thirty (30) days of the effective date of this resolution pursuant to the Florida Rules of Appellate Procedure.

SECTION 5. A certified copy of this resolution shall be mailed by registered or certified mail to the hereinbefore named persons, firms, or corporations, by the City Clerk for the City of Fort Pierce, Florida.

SECTION 6. This resolution shall be effective immediately upon final adoption by the Commission.

IN WITNESS HEREWITH, we hereunto set our hands and affix the Official Seal of the City of Fort Pierce, Florida, this _____ day of _____, 20____.

_____
Linda Hudson, Mayor

ATTEST:

_____
Linda Cox, City Clerk

(SEAL)

Approved as to Form
And Correctness:

_____
Peter J. Sweeney, Esq.
City Attorney

THE SUNRISE CITY
FORT PIERCE
CODE ENFORCEMENT
Florida

Notice of Unsafe Building
Affidavit

Case#: 18-2278

Property Address: 608 S 6TH ST

Tax ID#: 2410-715-0012-000/7

Legal Description: WOODBINE S/D LOT 12 (MAP 24/10F)(OR 2125-2549)

Owner(s): ISABELLE & THOMAS SCHILLO
298 PONCE DELEON ST
WEST PALM BEACH, FL 33411

This AFFIDAVIT certifies that the above property, building, structure or premise is unsafe and the owner(s) of record has been properly served.

9/6/18
Date

Margaret M. Arraiz, City of Fort Pierce, Florida

Attachment: Notice of Unsafe Building Letter

This Affidavit shall remain on file until such time as the condition(s) rendering the building, structure or premise unsafe have been abated.

State of Florida, County of St. Lucie

The foregoing instrument was acknowledged before me this 6th day of September, 2018, by Margaret M. Arraiz who is personally known to me.

Colleen Greer
Signature of Notary

stamp

COLLEEN GREER
State of Florida - Notary Public
Commission # GG 013803
My Comm. Expires 11-13-2020
Bonded Through
National Notary Assn

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT
SAINT LUCIE COUNTY
FILE # 4478376 09/07/2018 02:04:12 PM
OR BOOK 4178 PAGE 542 - 545 Doc Type: NOT
RECORDING: $35.50

C0080373

THE SUNRISE CITY
FORT PIERCE
CODE ENFORCEMENT
Florida

September 6, 2018

Case #: 18-00002278

ISABELLE & THOMAS SCHILLO
298 PONCE DELEON ST
WEST PALM BEACH, FL 33411

RE: Address: 608 S 6TH ST
Tax ID #: 2410-715-0012-000/7

Pursuant to the City of Fort Pierce Code of Ordinances and the International Property Maintenance Code (IPMC) s. 108, the property located at the above referenced location has been found to be unsafe and is in violation of the following:

108.1.1 Unsafe structures.

An unsafe structure is one that is found to be dangerous to the life, health, property or safety of the public or the occupants of the structure by not providing minimum safeguards to protect or warn occupants in the event of fire, or because such structure contains unsafe equipment or is so damaged, decayed, dilapidated, structurally unsafe or of such faulty construction or unstable foundation, that partial or complete collapse is possible.

108.1.2 Unsafe equipment.

Unsafe equipment includes any boiler, heating equipment, elevator, moving stairway, electrical wiring or device, flammable liquid containers or other equipment on the premises or within the structure which is in such disrepair or condition that such equipment is a hazard to life, health, property or safety of the public or occupants of the premises or structure.

108.1.3 Structure unfit for human occupancy.

A structure is unfit for human occupancy whenever the code official finds that such structure is unsafe, unlawful or, because of the degree to which the structure is in disrepair or lacks maintenance, is unsanitary, vermin or rat infested, contains filth and contamination, or lacks ventilation, illumination, sanitary or heating facilities or other essential equipment required by this code, or because the location of the structure constitutes a hazard to the occupants of the structure or to the public.

108.1.5 Dangerous structure or premises.

For the purpose of this code, any structure or premises that have any or all of the conditions or defects described below shall be considered dangerous:

> 3. Any portion of a building, structure or appurtenance that has been damaged by fire, earthquake, wind, flood, deterioration, neglect, abandonment, vandalism or by any other cause to such an extent that it is likely to partially or completely collapse, or to become detached or dislodged.

C0080374

Atención: Documento importante con respecto a sus derechos y responsabilidades. Si usted no comprende ingles consiga traducción inmediatamente.
Atansyon: Dokuman sa impòtan an rapò avek droi è responsablitè ou. Si ou pa kompran anglè relé nou ou bien chèché ou moun póu nou espliké sa tou suit.

6. The building or structure, or any portion thereof, is clearly unsafe for its use and occupancy.

7. The building or structure is neglected, damaged, dilapidated, unsecured or abandoned so as to become an attractive nuisance to children who might play in the building or structure to their danger, becomes a harbor for vagrants, criminals or immoral persons, or enables persons to resort to the building or structure for committing a nuisance or an unlawful act.

304.1.1 Unsafe conditions.

The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the International Building Code or the International Existing Building Code as required for existing buildings:

8. Roofing or roofing components that have defects that admit rain, roof surfaces with inadequate drainage, or any portion of the roof framing that is not in good repair with signs of deterioration, fatigue or without proper anchorage and incapable of supporting all nominal loads and resisting all load effects;

304.7 Roofs and drainage.

The roof and flashing shall be sound, tight and not have defects that admit rain. Roof drainage shall be adequate to prevent dampness or deterioration in the walls or interior portion of the structure. Roof drains, gutters and downspouts shall be maintained in good repair and free from obstructions. Roof water shall not be discharged in a manner that creates a public nuisance.

605.1 Installation.

All electrical equipment, wiring and appliances shall be properly installed and maintained in a safe and approved manner.

The building, structure, or premise is condemned and shall be demolished within 30 days. The building or structure has been posted with a Condemned placard and ordered vacated to prevent further occupancy until work is completed and the final inspection has been approved. The demolition of the building or structure must fully comply with all local ordinances and the currently adopted Florida Building Code (FBC). **If no action has been taken by the legal owner to come into compliance within the time specified, the City may initiate demolition proceedings in accordance with the City of Fort Pierce Charter and all applicable codes, with all costs incurred charged against the owner of record and a lien filed upon such real estate.**

Should you have questions regarding this matter, you may contact my office at (772) 467-3720.

Sincerely,

Margaret M. Arraiz
Code Compliance Manager
City of Fort Pierce

In addition to the party listed above, a copy of this notice has been provided by certified mail to the following:

AJBM LIMITED PARTNERSHIP
3923 LAKE WORTH ROAD
LAKE WORTH, FL 33461

BRUCE S ROSENWATER, ESQ
BRUCE S ROSENWATER & ASSOC PA
1601 FORUM PLACE, STE 1200
WEST PALM BEACH, FL 33401

BTI 2016 LLC
1698 W HIBISCUS BLVD, STE A
MELBOURNE, FL 32901

FCAP AS CUSTODIAN FOR FTCFIMT
FL TAX CERT FUND I MUNI TAX LLC
PO BOX 775311
CHICAGO, IL 60677

BTI 2018 LLC
1698 W HIBISCUS BLVD, STE A
MELBOURNE, FL 32901

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece,

1. BTI 2018 LLC
1698 W Hibiscus Blvd, Ste A
Melbourne, FL 32901

COND-DM 608 S 6th St 18-2278

9590 9402 4052 8079 8959 53

2. Article Number (Transfer from service label)
7018 0040 0000 2906 1668

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Bonnie Kennedy
☐ Agent
☐ Addressee

B. Received by (Printed Name) Bonnie Kennedy
C. Date of Delivery 9/10

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED
SEP 13 2018
CODE ENFORCEMENT
CITY OF FT. PIERCE

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

---

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece,

1. FCAP as Custodian for FTCFIMT
FL Tax Cert Fund I Muni Tax LLC
PO Box 775311
Chicago, IL 60677

COND-DM 608 S 6th St 18-2278

9590 9402 4052 8079 8959 46

2. Article Number (Transfer from service label)
7018 0040 0000 2906 1675

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X
☐ Agent
☐ Addressee

B. Received by (Printed Name)
C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED
SEP 19 2018
CODE ENFORCEMENT
CITY OF FT. PIERCE

CARDISS COLLINS 1980 UNIT
SEP 10 2018
CHICAGO, IL 60699

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

---

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece,

1. Bruce S Rosenwater, Esq
Bruce S Rosenwater & Assoc PA
1601 Forum Place, Ste 1200
West Palm Beach, FL 33401

COND-DM 608 S 6th St 18-2278

9590 9402 4052 8079 8959 22

2. Article Number (Transfer from service label)
7018 0040 0000 2906 1682

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X P. May
☐ Agent
☐ Addressee

B. Received by (Printed Name) P. May
C. Date of Delivery 9/10/18

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

---

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. BTI 2016 LLC
1698 W Hibiscus Blvd, Ste A
Melbourne, FL 32901

COND-DM 608 S 6th St 18-2278

9590 9402 4052 8079 8959 39

2. Article Number (Transfer from service label)
7018 0040 0000 2906 1699

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X Bonnie Kennedy
☐ Agent
☐ Addressee

B. Received by (Printed Name) Bonnie Kennedy
C. Date of Delivery 9/10

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

RECEIVED
SEP 13 2018
CODE ENFORCEMENT
CITY OF FT. PIERCE

3. Service Type
☐ Adult Signature
☐ Adult Signature Restricted Delivery
☒ Certified Mail®
☐ Certified Mail Restricted Delivery
☐ Collect on Delivery
☐ Collect on Delivery Restricted Delivery
☐ Insured Mail
☐ Insured Mail Restricted Delivery (over $500)
☐ Priority Mail Express®
☐ Registered Mail™
☐ Registered Mail Restricted Delivery
☐ Return Receipt for Merchandise
☐ Signature Confirmation™
☐ Signature Confirmation Restricted Delivery

PS Form 3811, July 2015 PSN 7530-02-000-9053 Domestic Return Receipt

THE SUNRISE CITY
FORT PIERCE
CODE ENFORCEMENT & ANIMAL CONTROL
Florida
100 NORTH U.S. 1
P.O. BOX 1480
FORT PIERCE, FL 34954-1480

CERTIFIED MAIL®

7018 0040 0000 2906 1651

U.S. POSTAGE » PITNEY BOWES
ZIP 34950 $ 006.67⁰
02 1W
0001403970 SEP. 07. 2018

ISABELLE & THOMAS SCHILLO
298 PONCE DELEON ST
WEST PALM BEACH, FL 33411

LN 9/10

NIXIE 331 DE 1 0010/04/18
RETURN TO SENDER
UNCLAIMED
UNABLE TO FORWARD
BC: 34954148080 *1687-06788-04-26

3341193277910 NW1 UNC
331 NEE 32 33411-115998 34954>1480

THE SUNRISE CITY
FORT PIERCE
CODE ENFORCEMENT & ANIMAL CONTROL
Florida
100 NORTH U.S. 1
P.O. BOX 1480
FORT PIERCE, FL 34954-1480

CERTIFIED MAIL®

7018 0040 0000 2906 1644

U.S. POSTAGE » PITNEY BOWES
ZIP 34950 $ 006.67⁰
02 1W
0001403970 SEP. 07. 2018

AJBM LIMITED PARTNERSHIP
3923 LAKE WORTH ROAD
LAKE WORTH, FL 33461

NV 9/18

NIXIE 331 DE 1 0009/29/18
RETURN TO SENDER
UNCLAIMED
UNABLE TO FORWARD
BC: 34954148080 *0475-04206-07-42

[illegible] UNC
DO NOT FORWARD 33461-404998 34954>1480

THE SUNRISE CITY
FORT PIERCE
CODE ENFORCEMENT
Florida

AFFIDAVIT OF POSTING - PLACARD

CASE NO: 18-2278

RE: 608 S 6TH ST

BEFORE ME, the undersigned authority, personally appeared Isaac Saucedo, Code Enforcement Officer for the City of Fort Pierce, Florida, who after being duly sworn deposes and says:

That the property listed above was posted with a CONDEMNED placard in accordance with the International Property Maintenance Code Section 108.4.

FURTHER AFFIANT SAYETH NOT.

DATED this 6th day of September, 2018.

Isaac Saucedo, Code Enforcement Officer

STATE OF FLORIDA
COUNTY OF ST. LUCIE

SWORN TO and SUBSCRIBED before me

this 6th day of September, 2018.

NOTARY PUBLIC – STATE OF FLORIDA

MY COMMISSION EXPIRES:

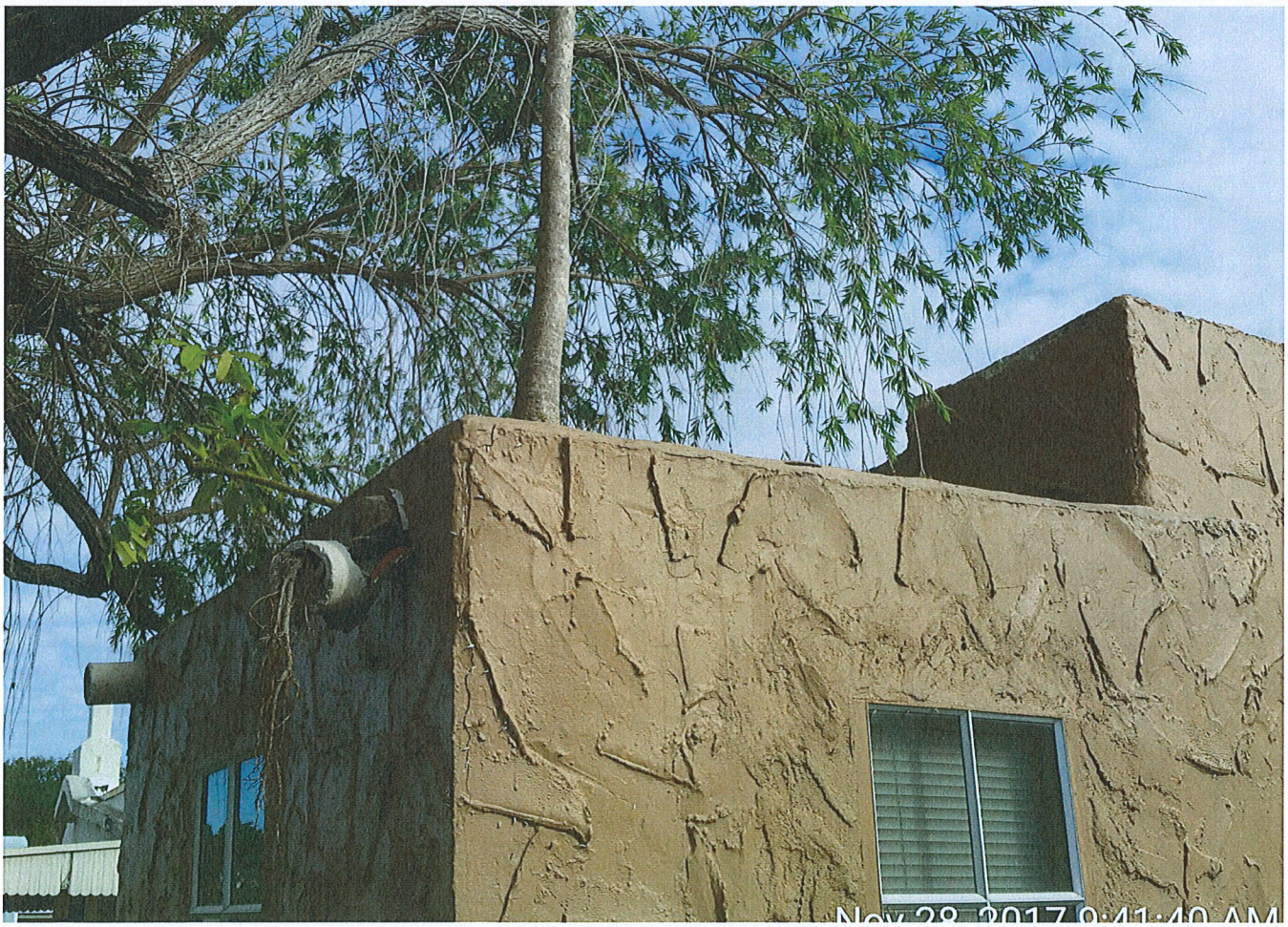
MARGARET M ARRAIZ
Notary Public – State of Florida
Commission # GG 185223
My Comm. Expires Jun 7, 2022
Bonded through National Notary Assn.

C0080376


Sep 6, 2018 2:18:03 PM


CONDEMNED
NOTICE TO VACATE
BY THE CITY OF FORT PIERCE
Sep 6, 2018 2:17:48 PM


Nov 28 2017 9:41:17 AM


Nov 28 2017 9:41:40 AM


Nov 28 2017 9:38:55 AM


Nov 28 2017 9:39:01 AM


Nov 28 2017 9:40:32 AM


Nov 28 2017 9:40:41 AM


Nov 28, 2017 9:40:53 AM


Nov 28, 2017 9:41:03 AM



Nov 28 2017 9:41:50 AM


Apr 4, 2019 9:37:59 AM
Fort Pierce

Apr 4, 2019 9:41:36 AM
Fort Pierce


Apr 4, 2019 9:38:13 AM
Fort Pierce


Apr 4, 2019 9:38:52 AM
Fort Pierce


Apr 4, 2019 9:39:33 AM
Fort Pierce


Apr 4, 2019 9:39:51 AM
Fort Pierce


Apr 4, 2019 9:40:11 AM
Fort Pierce

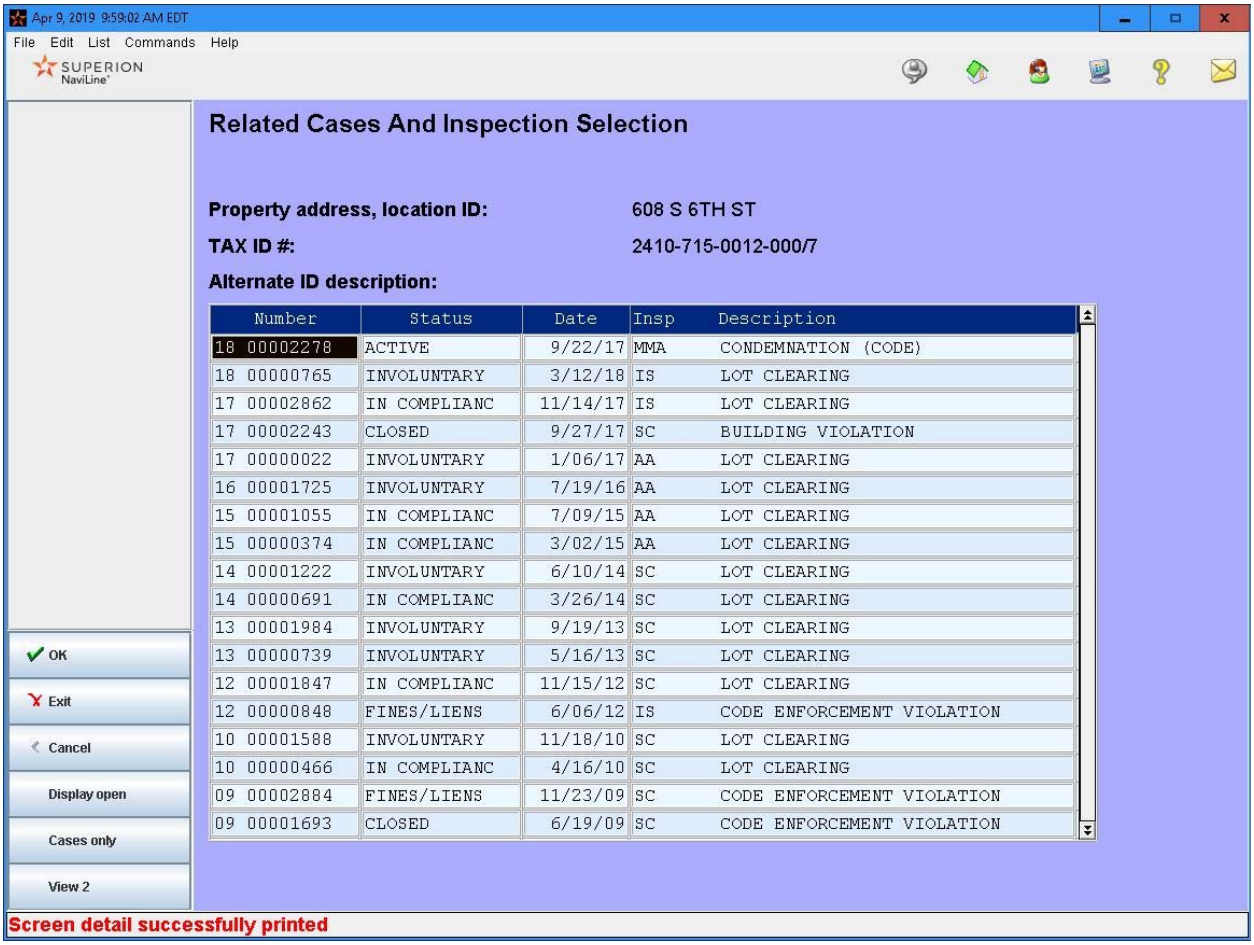

Apr 4, 2019 9:40:22 AM
Fort Pierce


Apr 4, 2019 9:39:39 AM
Fort Pierce


Apr 4, 2019 9:40:46 AM
Fort Pierce


Apr 4, 2019 9:41:13 AM
Fort Pierce


Apr 4, 2019 9:41:03 AM
Fort Pierce


Apr 9, 2019 9:59:02 AM EDT
File Edit List Commands Help
SUPERION NaviLine
Related Cases And Inspection Selection
Property address, location ID: 608 S 6TH ST
TAX ID #: 2410-715-0012-000/7
Alternate ID description:
Number Status Date Insp Description
18 00002278 ACTIVE 9/22/17 MMA CONDEMNATION (CODE)
18 00000765 INVOLUNTARY 3/12/18 IS LOT CLEARING
17 00002862 IN COMPLIANC 11/14/17 IS LOT CLEARING
17 00002243 CLOSED 9/27/17 SC BUILDING VIOLATION
17 00000022 INVOLUNTARY 1/06/17 AA LOT CLEARING
16 00001725 INVOLUNTARY 7/19/16 AA LOT CLEARING
15 00001055 IN COMPLIANC 7/09/15 AA LOT CLEARING
15 00000374 IN COMPLIANC 3/02/15 AA LOT CLEARING
14 00001222 INVOLUNTARY 6/10/14 SC LOT CLEARING
14 00000691 IN COMPLIANC 3/26/14 SC LOT CLEARING
13 00001984 INVOLUNTARY 9/19/13 SC LOT CLEARING
13 00000739 INVOLUNTARY 5/16/13 SC LOT CLEARING
12 00001847 IN COMPLIANC 11/15/12 SC LOT CLEARING
12 00000848 FINES/LIENS 6/06/12 IS CODE ENFORCEMENT VIOLATION
10 00001588 INVOLUNTARY 11/18/10 SC LOT CLEARING
10 00000466 IN COMPLIANC 4/16/10 SC LOT CLEARING
09 00002884 FINES/LIENS 11/23/09 SC CODE ENFORCEMENT VIOLATION
09 00001693 CLOSED 6/19/09 SC CODE ENFORCEMENT VIOLATION
OK
Exit
Cancel
Display open
Cases only
View 2
Screen detail successfully printed

Property Information

Address:	608 S 6TH ST FT PIERCE, FL 34950
Location ID:	8403
TAX ID #:	2410-715-0012-000/7
Alternate ID description:	
Zoning:	NA UNKNOWN
Subdivision:	

Case General Information

Case status:	CL CLOSED
Status date:	4/21/2010
Case type:	CE CODE ENFORCEMENT VIOLATION
Reported date:	6/19/2009
Origination:	CC CITIZEN COMPLAINT
Default inspector:	SC Shaun Coss
Credit balance:	.00

Owner Information

Owner name:	ISABELLE & THOMAS SCHILLO
Address:	298 PONCE DELEON ST
City:	WEST PALM BEACH, FL 33411
Phone:	0
Notice:	Y
Flip:	N

Violations

Type	Status	Location	Quantity	Date Established	Date Resolved
LANDSCAPE MAINTENANCE	CL		1	6/19/2009	4/21/2010
OUTSIDE STORAGE	CL		1	6/19/2009	4/21/2010
PROPERTY MAINTENANCE (4)	CL		1	6/19/2009	4/21/2010

Case Data

Description	Data

Active Inspections

Type	Insp ID	Schedule Date

No scheduled inspections exist

Type	Text	Date
Case narrative		
	June 19, 2009 11:41:24 AM nancye.	6/19/2009
	CC CAME OF LTCL AND ALSO DURNING THE INSPECTION NOTICE THAT	6/19/2009
	THE PROPERTY WAS IN VIOLATION OF O/S LANDSCAPING TREE DOWN	6/19/2009
	AND PM NEEDS TO BE CLEANED AND MAIL BOX FALLING OVER.	6/19/2009
	July 1, 2009 12:39:30 PM nancye.	7/01/2009
	letter returned, schedule for a hearing.	7/01/2009
	July 29, 2009 4:35:11 PM nancye.	7/29/2009
	SAME	7/29/2009
	September 2, 2009 4:21:55 PM nancye.	9/02/2009

Type	Text	Date
(Continued)		
	change to Shaun	9/02/2009
	September 28, 2009 4:42:06 PM shaun.	9/28/2009
	SCHEDULING	9/28/2009
	October 20, 2009 3:12:07 PM shaun.	10/20/2009
	SCH FOR NOV 18TH, SM ROSS	10/20/2009
	November 16, 2009 3:39:55 PM shaun.	11/16/2009
	SPOKE TO ISABELLE SHE SAID THAT THE OVEN IS HER NEIGHBORS.	11/16/2009
	SHE SAID SOMETHING TO THE EFFECT THAT HER NEIGHBORS ARE	11/16/2009
	TRYING TO MESS UP HER PROPERTY AND FORCE HER TO SELL IT. I	11/16/2009
	TOLD HER NONETHELESS IT'S ON HER PROPERTY IT'S HER	11/16/2009
	RESPONSIBILITY. I ASKED ABOUT THE PM ISSUES, AND SHE	11/16/2009
	MENTIONED A SINK HOLE AND THE INSIDE IS FALLING APART IT	11/16/2009
	SHOULD REALLY BE TORN DOWN...WHY FIX THE OUTSIDE...WHEN I	11/16/2009
	MENTIONED THE TALL GRASS AND TREE LIMBS SHE SAID THAT SHE	11/16/2009
	HIRED ONE OF THE GUYS THAT WORKS IN SANITATION TO TAKE CARE	11/16/2009
	OF THE GRASS BUT HE NEVER DID. IT SEEMS THAT SHE DOESN'T	11/16/2009
	WANT TO TAKE RESPONSIBILITY FOR ANY OF THE VIOLATIONS EVEN	11/16/2009
	THOUGH IT'S HER PROPERTY. I TOLD HER THAT IT'S GOING IN	11/16/2009
	FRONT OF THE SM AND I AM GOING TO RECOMMEND 30 DAYS.	11/16/2009
	November 18, 2009 10:54:21 AM shaun.	11/18/2009
	WENT TO THE SM TODAY, CONTINUED FOR 60 DAYS	11/18/2009
	December 21, 2009 3:47:54 PM shaun.	12/21/2009
	OS IS GONE, GRASS IS TALL AND PM IS THE SAME	12/21/2009
	January 20, 2010 3:52:24 PM shaun.	1/20/2010
	WAS SUPPOSE TO GO TO SM TODAY DUE TO MEDICAL EMERGANCY HAS	1/20/2010
	BEEN CONTINUED FOR 30 DAYS	1/20/2010
	February 23, 2010 9:31:40 AM shaun.	2/23/2010
	SAME, GOING FOR RECALL ON THUR, EVERYTHING THE SAME	2/23/2010
	February 25, 2010 10:11:13 AM shaun.	2/25/2010
	WENT TO SPECIAL MAGISTRATE TODAY, BLANKET MOTION 30 DAYS TO	2/25/2010
	COMPLY OR FINE OF 250 PER DAY	2/25/2010
	March 22, 2010 8:48:53 AM shaun.	3/22/2010
	SPOKE TO ISABELLE THIS MORNING, GOING TO GIVE HER 30 DAYS	3/22/2010
	FROM 3-9-2010 SINCE THAT'S WHEN IT WAS MAILED OUT. WHICH	3/22/2010
	WILL GIVE HER UNTIL 4-9-10. SHE SAID THAT SHE HAS AN APT	3/22/2010
	WITH THE INSURANCE CO ON APRIL 16TH AND WAS ADVISED NOT TO	3/22/2010
	DO ANY WORK ON THE HOUSE PRIOR TO THAT. I TOLD HER TO	3/22/2010
	PROVIDE THE NOTICE FROM THE INSURANCE COMPANY TO ME AND I	3/22/2010
	WILL WORK WITH HER ON TIMING.	3/22/2010
	March 24, 2010 10:03:36 AM shaun.	3/24/2010
	RECD FAX FROM ISABELLE YESTERDAY STATING THAT THEY HAD AN	3/24/2010
	APT WITH A NEUTRAL EVALUATOR. I CALLED HER BACK TODAY AND	3/24/2010
	TOLD HER THAT THIS IS NOT ENOUGH. I NEED A LETTER FROM THE	3/24/2010
	INSURANCE AGENCY OR FROM THE ATY THAT THEY DO NOT WANT HER	3/24/2010
	TO DO ANY WORK ON THE HOUSE.	3/24/2010
	April 20, 2010 2:33:02 PM shaun.	4/20/2010
	TIME IS UP, NOTHING HAS BEEN DONE TO THE PROPERTY AND SHE	4/20/2010
	HAS PROVIDED ME WITH THE INFORMATION THAT I HAVE REQUESTED.	4/20/2010
	THE CASE FOR THE VACANT BUILDING IS GOING BEFORE THE SM	4/20/2010
	TOMORROW. IF SHE DOES NOT SHOW UP I AM GOING TO GO AHEAD	4/20/2010
	AND START FINES ON THIS CASE. IF SHE DOES SHOW UP I WILL	4/20/2010
	SEE IF SHE WILL WAIVER HER RIGHT OF NOTICE AND READ IT INTO	4/20/2010

Type	Text	Date
(Continued)		
	THE RECORD TO BRING THE TIMEFRAME TO COMPLY TOGETHER AND	4/20/2010
	GIVER HER ONE MORE OPPORTUNITY TO COMPLY BEFORE STARTING	4/20/2010
	FINES.	4/20/2010
	April 21, 2010 10:48:40 AM shaun.	4/21/2010
	THIS CASE IS CLOSED, AS DETERMINED BY SM ROSS, THESE	4/21/2010
	VIOLATIONS ARE BEING ROLLED INTO CASE 9-2884.	4/21/2010
Violation comments		
LANDSCAPE MAINTENANCE - CL		
	TREE DOWN NEEDS TO REMOVED ALSO TRIMMING EDGING ETC.	6/19/2009
OUTSIDE STORAGE - CLOSED		
	FISH TANK, TABLE	6/19/2009
PROPERTY MAINTENANCE (4) -		
	NEED TO CLEAN AND OR PAINT.	6/19/2009
Inspection comments		
001 - Initial Inspection		
002 - Follow-up Inspection		
003 - Follow-up Inspection		
004 - Follow-up Inspection		
005 - Follow-up Inspection		
006 - Follow-up Inspection		
007 - Follow-up Inspection		
008 - Follow-up Inspection		
009 - Follow-up Inspection		
010 - Follow-up Inspection		
011 - Follow-up Inspection		
Board meeting comments		
001 - SPECIAL MAGISTRATE ME		
	WENT TO SM TODAY CONT. FOR 60 DAYS	11/18/2009
Other action comments		
Land Management information		
Legal description		
	WOODBINE S/D LOT 12 (MAP 24/10F)(OR 2125-2549)	
Lien information		

Property Information

Address:	608 S 6TH ST FT PIERCE, FL 34950
Location ID:	8403
TAX ID #:	2410-715-0012-000/7
Alternate ID description:	
Zoning:	NA UNKNOWN
Subdivision:	

Case General Information

Case status:	FL FINES/LIENS RUNNING
Status date:	10/16/2012
Case type:	CE CODE ENFORCEMENT VIOLATION
Reported date:	6/06/2012
Origination:	CC CITIZEN COMPLAINT
Default inspector:	IS Isaac Saucedo
Credit balance:	.00

Owner Information

Owner name:	SCHILLO, ISABELLE & THOMAS
Address:	298 PONCE DELEON ST
City:	WEST PALM BEACH, FL 33411
Phone:	0
Notice:	Y
Flip:	Y

Violations

Type	Status	Location	Quantity	Date Established	Date Resolved
LANDSCAPE MAINTENANCE	AC		1	6/06/2012	
PROPERTY MAINTENANCE (1)	AC		1	6/06/2012	

Case Data

Description	Data

Active Inspections

Type	Insp ID	Schedule Date
Follow-up Inspection	IS	7/29/2019

Type	Text	Date
Case narrative		
	June 6, 2012 4:23:34 PM shaun.	6/06/2012
	WAS AT THE PROPERTY NEXT DOOR AND HE WAS COMPLAINING ABOUT	6/06/2012
	THE VERY LARGE FALLEN BRANCH THAT HAS BEEN IN THE YARD FOR	6/06/2012
	SOME TIME NOW. I AM ALSO CITING FOR ROOF DAMAGE THAT THE	6/06/2012
	BRANCH CAUSED ON THE DETACHED GARAGE IN THE REAR.	6/06/2012
	July 11, 2012 11:36:22 AM shaun.	7/11/2012
	LOOKS LIKE THE TREE HAS BEEN PARTLY CUT, I WILL MONITOR	7/11/2012
	August 7, 2012 10:08:41 AM shaun.	8/07/2012
	NOTHING MORE HAS BEEN DONE, WILL SCHEDULE WITH THE NEXT	8/07/2012
	BATCH	8/07/2012

Type	Text	Date
(Continued)		
	August 13, 2012 1:11:38 PM shaun.	8/13/2012
	FILE UP FRONT FOR SCHEDULING.	8/13/2012
	September 11, 2012 3:05:04 PM shaun.	9/11/2012
	ROOF HAS NOT BEEN FIXED. IT LOOKS LIKE ONE OF THE DEAD	9/11/2012
	BRANCHES WAS EITHER CUT OFF OR FELL OFF AND IS LAYING IN THE	9/11/2012
	YARD. THERE IS STILL A DEAD BRANCH ATTACHED TO THE TREE,	9/11/2012
	GOING TO THE SM TOMORROW.	9/11/2012
	September 12, 2012 10:54:57 AM shaun.	9/12/2012
	WENT TO THE CEB THIS MORNING, GIVEN 30 DAYS TO COMPLY OR A	9/12/2012
	FINE OF $500 PER DAY.	9/12/2012
	October 16, 2012 9:05:21 AM shaun.	10/16/2012
	AT THE HEARING ISABELLE SAID THAT SHE HAD A CONTRACTOR LOOK	10/16/2012
	AT THE ROOF LAST YEAR AND THAT IT WAS IN GOOD STRUCTURAL	10/16/2012
	REPAIR. I ADVISED THAT EVEN IF IT IS NOT STRUCTURALLY	10/16/2012
	DAMAGED IT NEEDS TO BE FIXED AS IT APPEARS TO BE DAMAGED. I	10/16/2012
	ADVISED THAT SHE NEEDED TO CHECK TO SEE IF SHE WOULD NEED A	10/16/2012
	PERMIT OR NOT. I ALSO ADVISED THAT THE BRANCH NEEDED TO BE	10/16/2012
	REMOVED, SHE SAID SHE REMOVED ONE ALREADY AND MAYBE ANOTHER	10/16/2012
	ONE FELL. AFTER THE HEARING SHE SENT ME INVOICES FROM THE	10/16/2012
	LAWN PERSON STATING THAT THE BRANCH HAS BEEN CUT. A WEEK OR	10/16/2012
	SO AFTER THE HEARING SHE CALLED AND SAID THAT THE LAWN	10/16/2012
	PERSON WOULD REMOVE THE BRANCH AND FIX THE ROOF B/C IT CAN	10/16/2012
	BE FIXED WITH SOME NEW WOOD. I WENT BY YESTERDAY, NOTHING	10/16/2012
	HAS BEEN DONE SINCE THE HEARING, THE ROOF IS STILL DAMAGED,	10/16/2012
	THE BRANCH IS STILL LAYING ON THE GROUND AND EVEN THOUGH IT	10/16/2012
	WASN'T PART OF THE ORDER, THE GRASS IS OVERGROWN AS WELL. I	10/16/2012
	AM GOING TO GO AHEAD AND START THE FINES.	10/16/2012
	November 20, 2012 4:16:55 PM shaun.	11/20/2012
	WENT BY LAST MONDAY, THE BRANCH WAS STILL LAYING ON THE	11/20/2012
	GROUND AND THE ROOF WAS STILL IN DISREPAIR. ISABELLE CALLED	11/20/2012
	LAST TUESDAY, SAID THAT SHE COULDN'T MAKE IT AND WANTED AN	11/20/2012
	EXTENSION.	11/20/2012
	December 18, 2012 11:47:52 AM shaun.	12/18/2012
	SCHEDULED FOR MASSEY 1-9-13	12/18/2012
	January 7, 2013 3:43:51 PM shaun.	1/07/2013
	GOING TO MASSEY ON WEDNESDAY. NOTHING HAS BEEN DONE AS OF	1/07/2013
	TODAY.	1/07/2013
	January 9, 2013 11:49:46 AM shaun.	1/09/2013
	WENT IN FRONT OF THE CEB TODAY, SCHILLO SPOKE VIA	1/09/2013
	TELEPHONE. CEB MADE MOTION TO CONTINUE TO THE NEXT HEARING	1/09/2013
	SO THAT SHE OR SOMEONE ELSE CAN ATTEND.	1/09/2013
	March 11, 2013 1:28:16 PM peggy.	3/11/2013
	The office recieved a with a handwritten statement saying	3/11/2013
	"My attorney is Leticia Dieppa. Upon advise of my attorney	3/11/2013
	rescheduling is necessary." I called Mrs. Schillo and	3/11/2013
	advised her that her attorney would need to file a notice to	3/11/2013
	appear and that her attorney must also request an extension	3/11/2013
	in writing as this hearing had been rescheduled to March at	3/11/2013
	Mrs. Schillo's request. Mrs. Schillo wanted to debate the	3/11/2013
	facts of the case over the phone and I declined stating that	3/11/2013
	per the City, this property is still not in compliance and	3/11/2013
	that fines are continuing to run.	3/11/2013

Type	Text	Date
(Continued)		
	March 13, 2013 11:05:08 AM shaun.	3/13/2013
	I SPOKE TO MRS. SCHILLO ON MONDAY AGAIN ADVISING HER THAT	3/13/2013
	THIS CASE WILL NOT BE CONTINUED UNLESS WE RECEIVE A WRITTEN	3/13/2013
	STATEMENT FROM THE ATTORNEY THAT THEY ARE REPRESENTING HER	3/13/2013
	AND THE ATTORNEY MAKES A REQUEST FOR A CONTINUANCE.	3/13/2013
	YESTERDAY I E-MAILED MRS. SCHILLO THE PICTURE SHOWING THE	3/13/2013
	ROOF STILL DAMAGED AND THE LIMBS ON THE GROUND STILL. I	3/13/2013
	E-MAILED HER THE RULES AND PROCEDURES OF THE CEB AS IT	3/13/2013
	RELATES TO AN ATTORNEY REPRESENTING HER. LATER IN THE DAY I	3/13/2013
	RECD A RESPONSE FROM HER VIA EMAIL THAT THEY WOULD BE HERE	3/13/2013
	TODAY. THIS MORNING A LITTLE AFTER 9, MRS. SCHILLO WASN'T	3/13/2013
	HERE, NEITHER WAS HER REPRESENTATIVE. I CALLED MRS. SCHILLO	3/13/2013
	AND ASKED IF SHE WAS ON THE WAY TO THE HEARING, SHE PLACED	3/13/2013
	ME ON HOLD. SHE CAME BACK ON AND ASKED IF HER ATTORNEY WAS	3/13/2013
	HERE, I ADVISED THAT THEY WERE NOT, SHE ASKED IF WPTV WAS	3/13/2013
	HERE, I ADVISED THAT THEY WERE NOT. I AGAIN ASKED IF SHE	3/13/2013
	WAS ON HER WAY TO THE HEARING THIS MORNING, SHE SAID THAT	3/13/2013
	SHE WAS NOT. I RELAYED THIS INFO TO PEGGY AND PEGGY ADVISED	3/13/2013
	THE BOARD THAT SHE WOULD NOT BE IN ATTENDANCE. THE BOARD	3/13/2013
	ORDERED WITHOUT HER PRESENT THAT THE FINE BE REDUCED TO	3/13/2013
	$5000 AND STOPPED FOR A PERIOD OF 30 DAYS FOR MRS. SCHILLO	3/13/2013
	TO COME INTO COMPLIANCE. IF THE CASE IS NOT BROUGHT INTO	3/13/2013
	COMPLIANCE AND THE REDUCED FINE IS NOT PAID WITHIN 30 DAYS	3/13/2013
	THEN THE FINE WILL REVERT BACK TO THE ORIGINAL AMOUNT 74,510	3/13/2013
	AS OF TODAY AND WILL CONTINUE TO ACCRUE.	3/13/2013
	April 15, 2013 3:24:09 PM shaun.	4/15/2013
	EVERYTHING IS THE SAME, PULLED THE FILE TO GIVE TO COLLEEN	4/15/2013
	AND NOTICED THAT THE ORDER WASN'T DATED THE DAY OF THE	4/15/2013
	HEARING, WILL DO ANOTHER INSPECTION NEXT WEEK.	4/15/2013
	April 23, 2013 2:36:05 PM shaun.	4/23/2013
	ROOF HAS NOT BEEN REPAIRED, TREE BRANCH IS STILL ON THE	4/23/2013
	GROUND. CHECKED WITH PEGGY, SHE SAID TO HAVE COLLEEN GO	4/23/2013
	AHEAD AND DO AN ORDER ASSESSING FINE AND IMPOSING LIEN IN	4/23/2013
	THE ORIGINAL AMOUNT AND STILL ACCRUING AT $500 PER DAY.	4/23/2013
	May 28, 2013 4:45:40 PM shaun.	5/28/2013
	SAME, ROOF HAS NOT BEEN REPAIRED, TREE BRANCH STILL LAYING	5/28/2013
	IN THE BACK YARD.	5/28/2013
	December 4, 2013 11:20:14 AM shaun.	12/04/2013
	APPEARS TO BE THE SAME. HOUSE NEXT DOOR TO THE SOUTH IS NOW	12/04/2013
	VACANT SO I CAN NO LONGER ACCESS THAT PROPERTY TO OBSERVE	12/04/2013
	THE VIOLATION ON THIS PROPERTY, FINES WILL CONTINUE TO	12/04/2013
	ACCRUE UNTIL THE PROPERTY IS BROUGHT INTO COMPLIANCE AND WE	12/04/2013
	ARE CONTACTED BY MRS. SCHILLO.	12/04/2013
	June 10, 2014 9:15:00 AM shaun.	6/10/2014
	SAME	6/10/2014
	October 15, 2014 2:23:29 PM shaun.	10/15/2014
	SAME, FINES RUNNING, TRANSFERRING THIS CASE TO ANDY SINCE IT	10/15/2014
	IS IN HIS AREA NOW.	10/15/2014
	December 17, 2014 4:27:59 PM andy.	12/17/2014
	same fines running	12/17/2014
	April 23, 2015 10:55:08 AM andy.	4/23/2015
	same	4/23/2015

Type	Text	Date
(Continued)		
	August 20, 2015 4:24:16 PM andy.	8/20/2015
	same fines running	8/20/2015
	December 15, 2015 11:33:32 AM andy.	12/15/2015
	same fines running	12/15/2015
	April 13, 2016 11:45:21 AM andy.	4/13/2016
	same fine running	4/13/2016
	August 10, 2016 4:33:29 PM andy.	8/10/2016
	same fines running	8/10/2016
	December 6, 2016 10:33:10 AM andy.	12/06/2016
	same fines running	12/06/2016
	April 5, 2017 1:56:22 PM andy.	4/05/2017
	same not cut yet	4/05/2017
	May 1, 2017 5:41:21 PM andy.	5/01/2017
	same fines running	5/01/2017
	May 1, 2017 5:42:10 PM andy.	5/01/2017
	switching this case to Isaac Saucedo due to it is in his	5/01/2017
	area now.	5/01/2017
	July 3, 2017 3:59:24 PM ISAUCEDO.	7/03/2017
	SAME, WILL SET NEW INSPECTION	7/03/2017
	October 11, 2017 4:52:53 PM isaucedo.	10/11/2017
	same	10/11/2017
	February 1, 2018 10:15:26 AM isaucedo.	2/01/2018
	HAS BEEN COMPLIED	2/01/2018
	February 1, 2018 10:15:50 AM isaucedo.	2/01/2018
	DISREGARD PREVIOUS NOTES, PROPERTY CONTINUES TO LOOK THE	2/01/2018
	SAME	2/01/2018
	December 19, 2018 11:10:15 AM isaucedo.	12/19/2018
	same	12/19/2018

Violation comments
LANDSCAPE MAINTENANCE - AC
PROPERTY MAINTENANCE (1) -

Inspection comments
001 - Initial Inspection
002 - Follow-up Inspection
003 - Follow-up Inspection
004 - Follow-up Inspection
005 - Follow-up Inspection
006 - Follow-up Inspection
007 - Follow-up Inspection
008 - Follow-up Inspection
009 - Follow-up Inspection
010 - Follow-up Inspection
011 - Follow-up Inspection
012 - Follow-up Inspection
013 - Follow-up Inspection
014 - Follow-up Inspection
015 - Follow-up Inspection
016 - Follow-up Inspection
017 - Follow-up Inspection
018 - Follow-up Inspection
019 - Follow-up Inspection
020 - Follow-up Inspection

Type	Text	Date
(Continued)		
021 - Follow-up Inspection		
022 - Follow-up Inspection		
023 - Follow-up Inspection		
024 - Follow-up Inspection		
025 - Follow-up Inspection		
026 - Follow-up Inspection		
027 - Follow-up Inspection		
028 - Follow-up Inspection		
Board meeting comments		
001 - CODE ENFORCEMENT BOAR	WENT TO THE CEB THIS MORNING, GIVEN 30 DAYS TO COMPLY OR A	9/12/2012
	FINE OF $500 PER DAY.	9/12/2012
Other action comments		
001 - FINES RUNNING		
Land Management information		
Legal description		
	WOODBINE S/D LOT 12 (MAP 24/10F)(OR 2125-2549)	
Lien information		
003833535 -		

Property Information

Address: 608 S 6TH ST
FT PIERCE, FL 34950
Location ID: 8403
TAX ID #: 2410-715-0012-000/7
Alternate ID description:
Zoning: NA UNKNOWN
Subdivision:

Case General Information

Case status: FL FINES/LIENS RUNNING
Status date: 6/06/2012
Case type: CE CODE ENFORCEMENT VIOLATION
Reported date: 11/23/2009
Origination: CC CITIZEN COMPLAINT
Default inspector: SC Shaun Coss
Credit balance: .00

Owner Information

Owner name: SCHILLO, ISABELLE & THOMAS
Address: 298 PONCE DELEON ST
City: WEST PALM BEACH, FL 33411
Phone: 0
Notice: Y
Flip: Y

Violations

Type	Status	Location	Quantity	Date Established	Date Resolved
VACANT BUILDINGS	CM		1	11/23/2009	6/06/2012
PROPERTY MAINTENANCE (4)	CM		1	4/21/2010	6/06/2012

Case Data

Description	Data

Active Inspections

Type	Insp ID	Schedule Date

No scheduled inspections exist

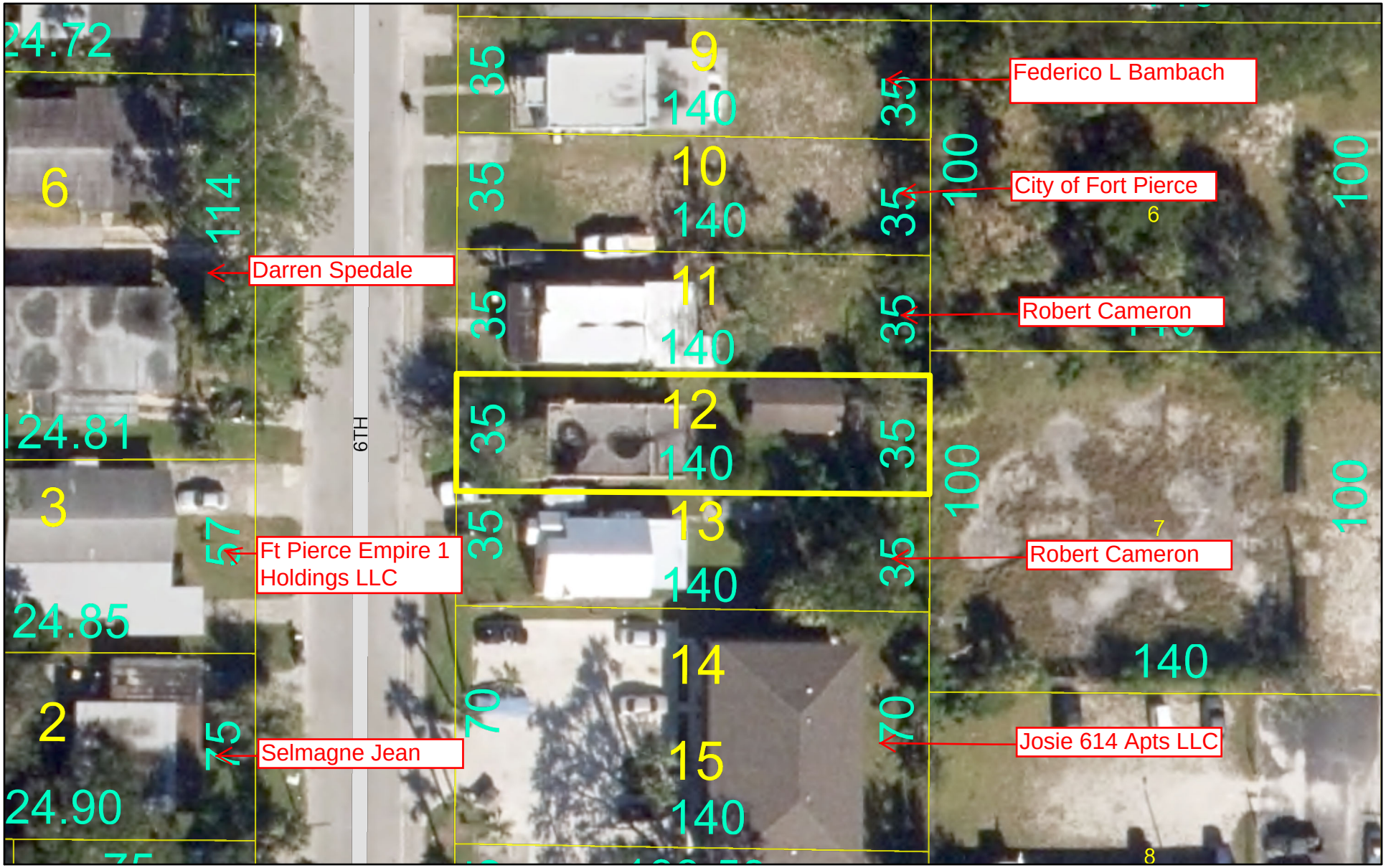
Type	Text	Date
Case narrative	November 23, 2009 3:27:41 PM shaun.	11/23/2009
	HAVE ANOTHER ACTIVE CASE THAT WENT TO SM LAST WEEK I ADVISED	11/23/2009
	THAT SHE SHOULD BOARD UP THE WINDOWS. THE OWNER CALLED	11/23/2009
	TODAY ASKING FOR THAT IN WRITING. I ADVISED HER THAT I CAN	11/23/2009
	DO THAT, BUT THAT A NEW CASE WOULD BE GENERATED.	11/23/2009
	January 12, 2010 10:12:08 AM shaun.	1/12/2010
	SAME, WILL SCHEDULE FOR MARCH IF NOTHING IS DONE	1/12/2010
	February 16, 2010 3:06:31 PM shaun.	2/16/2010
	SAME, WILL SUBMIT TO SCHEDULE WITH THE NEXT BATCH.	2/16/2010
	March 16, 2010 11:47:02 AM shaun.	3/16/2010

Type	Text	Date
(Continued)		
	SAME, NO DATE GIVEN YET FOR THE HEARING	3/16/2010
	April 20, 2010 2:35:49 PM shaun.	4/20/2010
	SAME GOING TO THE SM TOMORROW GOING TO REQUEST 15 DAYS TO	4/20/2010
	COMPLY OR FINE OF 250 PER DAY	4/20/2010
	April 21, 2010 10:42:16 AM shaun.	4/21/2010
	WENT TO THE SM TODAY AND WAS GIVEN A 60 DAY CONTINUANCE.	4/21/2010
	TOLD TO SUBMIT THE PAPERWORK FROM THE INSURANCE COMPANY	4/21/2010
	STATING NOT TO DO WORK AS SOON AS SHE RECEIVES IT. WE ARE	4/21/2010
	CLOSING CASE 9-1693 AND ROLLING IT INTO THIS CASE SO THIS	4/21/2010
	CASE IS NOW FOR 5-368(4) AND 5-369.	4/21/2010
	May 25, 2010 9:34:37 AM shaun.	5/25/2010
	SAME, NO PERMITS HAVE BEEN SUBMITTED TO US YET FROM THE INS.	5/25/2010
	CO OR ATY.	5/25/2010
	June 16, 2010 10:06:52 AM shaun.	6/16/2010
	WENT TO THE SM TODAY, NO SHOW GIVEN 45 DAYS OR A FINE OF 200	6/16/2010
	PER DAY	6/16/2010
	July 20, 2010 2:51:40 PM shaun.	7/20/2010
	LOOKS THE SAME, SHE REQUESTED AND EXTENSION GOING BACK TO SM	7/20/2010
	ON 8-4-10	7/20/2010
	August 4, 2010 1:02:15 PM shaun.	8/04/2010
	WENT TO THE SM TODAY FOR AN EXTENSION, MRS. SCHILLO WAS NOT	8/04/2010
	PRESENT SM BLANDINO DENIED THE REQUEST FOR EXTENSION AND	8/04/2010
	ORDERED THAT THE FINES MAY START AS OF TODAY.	8/04/2010
	August 10, 2010 4:35:24 PM shaun.	8/10/2010
	HELD OFF ON STARTING FINES UNTIL YESTERDAY TO ALLOW FOR THE	8/10/2010
	45 DAYS PLUS 5 DAYS FOR MAILING. I RECEIVED A MESSAGE FROM	8/10/2010
	ISABELLE YESTERDAY WHICH I RETURNED THE CALL AND LEFT A	8/10/2010
	MESSAGE. SHE HAS NOT CALLED ME BACK YET, SHE HAS NOT	8/10/2010
	PROVIDED US WITH DOCUMENTATION THAT THE INSURANCE COMPANY OR	8/10/2010
	ATTORNEY DOES NOT WORK TO BE DONE TO THE PROPERTY. I AM	8/10/2010
	STARTING FINES AS OF YESTERDAY.	8/10/2010
	September 13, 2010 4:46:05 PM shaun.	9/13/2010
	SAME TALKED TO SCHILLO SHORTLY AFTER SHE RECD THE ORDER	9/13/2010
	DENYING HER REQUEST AND SHE WANTED MORE TIME, ANOTHER	9/13/2010
	HEARING, ETC.. I TOLD HER THAT THERE WAS NOTHING I COULD DO,	9/13/2010
	THAT THE FINES HAD STARTED AND THAT THEY WILL CONTINUE TO	9/13/2010
	RUN UNTIL THE PROPERTY IS IN COMPLIANCE. SHE THEN ASKED IF	9/13/2010
	HER ATY EVER CONTACTED ME, I TOLD HER THAT I HAVE NEVER	9/13/2010
	SPOKE TO AN ATY OR INSURANCE PERSON. SHE SAID SHE WOULD	9/13/2010
	HAVE HIM CALL ME. I TOLD HER TO HAVE HIM CALL PEGGY NOT	9/13/2010
	ME. A COUPLE DAYS LATER PEGGY TOLD ME THAT SHE SPOKE TO	9/13/2010
	MRS. SCHILLO, NOT HER ATY AND SHE TOLD HER THE SAME THAT ALL	9/13/2010
	OF HER OPTIONS HAVE BEEN EXHAUSTED AND THAT THE FINES ARE	9/13/2010
	RUNNING.	9/13/2010
	October 20, 2010 10:49:19 AM shaun.	10/20/2010
	NOTHING MORE HAS BEEN DONE, FINES CONTINUE TO ACCRUE	10/20/2010
	January 25, 2011 11:26:33 AM shaun.	1/25/2011
	SPOKE TO ISABELLE ABOUT TWO WEEKS AGO, SHE WAS MAKING	1/25/2011
	ALLEGATIONS AGAIN ABOUT HOW CROOKED THE SANITATION WORKERS	1/25/2011
	ARE AND THE BUILDING DEPARTMENT AND THAT THE CITY IS WORKING	1/25/2011
	AGAINST HER...I TOLD HER TO REPORT TO THE POLICE DEPT, THE	1/25/2011
	CITY MANAGER OR THE COMMISSIONERS IF SHE BELIEVES THERE IS	1/25/2011

Type	Text	Date
(Continued)		
	IMPROPRIETY, THE ONLY ISSUE WE HAVE REMAINING IS THAT THE	1/25/2011
	HOUSE NEEDS TO BE PAINTED AND SECURED. SHE DOESN'T	1/25/2011
	UNDERSTAND WHY WE WANT HER TO DO WORK ON A HOUSE THAT IS	1/25/2011
	SITTING ON A SINKHOLE. I TOLD HER THAT WE HAVE GIVEN HER	1/25/2011
	SEVERAL OPPORTUNITIES TO PROVIDE US DOCUMENTATION FROM AN	1/25/2011
	ATY OR THE INS. COMPANY STATING NOT TO DO WORK TO THE HOME	1/25/2011
	AND WE WOULD WORK WITH HER, SHE NEVER DID, SO NOW THE FINES	1/25/2011
	ARE RUNNING AND THEY WILL CONTINUE TO RUN UNTIL IT'S BROUGHT	1/25/2011
	INTO COMPLIANCE. I TOLD HER TO MAKE SURE SHE CALLS AFTER	1/25/2011
	SHE PAINTS AND SECURES SO WE CAN COMPLY OUR CASE.	1/25/2011
	July 26, 2011 2:28:27 PM shaun.	7/26/2011
	SAME, STILL NOT SECURED, FINES WILL CONTINUE TO RUN	7/26/2011
	February 1, 2012 8:37:17 AM shaun.	2/01/2012
	PROPERTY IS FOR SALE NOW, BUT STILL IN VIOLATION. FINES	2/01/2012
	WILL CONTINUE TO RUN	2/01/2012
	March 6, 2012 7:16:56 AM shaun.	3/06/2012
	SAME, PROPERTY STILL FOR SALE.	3/06/2012
	June 6, 2012 11:07:13 AM shaun.	6/06/2012
	I WAS AT THE PROPERTY NEXT DOOR WHICH I HAVE A CASE ON AND	6/06/2012
	HE COMPLAINED ABOUT THE FALLEN TREE IN THE BACK YARD. I	6/06/2012
	HEARD THE A/C UNIT RUNNING IN THE BACK ROOM AND WHAT SOUNDED	6/06/2012
	LIKE A TV I ASKED HIM IF SOMEBODY WAS LIVING THERE AND HE	6/06/2012
	SAID YES. I AM GOING TO COMPLY THIS CASE SINCE THE ONLY	6/06/2012
	VIOLATION LEFT WAS TO SECURE THE VACANT STRUCTURE, I'M NOT	6/06/2012
	SURE WHY ISABELLE NEVER CALLED TO LET ME KNOW THAT SOMEBODY	6/06/2012
	WAS LIVING THERE SO I COULD STOP THE FINES. I AM GOING TO	6/06/2012
	START A NEW CASE FOR THE FALLEN TREE BRANCH AND ROOF DAMAGE	6/06/2012
	FROM THE FALLEN TREE BRANCH.	6/06/2012
Violation comments		
VACANT BUILDINGS - COMPLIE		
PROPERTY MAINTENANCE (4) -		
Inspection comments		
001 - Initial Inspection		
002 - Follow-up Inspection		
003 - Follow-up Inspection		
004 - Follow-up Inspection		
005 - Follow-up Inspection		
006 - Follow-up Inspection		
007 - Follow-up Inspection		
008 - Follow-up Inspection		
009 - Follow-up Inspection		
010 - Follow-up Inspection		
011 - Follow-up Inspection		
012 - Follow-up Inspection		
013 - Follow-up Inspection		
014 - Follow-up Inspection		
015 - Follow-up Inspection		
016 - Follow-up Inspection		
Board meeting comments		
001 - SPECIAL MAGISTRATE ME		
	CONTINUED 60 DAYS	4/21/2010
Other action comments		

Type	Text	Date
	(Continued)	
Land Management information		
Legal description		
	WOODBINE S/D LOT 12 (MAP 24/10F)(OR 2125-2549)	
Lien information		
000092884 - 3527364		

St. Lucie County Property Appraiser



April 9, 2019

1:564

0 20 40 80 ft

0 5 10 20 m

GPI Geospatial, Inc., Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri

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

Property Identification

Site Address: 608 S 6th ST	Parcel ID: 2410-715-0012-000-7	Account #: 23819	Sec/Town/Range: 10/35S/40E
Map ID: 24/10S	Zoning: R4	Use Type: 0100	Jurisdiction: Fort Pierce

Ownership

Isabelle Schillo
Thomas Schillo

298 Ponce Deleon St
Royal Palm Beach, FL 33411

Legal Description

WOODBINE S/D LOT 12 (MAP 24/10F)(OR 2125-2549)

Current Values

Just/Market:	$37,800	Assessed:	$28,072
Exemptions:	$0	Taxable:	$28,072

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2018	$37,800	$28,072	$0	$28,072
2017	$30,400	$25,520	$0	$25,520
2016	$23,200	$23,200	$0	$23,200

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
11-12-2004	2125 / 2549	XX00	WD	Close Justin J	$67,000
03-16-2004	1969 / 0964	XX00	WD	Mora Alfredo	$50,000
11-04-1996	1044 / 1015	XX00	WD	Gorie William J	$15,000

Primary Building Information

Finished Area of this building: 1,003 SF
Gross Sketched Area: 1,420 SF

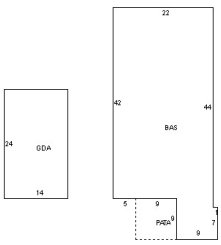
Exterior Data

View:	Roof Cover: Dim Shingle	Roof Structure: Flat/Shed	Building Type: HD-
Year Built: 1925	Frame:	Grade: D-	Effective Year: 1970
Primary Wall: Frm Stucco	Story Height: 1 Story	No. Units: 1	Secondary Wall:

Interior Data

Bedrooms: 2	A/C %: 0%	Electric: AVERAGE	Primary Int Wall:
Full Baths: 1	Heated %: 0%	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Sprinkled %: 0%	Heat Fuel:	Primary Floors: Sing Pine





Total Areas

Finished/Under Air (SF):	1,003
Gross Sketched Area (SF):	1,420
Land Size (acres):	0.11
Land Size (SF):	4,900
Total Building Count:	1

Special Features and Yard Items

Type	Qty	Units	Year Blt

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

Property Maintenance Inspection Report

Property Address: 608 S 6th St.
Parcel ID #: 2410-715-0012-000-7

House Color: Brown
# of Units:
Historic?: No

Type of Structure: Single Family Residence
Building Occupied: No
Time to Comply: 30 Days

Action to be take - Select all that apply

- ○ Unsafe Building - Rehab
- ◉ Unsafe Building - Demo
- ○ Nuisance Abatement - Board up

Inspector: Richard Jefferson- GFA
Date: 9-22-17
Property Posted?: No

Comments: FPUA has pulled the utilities

- ○ Active Code Cases
- ○ NONE
- ○ Active Building Permit
- ○ NONE
- ○ Lis Pendens check
- ○ Rehab letter sent
- ○ Demo letter sent
- ○ Nuisance letter sent
- ○ Title search done
- ○ Affidavit recorded

Contact Information [Add new contact]

Contact Info:

Comments:

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[X] Unsafe structures

[X] 108.1.1 - Unsafe structure

- [ ] Lacks adequate protection from fire
- [ ] Contains unsafe equipment
- [X] All or part of building is likely to collapse

[X] 108.1.2 - Unsafe equipment

- [ ] Unsafe boiler / heating equipment
- [X] Unsafe electrical wiring / device
- [ ] Unsafe elevator / moving stairway
- [ ] Flammable liquid containers within structure
- [ ] Other unsafe equipment

[X] 108.1.3 - Structure unfit for human occupancy

- [X] Unsafe or unlawful
- [ ] Unsanitary / contains filth / contamination
- [ ] vermin or rat infested
- [ ] lacks illumination
- [ ] Location of structure constitutes a hazard
- [ ] lacks ventilation
- [ ] lacks heat
- [ ] lacks maintenance
- [ ] lacks sanitary facilities

[ ] 108.1.4 - Unlawful structure

- [ ] Occupied by more persons than permitted
- [ ] Erected, altered or occupied contrary to law

[X] 108.1.5 - Dangerous structure or premises

- [ ] (1) Any door, aisle, passageway, stairway, or exit that does not comply to requirements for exiting the building
- [ ] (2) The walking surface of means of egress is so warped, worn, loose, torn or otherwise unsafe to provide means of egress.
- [X] (3) Any portion of a structure damaged by fire, wind, flood, earthquake, deterioration, neglect, abandonment, vandalism or any other cause that it is likely to partially or completely collapse, or to become detached or dislodged.
- [ ] (4) Any portion of a building, appurtenance or ornamentations that is not of sufficient strength or stability, or is not so anchored or attached to be capable of resisting natural or artificial loads of one and one-half the original designed value.
- [ ] (5) The structure or part of structure because of dilapidation, deterioration, decay, faulty construction, the removal or movement of ground necessary for support or any other reason is likely to collapse or under pining is likely to fail or give way.
- [X] (6) The building or structure, or any portion thereof, is clearly unsafe for its use and occupancy.
- [X] (7) The structure is neglected, damaged, dilapidated, unsecured or abandoned so as to become an attractive nuisance.
- [ ] (8) Any structure that exists or has been maintained in violation of any specific requirement or prohibition to such an extent as to present either a substantial risk of fire, building collapse or any other threat to life and safety.
- [ ] (9) Any structure intended to be used for dwelling purposes, due to inadequate maintenance, dilapidation ,decay ,damage, faulty construction, inadequate light, ventilation, mechanical or plumbing system is determined to be unsanitary, unfit for human habitation or in such a condition that it is likely to cause sickness or disease.
- [ ] (10) Any structure, due to lack of sufficient fire resistance rated construction, fire protection systems, electrical system, fuel connections, mechanical system, plumbing system or other cause is determined to be a threat to life or health.
- [ ] (11) Any portion of a building remains on a site after the demolition of the structure or whenever any building or structure is abandoned so as to constitute such building or portion thereof as an attractive nuisance or hazard to the public.

Comments: Roof collapsed during Hurricane Irma

[ ] Section 302 - Exterior property areas

[ ] Section 303 - Swimming Pools, Spas and Hot Tubs

[X] Section 304 - Exterior Structure

[ ] 304.1 - General - The exterior of a structure shall be maintained in good repair, structurally sound and sanitary so as not to pose a threat to the public health, safety and welfare.

[X] 304.1.1 - Unsafe conditions - The following conditions shall be determined as unsafe and shall be repaired or replaced to comply with the IBC or the IEBC as required for existing buildings.

- [ ] 1. The nominal strength of any structural member is exceeded by nominal loads, the load effects or the required strength.

☐	2. The anchorage of the floor or roof to walls or columns, and of walls and columns to foundations is not capable of resisting all nominal loads or load effects.
☐	3. Structures or components thereof that have reached their limit state.
☐	4. Siding and masonry joints are not maintained, weather resistant or water tight.
☐	5. Structural members that have evidence of deterioration or cannot safety support all nominal loads and load effects.
☐	6. Foundation systems that are not firmly supported by footings, are not plumb without cracks and breaks and are not properly anchored or cannot support all nominal loads and resisting all load effects.
☐	7. Exterior walls that are not anchored to supporting elements or are not plumb or free from holes, cracks, breaks or loose or rotting materials, are not properly anchored and not able of supporting all nominal loads and resisting load effects.
☒	8. Roofing that have defects that admit rain, roof surfaces with inadequate drainage, or any portion that is not in good repair with signs of deterioration, fatigue or without property anchorage and incapable of supporting all nominal loads.
☐	9. Flooring with defects that affect serviceability or that show signs of deterioration or fatigue, are not properly anchored or are incapable of supporting all nominal loads and resisting all load effects.
☐	10. Veneer, cornices, belt courses, corbels, trim , wall facings not properly anchored or that are anchored with connections not capable of supporting all nominal loads and resisting load effects.
☐	11. Overhang extensions or projections including trash chutes, canopies, marquees, signs, awnings, fire escapes, standpipes and exhaust ducts not properly anchored or anchored with connections unable to support all nominal loads.
☐	12. Exterior stairs, decks, porches, balconies and all attachments such as guards and handrails are not structurally sound, not properly anchored or anchored with connections unable to support all nominal loads and resisting all load effects.
☐	13. Chimneys, cooling towers, smokestacks not properly anchored or that are anchored with connections unable to support all nominal loads and resisting all load effects.

☐	304.2 - Protective Treatment - Exterior surfaces, including doors, door and window frames, cornices, porches, trim, balconies, decks and fences shall be maintained in good condition. Exterior surfaces shall be protected from elements and decay by painting or other protective treatment. Peeling, flaking and chipped paint shall be eliminated and surfaces repainted. Siding and masonry joints shall be maintained weather resistant and water tight. Metal surfaces subject to rust or corrosion shall be coated to inhibit such rust and corrosion.
☐	304.3 - Address identification - Buildings shall be provided with approved address identification that are legible and placed to be visible from the street fronting the property. They must contrast with their background, be numerical and a minimum of 4" tall.
☐	304.4 - Structural members - Structural members shall be maintained free from deterioration, and shall be capable of safely supporting the imposed dead and live loads.
☐	304.5 - Foundation walls - Foundation walls shall be maintained plumb and free from cracks and breaks and shall be kept n such condition so as to prevent the entry of rodents and other pests.
☐	304.6 - Exterior walls - Exterior walls shall be free from holes, breaks and loose or rotting materials; and maintained weatherproof and properly surface coated where required to prevent deterioration.
☒	304.7 - Roofs and drainage - The roof and flashing shall be sound, tight and not have defects that admit rain. Drainage must prevent dampness or deterioration in the walls or interior portion of the structure. Drains, gutters and downspouts must be in good repair and free from obstruction. Roof water shall not be discharged in a manner that creates a public nuisance.
☐	304.8 - Decorative features - Cornices, belt courses, corbels, terra cotta trim, wall facing and similar decorative features shall be in good repair with proper anchorage and in safe condition.
☐	304.9 - Overhang extensions - Overhang extensions including canopies, marquees, signs, metal awnings, fire escapes, standpipes and exhaust ducts shall be in good repair and properly anchored and kept in sound condition. All exposed surfaces of metal or wood shall be protected from the elements with weather coating material such as paint or similar surface treatment.
☐	304.10 - Stairways, decks, porches and balconies - Every exterior stairway, deck, porch and balcony shall be structurally sound, in good repair, with proper anchorage and capable of supporting the imposed loads.
☐	304.11 - Chimneys and towers - Chimneys, cooling towers, smoke stacks, shall be structurally safe and sound and in good repair. Exposed surfaces shall be protected by paint or similar surface treatment.
☐	304.12 - Handrails and guards - Every handrail and guard shall be firmly fastened and capable of supporting normally imposed loads and shall be maintained in good condition.

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☐	304.13 - Window, skylight and door frames - Every window, skylight, door and frame shall be kept in sound condition, good repair and weather tight.
☐	304.13.1 - Glazing - Glazing materials shall be maintained free from cracks or holes.
☐	304.13.2 - Openable windows - Every window, other than a fixed window, shall be easily openable and capable of being held in position by window hardware.
☐	304.14 - Insect screens - Every door, window and other outside opening required for ventilation or food preparation areas shall have tightly fitting screens of minimum 16 mesh per inch and every screen door must have self closing device is good working condition.
☐	304.15 - Doors - Exterior doors and hardware shall be maintained in good condition. Locks at all entrances to dwelling units and sleeping units shall tightly secure the door.
☐	304.18 - Building security - Doors, windows or hatchways for dwelling units, room units or housekeeping units shall be provided with devices designed to provide security for the occupants and property within.
☐	304.18.1 - Doors - Doors providing access to a dwelling unit, rooming unit or housekeeping unit that is rented, leased or let shall have a dead bolt designed to open from the inside without a key.
☐	304.18.2 - Windows - Operable windows located within 6 ft. above the ground that provides access to a dwelling unit, rooming unit or housekeeping unit that is rented, leased or let shall be equipped with a window sash locking device.
☐	304.19 - Gates - Exterior gates, gate assemblies, operator systems and hardware shall be maintained in good condition.

Comments

☐	Section 305 - Interior Structure
☐	Section 306 - Component Serviceability
☐	Section 307 - Handrails and guardrails
☐	Section 308 - Rubbish and garbage
☐	Section 309 - Pest Elimination
☐	Section 404 - Occupancy Limits
☐	Section 502 - Required facilities
☐	Section 503 - Toilet Rooms
☐	Section 504 - Plumbing systems and fixtures
☐	Section 505 - Water system
☐	Section 506 - Sanitary drainage system
☐	Section 507 - Storm drainage
☐	Section 601 - Mechanical - General
☐	Section 602 - Heating facilities
☐	Section 603 - Mechanical equipment
☐	Section 604 - Electrical Facilities
☒	Section 605 - Electrical equipment
☒	605.1 Installation - Electrical equipment, wiring and appliances shall be properly installed and maintained in a safe manner
☐	605.2 Receptacles - Every habitable space in a swelling shall have at least 2 separate and remove receptacle outlets. Every laundry area shall have at least 1 grounding type receptacle. Every bathroom shall have at least 1 receptacle. All receptacles have faceplates.
☐	605.3 Luminaires - Every public hall, interior stairway, toilet room, kitchen, bathroom, laundry room, boiler room and furnace room shall have at least 1 electric luminaires. Pool/spa luminaires over 15 V shall have ground fault protection.
☐	605.4 Wiring - Flexible cords shall not be used for permanent wiring, or for running through doors, windows or cabinets, or concealed within walls, floors or ceilings.

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Comments	Electric system unsafe due to roof collapse

- [ ] Section 606 - Elevators, escalators and dumbwaiters
- [ ] Section 607 - Duct systems
- [ ] Section 701 - General fire safety requirements
- [ ] Section 702 - Means of egress
- [ ] Section 703 - Fire resistance ratings
- [ ] Section 704 - Fire protection systems

Additional Comments	

City Commission Regular Meeting **12.b.**

Meeting Date: 04/15/2019

Re: Text Amendment - Chapter 22 - Use Table

SUBJECT:

Legislative Hearing - Ordinance 19-013 amending Chapter 22 of the Code of Ordinances amending the Use Table for certain commercial and industrial uses. SECOND READING

SUMMARY:

The City of Fort Pierce Planning Department is proposing a Zoning Text Amendment to Article III – Basic Zoning Districts, Section 22-22, Allowed Uses, of the City of Fort Pierce Code of Ordinances to allow some uses identified in the Use Table to be allowed by right, in lieu of needing a Conditional Use approval from City Commission. The Text Amendment would also allow some uses to be allowed with Conditional Use approval instead of being prohibited outright in certain zoning districts.

The purpose of the Text Amendment is to streamline the development process by providing for a broader range of uses to be allowed outright in certain zoning districts where the use itself is appropriate given the characteristics of each district and its location in the City. In particular, commercial and industrial uses have been expanded in such a manner so as to allow for a more streamlined review and development approval process. To this end, there are 44 instances where uses which are now only allowed with a Conditional use, or were prohibited outright, which are now being proposed to be deemed permitted by right. In addition, there are 14 instances where uses which are now prohibited outright are now being proposed to be allowed with Conditional use approval.

In addition to the above changes, the Text Amendment also serves to clarify how permitted and conditional uses are determined for properties in the Edgartown Settlement (ES) Zoning District, the Planned Development Zone (PD), and the Planned Unit Redevelopment Zone (PUR).

These proposed changes have been recommended by the Development Review Task Force as well as the Saint Lucie County Chamber of Commerce.

RECOMMENDATION:

Approve

ALTERNATIVES:

Provide Staff with direction to revise
Deny

RESPONSIBLE STAFF:

Rebeca A. Guerra, AICP, LEED-AP, CPD, Assistant Planning Director

COORDINATED WITH:

Technical Review Committee and City Attorney

Fiscal Impact

OTHER INFORMATION:

N/A

Attachments

19-013 Update with Change from 1st Reading
Draft Ordinance
Staff Report
Proposed Text Amendment
TRC Comments
Development Review Task Force

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	03/25/2019 02:55 PM

Form Started By: Rebeca Guerra
Started On: 03/19/2019 05:22 PM
Final Approval Date: 04/02/2019

ORDINANCE NO. 19-013

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA CHAPTER 22, ARTICLE III, SECTION 22-22, AMENDING THE USE TABLE TO ALLOW CERTAIN COMMERCIAL AND INDUSTRIAL USES TO BE ALLOWED BY RIGHT IN LIEU OF REQUIRING A CONDITIONAL USE APPROVAL; AMENDING THE USE TABLE TO ALLOW CERTAIN COMMERCIAL AND INDUSTRIAL USES TO BE ALLOWED WITH A CONDITIONAL USE APPROVAL IN LIEU OF BEING PROHIBITED OUTRIGHT; AMENDING THE USE TABLE BY CREATING A NEW USE CATEGORY "SERVICE OF HEAVY EQUIPMENT" AND PROVIDING FOR ITS ALLOWANCE IN CERTAIN ZONING DISTRICTS; ESTABLISHING HOW PERMITTED AND CONDITIONAL USES ARE DETERMINED FOR PROPERTIES IN THE EDGARTOWN SETTLEMENT ZONING DISTRICT, THE PLANNED DEVELOPMENT ZONE, AND THE PLANNED UNIT REDEVELOPMENT ZONE; PROVIDING FOR A SEVERABILITY CLAUSE; REPEALING ALL ORDINANCES OR PARTS THEREOF IN CONFLICT; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City Commission of the City of Fort Pierce on November 4, 2013, approved Ordinance L-295 that created Section 22-22, Allowed Uses; and

WHEREAS, uses listed are only allowed in each zoning district in accordance with the Use Table; and

WHEREAS, uses may only be permitted in a zoning district provided that the use will not violate basic use standards specified in each zoning district, other applicable use standards, additional zoning ordinance provisions and other City laws; and

WHEREAS, changes to the City's Use Table have been recommended by the Growth Management Task Force in June of 2018 as part of an evaluation of the City's regulatory and permitting process; and

WHEREAS, Section 22-22 has been amended from time to time since it was formally adopted on November 4, 2013, under Ordinance L-295; and

WHEREAS, the City of Fort Pierce Planning Board held a public meeting on February 12, 2019, to consider the Land Development Code amendment and recommended approval of the amendment by a vote of 6 to 0; and

NOW, THEREFORE BE IT ORDAINED by the City Commission of the City of Fort Pierce, Florida as follows:

SECTION 1. Section 22-22 is hereby amended so that the same shall read as follows:

Sec. 22-22. - Allowed Uses.

(a) *Uses listed.* Uses listed are allowed in each zoning district in accordance with the Use Table.

(b) *Permitted uses.* Uses identified with a "P" in the Use Table are permitted in the subject zoning district provided that the uses will not violate basic use standards specified in each zoning district, other applicable use standards, additional zoning ordinance provisions and other city laws.

(c) *Conditional uses.* Uses identified with a "C" in the Use Table are permitted in the subject zoning district, if the city commission after a public hearing, determines that the location and development plans comply with applicable standards and will not violate basic use standards specified in each zoning district, other applicable use standards, additional zoning ordinance provisions and other city laws.

(d) *Prohibited uses.* Uses identified with a "-" in the Use Table are expressly prohibited.

(e) *Planned Development Zone (PD) and Planned Unit Redevelopment Zone (PUR).* Permitted and conditional uses are identified during the review for all proposed PD and PUR districts.

(f) *Edgartown Settlement (ES) Zoning District.* Permitted, conditional, and accessory uses shall be allowed in the ES District consistent with Section 22-28.1 of this chapter.

~~(e)~~ (g) *Use table.*

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
RESIDENTIAL																							
Household Living																							
–Detached House	P	P	P	P	P	P	P	P	C	C	C	-	-	C	-	-	-	-	-	-	C	-	-
–Duplex	-	-	-	-	-	C	P	P	C	C	C	-	-	C	-	-	-	-	-	-	-	-	-
–Townhouse	-	-	-	-	-	C	P	P	P	C	C	-	-	C	-	-	-	-	-	-	-	-	-
–Multi-Dwelling Building	-	-	-	-	-	C	P	P	P	C	C	C	-	C	C	-	-	-	-	-	-	-	-
–Mobile or Manufactured Home	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Manufactured Home Park or Subdivision	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Mobile Home Park	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Vertical Mixed-Use Building	-	-	-	-	-	-	C	C	P	P	P	P	P	P	P	-	-	-	-	-	-	-	-
Home Occupations (per requirements of Section 22-63)	P	P	P	P	P	P	P	P	P	-	-	-	-	P	-	-	-	-	-	-	-	-	-
Group Living (except as noted below)	-	-	-	-	C	C	C	C	C	C	-	C	C	C	-	-	-	-	-	-	-	-	-
–Community Residential Home, Type 1 (1–6 residents)	P	P	P	P	P	P	P	P	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Community Residential Home, Type 2 (7-14 residents)	-	-	-	-	-	-	C	-	C	C	-	C	C	-	-	-	-	-	-	-	-	-	-
–Dormitories, Fraternity and Sorority Houses	-	-	-	-	-	C	C	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
PUBLIC AND CIVIC																							
Community/Cultural (except as noted below)	-	-	-	-	C	C	C	C	C	C	C	P	P	C	C	C	-	-	-	C	-	-	-
–Community Center	-	-	-	-	C	C	C	C	C	-	C	P	P	C	-	C	-	-	-	C	-	-	-
–Fraternal Organization/Lodge	-	-	-	-	C	C	C	C	C	-	C	P	P	C	-	C	-	-	-	C	-	-	-
–Library or Cultural Exhibit	-	-	-	-	C	C	C	C	C	-	C	P	P	C	-	C	-	-	-	C	-	-	-
–Environmental Research and Education Facilities	-	-	-	-	-	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Day Care	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Adult Day Care Center	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Day Care Center	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Child Care Facility	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Family Day Care Home	P	P	P	P	P	P	P	P	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Educational Facilities																							
–College or University	-	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	-
–Elementary, Middle or High School	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	-	-	-	-
–Marine Research/Education Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		P	-	-	-	C	-
Government Facilities (except as noted below)	-	-	-	-	-	-	-	-	-	C	C	P	P	C	-	C	-	-	-	-	-	C	C
–Post Office	-	-	-	-	-	-	-	-	-	C	C	P	P	-	-	C	-	-	-	-	-	-	-
–Safety Service	C	C	C	C	C	C	C	C	C	P	P	P	P	P	P	P	P	P	P	-	-	C	C
Medical Facilities (except as noted below)	-	-	-	-	C	C	C	-	C	C	-	C	-	C	-	-	-	-	-	-	-	-	-
–Hospital	-	-	-	-	C	C	C	-	C	C	-	C	C	-	-	-	-	-	-	-	-	-	-
–Nursing Home	-	-	-	-	C	C	C	-	C	C	-	C	C	-	-	-	-	-	-	-	-	-	-
Park and Open Space (except as noted below)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	C	C	-
– Cemetery/Columbarium/ Mausoleum	C	C	C	C	C	C	-	-	C	C	C	C	-	-	-	-	-	-	-	C	-	-	-
–Country Club/Golf Course	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	C	-	-	-
–Game and Wildlife Management Preserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-
–Water Dependent Recreation Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C
Passenger Terminal																							
–Airport/Heliport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
–Rail/Bus Terminal	-	-	-	-	-	-	-	-	-	C	C	C	C	-	C	C	C	C	C	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Bus Shelter	C	C	C	C	C	C	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-	-
–Taxi Terminal	-	-	-	-	-	-	-	-	-	C	C	C	C	-	C	C	C	C	C	-	-	-	-
Religious Institution	C	C	C	C	C	C	C	C	C	C	C	P	P	C	-	C	-	-	-	-	-	-	-
Social Service Institution (except as noted below)	-	-	-	-	-	-	-	-	-	C	-	C	C	-	-	-	C	C	-	-	-	-	-
–Halfway Houses	-	-	-	-	-	C	C	C	C	C	-	C	C	-	-	-	C	-	-	-	-	-	-
Utilities																							
–Minor, other	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	P	C	P	C	C	C	C
–Major	-	-	-	-	-	-	-	-	-	-	-	C	C	C	C	C	C	C	P	C	C	C	C
–Utility Cabinets, Above Ground	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	C	C	C	C
COMMERCIAL																							
Eating and Drinking Establishments																							
–Brew Pub	-	-	-	-	-	-	-	-	C	P	~~C~~ P	P	P	P	P	C	C	C	-	-	-	-	-
–Coffee Shop	-	-	-	-	-	-	C	-	C	~~C~~ P	P	P	P	P	P	C	C	C	-	-	-	-	-
–Neighborhood Bistro	-	-	-	-	-	-	-	-	C	~~C~~ P	~~C~~ P	P	P	P	P	C	C	C	-	-	-	-	-
–Neighborhood Café	-	-	-	-	-	-	-	-	C	~~C~~ P	~~C~~ P	P	P	P	P	C	C	C	-	-	-	-	-
–Restaurants, Fast Food	-	-	-	-	-	-	-	-	C	-	-	P	P	P	P	C	C	C	-	-	-	-	-
–Restaurant and Bar	-	-	-	-	-	-	-	-	C	C	C	P	P	P	P	C	C	C	-	C	-	-	C
–Wine/Cigar Bar	-	-	-	-	-	-	-	-	C	C	C	P	P	P	P	C	C	C	-	-	-	-	-
Entertainment, Indoor (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	C	-	-	-
–Adult Establishment	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-
–Arcade Amusement Center/Amusement Arcade	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-
–Bar or Nightclub	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-
–Theater	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-
Entertainment, Outdoor (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	C	-	P	-	-	-	-	-	C	-	-	-
–Batting Cages, Driving Ranges	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-
–Stables or Equestrian Facilities	C	C	C	-	-	-	-	-	-	-	-	P	-	P	-	-	-	-	-	-	-	-	-
–Stadium or Arena	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C	-	C	C	-	-	-	-	-
Marine-Related Commercial (except as noted below)	-	-	-	-	-	-	-	-	-	C	-	P	P	C	P	-	-	C	-	C	-	-	C
–Boat and Marine Equipment Sales	-	-	-	-	-	-	-	-	-	-	-	P	C	C	P	-	-	C	-	-	-	-	-

ZONING DISTRICT	E1	E2	E3	R1	R2	R3	R4	R4A	R5	C1	C2	C3	C4	C5	C6	CP	I1	I2	I3	OS1	OS2	A1	A2
–Marina/Boat Livery	-	-	-	-	-	-	-	-	-	C	-	C	C	C	C	-	-	P	-	C	-	-	C
Office																							
–Administrative, Professional, General, Medical Office	-	-	-	-	-	-	C	C	C	P	P	P	P	P	P	P	C	C	-	-	-	-	-
–Day Labor Employment Agency	-	-	-	-	-	-	-	-	-	P	C	P	P	-	-	P	-	-	-	-	-	-	-
–Medical and Dental Clinic	-	-	-	-	-	-	-	-	-	P	C	P	P	C	-	P	-	C	-	-	-	-	-
–Television and Radio Studios	-	-	-	-	-	-	-	-	-	P	P	P	P	P	~~C~~ P	P	-	C	-	-	-	-	-
Overnight Accommodations																							
–Bed & Breakfast	-	-	-	-	-	-	C	C	C	C	P	P	P	P	-	-	-	-	-	-	-	-	-
–Dwelling Rental	-	C	C	C	C	C	C	C	C	-	-	-	P	P	-	-	-	-	-	-	-	-	-
–Hotel/Motel	-	-	-	-	-	-	-	-	-	-	-	P	P	P	P	C	-	-	-	-	-	-	-
–Recreational Vehicle Park	-	-	-	-	-	-	-	-	-	-	-	C	-	C	-	-	-	-	-	-	-	-	-
–Resort Hotel	-	-	-	-	-	-	-	-	-	-	-	P	P	P	P	-	-	-	-	-	-	-	-
Parking, Commercial	-	-	-	-	-	-	-	C	-	C	- C	P	C	C	-	C	-	C	-	-	-	-	-
Retail Sales & Service, Sales-Oriented (except as noted below)	-	-	-	-	-	-	-	-	-	- C	- P	P	P	P	- C	C	-	-	-	-	-	-	-
–Art Gallery	-	-	-	-	-	-	-	-	-	C	C	P	P	P	-	C	-	-	-	-	-	-	-
–Farmers Market or Farm Stand	P	-	-	-	-	-	-	-	-	- C	- C	P	P	P	-	C	C	-	-	-	-	-	-
–Grocery or Liquor Store	-	-	-	-	-	-	C	-	C	-	P	P	P	C	-	C	-	-	-	-	-	-	-
–Neighborhood Commercial Sale	-	-	-	-	C	C	P	P	P	-	P	P	P	C	-	C	-	-	-	-	-	-	-
–Office Supplies & Electronics	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	C	-	-	-	-	-	-	-
–Pet Stores	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	C	-	-	-	-	-	-	-
Retail Sales & Service, Personal-Service Oriented (except as noted below)	-	-	-	-	-	-	-	-	-	- C	- C	P	P	P	-	C	-	-	-	-	-	-	-
–Art Studio	-	-	-	-	-	-	-	-	-	- P	- P	P	P	P	-	C	-	-	-	-	-	-	-
–Animal Care Facilities & Service	-	-	-	-	-	-	-	-	-	-	- P	~~C~~ P	-	P	-	C	-	-	-	-	-	-	-
–Animal Grooming Services	-	-	-	-	-	-	-	-	-	-	- P	P	P	P	-	C	-	-	-	-	-	-	-
–Check Cashing/Loan Service	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Educational Service Establishments	-	-	-	-	-	-	-	-	C	C	~~C~~ P	P	P	C	P	P	P	C	C	-	-	-	-
–Laundry & Dry Cleaners Pick-Up	-	-	-	-	-	-	C	C	C	C	P	P	P	P	-	C	-	-	-	-	-	-	-
–Laundromat	-	-	-	-	-	-	C	C	C	C	P	P	P	C	-	C	-	-	-	-	-	-	-
–Mortuaries or Funeral Homes	-	-	-	-	-	-	-	-	-	-	-	P	P	-	-	C	-	-	-	-	-	-	-
–Neighborhood Commercial Services	-	-	-	-	C	C	P	P	P	~~C~~ P	P	P	P	P	-	C	-	-	-	-	-	-	-
–Pawn Shop	-	-	-	-	-	-	-	-	-	-	-	P	P	C	-	C	-	-	-	-	-	-	-
–Personal Improvement Service	-	-	-	-	-	-	C	C	C	~~C~~ P	- P	P	P	P	-	C	-	-	-	-	-	-	-
–Veterinary (Without Outdoor Runs)	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	C	-	-	-	-	-	-	-
Retail Sales & Service, Repair-Oriented	-	-	-	-	-	-	-	P	-	C	-	P	P	P	-	P	-	-	-	-	-	-	-
Self-Service Storage	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C	-	P	-	P	-	-	-	-
Vehicle Sales & Service																							
–Automobile Rentals	-	-	-	-	-	-	-	-	-	-	-	P	C	C	C	C	P	-	P	-	-	-	-
–Automobile Sales	-	-	-	-	-	-	-	-	-	-	-	P	C	C	C	C	P	-	P	-	-	-	-
–Boat Rentals	-	-	-	-	-	-	-	-	-	-	-	P	C	P	C	C	P	-	P	-	-	C	P
–Boat Sales	-	-	-	-	-	-	-	-	-	-	-	P	C	C	C	C	P	-	P	-	-	-	P
–Fueling Station	-	-	-	-	-	-	-	-	-	C	C	P	C	C	-	C	-	P	-	-	-	-	-
–Travel Plaza	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	C	-	-	-	-	-	-	-
–Truck Stop	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	C	-	-	-	-	-	-	-
–Vehicle Repair, General	-	-	-	-	-	-	-	-	-	-	- C	~~C~~ P	C	-	-	C	-	-	-	-	-	-	-
–Vehicle Repair, Limited	-	-	-	-	-	-	-	-	-	-	- C	P	C	-	-	P	-	-	-	-	-	-	-
–Vehicle Storage	-	-	-	-	-	-	-	-	-	-	-	C	-	-	C	-	P	C	P	-	-	-	-
INDUSTRIAL																							
Artisan	-	-	-	-	-	-	-	-	-	-	- C	~~C~~ P	C	-	-	P	P	-	P	-	-	-	-
–Cabinet Shops, Woodworking	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	C	-	C	P	P	-	P	-	-	-	-
Light Industrial Service (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	P	P	-	P	-	-	-	-
–Catering Facility, Large-Scale	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	-	-	-	P	P	-	P	-	-	-	-
–Crematorium	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-
–Building Maintenance Facilities And Services	-	-	-	-	-	-	-	-	-	-	-	C	-	-	C	-	-	-	-	-	-	-	-
–Contractors/Others Performing Services Off-Site	-	-	-	-	-	-	-	-	-	-	- C	~~C~~ P	-	-	-	P	P	-	P	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Microbrewery	-	-	-	-	-	-	-	-	-	C	C	C	C	C	C	C	-	-	-	-	-	-	-
–Research Service	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	-	-	P	P	P	- P	P	-	-	-	-
Marine-Related Industrial	-	-	-	-	-	-	-	-	-	-	-	C	-	-	P	-	~~C~~ P	P	P	-	-	-	P
Warehouse & Freight (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	P	P	C	P	-	-	-	-
–Parcel Service	-	-	-	-	-	-	-	-	-	-	-	P	P	-	-	P	P	C	P	-	-	-	-
Waste-Related Use (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
–Solid Waste Separation, Transfer Station	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
–Recycling Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	C	-	-	-	-
–Wrecking or Salvage Yard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
Wholesale Trade	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	-	-	-	P	P	~~C~~ P	P	-	-	-	-
Heavy Industrial (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-
–Heavy Equipment Sales & Rentals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- C	P	~~C~~ P	P	-	-	-	-
–Service of Heavy Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	P	P	P	-	-	-	-
–Processing of Food & Related Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	~~C~~ P	P	P	-	-	-	-
OTHER																							
Aquaculture Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- P	~~C~~ P	- C	-	-	C	C
Community Gardens	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	C	C	C	C	C	C	C	C	C	C	C	C	-	-
Dock/Moorage Facility (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C
–Docks for Single Family Homes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
– Docks for Single Family Homes on canals within Surfside or Jennings Cove	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C
Navigational Aids	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Telecommunication Facility																							
–Antenna Support Structure	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
–Antenna (on existing structure)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

SECTION 2. The provisions of this Ordinance are declared to be severable and if any section, sentence, clause, or phrase of this Ordinance shall, for any reason, be held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance but shall remain in effect, it being the legislative intent that this Ordinance shall stand notwithstanding the invalidity of any part.

SECTION 3. All ordinances or parts thereof that may be determined to be in conflict herewith are hereby repealed.

SECTION 4. This Ordinance shall be and become effective immediately upon final passage.

APPROVED AS TO FORM & CORRECTNESS:

_____
Peter J. Sweeney
City Attorney

STATE OF FLORIDA

COUNTY OF ST. LUCIE

WE, THE UNDERSIGNED, Mayor Commissioner and the City Clerk of the City of Fort Pierce, Florida, do hereby certify that the foregoing and above Ordinance No. 19-013 was duly advertised by title only in the St. Lucie News Tribune on Sunday, March 17, 2019; copy of said Ordinance was made available at the office of the City Clerk to the public upon request; said Ordinance was duly introduced, read by title only, and passed on first reading by the City Commission of the City of Fort Pierce, Florida, on April 1, 2019; and was duly introduced, read by title only, and passed on second and final reading April 15, 2019, by the City Commission of the City of Fort Pierce, Florida.

IN WITNESS HEREWITH, we hereunto set our hands and affix the Official Seal of the City of Fort Pierce, Florida, this XX day of April, 2019.

_____
Linda Hudson
MAYOR COMMISSIONER

ATTEST

_____
Linda W. Cox
CITY CLERK

(CITY SEAL)

ORDINANCE NO. 19-013

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA CHAPTER 22, ARTICLE III, SECTION 22-22, AMENDING THE USE TABLE TO ALLOW CERTAIN COMMERCIAL AND INDUSTRIAL USES TO BE ALLOWED BY RIGHT IN LIEU OF REQUIRING A CONDITIONAL USE APPROVAL; AMENDING THE USE TABLE TO ALLOW CERTAIN COMMERCIAL AND INDUSTRIAL USES TO BE ALLOWED WITH A CONDITIONAL USE APPROVAL IN LIEU OF BEING PROHIBITED OUTRIGHT; AMENDING THE USE TABLE BY CREATING A NEW USE CATEGORY "SERVICE OF HEAVY EQUIPMENT" AND PROVIDING FOR ITS ALLOWANCE IN CERTAIN ZONING DISTRICTS; ESTABLISHING HOW PERMITTED AND CONDITIONAL USES ARE DETERMINED FOR PROPERTIES IN THE EDGARTOWN SETTLEMENT ZONING DISTRICT, THE PLANNED DEVELOPMENT ZONE, AND THE PLANNED UNIT REDEVELOPMENT ZONE; PROVIDING FOR A SEVERABILITY CLAUSE; REPEALING ALL ORDINANCES OR PARTS THEREOF IN CONFLICT; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City Commission of the City of Fort Pierce on November 4, 2013, approved Ordinance L-295 that created Section 22-22, Allowed Uses; and

WHEREAS, uses listed are only allowed in each zoning district in accordance with the Use Table; and

WHEREAS, uses may only be permitted in a zoning district provided that the use will not violate basic use standards specified in each zoning district, other applicable use standards, additional zoning ordinance provisions and other City laws; and

WHEREAS, changes to the City's Use Table have been recommended by the Growth Management Task Force in June of 2018 as part of an evaluation of the City's regulatory and permitting process; and

WHEREAS, Section 22-22 has been amended from time to time since it was formally adopted on November 4, 2013, under Ordinance L-295; and

WHEREAS, the City of Fort Pierce Planning Board held a public meeting on February 12, 2019, to consider the Land Development Code amendment and recommended approval of the amendment by a vote of 6 to 0; and

NOW, THEREFORE BE IT ORDAINED by the City Commission of the City of Fort Pierce, Florida as follows:

SECTION 1. Section 22-22 is hereby amended so that the same shall read as follows:

Sec. 22-22. - Allowed Uses.

(a) *Uses listed.* Uses listed are allowed in each zoning district in accordance with the Use Table.

(b) *Permitted uses.* Uses identified with a "P" in the Use Table are permitted in the subject zoning district provided that the uses will not violate basic use standards specified in each zoning district, other applicable use standards, additional zoning ordinance provisions and other city laws.

(c) *Conditional uses.* Uses identified with a "C" in the Use Table are permitted in the subject zoning district, if the city commission after a public hearing, determines that the location and development plans comply with applicable standards and will not violate basic use standards specified in each zoning district, other applicable use standards, additional zoning ordinance provisions and other city laws.

(d) *Prohibited uses.* Uses identified with a "-" in the Use Table are expressly prohibited.

(e) *Planned Development Zone (PD) and Planned Unit Redevelopment Zone (PUR).* Permitted and conditional uses are identified during the review for all proposed PD and PUR districts.

(f) *Edgartown Settlement (ES) Zoning District.* Permitted, conditional, and accessory uses shall be allowed in the ES District consistent with Section 22-28.1 of this chapter.

~~(e)~~ (g) *Use table.*

ZONING DISTRICT	E1	E2	E3	R1	R2	R3	R4	R4A	R5	C1	C2	C3	C4	C5	C6	CP	I1	I2	I3	OS1	OS2	A1	A2
RESIDENTIAL																							
Household Living																							
–Detached House	P	P	P	P	P	P	P	P	C	C	C	-	-	C	-	-	-	-	-	-	C	-	-
–Duplex	-	-	-	-	-	C	P	P	C	C	C	-	-	C	-	-	-	-	-	-	-	-	-
–Townhouse	-	-	-	-	-	C	P	P	P	C	C	-	-	C	-	-	-	-	-	-	-	-	-
–Multi-Dwelling Building	-	-	-	-	-	C	P	P	P	C	C	C	-	C	C	-	-	-	-	-	-	-	-
–Mobile or Manufactured Home	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Manufactured Home Park or Subdivision	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Mobile Home Park	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Vertical Mixed-Use Building	-	-	-	-	-	-	C	C	P	P	P	P	P	P	P	-	-	-	-	-	-	-	-
Home Occupations (per requirements of Section 22-63)	P	P	P	P	P	P	P	P	P	-	-	-	-	P	-	-	-	-	-	-	-	-	-
Group Living (except as noted below)	-	-	-	-	C	C	C	C	C	C	-	C	C	C	-	-	-	-	-	-	-	-	-
–Community Residential Home, Type 1 (1–6 residents)	P	P	P	P	P	P	P	P	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Community Residential Home, Type 2 (7-14 residents)	-	-	-	-	-	-	C	-	C	C	-	C	C	-	-	-	-	-	-	-	-	-	-
–Dormitories, Fraternity and Sorority Houses	-	-	-	-	-	C	C	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
PUBLIC AND CIVIC																							
Community/Cultural (except as noted below)	-	-	-	-	C	C	C	C	C	C	C	P	P	C	C	C	-	-	-	C	-	-	-
–Community Center	-	-	-	-	C	C	C	C	C	-	C	P	P	C	-	C	-	-	-	C	-	-	-
–Fraternal Organization/Lodge	-	-	-	-	C	C	C	C	C	-	C	P	P	C	-	C	-	-	-	C	-	-	-
–Library or Cultural Exhibit	-	-	-	-	C	C	C	C	C	-	C	P	P	C	-	C	-	-	-	C	-	-	-
–Environmental Research and Education Facilities	-	-	-	-	-	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Day Care	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Adult Day Care Center	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Day Care Center	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Child Care Facility	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Family Day Care Home	P	P	P	P	P	P	P	P	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Educational Facilities																							
–College or University	-	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	-
–Elementary, Middle or High School	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	-	-	-	-
–Marine Research/Education Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		P	-	-	-	C	-
Government Facilities (except as noted below)	-	-	-	-	-	-	-	-	-	C	C	P	P	C	-	C	-	-	-	-	-	C	C
–Post Office	-	-	-	-	-	-	-	-	-	C	C	P	P	-	-	C	-	-	-	-	-	-	-
–Safety Service	C	C	C	C	C	C	C	C	C	P	P	P	P	P	P	P	P	P	P	-	-	C	C
Medical Facilities (except as noted below)	-	-	-	-	C	C	C	-	C	C	-	C	-	C	-	-	-	-	-	-	-	-	-
–Hospital	-	-	-	-	C	C	C	-	C	C	-	C	C	-	-	-	-	-	-	-	-	-	-
–Nursing Home	-	-	-	-	C	C	C	-	C	C	-	C	C	-	-	-	-	-	-	-	-	-	-
Park and Open Space (except as noted below)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	C	C	-
– Cemetery/Columbarium/ Mausoleum	C	C	C	C	C	C	-	-	C	C	C	C	-	-	-	-	-	-	-	C	-	-	-
–Country Club/Golf Course	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	C	-	-	-
–Game and Wildlife Management Preserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-
–Water Dependent Recreation Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C
Passenger Terminal																							
–Airport/Heliport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
–Rail/Bus Terminal	-	-	-	-	-	-	-	-	-	C	C	C	C	-	C	C	C	C	C	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Bus Shelter	C	C	C	C	C	C	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-	-
–Taxi Terminal	-	-	-	-	-	-	-	-	-	C	C	C	C	-	C	C	C	C	C	-	-	-	-
Religious Institution	C	C	C	C	C	C	C	C	C	C	C	P	P	C	-	C	-	-	-	-	-	-	-
Social Service Institution (except as noted below)	-	-	-	-	-	-	-	-	-	C	-	C	C	-	-	-	C	C	-	-	-	-	-
–Halfway Houses	-	-	-	-	-	C	C	C	C	C	-	C	C	-	-	-	C	-	-	-	-	-	-
Utilities																							
–Minor, other	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	P	C	P	C	C	C	C
–Major	-	-	-	-	-	-	-	-	-	-	-	C	C	C	C	C	C	C	P	C	C	C	C
–Utility Cabinets, Above Ground	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	C	C	C	C
COMMERCIAL																							
Eating and Drinking Establishments																							
–Brew Pub	-	-	-	-	-	-	-	-	C	P	~~C~~ P	P	P	P	P	C	C	C	-	-	-	-	-
–Coffee Shop	-	-	-	-	-	-	C	-	C	~~C~~ P	P	P	P	P	P	C	C	C	-	-	-	-	-
–Neighborhood Bistro	-	-	-	-	-	-	-	-	C	~~C~~ P	~~C~~ P	P	P	P	P	C	C	C	-	-	-	-	-
–Neighborhood Café	-	-	-	-	-	-	-	-	C	~~C~~ P	~~C~~ P	P	P	P	P	C	C	C	-	-	-	-	-
–Restaurants, Fast Food	-	-	-	-	-	-	-	-	C	-	-	P	P	P	P	C	C	C	-	-	-	-	-
–Restaurant and Bar	-	-	-	-	-	-	-	-	C	C	C	P	P	P	P	C	C	C	-	C	-	-	C
–Wine/Cigar Bar	-	-	-	-	-	-	-	-	C	C	C	P	P	P	P	C	C	C	-	-	-	-	-
Entertainment, Indoor (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	C	-	-	-
–Adult Establishment	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-
–Arcade Amusement Center/Amusement Arcade	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-
–Bar or Nightclub	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-
–Theater	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-
Entertainment, Outdoor (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	C	-	P	-	-	-	-	-	C	-	-	-
–Batting Cages, Driving Ranges	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-
–Stables or Equestrian Facilities	C	C	C	-	-	-	-	-	-	-	-	P	-	P	-	-	-	-	-	-	-	-	-
–Stadium or Arena	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C	-	C	C	-	-	-	-	-
Marine-Related Commercial (except as noted below)	-	-	-	-	-	-	-	-	-	C	-	P	P	C	P	-	-	C	-	C	-	-	C
–Boat and Marine Equipment Sales	-	-	-	-	-	-	-	-	-	-	-	P	C	C	P	-	-	C	-	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Marina/Boat Livery	-	-	-	-	-	-	-	-	-	C	-	C	C	C	C	-	-	P	-	C	-	-	C
Office																							
–Administrative, Professional, General, Medical Office	-	-	-	-	-	-	C	C	C	P	P	P	P	P	P	P	C	C	-	-	-	-	-
–Day Labor Employment Agency	-	-	-	-	-	-	-	-	-	P	C	P	P	-	-	P	-	-	-	-	-	-	-
–Medical and Dental Clinic	-	-	-	-	-	-	-	-	-	P	C	P	P	C	-	P	-	C	-	-	-	-	-
–Television and Radio Studios	-	-	-	-	-	-	-	-	-	P	P	P	P	P	~~C~~ P	P	-	C	-	-	-	-	-
Overnight Accommodations																							
–Bed & Breakfast	-	-	-	-	-	-	C	C	C	~~C~~ P	P	P	P	P	-	-	-	-	-	-	-	-	-
–Dwelling Rental	-	C	C	C	C	C	C	C	C	-	-	-	P	P	-	-	-	-	-	-	-	-	-
–Hotel/Motel	-	-	-	-	-	-	-	-	-	-	-	P	P	P	P	C	-	-	-	-	-	-	-
–Recreational Vehicle Park	-	-	-	-	-	-	-	-	-	-	-	C	-	C	-	-	-	-	-	-	-	-	-
–Resort Hotel	-	-	-	-	-	-	-	-	-	-	-	P	P	P	P	-	-	-	-	-	-	-	-
Parking, Commercial	-	-	-	-	-	-	-	C	-	C	- C	P	C	C	-	C	-	C	-	-	-	-	-
Retail Sales & Service, Sales-Oriented (except as noted below)	-	-	-	-	-	-	-	-	-	- C	- P	P	P	P	- C	C	-	-	-	-	-	-	-
–Art Gallery	-	-	-	-	-	-	-	-	-	C	C	P	P	P	-	C	-	-	-	-	-	-	-
–Farmers Market or Farm Stand	P	-	-	-	-	-	-	-	-	- C	- C	P	P	P	-	C	C	-	-	-	-	-	-
–Grocery or Liquor Store	-	-	-	-	-	-	C	-	C	-	P	P	P	C	-	C	-	-	-	-	-	-	-
–Neighborhood Commercial Sale	-	-	-	-	C	C	P	P	P	-	P	P	P	C	-	C	-	-	-	-	-	-	-
–Office Supplies & Electronics	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	C	-	-	-	-	-	-	-
–Pet Stores	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	C	-	-	-	-	-	-	-
Retail Sales & Service, Personal-Service Oriented (except as noted below)	-	-	-	-	-	-	-	-	-	- C	- C	P	P	P	-	C	-	-	-	-	-	-	-
–Art Studio	-	-	-	-	-	-	-	-	-	- P	- P	P	P	P	-	C	-	-	-	-	-	-	-
–Animal Care Facilities & Service	-	-	-	-	-	-	-	-	-	-	- P	~~C~~ P	-	P	-	C	-	-	-	-	-	-	-
–Animal Grooming Services	-	-	-	-	-	-	-	-	-	-	- P	P	P	P	-	C	-	-	-	-	-	-	-
–Check Cashing/Loan Service	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Educational Service Establishments	-	-	-	-	-	-	-	-	C	C	~~C~~ P	P	P	C	P	P	P	C	C	-	-	-	-
–Laundry & Dry Cleaners Pick-Up	-	-	-	-	-	-	C	C	C	C	P	P	P	P	-	C	-	-	-	-	-	-	-
–Laundromat	-	-	-	-	-	-	C	C	C	C	P	P	P	C	-	C	-	-	-	-	-	-	-
–Mortuaries or Funeral Homes	-	-	-	-	-	-	-	-	-	-	-	P	P	-	-	C	-	-	-	-	-	-	-
–Neighborhood Commercial Services	-	-	-	-	C	C	P	P	P	~~C~~ P	P	P	P	P	-	C	-	-	-	-	-	-	-
–Pawn Shop	-	-	-	-	-	-	-	-	-	-	-	P	P	C	-	C	-	-	-	-	-	-	-
–Personal Improvement Service	-	-	-	-	-	-	C	C	C	~~C~~ P	- P	P	P	P	-	C	-	-	-	-	-	-	-
–Veterinary (Without Outdoor Runs)	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	C	-	-	-	-	-	-	-
Retail Sales & Service, Repair-Oriented	-	-	-	-	-	-	-	P	-	C	-	P	P	P	-	P	-	-	-	-	-	-	-
Self-Service Storage	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C	-	P	-	P	-	-	-	-
Vehicle Sales & Service																							
–Automobile Rentals	-	-	-	-	-	-	-	-	-	-	-	P	C	C	C	C	P	-	P	-	-	-	-
–Automobile Sales	-	-	-	-	-	-	-	-	-	-	-	P	C	C	C	C	P	-	P	-	-	-	-
–Boat Rentals	-	-	-	-	-	-	-	-	-	-	-	P	C	P	C	C	P	-	P	-	-	C	P
–Boat Sales	-	-	-	-	-	-	-	-	-	-	-	P	C	C	C	C	P	-	P	-	-	-	P
–Fueling Station	-	-	-	-	-	-	-	-	-	C	C	P	C	C	-	C	-	P	-	-	-	-	-
–Travel Plaza	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	C	-	-	-	-	-	-	-
–Truck Stop	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	C	-	-	-	-	-	-	-
–Vehicle Repair, General	-	-	-	-	-	-	-	-	-	-	- C	~~C~~ P	C	-	-	C	-	-	-	-	-	-	-
–Vehicle Repair, Limited	-	-	-	-	-	-	-	-	-	-	- C	P	C	-	-	P	-	-	-	-	-	-	-
–Vehicle Storage	-	-	-	-	-	-	-	-	-	-	-	C	-	-	C	-	P	C	P	-	-	-	-
INDUSTRIAL																							
Artisan	-	-	-	-	-	-	-	-	-	-	- C	~~C~~ P	C	-	-	P	P	-	P	-	-	-	-
–Cabinet Shops, Woodworking	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	C	-	C	P	P	-	P	-	-	-	-
Light Industrial Service (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	P	P	-	P	-	-	-	-
–Catering Facility, Large-Scale	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	-	-	-	P	P	-	P	-	-	-	-
–Crematorium	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-
–Building Maintenance Facilities And Services	-	-	-	-	-	-	-	-	-	-	-	C	-	-	C	-	-	-	-	-	-	-	-
–Contractors/Others Performing Services Off-Site	-	-	-	-	-	-	-	-	-	-	- C	~~C~~ P	-	-	-	P	P	-	P	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Microbrewery	-	-	-	-	-	-	-	-	-	C	C	C	C	C	C	C	-	-	-	-	-	-	-
–Research Service	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	-	-	P	P	P	- P	P	-	-	-	-
Marine-Related Industrial	-	-	-	-	-	-	-	-	-	-	-	C	-	-	P	-	~~C~~ P	P	P	-	-	-	P
Warehouse & Freight (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	P	P	C	P	-	-	-	-
–Parcel Service	-	-	-	-	-	-	-	-	-	-	-	P	P	-	-	P	P	C	P	-	-	-	-
Waste-Related Use (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
–Solid Waste Separation, Transfer Station	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
–Recycling Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	C	-	-	-	-
–Wrecking or Salvage Yard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
Wholesale Trade	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	-	-	-	P	P	~~C~~ P	P	-	-	-	-
Heavy Industrial (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-
–Heavy Equipment Sales & Rentals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- C	P	~~C~~ P	P	-	-	-	-
–Service of Heavy Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	P	P	P	-	-	-	-
–Processing of Food & Related Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	~~C~~ P	P	P	-	-	-	-
OTHER																							
Aquaculture Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- P	~~C~~ P	- C	-	-	C	C
Community Gardens	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	C	C	C	C	C	C	C	C	C	C	C	C	-	-
Dock/Moorage Facility (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C
–Docks for Single Family Homes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
– Docks for Single Family Homes on canals within Surfside or Jennings Cove	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C
Navigational Aids	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Telecommunication Facility																							
–Antenna Support Structure	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
–Antenna (on existing structure)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

SECTION 2. The provisions of this Ordinance are declared to be severable and if any section, sentence, clause, or phrase of this Ordinance shall, for any reason, be held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance but shall remain in effect, it being the legislative intent that this Ordinance shall stand notwithstanding the invalidity of any part.

SECTION 3. All ordinances or parts thereof that may be determined to be in conflict herewith are hereby repealed.

SECTION 4. This Ordinance shall be and become effective immediately upon final passage.

APPROVED AS TO FORM & CORRECTNESS:

_____
Peter J. Sweeney
City Attorney

STATE OF FLORIDA

COUNTY OF ST. LUCIE

WE, THE UNDERSIGNED, Mayor Commissioner and the City Clerk of the City of Fort Pierce, Florida, do hereby certify that the foregoing and above Ordinance No. 19-013 was duly advertised by title only in the St. Lucie News Tribune on Sunday, March 17, 2019; copy of said Ordinance was made available at the office of the City Clerk to the public upon request; said Ordinance was duly introduced, read by title only, and passed on first reading by the City Commission of the City of Fort Pierce, Florida, on April 1, 2019; and was duly introduced, read by title only, and passed on second and final reading April 15, 2019, by the City Commission of the City of Fort Pierce, Florida.

IN WITNESS HEREWITH, we hereunto set our hands and affix the Official Seal of the City of Fort Pierce, Florida, this XX day of April, 2019.

_____
Linda Hudson
MAYOR COMMISSIONER

ATTEST

_____
Linda W. Cox
CITY CLERK

(CITY SEAL)

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

TO: Nicholas C. Mimms, PE, City Manager

THROUGH: Rebecca Grohall, AICP, Planning Director

FROM: Rebeca A. Guerra, AICP, LEED-AP, CPD, Assistant Planning Director

RE: Amendment to Chapter 22 - Zoning
Article III – Basic Zoning Districts
Section 22-22 – Allowed Uses

DATE: March 20, 2019

STAFF REPORT

The City of Fort Pierce Planning Department is proposing a Zoning Text Amendment to Article III – Basic Zoning Districts, Section 22-22, Allowed Uses, of the City of Fort Pierce Code of Ordinances to allow some uses identified in the Use Table to be allowed by right, in lieu of needing a Conditional Use approval from City Commission. The Text Amendment would also allow some uses to be allowed with Conditional Use approval instead of being prohibited outright in certain zoning districts.

The purpose of the Text Amendment is to streamline the development process by providing for a broader range of uses to be allowed outright in certain zoning districts where the use itself is appropriate given the characteristics of each district and its location in the City. In particular, commercial and industrial uses have been expanded in such a manner so as to allow for a more streamlined review and development approval process. To this end, there are 44 instances where uses which are now only allowed with a Conditional use, or were prohibited outright, which are now being proposed to be deemed permitted by right. In addition, there are 14 instances where uses which are now prohibited outright are now being proposed to be allowed with Conditional use approval.

In addition to the above changes, the Text Amendment also serves to clarify how permitted and conditional uses are determined for properties in the Edgartown Settlement (ES) Zoning District, the Planned Development Zone (PD), and the Planned Unit Redevelopment Zone (PUR).

These proposed changes have been recommended by the Development Review Task Force as well as the Saint Lucie County Chamber of Commerce.

The Technical Review Committee (TRC) reviewed this item on January 17, 2019. Comments from each department and agency are attached.

At their meeting on February 12, 2019, the Planning Board unanimously voted to recommend approval of the request, as presented.

Staff recommends that the City Commission approve the request.

Attachments:
Proposed text amendment
TRC comments
Draft Ordinance

ZONING DISTRICT	E1	E2	E3	R1	R2	R3	R4	R4A	R5	C1	C2	C3	C4	C5	C6	CP	I1	I2	I3	OS1	OS2	A1	A2
RESIDENTIAL																							
Household Living																							
–Detached House	P	P	P	P	P	P	P	P	C	C	C	-	-	C	-	-	-	-	-	-	C	-	-
–Duplex	-	-	-	-	-	C	P	P	C	C	C	-	-	C	-	-	-	-	-	-	-	-	-
–Townhouse	-	-	-	-	-	C	P	P	P	C	C	-	-	C	-	-	-	-	-	-	-	-	-
–Multi-Dwelling Building	-	-	-	-	-	C	P	P	P	C	C	C	-	C	C	-	-	-	-	-	-	-	-
–Mobile or Manufactured Home	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Manufactured Home Park or Subdivision	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Mobile Home Park	-	-	-	-	-	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Vertical Mixed-Use Building	-	-	-	-	-	-	C	C	P	P	P	P	P	P	P	-	-	-	-	-	-	-	-
Home Occupations (per requirements of Section 22-63)	P	P	P	P	P	P	P	P	P	-	-	-	-	P	-	-	-	-	-	-	-	-	-
Group Living (except as noted below)	-	-	-	-	C	C	C	C	C	C	-	C	C	C	-	-	-	-	-	-	-	-	-
–Community Residential Home, Type 1 (1–6 residents)	P	P	P	P	P	P	P	P	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-
–Community Residential Home, Type 2 (7-14 residents)	-	-	-	-	-	-	C	-	C	C	-	C	C	-	-	-	-	-	-	-	-	-	-
–Dormitories, Fraternity and Sorority Houses	-	-	-	-	-	C	C	C	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PUBLIC AND CIVIC																							
Community/Cultural (except as noted below)	-	-	-	-	C	C	C	C	C	C	C	P	P	C	C	C	-	-	-	C	-	-	-
–Community Center	-	-	-	-	C	C	C	C	C	-	C	P	P	C	-	C	-	-	-	C	-	-	-
–Fraternal Organization/Lodge	-	-	-	-	C	C	C	C	C	-	C	P	P	C	-	C	-	-	-	C	-	-	-
–Library or Cultural Exhibit	-	-	-	-	C	C	C	C	C	-	C	P	P	C	-	C	-	-	-	C	-	-	-
–Environmental Research and Education Facilities	-	-	-	-	-	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Day Care	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Adult Day Care Center	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Day Care Center	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Child Care Facility	-	-	-	-	C	C	C	C	C	C	C	C	-	C	-	-	-	-	-	-	-	-	-
–Family Day Care Home	P	P	P	P	P	P	P	P	P	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Educational Facilities																							
–College or University	-	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	-
–Elementary, Middle or High School	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Marine Research/Education Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		P	-	-	-	C	-
Government Facilities (except as noted below)	-	-	-	-	-	-	-	-	-	C	C	P	P	C	-	C	-	-	-	-	-	C	C
–Post Office	-	-	-	-	-	-	-	-	-	C	C	P	P	-	-	C	-	-	-	-	-	-	-
–Safety Service	C	C	C	C	C	C	C	C	C	P	P	P	P	P	P	P	P	P	P	-	-	C	C
Medical Facilities (except as noted below)	-	-	-	-	C	C	C	-	C	C	-	C	-	C	-	-	-	-	-	-	-	-	-
–Hospital	-	-	-	-	C	C	C	-	C	C	-	C	C	-	-	-	-	-	-	-	-	-	-
–Nursing Home	-	-	-	-	C	C	C	-	C	C	-	C	C	-	-	-	-	-	-	-	-	-	-
Park and Open Space (except as noted below)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	C	C	-
– Cemetery/Columbarium/ Mausoleum	C	C	C	C	C	C	-	-	C	C	C	C	-	-	-	-	-	-	-	C	-	-	-
–Country Club/Golf Course	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	-	-	-	C	-	-	-
–Game and Wildlife Management Preserves	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-
–Water Dependent Recreation Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C
Passenger Terminal																							
–Airport/Heliport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
–Rail/Bus Terminal	-	-	-	-	-	-	-	-	-	C	C	C	C	-	C	C	C	C	C	-	-	-	-
–Bus Shelter	C	C	C	C	C	C	P	P	P	P	P	P	P	P	P	P	P	P	P	-	-	-	-
–Taxi Terminal	-	-	-	-	-	-	-	-	-	C	C	C	C	-	C	C	C	C	C	-	-	-	-
Religious Institution	C	C	C	C	C	C	C	C	C	C	C	P	P	C	-	C	-	-	-	-	-	-	-
Social Service Institution (except as noted below)	-	-	-	-	-	-	-	-	-	C	-	C	C	-	-	-	C	C	-	-	-	-	-
–Halfway Houses	-	-	-	-	-	C	C	C	C	C	-	C	C	-	-	-	C	-	-	-	-	-	-
Utilities																							
–Minor, other	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	P	C	P	C	C	C	C
–Major	-	-	-	-	-	-	-	-	-	-	-	C	C	C	C	C	C	C	P	C	C	C	C
–Utility Cabinets, Above Ground	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	C	C	C	C
COMMERCIAL																							
Eating and Drinking Establishments																							

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Brew Pub	-	-	-	-	-	-	-	-	C	P	~~C~~ P	P	P	P	P	C	C	C	-	-	-	-	-
–Coffee Shop	-	-	-	-	-	-	C	-	C	~~C~~ P	P	P	P	P	P	C	C	C	-	-	-	-	-
–Neighborhood Bistro	-	-	-	-	-	-	-	-	C	~~C~~ P	~~C~~ P	P	P	P	P	C	C	C	-	-	-	-	-
–Neighborhood Café	-	-	-	-	-	-	-	-	C	~~C~~ P	~~C~~ P	P	P	P	P	C	C	C	-	-	-	-	-
–Restaurants, Fast Food	-	-	-	-	-	-	-	-	C	-	-	P	P	P	P	C	C	C	-	-	-	-	-
–Restaurant and Bar	-	-	-	-	-	-	-	-	C	C	C	P	P	P	P	C	C	C	-	C	-	-	C
–Wine/Cigar Bar	-	-	-	-	-	-	-	-	C	C	C	P	P	P	P	C	C	C	-	-	-	-	-
Entertainment, Indoor (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	C	-	-	-
–Adult Establishment	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-
–Arcade Amusement Center/Amusement Arcade	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-
–Bar or Nightclub	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-
–Theater	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-
Entertainment, Outdoor (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	C	-	P	-	-	-	-	-	C	-	-	-
–Batting Cages, Driving Ranges	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	-	-	-	-	-	-	-	-
–Stables or Equestrian Facilities	C	C	C	-	-	-	-	-	-	-	-	P	-	P	-	-	-	-	-	-	-	-	-
–Stadium or Arena	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C	-	C	C	-	-	-	-	-
Marine-Related Commercial (except as noted below)	-	-	-	-	-	-	-	-	-	C	-	P	P	C	P	-	-	C	-	C	-	-	C
–Boat and Marine Equipment Sales	-	-	-	-	-	-	-	-	-	-	-	P	C	C	P	-	-	C	-	-	-	-	-
–Marina/Boat Livery	-	-	-	-	-	-	-	-	-	C	-	C	C	C	C	-	-	P	-	C	-	-	C
Office																							
–Administrative, Professional, General, Medical Office	-	-	-	-	-	-	C	C	C	P	P	P	P	P	P	P	C	C	-	-	-	-	-
–Day Labor Employment Agency	-	-	-	-	-	-	-	-	-	P	C	P	P	-	-	P	-	-	-	-	-	-	-
–Medical and Dental Clinic	-	-	-	-	-	-	-	-	-	P	C	P	P	C	-	P	-	C	-	-	-	-	-
–Television and Radio Studios	-	-	-	-	-	-	-	-	-	P	P	P	P	P	~~C~~ P	P	-	C	-	-	-	-	-
Overnight Accommodations																							
–Bed & Breakfast	-	-	-	-	-	-	C	C	C	~~C~~ P	P	P	P	P	-	-	-	-	-	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
–Dwelling Rental	-	C	C	C	C	C	C	C	C	-	-	-	P	P	-	-	-	-	-	-	-	-	-
–Hotel/Motel	-	-	-	-	-	-	-	-	-	-	-	P	P	P	P	C	-	-	-	-	-	-	-
–Recreational Vehicle Park	-	-	-	-	-	-	-	-	-	-	-	C	-	C	-	-	-	-	-	-	-	-	-
–Resort Hotel	-	-	-	-	-	-	-	-	-	-	-	P	P	P	P	-	-	-	-	-	-	-	-
Parking, Commercial	-	-	-	-	-	-	-	C	-	C	- C	P	C	C	-	C	-	C	-	-	-	-	-
Retail Sales & Service, Sales-Oriented (except as noted below)	-	-	-	-	-	-	-	-	-	- C	- P	P	P	P	- C	C	-	-	-	-	-	-	-
–Art Gallery	-	-	-	-	-	-	-	-	-	C	C	P	P	P	-	C	-	-	-	-	-	-	-
–Farmers Market or Farm Stand	P	-	-	-	-	-	-	-	-	- C	- C	P	P	P	-	C	C	-	-	-	-	-	-
–Grocery or Liquor Store	-	-	-	-	-	-	C	-	C	-	P	P	P	C	-	C	-	-	-	-	-	-	-
–Neighborhood Commercial Sale	-	-	-	-	C	C	P	P	P	-	P	P	P	C	-	C	-	-	-	-	-	-	-
–Office Supplies & Electronics	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	C	-	-	-	-	-	-	-
–Pet Stores	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	C	-	-	-	-	-	-	-
Retail Sales & Service, Personal-Service Oriented (except as noted below)	-	-	-	-	-	-	-	-	-	- C	- C	P	P	P	-	C	-	-	-	-	-	-	-
–Art Studio	-	-	-	-	-	-	-	-	-	- P	- P	P	P	P	-	C	-	-	-	-	-	-	-
–Animal Care Facilities & Service	-	-	-	-	-	-	-	-	-	-	- P	~~C~~ P	-	P	-	C	-	-	-	-	-	-	-
–Animal Grooming Services	-	-	-	-	-	-	-	-	-	-	- P	P	P	P	-	C	-	-	-	-	-	-	-
–Check Cashing/Loan Service	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-	-	-	-	-	-	-	-
–Educational Service Establishments	-	-	-	-	-	-	-	-	C	C	~~C~~ P	P	P	C	P	P	P	C	C	-	-	-	-
–Laundry & Dry Cleaners Pick-Up	-	-	-	-	-	-	C	C	C	C	P	P	P	P	-	C	-	-	-	-	-	-	-
–Laundromat	-	-	-	-	-	-	C	C	C	C	P	P	P	C	-	C	-	-	-	-	-	-	-
–Mortuaries or Funeral Homes	-	-	-	-	-	-	-	-	-	-	-	P	P	-	-	C	-	-	-	-	-	-	-
–Neighborhood Commercial Services	-	-	-	-	C	C	P	P	P	~~C~~ P	P	P	P	P	-	C	-	-	-	-	-	-	-
–Pawn Shop	-	-	-	-	-	-	-	-	-	-	-	P	P	C	-	C	-	-	-	-	-	-	-
–Personal Improvement Service	-	-	-	-	-	-	C	C	C	~~C~~ P	- P	P	P	P	-	C	-	-	-	-	-	-	-
–Veterinary (Without Outdoor Runs)	-	-	-	-	-	-	-	-	-	-	-	P	P	P	-	C	-	-	-	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
Retail Sales & Service, Repair-Oriented	-	-	-	-	-	-	-	P	-	C	-	P	P	P	-	P	-	-	-	-	-	-	-
Self-Service Storage	-	-	-	-	-	-	-	-	-	-	-	C	-	C	C	-	P	-	P	-	-	-	-
Vehicle Sales & Service																							
–Automobile Rentals	-	-	-	-	-	-	-	-	-	-	-	P	C	C	C	C	P	-	P	-	-	-	-
–Automobile Sales	-	-	-	-	-	-	-	-	-	-	-	P	C	C	C	C	P	-	P	-	-	-	-
–Boat Rentals	-	-	-	-	-	-	-	-	-	-	-	P	C	P	C	C	P	-	P	-	-	C	P
–Boat Sales	-	-	-	-	-	-	-	-	-	-	-	P	C	C	C	C	P	-	P	-	-	-	P
–Fueling Station	-	-	-	-	-	-	-	-	-	C	C	P	C	C	-	C	-	P	-	-	-	-	-
–Travel Plaza	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	C	-	-	-	-	-	-	-
–Truck Stop	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	C	-	-	-	-	-	-	-
–Vehicle Repair, General	-	-	-	-	-	-	-	-	-	-	- C	~~C~~ P	C	-	-	C	-	-	-	-	-	-	-
–Vehicle Repair, Limited	-	-	-	-	-	-	-	-	-	-	- C	P	C	-	-	P	-	-	-	-	-	-	-
–Vehicle Storage	-	-	-	-	-	-	-	-	-	-	-	C	-	-	C	-	P	C	P	-	-	-	-
INDUSTRIAL																							
Artisan	-	-	-	-	-	-	-	-	-	-	- C	~~C~~ P	C	-	-	P	P	-	P	-	-	-	-
–Cabinet Shops, Woodworking	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	C	-	C	P	P	-	P	-	-	-	-
Light Industrial Service (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	P	P	-	P	-	-	-	-
–Catering Facility, Large-Scale	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	-	-	-	P	P	-	P	-	-	-	-
–Crematorium	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-	-	-	-	-	-	-
–Building Maintenance Facilities And Services	-	-	-	-	-	-	-	-	-	-	-	C	-	-	C	-	-	-	-	-	-	-	-
–Contractors/Others Performing Services Off-Site	-	-	-	-	-	-	-	-	-	-	- C	~~C~~ P	-	-	-	P	P	-	P	-	-	-	-
–Microbrewery	-	-	-	-	-	-	-	-	-	C	C	C	C	C	C	C	-	-	-	-	-	-	-
–Research Service	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	-	-	P	P	P	- P	P	-	-	-	-
Marine-Related Industrial	-	-	-	-	-	-	-	-	-	-	-	C	-	-	P	-	~~C~~ P	P	P	-	-	-	P
Warehouse & Freight (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	P	P	C	P	-	-	-	-
–Parcel Service	-	-	-	-	-	-	-	-	-	-	-	P	P	-	-	P	P	C	P	-	-	-	-
Waste-Related Use (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
–Solid Waste Separation, Transfer Station	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-
–Recycling Center	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	C	-	-	-	-
–Wrecking or Salvage Yard	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C	C	-	-	-	-

ZONING DISTRICT	E 1	E 2	E 3	R 1	R 2	R 3	R 4	R4 A	R 5	C 1	C 2	C 3	C 4	C 5	C 6	C P	I1	I2	I3	OS 1	OS 2	A 1	A 2
Wholesale Trade	-	-	-	-	-	-	-	-	-	-	-	~~C~~ P	-	-	-	P	P	~~C~~ P	P	-	-	-	-
Heavy Industrial (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	-	-	-	-
–Heavy Equipment Sales & Rentals	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- C	P	~~C~~ P	P	-	-	-	-
–Service of Heavy Equipment	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	P	P	P	-	-	-	-
–Processing of Food & Related Products	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	-	~~C~~ P	P	P	-	-	-	-
OTHER																							
Aquaculture Facilities	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	- P	~~C~~ P	- C	-	-	C	C
Community Gardens	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	~~C~~ P	C	C	C	C	C	C	C	C	C	C	C	C	-	-
Dock/Moorage Facility (except as noted below)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C
–Docks for Single Family Homes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
– Docks for Single Family Homes on canals within Surfside or Jennings Cove	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	C	C
Navigational Aids	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	P	P
Telecommunication Facility																							
–Antenna Support Structure	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
–Antenna (on existing structure)	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

THE SUNRISE CITY
FORT PIERCE
Florida
ENGINEERING
DEPARTMENT

To : Rebeca Guerra, AICP, Assistant Planning Director

From : John R. Andrews, P.E., City Engineer

Re : Chapter 22-22 Text Amendment
Allowed Uses

Date : January 15, 2019

RECEIVED
JAN 17 2019
CITY OF FORT PIERCE
PLANNING & ZONING

This is to advise you that we have completed the review of the following documents as received by this office on January 4, 2019:

- [x] Text Amendment
- [ ] Test Reports & Related Documents
- [ ] Record Drawings
- [ ] Clearances from all applicable Local, State and Federal Agencies
- [ ] P/D Drawings
- [ ] Certificate of Completion
- [ ] Permits from applicable Local, State & Federal Agencies

Based on our reviews and appropriate site final inspection, we

- [x] Recommend
- [ ] Do Not Recommend

- [x] Approval of Amendment
- [ ] Building Permit
- [ ] C/O

Developer, Owner, Engineer, Contractor and other members of the Development Team must be aware, the above recommendation is based only on the construction requirements of the engineering plans and other engineering documentation approved by this department. The Development Team shall be responsible for the compliance with other City department requirements and all approved documents, as well as Local, State and Federal regulations. The development requirements for this project may necessitate additional construction requirements that are not subject to this department's review for approval.

- [ ] See attached for conditions of approval

JRA/jra

Q:\ENGINEERING\Site Development Projects\Miscellaneous\Zoning Text Amendments\Section 22-22\Allowed Uses\Text Amendment Approval - 011519.docx

ST. LUCIE COUNTY FLORIDA

PUBLIC WORKS
ENGINEERING DIVISION
DEVELOPMENT REVIEW
COMMITTEE

January 14, 2019

Project: **Text Amendment Chapter 22 Zoning**
Subject: **SURVEY REVIEW**
To: Rebeca Guerra
From: Rod Reed, PLS
SLC-Engineering Division

I have no comments.

Rod Reed, County Surveyor
St. Lucie County, Fl.
2300 Virginia Avenue
Ft. Pierce, Fl. 34982-5652
www.stlucieco.org
Ph. (772) 462-1721
E-mail reedr@stlucieco.org

ST. LUCIE WORKS

THE SUNRISE CITY
FORT PIERCE
BUILDING DEPARTMENT Florida

BUILDING DEPARTMENT
TECHNICAL REVIEW COMMITTEE (TRC)
COMMENT FORM

Meeting Date: 1.17.19
Property Address: Zoning Text Amendment
Property Name:
Project Name:
Planner: Rebecca Guerra

Please be advised that the project may trigger the requirements indicated below:

☑ 1. Building Official or his representative has no comment at the time of this meeting, but reserves submission of comments upon completion of the official plan review.

☐ 2. Pre-construction meeting with the City's Building Department is requested.

☐ 3. Any construction will need to meet the requirements of the Florida Building Code 6th Edition.

☐ 4. Means of egress is required.

☐ 5. Means of ingress is required.

☐ 6. Must meet the following Accessibility requirements:

- ☐ Accessible route
- ☐ Handicapped parking spaces
- ☐ Means of egress

☐ 7. Change of Use required

- ☐ to include a signed and sealed Life Safety Plan
- ☐ to include a signed and sealed detailed comprehensive building plan.

☐ 8. Property exists in Special Flood Hazard Area. All Federal and State requirements shall be addressed.

☐ 9. Flood Development Permit required.

☐ 10. Building Permit required.

☐ 11. Signed and sealed construction drawings required.

☐ 12. Will need to meet the Fire Code.

☐ 13. Sprinkler system is required.

☐ 14. Smoke alarm system is required.

☐ 15. Other

Additional Comments/Requirements:

Building Official's or Representative's Signature _____ Date: 1/15/19

THE SUNRISE CITY
FORT PIERCE
Florida
POLICE DEPARTMENT
"In Honor We Serve"

Technical Review Committee meeting

January 17th, 2019

Case # 19-99800002

Zoning text amendment, Chapter 22, Admin provisions

Comments:

No comments at this time.

Officer Damian Spotts

Crime Prevention Practitioner

Fort Pierce Police Department.

June 2018



ST. LUCIE COUNTY

DEVELOPMENT REVIEW

TASK FORCE

St. Lucie EDC

ST. LUCIE COUNTY Chamber of Commerce

Building A Better Tomorrow.
TCBA Since 1974
TREASURE COAST BUILDERS ASSOCIATION
MARTIN · ST. LUCIE · INDIAN RIVER · OKEECHOBEE

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St. Lucie EDC

ST. LUCIE COUNTY Chamber of Commerce

Building A Better Tomorrow.
TCBA
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TREASURE COAST BUILDERS ASSOCIATION
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I. INTRODUCTION

In October 2010, St. Lucie County's Economic Development Council and its Chamber of Commerce were asked by St. Lucie County's Administrator and Planning Director to evaluate the county's permitting and development processes for business. At that time, the Development Review Task Force was formed and in May of 2011, the task force shared their findings.

In August 2016, the Economic Development Council (EDC) discovered through meetings with their investors, regulatory processes in the City of Port St. Lucie were often called into question indicating there may be a need to establish a similar group to evaluate the City's permitting process. As a result, the EDC, the Chamber and the Treasure Coast Builders Association (TCBA) reestablished the Development Review Task Force.

Upon hearing of the reassembling of the group, Assistant City Manager Linda Cox, reached out to the Task Force to request an evaluation of the City of Fort Pierce's regulatory/permitting process.

The goal of the Task Force was identified as follows:

> Establish easily recognizable expectations for the benefit of both the applicant and the City's departments; eliminate any misconception, confusion, duplication, or unessential items in an effort to streamline regulatory processes; improve upon the experience for all parties in order to establish a pro-business atmosphere.

The Task Force subsequently met with Ms. Cox and several department heads from the City of Fort Pierce. A monthly meeting time was established and the group would convene to discuss each department individually to go over concerns held by either staff or members of the Task Force. The order was as follows; Planning & Zoning, Building, Fort Pierce Utility Authority, Public Works/ Engineering.

II. SUMMARY OF FINDINGS

A. As meetings progressed, several recommendations universal to the process independent of department were identified. The items listed below are those established by the Task Force to be of upmost importance for all parties and should be deemed imperative to the process.

1. All department policies should be available online to allow applicants the best chance to prepare applications that meet policy and reduce staff review/comment time.
2. All departments must have a defined, mapped and time-lined process for any type of application and these time-lines should be made available online.
3. A centralized system should be established allowing all departments and applicants the ability to track processes and progression in all departments.
4. Design standards must be clearly set forth and available online for all types of projects. Including projects in the CRA and Historic District
5. A position should be established within the city to help applicants navigate the various approval processes in order to better serve the public.
6. Additionally, a similar position at the Fort Pierce Utility Authority should be similarly maintained.
7. The Technical Review Committee (TRC) should serve as the project overview meeting and all departments should have representation at TRC. Input from the county should be submitted in a timeframe that closely matches the city's and their comments should be restricted to matters within their jurisdiction.

III. PLANNING AND ZONING

A. The Task Force recommends thresholds comparable to St. Lucie County thresholds for staff approval of projects be established.

1. Non-Residential site plan projects under 50,000 square feet should be approved by staff without requiring City Commission approval.
2. Residential site plans of 50 units or less should also be approved by staff without requiring City Commission approval..

B. The ability to fast track targeted industries or job creating projects should be established and relevant to the process.

C. The city should establish a voluntary, paid for, pre-application process with fees credited toward any future application fees.

D. A table of allowed uses within each zoning category should be available to the public and online with ITE codes.

E. The preliminary plat approval should be optional.

F. Platting requirements should follow state statute and local requirements eliminated.

G. Under the various zoning categories, an increase of permitted uses should be made in order to reduce the need for conditional use approvals.

IV. BUILDING DEPARTMENT

A. The ability to track the status of all projects among all departments online should be established.

B. The Task Force supports the hiring of a Licensing Investigator.

C. The approximate timeline for all permits should be made public.

D. The ability to apply for and receive a "foundation only" permit is vital to the congruency and timeframe of a project and should be available.

E. The Task Force recommends the hiring of a full-time inspector to increase service capabilities.

F. The availability of fast-tracking and after-hours inspections should be established.

G. A checklist for submittals should be established and available online.

H. Electronic submittal for certain projects should be available.

I. Update per CSR annually.

J. Allow the submittal of civil construction plan separate from the building permit process. These plans can be submitted to the building department, but should be reviewed by the engineering department. This will allow for applicants to begin civil construction while building plans are being developed and/or approved.

V. UTILITIES DEPARTMENT

1. A database that provides services available by address should be established.
2. A map of future use should be established.
3. Concessions for the initiation of economically viable corridors should be established.
4. Establish and maintain an economic development liaison.

TASK FORCE MEMBERS

Terissa Aronson, President/CEO
St. Lucie County Chamber of Commerce
President@StLucieChamber.org

Brad Currie, Vice-President
Engineering, Design & Construction
Bradcurrie@edc-inc.com

W. Lee Dobbins, Vice-President
Dean, Mead, Minton & Zwemer
LDobbins@deanmead.com

Jill Marasa,
Economic Development Council of SLC
jmarasa@youredc.com

Brian Nolan, AICP, Senior Project Manager
Lucido & Associates, PA
BNolan@lucidodesign.com

Rick Ross
rr1853@aol.com

Steve Tarr, Managing Partner
HST Development
Hovenre@gmail.com

Maddie Williams, Executive Director
Treasure Coast Builders Association
maddie@treasurecoasttba.com

St. Lucie EDC

ST. LUCIE COUNTY Chamber of Commerce

Building A Better Tomorrow.
TCBA
Since 1974
TREASURE COAST BUILDERS ASSOCIATION
MARTIN · ST. LUCIE · INDIAN RIVER · OKEECHOBEE

City Commission Regular Meeting **12.c.**

Meeting Date: 04/15/2019

Re: Text Amendment - Chapter 22 - Required Signage

SUBJECT:

Legislative Hearing - Ordinance 19-015 amending Section 22-143(c) creating size, placement, responsibilities, and procedures for required signage for public hearings. SECOND READING

SUMMARY:

The proposed Text Amendment seeks to modify Section 22-143 regarding the posting of signage on any property seeking an amendment of the Zoning Atlas or an application for Conditional Use. Specifically, it is proposing simplify the information listed on the sign itself so as to provide the basic information necessary to the public in order to give notice of a pending application. Additionally, the Text Amendment looks to shift the responsibility of posting the required signage from City Staff to the applicant. The timing requirements for notice by signage set forth in Section 22-143 of City Code are not being changed as part of this amendment.

The signs themselves have been modified as well, changing from metal signs to corrugated plastic signage similarly used by the Code Enforcement Division. This will enable the applicant to post a sign easily by a variety of means so that it may be readily seen by the public from the right-of-way.

The goal of the changes is to streamline the sign installation process.

RECOMMENDATION:

Approval

ALTERNATIVES:

Provide Staff with Alternative text for Amendment
Deny

RESPONSIBLE STAFF:

Rebeca A. Guerra, AICP, LEED-AP, CPD, Assistant Planning Director

COORDINATED WITH:

Technical Review Committee and City Attorney

Fiscal Impact

OTHER INFORMATION:

N/A

Attachments

Draft Ordinance
Staff Report
Proposed Text Amendment
Proposed Signage
TRC Comments
Proof of Publication
Revised Sign Examples

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	03/25/2019 02:56 PM

Form Started By: Rebeca Guerra Started On: 03/19/2019 05:08 PM
Final Approval Date: 04/02/2019

ORDINANCE NO. 19-015

AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA, TO REPEAL CHAPTER 22, ARTICLE X, SECTION 22-143(C) "NOTICE BY SIGNS," TO ADOPT A NEW CHAPTER 22, ARTICLE X, SECTION 22-143(C) "NOTICE BY SIGNS," CREATING SIZE, PLACEMENT, RESPONSIBILITIES, AND PROCEDURES FOR POSTING OF REQUIRED SIGNAGE FOR PUBLIC HEARINGS; PROVIDING FOR A SEVERABILITY CLAUSE; REPEALING ALL ORDINANCES OR PARTS THEREOF IN CONFLICT; PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City Commission of the City of Fort Pierce on June 15, 1981, approved Ordinance H-186 that created Section 22-143, Public Hearings; and

WHEREAS, the intent of Ordinance H-186 was to establish procedures for the timely posting of properties undertaking amendments of the Zoning Atlas or applications for a Conditional Use; and

WHEREAS, signage for public hearings should be designed and placed on the subject property so as to be visible and readable to persons driving or walking by; and

WHEREAS, the timely placement of said signage for public hearings should be the responsibility of the applicant or his/her designated agent; and

WHEREAS, Section 22-143 has been amended from time to time since it was formally adopted on June 15, 1981, under Ordinance H-186; and

WHEREAS, the City of Fort Pierce Planning Board held a public meeting on February 12, 2019, to consider the land development code amendment and recommended approval of the amendment by a vote of 6 to 0; and

NOW, THEREFORE BE IT ORDAINED by the City Commission of the City of Fort Pierce, Florida as follows:

SECTION 1. Section 22-143(C) is hereby amended so that the same shall read as follows:

~~Section 22-143. – Public hearings.~~

~~(c) Notice by signs. After an application has been filed for an amendment of the zoning atlas or an application for conditional use, the department of planning and development shall post a sign or signs on the property concerned at least five (5) days prior to the planning board meeting thereon. The sign or signs shall not be less than ten (10) square feet in size and located where, in the judgment of the department, the sign or signs would be in the most conspicuous place to the passing public. The sign will state that rezoning~~

~~is proposed from one category to another and also the date of the public hearing before the city commission. The sign or signs shall be posted not less than ten (10) days prior to the public hearing. The city will only be responsible for erection of the sign or signs.~~

~~All notice by sign posting shall identify the existing zoning classification, the proposed zoning classification, if applicable, the type of use being requested, and in the date, time and location of the public hearing.~~

Section 22-143. – Public hearings.

(c) Notice by signs. After an application has been filed for an amendment of the Zoning Atlas or an application for Conditional Use, the applicant shall post a sign or signs on the property concerned at least five (5) days prior to the Planning Board meeting thereon. The sign or signs shall not be less than 18 x 24 inches in size as provided by the Planning Department; and located where, in the judgment of the Planning Department, the sign or signs would be in proximity to the subject property and in the most conspicuous place to the passing public. The sign or signs shall be posted not less than ten (10) days prior to the public hearing.

SECTION 2. The provisions of this Ordinance are declared to be severable and if any section, sentence, clause, or phrase of this Ordinance shall, for any reason, be held to be invalid or unconstitutional, such decision shall not affect the validity of the remaining sections, sentences, clauses, and phrases of this Ordinance but shall remain in effect, it being the legislative intent that this Ordinance shall stand notwithstanding the invalidity of any part.

SECTION 3. All ordinances or parts thereof that may be determined to be in conflict herewith are hereby repealed.

SECTION 4. This Ordinance shall be and become effective immediately upon final passage.

APPROVED AS TO FORM & CORRECTNESS:

_____
Peter J. Sweeney
City Attorney

STATE OF FLORIDA

COUNTY OF ST. LUCIE

WE, THE UNDERSIGNED, Mayor Commissioner and the City Clerk of the City of Fort Pierce, Florida, do hereby certify that the foregoing and above Ordinance No. 19-015 was duly advertised by title only in the St. Lucie News Tribune on Sunday, March 17, 2019; copy of said Ordinance was made available at the office of the City Clerk to the public upon request; said Ordinance was duly introduced, read by title only, and passed on first reading by the City Commission of the City of Fort Pierce, Florida, on April 1, 2019; and was duly introduced, read by title only, and passed on second and final reading April 15, 2019, by the City Commission of the City of Fort Pierce, Florida.

IN WITNESS HEREWITH, we hereunto set our hands and affix the Official Seal of the City of Fort Pierce, Florida, this XX day of April, 2019.

_____

Linda Hudson
MAYOR COMMISSIONER

ATTEST

_____

Linda W. Cox
CITY CLERK

(CITY SEAL)

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

TO: Nicholas C. Mimms, PE, City Manager

THROUGH: Rebecca Grohall, AICP, Planning Director

FROM: Rebeca A. Guerra, AICP, LEED-AP, CPD, Assistant Planning Director

RE: Amendment to Chapter 22 - Zoning
Article X – Administrative Provisions
Section 22-143

DATE: March 20, 2019

STAFF REPORT

The proposed Text Amendment seeks to modify Section 22-143 regarding the posting of signage on any property seeking an amendment of the Zoning Atlas or an application for Conditional Use. Specifically, it is proposing simplify the information listed on the sign itself so as to provide the basic information necessary to the public in order to give notice of a pending application. Additionally, the Text Amendment looks to shift the responsibility of posting the required signage from City Staff to the applicant. The timing requirements for notice by signage set forth in Section 22-143 of City Code are not being changed as part of this amendment.

The signs themselves have been modified as well, changing from metal signs to corrugated plastic signage similarly used by the Code Enforcement Division. This will enable the applicant to post a sign easily by a variety of means so that it may be readily seen by the public from the right-of-way.

The Technical Review Committee (TRC) reviewed this item on January 17, 2019. Comments from each department and agency are attached.

At their meeting on February 12, 2019, the Planning Board unanimously voted to recommend approval of the request, with the addition that signage be installed in such a manner so as to be in proximity to the subject property.

Staff recommends that the City Commission approve the request, as modified by the Planning Board.

Attachments:
Proposed text amendment
Proposed signage
TRC comments
Draft Ordinance

Chapter 22 - Zoning

ARTICLE X. - ADMINISTRATIVE PROVISIONS

Sec. 22-143. - Public hearings.

~~(c) Notice by signs. After an application has been filed for an amendment of the zoning atlas or an application for conditional use, the department of planning and development shall post a sign or signs on the property concerned at least five (5) days prior to the planning board meeting thereon. The sign or signs shall not be less than ten (10) square feet in size and located where, in the judgment of the department, the sign or signs would be in the most conspicuous place to the passing public. The sign will state that rezoning is proposed from one category to another and also the date of the public hearing before the city commission. The sign or signs shall be posted not less than ten (10) days prior to the public hearing. The city will only be responsible for erection of the sign or signs.~~

~~All notice by sign posting shall identify the existing zoning classification, the proposed zoning classification, if applicable, the type of use being requested, and in the date, time and location of the public hearing.~~

(c) Notice by signs. After an application has been filed for an amendment of the zoning atlas or an application for conditional use, the applicant shall post a sign or signs on the property concerned at least five (5) days prior to the planning board meeting thereon. The sign or signs shall not be less than 18 x 24 inches in size as provided by the Planning Department; and located where, in the judgment of the Planning Department, the sign or signs would be in proximity to the subject property and in the most conspicuous place to the passing public. The sign or signs shall be posted not less than ten (10) days prior to the public hearing.

REZONING

An application has been received for this property.

For more information:

(772) 467-3737

FORT PIERCE, FL
THE SUNRISE CITY

CONDITIONAL USE

An application has been received for this property.

For more information:

(772) 467-3737

FORT PIERCE, FL
THE SUNRISE CITY

THE SUNRISE CITY
FORT PIERCE
Florida
ENGINEERING
DEPARTMENT

To : Rebeca Guerra, AICP, Assistant Planning Director

From : John R. Andrews, P.E., City Engineer

Re : Chapter 22-143 Text Amendment
Signage

Date : January 15, 2019

RECEIVED
JAN 17 2019
CITY OF FORT PIERCE
PLANNING & ZONING

This is to advise you that we have completed the review of the following documents as received by this office on January 4, 2019:

- [x] Text Amendment
- [ ] Test Reports & Related Documents
- [ ] Record Drawings
- [ ] Clearances from all applicable Local, State and Federal Agencies
- [ ] P/D Drawings
- [ ] Certificate of Completion
- [ ] Permits from applicable Local, State & Federal Agencies

Based on our reviews and appropriate site final inspection, we

- [x] Recommend
- [ ] Do Not Recommend

- [x] Approval of Amendment
- [ ] Building Permit
- [ ] C/O

Developer, Owner, Engineer, Contractor and other members of the Development Team must be aware, the above recommendation is based only on the construction requirements of the engineering plans and other engineering documentation approved by this department. The Development Team shall be responsible for the compliance with other City department requirements and all approved documents, as well as Local, State and Federal regulations. The development requirements for this project may necessitate additional construction requirements that are not subject to this department's review for approval.

- [ ] See attached for conditions of approval

JRA/jra

Q:\ENGINEERING\Site Development Projects\Miscellaneous\Zoning Text Amendments\Section 22-143\Text Amendment Approval - 011519.docx

ST. LUCIE COUNTY FLORIDA

PUBLIC WORKS
ENGINEERING DIVISION
DEVELOPMENT REVIEW
COMMITTEE

January 14, 2019

Project: **Text Amendment Chapter 22 Zoning Article III**
Subject: **SURVEY REVIEW**
To: Rebeca Guerra
From: Rod Reed, PLS
SLC-Engineering Division

I have no comments

Rod Reed, County Surveyor
St. Lucie County, Fl.
2300 Virginia Avenue
Ft. Pierce, Fl. 34982-5652
www.stlucieco.org
Ph. (772) 462-1721
E-mail reedr@stlucieco.org

THE SUNRISE CITY
FORT PIERCE
BUILDING DEPARTMENT Florida

BUILDING DEPARTMENT
TECHNICAL REVIEW COMMITTEE (TRC)
COMMENT FORM

RECEIVED
JAN 17 2019
CITY OF FORT PIERCE
PLANNING & ZONING

Meeting Date: 1.17.19
Property Address: Zoning Text Amendment
Property Name:
Project Name:
Planner: Rebecca Guerra

Please be advised that the project may trigger the requirements indicated below:

☑ 1. Building Official or his representative has no comment at the time of this meeting, but reserves submission of comments upon completion of the official plan review.

☐ 2. Pre-construction meeting with the City's Building Department is requested.

☐ 3. Any construction will need to meet the requirements of the Florida Building Code 6th Edition.

☐ 4. Means of egress is required.

☐ 5. Means of ingress is required.

☐ 6. Must meet the following Accessibility requirements:

- ☐ Accessible route
- ☐ Handicapped parking spaces
- ☐ Means of egress

☐ 7. Change of Use required

- ☐ to include a signed and sealed Life Safety Plan
- ☐ to include a signed and sealed detailed comprehensive building plan.

☐ 8. Property exists in Special Flood Hazard Area. All Federal and State requirements shall be addressed.

☐ 9. Flood Development Permit required.

☐ 10. Building Permit required.

☐ 11. Signed and sealed construction drawings required.

☐ 12. Will need to meet the Fire Code.

☐ 13. Sprinkler system is required.

☐ 14. Smoke alarm system is required.

☐ 15. Other

Additional Comments/Requirements:

Building Official's or Representative's Signature _____ Date: 1/15/19

THE SUNRISE CITY
FORT PIERCE
Florida
POLICE DEPARTMENT
"In Honor We Serve"

Technical Review Committee meeting

January 17th, 2019

Case # 19-99800004

Zoning text amendment, Chapter 22, Admin provisions

Comments:

No comments at this time.

Officer Damian Spotts

Crime Prevention Practitioner

Fort Pierce Police Department.

THE SUNRISE CITY
FORT PIERCE
Florida
PUBLIC WORKS
DEPARTMENT

TO : Rebecca Guerra, Assistant Planning Director

FROM : Mike Reals, Director of Public Works

RE : **TRC PROJECT NUMBER #19-99800004**
TEXT AMMENDMENT TO CHAPTER 22

DATE : February 5, 2019

The Public Works Department is in full support of the proposed text amendment as presented. Public Works responds to the request from Planning with the specific information on where to place the sign, when to place the sign as well as the text to appear on the sign. This process is labor intensive and poses challenges on timely placement when multiple requests are received at one time. The signs are printed and prepared in the compound and then sent out for installation by the sign technician. They are bulky, heavy and cumbersome to install by one person and oftentimes require several trips to the compound before all are installed.

This office respectfully request that the City Commission and Planning Board support the recommendation from staff.

Please contact this office if you have any questions.

cc: Rebecca Grohall, Planning Director

Treasure Coast Newspapers | TCPALM

St. Lucie News-Tribune
1939 SE Federal Highway, Stuart, FL 34994

AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA
COUNTY OF ST. LUCIE

Before the undersigned authority personally appeared, Natalie Zollar, who on oath says that she is Classified Inside Sales Manager of the St. Lucie News-Tribune, a daily newspaper published at Fort Pierce in St. Lucie County, Florida: that the attached copy of advertisement was published in the St. Lucie News-Tribune in the following issues below. Affiant further says that the said St Lucie News-Tribune is a newspaper published in Fort Pierce, in said St. Lucie County, Florida, and that said newspaper has heretofore been continuously published in said St. Lucie County, Florida, daily and distributed in St. Lucie County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid or promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper. The St. Lucie News-Tribune has been entered as Periodical Matter at the Post Offices in Fort Pierce, St. Lucie County, Florida and has been for a period of one year next preceding the first publication of the attached copy of advertisement.

Customer	Ad Number	Copyline	PO #
463454 - CITY OF FORT PIERCE (LEGALS)	2250256	NOTICE OF PUBLIC HEARING	

Pub Dates
March 17, 2019
March 31, 2019

Sworn to and subscribed before me this day of, April 01, 2019, by

Natalie Zollar, who is

Natalie Zollar

(X) personally known to me or

( ) who has produced _____ as identification.

Karol E Kangas

Karol Kangas **Notary Public**

KAROL E KANGAS
Notary Public - State of Florida
Commission # GG 126041
My Comm. Expires Jul 29, 2021
Bonded through National Notary Assn.

STATE BRIEFS

Missing Texas boy found in Florida with dad

SANFORD – A 9-year-old Texas boy missing for more than a year was found safe in Florida with his father.

Sanford police say Joshua Graham was taken from Texas by his father in 2017. Authorities said 52-year-old Kenneth Graham did not have custody of his son and did not tell the boy's mother he was taking him. According to authorities, they located the father and son Saturday while investigating a suspicious vehicle.

The child had been reported missing earlier this week. Police did not say why he was not reported sooner. The boy is under the care of child welfare officials until he can be reunited with his mother.

The Orlando Sentinel reports criminal charges may be forthcoming by Texas officials.

Woman charged with slaying in orange grove

LAKELAND – A Florida woman was charged with first-degree murder after authorities say she shot a 21-year-old in the back of the head as he drove through an orange grove.

Polk County Sheriff's Office Homicide detectives have arrested 28-year-old Heather Tyler with the crime, saying she and Joseph Witherington were hanging out last week and went for a drive. Authorities offered no motive, but said Tyler shot Witherington twice as he drove. Authorities said she then took his wallet and burned her clothes that had his blood on them. She is also charged with witness tampering.

She was booked into the Polk County Jail late Friday. It's unclear if she had an attorney to comment on the charges.

Animal rights attorney testifies in trial

OKLAHOMA CITY – An attorney for the animal rights organization People for the Ethical Treatment of Animal was the first defense witness for a former Oklahoma zookeeper and gubernatorial candidate accused of trying to arrange the killing of a critic who ran an animal sanctuary in Florida.

PETA attorney Brittany Peet testified Friday in the murder-for-hire trial of Joseph Maldonado-Passage, who is also known as "Joe Exotic."

Peet said Maldonado-Passage told her he wanted out of the industry and to become a bartender in Central America as the defense seeks to show he was never serious about trying to arrange the death of Carole Baskin.

Prosecutors say Maldonado-Passage offered $10,000 to an undercover FBI agent to kill Baskin, who had criticized Maldonado-Passage's treatment of animals. Baskin was not harmed.

Maldonado-Passage faces more than 20 years in prison if convicted. The trial is to resume Monday.

Contractor fined $4.6M for SunPass problems

TALLAHASSEE – Florida Transportation officials say they fined a contractor $4.6 million for problems with the state's toll road system last year.

The Florida Department of Transportation announced the fine for Conduent State & Local Solutions in a news release Friday. The agency also replaced its director of toll systems.

FDOT Secretary Kevin Thibault says he wants Florida's Turnpike Enterprise to assess maximum performance penalties allowed under its contract with Conduent.

Conduent won the estimated $600 million contract to take over Florida's SunPass program despite concerns over the New Jersey company's troubled history. Millions of toll transactions got delayed as a result of a billing system upgrade last June. When the transactions finally began to show up, some customers incurred bank overdraft fees as a result.

Gov. Ron DeSantis authorized FDOT to continue waiving fees and penalties.

— *Associated Press*

WILL OR TRUST QUESTIONS?

LEARN THE REASONS WHY YOUR SHOULD COMPLETE OR UPDATE YOUR WILL OR TRUST

SEND FOR FREE INFORMATION ON WILLS AND TRUSTS AND A PERSONAL & FINANCIAL AFFAIRS BOOKLET

THE SALVATION ARMY DOING THE MOST GOOD

Please Send me your FREE, 10 Minute Guide on Wills and Trusts
The Salvation Army, Planned Giving Department
PO Box 270848, Tampa, FL 33688
1-800-758-2769 Ext 25706
E-Mail: FlaPlannedGiving@uss.salvationarmy.org

Name _____
Address _____
City, State, Zip _____
Date(s) of Birth _____
Phone _____

TR-GCI0164791-02 Treasure Coast 3-21-19

CITY OF FORT PIERCE AMENDMENT TO CHAPTER 22 - ZONING

The City Commission of the City of Fort Pierce, Florida, pursuant to Section 22-143 of the Code of Ordinances of the City of Fort Pierce, and Sections 166.041 (3)(a) of the Florida State Statutes, will on Monday, April 1, 2019, and Monday, April 15, 2019, hold Public Hearings on the enactment of the proposed ordinances on first and second readings, respectively, in the City Hall Commission Chambers, 100 North U.S. #1, Fort Pierce, Florida, at their meetings which begin at 6:30 p.m., to consider review and approval of the following:

1) ORDINANCE NO. 19-013 - AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA CHAPTER 22, ARTICLE III, SECTION 22-22, AMENDING THE USE TABLE TO ALLOW CERTAIN COMMERCIAL AND INDUSTRIAL USES TO BE ALLOWED BY RIGHT IN LIEU OF REQUIRING A CONDITIONAL USE APPROVAL; AMENDING THE USE TABLE TO ALLOW CERTAIN COMMERCIAL AND INDUSTRIAL USES TO BE ALLOWED WITH A CONDITIONAL USE APPROVAL IN LIEU OF BEING PROHIBITED OUTRIGHT; AMENDING THE USE TABLE BY CREATING A NEW USE CATEGORY "SERVICE OF HEAVY EQUIPMENT" AND PROVIDING FOR ITS ALLOWANCE IN CERTAIN ZONING DISTRICTS; ESTABLISHING HOW PERMITTED AND CONDITIONAL USES ARE DETERMINED FOR PROPERTIES IN THE EDGARTOWN SETTLEMENT ZONING DISTRICT, THE PLANNED DEVELOPMENT ZONE, AND THE PLANNED UNIT REDEVELOPMENT ZONE; PROVIDING FOR A SEVERABILITY CLAUSE; REPEALING ALL ORDINANCES OR PARTS THEREOF IN CONFLICT; PROVIDING FOR AN EFFECTIVE DATE.

2) ORDINANCE NO. 19-015 - AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA, TO REPEAL CHAPTER 22, ARTICLE X, SECTION 22-143(C) "NOTICE BY SIGNS," TO ADOPT A NEW CHAPTER 22, ARTICLE X, SECTION 22-143(C) "NOTICE BY SIGNS," CREATING SIZE, PLACEMENT, RESPONSIBILITIES, AND PROCEDURES FOR POSTING OF REQUIRED SIGNAGE FOR PUBLIC HEARINGS; PROVIDING FOR A SEVERABILITY CLAUSE; REPEALING ALL ORDINANCES OR PARTS THEREOF IN CONFLICT; PROVIDING FOR AN EFFECTIVE DATE.

3) ORDINANCE NO. 19-016 - AN ORDINANCE AMENDING THE CODE OF ORDINANCES OF THE CITY OF FORT PIERCE, FLORIDA TO REPEAL CHAPTER 22, ARTICLE IV, SECTION 22-58 "SITE PLAN REVIEW;" TO ADOPT A NEW CHAPTER 22, ARTICLE IV, SECTION 22-58 "MAJOR AND MINOR SITE PLAN APPLICATION," ESTABLISHING NEW THRESHOLDS FOR SITE PLAN REVIEWS, CREATING MAJOR AND MINOR SITE PLAN REVIEW CLASSIFICATIONS, ESTABLISHING APPLICATION SUBMITTAL REQUIREMENTS FOR MAJOR SITE PLANS, CLARIFYING REVIEW PROCESSES BY THE TECHNICAL REVIEW COMMITTEE, PLANNING, BOARD AND CITY COMMISSION FOR MAJOR SITE PLANS, AND CREATING A NEW MINOR SITE PLAN REVIEW PROCESS AND ASSOCIATED APPLICATION REQUIREMENTS; TO AMEND THE FOLLOWING SUBSECTIONS OF CHAPTER 22, ARTICLE III, FOR CONSISTENCY WITH NEW THRESHOLDS OF SITE PLAN REVIEWS: SUBSECTION 22-27(C)(1) "MEDIUM DENSITY RESIDENTIAL ZONE (R-4)," SUBSECTION 22-27.1(C)(1) "HUTCHINSON ISLAND MEDIUM DENSITY RESIDENTIAL ZONE (R-4A)," SUBSECTION 22-28(C)(1) "HIGH DENSITY RESIDENTIAL ZONE (R-5)," SUBSECTION 22-29(C)(1) "OFFICE COMMERCIAL ZONE (C-1)," SUBSECTION 22-30(C)(1) "NEIGHBORHOOD COMMERCIAL ZONE (C-2)," SUBSECTION 22-31(C)(1) "GENERAL COMMERCIAL ZONE (C-3)," SUBSECTION 22-32(C)(2) "CENTRAL COMMERCIAL ZONE (C-4)," SUBSECTION 22-33(C)(1) "TOURIST COMMERCIAL ZONE (C-5)," SUBSECTION 22-33.1(C)(1) "MARINE COMMERCIAL ZONE (C-6)," SUBSECTION 22-34(C)(1) "LIGHT INDUSTRIAL ZONE (I-1)," SUBSECTION 22-34.1(C)(1) "HEAVY INDUSTRIAL ZONE (I-3)," SUBSECTION 22-35(D)(1) "MARINE INDUSTRIAL ZONE (I-2)," SUBSECTION 22-35.1(E)(1) "COMMERCIAL PARKWAY ZONE (CP-1)," SUBSECTION 22-36(C)(1) "GENERAL AND RECREATIONAL OPEN SPACE ZONE (OS-1);" PROVIDING FOR A SEVERABILITY CLAUSE; REPEALING ALL ORDINANCES OR PARTS THEREOF IN CONFLICT; PROVIDING FOR AN EFFECTIVE DATE.

All interested parties may appear at the meeting and be heard with respect to the ordinances. Said ordinances will be available for inspection in the City Clerk's Office, City Hall, 100 North U.S. #1, Fort Pierce, Florida.

ANY PERSON SEEKING TO APPEAL THE DECISION OF THE CITY COMMISSION AS TO THE FOREGOING IS ADVISED THAT A RECORD OF PROCEEDINGS IS REQUIRED IN ANY SUCH APPEAL AND THAT SUCH PERSON MAY NEED TO INSURE THAT A VERBATIM RECORD OF PROCEEDINGS IS MADE INCLUDING THE TESTIMONY AND EVIDENCE UPON WHICH THE APPEAL IS TO BE BASED.

In accordance with the Americans with Disabilities Act and Section 286.26, Florida Statutes, persons with disabilities needing special accommodation to participate in this meeting should contact the City Clerk's Office at (772) 467-3065 at least 48 hours prior to the meeting. TR-2259286

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For more information:

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City Commission Regular Meeting **13.a.**

Meeting Date: 04/15/2019

Re: Resolution No. 19-R15 - Board of Examiners of Contractors Rules of Procedure

Submitted For: Paul Thomas, Building Official, Building

SUBJECT:

Resolution No. 19-R15 - Adopting Revised City of Fort Pierce Board of Examiners of Contractors Rules of Procedure.

SUMMARY:

In accordance with Ordinance 18-035 amending rules, duties and procedures as adopted in Chapter 5, Article II of the Code of Ordinances entitled "Contractors," the Rules and Procedures were amended as approved by the Board on March 12, 2019. Any such amendment to the Rules of Procedure shall not be effective unless or until subsequently ratified or approved by the City Commission.

RECOMMENDATION:

Staff recommends approval of Resolution No. 19-R15 - Adopting amended City of Fort Pierce Board of Examiners of Contractors Rules of Procedure.

ALTERNATIVES:

Do not approve the Resolution at this time.

RESPONSIBLE STAFF:

Paul Thomas, CBO, CFM, Building Official

COORDINATED WITH:

Shaun Coss, CFM, Building Department Coordinator

Fiscal Impact

OTHER INFORMATION:

None at this time.

Attachments

19-R15

BEC Rules of Procedure

Form Review

Inbox	Reviewed By	Date
Building	Paul Thomas	04/01/2019 08:29 AM
City Manager	Nick Mimms	04/09/2019 05:42 PM
Form Started By: Karen Murphy		Started On: 03/26/2019 12:56 PM

Final Approval Date: 04/09/2019

RESOLUTION NO. 19-R15

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF FORT PIERCE, FLORIDA; ADOPTING REVISED CITY OF FORT PIERCE **BOARD OF EXAMINERS OF CONTRACTORS RULES OF PROCEDURE**; and PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the City Commission of the City of Fort Pierce, Florida adopted Resolution No. 06-34 providing for Rules of Procedure for the Board of Examiners of Contractors regarding disciplinary matters on June 6, 2006; and

WHEREAS, the City Commission of the City of Fort Pierce, Florida adopted Resolution No. 12-38 providing for Rules of Procedure for the Board of Examiners of Contractors regarding actions against unlicensed contractors on July 16, 2012; and

WHEREAS, the City Commission of the City of Fort Pierce, Florida adopted Ordinance 18-035 thereby amending rules, duties and procedures as adopted in Chapter 5, Article II of the Code of Ordinances entitled "Contractors"; and

WHEREAS, on March 12, 2019, the City of Fort Pierce, Florida, Board of Examiners of Contractors approved the amended Rules of Procedure attached herein; and

NOW THEREFORE, BE IT RESOLVED by the City Commission of the City of Fort Pierce, Florida as follows:

The Rules of Procedure for the City of Fort Pierce, Florida, Board of Examiners of Contractors previously adopted by Resolution No. 06-34 and Resolution No. 12-38 are hereby repealed and replaced as set forth herein; a copy of the Rules of Procedure shall be made part of this Resolution.

BE IT FURTHER RESOLVED that this Resolution shall become effective upon adoption.

IN WITNESS WHEREOF, this Resolution has been duly adopted this 15th day of April, 2019.

_____
Linda Hudson, Mayor Commissioner

ATTEST:

_____
Linda W. Cox, City Clerk

(SEAL)

APPROVED AS TO FORM
AND CORRECTNESS

_____
Peter J. Sweeney, City Attorney

Rules of Procedure

FORT PIERCE
BOARD OF EXAMINERS OF CONTRACTORS

City of Fort Pierce, Florida

Adopted by Resolution 19-R56

April 15, 2019

Prepared by:
Office of the City Attorney
Post Office Box 1480
Fort Pierce, FL 34954-1480

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RULES OF PROCEDURE
for
FORT PIERCE BOARD OF EXAMINERS OF CONTRACTORS

Rule 1. **Scope and Interpretation**

These rules apply to all disciplinary proceedings involving the holder of a contractor's certificate of competency issued pursuant to the provisions of Chapter 5, Article II of the Code of Ordinance of the City of Fort Pierce, Florida and contractor certified by the State of Florida (the Florida Construction Industry Licensing Board, the Florida electrical Contractor's Licensing Board, or the Florida Department of Professional Regulation). These rules shall be construed and interpreted so as to be consistent with state law and local ordinances.

These rules do not apply to disciplinary proceedings involving unlicensed contractors; specialty contractors whose certificate of competency has not been renewed within 12 months of the renewal date pursuant to Chapter 5, Article II, Section 5-35(B); or, citations issued pursuant to City Ordinance Chapter 5, Article II, Section 5-53. These matters will be heard by the Special Magistrate.

Rule 2. **Definitions**

Wherever used in these rules, the following words or terms shall have the meaning set forth unless the use thereof shall clearly indicate a different meaning:

(a) **"Board"** shall mean the Board of Examiners of Contractors provided for in Chapter 5, Article II of the Code of Ordinances of the City of Fort Pierce, Florida.

(b) **"Building Official"** shall mean the chief administrator of the department responsible for administration of Chapter 5 of the Code of Ordinances of the City of Fort Pierce, Florida or employees of the City who administer Chapter 5 of the Code of Ordinances of the City of Fort Pierce, Florida subject to the direction and supervision of such department's chief administrator.

(c) **"Code"** shall mean the Code of Ordinances of the City of Fort Pierce, Florida.

(d) **"Complainant"** or "**complaining witness**" shall mean any person who has complained to any officer or agency of the City of Fort Pierce, Florida of the conduct of a contractor.

(e) **"Contractor"** shall mean the holder of a contractor's certificate of competency issued pursuant to the provisions of Chapter 5, Article II of the Code or a contractor certified by the State of Florida.

(f) **"Department"** shall mean the City of Fort Pierce department responsible for administration of Chapter 5 (Buildings and Building Regulations) of the Code, such department being presently known as the Department of Building or as such department may be hereafter renamed.

(g) **"Respondent**" shall mean a contractor who is accused of misconduct or whose conduct is under investigation.

(h) Other terms not herein defined shall have the meaning expressly given to them through definition by Chapter 5 and other chapters of the Code. In the event a term is not expressly defined as aforesaid, such terms shall be given the meaning accorded through normal, customary usage.

Rule 3. **Jurisdiction**

The Board shall have jurisdiction over disciplinary matters involving a contractor pursuant to §§ 5-50 – 5-52 of the Code of Ordinances of the City of Fort Pierce.

Rule 4. **Officers**

(a) **Chair.** The Chair shall preside at all meetings and hearings of the Board, shall have the duties normally conferred by parliamentary usage on such officers, and shall sign all orders as may be adjudicated and/or authorized by the Board.

(b) **Vice Chair.** The Vice Chair shall act in the absence or disqualification of the Chair and, in such an event, shall exercise or perform all duties and be subject to all responsibilities of the Chair, including signing orders as may be adjudicated and/or authorized by the Board in the absence of the Chair. In the absence or disqualification of the Chair and the Vice Chair, a majority of the Board members present may designate a temporary Chair to serve in such absence.

(c) **Secretary**. The director of the Department, or his designee, shall serve as the secretary of the Board. The Secretary shall maintain a record of Board proceedings, maintain all records pursuant to those proceedings, prepare and deliver meeting agendas, and, in general, serve as the liaison between the Board and the City of Fort Pierce and perform those duties more specifically provided in these rules.

(d) **Board Attorney.** The Office of the City Attorney of the City of Fort Pierce, Florida shall provide counsel for the Board to serve as a legal advisor.

Rule 5. **Standards of Conduct**

(a) **Notice and Knowledge of Code.** Every contractor who contracts within the jurisdiction of the City of Fort Pierce, Florida, is within the jurisdiction of the City of

Fort Pierce, Florida and its agencies and is charged with notice and held to know the standards of conduct prescribed by the Code and state law.

(b) **Rules of Conduct.** Violations of the Rules of Conduct as prescribed by Chapter 5, Article II of the Code and state law is a cause for discipline.

Rule 6. **Complaint Processing and Initial Procedures**

(a) **Complaint.** Any person, including, but not limited to, the director of the Department, may refer charges against a contractor. Such charges shall be made in writing and sworn to by the complainant or complaining witness and submitted to the building official. The building official shall mail a copy of such charges to the Respondent within 15 days from the receipt thereof, and the Respondent may submit a written response to the complaint within 15 days after the service to the Respondent of the complaint.

(b) **Processing of Complaint.** The complaint shall be referred to the Board for hearing thereon, and the Respondent and the complainant shall be notified of such hearing.

Rule 7. **Board Proceedings**

(a) **Proceedings.** The proceeding shall be an adversarial proceeding that shall be conducted as hereinafter set forth.

(b) **Nature of Proceedings**. A disciplinary proceeding is neither civil nor criminal in nature but is considered a quasi-judicial administrative proceeding.

(c) **Style of Proceedings.** All such disciplinary proceedings before the Board shall be styled "(name of complainant), Complainant v. (name of Respondent), Respondent," and "Before the Fort Pierce Board of Examiners of Contractors."

(d) **Hearing Notices.**

(1) **Initial Notification.** The complaint may be set for hearing by the Board and/or the Department upon not less than 15 days' notice thereof to the Respondent. The Department shall provide such notice of hearing to the Respondent by certified mail, return receipt requested, or by hand-delivery by a law enforcement officer or the building official, or by leaving the notice at the Respondent's usual place of business or usual place of residence. Such notice shall include this highlighted statement: **"A copy of the Rules of Procedure for Disciplinary Matters for the Fort Pierce Board of Examiners of Contractors may be obtained upon request from the Department of Building and Code Enforcement."**

(2) **Subsequent Proceedings**. Notification of subsequent proceedings provided by these rules shall be by regular mail, at least 7 days in advance of the date such subsequent proceedings are to be held before the Board.

(e) **Subpoenas.**

(1) Subpoenas for testimony before the Board may be issued by the Secretary upon the request of the Department or by any attorney of record for and on behalf of the Respondent. Every subpoena shall issue under seal of the City of Fort Pierce, Florida, shall state the action, and shall command each person to whom it is directed to attend and give testimony at a time and place therein specified.

(2) On oral request of the Department or any attorney of record for and on behalf of a Respondent, the Secretary shall issue a subpoena for testimony before the Board, sealed but otherwise in blank except as described above, and the subpoena shall be filled in before service by the Department or attorney.

(f) **Continuances.**

In the event there are circumstances constituting good cause for the Respondent to seek a continuance or a postponement of a hearing, the Respondent may file a written request for a continuance or postponement with the Department. Such request must be made within a reasonable time following the date the Respondent became aware of the circumstances which formed the basis of the request, and such request must specify the circumstances justifying the request with particularity.

The Respondent shall be provided with notice that the hearing shall proceed as originally scheduled, provided, however, that at the commencement of said hearing, the Board shall determine whether there is good cause for the request and whether such good cause, if any, outweighs the public interest, if any, in allowing the hearing to proceed as originally scheduled; and such request will then be either granted or denied by the Board. If such request is granted by the Board, then the Department shall cause the hearing to be rescheduled, and if such request is denied by the Board, then the hearing shall proceed as originally scheduled.

(g) **Hearings.**

(1) **Conduct of Proceedings.** Generally accepted parliamentary procedures shall apply and prevail at hearings before the Board except as may otherwise be provided for in these rules. The proceedings before the Board may be informal in nature and the Board shall not be bound by the rules of evidence. The Board shall be entitled to rely on such evidence as is regularly relied upon in the ordinary course of the conduct of business.

(2) **The Record**. Minutes shall be kept of all hearings before the Board by the Secretary, who shall record all testimony. The record shall include all items properly filed in the cause, including pleadings, recorded testimony, if transcribed, exhibits and evidence, and the finding and rulings of the Board.

(3) **Order of Presentation.**
If the Respondent admits to the alleged charges, the Board may immediately make a finding of guilt without further testimony, and if the Respondent fails to appear at the hearing, the Board may make its determination based upon the

sworn complaint, items properly filed in the cause, exhibits received in evidence, and any testimony presented.

If the Respondent contests the alleged charges, the Chair shall call upon the Department or the complainant to present evidence in support of the charges. The Respondent may then present evidence in opposition to the charges, including being allowed to testify and to present evidence and other witnesses on the Respondent's behalf. The Respondent may be accompanied by counsel and shall be given the opportunity to make a statement, personally or by counsel, verbally or in writing, sworn or unsworn, explaining, refuting, or admitting the alleged charges. Both sides shall have a right of cross examination, subject to reasonable limitation.

The Board may question any witness or call any witness believed necessary. Any member of the public having direct knowledge of the facts of the case and desiring to testify may be recognized by the Chair as appropriate, but is encouraged to first discuss such testimonial contribution with the party on whose behalf it is tendered.

The Board may, in an exercise of reasonable discretion, continue a hearing in the interest of justice should there be a determination that further information is necessary from either party, whereupon there shall be declared a date certain for continuation of the proceeding or notice thereof.

The Chair may act to exclude irrelevant, immaterial or unduly repetitious evidence but all other evidence of a type commonly relied upon by reasonably prudent persons in the conduct of their affairs shall be admissible, whether or not such evidence would be admissible in a trial of the courts of the State of Florida. Motions shall be ruled upon by the Board, and objections shall be ruled upon by the Chair. Upon presentation of all evidence, the hearing shall be closed.

(4) **Rights and Responsibilities of the Respondent.** The Respondent may be required to testify and to produce evidence as any other witness unless the Respondent claims a privilege or right properly available to the Respondent under applicable federal or state law. The Respondent may be accompanied by counsel. At a reasonable time before any finding of probable cause or misconduct is made, the Respondent shall be advised of the conduct that is being investigated and the alleged charges. The Respondent shall be provided with all materials considered by the Board and shall be given an opportunity to make a written statement, sworn or unsworn, explaining, refuting, or admitting the alleged misconduct.

(5) **Rights of the Complainant.** During the hearing, unless it is found to be impractical by the Chair due to unreasonable delay or other good cause, if the complainant or complaining witness is present at the hearing before the Board, he/she is permitted to present evidence and or testimony regarding the complaint at any Board hearing when evidence is to be presented, subject to reasonable limitation. Neither unwillingness nor neglect of the complaining

witness to cooperate, nor a settlement, compromise, or restitution, will excuse the disposition of the alleged charges by the Board.

(6) **Disposition of Charges.** Upon conclusion of the hearing, the Board shall make a determination. First, the Board shall determine whether the Respondent is guilty or not guilty of the alleged misconduct. If the Respondent is found to be guilty of the alleged misconduct by the Board, the Board shall thereupon enter its findings, an order of guilt and determine the proper disciplinary action to be imposed upon the Respondent by motion. The Board's ruling shall be reduced to writing and mailed to the Respondent and to any other person or entity directed by the Board.

Deliberations of the Board on any complaint shall be conducted in open session immediately following the hearing. Although the hearings and proceedings before the Board shall be open to the public, such members of the public may not participate in or address the Board during deliberations unless specifically allowed by the Chair.

(7) **Quorum and Voting.** No fewer than six (6) members of the Board shall constitute a quorum. All findings of guilt and recommendations of discipline shall be by affirmative vote of a majority of the Board members present, which majority must number at least four (4) members.

Voting on the disposition of complaints shall be either a voice vote or roll call vote except that, in the event the vote is less than unanimous, then, in order to preserve clarity in the record, the Chair shall conduct the vote by roll call.

Procedures involving a voting conflict for a member of the Board shall be governed by applicable Florida law, including §112.3143, Florida Statutes.

Pursuant to §286.012, Florida Statutes, no member of the Board who is present at a hearing may abstain from voting on any matter to be taken or adopted by the Board except when, with respect to any such member, this is, or appears to be, a possible conflict of interest under the provisions of §112.3143, Florida Statutes.

Rule 8. **Rehearings**

Within ten (10) days of the date the Board's written order is mailed to the Respondent, the Respondent may file with the Department a written request for the rehearing. The request shall include a description of new evidence or circumstances not presented or considered at the original hearing and should also state why any such new information was not presented at the original hearing. The Department shall schedule the request for rehearing by the Board at its next regular meeting, with notice to the Respondent. No such request shall stay the term of any order entered by the Board, except as otherwise provided for in these rules or in the Code.

Rule 9. **Appeals and Stays**

(a) **Appeals.** Any decision of the Board imposing disciplinary action on a Respondent may be appealed by the Respondent to the City Commission within 15 days of the date of the Board's decision; provided, however, a written notice of such appeal shall be filed with the City Clerk within such a period of time. The City Clerk shall notify all interested parties of the date fixed for hearing the appeal, which dates shall be not less than 30 days after the date of the filing of the notice of appeal. The hearing on appeal shall be, to the extent possible, upon the record and shall not be a hearing de novo. The City Commission shall review the transcript of the hearing before the Board together with any tangible evidence considered by the Board that determined its decision. The City Commission may also entertain any additional testimony or evidence offered by the Respondent or other interested party that was not brought out at the Board hearing.

(b) **Stays.** Any decision of the Board imposing disciplinary action upon a Respondent, other than revocation, which has been appealed by the Respondent shall be automatically stayed upon receipt of the written notice of appeal by the City Clerk.

Rule 10. **Amendments**

These rules may be amended by the Board upon motion of any Board member, provided, however, that any such amendment shall not be effective unless or until subsequently ratified or approved by the City Commission.

City Commission Regular Meeting **13.b.**

Meeting Date: 04/15/2019

Re: Surtax Committee

Submitted For: Linda Cox, City Clerk, City Clerk

SUBJECT:

Resolution 19-R17 appointing members to serve on the Fort Pierce Infrastructure Surtax Citizen Oversight Committee.

SUMMARY:

The Commission adopted Resolution 19-R06 establishing the Fort Pierce Infrastructure Surtax Citizen Oversight Committee for which each commissioner shall appoint a member and two additional members will serve at large. The attached applications are what we have received to date.

RECOMMENDATION:

Commissioners to name their appointees and continue seeking volunteers.

ALTERNATIVES:

Proceed as directed.

RESPONSIBLE STAFF:

Linda W. Cox, City Clerk

COORDINATED WITH:

Jack Andrews, City Engineer

Fiscal Impact

OTHER INFORMATION:

No fiscal impact.

Attachments

19-R17
Noelke - Johnson Appointee
Davis Liverpool - Hudson Appointee
Davis Liverpool App - Hudson Appointee
Burdge - At Large Applicant
Harding - At Large Applicant
Hayling - At Large Applicant
Johnson - At Large Applicant
Establishing Resolution

Form Review

Inbox	Reviewed By	Date
City Manager	Nick Mimms	03/26/2019 08:15 AM

Form Started By: Linda Cox
Started On: 03/20/2019 05:52 PM
Final Approval Date: 04/02/2019

RESOLUTION NO. 19-R17

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF FORT PIERCE, FLORIDA, **CERTIFYING THE APPOINTMENT OF MEMBERS TO THE INFRASTRUCTURE SURTAX CITIZEN OVERSIGHT COMMITTEE;;** PROVIDING FOR AN EFFECTIVE DATE.

BE IT RESOLVED By the City Commission of the City of Fort Pierce, Florida, that the following be and are hereby appointed by the City Commission to serve as members of the Infrastructure Surtax Citizen Oversight Committee; which was established via Resolution No. 19-R06; said terms to commence upon adoption of this resolution and to expire as indicated below, or when a successor has been duly appointed.

Name	Appointed by:	Term Expires
_____	Commissioner Alexander	December 3, 2022
Daniel Noelke	Commissioner Johnson	December 4, 2020
_____	Commissioner Perona	December 3, 2022
_____	Commissioner Sessions	December 4, 2020
Pearl M. Davis Liverpool	Mayor Hudson	December 4, 2020
_____	At-Large	April 14, 2023
_____	At-Large	April 14, 2023

BE IT FURTHER RESOLVED that this Resolution shall become effective upon adoption.

IN WITNESS WHEREOF, this Resolution has been duly adopted this 15th day of April, 2019.

_____
LINDA HUDSON, MAYOR COMMISSIONER

ATTEST:

_____
LINDA W. COX, CITY CLERK

(CITY SEAL)

APPROVED AS TO FORM
AND CORRECTNESS:

_____
PETER J. SWEENEY
CITY ATTORNEY

CITY OF FORT PIERCE

100 NORTH US HWY 1
FORT PIERCE, FLORIDA 34950
(772) 467-3065 fax (772) 467-3841

APPLICATION FOR APPOINTMENT/REAPPOINTMENT

Name of Board or Boards for which you are applying: Infrastructure Surtax Citzens Oversight Committee

Name: Daniel Noelke	Phone: 772-332-7262
Home Address: City/Zip Code: 1605 Wyoming Av, Fort Pierce 34982	How long at this address? 5 months
Are you a citizen of the United States? ☑ Yes ☐ No	
Occupation: Insurance Agent	
Do you own a business that operates within the City of Fort Pierce? ☐ Yes ☑ No If yes, list the address and nature of said business:	
Do you now or in the future plan to do business with the City of Fort Pierce? ☐ Yes ☑ No If yes, in what capacity?	
Are you employed by a business that is located within the City of Fort Pierce? ☐ Yes ☑ No If yes, state the business and location:	
Do you have special training or knowledge in the area of: Architecture: ☐ Yes ☑ No Engineering: ☐ Yes ☑ No Real Estate Brokering: ☐ Yes ☑ No Contracting: ☐ Yes ☑ No Land Development: ☐ Yes ☑ No Other: Describe your education, background, training and knowledge – (feel free to attach a resume): Bachelors degree in Political Science, been a licensed insurance agent with Florida Farm Bureau since 2008, prior to that spent 7 years as a fundraiser for Non-Profits on the Treasure Coast.	
Are you currently a member of a Commission-appointed board/committee? ☐ Yes ☑ No If yes, please specify:	
Have you ever been convicted of a felony? ☐ Yes ☑ No If yes, what was the nature of the crime(s) you were convicted of:	
Referred by: Jeremiah Johnson	Applicant Email Address: dannynoelke@me.com
Date: 01/17/2019	Applicant's Signature

APPLICATIONS EXPIRE 6 MONTHS FROM THE DATE OF SUBMISSION. PLEASE REAPPLY AS OFTEN AS DESIRED.
Please return form to: City Clerk's Office – 100 North US Hwy 1, Fort Pierce, Florida 34950
fax (772) 467-3841 or via email at lcox@city-ftpierce.com

Pearl Matthews Davis (Liverpool)

Pearl Matthews Liverpool, a native of Fort Pierce was born as the ninth child to Charlie & Ethel Matthews. She is a retired well-established financial institution executive with over 30 years of diversified asset management and bank operations experience. She served her country as a regulatory agent with the Federal Deposit Insurance Corporation (FDIC) and Resolution Trust Corporation for 15 years with the objective to restore solvency and provide stability to the United States banking system. After serving as Managing Agent/CEO of several banks was appointed to serve as Regional Director. As the appointed Regional Director of the Office of Field Receivership Conservatorship Asset Management she managed the assets of 40+ controlled savings & loans in eight states during the S&L crisis. This role required working in conjunction with the Department of Justice while identifying waste, fraud, and abuse, liquidating less desirable assets, managing remaining assets, controlling expenditures, packaging and selling the banks to healthier financial institutions as going concerns. During her tour of duties she notes her greatest accomplishment to be the preservation of one of the few African American owned and operated financial Institutions in the country, Tuskegee Federal Savings & Loan.

Later, after being away for 20 years, she returned to Fort Pierce to assist with the care of her elderly parents and shared her knowledge, expertise, and exposure to enhance the success of our local community financial institutions. She performed as Vice President, Corporate Loan Review Manager, at Harbor Federal Savings & Loan. Harbor Federal sold to National City at a premium and later became PNC Bank.

After providing independent contract serves to Seacoast National Bank was asked to join the organization to serve as Senior Vice President, Credit Risk Review Manager and reform the credit risk program. Her role required being in touch with the market and providing insight to the Board of Directors as to how market conditions will affect the bank's assets. Such encompass' planning, researching, monitoring, and providing oversight of financial analysis while assessing risk ratings on the credit related assets to guide the provision for potential losses. During her tenure the bank has grown from being a $2.5B financial institution to $7B in quality assets. Seacoast stock has gone from $3 per share to $32 per share during her tenure that ended in 2018.

Community Related Accomplishments are as follows:

- During the 2008 Presidential Election coordinated with the local jail and arranged for those retained without conviction to have the opportunity to exercise their right to vote. That practice continues to date through the Supervisor of Elections Office.

- During the 2008 Presidential Election established an operation with the International Longshoremen Association, Mount Bethel Ministries, volunteering attorneys, researchers, and the National Civil Liberties Association (NCLA) to restore eligible individual's civil rights and create awareness for those who erroneously assumed their rights were lost. Over 100 individual rights were restored through that initiative.

- Annually provides etiquette classes for the Alpha Phi Alpha fraternity cadets "Men of Tomorrow".

- In 2016, with the approval of the City of Fort Pierce Beautification Board initiated the Adopt a Road Program within the City of Fort Pierce.

- Recipient of the 2017 African American Diaspora Award recognizing professional excellence and community service.

Pearl serves on the City of Fort Pierce Civil Appeals Board (alternate), Power of Parenting Board, and The River of Life Fellowship Board. As well, is a member of the Restoring the Village Planning Committee.

She enjoys living, loving, and laughing!

CITY OF FORT PIERCE

100 NORTH US HWY 1
FORT PIERCE, FLORIDA 34950
(772) 467-3065 FAX (772) 467-3841

RECEIVED
AUG 02 2018
CITY CLERK'S OFFICE

APPLICATION FOR APPOINTMENT/REAPPOINTMENT TO FPUA

(City Residency Required)

Name: **Pearl M. Davis**	Phone: **772-240-2328**
Home Address: **2006 Avenue Q** City/Zip Code: **Fort Pierce / 34950**	How long at this address? **12 Yrs.**
Are you a qualified elector of the City of Fort Pierce? X Yes ☐ No	
Occupation: **Retired**	Employer Name: **N/A**
Do you own a business that operates within the City of Fort Pierce? ☐ Yes **X** No If yes, list the address and nature of said business: **N/A**	
Do you now or in the future plan to do business with or have a business relationship with FPUA? X Yes ☐ No If yes, please describe in detail outlining any businesses or matters deemed appropriate. **I am currently a customer via owner occupied residential utilities services**	
Describe your professional background and what expertise you will bring to the FPUA Board. Feel free to attach your curriculum vitae (CV) or other applicable information. **I am a former regulatory agent for the Federal Deposit Insurance Corporation (FDIC) and credit risk manager for local financial institutions (Harbor Fed. S&L and Seacoast Bank).** ****See professional and personal Bio-sketches attached hereto**	
Do you have special training or knowledge in any of the following areas: Utilities: ☐ Yes ☐ No Engineering: ☐ Yes ☐ No Contracting/Development: X Yes ☐ No Legal: ☐ Yes ☐ No Management: X Yes ☐ No Finance/Accounting: X Yes ☐ No Describe your education and background in any of the above areas: **As the Regional Director for the Resolution Trust Corporation (RTC), the FDIC, and Seacoast Bank I negotiated contracts with a variety of entities for professional services. I managed a team of 200 (+/-) bankers i.e. Managing Agents, Chief Credit Specialist, and Chief Financial Officers during the S&L crisis, a staff of Credit Risk Officers during my banking careers. A component of the responsibilities encompassed financial statement analysis and budget management.**	
Are you currently a member of a Commission-appointed board or committee? X Yes ☐ No If yes, please specify: **I am an alternate for the City of Fort Pierce Civil Appeals Board**	
Have you ever been convicted of a felony? ☐ Yes X No If yes, what was the nature of the crime(s) you were convicted of: **N/A**	
If appointed, are you willing to attend a training session which could last at least 5 hours? X Yes ☐ No	
Referred by: **Mayor, Linda Hudson**	Applicant Email Address: **davisp7@aol.com**
Date: **08/02/2018**	Applicant's Signature: Pearl M. Davis

APPLICATIONS EXPIRE 6 MONTHS FROM THE DATE OF SUBMISSION. PLEASE REAPPLY AS OFTEN AS DESIRED.
Please return form to: City Clerk's Office – 100 North US Hwy 1, Fort Pierce, Florida 34950
fax (772) 467-3841 or via email at lcox@city-ftpierce.com

PEARL M. DAVIS

Pearl M. Davis is a retired financial institution executive with over 30 years of diversified asset management and bank operations experience. Professional fortes are noted as strong strategic, analytical, organization, risk management and human relations skills.

Seacoast Bank- $4.5 B-Credit Risk Review Manager- Senior Vice President
Independently managed the Credit Risk Department and provided oversight of professional contractor's performance. Responsibilities entailed researching all industries within the marketplace, planning, monitoring, assessing, and managing all aspects of the bank's credit risk review program. The position reports to the Board of Director's and Chief Audit Executive.
December 2007- March 2018

Seacoast National Bank $2.5B- Loan Reviewer- Independent Contractor
Assessed the risk ratings and anticipated allowance for loss for commercial loans held by the financial institution. The position reported to the Board of Directors and President.
May 2007- December 2007

Harbor Fed. Savings Bank- Corporate Loan Risk Review Manager- Vice President
Independently assessed the risk ratings and anticipated allowance for loss on commercial loans held by the financial institution. Regulatory liaison regarding credit related matters. Position reported to the Board of Directors.
March 2001 – March 2007

Coldwell Bankers Realtors- Residential Real Estate Agent in the Atlanta Metro area.

Resolution Trust Corp. (FDIC/RTC)Federal S&L Regulatory Agency - 1989 - 1996

- **Regional Director, Office of Field Receivership Conservatorship Asset Management (OFRCAM)** - Managed the assets of 40+ on–going/controlled savings & loans within the SE region (8 states) of the U.S. with an agency staff of 200 (+/-) and bank staff to restore solvency and provide stability to the banking system. Position reported to the Regional Executive Director.

- **Managing Agent** – Managed controlled savings & loans as a going concern as CEO. Performed in conjunction with the Department of Justice while identifying and curing waste, fraud, and internal/external abuse. Liquidated less desirable assets, managed remaining assets, controlled expenditures, while preparing to package and sale the banks to healthier regulated financial institutions. Position reported to the Special Assistant to the Regional Director, Office of Conservatorship Operations.

- **Senior Credit Specialist-** Managed assets held by financial institutions controlled by the agency as Chief Credit Officer. Responsibilities entailed preparing the banks for sale to healthier regulated financial institutions.

Federal Deposit Insurance Corporation (FDIC) Banks Depository Ins. Reg. Agency
(Commercial Banks Division of Liquidation) 1984 - 1989

- **Credit Manager**- Managed account officers within the Division of Liquidation while liquidating and maximizing the return on assets obtained from the sale of acquired financial institutions.

- **Account Officer**- Liquidation of assets obtained from acquired financial institutions once sold by the regulatory agency. Liquidation methods varied from negotiating compromises, workouts, litigation, and asset sales in an effort to maximize the return on assets retained subsequent to the sale of the financial institutions.

Education:
Indian River Community College
Jones Business School
L. William Seidman Academy

Native of Fort Pierce, Florida, though removed for 20 years while pursuing a career in financial institution regulation. After living in Tennessee, Orlando, Alabama, and Georgia while working as an agent with Federal banking regulators for numerous years, I returned approximately 15+ years ago. This has been a very rewarding transition and I am proud to return home to contribute to my community.

Pearl Matthews Davis (Liverpool)

Pearl Matthews Liverpool, a native of Fort Pierce was born as the ninth child to Charlie & Ethel Matthews. She is a well-established financial institution executive with over 30 years of diversified asset management and bank operations experience. She served her country as a regulatory agent with the Federal Deposit Insurance Corporation (FDIC) and Resolution Trust Corporation for 15 years with the objective to restore solvency and provide stability to the United States banking system. After serving as Managing Agent/CEO of several banks was appointed to serve as Regional Director. As the appointed Regional Director of the Office of Field Receivership Conservatorship Asset Management she managed the assets of 40+ controlled savings & loans in eight states during the S&L crisis. This role required working in conjunction with the Department of Justice while identifying waste, fraud, and abuse, liquidating less desirable assets, managing remaining assets, controlling expenditures, packaging and selling the banks to healthier financial institutions as going concerns. During her tour of duties she notes her greatest accomplishment to be the preservation of one of the few African American owned and operated financial Institutions in the country, Tuskegee Federal Savings & Loan.

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She enjoys living, loving, and laughing!

CITY OF FORT PIERCE

100 NORTH US HWY 1
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RECEIVED
MAR 06 2019
CITY CLERK'S OFFICE

APPLICATION FOR APPOINTMENT/REAPPOINTMENT

Name of Board or Boards for which you are applying: Ft Pierce Infrastructure Citizen Oversite Committee

Name: Bob Burdge	Phone: 772-466-0032
Home Address: 1302 Nebraska Ave 1-C City/Zip Code: Fort Pierce, Fl 34950	How long at this address? 21 yrs

Are you a citizen of the United States? ☒ Yes ☐ No

Occupation: Retired

Do you own a business that operates within the City of Fort Pierce? ☐ Yes ☒ No
If yes, list the address and nature of said business:

Do you now or in the future plan to do business with the City of Fort Pierce? ☐ Yes ☒ No
If yes, in what capacity?

Are you employed by a business that is located within the City of Fort Pierce? ☐ Yes ☒ No
If yes, state the business and location: Retired from St. Lucie County School Board

Do you have special training or knowledge in the area of:
Architecture: ☐ Yes ☐ No Engineering: ☐ Yes ☐ No Real Estate Brokering: ☐ Yes ☐ No
Contracting: ☐ Yes ☐ No Land Development: ☐ Yes ☐ No Other:
Describe your education, background, training and knowledge – (feel free to attach a resume): former Former Ft. Pierce City Commissioner Charter Review Committee Member of Planning Board Former Member of Community wide Council

Are you currently a member of a Commission-appointed board/committee? ☒ Yes ☐ No
If yes, please specify: Planning Board

Have you ever been convicted of a felony? ☐ Yes ☒ No
If yes, what was the nature of the crime(s) you were convicted of:

Referred by: Applicant Email Address: Commish33@Aol.Com

Date: 3/5/19 Applicant's Signature: [signature]

APPLICATIONS EXPIRE 6 MONTHS FROM THE DATE OF SUBMISSION. PLEASE REAPPLY AS OFTEN AS DESIRED.
Please return form to: City Clerk's Office – 100 North US Hwy 1, Fort Pierce, Florida 34950
fax (772) 467-3841 or via email at lcox@city-ftpierce.com

CITY OF FORT PIERCE

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FORT PIERCE, FLORIDA 34950
(772) 467-3065 fax (772) 467-3841

APPLICATION FOR APPOINTMENT/REAPPOINTMENT

Name of Board or Boards for which you are applying: __Fort Pierce Infrastructure Surtax Citizen Oversight _

Name: James R. Harding	Phone: 804-761-0667
Home Address: 66 Winghaven Ln, Ft. Pierce, FL 34949 City/Zip Code:	How long at this address? More than 10 years
Are you a citizen of the United States? ☒ Yes ☐ No	
Occupation: Retired	
Do you own a business that operates within the City of Fort Pierce? ☐ Yes ☒ No If yes, list the address and nature of said business:	
Do you now or in the future plan to do business with the City of Fort Pierce? ☐ Yes ☒ No If yes, in what capacity?	
Are you employed by a business that is located within the City of Fort Pierce? ☐ Yes ☒ No If yes, state the business and location:	
Do you have special training or knowledge in the area of: Architecture: ☐ Yes ☐ No Engineering: ☒ Yes ☐ No Real Estate Brokering: ☐ Yes ☐ No Contracting: ☒ Yes ☐ No Land Development: ☐ Yes ☐ No Other: Finance Describe your education, background, training and knowledge – (feel free to attach a resume): Education: Engineering - West Point (B.S.); Finance - Harvard Business School (M.B.A. - Finance) Managed Large Communities (50,000 plus population); Oversaw execution of large contracts ($1M plus)	
Are you currently a member of a Commission-appointed board/committee? ☐ Yes ☒ No If yes, please specify:	
Have you ever been convicted of a felony? ☐ Yes ☒ No If yes, what was the nature of the crime(s) you were convicted of:	
Referred by:	Applicant Email Address: jim.millcreek@earthlink.net
Date: 21 March 2019	Applicant's Signature

APPLICATIONS EXPIRE 6 MONTHS FROM THE DATE OF SUBMISSION. PLEASE REAPPLY AS OFTEN AS DESIRED.
Please return form to: City Clerk's Office – 100 North US Hwy 1, Fort Pierce, Florida 34950
fax (772) 467-3841 or via email at lcox@city-ftpierce.com

CITY OF FORT PIERCE

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FORT PIERCE, FLORIDA 34950
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RECEIVED
MAR 26 2019

APPLICATION FOR APPOINTMENT/REAPPOINTMENT

Name of Board or Boards for which you are applying: Infrastructure Sales Tax Citizen Oversight Committee

Name: Charles C. Hayling	Phone: 772-924-9208
Home Address: 1116 Orange Ave City/Zip Code: Ft. Pierce FL 34950	How long at this address? 6 months
Are you a citizen of the United States? ☒ Yes ☐ No	
Occupation: Consultant	
Do you own a business that operates within the City of Fort Pierce? ☐ Yes ☒ No If yes, list the address and nature of said business:	
Do you now or in the future plan to do business with the City of Fort Pierce? ☐ Yes ☒ No If yes, in what capacity?	
Are you employed by a business that is located within the City of Fort Pierce? ☒ Yes ☐ No If yes, state the business and location: George + Assoc, Ft. Pierce FL 1305 S. Indian River Dr.	
Do you have special training or knowledge in the area of: Architecture: ☐ Yes ☐ No Engineering: ☐ Yes ☐ No Real Estate Brokering: ☐ Yes ☐ No Contracting: ☐ Yes ☐ No Land Development: ☐ Yes ☐ No Other: Legal Describe your education, background, training and knowledge – (feel free to attach a resume): Juris Doctorate	
Are you currently a member of a Commission-appointed board/committee? ☐ Yes ☒ No If yes, please specify:	
Have you ever been convicted of a felony? ☒ Yes ☐ No If yes, what was the nature of the crime(s) you were convicted of: Possession of Controlled Sub.	
Referred by: Staff	Applicant Email Address: Rattlerbck741@gmail.com
Date: 3/26/19	Applicant's Signature Charles C. Hayling

APPLICATIONS EXPIRE 6 MONTHS FROM THE DATE OF SUBMISSION. PLEASE REAPPLY AS OFTEN AS DESIRED.
Please return form to: City Clerk's Office – 100 North US Hwy 1, Fort Pierce, Florida 34950
fax (772) 467-3841 or via email at lcox@city-ftpierce.com

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FORT PIERCE, FLORIDA 34950
(772) 467-3065 fax (772) 467-3841

APPLICATION FOR APPOINTMENT/ REAPPOINTMENT

Name of Board or Boards for which you are applying: Surtax Citizen Oversight Committee

Name: Curtis E. Johnson Jr	Phone: 772-206-3966
Home Address: 1501 N. 21st Street City/Zip Code: Ft. Pierce, FL 34950	How long at this address? 1 yr 4 mo

Are you a citizen of the United States? ☑ Yes ☐ No

Occupation: Owner: The CUVEY Group, LLC

Do you own a business that operates within the City of Fort Pierce? ☑ Yes ☐ No
If yes, list the address and nature of said business:

Consulting Practice - Homebased

Do you now or in the future plan to do business with the City of Fort Pierce? ☑ Yes ☑ No
If yes, in what capacity?

Are you employed by a business that is located within the City of Fort Pierce? ☐ Yes ☑ No
If yes, state the business and location:

Do you have special training or knowledge in the area of:
Architecture: ☐ Yes ☑ No Engineering: ☐ Yes ☑ No Real Estate Brokering: ☐ Yes ☑ No
Contracting: ☑ Yes ☐ No Land Development: ☐ Yes ☑ No Other:
Describe your education, background, training and knowledge – (feel free to attach a resume):
MBA Marketing Florida A+M University
BS Business Admin "

Are you currently a member of a Commission-appointed board/committee? ☑ Yes ☐ No
If yes, please specify: Community wide Board

Have you ever been convicted of a felony? ☐ Yes ☑ No
If yes, what was the nature of the crime(s) you were convicted of:

Referred by: Applicant Email Address: cjohnson41906@gmail.com

Date: 3/22/19 Applicant's Signature Curt E. Johnson Jr

APPLICATIONS EXPIRE 6 MONTHS FROM THE DATE OF SUBMISSION. PLEASE REAPPLY AS OFTEN AS DESIRED.
Please return form to: City Clerk's Office – 100 North US Hwy 1, Fort Pierce, Florida 34950
fax (772) 467-3841 or via email at lcox@city-ftpierce.com

RESOLUTION NO. 19-R06

A RESOLUTION OF THE CITY COMMISSION OF THE CITY OF FORT PIERCE, FLORIDA, **ESTABLISHING THE INFRASTRUCTURE SURTAX CITIZEN OVERSIGHT COMMITTEE**; ESTABLISHING THE MEMBERSHIP OF THE OVERSIGHT COMMITTEE; ESTABLISHING THE RESPONSIBILITIES AND DUTIES OF THE OVERSIGHT COMMITTEE; ESTABLISHING PROCEDURES FOR THE CONDUCT OF MEETINGS AND OPERATIONS; ESTABLISHING A SUNSET DATE; PROVIDING AN EFFECTIVE DATE; AND FOR OTHER PURPOSES

WHEREAS, on March 19, 2018, the City of Fort Pierce adopted Resolution No. 18-R15 supporting the St. Lucie County Board of County Commissioners intention to impose a voter approved half percent (.5%) local government infrastructure surtax (the "Surtax") to be utilized by the City of Fort Pierce for the financing, planning, constructing, reconstructing, renovating and improving of needed infrastructure; and

WHEREAS, a referendum on the Surtax was held on November 6, 2018 and the voters of the St. Lucie County approved the Surtax; and

WHEREAS, City Resolution No. 18-R15 and the ballot language approved by voters in the referendum called for "independent oversight by citizen committee" to review the City's expenditures of Surtax proceeds; and

WHEREAS, the City of Fort Pierce desires that the Infrastructure Surtax Citizen Oversight Committee be tasked with the review of projects funded by the Infrastructure Surtax and issue reports to the City Commission to insure transparency and to provide the citizens of the City with the assurance that funds are being spent in the manner approved by the voters and in accordance with state law.

NOW, THEREFORE, BE IT RESOLVED by the City of Fort Pierce, Florida that:

Section 1: Establishment and Purpose: The City of Fort Pierce hereby establishes the Infrastructure Surtax Citizen Oversight Committee (the "Committee") pursuant to City Resolution No. 18-R15 and the ballot language approved by the voters.

Section 2: Membership and Qualifications: Term of Appointment; Vacancy

A. The Committee shall consist of seven (7) members. All members shall have the following qualifications:

1. A member shall be a resident of the City of Fort Pierce;

2. One member shall be appointed by each member of the City Commission;
3. Two members shall be appointed at large;
4. At-large members shall serve a term of four years;
5. Members shall not be elected officials or City staff members;
6. Consideration should be given to applicants to the Committee that have a background in engineering, planning or finance.

B. The term of each member of the Committee appointed by an individual City Commission member shall coincide with the terms of the City Commission member that appointed the member of the Committee.

C. All Committee Members appointed by an individual City Commission member shall serve at the pleasure of the City Commission member who appointed the Committee member.

Committee Members shall be automatically removed for lack of attendance. Lack of attendance means failure to attend three (3) consecutive regularly scheduled meetings or failure to attend at least two-thirds of the regularly scheduled meetings during a calendar year. Participation for less than three-fourths of a meeting shall be the same as a failure to attend a meeting. Absences shall be entered into the minutes of the Committee meeting.

D. Vacancies occurring for any reason during the term of office by a Committee Member shall be filled within ninety (90) days from the date of the vacancy.

Section 3: Responsibilities and Duties.

The Committee shall act solely in an oversight and advisory capacity to the City Commission. The Committee shall not be responsible for identifying projects or determining the priority of a proposed project on the approved projects list. Project priorities are determined by the City Commission based upon many factors, including, but not limited to, availability of surtax revenues along with the status of project design and permitting. The Committee shall have the following responsibilities and duties:

A. Prepare an annual report to the City Commission regarding:

1. Whether City's expenditure of Surtax proceeds for the fiscal year was consistent with the requirements of Section 212.055(2), Florida Statutes, and the ballot language approved by the voters; and
2. Whether the City's expenditure of Surtax proceeds for the fiscal year was consistent with the City's approved Surtax proceeds project list, if any, or any future revisions to that list as approved and adopted by the City of Fort Pierce Commission.

B. Review documents and projects:

1. The Committee will be presented with appropriate documents, plans, budgets, designs, permits (or permit applications), reports, photographs, presentations or other materials to sufficiently determine the status of each project.
2. Review and comment upon any changes or additions to the project list that may occur as a result of emergencies, hurricanes or other acts of God that might necessitate altering the projects list. In the case of an emergency, the Committee may be consulted after-the-fact.

Section 4: Operations and Procedures. The Committee shall be governed by the following rules of procedure:

A. Chair and Vice Chair: During the initial meeting of the Committee, the Committee shall select a Chair and Vice Chair from its membership to preside over and conduct meetings. The Chair and Vice Chair shall be selected by a majority vote of the Committee Members. After the first year of service, the Committee shall annually select one of its members as Chair and one of its members as Vice Chair. In the event the Chair or Vice Chair of the Committee is not fulfilling his or her responsibilities, the Committee, may at its own discretion, remove said Committee Member from the Chair or Vice Chair position, and appoint a replacement for the remainder of the term.

B. Meetings: The Committee shall meet quarterly, or as needed, as

determined by the Committee in order to fulfill its duties and responsibilities. The Committee shall endeavor to schedule the first meeting of the Committee in March of 2019. During the initial meeting of the Committee, the Committee shall, by majority vote, set a meeting schedule for the upcoming year. The Committee shall set meeting schedules for subsequent years as determined by the Committee. The meeting schedule shall include the date, time and location of the meetings.

All meetings and business of the Committee, and any Subcommittees, shall comply with and be subject to the requirements of the Florida Sunshine Law (Chapter 286, Florida Statutes); the Florida Public Records Law (Chapter 119, Florida Statutes), the Florida Ethics Code (Chapter 112, Florida Statutes), and all other applicable local or state statutes, ordinances, or rules. All meetings of the Committee and any Subcommittees shall be open to the public at all times, shall be subject to public participation requirements as outlined in the Florida Statutes. Minutes of each meeting shall be recorded.

C. Quorum: A quorum shall consist of no less than four (4) members. Recommendations and decisions of the Committee shall be made by a majority vote of those present and voting.

D. Agendas: The Committee, with input and assistance from the Chair, shall be responsible for preparing the meeting agenda and distributing the agenda to all Committee Members prior to the meeting.

E. Reports: The Committee shall compile information received from the City on Surtax expenditures so that it is able to provide annual reports to the City Commission by December 31st of each year, or by some other date as determined by the Committee. The Committee also shall provide a final report to the City Commission prior to sun-setting and completing its operations.

F. Subcommittees: By majority vote of the Committee Members present and voting, a subcommittee, task force, or work group, may be created

to further the purpose of the Committee. Any such task force, work group, or sub-committee shall be made up of Committee members, and shall report their findings and/or recommendations back to the Committee or action.

G. Staff Support: The City shall provide the Committee adequate staff and support services to enable the Committee to carry out its duties and responsibilities.

Section 5: Compensation. Members of the Committee shall receive no compensation for the performance of their duties and responsibilities.

Section 6: Sunset Provisions. Pursuant to City Resolution No. 18-R15, the Surtax shall be in effect only through December 31, 2028. It shall "sunset" and expire thereafter, without further action by any local government. The Committee shall remain in effect for the life of the Surtax imposed and until all Surtax proceeds are expended by the City Commission. Thereafter, the Committee shall automatically sunset.

Section 7: Effective Date: This Resolution shall take effect immediately upon its adoption.

IN WITNESS WHEREOF, this Resolution has been duly adopted this 4th day of February, 2019.

_____
LINDA HUDSON, MAYOR COMMISSIONER

ATTEST:

_____
LINDA W. COX, CITY CLERK

(CITY SEAL)

APPROVED AS TO FORM
AND CORRECTNESS:

_____
PETER J. SWEENEY, ESQ.
CITY ATTORNEY

City Commission Regular Meeting **13.c.**

Meeting Date: 04/15/2019

Re:

SUBJECT:

Approval of Letter of Congratulations to IRSC for winning the 2019 Aspen Prize for Community College Excellence.

Attachments

Letter

Form Review

Form Started By: Linda Cox Started On: 04/09/2019 08:35 AM

Final Approval Date: 04/09/2019

THE SUNRISE CITY
FORT PIERCE
OFFICE OF THE MAYOR
AND CITY COMMISSION
Florida

April 15, 2019

Edwin R. Massey, Ph.D., President
Indian River State College
3209 Virginia Avenue
Fort Pierce, FL 34981

Dear Dr. Massey:

Congratulations to Indian River State College (IRSC) for winning the 2019 Aspen Prize for Community College Excellence. The City of Fort Pierce has been home to Indian River State College (IRSC) for six decades. We have always considered this institution to be an asset for our community. This year, IRSC winning the Aspen Prize showed the world what we already knew.

Since its inception, IRSC has been working towards improving our community and the four-county area which it serves. When you shepherded in the four-year degree programs, the benefit was enormous, because students, of all ages in the four counties of Indian River, Martin, Okeechobee and St. Lucie could easily further their education. The four-year degrees you offered were planned to coincide with the needs of our area.

IRSC then made a conscious decision to go one step further. Under your leadership, the college fostered a culture of making sure every student succeeds. IRSC recognized that some of its students were always on the edge of not completing their studies. You decided to make sure the bridge was in place, so that struggling students could identify a career pathway, cross the finish line, and be employable upon completion.

Not only do you make sure students are able to earn a living wage upon graduation, you also motivate the half-hearted student to consider more than he or she every dreamed in terms of educational attainment, and career accomplishment. Finally, you have made it possible for our children and grandchildren to be able to find work and career at home.

We are so very proud of IRSC and what you have accomplished. We recognize that in order to win the prize, you, your faculty, administrators and students had to use your combined imagination, innovation, dedication, and sheer hard work and perseverance to convince the judges that you are worthy of the top spot. Thank you for winning the Aspen Prize, and for making Fort Pierce a better place to live, learn, work and play. We are proud to be your community partner.

Sincerely,

Linda Hudson
Mayor