PLEASE NOTE NEW LOCATION AT THE RIVERWALK CENTER

CITY PLANNING BOARD
BOARD AGENDA

Planning Board Regular Meeting - Monday, February 12, 2024 - 2:00 p.m.
Riverwalk Center, 600 North Indian River Drive, Fort Pierce, Florida

1. **CALL TO ORDER**

2. **PLEDGE OF ALLEGIANCE**

3. **ROLL CALL**

4. **CONSIDERATION OF ABSENCES**

5. **APPROVAL OF MINUTES**

   a. Minutes from the January 8, 2024 meeting

6. **NEW BUSINESS**

   a. Conditional Use - Mixed-Use Family Indoor Entertainment Center - 111 Orange Avenue

   b. Site Plan (Development and Design Review) - Viva East - 5315 Edwards Road and 5496 Altman Road

   c. Site Plan (Development Review and Design Review) - Regatta Luxury Apartments - SE Corner of Graham Road and S. Jenkins Road and approximately 669 feet south of Graham Road (2418-333-0004-000-0, 2418-333-0003-000-3, 2418-333-0002-000-6, 2418-333-0001-000-9)

d. Major Site Plan Amendment - Ocean Village Pickleball Amenity - 2400 S. Ocean Drive

7. **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 Chair, as this section of the Agenda is limited to thirty minutes. The Planning Board will not be able to take any official actions under Comments from the Public. Speakers will address the Board and the Public with respect. Inappropriate language will not be tolerated.

8. **DIRECTOR'S REPORT**

9. **BOARD COMMENTS**

10. **ADJOURNMENT**

Any person seeking to appeal any decision by the Planning Board with respect to any matter considered at this meeting 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 the proceedings is made including the testimony and evidence upon which the appeal is to be based.
Persons who require special accommodations under the Americans with Disabilities Act (ADA) should contact (772) 467-3729, at least five (5) days prior to the meeting. Persons who are hearing or speech impaired may use the Florida Relay System by dialing 711.

Planning Board **5. a.**

Meeting Date: 02/12/2024

Re: Planning Board Minutes 1/8/24

Submitted For: Kev Freeman, Planning Director, Planning Department

Information

SUBJECT:

Minutes from the January 8, 2024 meeting

Attachments

Planning Board Minutes 1/8/24

Form Review

Form Started By: Alicia Rosenthal Started On: 01/10/2024 08:40 AM

Final Approval Date: 01/10/2024

D R A F T

CITY OF FORT PIERCE
PLANNING BOARD

Planning Board Minutes

OF THE REGULAR MEETING OF THE FORT PIERCE CITY PLANNING BOARD HELD ON MONDAY, JANUARY 8, 2024, IN FORT PIERCE CITY HALL, COMMISSION CHAMBERS, 100 NORTH US HIGHWAY 1, FORT PIERCE, FLORIDA.

1. CALL TO ORDER

2. PLEDGE OF ALLEGIANCE

3. ROLL CALL

Ms. Carter entered the meeting at 2:06 PM.

Present: John Heaning; Nichelle Clemons; Justine Carter; Uline Daniel; Alexander Edwards; Anton Kreisl; Frank Creyaufmiller, Chairman

Staff Present: Kev Freeman, Planning Director
Ryan Alitzer, Senior Planner
Kerry Driver, Planner
Miriam Garcia, Redevelopment Specialist
Alicia Rosenthal, Planning and Development Organizer

4. CONSIDERATION OF ABSENCES

All members were in attendance.

5. APPROVAL OF MINUTES

a. Minutes from the December 11, 2023 meeting.

Motion was made by Nichelle Clemons, and seconded by Anton Kreisl to approve the minutes from the December 11, 2023 meeting with the roll call correction.

AYE: Uline Daniel, Alexander Edwards, Anton Kreisl, John Heaning, Nichelle Clemons, Chairman Frank Creyaufmiller

Passed

6. NEW BUSINESS

a. RFP 2024-009 - Disposal of Surplus Property - 706 N. 20th Street

Ms. Garcia stated the five surplus properties were presented to the Planning Board in May; however the bids expired and there was another request for proposals. Ms. Garcia noted they were waiting for the development agreement from the City Attorney's office. Ms. Garcia noted some of the properties were awarded to a different respondent from when the surplus properties came before the Board in May 2023.

Ms. Garcia explained the way a property is determined to be used for surplus.

Ms. Garcia gave an overview of the surplus property and explained the evaluation criteria, evaluation results, purchase price, cost estimate and construction timeline for the single family home awarded to Sunrise City concrete Services. Ms. Garcia answered questions from the Board.

Motion was made by John Heaning, and seconded by Alexander Edwards to forward a recommendation of approval to the Fort Pierce Redevelopment Agency for RFP 2024-009 for Disposal of Surplus Property located at 706 N. 20th Street.

AYE: Uline Daniel, Alexander Edwards, Anton Kreisl, John Heaning, Nichelle Clemons, Justine Carter, Chairman Frank Creyaufmiller

Passed

b. RFP 2024-010 - Disposal of Surplus Property - 604 S. 6th Street

Ms. Garcia gave an overview of the surplus property and explained the evaluation criteria, evaluation results, purchase price, cost estimate and construction timeline for the single family home awarded to Joe John McVey.

Motion was made by John Heaning, and seconded by Uline Daniel to forward a recommendation of approval to the Fort Pierce Redevelopment Agency for RFP 2024-010 for Disposal of Surplus Property located at 604 S. 6th Street.

AYE: Alexander Edwards, Anton Kreisl, John Heaning, Nichelle Clemons, Justine Carter, Uline Daniel, Chairman Frank Creyaufmiller

Passed

AYE: John Heaning, Nichelle Clemons, Justine Carter, Uline Daniel, Alexander Edwards, Anton Kreisl, Chairman Frank Creyaufmiller

Passed

c. **RFP 2024-011 - Disposal of Surplus Property – 1204 Avenue E**

Ms. Garcia gave an overview of the surplus property and explained the evaluation criteria, evaluation results, purchase price, cost estimate and construction timeline for the fourplex awarded to Telco Investments. Ms. Garcia noted Telco Investments are owners of the adjacent properties, which will allow a larger building.

Motion was made by Nichelle Clemons, and seconded by John Heaning to forward a recommendation of approval to the Fort Pierce Redevelopment Agency for RFP 2024-011 for Disposal of Surplus Property located at 1204 Avenue E.

AYE: Anton Kreisl, John Heaning, Nichelle Clemons, Justine Carter, Uline Daniel, Alexander Edwards, Chairman Frank Creyaufmiller

Passed

d. **RFP 2024-012 - Disposal of Surplus Property - 1620 Avenue E**

Ms. Garcia gave an overview of the surplus property and explained the evaluation criteria, evaluation results, purchase price, cost estimate and construction timeline for the single family home awarded to Sunrise City Concrete Services.

Motion was made by Nichelle Clemons, and seconded by John Heaning to forward a recommendation of approval to the Fort Pierce Redevelopment Agency for RFP 2024-012 for Disposal of Surplus Property located at 1620 Avenue E.

AYE: John Heaning, Nichelle Clemons, Justine Carter, Uline Daniel, Alexander Edwards, Anton Kreisl, Chairman Frank Creyaufmiller

Passed

e. **RFP 2024-013 - Disposal of Surplus Property – N. 25th Street, Lot 1 & 2**
Parcel IDs: 2408-501-0066-000-6 and 2408-501-0067-000-3

Ms. Garcia gave an overview of the surplus property and explained the commercial property evaluation criteria, evaluation results, purchase price, cost estimate and construction timeline for the commercial property awarded to Larry Lee Jr. and family. Ms. Garcia answered questions from the Board on surrounding properties and if there is a point threshold for surplus properties.

Motion was made by Nichelle Clemons, and seconded by Alexander Edwards to forward a recommendation of approval to the Fort Pierce Redevelopment Agency for RFP 2023-029 for Disposal of Surplus Property located at N.25th Street, Lot 1 & 2, Parcel IDs: 2408-501-0066-000-6 and 2408-501-0067-000-3.

AYE: Nichelle Clemons, Justine Carter, Uline Daniel, Alexander Edwards, Anton Kreisl, John Heaning, Chairman Frank Creyaufmiller

Passed

f. **Annexation - Harry Blue Annexation - Parcel IDs: 2427-603-0104-000-7, 2427-603-0135-000-3, 2427-603-0134-000-6 and 2427-603-0136-000-0**

Mr. Altizer gave an overview of the annexation. The request is to annex four (4) parcels into the city, with a City Future Land Use of RH, High Density Residential, and a City Zoning of R-4, Medium Density Residential. The site area is around 2.95 acres. The current Zoning is RM-11 (Residential Multi-Family 11 – County) and the current Future Land Use is RH (Residential High – County). Mr. Altizer explained that four of the lots shown on the warranty deed are in the City of Fort Pierce and do not need to be annexed.

Motion was made by Nichelle Clemons, and seconded by Uline Daniel to forward a recommendation of approval for the annexation of Parcel IDs: 2427-603-0104-000-7, 2427-603-0135-000-3, 2427-603-0134-000-6 and 2427-603-0136-000-0.

AYE: Justine Carter, Uline Daniel, Alexander Edwards, Anton Kreisl, John Heaning, Nichelle Clemons, Chairman Frank Creyaufmiller

Passed

g. **Major Amendment - Trinity Lutheran Church of Fort Pierce - 2011 S. 13th Street**

Ms. Driver gave an overview of the application. The request is for a Major Amendment to add a 6,530 square foot classroom building to be used in association with religious education and day care programs offered by the Church. The proposed building addition, a prefabricated modular structure, will be located along the western side of the existing developed area of the property. The proposed use will require minor modifications to the existing parking lot and the site's storm water systems. The site area is around 4.77 acres. The current Future Land Use is INST- Institutional and the current Zoning is OS-1 General Recreational Open Space. Ms. Charles noted an updated drainage plan has been submitted to the city.

Thomas DeGrace, Engineer with Culpepper and Terpening, answered questions from the Board on the type of structure and drainage. He explained the building is pre-fabricated and will be anchored to the foundation and will look like it was built on site. Mr. DeGrace explained the existing pond on site was oversize when it was built, so there are no major modifications being done to the drainage system and minimal impervious area is being effected. Mr. Heaning asked why they are using modular construction, and he stated he does not like the look of the building. Mr. DeGrace said the building is built in an environmental control building, it is quicker to construct, and more economical.

Kurt Bravo, of Trinity Lutheran Church, said the building will have ramps, covered walkways and covered exit doors.

Mr. Freeman said the building does not meet the Design Review guidelines and there are no regulations in place, so the guidelines cannot be enforced. Mr. Freeman noted he is in the process of standardizing Design Review regulations to the code.

Mr. Kreisl asked if there were any modifications to the landscape plan and if the applicant is aware that they do not meet the design guidelines. Mr. Freeman said the landscape meets the code and there were no modifications. Mr. Kreisl said since the Board has no authority to force the architectural details, he would be happier to see less of the building from the street and use landscaping to completely conceal the building.

Chaiman Creyaufmiller said he was in a quandary because the building and landscaping meet the code but not the design guidelines. He highlighted that the Board can request the applicant to beautify the landscape.

Mr. Freeman said the Planning Board can make a suggestion but if the application meets the code it will need to be approved. Until the city has regulations in place, no conditions can be imposed.

Ms. Carter said other St. Lucie County schools have modular buildings and the function and purpose is appropriate, even though she does not like the design of the building.

Chairman Creyaufmiller suggested the applicant meet with the Planning department to discuss beautifying the landscaping.

Motion was made by Nichelle Clemons, and seconded by Alexander Edwards to forward a recommendation of approval to the City Commission.

AYE: Uline Daniel, Alexander Edwards, Anton Kreisl, John Heaning, Nichelle Clemons, Justine Carter, Chairman Frank Creyaufmiller

Passed

7. COMMENTS FROM THE PUBLIC

There were no comments from the public.

8. DIRECTOR'S REPORT

Mr. Freeman said he is trying to look at the city as a whole and improve the appearance of the city. He said he is in the process of amending the landscape code to incorporate elements and buffers through a visual code. Mr. Freeman said he is looking for a balance between making the city look better and the cost of developing the city. He said he is also looking at better architectural standards and flexibility to enable alternative building types of construction with aesthetic value.

9. BOARD COMMENTS

Chairman Creyaufmiller stated the South Beach overlay has no teeth when it comes to joining properties and losing setbacks on Ocean Drive. He mentioned the unintended negative consequences for the Surfside community of a project that was recently approved by the Planning Board.

Mr. Kreisl asked Mr. Freeman if he had made any progress in changing the ordinance. Mr. Freeman explained he had done research in other municipalities, and it becomes a delicate situation when taking the value and entitlement of a property. He also noted the recent change in state statute not allowing the city to enforce regulations on single-family homes.

Chairman Creyaufmiller said a lot of old ordinances were loosely written in terms of specifics. He said new ordinances being reviewed by the Planning Board need to be read and understood.

Mr. Heaning asked about not allowing temporary buildings to be used as permanent buildings. Mr. Freeman said he cannot guarantee this will not happen again because the industry is going with manufactured building construction methodology due to material cost and supply chain availability.

Mr. Freeman noted the frustration for staff and the Board, and he said he is trying to improve

the design standards, so the Board can have the ammunition to enforce better design.

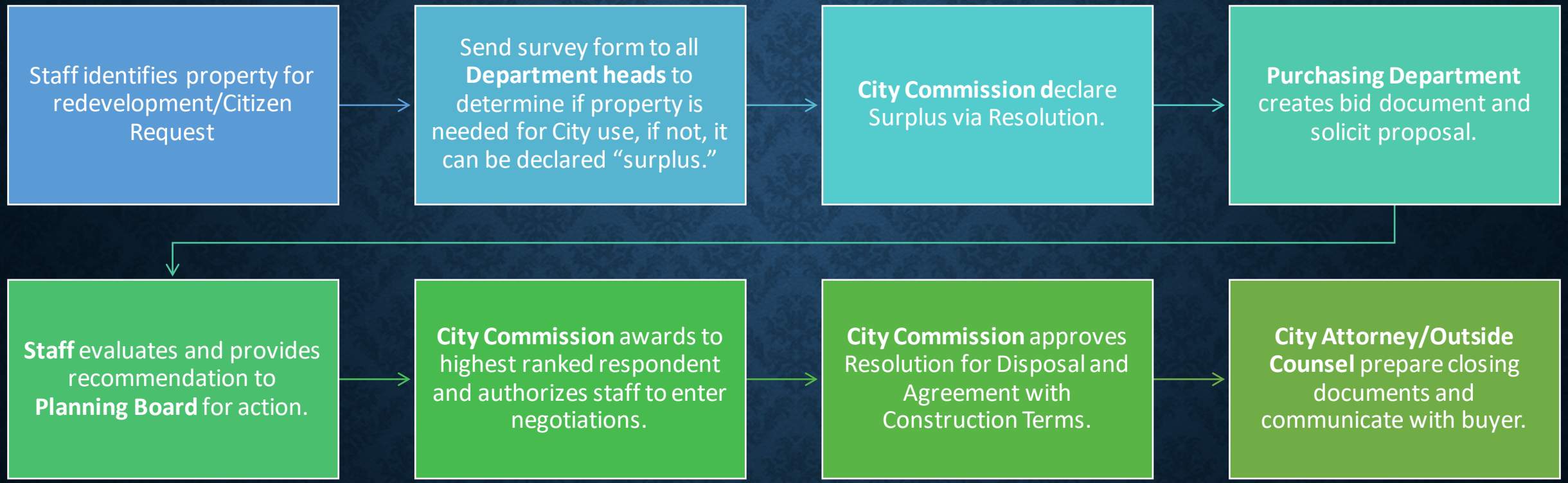
10. ADJOURNMENT

THE SUNRISE CITY

FORT PIERCE

Florida

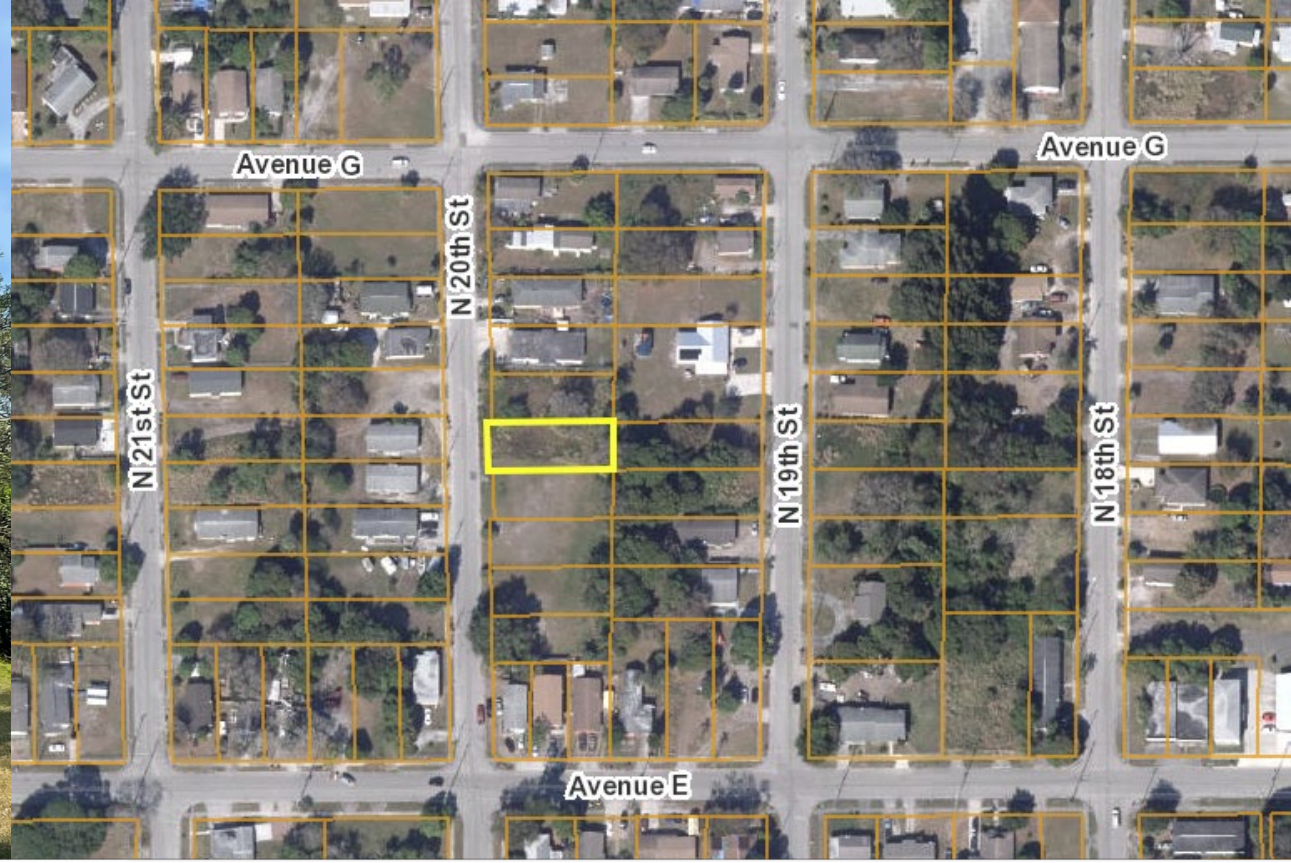
DISPOSITION OF SURPLUS PROPERTY
706 N 20TH ST


Staff identifies property for redevelopment/Citizen Request
Send survey form to all **Department heads** to determine if property is needed for City use, if not, it can be declared "surplus."
City Commission declare Surplus via Resolution.
Purchasing Department creates bid document and solicit proposal.
Staff evaluates and provides recommendation to **Planning Board** for action.
City Commission awards to highest ranked respondent and authorizes staff to enter negotiations.
City Commission approves Resolution for Disposal and Agreement with Construction Terms.
City Attorney/Outside Counsel prepare closing documents and communicate with buyer.

EVALUATION CRITERIA

- Development Plan (20 points)
- Timeline (20 points)
- Construction Cost Estimates (10 points)
- Proof of Financial Ability (15 points)
- Property Utilization (20 points)
- Summary of Development (15 points)





706 N. 20TH ST

EVALUATION RESULTS

RESPONDENTS	EVALUATOR #1	EVALUATOR #2	EVALUATOR #3	EVALUATOR #4	TOTAL
Sunrise City Concrete Services, Inc	95	82	92.5	95	**364.5**
Progression Properties, LLC	67	38	70	65	240

SUNRISE CITY CONCRETE SERVICES INC.



Purchase Price
3K

Single Family Home
3BR/2BATH

Construction Cost Estimates
185K

Complete Construction within 7 months of closing

RECOMMENDATION

- IN ACCORDANCE WITH THE FORT PIERCE CODE OF ORDINANCES, SECTION 101-23 (4), STAFF RECOMMENDS THE PLANNING BOARD REVIEW THE REQUEST AND FORWARD A RECOMMENDATION TO THE CITY COMMISSION FOR APPROVAL OF THE SALE OF REAL PROPERTY LOCATED AT 706 N 20TH ST, TO SUNRISE CITY CONCRETE SERVICES, INC.





QUESTIONS

THE SUNRISE CITY

FORT PIERCE

Florida

DISPOSITION OF SURPLUS PROPERTY
604 S 6TH ST

EVALUATION CRITERIA

- Development Plan (20 points)
- Timeline (20 points)
- Construction Cost Estimates (10 points)
- Proof of Financial Ability (15 points)
- Property Utilization (20 points)
- Summary of Development (15 points)





604 S. 6TH ST

EVALUATION RESULTS

RESPONDENTS	EVALUATOR #1	EVALUATOR #2	EVALUATOR #3	EVALUATOR #4	TOTAL
Journey Equity Partners LLC	85	84	65	77	311
Joe John McVey	80	82	82.5	85	**329.5**

JOEJOHN MCVEY



Purchase Price
$15K

2BR/2BATH
Single Family
Home

Construction
Cost Estimates
$225K

Complete
Construction
within 18
months of
closing

RECOMMENDATION



- In accordance with the Fort Pierce Code of Ordinances, Section 101-23 (4), staff recommends the Planning Board review the request and forward a recommendation to the City Commission for approval of the sale of real property located at 604 S 6th St. to JoeJohn McVey



QUESTIONS

THE SUNRISE CITY

FORT PIERCE

Florida

DISPOSITION OF SURPLUS PROPERTY
1204 AVENUE E

EVALUATION CRITERIA

- Development Plan (20 points)
- Timeline (20 points)
- Construction Cost Estimates (10 points)
- Proof of Financial Ability (15 points)
- Property Utilization (20 points)
- Summary of Development (15 points)





1204 AVENUE E

EVALUATION RESULTS

RESPONDENTS	EVALUATOR #1	EVALUATOR #2	EVALUATOR #3	EVALUATOR #4	TOTAL
Progression Properies, LLC	70	41	70	65	246
Vincent Marcellino	72	65	82.5	85	304.5
Telco Investments, LLC	87	67	80	85	**319**

TELCO INVESTMENTS, LLC



Purchase Price
$25K

3BD/2BATH
Fourplex

Construction
Cost Estimates
$462,602K

Complete
Construction
within 12
months of
closing

RECOMMENDATION



- In accordance with the Fort Pierce Code of Ordinances, Section 101-23 (4), staff recommends the Planning Board review the request and forward a recommendation to the City Commission for approval of the sale of real property located at 1204 Avenue E, to Telco Investments, LLC.



QUESTIONS

THE SUNRISE CITY

FORT PIERCE

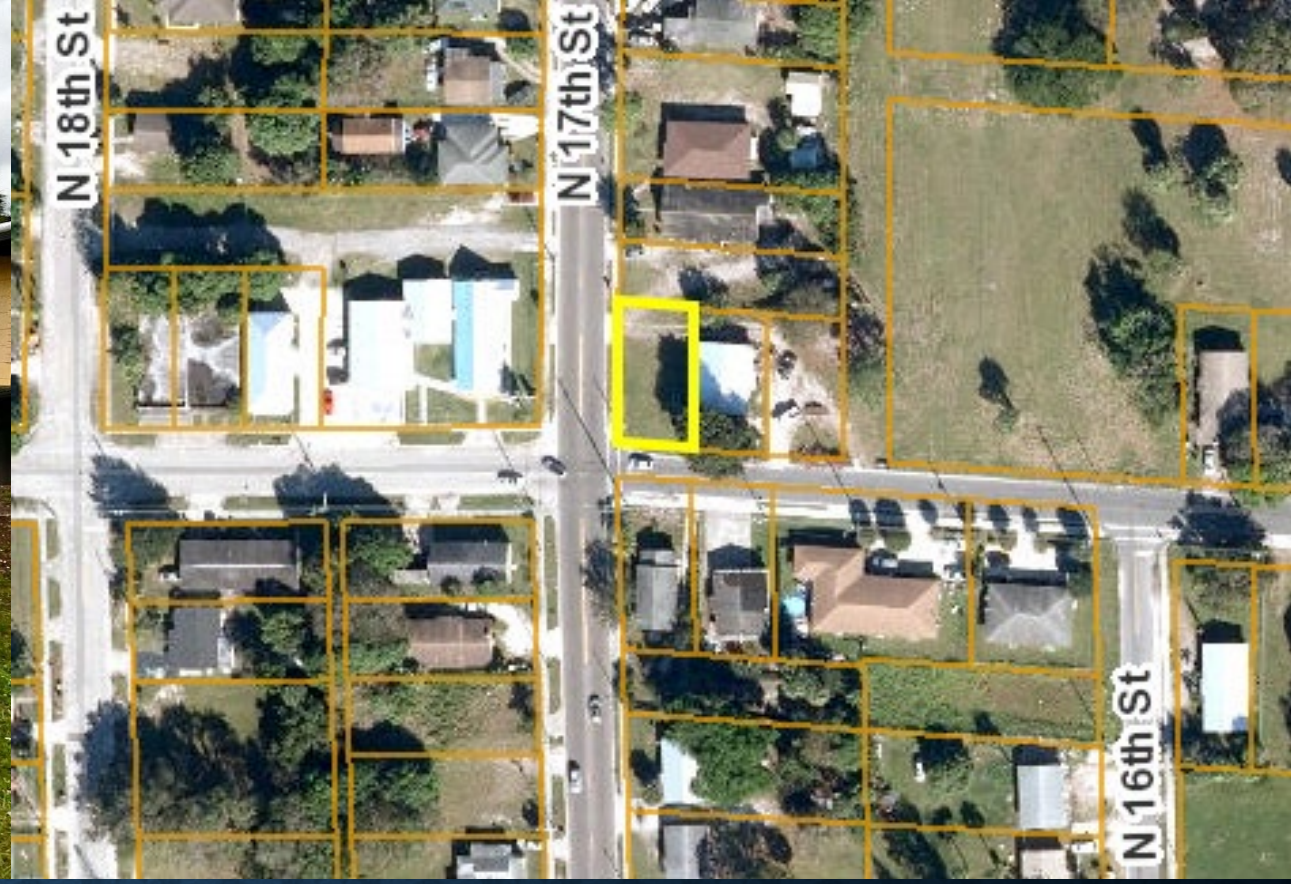
Florida

DISPOSITION OF SURPLUS PROPERTY
1620 AVENUE E

EVALUATION CRITERIA

- Development Plan (20 points)
- Timeline (20 points)
- Construction Cost Estimates (10 points)
- Proof of Financial Ability (15 points)
- Property Utilization (20 points)
- Summary of Development (15 points)





1620 AVENUE E

EVALUATION RESULTS

RESPONDENTS	EVALUATOR #1	EVALUATOR #2	EVALUATOR #3	EVALUATOR #4	TOTAL
Sunrise City Concrete Services, Inc	95	82	72.5	95	**344.5**
Journey Equity Partners, LLC	85	84	65	77	311

SUNRISE CITY CONCRETE SERVICES INC.



Purchase Price
$3K

Single Family Home
3BR/2BATH

Construction Cost Estimates
$185K

Complete Construction within 7 months of closing

RECOMMENDATION



- In accordance with the Fort Pierce Code of Ordinances, Section 101-23 (4), staff recommends the Planning Board review the request and forward a recommendation to the City Commission for approval of the sale of real property located at 1620 Avenue E to Sunrise City Concrete Services Inc.



QUESTIONS

THE SUNRISE CITY

FORT PIERCE

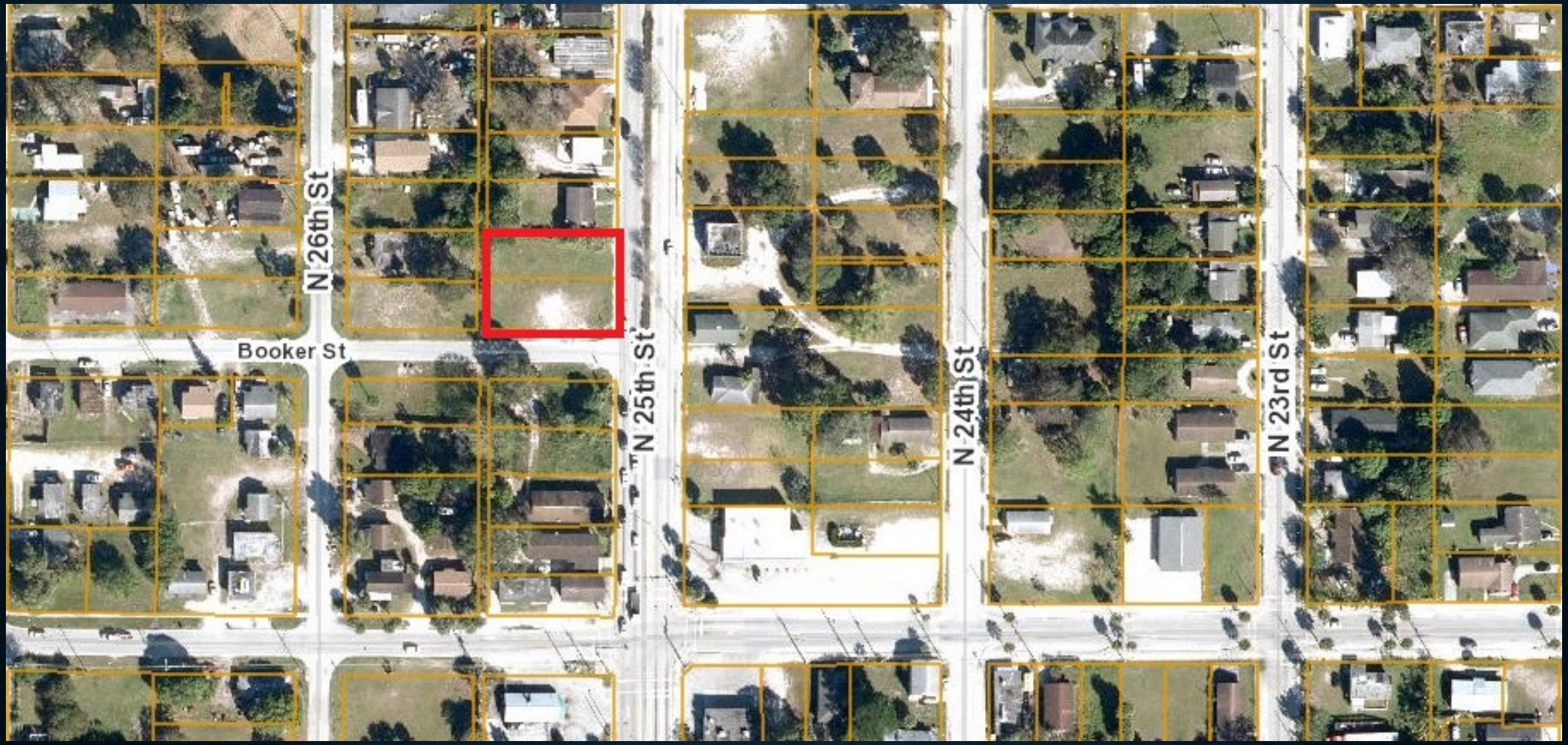
Florida

DISPOSITION OF SURPLUS PROPERTY
N. 25TH ST – LOT 1 & 2
2408-501-0066-000-6 & 2408-501-0067-000-3
COMMERCIAL C-3

EVALUATION CRITERIA

- Development Plan (25 points)
- Timeline (20 points)
- Construction Cost Estimates (10 points)
- Proof of Financial Ability (15 points)
- Property Utilization (15 points)
- Summary of Development (15 points)

N. 25TH ST LOT 1 & 2 (C-3) COMMERCIAL)



EVALUATION RESULTS

RESPONDENTS	EVALUATOR #1	EVALUATOR #2	EVALUATOR #3	EVALUATOR #4	TOTAL
Larry Lee Jr and Family, LLC	55	61	65	80	**261**
Progression Properties, LLC	70	43	60	65	238



LARRY LEE JR. & FAMILY LLC

- Purchase Price $10,100
- 2000 SF Office Building (4 shared offices & 1 anchor business)
- Construction Cost Estimates $350-550K
- Complete Construction within 2 years

RECOMMENDATION



- In accordance with the Fort Pierce Code of Ordinances, Section 101-23 (4), staff recommends the Planning Board review the request and forward a recommendation to the City Commission for approval of the sale of real property located at TBD N 25th St, identified by Parcel IDs: 2408-501-0066-000-6 & 2408-501-0067-000-3, to Larry Lee Jr. & Family, LLC



QUESTIONS

Planning Board **6. a.**

Meeting Date: 02/12/2024

Re: Conditional Use Application - Family Indoor Entertainment Center

Submitted For: Kev Freeman, Planning Director, Planning Department

---

Information

SUBJECT:

Conditional Use - Mixed-Use Family Indoor Entertainment Center - 111 Orange Avenue

SUMMARY:

The property subject of this conditional use application is located within the C-4 Zoning District which permits mixed-mixed use and indoor entertainment. The C-4 Zoning District does not permit Arcade Amusement Centers and Amusement Arcades.

However, the proposed mixed-use with ancillary restaurant facilities should be better described as 'Family Indoor Entertainment'. The proposed use would only be permitted to accommodate particular skill-based amusement games or machines. The type of machines allowed within the proposed use will be restricted by Florida State Statute 546.10, which deals with the allowance of 'Family Amusement Centers'. Such use does not include:

1. Any game or machine that uses mechanical slot reels, video depictions of slot machine reels or symbols, or video simulations or video representations of any other casino game, including, but not limited to, any banked or banking card game, poker, bingo, pull-tab, lotto, roulette, or craps.
2. A game in which the player does not control the outcome of the game through skill or a game where the outcome is determined by factors not visible, known, or predictable to the player.
3. A video poker game or any other game or machine that may be construed as a gambling device under the laws of this state.
4. Any game or device defined as a gambling device in 15 U.S.C. s. 1171, unless excluded under 15 U.S.C. s. 1178.

Therefore, staff recommend the following conditions be applied to any approval of this use:

1. Skill-based amusement games or machines are permitted as otherwise restricted by Florida State Statute 546.10 and shall not include;
    a. Any game or machine that uses mechanical slot reels, video depictions of slot machine reels or symbols, or video simulations or video representations of any other casino game, including, but not limited to, any banked or banking card game, poker, bingo, pull-tab, lotto, roulette, or craps.
    b. A game in which the player does not control the outcome of the game through skill or a game where the outcome is determined by factors not visible, known, or predictable to the player.
    c. A video poker game or any other game or machine that may be construed as a gambling device under the laws of this state.
    d. Any game or device defined as a gambling device in 15 U.S.C. s. 1171, unless

excluded under 15 U.S.C. s. 1178.

2. Window tinting, mirrored windows, or other obscuring elements are prohibited to be installed on/at any display windows connected to the approved use.

RECOMMENDATION:

Staff recommend approval of the conditional use and that the following conditions be applied to the approval of this use:

1. Skill-based amusement games or machines are permitted as otherwise restricted by Florida State Statute 546.10 and shall not include;
    a. Any game or machine that uses mechanical slot reels, video depictions of slot machine reels or symbols, or video simulations or video representations of any other casino game, including, but not limited to, any banked or banking card game, poker, bingo, pull-tab, lotto, roulette, or craps.
    b. A game in which the player does not control the outcome of the game through skill or a game where the outcome is determined by factors not visible, known, or predictable to the player.
    c. A video poker game or any other game or machine that may be construed as a gambling device under the laws of this state.
    d. Any game or device defined as a gambling device in 15 U.S.C. s. 1171, unless excluded under 15 U.S.C. s. 1178.
2. Window tinting, mirrored windows, or other obscuring elements are prohibited on the front elevation of the premises.

ALTERNATIVES:

Approve the conditional use with alternative/additional conditions.

or

Deny the conditional use.

RESPONSIBLE STAFF:

Kev Freeman, Planning Director.

COORDINATED WITH:

The City Commission at their February 5th, 2024, meeting, requested staff to address the opportunity for such use within the Downtown Entertainment District.

Fiscal Impact

OTHER INFORMATION:

None

Attachments

Presentation_Staff Report

Application

Property ID Summary

Legal Description
State Statue 546.10

Form Review

Form Started By: Kev Freeman
Started On: 02/06/2024 12:55 PM
Final Approval Date: 02/06/2024

CITY OF FORT PIERCE

PLANNING BOARD

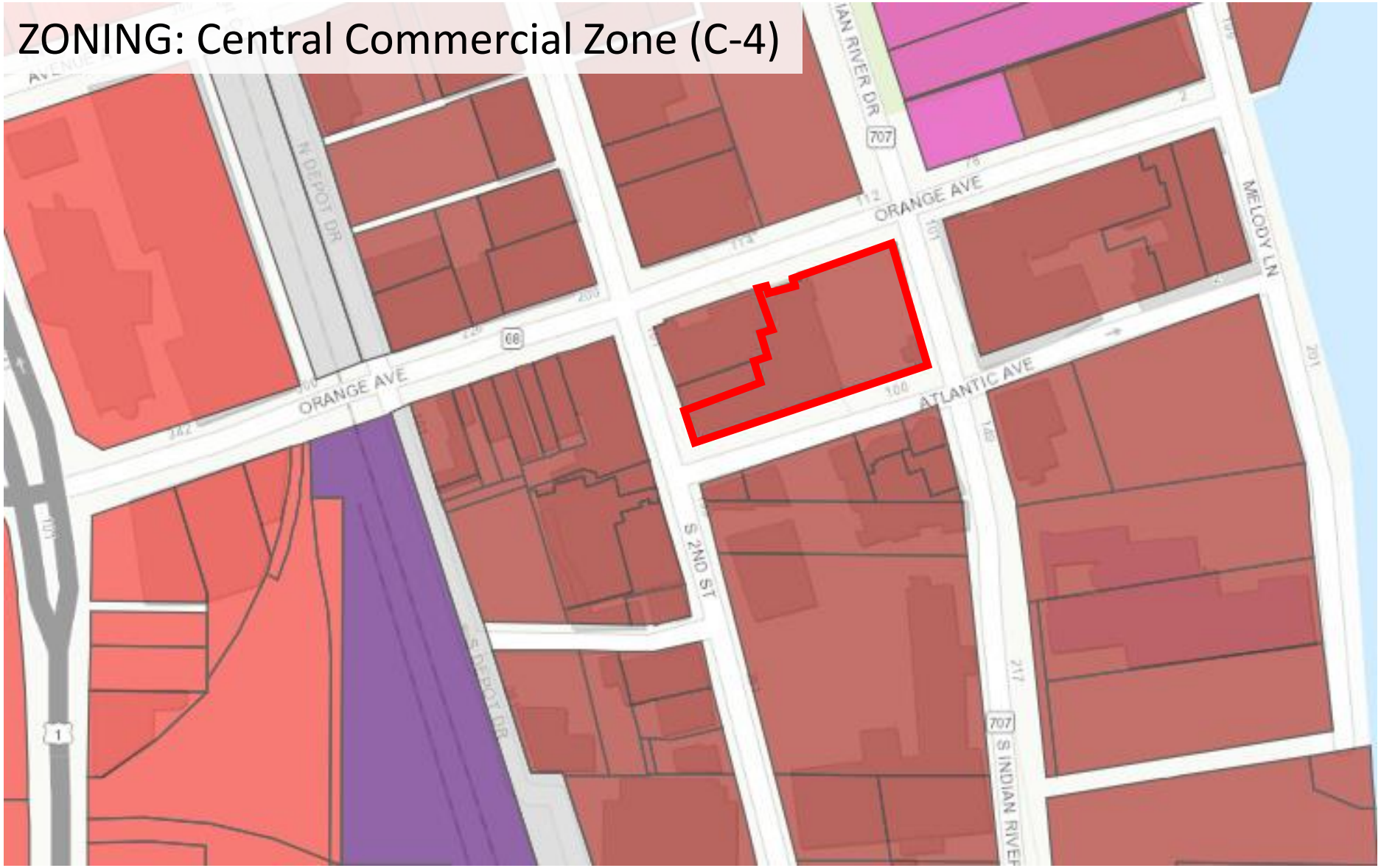
FAMILY AMUSEMENT CENTER

111 ORANGE AVE

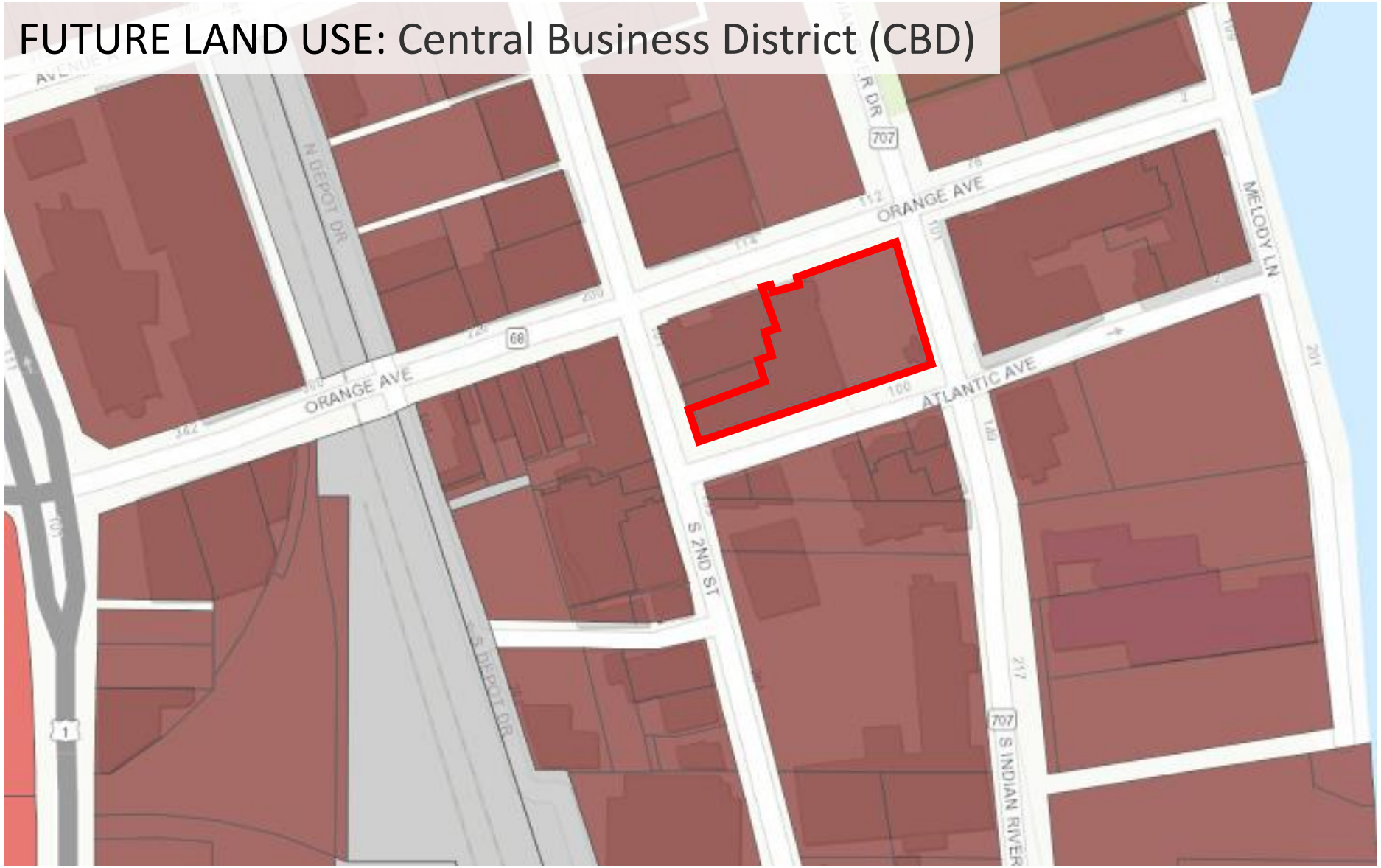
CONDITIONAL USE APPLICATION: Family Amusement Center, One Eleven Orange Ave (111 2nd ST)



CONDITIONAL USE APPLICATION: Family Amusement Center, One Eleven Orange Ave (111 2nd ST)



CONDITIONAL USE APPLICATION: Family Amusement Center, One Eleven Orange Ave (111 2nd ST)



The property subject of this conditional use application is located within the C-4 Zoning District which permits mixed-use and indoor entertainment.

The C-4 Zoning District does not permit Arcade Amusement Centers and Amusement Arcades.

The proposed mixed-use with ancillary eating facilities would be better described as a ‘Family Indoor Entertainment’ or a ‘Family Amusement Center’ venue.

State Statute supports ‘Family Amusement Centers’ and restricts the types of games and machines therein.

If approved, the proposed use would only be permitted to accommodate **skill-based** amusement games or machines.

The types of amusement games and machines allowed within this use are restricted by Florida State Statute 546.10, which deals with ‘Family Amusement Centers’.

Staff Recommend that the Planning Board approve this Conditional Use Application with the following conditions:

1. Only skill-based amusement games or machines are permitted as described by Florida State Statute 546.10 and shall not include;
    a. Any game or machine that uses mechanical slot reels, video depictions of slot machine reels or symbols, or video simulations or video representations of any other casino game, including, but not limited to, any banked or banking card game, poker, bingo, pull-tab, lotto, roulette, or craps.
    b. A game in which the player does not control the outcome of the game through skill or a game where the outcome is determined by factors not visible, known, or predictable to the player.
    c. A video poker game or any other game or machine that may be construed as a gambling device under the laws of this state.
    d. Any game or device defined as a gambling device in 15 U.S.C. s. 1171, unless excluded under 15 U.S.C. s. 1178.
2. Window tinting, mirrored windows, or other obscuring elements are prohibited to be installed on/at any display windows connected to the approved use.

INTENTIONALLY BLANK

Sec. 125-325 Amusement Arcades and arcade amusement centers.

Amusement Arcade means that portion of an interior premises consisting of three or more amusement devices, but no more than 49 amusement devices.

Arcade Amusement Center means that portion of an interior premises consisting of 50 or more amusement devices.

Amusement Device means any table, platform, mechanical or electronic device or apparatus operated or intended to be operated indoors for amusement, pleasure, test of a skill, competition or sport, where the use or operation of which is conditioned upon payment of a consideration either by insertion of a coin, electronic card, or token in a slot or otherwise so long as the person playing does not receive anything of value or any prize in violation of state or federal law…*(continued)*

Amusement Device …*(continued)* The definition of the term "amusement device" includes, but is not be limited to, devices commonly known or simulated baseball, simulated football, simulated basketball, simulated hockey, simulated boxing, pinball, shuffleboard, ray guns, bowling games, bumper games, skiball, electronic video games, and shall also include billiard tables and pool tables (whether coin or not). Such definition does not include a bowling alley, juke box, or other coin-operated music machine, or a mechanical children's amusement riding device.

The provisions of Sec 125-325

Amusement arcades and arcade amusement centers shall comply with the following regulations:

(1) General operating standards.

a. No amusement arcade or arcade amusement centers shall operate after the hour of 12:00 midnight and before the hour of 8:00 a.m. on weekdays, and between 2:00 a.m. and 8:00 a.m. on weekends.

b. No game shall be played by persons who are under 18 years of age.

c. No arcade amusement center shall be located within 1,250 feet of another arcade amusement center. Such distance shall be measured from closest property line to closest property line.

d. No amusement arcade or arcade amusement centers shall be permitted within the Downtown Business and Entertainment Overlay District.

e. No amusement arcade or arcade amusement centers shall be located within 250 feet of the Downtown Business and Entertainment Overlay District boundaries.

f. Alcohol sales or consumption shall be prohibited in amusement arcades and arcade amusement centers.

g. Amusement arcades or arcade amusement centers shall not exceed 9,000 square feet.

h. Amusement arcades or arcade amusement centers shall operate in full compliance with all state and federal law.

The provisions of Sec 125-325

(2) Design standards.

a. No sign, display, or merchandise, shall be placed on or adjacent to any window if such placement would interfere with the clear and unobstructed view of the entire interior of the establishment from ground level through exterior windows.

b. Placement of game machines along front windows are prohibited.

c. Window tinting, mirrored windows, or other obscuring elements are prohibited.

d. All entrances shall be adequately lighted.

e. All amusement arcades or arcade amusement centers must post at least two conspicuous signs within the premises, and one conspicuous sign at the entrance, stating the following:

1. Minimum age requirements as described above.
2. School hours use restrictions as described above.
3. No smoking.
4. No drugs.
5. No alcohol.

The provisions of Sec 125-325

(2) Design standards.

f. Amusement arcades or arcade amusement centers shall provide bicycle racks within enough stalls to accommodate one bicycle for each five game machines located within the premises. Bicycle racks shall be located as close as practical to the entrance of the facility and shall not be located in a manner that obstructs any entrances, exits, sidewalks, driveways, or parking areas.

g. All amusement arcades or arcade amusement centers must provide public restrooms in accordance with applicable country health department requirements.

h. Lighting for parking lots must satisfy lighting requirements of section 125-315(g)(1) prior to the issuance of a business tax receipt.

i. Landscaping must comply with requirements of the city's landscaping ordinance prior to the issuance of a business tax receipt.

j. Sidewalks shall be installed along all public rights-of-way for properties that have arcade uses and shall be installed prior to the issuance of a business tax receipt. No location shall be exempt from sidewalk provisions contained in section 125-317.

k. Any proposed exterior change to a building used for arcade uses will be subject to city design review guidelines pursuant to section 125-314. This shall not apply to buildings located in historic districts or buildings that are individually designated.

l. Parking shall be provided at a rate of three-fourths parking spaces per machine (or three spaces for every four machines).

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

CONDITIONAL USE – NO NEW CONSTRUCTION

Property Information

Property address or Location
111 Orange Ave.

Parcel ID #(s)
2410-509-0002-000-1

Project description
Family Amusement Center on Full Main Level in Second Generation Space

Site Information

Building Size: 35000 Parking Spaces: 24

One Eleven Orange, LLC
Property Owner(s)
111 Orange Ave. #300
Street Address
Fort Pierce FL 34950
City State Zip
561-762-3732
Phone Number
hovenre@gmail.com
Email Address

Steve Tarr
Applicant/Representative, Title, Company
111 Orange Ave. #300
Street Address
Fort Pierce FL 34950
City State Zip
561-762-3732
Phone Number
hovenre@gmail.com
Email Address

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

Property Owner(s) Signature(s)

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

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

Property Identification

Site Address: 111 ORANGE AVE	Parcel ID: 2410-509-0002-000-1	Account #: 23132	Sec/Town/Range: 10/35S/40E
Use Type: 1800	Jurisdiction: Fort Pierce	Map ID: 24/10N	Zoning: Central Co

Ownership

One Eleven Orange LLC
4521 PGA BLVD Ste 201
Palm Beach Gardens, FL 33418

Legal Description

MCMULLEN'S PLAT BLK 1 BEG 56 FT S OF NW COR OF BLK 1, TH E 95 FT, TH N 28 FT, TH E 10 FT, TH S 68 FT, TH W 105 FT, TH N 40 FT TO POB AND LOT 4- LESS W 6 FT OF N 28 FT- AND ALL OF LOTS 5, 6, 7, 8 AND 9 AND E 157.87 FT OF W 282.87 FT OF LOT 1 OF AARON LEE`S MAP OF FORT PIERCE BLK K (0.69 AC - 30,128 SF) (MAP 24/10N) (OR 3735-2813)

Current Values

Just/Market:	$1,124,800	Assessed:	$971,080
Exemptions:	$0	Taxable:	$971,080

Historical Values 3-year

Year	Just/Market	Assessed	Exemptions	Taxable
2023	$1,124,800	$971,080	$0	$971,080
2022	$882,800	$882,800	$0	$882,800
2021	$879,700	$847,240	$0	$847,240

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
03-27-2015	3735 / 2813	0002	WD	Eviva Group Florida Inc	$800,000
02-10-2012	3367 / 0340	0205	WD	Spurrier Investments Inc	$1,250,000
06-26-2009	3104 / 0566	0205	WD	Boca Ven Land of Ft Pierce Inc	$1,398,300

Primary Building Information

Finished Area of this building: 31,011 SF
Gross Sketched Area: 40,438 SF

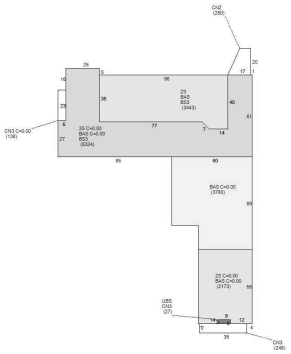
Exterior Data

View:	Roof Cover: Mod Bitimun	Roof Structure: BarJst/Rigid	Building Type: HROF
Year Built: 1919	Frame: Conc Blk	Grade: Y_D	Effective Year: 1939
Primary Wall: CB Stucco	Story Height: 3 Story	No. Units: N/A2	Secondary Wall:

Interior Data

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





Total Areas

Finished/Under Air (SF):	31,187
Gross Sketched Area (SF):	40,862
Land Size (acres):	0.68
Land Size (SF):	29,836
Total Building Count:	2

Special Features and Yard Items

Type	Qty	Units	Year Blt
ASP2 LOW	1	4485	1976
ELEVATOR	1	2000	1976
ELEVATOR	1	1200	1976

Legal Description

MCMULLEN'S PLAT BLK 1 BEG 56 FT S OF NW COR OF BLK 1, TH E 95 FT, TH N 28 FT, TH E 10 FT, TH S 68 FT, TH W 105 FT, TH N 40 FT TO POB AND LOT 4- LESS W 6 FT OF N 28 FT- AND ALL OF LOTS 5, 6, 7, 8 AND 9 AND E 157.87 FT OF W 282.87 FT OF LOT 1 OF AARON LEE`S MAP OF FORT PIERCE BLK K (0.69 AC - 30,128 SF) (MAP 24/10N) (OR 3735-2813)

546.10 Amusement games or machines.—

(1) This section may be cited as the "Family Amusement Games Act."

(2) The Legislature finds that regulation of the operation of skill-based amusement games or machines at specified locations to ensure compliance with the requirements of law is appropriate to prevent expansion of casino-style gambling. Therefore, the Legislature finds that there is a compelling state interest in clarifying the operation and use of amusement games or machines to ensure that provisions regulating these devices are not subject to abuse or interpreted in any manner as creating an exception to the state's general prohibitions against gambling.

(3) As used in this section, the term:

(a) "Amusement game or machine" means a game or machine operated only for the bona fide entertainment of the general public which a person activates by inserting or using currency or a coin, card, coupon, slug, token, or similar device, and, by the application of skill, with no material element of chance inherent in the game or machine, the person playing or operating the game or machine controls the outcome of the game. The term does not include:

1. Any game or machine that uses mechanical slot reels, video depictions of slot machine reels or symbols, or video simulations or video representations of any other casino game, including, but not limited to, any banked or banking card game, poker, bingo, pull-tab, lotto, roulette, or craps.

2. A game in which the player does not control the outcome of the game through skill or a game where the outcome is determined by factors not visible, known, or predictable to the player.

3. A video poker game or any other game or machine that may be construed as a gambling device under the laws of this state.

4. Any game or device defined as a gambling device in 15 U.S.C. s. 1171, unless excluded under 15 U.S.C. s. 1178.

(b) "Arcade amusement center" means a place of business having at least 50 amusement games or machines on premises which is operated for the entertainment of the general public and tourists as a bona fide amusement facility.

(c) "Card" means a card other than a credit card or debit card:

1. Which is used to activate an amusement game or machine.

2. Which contains a microprocessor chip, magnetic stripe, or other means for storing, retrieving, and transferring information, which may include information regarding coupons or points that are won and that may be redeemed for merchandise.

3. Which is prefunded.

4. For which the prefunded value is reduced by the cost of play.

(d) “Game play” means the process of events beginning with the activation of the amusement game or machine and ending when the results of play are determined without the insertion or the use of any additional currency, coin, card, coupon, slug, token, or similar device to continue play. A free replay is not a separate game played.

(e) “Material element of chance inherent in the game or machine” means that:

1. The possibility of the player succeeding at the game or accomplishing the player’s task is determined by the number or ratio of prior wins or prior losses of players playing the game;

2. An award of value is not based solely on the player achieving the object of the game or on the player’s score;

3. The number of the coupons or points awarded or the value of the prize awarded for successfully playing the game can be controlled by a source other than the player or players playing the game;

4. The ability of the player to succeed at the game is determined by a game feature or design that changes the effect of the player’s actions and that is not discernible or known by the player;

5. The accomplishment of the player’s task requires the exercise of a skill that no player could exercise;

6. A computer-based or mechanical random number generator or other factor that is not discernible, known, or predictable by the player determines the outcome or winner of the game; or

7. The game is designed or adapted with a control device to allow manipulation of the game by the operator in order to prevent a player from winning or to predetermine which player will win.

(f) “Merchandise” means noncash prizes maintained on the premises by the operator of the amusement game or machine, including toys and novelties. The term does not include:

1. A cash equivalent, such as a gift card or certificate;

2. An alcoholic beverage;

3. A tobacco product;

4. A card, coupon, point, slug, token, or similar device that can be used to activate an amusement game or machine;

5. A coupon or a point that has a redemption value greater than the maximum value determined under subsection (7); or

6. Any prize or other item, if the exchange or conversion to cash or a cash equivalent is facilitated or permitted by the owner or operator of the game or machine.

(g) “Redemption value” means the imputed value of a coupon or a point, based on the wholesale cost of merchandise for which the individual may redeem the coupon or point.

(h) “Truck stop” means a dealer registered pursuant to chapter 212, excluding a marina, which:

1. Declares the sale of diesel fuel to be its primary fuel business.

2. Operates at least six functional diesel fuel pumps.

(4) Notwithstanding any other provision of law, an amusement game or machine may be operated as provided in this section.

(5) For purposes of this section:

(a) “Type A” is an amusement game or machine that, upon activation and game play, does not deliver, entitle, or enable a person playing or operating the amusement game or machine to receive cash, billets, tickets, tokens, points, coupons, merchandise, or any other thing of value, including electronic credits to be exchanged for cash, regardless of whether such things are delivered or paid automatically from the machine or manually. However, Type A amusement and machines may entitle or enable a person to replay the game without the insertion or use of any additional currency, coin, card, coupon, slug, token, or similar device, only if:

1. The amusement game or machine can accumulate and react to no more than 15 such replays;

2. The amusement game or machine can be discharged of accumulated replays only by reactivating the game or device for one additional play for each accumulated replay;

3. The amusement game or machine cannot make a permanent record, directly or indirectly, of any free replay;

4. The amusement game or machine does not entitle the player to receive anything of value other than a free replay;

5. An unused free replay may not be exchanged for anything of value, including merchandise or a coupon or a point that may be redeemed for merchandise; and

6. The amusement game or machine does not contain any device that awards a credit and contains a circuit, meter, or switch capable of removing and recording the removal of a credit if the award of a credit is dependent upon chance.

(b) “Type B” is an amusement game or machine that may, upon activation and game play, entitle or enable a person to receive a coupon or a point that may only be redeemed onsite for merchandise; and:

1. The coupon or point has no value other than for redemption onsite for merchandise;

2. The redemption value of the coupon or point that a person receives for a single game played does not exceed the maximum value determined under subsection (7). However, a player may accumulate coupons or points to redeem onsite for a single item of merchandise that has a wholesale cost of not more than 100 times the maximum value determined under subsection (7), or for a prize consisting of more than one item, unit, or part, only if the aggregate wholesale cost

of all items, units, or parts does not exceed 100 times the maximum value determined under subsection (7); and

3. The redemption value of coupons or points that a person receives for playing multiple games simultaneously or competing against others in a multiplayer game does not exceed the maximum value determined under subsection (7).

(c) "Type C" is an amusement game or machine that allows the player to manipulate a claw or similar device within an enclosure that entitles or enables a person to receive merchandise directly from the game or machine, if the wholesale cost of the merchandise does not exceed 10 times the maximum value determined under subsection (7).

(6)(a) A Type B amusement game or machine may only be operated at:

1. A facility as defined in s. 721.05(17) that is under the control of a timeshare plan.

2. A public lodging establishment or public food service establishment licensed pursuant to chapter 509.

3. The following premises, if the owner or operator of the premises has a current license issued by the Department of Business and Professional Regulation pursuant to chapter 509, chapter 561, chapter 562, chapter 563, chapter 564, chapter 565, chapter 567, or chapter 568:

a. An arcade amusement center;

b. A bowling center, as defined in s. 849.141; or

c. A truck stop.

(b) A Type C amusement game or machine may only be operated at:

1. A facility as defined in s. 721.05(17) that is under the control of a timeshare plan;

2. An arcade amusement center;

3. A bowling center, as defined in s. 849.141;

4. The premises of a retailer, as defined in s. 212.02;

5. A public lodging establishment or public food service establishment licensed pursuant to chapter 509;

6. A truck stop; or

7. The premises of a veterans' service organization granted a federal charter under Title 36, U.S.C., or a division, department, post, or chapter of such organization, for which an alcoholic beverage license has been issued.

(7) For purposes of this section, the maximum value is $5.25. Beginning September 30, 2017, and annually thereafter, the Department of Revenue shall calculate the maximum value as adjusted by the rate of inflation for the 12 months preceding September 1, rounded to the nearest 5 cents. In calculating the adjusted maximum value, the department shall multiply the previous maximum value by one plus the percentage change in the Consumer Price Index for All Urban Consumers, U.S. City Average, All Items, not seasonally adjusted, or a successor index as

calculated by the United States Department of Labor. Each adjusted maximum value shall take effect on the following January 1, with the initial adjusted maximum value to take effect on January 1, 2018. Beginning October 15, 2017, and annually thereafter, the department shall publish the maximum value, as adjusted, in a brochure accessible from its website relating to sales and use tax on amusement machines. If the release of the August Consumer Price Index for All Urban Consumers occurs after September 15, in any given year, the department shall publish the adjusted maximum value within 30 calendar days after the release date.

(8) Notwithstanding any other provision of law, an action to enjoin the operation of any game or machine pursuant to or for an alleged violation of this section or chapter 849 may be brought only by:

(a) The Attorney General, the state attorney for the circuit in which the game or machine is located, a federally recognized tribal government possessing sovereign powers and rights of self-governance which is a party to a compact with the state, or in the case of an alleged violation of statutes that it is charged with enforcing, the Department of Agriculture and Consumer Services or the Department of Business and Professional Regulation; or

(b) A substantially affected person who is a resident of the county where the place of business operating the game or machine is located, or any substantially affected person who has a business or residence within 5 miles of the place of business operating the game or machine.

(9) In addition to other civil, administrative, and criminal sanctions, a person who violates this section commits a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083. A person convicted of violating this section a second time commits a misdemeanor of the first degree, punishable as provided in s. 775.082 or s. 775.083. A person who violates this section after having been twice convicted is deemed a common offender and commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

History.—s. 1, ch. 2015-93; s. 66, ch. 2016-10.

Planning Board **6. b.**

Meeting Date: 02/12/2024

Re: Site Plan (Development and Design Review) - Viva East - 5315 Edwards Road and 5496 Altman Road

Submitted For: Kev Freeman, Planning Director, Planning Department

---

Information

SUBJECT:

Site Plan (Development and Design Review) - Viva East - 5315 Edwards Road and 5496 Altman Road

SUMMARY:

The applicant is requesting the review and approval of an application for a Site Plan (Development and Design Review) for a two-hundred and six (206) unit rental community at 5315 Edwards Road and 5496 Altman Road Road. The community will consist of one-bedroom, two-bedroom and three-bedroom duplexes. Viva East is the sister project to Viva West. Both communities will share access to amenities such as a fitness center, business lodge, community room, catering kitchen, pet spa, outdoor grilling areas and more.

The Site Plan leaves the 8.20 acre wetland (2.25 acres are freshwater marsh and 5.95 acres are riverine swamp) preserved, providing an additional 2.5 acres of upland ecosystems adjacent to those wetlands as a buffer. The 10.7 acres of wetlands and buffer will be preserved through a conservation easement.

The proposed development is located on a parcel with an approximate acreage of 39.70 acres. The future land use of the parcel is Medium Density Residential, RM, and the zoning is Medium Density Residential, R-4. The proposed 206 units are below the allowed 397 units (10 units per acre) in the R-4 zoning district.

RECOMMENDATION:

Staff's recommendation is for the Planning Board to move the proposed Site Plan (Development and Design Reviews), with four conditions, for approval to City Commission.

1. A completion certification by a landscape architect, cost estimate and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.
2. A gopher tortoise survey will be required per State Statute before construction can begin.
3. Addresses will need to be submitted to the Planning Department for all units prior to building permit applications.
4. Prior to the issuance of any Site Clearing Permits, the applicant shall provide a Tree Mitigation Survey and coordinate with the City of Fort Pierce Arborist for the required mitigation of the City-regulated trees proposed to be removed as a result of this site's development/construction activity.

ALTERNATIVES:

- Recommendation of approval with alternative conditions
- Recommendation of disapproval

RESPONSIBLE STAFF:

Ryan Altizer, Senior Planner

COORDINATED WITH:

Technical Review Committee

Fiscal Impact

OTHER INFORMATION:

N/A

Attachments

Staff Presentation
Staff Report
Application Packet & Supporting Documents
Staff Report & Supporting Documents

Form Review

Form Started By: Ryan Altizer Started On: 02/05/2024 03:18 PM
Final Approval Date: 02/06/2024

CITY OF FORT PIERCE

Planning Board

February 12th, 2024

Viva East Site Plan
5315 Edwards Rd. & 5496 Altman Rd.

APPLICANT

Francarlos Rivera, TEG Developers

PROPERTY OWNER(S)

TEG Mariner Cove, LLC

PARCEL ID #(S):

2430-231-0001-000-4 & 2430-234-0001-000-3

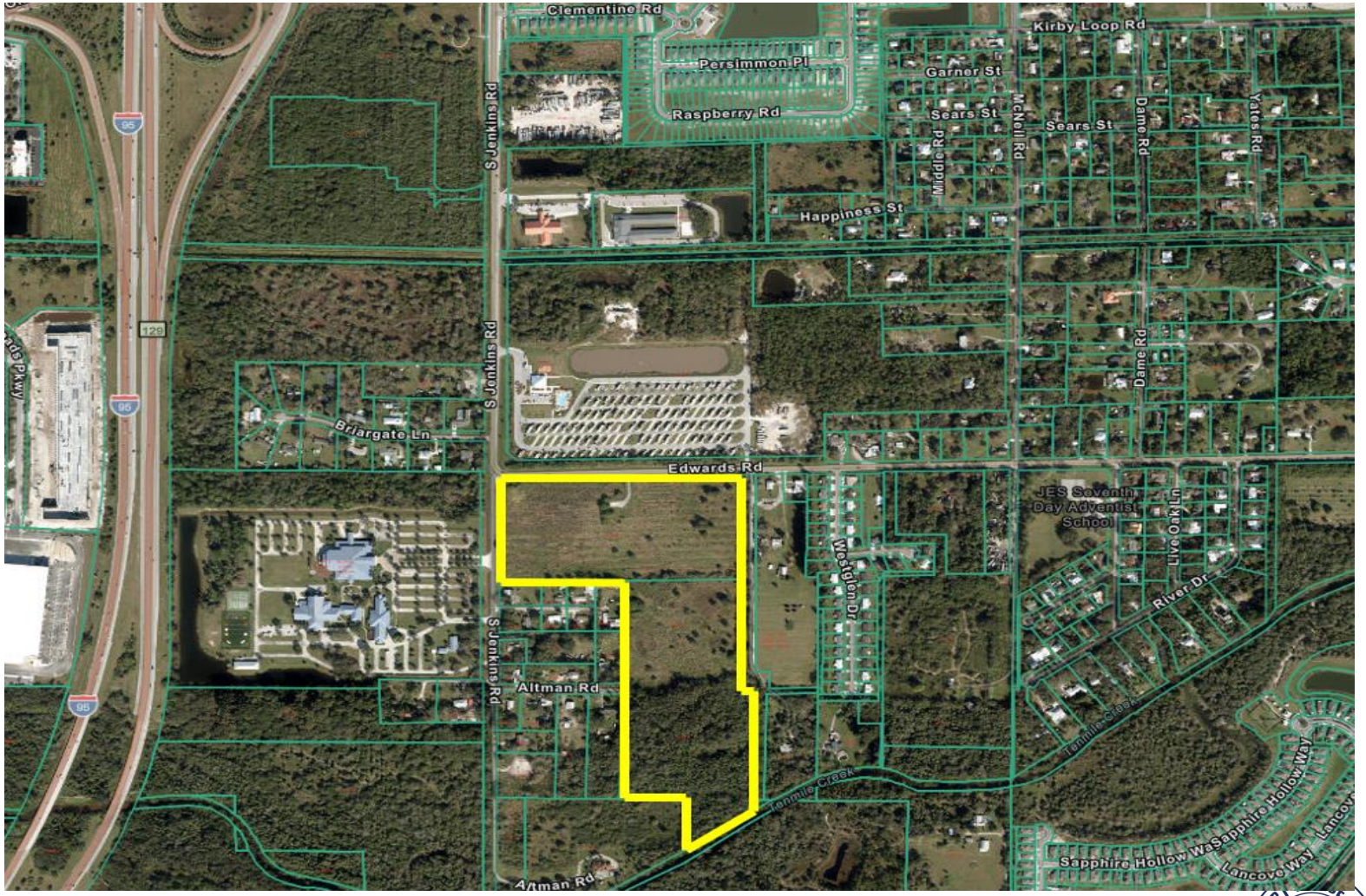
SUMMARY

Request for review of an application for a Site Plan (Development and Design Review) of a two-hundred and six (206) unit rental community. The community will consist of one-bedroom, two-bedroom and three-bedroom duplexes. Viva West is the sister project to Viva East. Both communities will share access to amenities such as a fitness center, business lodge, community room, catering kitchen, pet spa, outdoor grilling areas and more. Viva East is being proposed at 5315 Edwards Road & 5496 Altman Road.

The Site Plan leaves the 8.20-acre wetlands (2.25 acres are freshwater marsh and 5.95 acres riverine swamp) preserved, providing an additional 2.5 acres of upland ecosystems adjacent to those wetlands as a buffer. The 10.7 acres of wetlands and buffer will be preserved through a conservation easement.

The proposed development is located on a parcel with a Future Land Use of Medium Density Residential(RM) and a Zoning of Medium Density Residential(R-4). The proposed 206 units is far below the allotted 10 units per acre (397 units) the applicant could build in this zoning district.

SITE LOCATION

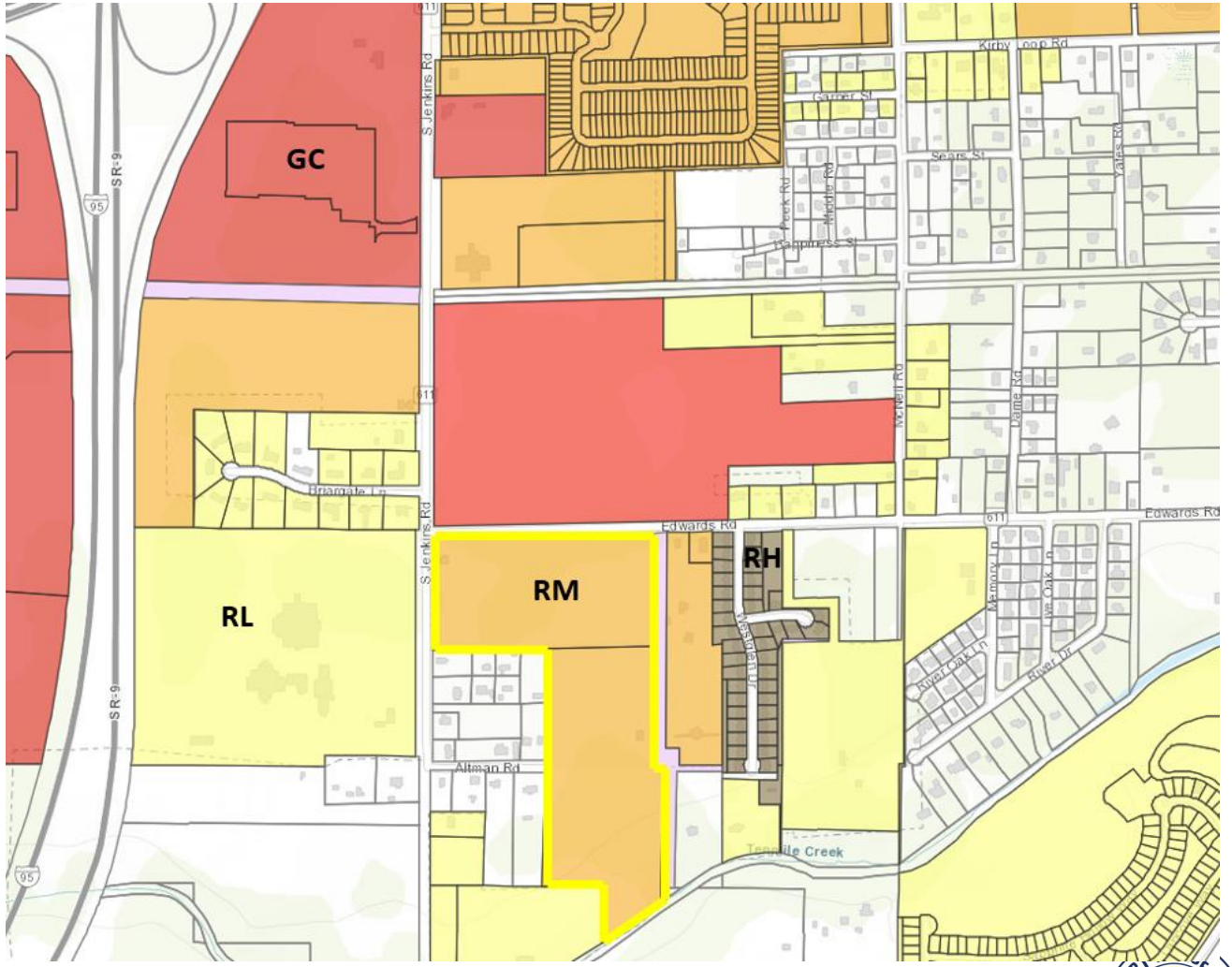


SITE AREA= 39.70 +/- Acres

Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

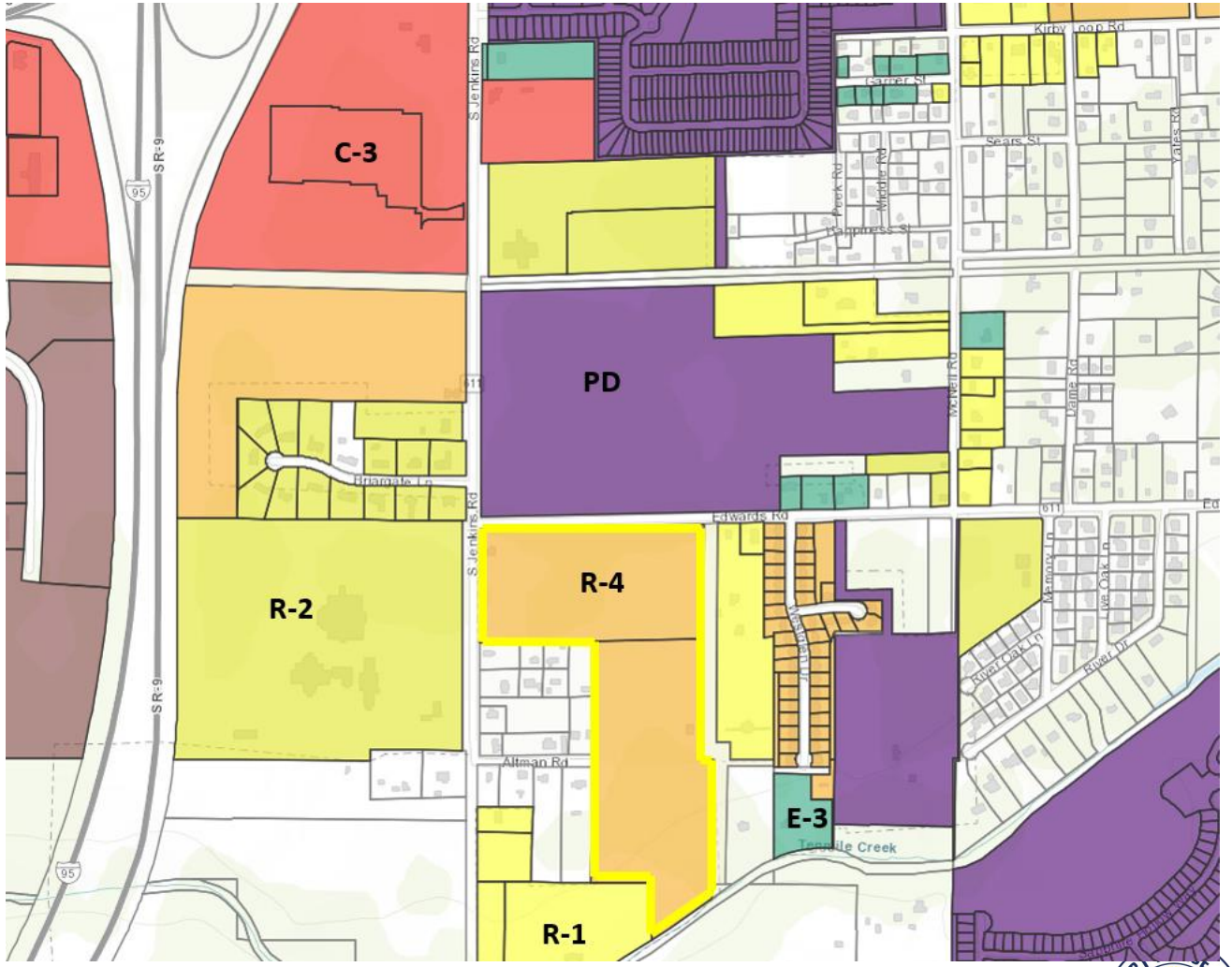
FUTURE LAND USE

Current FLU: RM (Medium Density Residential)



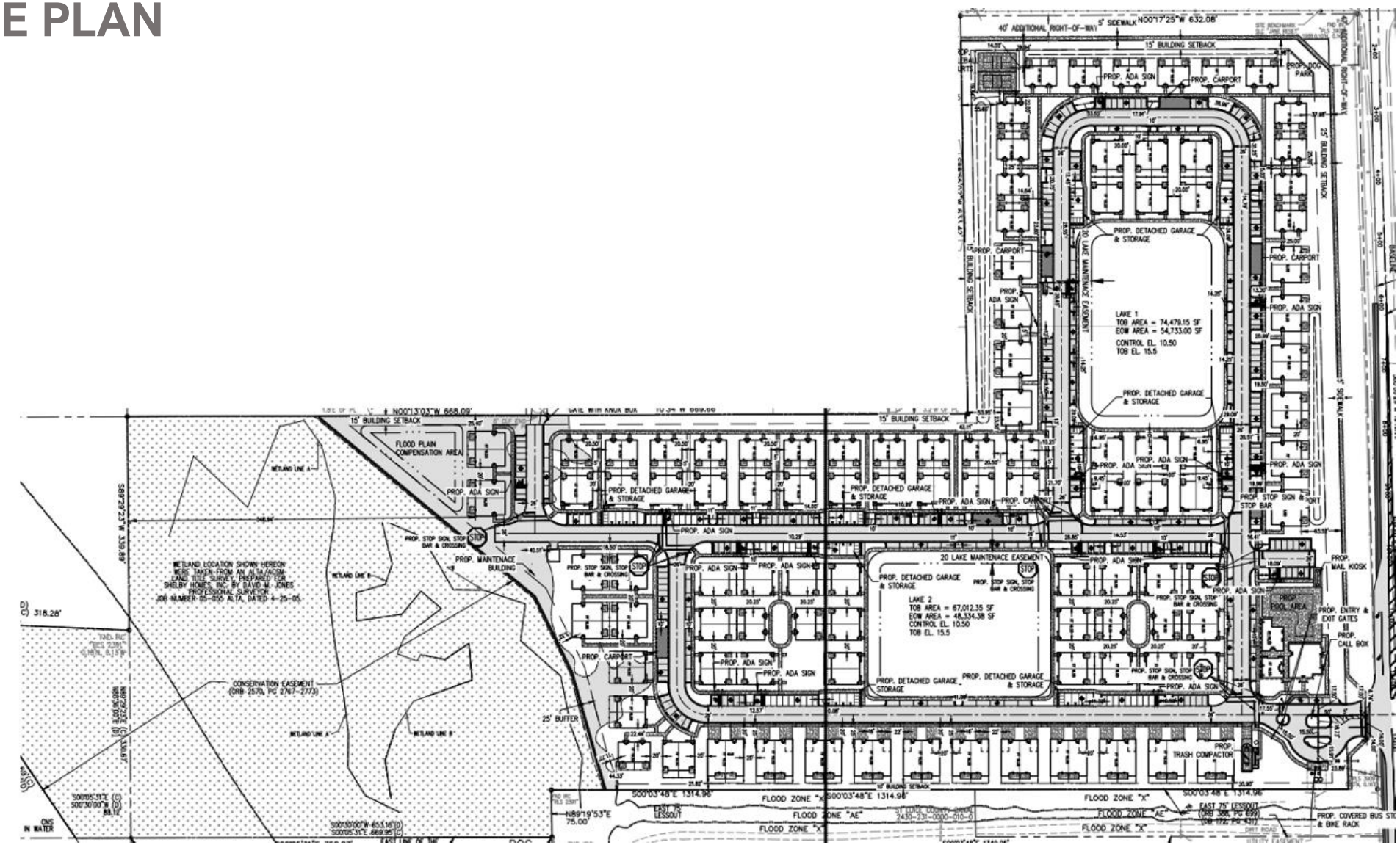
ZONING

Zoning: R-4 (Medium Density Residential)



Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

SITE PLAN



Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

SITE PLAN



Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

SITE PLAN

SITE DATA	
OWNER:	TEG MARINER COVE LLC
OWNER ADDRESS:	365 ROUTE 59 STE 110 AIRMONT, NY 10952
SITE ADDRESS	5315 EDWARDS RD & 5496 ALTMAN RD
PARCEL ID:	2430-231-0001-000-4 & 2430-234-0001-000-3
LEGAL DESCRIPTION:	30 35 40 N 1/2 OF SW 1/4 OF NW 1/4-LESS N 33 FT AND LESS W 40 FT FOR RDS AND LESS E 75 FT FOR DITCH- (47) (17.76 AC) 30 35 40 SE 1/4 OF SW 1/4 OF NW 1/4 AND NE 1/4 OF NW 1/4 OF SW 1/4 AND FROM NE COR OF NW 1/4 OF SW 1/4, RUN S 0 DEG 30 MIN W ALG, TH 1/4 1/4 SEC LI 653.16 FT FOR POB, TH CONT S 0 DEG 30 MIN W 88.12 FT TO PT ON TOP OF BLUFF OF TEN MILE CREEK, TH S 54 DEG 51 MIN 30 SEC W ALG SD CREEK 413.7 FT, TH N 1 DEG 32 MIN E 318.28 FT, TH N 88 DEG 36 MIN E 330.67 FT TO POB (21.05 AC) (CASE #89-14123)
COUNTY:	FORT PIERCE
SEC/TOWN /RANGE:	25/35S/40E
FLOOD ZONE:	X
ZONING:	MEDIUM DEN
FUTURE LANDUSE:	MEDIUM DEN
LOT SIZE:	39.01 AC.

LAND USE DATA			
USE	AREA SF	ACRES	PERCENTAGE
TOTAL SITE AREA	1,620,741.56	37.21	100%
IMPERVIOUS			
BUILDING	241,829.76	5.55	14.92%
ASPHALT	185,953.56	4.27	11.47%
CONCRETE	234,196.02	5.38	14.45%
LAKE	103,067.38	2.37	6.36%
TOTAL IMPERVIOUS:	765,046.72	17.56	47.20%
PERVIOUS			
OPEN SPACE	855,694.84	19.64	52.80%
TOTAL PERVIOUS:	855,694.84	19.64	52.80%

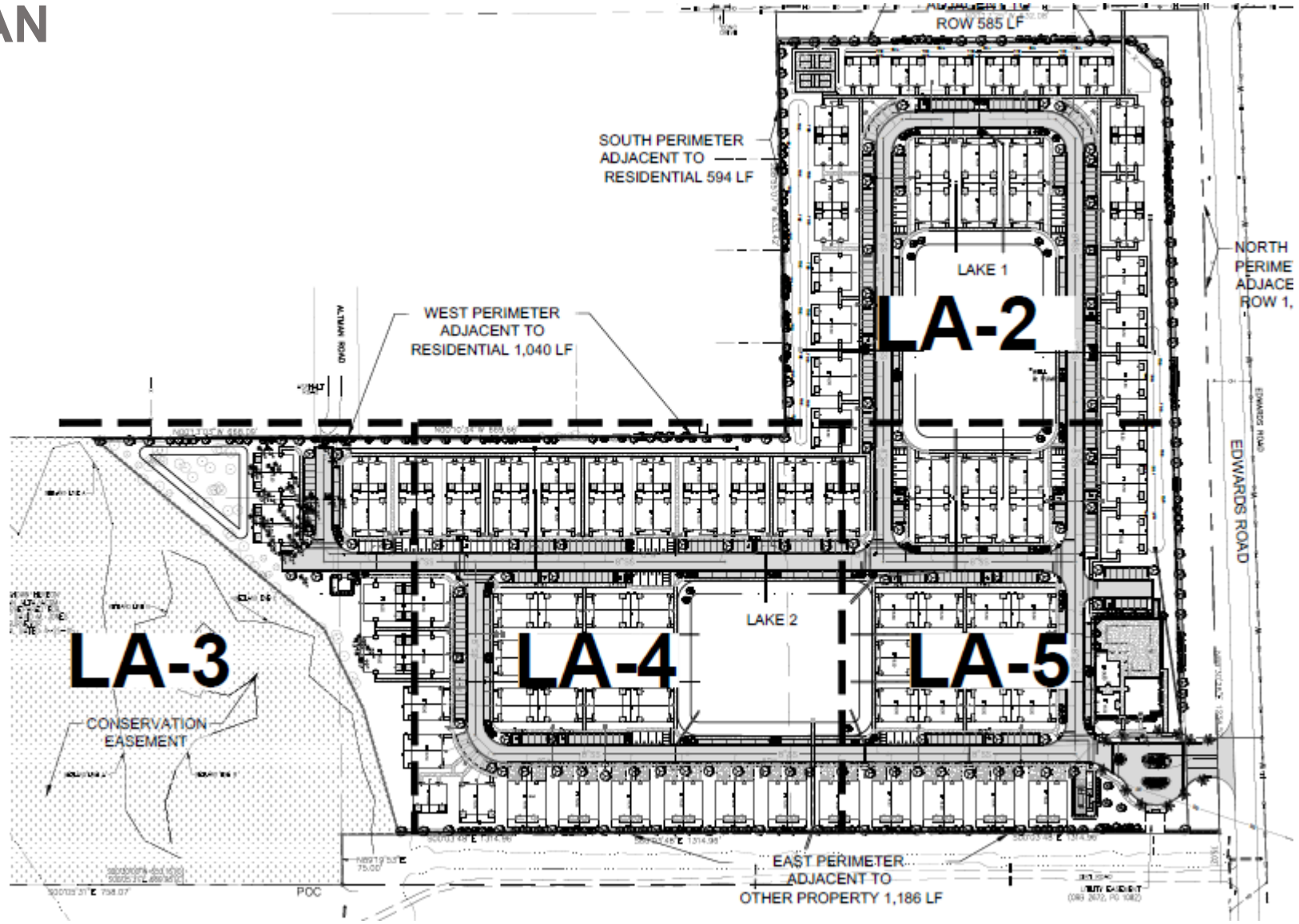
BUILDING DATA		
BUILDING HEIGHT:	45' MAX	24'-2" TO MID POINT
NUMBER OF STORIES:		2
1 BEDROOM UNIT		60
2 BEDROOM UNIT		92
3 BEDROOM UNIT		54
TOTAL UNIT:		206

BUILDING SETBACKS REQUIRED		
	REQUIRED	PROVIDED
FRONT:	25'	37.98'
FRONT (JENKINS RD.)	25'	39.94'
E SIDE:	10'	20.90'
W SIDE:	15'	25.40'
REAR (WETLAND BUFFER)	25'	3.32'

PARKING SPACE REQUIRED	
UNITS:	206
SPACES PER DWELLING UNIT	2
TOTAL SPACES REQUIRED	412
ADA REQUIRED OF REG. SPACES	9
PARKING SPACES PROVIDED	
9' - 6" X 19' 90 & 24 DEG PARKING SPACES	271
DRIVEWAY PARKING SPACES	44
12' X 19' 90 DEG. ADA PARKING SPACES	17
9' - 6" X 22' PARALLEL PARKING	81
DETACHED GARAGE	36
TOTAL SPACES PROVIDED:	459

Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

LANDSCAPE PLAN



Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

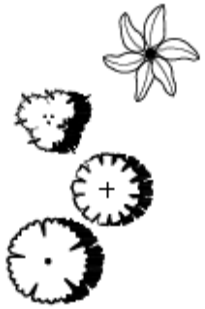
LANDSCAPE PLAN



TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	DBH
	31	Conocarpus erectus	Buttonwood	45G	12` HT	6`W	6`CT, SP	Native	2.5" DBH
	65	Pinus elliotti densa	South Florida Slash Pine	FG	12` HT	5`W	SP	Native	2.5" DBH
	149	Quercus virginiana	Southern Live Oak	45G	12` HT	5`W	6`CT, SP	Native	2.5" DBH



EXISTING TREES TO REMAIN	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	DBH
	11	Quercus spp	Oak Species	Existing to Remain				Native	VARIES 6"-55"
	9	Sabal palmetto	Cabbage Palmetto	Existing to Remain	10`-18` CT		SP	Native	



PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	16	Roystonea regia	Florida Royal Palm	FG	8` GW, 16` OA		SP	Native	
*	6	Phoenix roebelenii	Double Pygmy Date Palm	FG	6`OA	6` SPR	4` CT, SP	Non-native	
***	186	Sabal palmetto	Sabal Palm	FG	10`-18` CT		SLK, HC, SP	Native	
	8	Wodyetia bifurcata	Single Foxtail Palm	FG	6`GW, 10`CT		SGL, FH, SP	Non-native	

Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

LANDSCAPE PLAN

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	* 25	Alcantarea imperialis	Imperial Bromeliad	7G	2` HT	2` W	F	Non-native
	* 132	Bougainvillea `Helen Johnson`	Dwarf Bougainvillea	3G	18" HT	18"W	F	Non-native
	520	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native
	944	Clusia guttifera	Small Leaf Clusia	3G	24" HT	18"W	F	Non-native
	59	Clusia guttifera	Small-Leaf Clusia	7G	48" HT	36" W	F	Non-native
	* 80	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT	18"W	F	Non-native
	46	Hamelia patens 'Compacta'	Dwarf Firebush	3G	24" HT	18"W	F	Non-native
	* 94	Muhlenbergia capillaris	Pink Muhly Grass	3G	24" HT	18"W	F	Native
	* 72	Rondeletia leucophylla	Panama Rose	3G	24" HT	24"W	F	Non-native
	* 76	Schefflera arboricola	Green Schefflera	3G	24" HT	18"W	F	Non-native
	* 43	Serenoa repens `Cinerea`	Silver Saw Palmetto	3G	18" HT	18"W	F	Native

GROUND COVERS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	637	Carissa macrocarpa `Emerald Blanket`	Emerald Blanket Carissa	3G	18"HT	18" W	F	Non-native

SOD	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	TBD	* * Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests	

Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

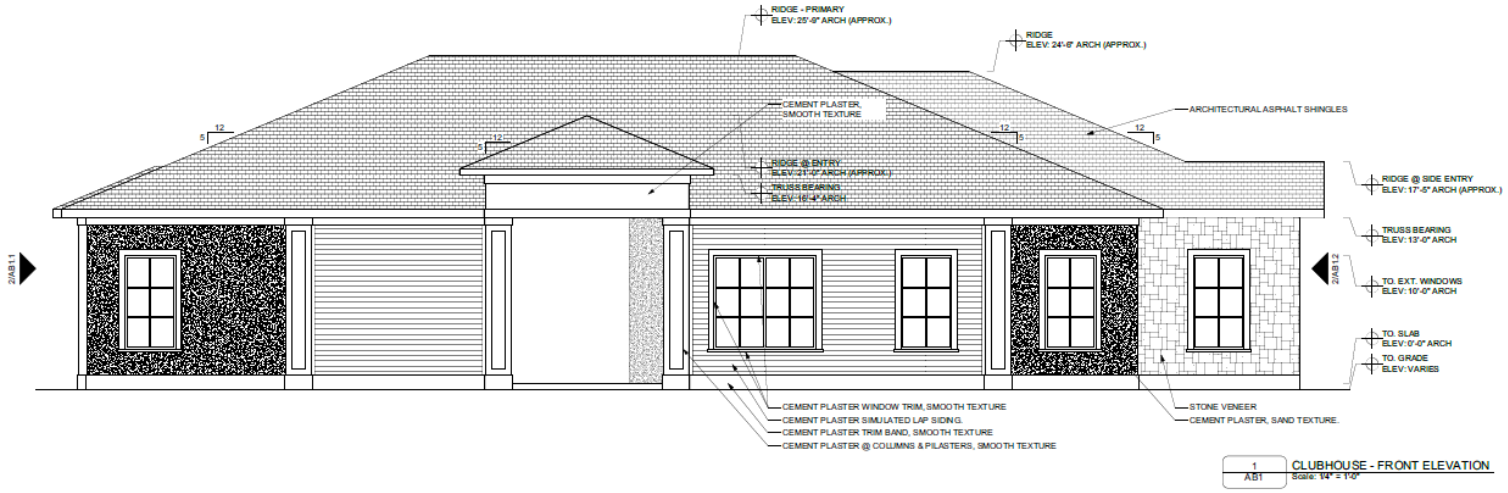
ELEVATIONS





Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS (Clubhouse)



1 / AB1 CLUBHOUSE - FRONT ELEVATION
Scale: 1/4" = 1'-0"

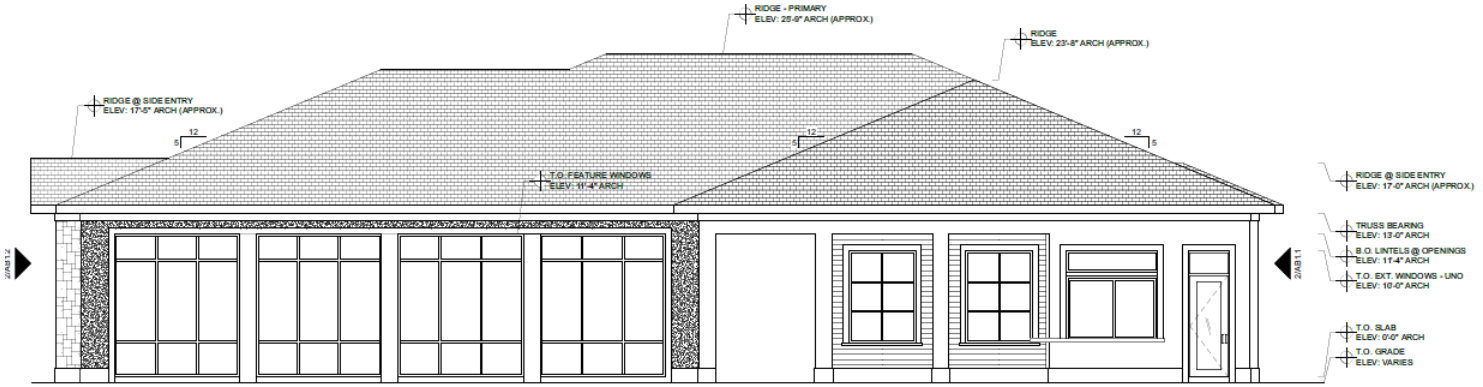
SEE 1/AB1.1 FOR MATERIAL DESIGNATIONS



2 / AB1 CLUBHOUSE - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"

Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS (ONE BEDROOM DUPLEX)



1 AB1-2 CLUBHOUSE - REAR ELEVATION
Scale: 1/4" = 1'-0"

EE 1/AB1.1 FOR MATERIAL DESIGNATIONS



2 AB1-2 CLUBHOUSE - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

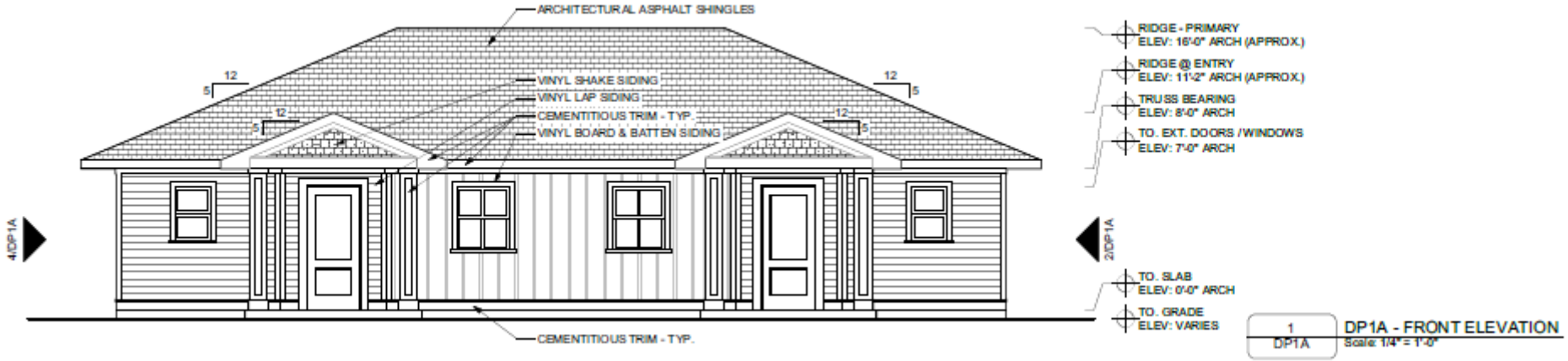
Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS

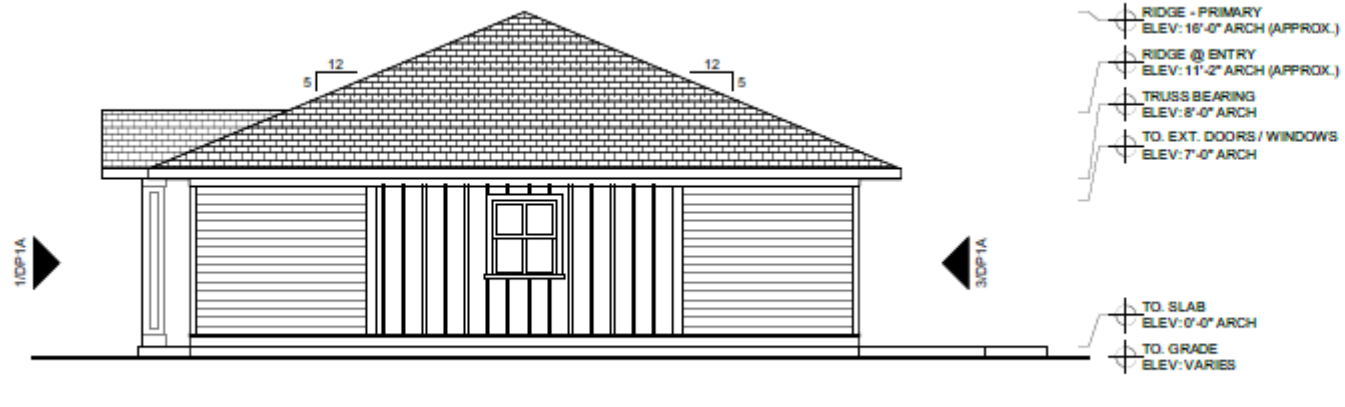


Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS (ONE BEDROOM DUPLEX)

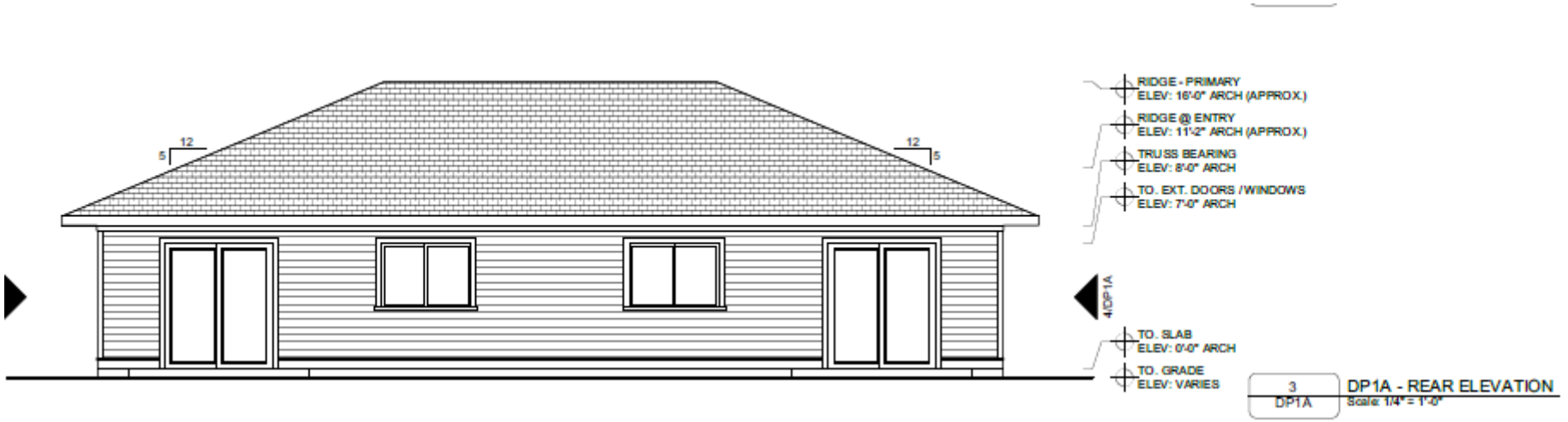


1 DP1A — DP1A - FRONT ELEVATION
Scale: 1/4" = 1'-0"

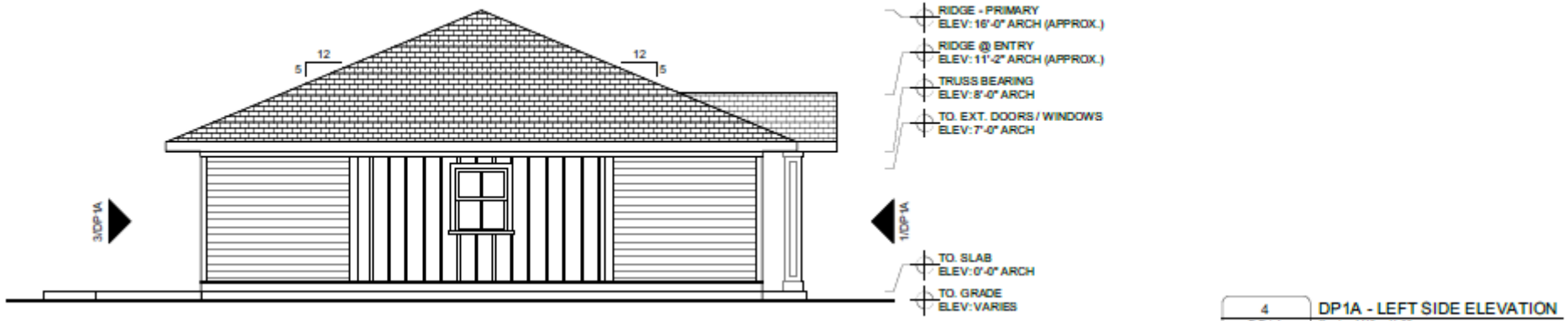


2 DP1A — DP1A - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

ELEVATIONS (ONE BEDROOM DUPLEX)



3 DP1A - REAR ELEVATION
DP1A Scale: 1/4" = 1'-0"



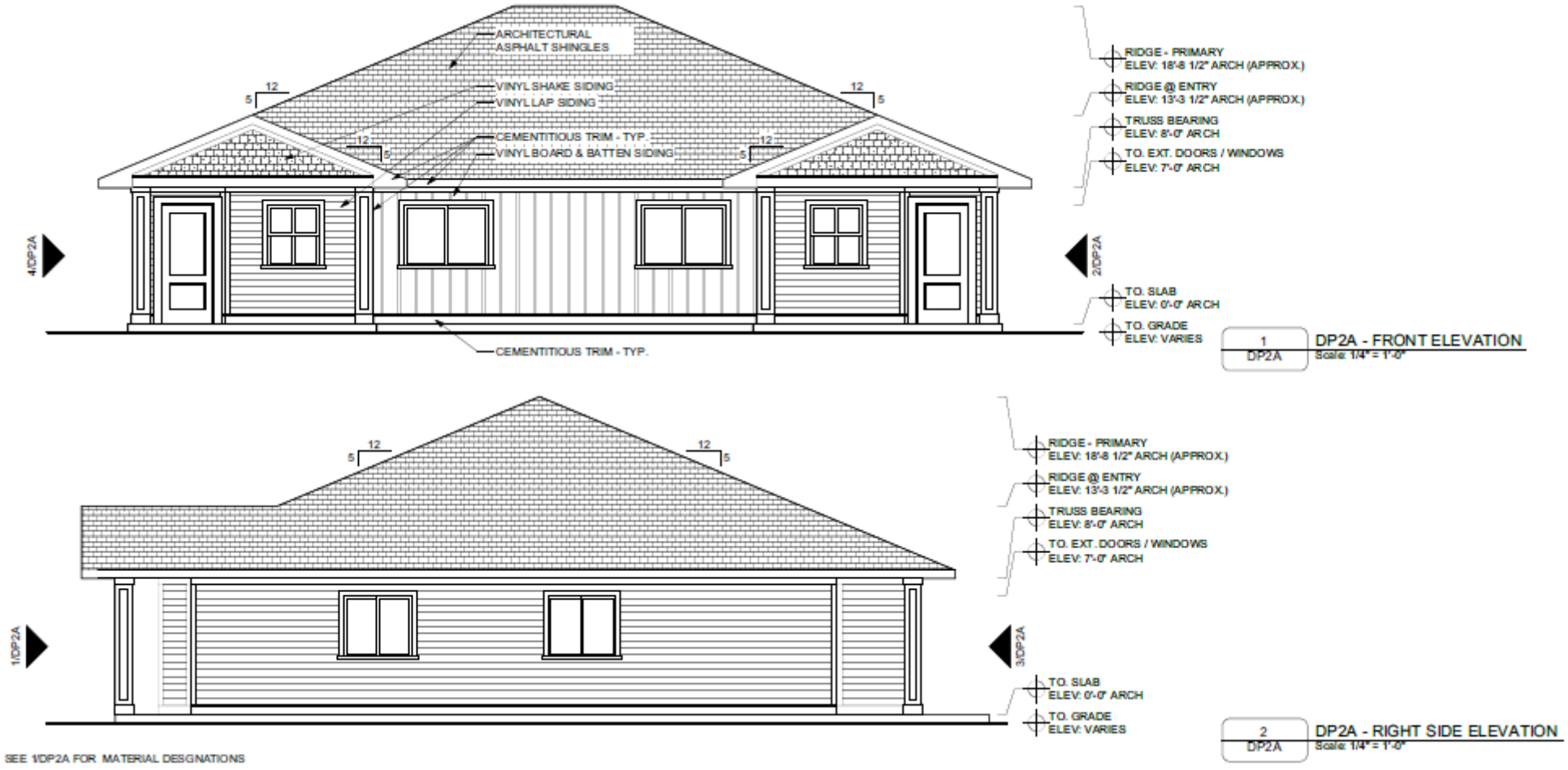
4 DP1A - LEFT SIDE ELEVATION
DP1A Scale: 1/4" = 1'-0"

ELEVATIONS (ONE BEDRROM DUPLEX)



Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS (TWO BEDROOM DUPLEX)



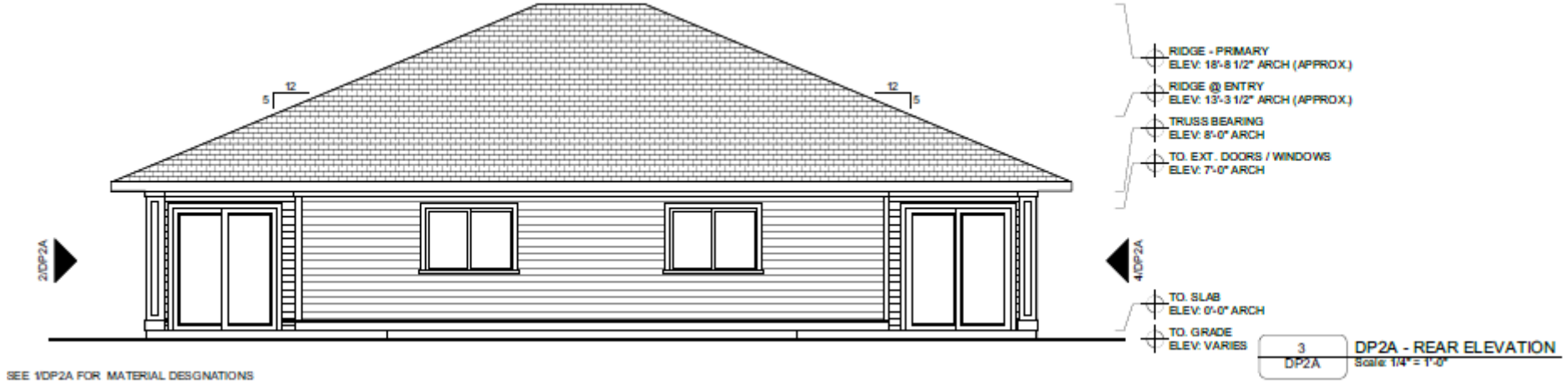
1 DP2A - FRONT ELEVATION
Scale: 1/4" = 1'-0"

2 DP2A - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

SEE 1/DP2A FOR MATERIAL DESIGNATIONS

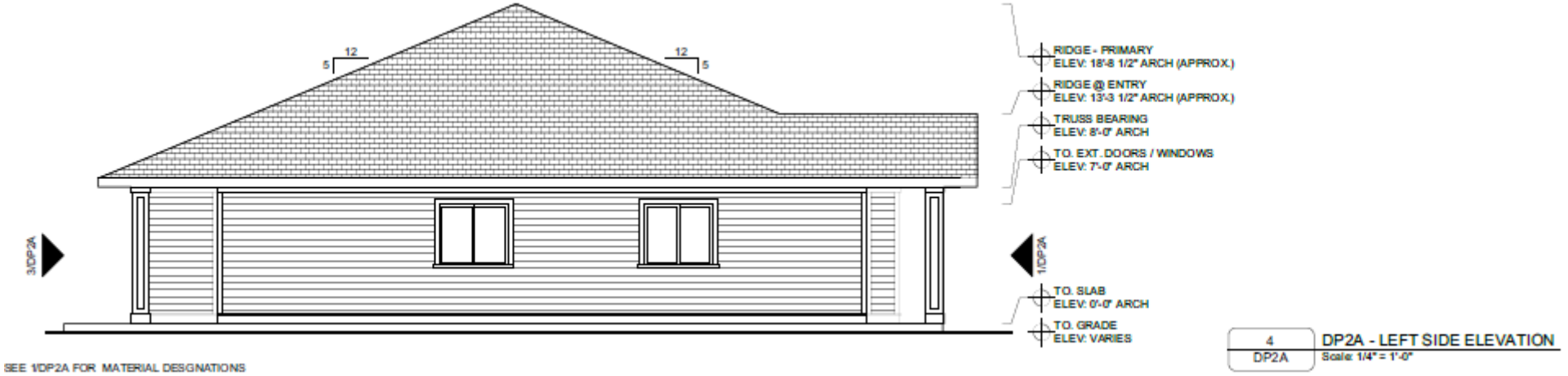
Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS (TWO BEDROOM DUPLEX)



SEE 1/DP2A FOR MATERIAL DESIGNATIONS

3 DP2A - REAR ELEVATION
DP2A Scale: 1/4" = 1'-0"



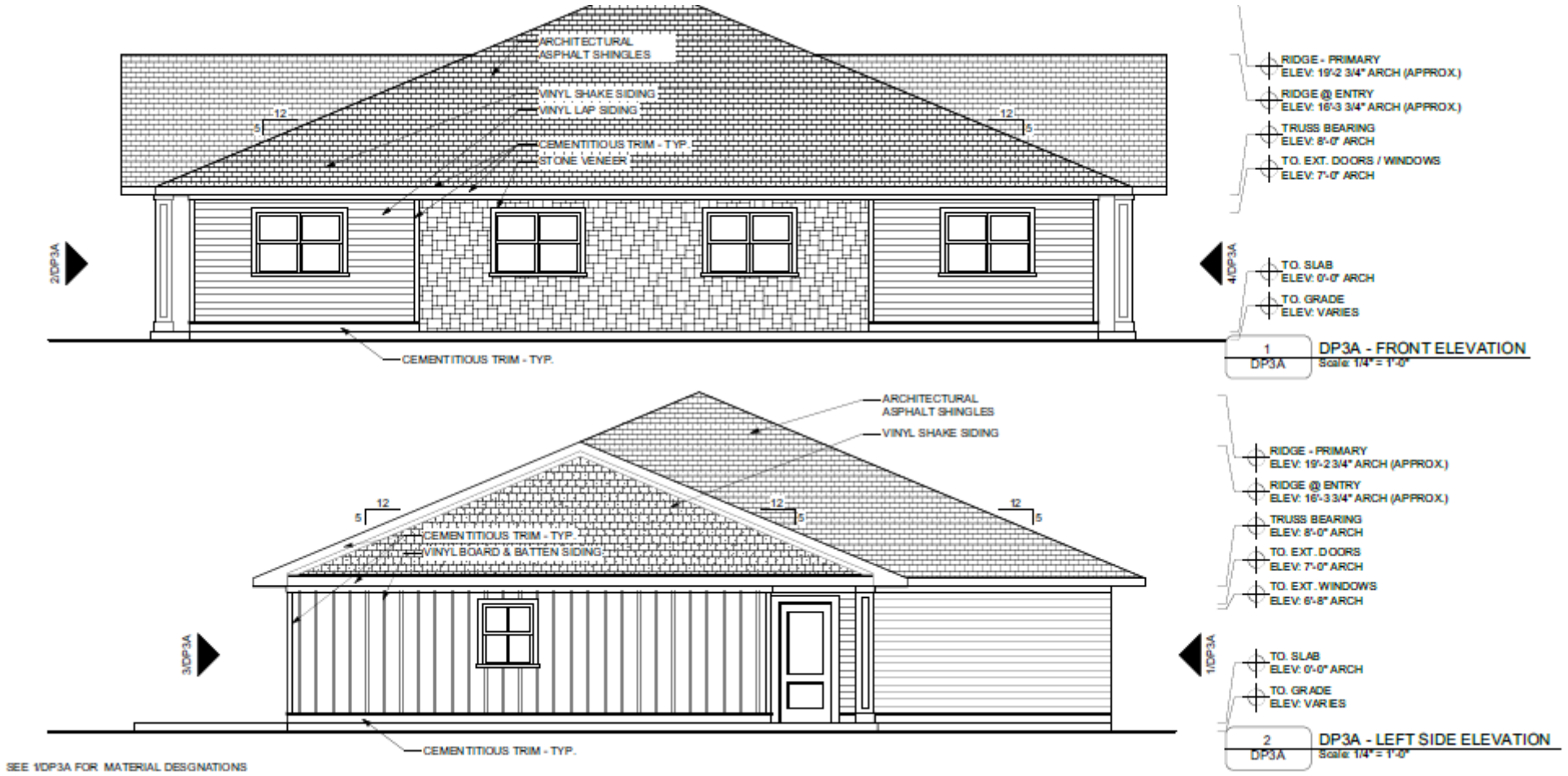
SEE 1/DP2A FOR MATERIAL DESIGNATIONS

4 DP2A - LEFT SIDE ELEVATION
DP2A Scale: 1/4" = 1'-0"

ELEVATIONS (TWO BEDRROM DUPLEX)

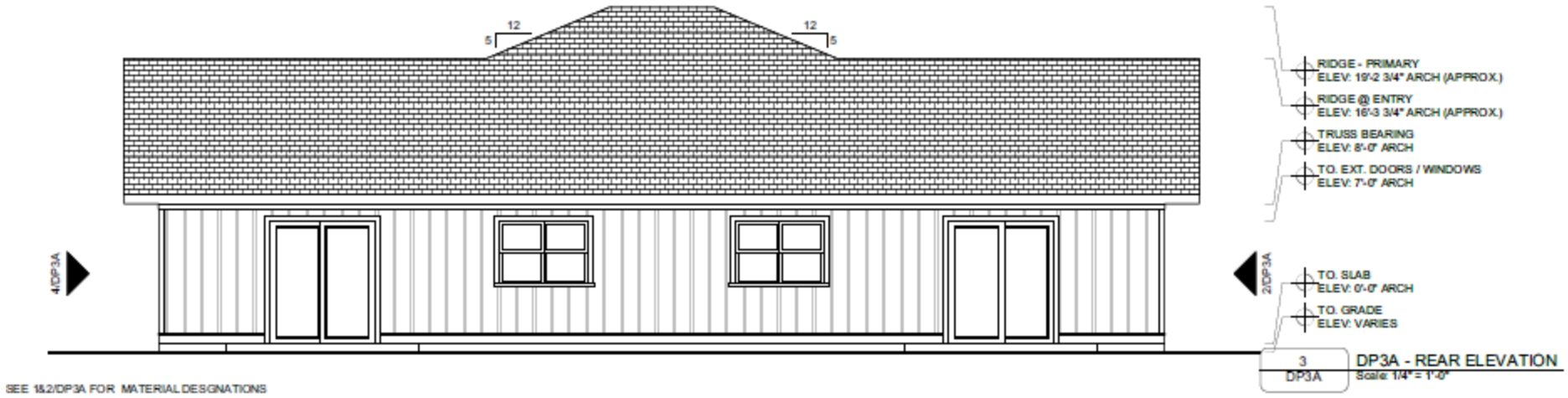


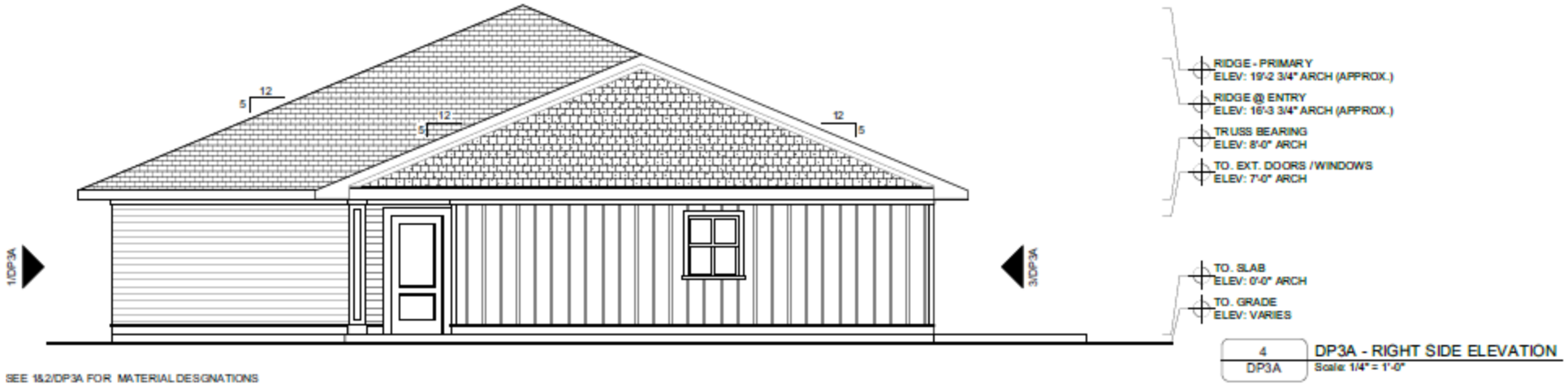
ELEVATIONS (THREE BEDROOM DUPLEX)



Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS (THREE BEDROOM DUPLEX)



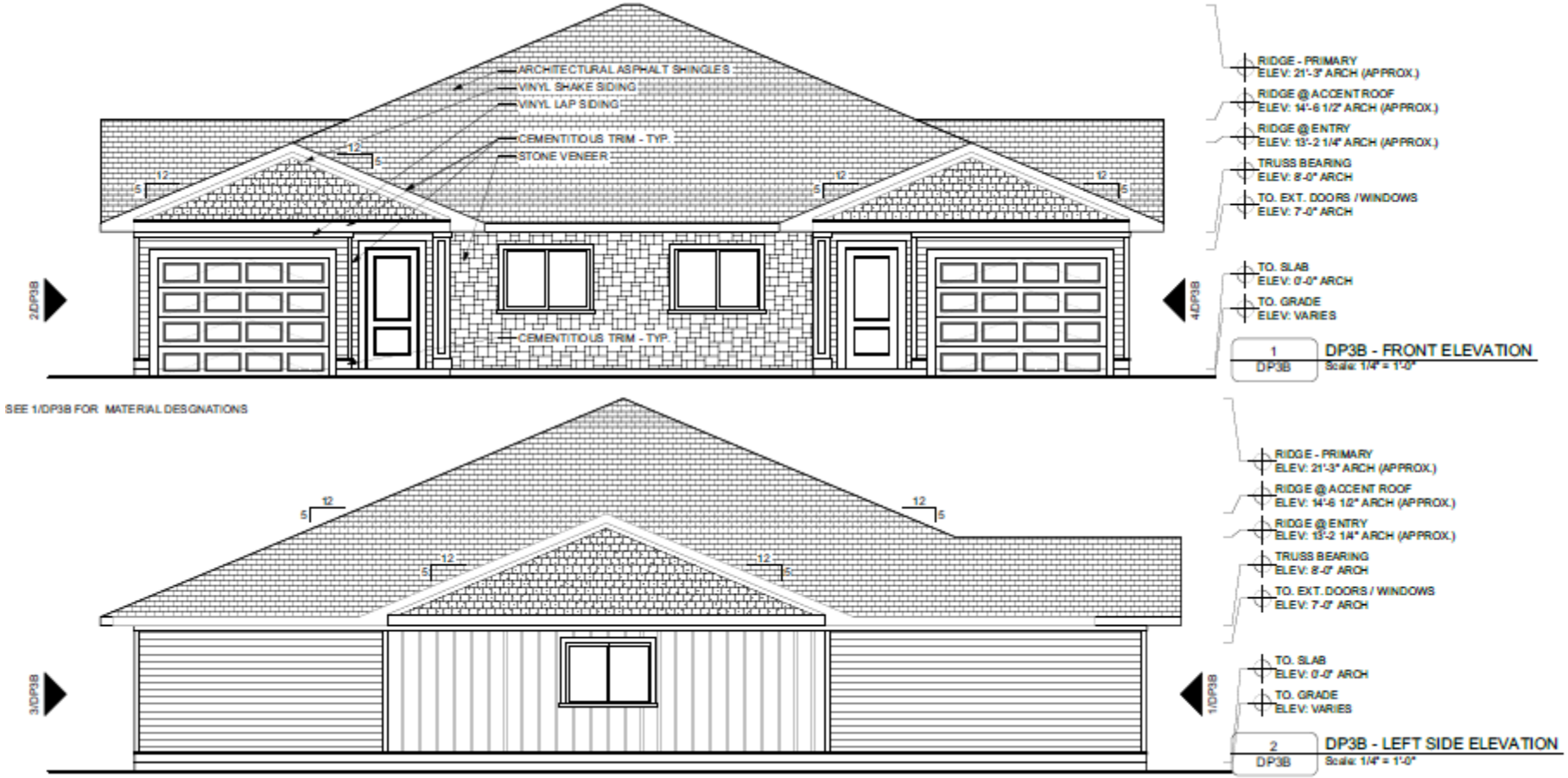


Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS (THREE BEDRROM DUPLEX)

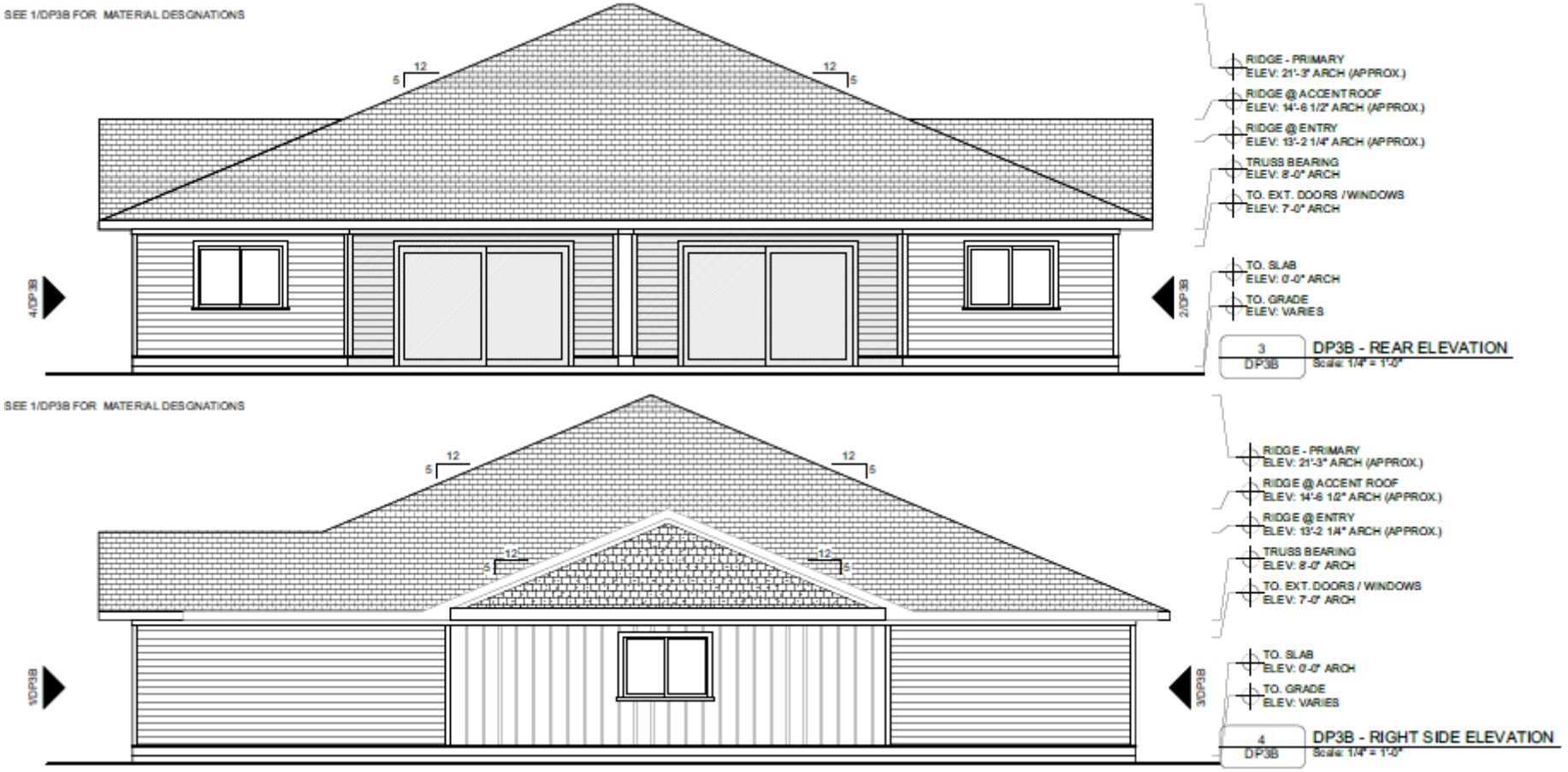


ELEVATIONS (THREE BEDROOM DUPLEX WITH GARAGE)



Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS (THREE BEDROOM DUPLEX WITH GARAGE)



Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

ELEVATIONS (THREE BEDROOM DUPLEX WITH GARAGE)



Viva East – Site Plan – 5315 Edwards Rd. & 5496 Altman Rd.

RECOMMENDATION

Staff recommends four (4) Conditions:

1. A completion certification by a landscape architect, cost estimate, and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.

2. A gopher tortoise survey will be required per State Statute before construction can begin.

3. Addresses will need to be submitted through the Planning Department for all units prior to building permit applications.

4. Prior to the issuance of any site clearing permits, the applicant shall provide a Tree Mitigation Survey and coordinate with the City of Ft. Pierce Arborist for the required mitigation of the City regulated trees proposed to be removed as a result of this site's development/construction activity.

RECOMMENDATION

Staff recommendation is for the Planning Board to move the proposed Site Plan (Development and Design Reviews), with the four (4) conditions, for approval to City Commission.

ALTERNATIVE RECOMMENDATION

1. Recommend Approval with conditions.

2. Recommend Disapproval.

CITY OF FORT PIERCE

Planning Board

February 12th, 2024

Viva East Site Plan
5315 Edwards Rd. & 5496 Altman Rd.

CITY OF FORT PIERCE
PLANNING DEPARTMENT

-PROJECT: **VIVA EAST SITE PLAN - 23-07000020**

REVIEWER: **RYAN ALTIZER, SENIOR PLANNER**

DATE: **2/5/2023**

STAFF REPORT

Owner: TEG Mariner Cove, LLC

Applicant: Francarlos Rivera, TEG Developers

Requested Action: Request for review of an application for a Site Plan (Development and Design Review) of a two-hundred and six (206) unit rental community.

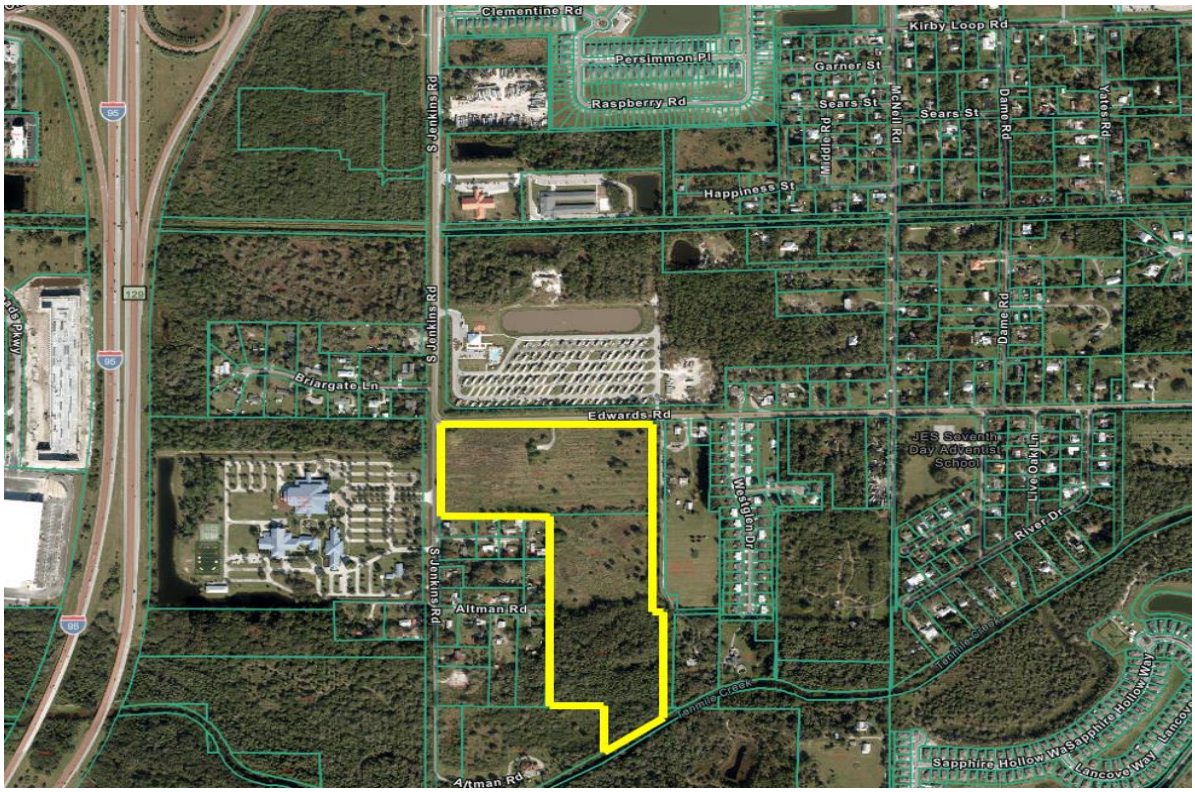
Location: 5315 Edwards Road & 5496 Altman Road

Parcel IDs: 2430-231-0001-000-4 & 2430-234-0001-000-3

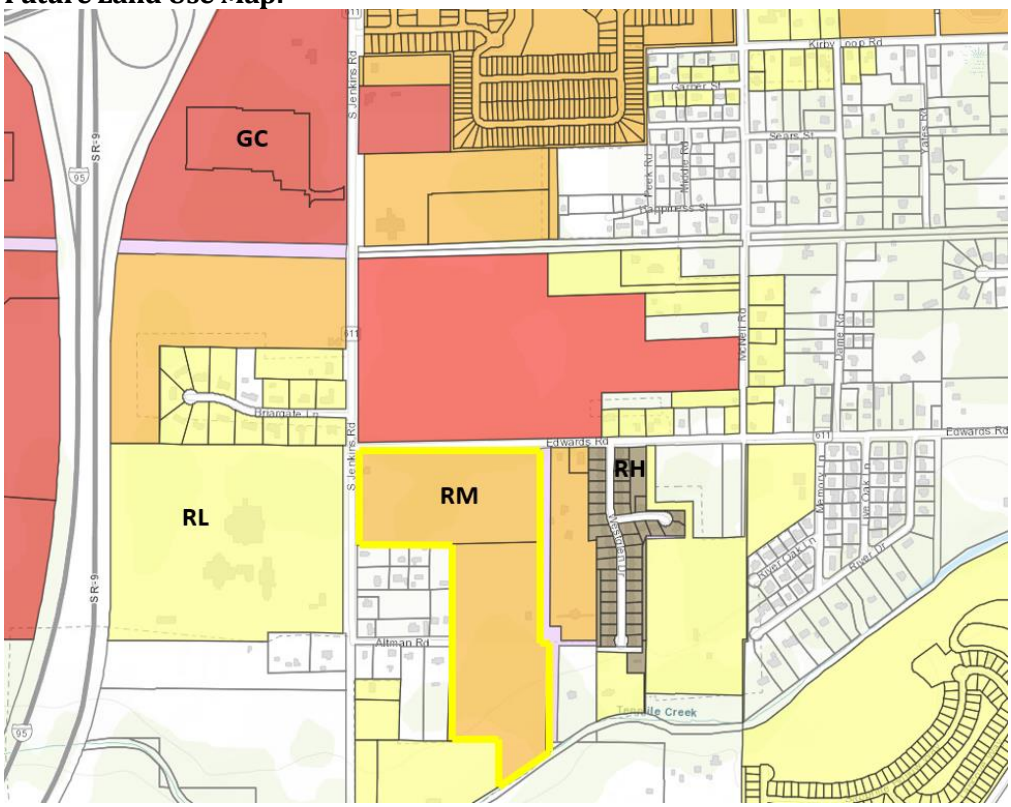
Current Zoning: Medium Density Residential, R-4

Future Land Use: Medium Density Residential, RM

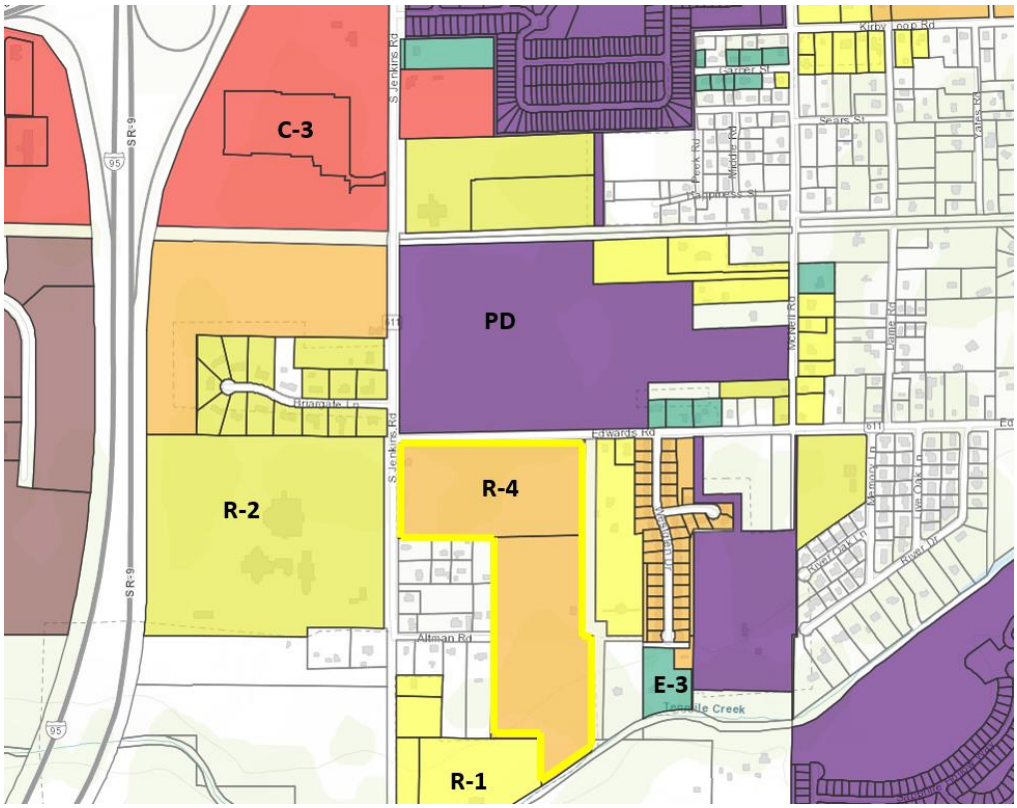
Location Map:



Future Land Use Map:



Zoning Map:



Surrounding Zoning:

North	East	South	West
PD	R-1	R-1	R-2

Site Area: +/- 39.70 acres

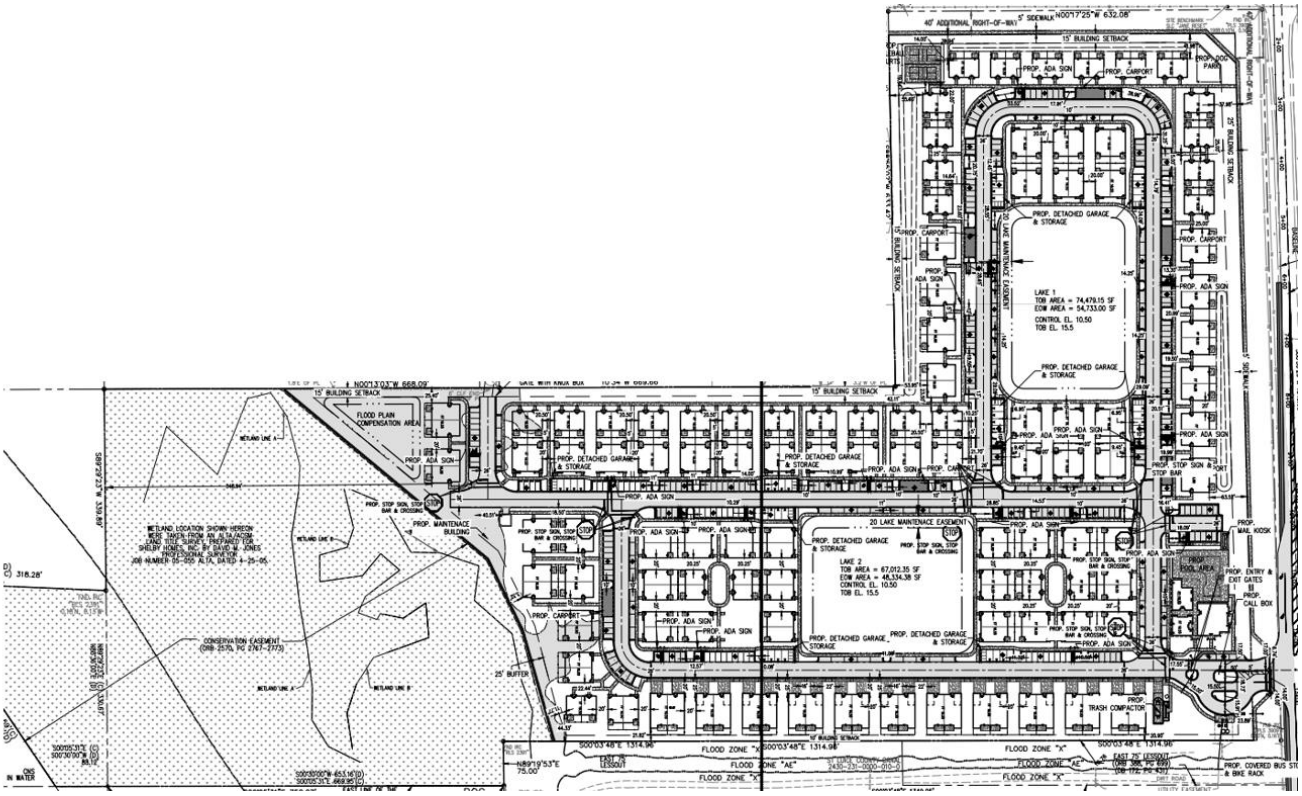
Utilities: Located within the FPUA Service Area

Staff Analysis

Request for review of an application for a Site Plan (Development and Design Review) of a two-hundred and six (206) unit rental community. The community will consist of one-bedroom, two-bedroom and three-bedroom duplexes. Viva East is the sister project to Viva West. Both communities will share access to amenities such as a fitness center, business lodge, community room, catering kitchen, pet spa, outdoor grilling areas and more. Viva East is being proposed at 5315 Edwards Road & 5496 Altman Road.

The Site Plan leaves the 8.20-acre wetlands (2.25 acres are freshwater marsh and 5.95 acres riverine swamp) preserved, providing an additional 2.5 acres of upland ecosystems adjacent to those wetlands as a buffer. The 10.7 acres of wetlands and buffer will be preserved through a conservation easement.

The proposed development is located on a parcel with a Future Land Use of Medium Density Residential (RM) and a Zoning of Medium Density Residential(R-4). The proposed 206 units is far below the allotted 10 units per acre (397 units) the applicant could build in this zoning district.

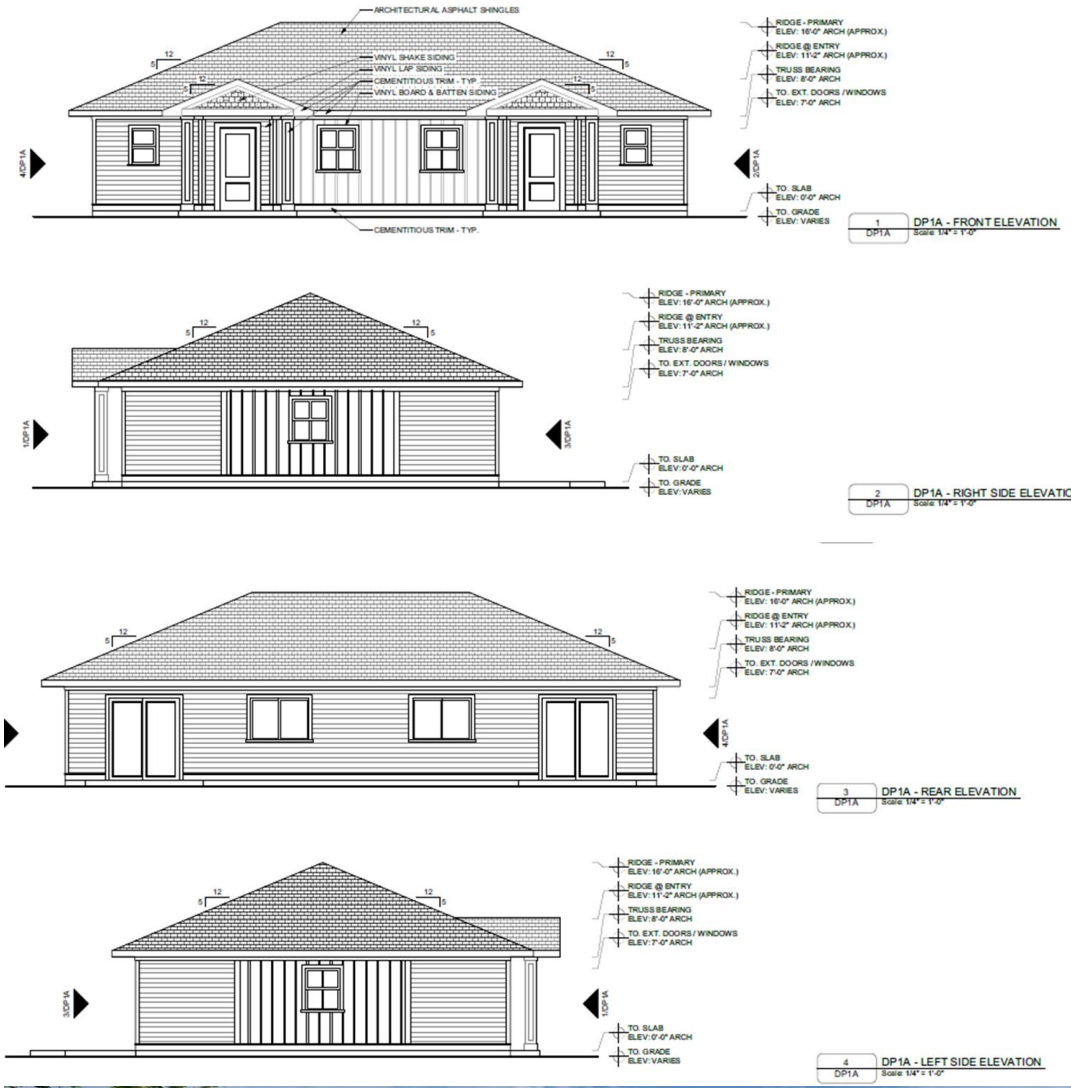




Existing Conditions Design
Currently the land is vacant.

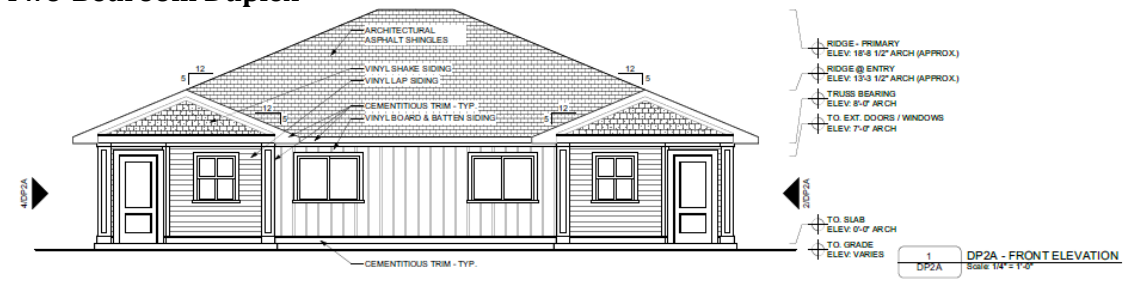
Design
The applicant proposes one-bedroom, two-bedroom and three-bedroom duplexes. The buildings consist of classic horizontal siding walls. The roofs are all 5:12 sloped with gable accents and 24" overhangs. The buildings also consist of horizontal and vertical sidings with stone veneer accents, combined with architectural details like porches and gable accents.

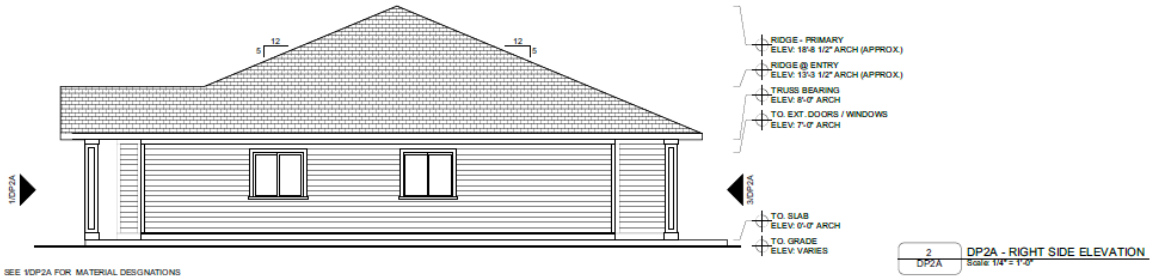
One-Bedroom Duplex



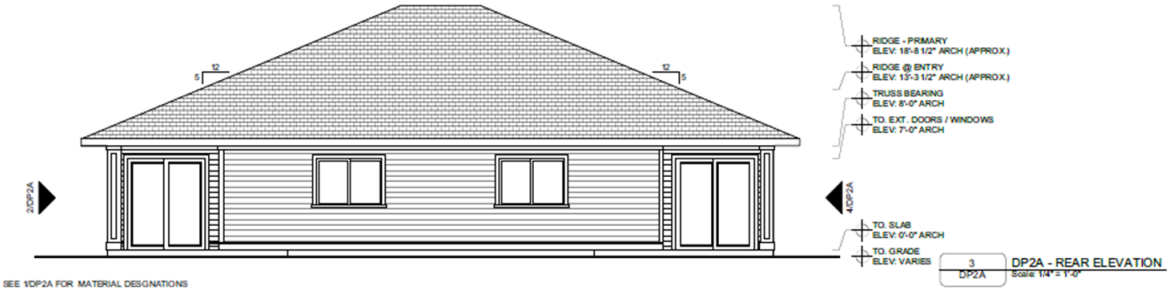


Two-Bedroom Duplex

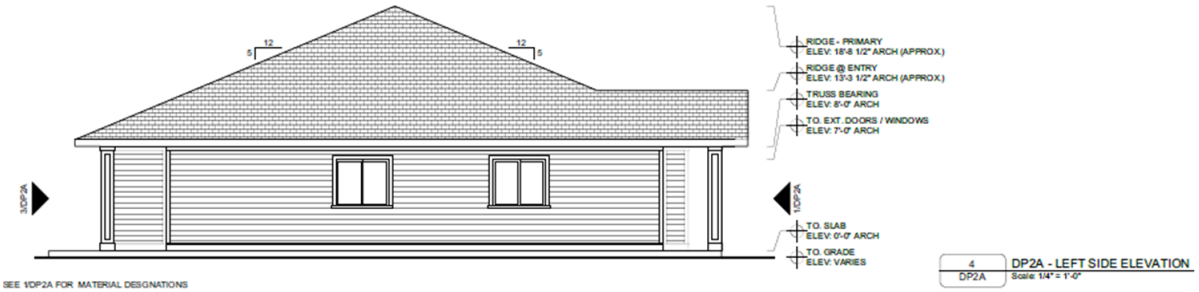




SEE 1/DP2A FOR MATERIAL DESIGNATIONS



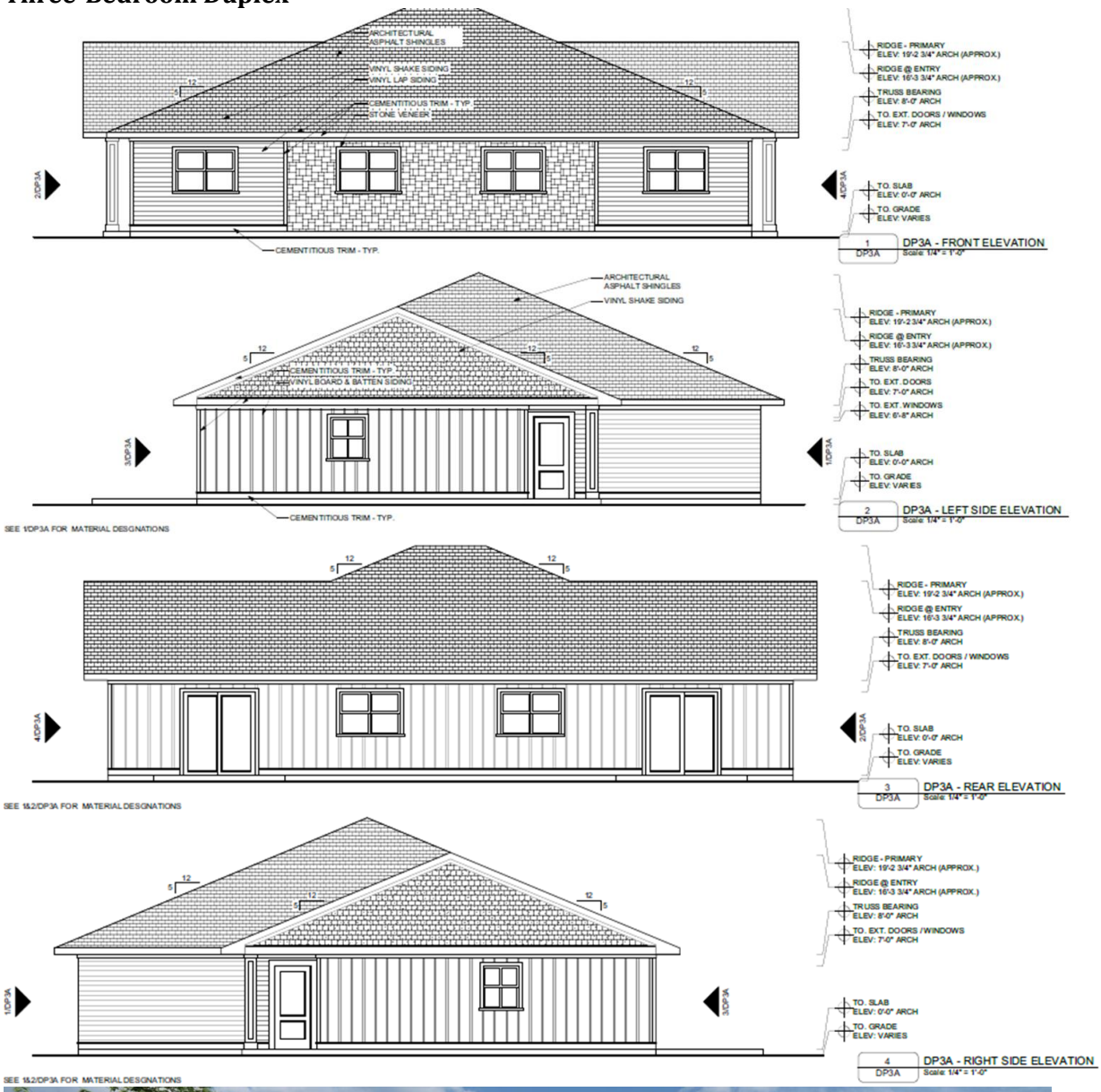
SEE 1/DP2A FOR MATERIAL DESIGNATIONS



SEE 1/DP2A FOR MATERIAL DESIGNATIONS

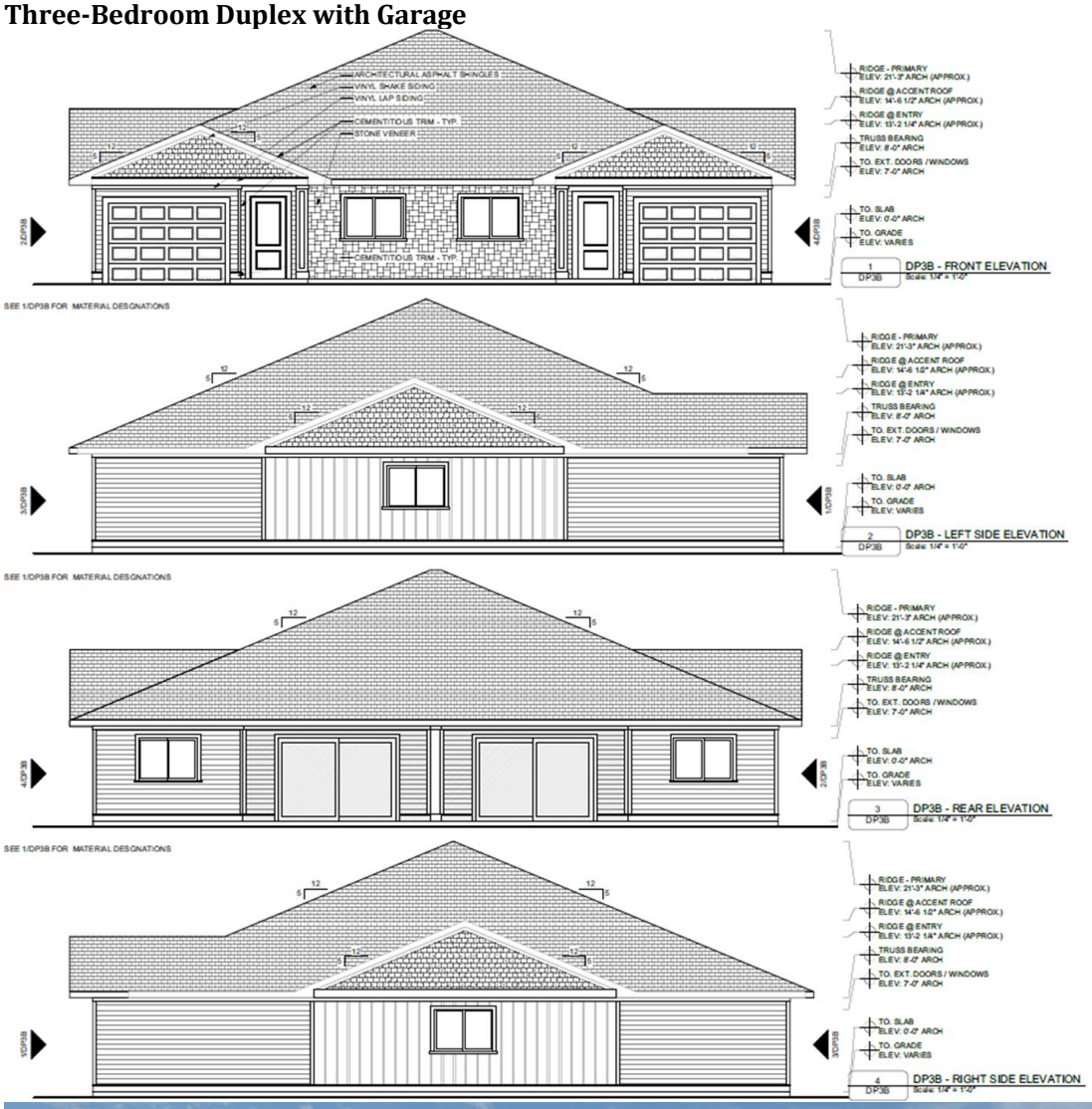


Three-Bedroom Duplex



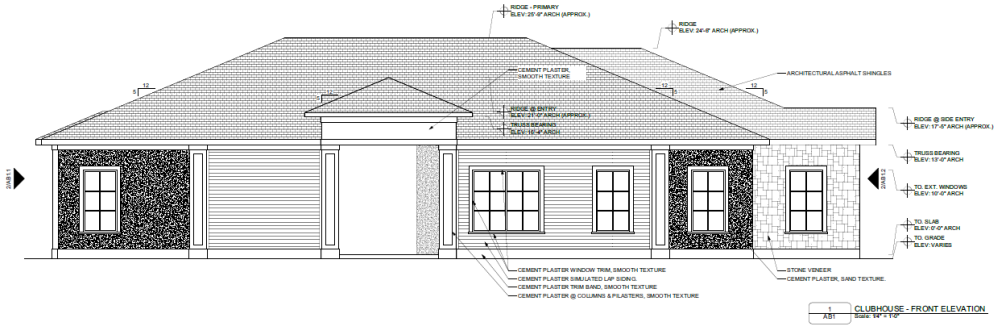


Three-Bedroom Duplex with Garage





Clubhouse

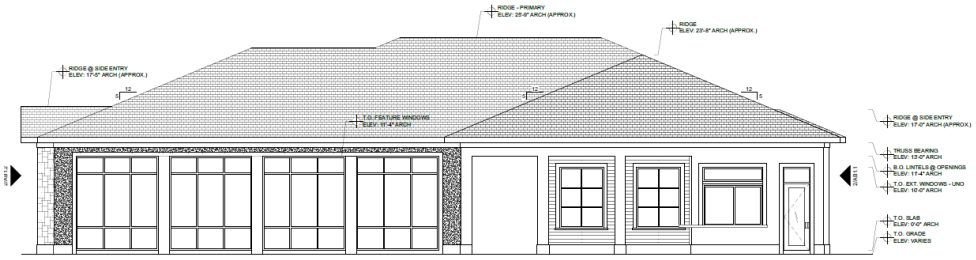


1 AS1 CLUBHOUSE - FRONT ELEVATION
Scale: 1/4" = 1'-0"

SEE 1/AB1.1 FOR MATERIAL DESIGNATIONS



2 AS1 CLUBHOUSE - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"



1 AS1-2 CLUBHOUSE - REAR ELEVATION
Scale: 1/4" = 1'-0"

EE 1/AB1.1 FOR MATERIAL DESIGNATIONS



2 AS1-2 CLUBHOUSE - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

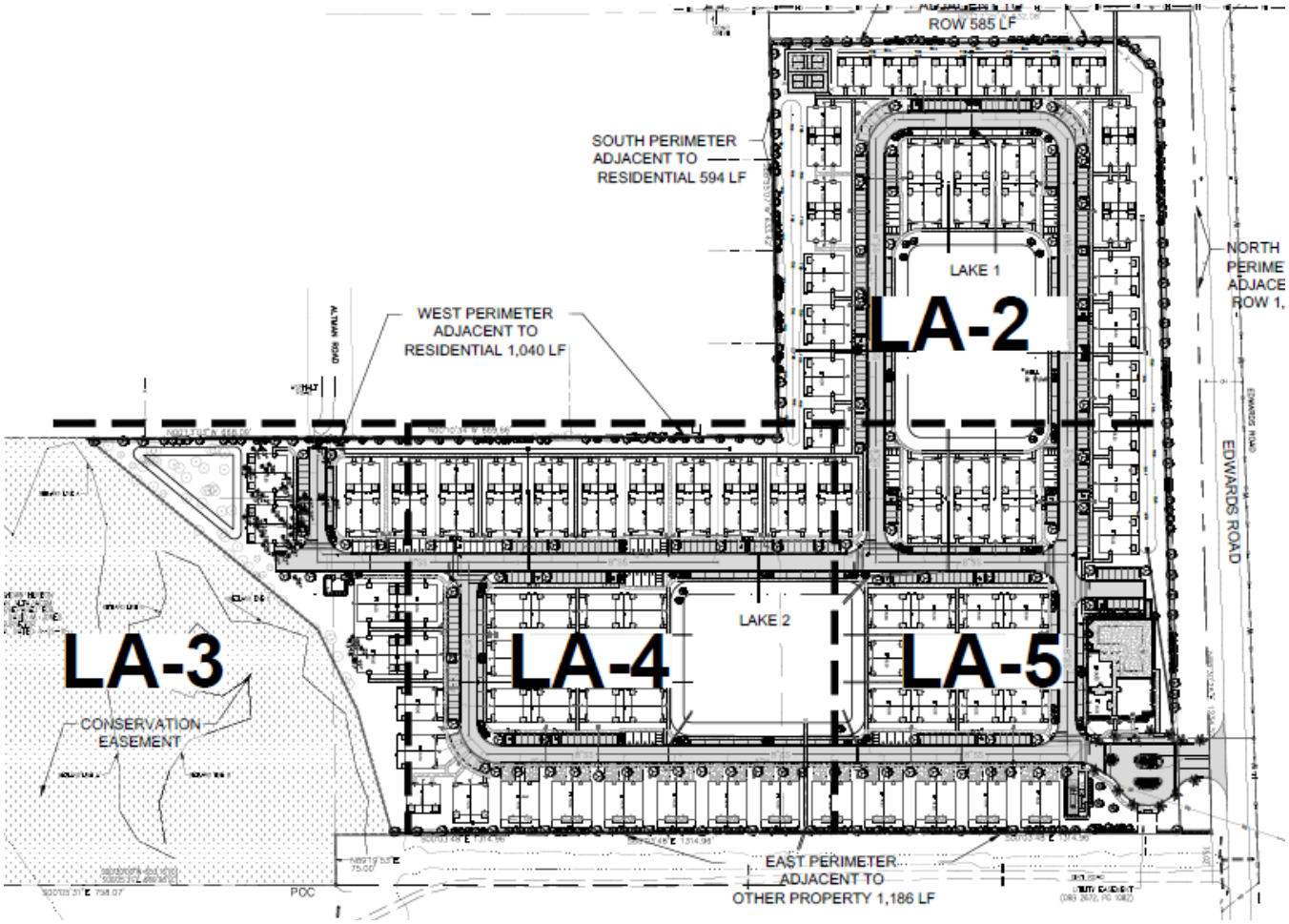




Stormwater Retention & Landscaping

The storm water and conceptual drainage plans were approved by the Engineering Department after multiple reviews.

The landscaping meets Chapter 123 of the code of Ordinances, with the exception that a tree mitigation survey needs to be presented before any site clearing permits are granted. 245 hardwood trees, 216 palms and 2,091 shrubs are being proposed with the development of Viva East.



TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	DBH
	31	Conocarpus erectus	Buttonwood	45G	12' HT	6'W	6'CT, SP	Native	2.5" DBH
	65	Pinus elliotti densa	South Florida Slash Pine	FG	12' HT	5'W	SP	Native	2.5" DBH
	149	Quercus virginiana	Southern Live Oak	45G	12' HT	5'W	6'CT, SP	Native	2.5" DBH
EXISTING TREES TO REMAIN	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**DBH**
	11	Quercus spp	Oak Species	Existing to Remain				Native	VARIES 6"-55"
	9	Sabal palmetto	Cabbage Palmetto	Existing to Remain	10'-18' CT		SP	Native	
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	16	Roystonea regia	Florida Royal Palm	FG	8' GW, 16' OA		SP	Native	
	* 6	Phoenix roebelenii	Double Pygmy Date Palm	FG	6'OA	6' SPR	4' CT, SP	Non-native	
	*** 186	Sabal palmetto	Sabal Palm	FG	10'-18' CT		SLK, HC, SP	Native	
	8	Wodyetia bifurcata	Single Foxtail Palm	FG	6'GW, 10'CT		SGL, FH, SP	Non-native	

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT
	* 25	Alcantarea imperialis	Imperial Bromeliad	7G	2` HT
	* 132	Bougainvillea `Helen Johnson`	Dwarf Bougainvillea	3G	18" HT
	520	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT
	944	Clusia guttifera	Small Leaf Clusia	3G	24" HT
	59	Clusia guttifera	Small-Leaf Clusia	7G	48" HT
	* 80	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT
	46	Hamelia patens 'Compacta'	Dwarf Firebush	3G	24" HT
	* 94	Muhlenbergia capillaris	Pink Muhly Grass	3G	24" HT
	* 72	Rondeletia leucophylla	Panama Rose	3G	24" HT
	* 76	Schefflera arboricola	Green Schefflera	3G	24" HT
	* 43	Serenoa repens `Cinerea`	Silver Saw Palmetto	3G	18" HT
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**
	637	Carissa macrocarpa `Emerald Blanket`	Emerald Blanket Carissa	3G	18"HT
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**
	TBD	* * Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD	

Comprehensive Plan

The subject property is designated with a Medium Density Residential, RM, future land use. The designation is intended for parcels that are best suited for multifamily residential uses ranging in density from six and one-half to 12 dwelling units per acre. This category allows small-lot single family units and multifamily dwellings including duplexes, condominiums and townhomes. Limited commercial uses intended to serve the residential uses shall be allowed. Compatible public, quasi-public, and special uses including parks, churches, non-profit clubs, schools and daycare facilities shall also be allowed.

Summary of Technical Review Committee

All affected departments have reviewed the proposed Development Plan with regards to consistency with established ordinances and requirements of the City Code. The Technical Review Committee reviewed this project, and all departments supported the Site Plan (Development and Design Review). The applicant resubmitted this Site Plan multiple times to meet the Engineering Department's requirements. Full findings and comments from review by the corresponding departments, and the responses and plan amendments by the applicant are provided for consideration by the Planning Board.

Staff Recommendation

Staff's recommendation is for the Planning Board to move the proposed Final Plat for approval to City Commission, with the four (4) conditions:

1. A completion certification by a landscape architect, cost estimate, and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.

2. A gopher tortoise survey will be required per State Statute before construction can begin.

3. Addresses will need to be submitted through the Planning Department for all units prior to building permit applications.

4. Prior to the issuance of any site clearing permits, the applicant shall provide a Tree Mitigation Survey and coordinate with the City of Ft. Pierce Arborist for the required mitigation of the City regulated trees proposed to be removed as a result of this site's development/construction activity.

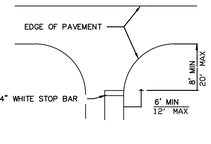
SITE DATA	
OWNER:	TEG MARINER COVE LLC
OWNER ADDRESS:	365 ROUTE 59 STE 110 AIRMONT, NY 10952
SITE ADDRESS:	5315 EDWARDS RD & 5496 ALTMAN RD
PARCEL ID:	2430-231-0001-000-4 & 2430-234-0001-000-3
LEGAL DESCRIPTION:	30 35 40 N 1/2 OF SW 1/4 OF NW 1/4–LESS N 33 FT AND LESS W 40 FT FOR RDS AND LESS E 75 FT FOR DITCH– (47) (17.76 AC) 30 35 40 SE 1/4 OF SW 1/4 OF NW 1/4 AND NE 1/4 OF NW 1/4 OF SW 1/4 AND FROM NE COR OF NW 1/4 OF SW 1/4, RUN S 0 DEG 30 MIN W ALG, TH 1/4 1/4 SEC LI 653.16 FT FOR POB, TH CONT S 0 DEG 30 MIN W 88.12 FT TO PT ON TOP OF BLUFF OF TEN MILE CREEK, TH S 54 DEG 51 MIN 30 SEC W ALG SD CREEK 413.7 FT, TH N 1 DEG 32 MIN E 318.28 FT, TH N 88 DEG 36 MIN E 330.67 FT TO POB (21.05 AC) (CASE #89-14123)
COUNTY:	FORT PIERCE
SEC/TOWN /RANGE:	25/35S/40E
FLOOD ZONE:	X
ZONING:	MEDIUM DEN
FUTURE LANDUSE:	MEDIUM DEN
LOT SIZE:	39.01 AC.

LAND USE DATA			
USE	AREA SF	ACRES	PERCENTAGE
TOTAL SITE AREA	1,620,741.56	37.21	100%
IMPERVIOUS			
BUILDING	241,829.76	5.55	14.92%
ASPHALT	185,953.56	4.27	11.47%
CONCRETE	234,196.02	5.38	14.45%
LAKE	103,067.38	2.37	6.36%
TOTAL IMPERVIOUS:	765,046.72	17.56	47.20%
PERVIOUS			
OPEN SPACE	855,694.84	19.64	52.80%
TOTAL PERVIOUS:	855,694.84	19.64	52.80%

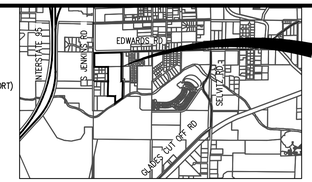
BUILDING DATA		
BUILDING HEIGHT:	45' MAX	24'-2" TO MID POINT
NUMBER OF STORIES:		2
1 BEDROOM UNIT		60
2 BEDROOM UNIT		92
3 BEDROOM UNIT		54
TOTAL UNIT:		206

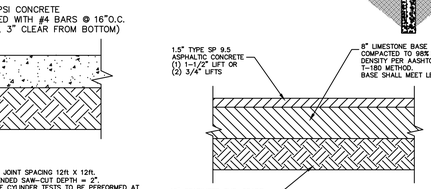
BUILDING SETBACKS REQUIRED		
	REQUIRED	PROVIDED
FRONT:	25'	37.98'
FRONT (JENKINS RD.)	25'	39.94'
E SIDE:	10'	20.90'
W SIDE:	15'	25.40'
REAR (WETLAND BUFFER)	25'	3.32'

PARKING SPACE REQUIRED	
UNITS:	206
SPACES PER DWELLING UNIT	2
TOTAL SPACES REQUIRED	412
ADA REQUIRED OF REQ. SPACES	9
PARKING SPACES PROVIDED	
9' – 6" X 19' 90 & 24 DEG PARKING SPACES	271
DRIVEWAY PARKING SPACES	44
12' X 19' 90 DEG. ADA PARKING SPACES	17
9' – 6" X 22' PARALLEL PARKING	81
DETACHED GARAGE	36
TOTAL SPACES PROVIDED:	459



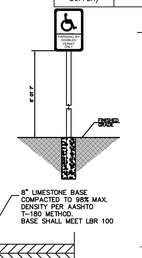
STOP SIGN LOCATION DETAIL
SCALE: N.T.S.





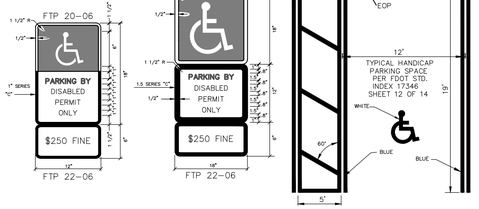
CONCRETE PAVEMENT SECTION

NEW ASPHALT PAVEMENT SECTION



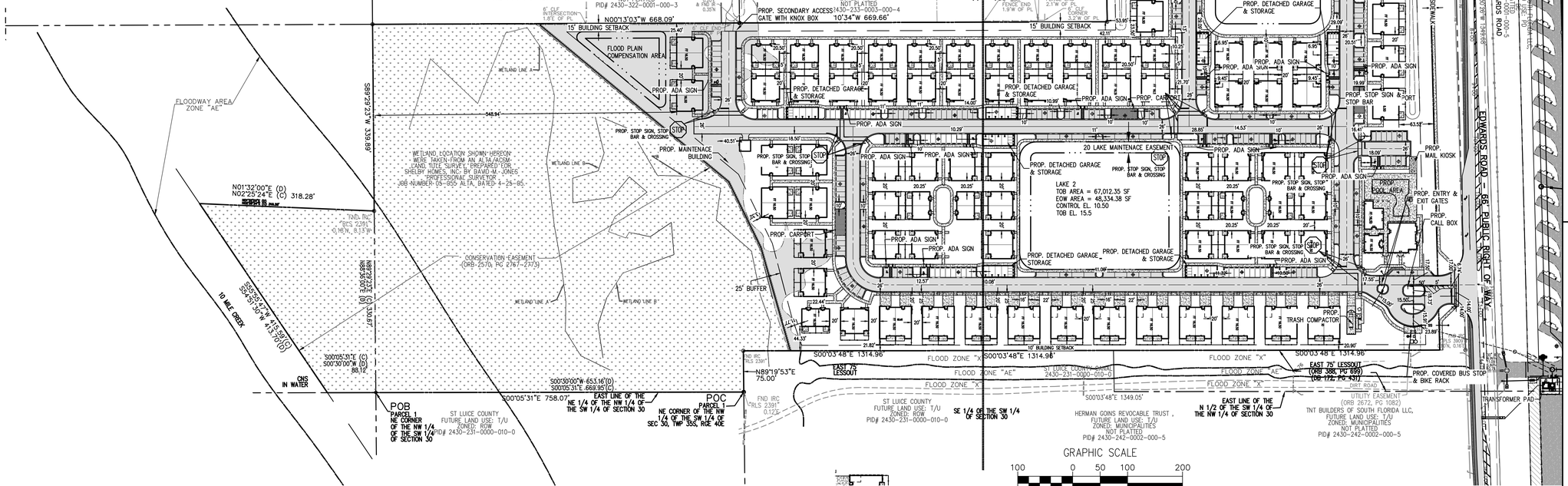
STANDARD PARKING DETAIL (TYP.)

N.T.S.



HANDICAP SIGN AND PARKING DETAIL (TYP.)

N.T.S.



No.	REVISION	DATE
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
- CONSULTING ENGINEER -
CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7450 SOUTH FEDERAL HIGHWAY
PORT ST. LUCIE, FLORIDA 34952
Tel 1-772-336-2933
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008856

SCPE

FINAL SITE PLAN OVERALL VIEW

VIVA AT TREASURE COAST EAST

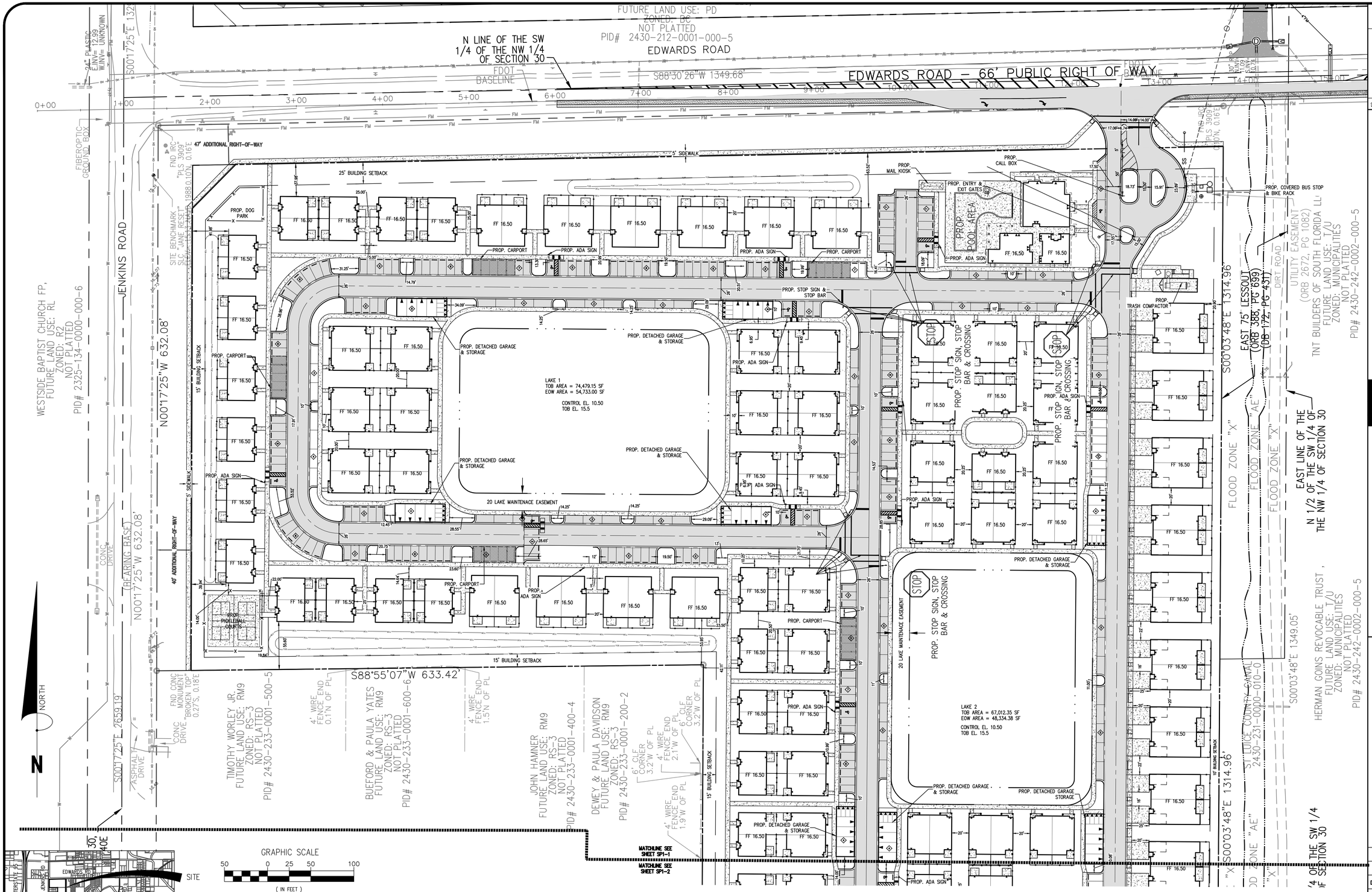
CITY OF FORT PIERCE, FLORIDA

DATE:	JAN 2021
DRAWN BY:	CCL
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=100'
VERT. SCALE:	NA
DRAWING NO.	SP1-0
JOB NO.	2018-121

Stephen Cooper, P.E. #46557

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BYSTEPHEN COOPER P.E., SHALL BE WITHOUT LIABILITY TO STEPHEN COOPER P.E. & ASSOCIATES, INC. CONSULTING ENGINEERS



No.	REVISION	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
- CONSULTING ENGINEER -
CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7450 SOUTH FEDERAL HIGHWAY
PORT ST. LUCIE, FLORIDA 34952
Tel 1-772-336-2933
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008856

SCPE

FINAL SITE PLAN

VIVA AT TREASURE COAST EAST

CITY OF FORT PIERCE, FLORIDA

DATE:	JAN 2021
DRAWN BY:	CCL
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=50'
VERT. SCALE:	NA

DRAWING NO.
SP1-1

JOB NO. 2018-121

Stephen Cooper, P.E. #46557

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BYSTEPHEN COOPER P.E., SHALL BE WITHOUT LIABILITY TO STEPHEN COOPER P.E. & ASSOCIATES, INC. CONSULTING ENGINEERS

LOCATION MAP

LEGEND
- PROP. CONCRETE
- PROP. ASPHALT
- PROP. ASPHALT (CARPORT)

No.	REVISION	DATE
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
- CONSULTING ENGINEER -
CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7450 SOUTH FEDERAL HIGHWAY
PORT ST. LUCIE, FLORIDA 34952
Tel 1-772-336-2933
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008856

SCPE

FINAL SITE PLAN CONT.

VIVA AT TREASURE COAST EAST

CITY OF FORT PIERCE, FLORIDA

NW 1/4 OF THE NW 1/4 OF THE SW 1/4 OF SECTION 30

SW 1/4 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 30

TOMMY & SHIRLEY WALLS
FUTURE LAND USE: RU
ZONED: RS-3
NOT PLATTED
PID# 2430-322-0001-000-3

PAUL FISCHER
FUTURE LAND USE: RM9
ZONED: RS-3
NOT PLATTED
PID# 2430-233-0003-000-4

ALTMAN ROAD
66' RIGHT-OF-WAY

ASPHALT ROAD

FND IR 0.20'E & FND IR 0.35'N

6' CLF INTERSECTION 1.8'E OF PL

6' CLF END OF PL

N00°13'03"W 668.09'

N00°10'34"W 669.66'

PROP. SECONDARY ACCESS GATE WITH KNOX BOX

15' BUILDING SETBACK

FLOOD PLAIN COMPENSATION AREA

WETLAND LINE A

WETLAND LINE B

WETLAND LINE C

WETLAND LOCATION SHOWN HEREON WERE TAKEN FROM AN ALTA/ACSM LAND TITLE SURVEY, PREPARED FOR SHELBY HOMES, INC. BY DAVID M. JONES PROFESSIONAL SURVEYOR JOB NUMBER 05-055 ALTA, DATED 4-25-05.

PROP. ADA SIGN

PROP. STOP SIGN, STOP BAR & CROSSING

PROP. MAINTENACE BUILDING

PROP. DETACHED GARAGE & STORAGE

PROP. CARPORT

25' BUFFER

S89°29'23"W 339.89'

548.94'

N01°32'00"E (D)
N02°25'24"E (C) 318.28'

FND IRC "RLS 2391" 0.18'N, 0.13'W

N89°29'23"E (C)
N88°36'00"E (D) 330.67'

CONSERVATION EASEMENT (ORB 2570, PG 2767-2773)

S55°55'47"W 415.59'(C)
S54°51'30"W 413.70'(D)

10 MILE CREEK

CNS IN WATER

S00°05'31"E (C)
S00°30'00"W (D)
88.12'

S00°30'00"W 653.16'(D)
S00°05'31"E 669.95'(C)

S00°05'31"E 758.07'

EAST LINE OF THE NE 1/4 OF THE NW 1/4 OF THE SW 1/4 OF SECTION 30

POB
PARCEL 1
NE CORNER OF THE NW 1/4 OF THE SW 1/4 OF SECTION 30

ST LUICE COUNTY
FUTURE LAND USE: T/U
ZONED: ROW
PID# 2430-231-0000-010-0

POC
PARCEL 1
NE CORNER OF THE NW 1/4 OF THE SW 1/4 OF SEC 30, TWP 35S, RGE 40E

FND IRC "RLS 2391" 0.12'E

FND IRC "RLS 2391"

N89°19'53"E 75.00'

S00°03'48"E 1314.96'

EAST 75' LESSOUT

FLOOD ZONE "X"

ST LUICE COUNTY
FUTURE LAND USE: T/U
ZONED: ROW
PID# 2430-231-0000-010-0

SE 1/4 OF THE S... OF SECTION ...

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

N
NORTH

Stephen Cooper, P.E. #46557

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

DATE:	JAN 2021
DRAWN BY:	CCL
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=50'
VERT. SCALE:	NA

DRAWING NO.
SP1-2

JOB NO. 2018-121

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BYSTEPHEN COOPER P.E., SHALL BE WITHOUT LIABILITY TO STEPHEN COOPER P.E. & ASSOCIATES, INC. CONSULTING ENGINEERS

WATER STATEMENT

POTABLE WATER TO BE PROVIDED BY FORT PIERCE UTILITY AUTHORITY (FPUA) VIA A LOOPED PROPOSED PUBLIC WATER MAIN EXTENSION INTO THE SITE. EXISTING WATERMAIN RUN ALONG THE PERIMETER OF THE PROJECT. THE PROPOSED RESIDENTIAL UNITS WILL BE METERED SEPARATELY.

FIRE HYDRANTS ARE PROPOSED TO BE SPACED PER ST. LUCIE COUNTY FIRE DISTRICT CRITERIA.

WASTEWATER STATEMENT

AN 8" GRAVITY SEWER COLLECTION SYSTEM IS PROPOSED TO CONVEY WASTEWATER FROM THE PLANNED BUILDINGS TO THE EXISTING KOA PUMP STATION PER PRIOR PLANNING.

DRAINAGE STATEMENT

THE PROPOSED SURFACE WATER MANAGEMENT SYSTEM FOR THE PROJECT CONSISTS OF SITE GRADING AND A SERIES OF INLETS AND CULVERTS WHICH DIRECT STORM WATER RUNOFF TO A PROPOSED WET DETENTION/RETENTION AREA. THE PROPOSED WET DETENTION AREA WILL PROVIDE WATER QUALITY TREATMENT ST LUCIE COUNTY OWNED DITCH.

FLOOD PROTECTION PER LOCAL AND STATE REQUIREMENTS TO BE ADDRESSED AS FOLLOWS;

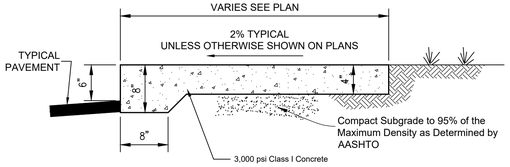
10 YEAR, 1 DAY STORM (ROAD PROTECTION – SFWMD/CITY OF FT PIERCE)

25 YEAR, 3 DAY (CITY OF FT. PIERCE – PRE VERSES POST DISCHARGE)

100 YEAR, 3 DAY (ZERO DISCHARGE MINIMUM FINISHED FLOOR)

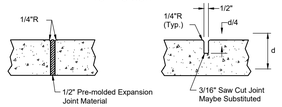
THE PROPOSED WET DETENTION SYSTEM SHALL DISCHARGE TO THE EXISTING OUTFALL DITCH ALONG THE EASTERN PERIMETER. THE EXISTING DITCH LEADS TO THE NORTH FORK OF THE ST. LUCIE RIVER AND IS OWNED BY ST. LUCIE COUNTY.

A SMALL PORTION OF THE DEVELOPMENT AREA (ALONG THE SOUTHERN PERIMETER) IS LOCATED WITHIN A FEMA ZONE A. DEVELOPMENT OF THIS AREA WILL BE SUBJECT TO FEMA FLOOD PLAIN CRITERIA.

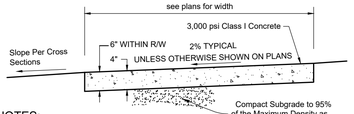


RAISED SIDEWALK SECTION

NOT TO SCALE



EXPANSION JOINTS **CONTRACTION JOINTS**

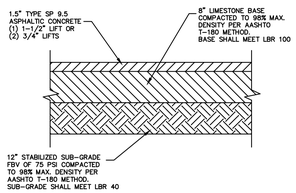


NOTES:

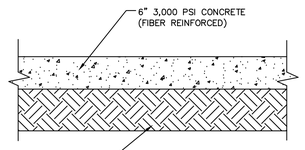
1. Provide expansion joints 20' center to center, at PC & PT of curves, junctions of existing & new sidewalks, and where sidewalk abuts curbs, driveways & similar structures.
2. Provide contraction joints 5' center to center.
3. Sod shall be placed below edge of sidewalk to allow drainage.

TYPICAL SIDEWALK

NOT TO SCALE



NEW ASPHALT PAVEMENT SECTION



NOTE:

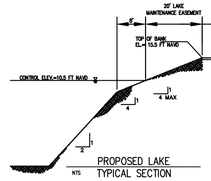
MAXIMUM JOINT SPACING 12ft X 12ft.

RECOMMENDED SAW-CUT DEPTH = 2".

CONCRETE CYLINDER TESTS TO BE PERFORMED AT LEAST EVERY 50 CUBIC YARDS, OR AT LEAST ONCE FOE EACH DAY'S PLACEMENT.

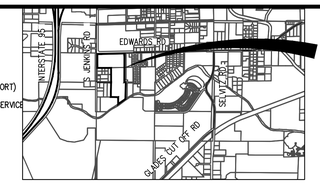
PROVIDE EXPANSION JOINT AT SIDEWALK AND CURB.

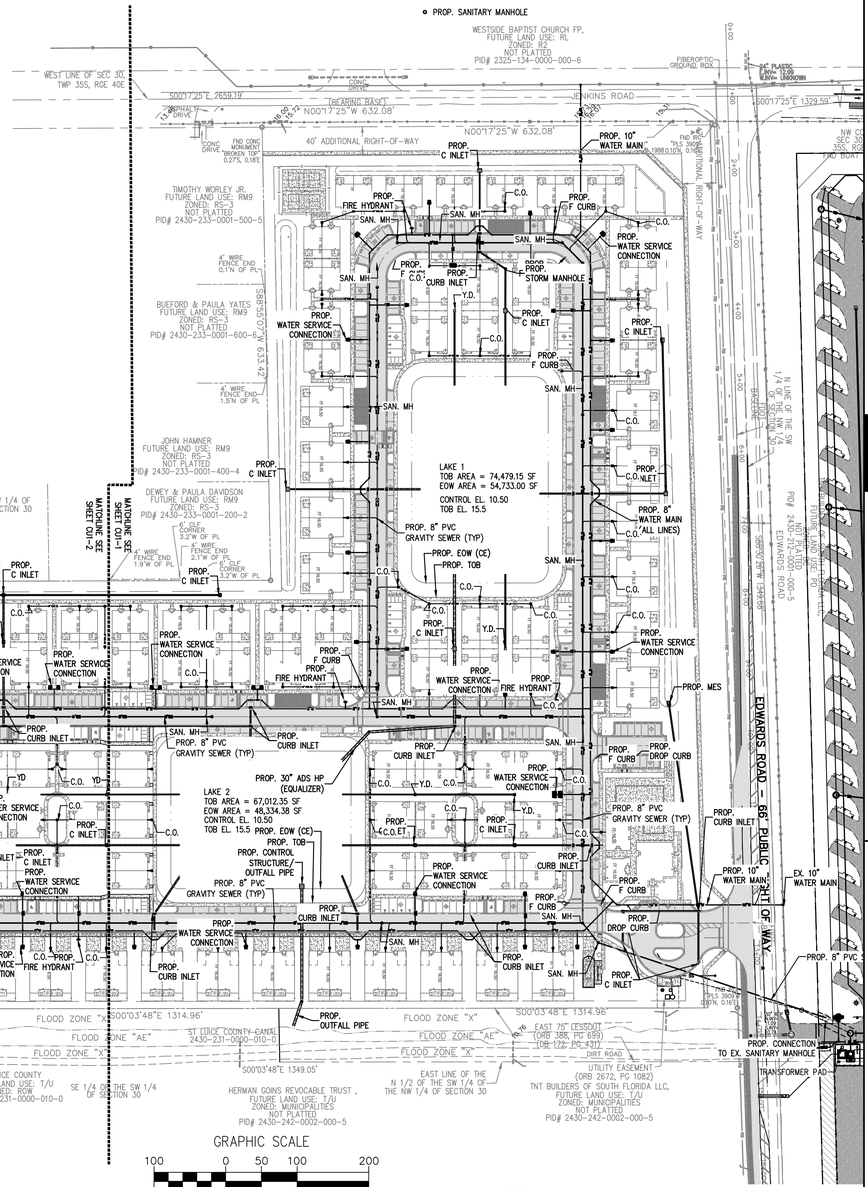
CONCRETE PAVEMENT SECTION OPTIONAL



LEGEND

- PROP. CONCRETE
- PROP. ASPHALT
- PROP. ASPHALT (CARPORT)
- PROP. WATER METER SERVICE
- PROP. YARD DRAIN
- PROP. C-INLET
- PROP. CURB INLET
- PROP. DRAINAGE PIPE
- PROP. STORM MANHOLE
- PROP. SANITARY CLEANOUT
- PROP. SANITARY MANHOLE




WESTSIDE BAPTIST CHURCH FP, FUTURE LAND USE: RL ZONED: R2 NOT PLATTED PID# 2325-134-0000-000-6
WEST LINE OF SEC 30 TWP 35S, RGE 40E
S00°17'25"E 2659.19'
[BEARING BASIS] N00°17'25"W 632.08'
S00°17'25"E 1329.59'
JENKINS ROAD
40' ADDITIONAL RIGHT-OF-WAY
PROP. 10" WATER MAIN
PROP. C INLET
PROP. FIRE HYDRANT
PROP. F CURB
PROP. WATER SERVICE CONNECTION
PROP. STORM MANHOLE
PROP. CURB INLET
TIMOTHY WORLEY JR. FUTURE LAND USE: RM9 ZONED: RS-3 NOT PLATTED PID# 2430-233-0001-500-5
BUEFORD & PAULA YATES FUTURE LAND USE: RM9 ZONED: RS-3 NOT PLATTED PID# 2430-233-0001-600-6
JOHN HAMNER FUTURE LAND USE: RM9 ZONED: RS-3 NOT PLATTED PID# 2430-233-0001-400-4
DEWEY & PAULA DAVIDSON FUTURE LAND USE: RM9 ZONED: RS-3 PID# 2430-233-0001-200-2
S88°55'07"E 633.24'
LAKE 1 TOB AREA = 74,479.15 SF EOW AREA = 54,733.00 SF CONTROL EL. 10.50 TOB EL. 15.5
PROP. 8" PVC GRAVITY SEWER (TYP)
PROP. EOW (CE)
PROP. TOB
PROP. 8" WATER MAIN (ALL LINES)
PROP. MES
MATCHLINE SEE SHEET CU1-1
MATCHLINE SEE SHEET CU1-2
TOMMY & SHIRLEY WALLS FUTURE LAND USE: RU ZONED: RS-3 NOT PLATTED PID# 2430-322-0001-000-3
N00°13'03"W 668.09'
NW 1/4 OF THE NW 1/4 OF THE SW 1/4 OF SECTION 30
ASPHALT ROAD
FND IR & CAP FND IR 0.30'N
PAUL FISCHER FUTURE LAND USE: RM9 ZONED: RS-3 NOT PLATTED PID# 2430-233-0003-000-4
N00°10'34"W 669.66'
SW 1/4 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 30
6" CLF INTERSECTION 1.0'E OF PL
6" CLF END CORNER 3.2'W OF PL
4' WIRE FENCE END 1.9'W OF PL
8' WIRE FENCE END 2.1'W OF PL
FLOOD PLAIN COMPENSATION AREA
FLOODWAY AREA ZONE "AE"
WETLAND LINE A
WETLAND LINE B
WETLAND LINE C
WETLAND, LOCATION SHOWN HEREON WERE TAKEN FROM AN ALTA/ACSM LAND TITLE SURVEY, PREPARED FOR SHELBY HOMES, INC. BY DAVID M. JONES PROFESSIONAL SURVEYOR JOB NUMBER: 05-055 ALTA, DATED 4-25-05
N01°32'09"E (D) N02°28'24"E (C) 318.28'
FND. RAC RRS 2391 0.1'EN, 0.13'N
S89°29'23"W 339.89'
N89°29'23"E 339.89' (C)
CONSERVATION EASEMENT (ORB 2370, PG 2787-2793)
10 MILE GREEN
S00°05'31"E (C) S00°30'00"W (D) 86.16'
S00°05'47"W 85.60' (C) S00°30'00"W 417.70' (D)
CNS IN WATER
S00°05'31"E 758.07'
EAST LINE OF THE NE 1/4 OF THE NW 1/4 OF THE SW 1/4 OF SECTION 30
POB PARCEL 1 NE CORNER OF THE NW 1/4 OF THE SW 1/4 OF SEC 30
ST LUICE COUNTY FUTURE LAND USE: T/U ZONED: ROW PID# 2430-231-0000-010-0
POC PARCEL NE CORNER OF THE NW 1/4 OF THE SW 1/4 OF SEC 30, TWP 35S, RGE 40E
FND IRC RLS 2391 0.12'E
N89°19'53"E 75.00'
S00°03'48"E 1314.96'
FLOOD ZONE "X"
FLOOD ZONE "AE"
EAST 75' LESSOUT
ST LUICE COUNTY CANAL 2430-231-0000-010-0
PROP. OUTFALL PIPE
PROP. 30" ADS HP (EQUALIZER)
LAKE 2 TOB AREA = 67,012.35 SF EOW AREA = 48,334.38 SF CONTROL EL. 10.50 TOB EL. 15.5
PROP. CONTROL STRUCTURE/ OUTFALL PIPE
S00°03'48"E 1349.05'
SE 1/4 OF THE SW 1/4 OF SECTION 30
HERMAN GOINS REVOCABLE TRUST , FUTURE LAND USE: T/U ZONED: MUNICIPALITIES NOT PLATTED PID# 2430-242-0002-000-5
EAST LINE OF THE N 1/2 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 30
UTILITY EASEMENT (ORB 2672, PG 1082) TNT BUILDERS OF SOUTH FLORIDA LLC, FUTURE LAND USE: T/U ZONED: MUNICIPALITIES NOT PLATTED PID# 2430-242-0002-000-5
EDWARDS ROAD – 66' PUBLIC R/W
EX. 10" WATER MAIN
PROP. 8" PVC
PROP. CONNECTION TO EX. SANITARY MANHOLE
TRANSFORMER PAD
PROP. DROP CURB
PROP. 4"C.O.ET
PROP. 8" PVC GRAVITY SEWER (TYP)
PROP. 10" WATER MAIN
PROP. C.O.
PROP. Y.D.
PROP. INLET
PROP. 8" WATER MAIN (ALL LINES)
PROP. CURB INLET
PROP. F CURB
PROP. DROP CURB
PROP. WATER SERVICE CONNECTION
PROP. C INLET
PROP. FIRE HYDRANT
SAN. MH
PROP. CURB INLET
PROP. 8" PVC GRAVITY SEWER (TYP)
PROP. 6" PVC GRAVITY SEWER (TYP)
PROP. C INLET
PROP. CURB INLET
PROP. WATER SERVICE CONNECTION
PROP. F CURB
PROP. FIRE HYDRANT
SAN. MH
PROP. C.O.
PROP. Y.D.
PROP. CURB INLET
PROP. C

EDWARDS ROAD – 66' PUBLIC RIGHT OF WAY

FUTURE LAND USE: PD
ZONED: BC
NOT PLATTED
PID# 2430-212-0001-000-5
EDWARDS ROAD

N LINE OF THE SW 1/4 OF THE NW 1/4 OF SECTION 30
FDOT BASELINE
S88°30'26"W 1349.68'

24" PLASTIC
R/W= 12.99'
R/W= UNKNOWN

S01°17'25"E 132

0+00 1+00 2+00 3+00 4+00 5+00 6+00 7+00 8+00 9+00 10+00 11+00 12+00 13+00 14+00 15+00

FIBEROPTIC GROUND BOX

FND IRC "PLS 3909" 0.16'E

47' ADDITIONAL RIGHT-OF-WAY

FND BENCHMARK "LE JANE RESET" ELEV= 15.13 (NAVD 1988) 0.10'N, 0.16'E

JENKINS ROAD

PROP. DOG PARK

WESTSIDE BAPTIST CHURCH FP,
FUTURE LAND USE: RL
ZONED: R2
NOT PLATTED
PID#2325-134-0000-000-6

N00°17'25"W 632.08'

PROP. 10" WATER MAIN

PROP. WATER SERVICE CONNECTION

PROP. C INLET

PROP. 8" WATER MAIN (ALL LINES)

PROP. F CURB

PROP. STORM MANHOLE

PROP. CURB INLET

PROP. MES

PROP. DROP CURB

PROP. 8" PVC GRAVITY SEWER (TYP)

PROP. FIRE HYDRANT

PROP. TOB

PROP. EOW (CE)

PROP. 30" ADS HP (EQUALIZER)

PROP. CONTROL STRUCTURE/ OUTFALL PIPE

PROP. OUTFALL PIPE

20 LAKE MAINTENACE EASEMENT

LAKE 1
TOB AREA = 74,479.15 SF
EOW AREA = 54,733.00 SF
CONTROL EL. 10.50
TOB EL. 15.5

LAKE 2
TOB AREA = 67,012.35 SF
EOW AREA = 48,334.38 SF
CONTROL EL. 10.50
TOB EL. 15.5

EX. 10" WATER MAIN

PROP. 8" PVC SANITARY

PROP. CONNECTION TO EX. SANITARY MANHOLE

EX. 30" CONC. STORM SEWER

EX. 24" CONC. STORM SEWER

EAST 75' LESSOUT (ORB 388, PG 699) (DB 172, PG 431)

DIRT ROAD

UTILITY EASEMENT (ORB 2672, PG 1082)

TNT BUILDERS OF SOUTH FLORIDA LLC,
FUTURE LAND USE: T/U
ZONED: MUNICIPALITIES
NOT PLATTED
PID# 2430-242-0002-000-5

S00°03'48"E 1314.96'

FLOOD ZONE "X"

FLOOD ZONE "AE"

EAST LINE OF THE N 1/2 OF THE SW 1/4 OF THE NW 1/4 OF SECTION 30

S00°03'48"E 1349.05'

HERMAN GOINS REVOCABLE TRUST ,
FUTURE LAND USE: T/U
ZONED: MUNICIPALITIES
NOT PLATTED
PID# 2430-242-0002-000-5

ST LUCIE COUNTY CANAL
2430-231-0000-010-0

TIMOTHY WORLEY JR.
FUTURE LAND USE: RM9
ZONED: RS-3
NOT PLATTED
PID# 2430-233-0001-500-5

BUFFORD & PAULA YATES
FUTURE LAND USE: RM9
ZONED: RS-3
NOT PLATTED
PID# 2430-233-0001-600-6

JOHN HAMNER
FUTURE LAND USE: RM9
ZONED: RS-3
NOT PLATTED
PID# 2430-233-0001-400-4

DEWEY & PAULA DAVIDSON
FUTURE LAND USE: RM9
ZONED: RS-3
PID# 2430-233-0001-200-2

S88°55'07"W 633.42

FND CONC MONUMENT "BROKEN TOP" 0.27'S, 0.18'E

CONC DRIVE

ASPHALT DRIVE

S00°17'25"E 2659.19'

(BEARING BASE)

N00°17'25"W 632.08'

40' ADDITIONAL RIGHT-OF-WAY

4' WIRE FENCE END 0.1'N OF PL

4' WIRE FENCE END 1.5'N OF PL

4' WIRE FENCE END 2.1'W OF PL

6" CLF CORNER 3.2'W OF PL

4' WIRE FENCE END 1.9'W OF PL

MATCHLINE SEE SHEET CU1-1

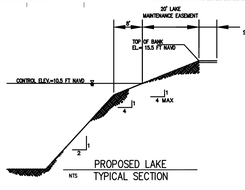
MATCHLINE SEE SHEET CU1-2

NORTH

N

LEGEND

- PROP. CONCRETE
- PROP. ASPHALT
- PROP. ASPHALT (CARPORT)
- PROP. WATER METER SERVICE
- PROP. YARD DRAIN
- PROP. C-INLET
- PROP. CURB INLET
- PROP. DRAINAGE PIPE
- PROP. STORM MANHOLE
- PROP. SANITARY CLEANOUT
- PROP. SANITARY MANHOLE



GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 inch = 50 ft.

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BYSTEPHEN COOPER P.E., SHALL BE WITHOUT LIABILITY TO STEPHEN COOPER P.E. & ASSOCIATES, INC. CONSULTING ENGINEERS

No.	REVISION	DATE
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

STEPHEN COOPER, P.E.
& ASSOCIATES, INC.
- CONSULTING ENGINEER -
CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7450 SOUTH FEDERAL HIGHWAY
PORT ST. LUCIE, FLORIDA 34952
Tel 1-772-336-2933
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008856

SCPE

CONCEPT UTILITY

VIVA AT TREASURE COAST EAST

CITY OF FORT PIERCE, FLORIDA

DATE:	JAN 2021
DRAWN BY:	CCL
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=50'
VERT. SCALE:	NA

DRAWING NO.
CU1-1

JOB NO. 2018-121

Stephen Cooper, P.E. #46557

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com



No.	REVISION	DATE
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
- CONSULTING ENGINEER -
CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7450 SOUTH FEDERAL HIGHWAY
PORT ST. LUCIE, FLORIDA 34952
Tel 1-772-336-2933
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008856

SCPE

CONCEPT UTILITY PLAN CONT.

VIVA AT TREASURE COAST EAST

CITY OF FORT PIERCE, FLORIDA

DATE:	JAN 2021
DRAWN BY:	CCL
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=50'
VERT. SCALE:	NA

DRAWING NO.
CU1-2
JOB NO. 2018-121

Stephen Cooper, P.E. #46557

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BYSTEPHEN COOPER P.E., SHALL BE WITHOUT LIABILITY TO STEPHEN COOPER P.E. & ASSOCIATES, INC. CONSULTING ENGINEERS

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

DEVELOPMENT REVIEW

Property Information

Property address or Location_____

Parcel ID #(s)_____

Project description_____

Application Type

☐Site Plan ☐Conditional Use w/New Construction ☐Conceptual Development Plan

☐Minor Amendment ☐Major Amendment

Site Information

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

Residential: Proposed Units: _____ Proposed Sq. Ft.:_____ Site Acreage:_____

Property Owner(s)	**Applicant/Representative, Title, Company**
Street Address	Street Address
City State Zip	City State Zip
Phone Number	Phone Number
Email Address	Email Address

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

_____

Property Owner(s) Signature(s)

APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS

CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM

For more information, please refer to the website:

https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi

General Information

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



Site Plan submittal requirements:

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

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

MICHELLE R. MILLER, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 4855809 OR BOOK 4600 PAGE 2758, Recorded 04/29/2021 10:34:48 AM Doc Tax: $19250.00

PREPARED BY:
Mariner Cove Builders, LLC
9429 Harding Avenue, Suite 292
Surfside, FL 33154
PARCEL IDENTIFICATION NUMBERS: 2430-234-0001-000-3 and 2430-231-0001-000-4

SPECIAL WARRANTY DEED

THIS INDENTURE, made and entered into as of the 27th day of April, 2021, by and between MARINER COVE BUILDERS, LLC, a Florida limited liability company, whose mailing address is 9429 Harding Avenue, Suite 292, Surfside, Florida 33154 (the "Grantor"), in favor of TEG ACQUISITIONS LLC, a New Jersey limited liability company, whose mailing address is 365 Route 59, Suite 120, Airmont, New York 10952 (the "Grantee").

GRANTOR, for and in consideration of the sum of Ten ($10.00) Dollars in hand paid at and before the sealing and delivery of these presents, the receipt whereof is hereby acknowledged, has granted, bargained, aliened, conveyed and confirmed, and by these presents does grant, alien, convey and confirm unto said Grantee, the following described premises situated in St. Lucie County, Florida and being more particularly described on Exhibit "A" attached hereto and made a part hereof (the "Property").

SUBJECT TO:

1. Taxes and assessments for the year 2021 and subsequent years.
2. Restrictions, covenants, conditions, reservations, matters, dedications, and easements of record, but this provision shall not operate to reimpose the same.
3. Existing zoning, restrictions, prohibitions and other similar requirements imposed by governmental authority.

TOGETHER with all the tenements, hereditaments and appurtenances thereof belonging or in otherwise appertaining.

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

AND the Grantor hereby covenants with said Grantee that it has good right and lawful authority to sell and convey said land; that it hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons claiming by, through and under Grantor.

IN WITNESS WHEREOF, the Grantor has caused these presents to be executed in its name by its proper duly authorized representative, on the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

Print Name: Detta Scarr

Print Name: F. Faucett

MARINER COVE BUILDERS, LLC, a Florida limited liability company

By: _____
David Koplowitz, Manager

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

Property Identification

Site Address: 5315 EDWARDS RD
Sec/Town/Range: 30/35S/40E
Parcel ID: 2430-231-0001-000-4
Jurisdiction: Fort Pierce

Use Type: 0000
Account #: 32794
Map ID: 24/30N
Zoning: Medium Den

Ownership

TEG Mariner Cove LLC
365 Route 59 Ste 110
Airmont, NY 10952



Legal Description

30 35 40 N 1/2 OF SW 1/4 OF NW 1/4-LESS N 33 FT AND LESS W 40 FT FOR RDS AND LESS E 75 FT FOR DITCH- (47) (17.76 AC)

Current Values

Just/Market Value:	$650,800
Assessed Value:	$369,245
Exemptions:	$0
Taxable Value:	$369,245

Property taxes are subject to change upon change of ownership.

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

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

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	17.76
Land Size (SF):	773,625.6

Building Design Wind Speed

Occupancy Category	I	II	III & IV
Speed	140	150	160

Sources/links:

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
© Copyright 2022 Saint Lucie County Property Appraiser. All rights reserved.

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

Property Identification

Site Address: 5496 ALTMAN RD
Sec/Town/Range: 30/35S/40E
Parcel ID: 2430-234-0001-000-3
Jurisdiction: Fort Pierce

Use Type: 0000
Account #: 32810
Map ID: 24/30S
Zoning: Medium Den

Ownership

TEG Mariner Cove LLC
365 Route 59 Ste 110
Airmont, NY 10952



Legal Description

30 35 40 SE 1/4 OF SW 1/4 OF NW 1/4 AND NE 1/4 OF NW 1/4 OF SW 1/4 AND FROM NE COR OF NW 1/4 OF SW 1/4, RUN S 0 DEG 30 MIN W ALG, TH 1/4 1/4 SEC LI 653.16 FT FOR POB, TH CONT S 0 DEG 30 MIN W 88.12 FT TO PT ON TOP OF BLUFF OF TEN MILE CREEK, TH S 54 DEG 51 MIN 30 SEC W ALG SD CREEK 413.7 FT, TH N 1 DEG 32 MIN E 318.28 FT, TH N 88 DEG 36 MIN E 330.67 FT TO POB (21.05 AC) (CASE #89-14123)

Current Values

Just/Market Value:	$651,300
Assessed Value:	$248,984
Exemptions:	$0
Taxable Value:	$248,984

Property taxes are subject to change upon change of ownership.

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

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

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	21.05
Land Size (SF):	916,938

Building Design Wind Speed

Occupancy Category	I	II	III & IV
Speed	140	150	160

Sources/links:

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
© Copyright 2022 Saint Lucie County Property Appraiser. All rights reserved.

Attn: City of Fort Pierce, Planning Department
100 N. US Hwy 1
Fort Pierce, FL 34950

August 01, 2023

Re: Viva Communities at Treasure Coast East

Project Narrative

TEG Developers is proud to present Viva Communities at Treasure Coast East, a proposed 206 unit rental community in the City of Fort Pierce. The subject property, located on Edwards Road between Jenkins Road and Westglen Drive. Situated on 10 Mile Creek this 39 acre property enjoys easy access to urban conveniences as well as serene landscapes.

Inspired by the pocket neighborhood concept, Viva Communities at Treasure Coast East aspires to create an enhanced apartment home community. The master plan boasts two large lakes flanked by apartment homes, creating a picturesque waterfront experience while allowing for open gathering areas, common outdoor amenities, and enhancing the overall living experience.

Every residence is thoughtfully designed to maximize comfort and livability. Shared walls are kept to a minimum, and residents are never stacked on top of one another. Additionally, each resident is provided with their own fenced in back yard. The architectural design draws inspiration from the timeless charm of the Florida Cracker vernacular. The buildings feature classic horizontal siding walls and 5:12 sloped roofs with gable accents and 24” overhangs. A carefully arranged mix of horizontal and vertical siding with stone veneer accents, combined with Architectural details such as deep porches and gable accents, add character and authenticity to each home.

A well-appointed clubhouse serves as a hub for community events, social gatherings, and recreational activities. The pool area provides a refreshing escape for residents to relax and unwind, while the generous open common areas offer ample space for outdoor activities and leisure. Residents also enjoy the benefits of having an on-site dog park, fitness center, business lounge, community room, catering kitchen, pet spa, outdoor grilling areas, pickleball courts, and more.

At Viva Communities, we take pride in offering a diverse selection of apartment homes tailored to suit a broad range of lifestyles. Our carefully designed one and two bedroom units cater to the increasing number of young residents in the area. These smaller units are also an excellent option for empty nesters and retirees who seek a more manageable living arrangement without compromising on quality. For young couples

and families seeking more space and functionality, our three-bedroom units offer ample room for families to grow. Additionally, all units are fair housing compliant, ensuring that all residents have equal access to our exceptional living spaces.

In closing, Viva Communities at Treasure Coast East represents a unique opportunity for the City of Fort Pierce to help address current housing demands. Our communities are purpose built for long term rental and are designed with a focus on quality, consistency, and modern amenities. Our primary objective is to offer residents comfortable, well maintained living spaces that provide an elevated living experience and help raise the overall standard of rental properties in the area.

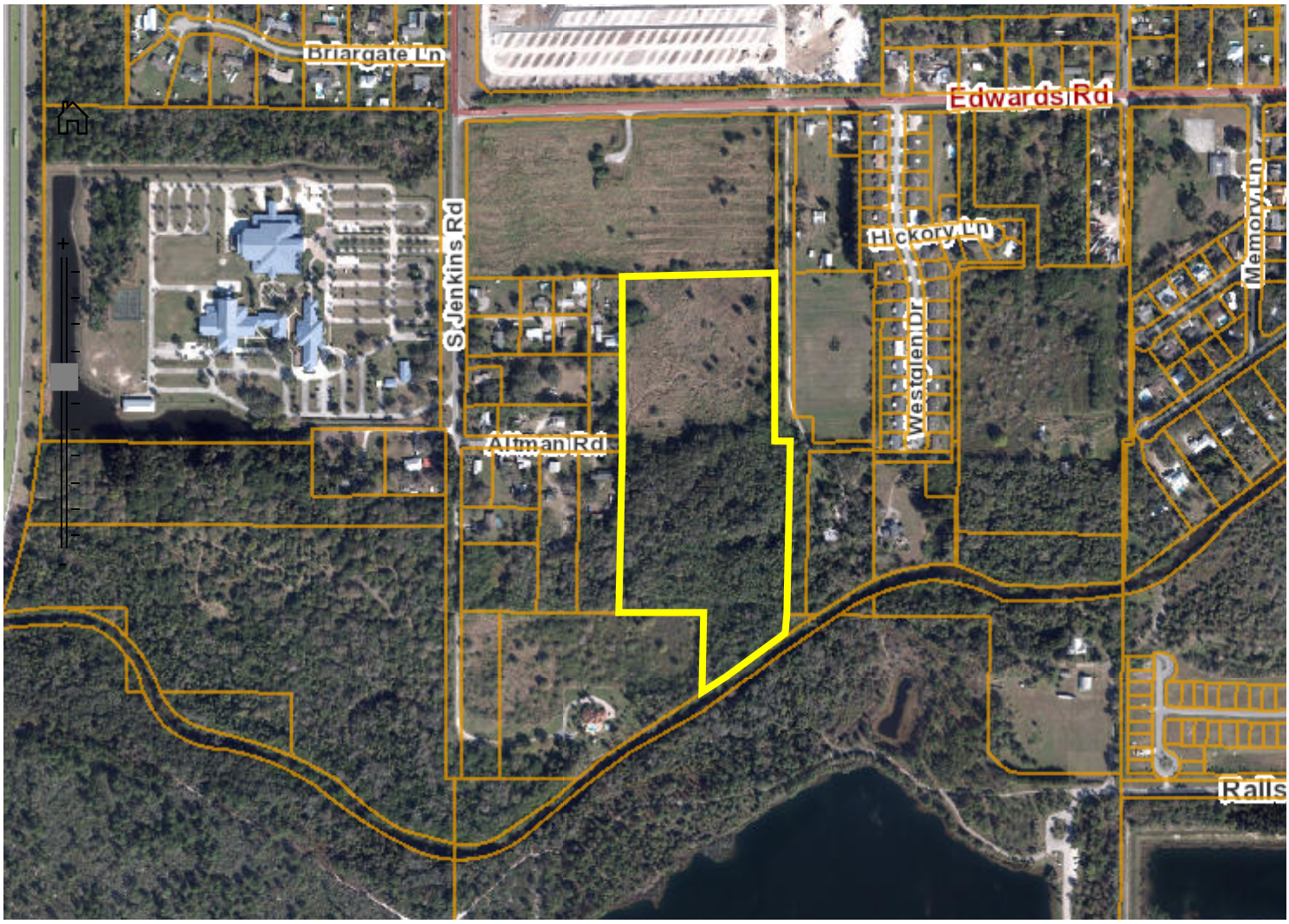
Francarlos Rivera, AIA, CGC
Senior Project Manager
TEG Developers, LLC

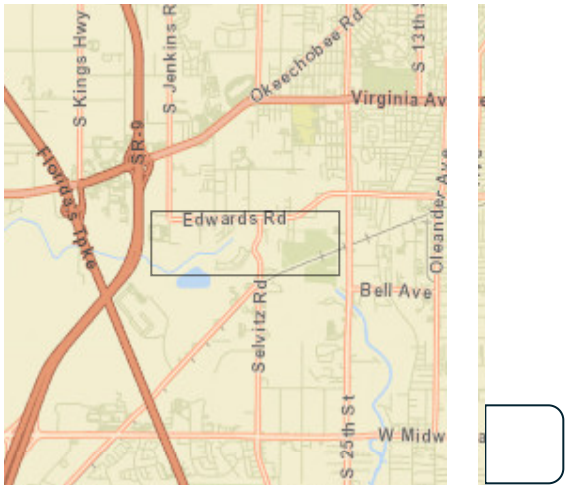
Phone: 813.853.3077
Email: frivera@tegdevelopers.com

(https://www.paslc.gov/)

Saint Lucie County Property Appraiser

Michelle Franklin CFA





600ft

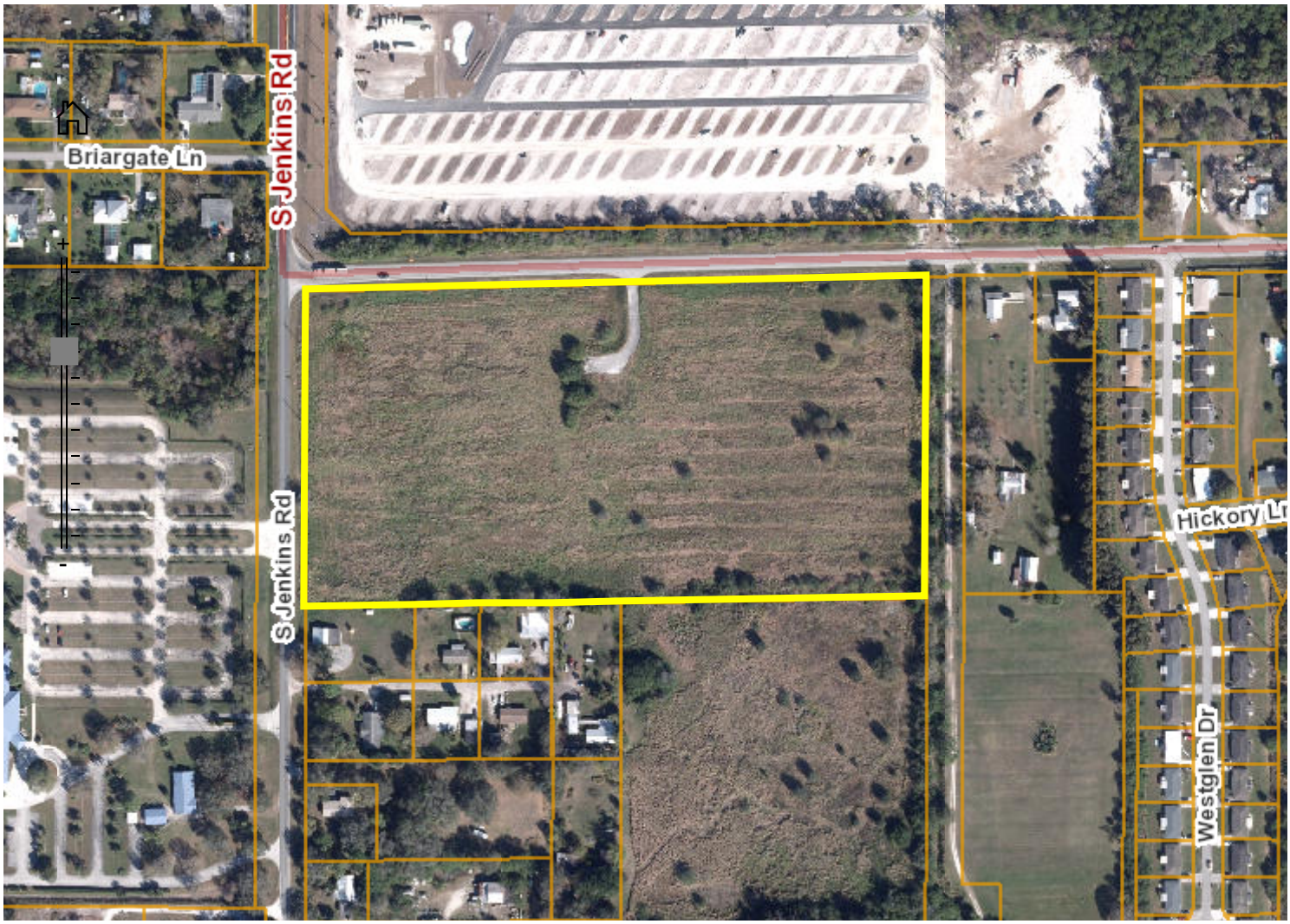
2021-09-28

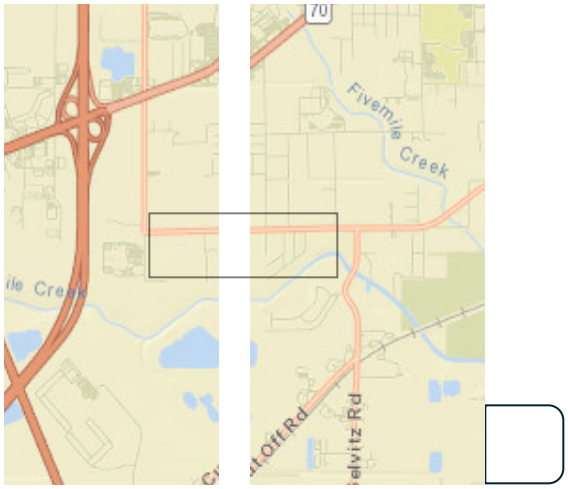
Click here for Legal Disclaimer

(https://www.paslc.gov/)

Saint Lucie County Property Appraiser

Michelle Franklin CFA

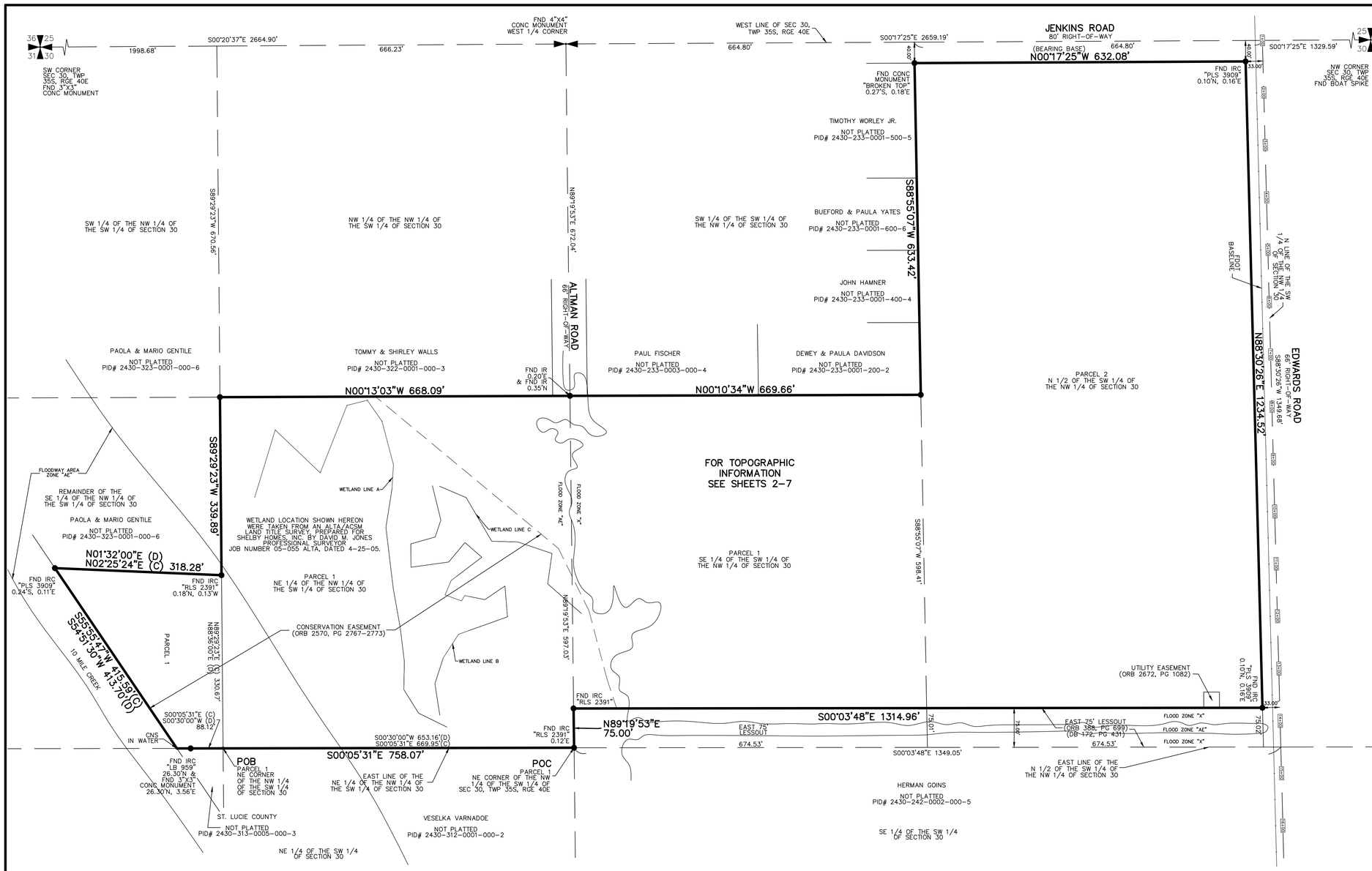


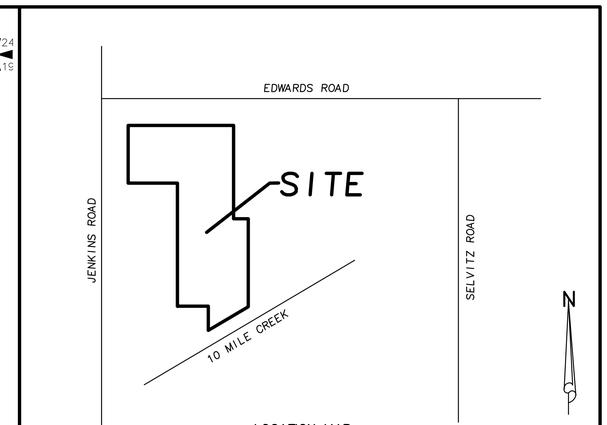


400ft

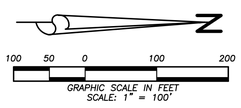
2021-09-28

Click here for Legal Disclaimer





LOCATION MAP
NOT TO SCALE



SURVEY REPORT:

1. THIS IS A BOUNDARY SURVEY AS DEFINED IN CHAPTER 5J-17.050(10)(A-K), FLORIDA ADMINISTRATIVE CODE.
2. SURVEY BASED ST. LUCIE COUNTY SECTIONAL DATA.
3. LEGAL DESCRIPTION WAS FURNISHED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, ORDER NUMBER: 9218519, DATED JANUARY 1, 2021 @ 11:00 PM.

   SUBJECT TO THE FOLLOWING CONDITIONS:

   A. EASEMENT TO THE CITY OF FT. PIERCE RECORDED IN O.R. BOOK 3042, PAGE 853, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #6) (COVERS ENTIRE PARCEL)

   B. DEED OF CONSERVATION EASEMENT RECORDED IN O.R. BOOK 2570, PAGE 2767, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #7) (AS SHOWN)

   C. NOTICE OF ENVIRONMENTAL RESOURCE OF SURFACE WATER MANAGEMENT PERMIT RECORDED IN O.R. BOOK 3353, PAGE 1326, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #8) (COVERS ENTIRE PARCEL)

   D. RIGHT OF WAY DEED RECORDED IN DEED BOOK 172, PAGE 431, AND O.R. BOOK 388, PAGE 699, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #9) (AS SHOWN)

   E. EASEMENT TO BELLSOUTH TELECOMMUNICATIONS, INC. RECORDED IN O.R. BOOK 2672, PAGE 1082, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #12) (AS SHOWN)

   F. ORDINANCE NO. K-269 ESTABLISHING THE FUTURE LAND USE DESIGNATION RECORDED IN OFFICIAL RECORDS BOOK 1971, PAGE 1295. (BII #13) (COVERS ENTIRE PARCEL) (NOT PLOTTABLE)

   G. NOTICE OF WATER/WASTEWATER SUPPLY AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 3117, PAGE 2790. (BII #14) (COVERS ENTIRE PARCEL) (NOT PLOTTABLE)
4. BEARING BASIS: N00°17'25"W ALONG THE WEST LINE OF SECTION 30, TOWNSHIP 35S, RANGE 40E.
5. NO UNDERGROUND UTILITIES OR IMPROVEMENTS WERE LOCATED UNLESS OTHERWISE SHOWN.
6. THIS SITE LIES WITHIN FLOOD ZONE "X" AND "AE" BASE FLOOD ELEVATION= 13.0, ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 12111C0167 J & 12111C0169 J, EFFECTIVE DATE 2-16-12.
7. FLOOD ZONE SHOWN HEREON IS AN INTERPRETATION BY THE SURVEYOR AND IS PROVIDED AS A COURTESY. THE FLOOD ZONE SHOULD BE VERIFIED BY A DETERMINATION AGENCY.
8. THERE MAY BE ADDITIONAL EASEMENTS AND/OR RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN PERFORMED BY ALEXANDER J. PIAZZA PSM, INC.
9. THE EXPECTED USE OF THE SUBJECT PROPERTY IS FOR THE PURCHASE OF SAID PROPERTY AND FALLS WITHIN THE SUBURBAN CATEGORY AS CLASSIFIED IN CHAPTER 5J-17.051(15)(B)(II), FLORIDA ADMINISTRATIVE CODE. ALL FIELD-MEASURED CONTROL MEASUREMENTS EXCEEDED 1:7,500 FEET ACCURACY REQUIREMENTS FOR THIS CLASSIFICATION.
10. SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
11. ADDITIONS OR DELETIONS TO THE SURVEY MAP OR REPORT BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
12. THE BEARINGS SHOWN HEREON ARE RELATIVE TO THE STATE PLANE COORDINATE SYSTEM OF THE NORTH AMERICAN DATUM OF 1983 (2007 ADJUSTMENT) AND THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 AND ARE REFERENCED TO THE LENGEMANN OF FLORIDA'S L-NET GPS NETWORK DEVELOPED WHICH MEETS OR EXCEEDS THE FEDERAL GEODETIC CONTROL COMMITTEE (FGCC) GUIDELINES FOR "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES" AS WELL AS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17.051 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 471.027 FLORIDA STATUTES. BENCHMARKS SET OR FOUND FOR THIS SURVEY ARE NOTED ON THE SKETCH.
13. THIS SURVEY IS PREPARED ONLY FOR THE PARTIES LISTED BELOW AND IS NOT ASSIGNABLE.
    PREPARED FOR: TEG ACQUISITIONS, LLC, A FLORIDA LIMITED LIABILITY COMPANY
    FIDELITY NATIONAL TITLE INSURANCE COMPANY
    GREEN & PIOTRKOWSKI, PLLC.
    WILLIAM J. SEGAL, P.A.
14. © COPYRIGHT 2021 BY ALEXANDER J. PIAZZA PSM, INC.
    THE SKETCH OF SURVEY AND SURVEY REPORT COMPRISE THE COMPLETE SURVEY.
    THIS SURVEY IS NOT VALID UNLESS THE SKETCH AND REPORT ACCOMPANY EACH OTHER.
    REPRODUCTIONS OF THIS SURVEY ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER EMPLOYED BY ALEXANDER J. PIAZZA PSM, INC.

DATE OF FIELD SURVEY: 3-21-21

DATE OF SURVEY: 3-22-21

ALEXANDER J. PIAZZA PSM, INC.

ALEXANDER J. PIAZZA
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 6330

LEGAL DESCRIPTION:

PARCEL 1:

THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 30, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS THE EAST 75 FEET THEREOF, ST. LUCIE COUNTY, FLORIDA.

AND

THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 30, TOWNSHIP 35 SOUTH, RANGE 40 EAST ST. LUCIE COUNTY, FLORIDA.

AND

FROM THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 30, TOWNSHIP 35 SOUTH, RANGE 40 EAST, RUN SOUTH 00°30' WEST ALONG THE QUARTER-QUARTER SECTION LINE, A DISTANCE OF 653.16 FEET FOR THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 00°30' WEST A DISTANCE OF 88.12 FEET TO A POINT ON THE TOP OF A BLUFF OF 10 MILE CREEK; THENCE RUN SOUTH 54°51'30" WEST ALONG SAID CREEK A DISTANCE OF 413.70 FEET; THENCE RUN NORTH 01°32' EAST A DISTANCE OF 318.28 FEET; THENCE RUN NORTH 88°36' EAST, A DISTANCE 330.67 FEET, TO THE POINT OF BEGINNING, BEING IN ST. LUCIE COUNTY, FLORIDA.

PARCEL 2:

NORTH ONE-HALF(N 1/2) OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 35 SOUTH, RANGE 40 EAST, EXCEPTING THEREFROM ALL RIGHTS OF WAY FOR DRAINAGE CANAL AND PUBLIC ROAD PURPOSES. SAID LAND LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

CONTAINING: 1,703,158 SQUARE FEET OR 39.099 ACRES, MORE OR LESS.

ABBREVIATIONS:

(C)	= CALCULATED
CBS	= CONCRETE BLOCK STRUCTURE
CMB	= COMMISSIONERS' MINUTES BOOK
CONC	= CONCRETE
CLF	= CHAIN LINK FENCE
DE	= DRAINAGE EASEMENT
FDOT	= FLORIDA DEPARTMENT OF TRANPORTATION
DB	= DEED BOOK
DIP	= DUCTILE IRON PIPE
FND	= FOUND
FPL	= FLORIDA POWER & LIGHT
IP	= IRON PIPE
INV	= INVERT
IRC	= IRON ROD WITH PLASTIC CAP
LB	= LICENSE BUSINESS
LS	= LICENSE SURVEY
(M)	= MEASURED
MON	= MONUMENT
ORB	= OFFICIAL RECORD BOOK
(P)	= PLAT
PB	= PLAT BOOK
PG	= PAGE
PL	= PROPERTY LINE
POB	= POINT OF BEGINNING
POC	= POINT OF COMMENCEMENT
PRM	= PERMANENT REFERENCE MONUMENT
R/W	= RIGHT-OF-WAY
RCP	= REINFORCED CONCRETE PIPE
RGE	= RANGE
SEC	= SECTION
TWP	= TOWNSHIP
UE	= UTILITY EASEMENT

SYMBOLS:

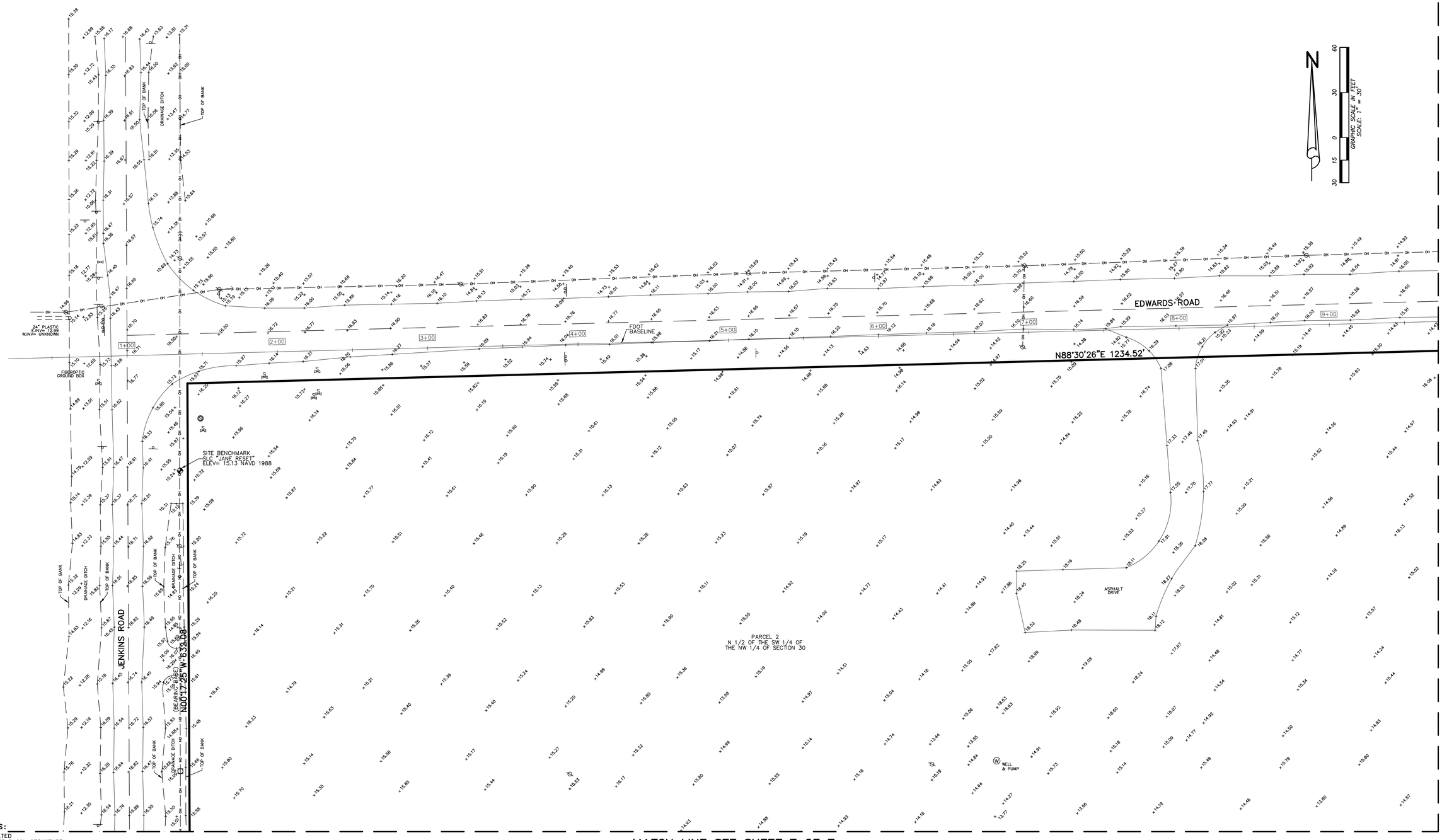
= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CATCH BASIN
= CATCH BASIN INLET
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= BACKFLOW PREVENTOR
= MAIL BOX
= GAS VALVE
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG				
REF	K:\				
FLD	SB	FB.	PG.	JOB	21-7056
OFF	SB			DATE	3-22-21
CKD	AJP	SHEET	1 OF 7	DWG	D-964



MATCH LINE SEE SHEET 3 OF 7

ABBREVIATIONS:

(C) = CALCULATED
CBS = CONCRETE BLOCK STRUCTURE
CONC = CONCRETE
CLF = CHAIN LINK FENCE
FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
FND = FOUND
FPL = FLORIDA POWER & LIGHT
IP = IRON PIPE
INV = INVERT
IRC = IRON ROD WITH PLASTIC CAP
LB = LICENSE BUSINESS
LS = LICENSE SURVEY
(M) = MEASURED
ORB = OFFICIAL RECORD BOOK
(P) = PLAT
PB = PLAT BOOK
PG = PAGE
PL = PROPERTY LINE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
R/W = RIGHT-OF-WAY
RCP = REINFORCED CONCRETE PIPE
RGE = RANGE
SEC = SECTION
TWP = TOWNSHIP
UE = UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

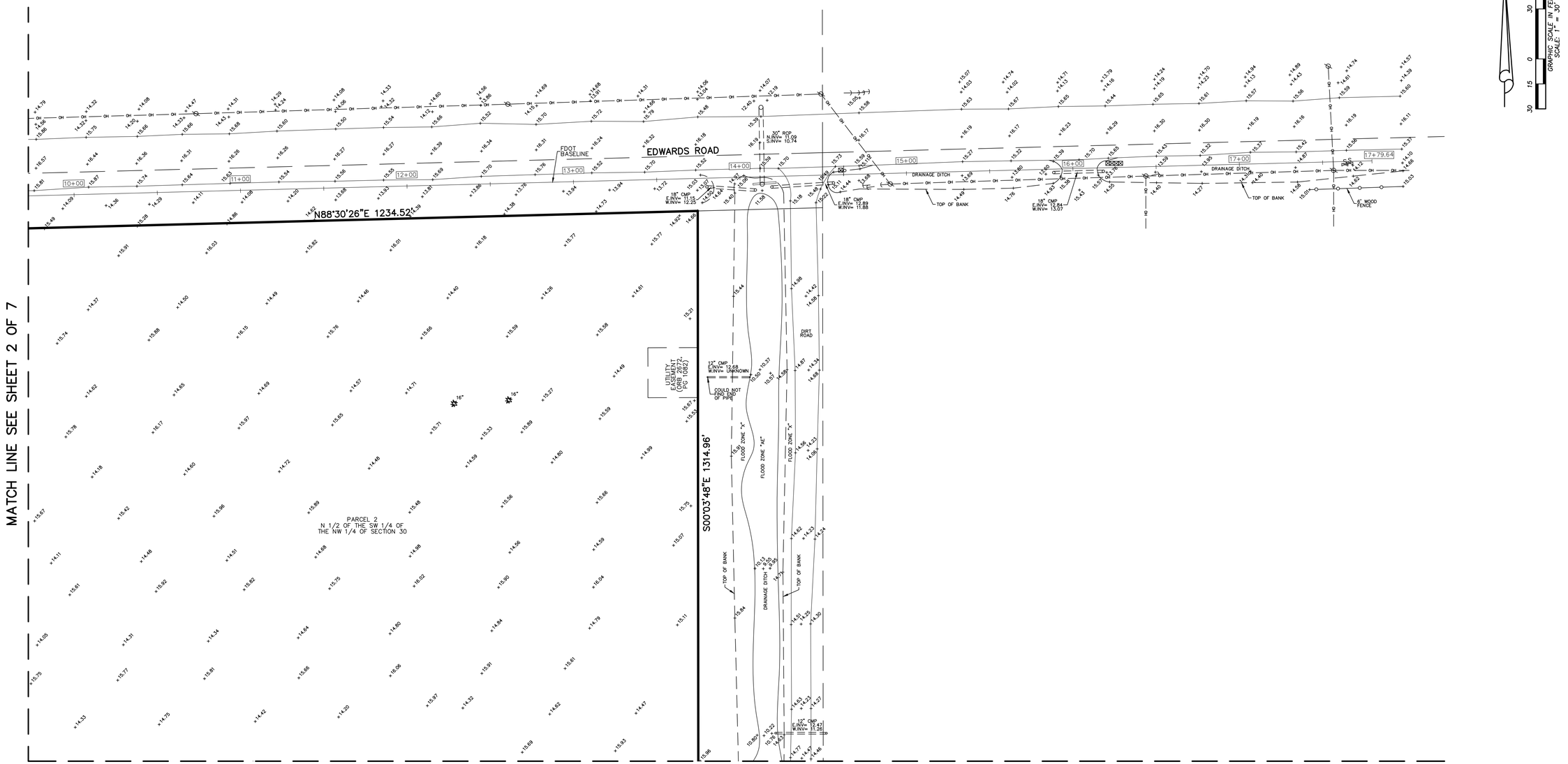
DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG				
REF	K:\				
FLD	SB	FB.	PG.	JOB	21-7056
OFF	SB			DATE	3-22-21
CKD	AJP	SHEET	2 OF 7	DWG	D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:56:42 AM



GRAPHIC SCALE IN FEET
SCALE: 1" = 30'

ABBREVIATIONS:

(C)	= CALCULATED
CBS	= CONCRETE BLOCK STRUCTURE
CONC	= CONCRETE
CLF	= CHAIN LINK FENCE
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FND	= FOUND
FPL	= FLORIDA POWER & LIGHT
IP	= IRON PIPE
INV	= INVERT
IRC	= IRON ROD WITH PLASTIC CAP
LB	= LICENSE BUSINESS
LS	= LICENSE SURVEY
(M)	= MEASURED
ORB	= OFFICIAL RECORD BOOK
(P)	= PLAT
PB	= PLAT BOOK
PG	= PAGE
PL	= PROPERTY LINE
POB	= POINT OF BEGINNING
POC	= POINT OF COMMENCEMENT
R/W	= RIGHT-OF-WAY
RCP	= REINFORCED CONCRETE PIPE
RGE	= RANGE
SEC	= SECTION
TWP	= TOWNSHIP
UE	= UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

= OAK TREE
= PALM TREE
= UNKNOWN TREE
15" = DENOTES NUMBER OF INCH DIAMETER

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

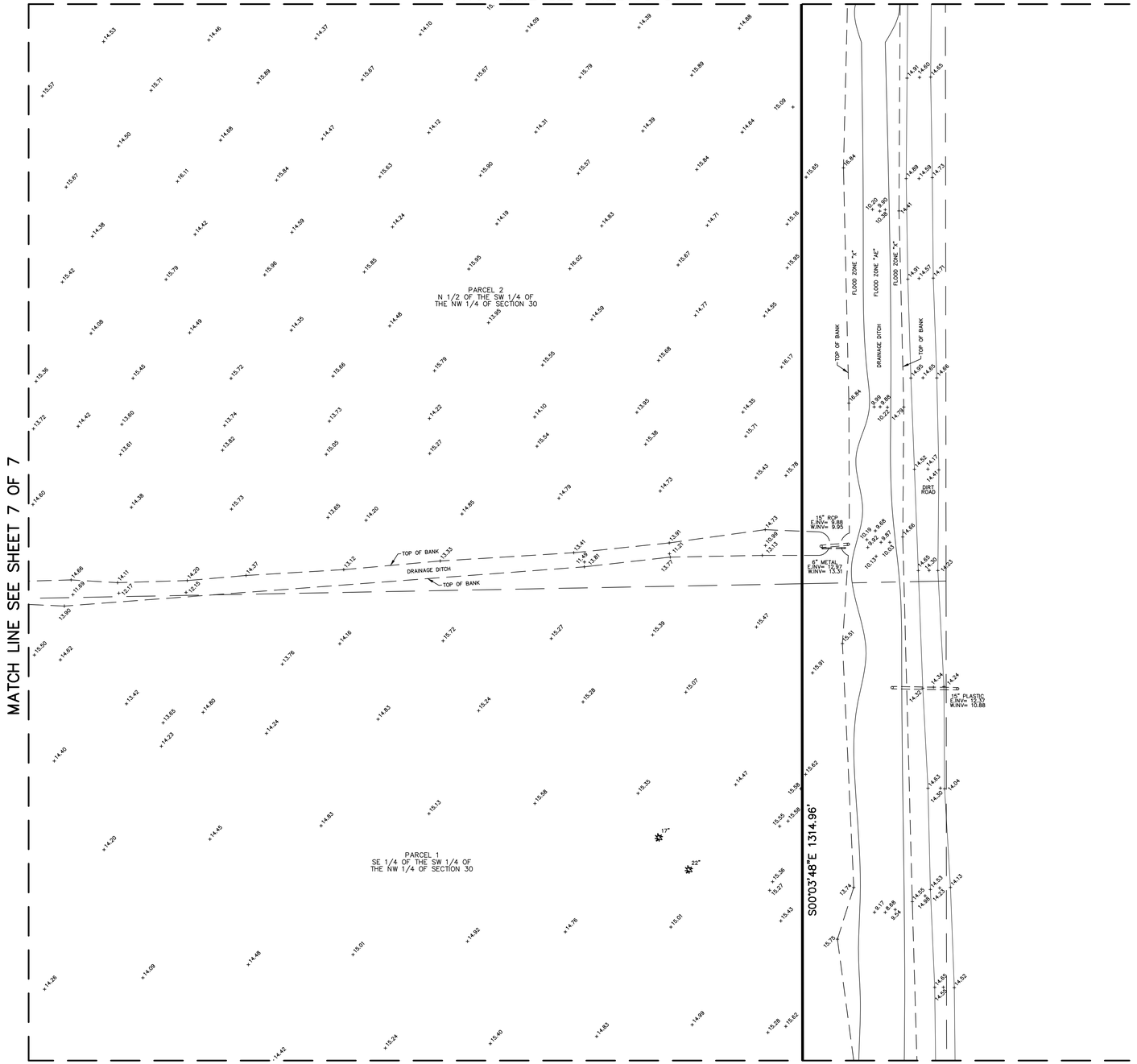
BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG				
REF	K:\				
FLD	SB	FB.	PG.	JOB	21-7056
OFF	SB			DATE	3-22-21
CKD	AJP	SHEET	3 OF 7	DWG	D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:57:18 AM

MATCH LINE SEE SHEET 3 OF 7

MATCH LINE SEE SHEET 7 OF 7



MATCH LINE SEE SHEET 5 OF 7

N

GRAPHIC SCALE IN FEET
SCALE: 1" = 30'
60 30 0 15 30

ABBREVIATIONS:

(C) = CALCULATED
CBS = CONCRETE BLOCK STRUCTURE
CONC = CONCRETE
CLF = CHAIN LINK FENCE
FND = FOUND
FPL = FLORIDA POWER & LIGHT
IP = IRON PIPE
INV = INVERT
IRC = IRON ROD WITH PLASTIC CAP
LB = LICENSE BUSINESS
LS = LICENSE SURVEY
(M) = MEASURED
ORB = OFFICIAL RECORD BOOK
(P) = PLAT
PB = PLAT BOOK
PG = PAGE
PL = PROPERTY LINE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
R/W = RIGHT-OF-WAY
RCP = REINFORCED CONCRETE PIPE
RGE = RANGE
SEC = SECTION
TWP = TOWNSHIP
UE = UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

= OAK TREE
= PALM TREE
= UNKNOWN TREE
15" = DENOTES NUMBER OF INCH DIAMETER

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

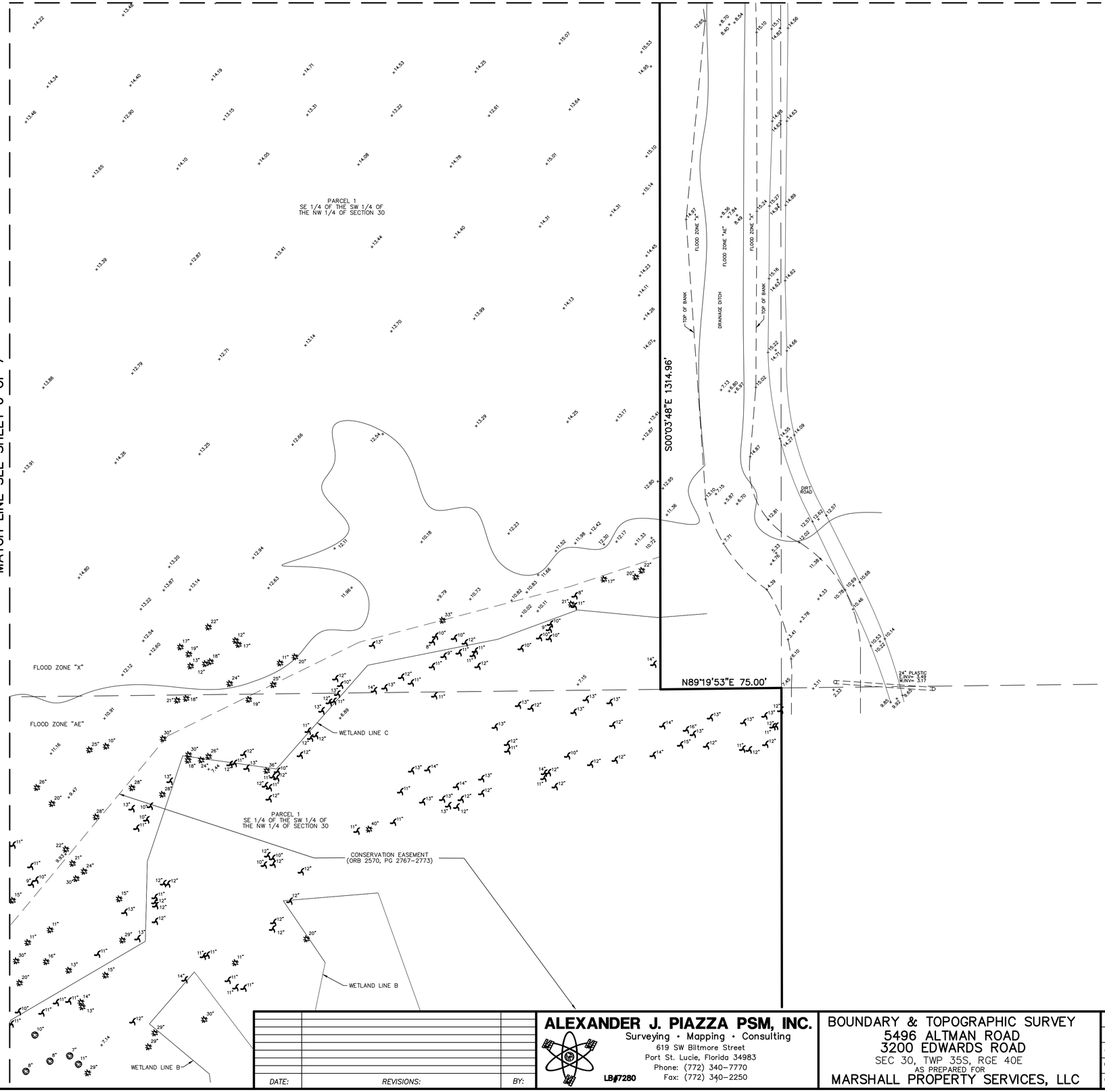
BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG				
REF	K:\				
FLD	SB	FB.	PG.	JOB	21-7056
OFF	SB			DATE	3-22-21
CKD	AJP	SHEET	4 OF 7	DWG	D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:57:52 AM

MATCH LINE SEE SHEET 4 OF 7

MATCH LINE SEE SHEET 6 OF 7



N

GRAPHIC SCALE IN FEET
SCALE: 1" = 30'
60 30 0 15 30

SYMBOLS:

- = GUY WIRE ANCHOR
- = CABLE TELEVISION BOX
- = CLEANOUT
- = ELECTRIC BOX
- = TELEPHONE BOX
- = SIGN
- = SANITARY MANHOLE
- = STORM MANHOLE
- = FIRE HYDRANT
- = LIGHT POLE
- = CONCRETE POWER POLE
- = MAIL BOX
- = SEWER VALVE
- = WATER VALVE
- = WELL
- = WATER METER
- = WOOD POWER POLE
- = SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

- = OAK TREE
- = PALM TREE
- = UNKNOWN TREE
- = PINE TREE
- 15" = DENOTES NUMBER OF INCH DIAMETER

ABBREVIATIONS:

(C)	= CALCULATED
CBS	= CONCRETE BLOCK STRUCTURE
CONC	= CONCRETE
CLF	= CHAIN LINK FENCE
FND	= FOUND
FPL	= FLORIDA POWER & LIGHT
IP	= IRON PIPE
INV	= INVERT
IRC	= IRON ROD WITH PLASTIC CAP
LB	= LICENSE BUSINESS
LS	= LICENSE SURVEY
(M)	= MEASURED
ORB	= OFFICIAL RECORD BOOK
(P)	= PLAT
PB	= PLAT BOOK
PG	= PAGE
PL	= PROPERTY LINE
POB	= POINT OF BEGINNING
POC	= POINT OF COMMENCEMENT
R/W	= RIGHT-OF-WAY
RCP	= REINFORCED CONCRETE PIPE
RGE	= RANGE
SEC	= SECTION
TWP	= TOWNSHIP
UE	= UTILITY EASEMENT

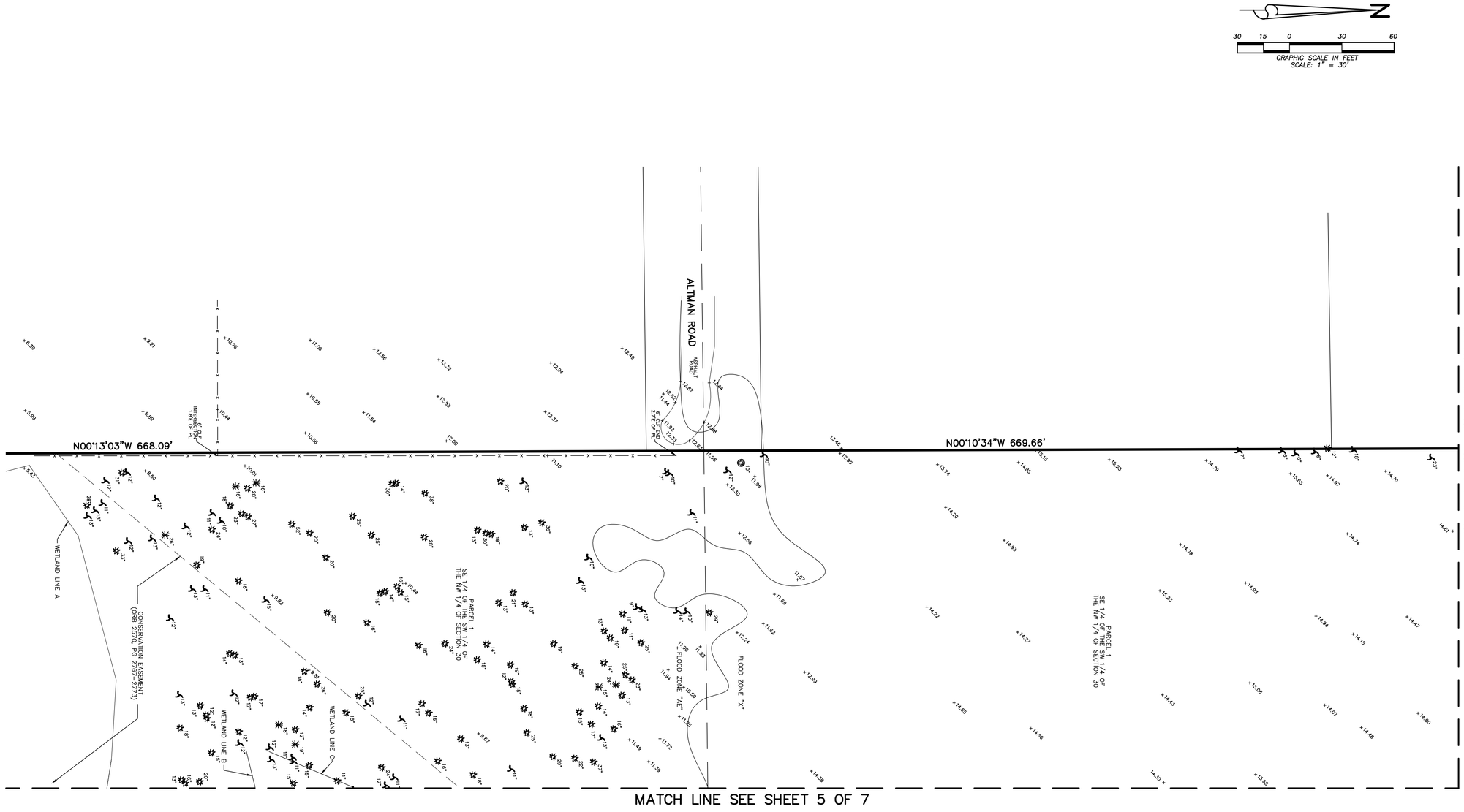
DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG		
REF	K:\		
FLD	SB	FB. PG.	JOB 21-7056
OFF	SB		DATE 3-22-21
CKD	AJP	SHEET 5 OF 7	DWG D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:58:19 AM



ABBREVIATIONS:

(C) = CALCULATED
CBS = CONCRETE BLOCK STRUCTURE
CONC = CONCRETE
CLF = CHAIN LINK FENCE
FND = FOUND
FPL = FLORIDA POWER & LIGHT
IP = IRON PIPE
INV = INVERT
IRC = IRON ROD WITH PLASTIC CAP
LB = LICENSE BUSINESS
LS = LICENSE SURVEY
(M) = MEASURED
ORB = OFFICIAL RECORD BOOK
(P) = PLAT
PB = PLAT BOOK
PG = PAGE
PL = PROPERTY LINE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
R/W = RIGHT-OF-WAY
RCP = REINFORCED CONCRETE PIPE
RGE = RANGE
SEC = SECTION
TWP = TOWNSHIP
UE = UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

= OAK TREE
= PALM TREE
= UNKNOWN TREE
= PINE TREE
15" = DENOTES NUMBER OF INCH DIAMETER

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG		
REF	K:\		
FLD	SB	FB. PG.	JOB 21-7056
OFF	SB		DATE 3-22-21
CKD	AJP	SHEET 6 OF 7	DWG D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:58:54 AM

MATCH LINE SEE SHEET 2 OF 7

MATCH LINE SEE SHEET 5 OF 7

MATCH LINE SEE SHEET 6 OF 7

JENKINS ROAD

N00°17'25"W 632.08'

S88°55'07"W 633.42'

N00°10'34"W 669.66'

PARCEL 2
N 1/2 OF THE SW 1/4 OF
THE NW 1/4 OF SECTION 30

PARCEL 1
SE 1/4 OF THE SW 1/4 OF
THE NW 1/4 OF SECTION 30

(BEARING BASIS)

TOP OF BANK

DRAINAGE DITCH

18" RCP
N.INV= 12.00
S.INV= 11.82

18" RCP
N.INV= 13.59
S.INV= 13.61

18" RCP
N.INV= 13.64
S.INV= 13.48

4" WIRE FENCE END 0.1'N OF PL

4" WIRE FENCE END 1.5'N OF PL

4" CLF CORNER 3.2'W OF PL

4" WIRE FENCE END 2.1'W OF PL

4" WIRE FENCE END 1.9'W OF PL

CONC DRIVE

ASPHALT DRIVE

LOW AREA

WELL

GRAPHIC SCALE IN FEET
SCALE: 1" = 30'

60 30 0 15 30

ABBREVIATIONS:

(C)	= CALCULATED
CBS	= CONCRETE BLOCK STRUCTURE
CONC	= CONCRETE
CLF	= CHAIN LINK FENCE
FND	= FOUND
FPL	= FLORIDA POWER & LIGHT
IP	= IRON PIPE
INV	= INVERT
IRC	= IRON ROD WITH PLASTIC CAP
LB	= LICENSE BUSINESS
LS	= LICENSE SURVEY
(M)	= MEASURED
ORB	= OFFICIAL RECORD BOOK
(P)	= PLAT
PB	= PLAT BOOK
PG	= PAGE
PL	= PROPERTY LINE
POB	= POINT OF BEGINNING
POC	= POINT OF COMMENCEMENT
R/W	= RIGHT-OF-WAY
RCP	= REINFORCED CONCRETE PIPE
RGE	= RANGE
SEC	= SECTION
TWP	= TOWNSHIP
UE	= UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

= OAK TREE
= PALM TREE
= UNKNOWN TREE
15" = DENOTES NUMBER OF INCH DIAMETER

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG		
REF	K:\		
FLD	SB	FB. PG.	JOB 21-7056
OFF	SB		DATE 3-22-21
CKD	AJP	SHEET 7 OF 7	DWG D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:59:20 AM

SITE DATA	
OWNER:	TEG MARINER COVE LLC
OWNER ADDRESS:	365 ROUTE 59 STE 110 AIRMONT, NY 10952
SITE ADDRESS	5315 EDWARDS RD & 5496 ALTMAN RD
PARCEL ID:	2430-231-0001-000-4 & 2430-234-0001-000-3
LEGAL DESCRIPTION:	30 35 40 N 1/2 OF SW 1/4 OF NW 1/4--LESS N 33 FT AND LESS W 40 FT FOR RDS AND LESS E 75 FT FOR DITCH- (47) (17.76 AC) 30 35 40 SE 1/4 OF SW 1/4 OF NW 1/4 AND NE 1/4 OF NW 1/4 OF SW 1/4 AND FROM NE COR OF NW 1/4 OF SW 1/4, RUN S 0 DEG 30 MIN W ALG, TH 1/4 1/4 SEC LI 653.16 FT FOR POB, TH CONT S 0 DEG 30 MIN W 88.12 FT TO PT ON TOP OF BLUFF OF TEN MILE CREEK, TH S 54 DEG 51 MIN 30 SEC W ALG SD CREEK 413.7 FT, TH N 1 DEG 32 MIN E 318.28 FT, TH N 88 DEG 36 MIN E 330.67 FT TO POB (21.05 AC) (CASE #89-14123)
COUNTY:	FORT PIERCE
SEC/TOWN/RANGE:	25/35S/40E
FLOOD ZONE:	X
ZONING:	MEDIUM DEN
FUTURE LANDUSE:	GC, GENERAL COMMERCIAL
LOT SIZE:	39.01 AC.

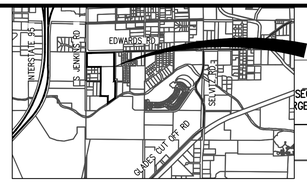
LAND USE DATA			
USE	AREA SF	ACRES	PERCENTAGE
TOTAL SITE AREA	1,620,741.56	37.21	100%
IMPERVIOUS			
BUILDING	242,229.78	5.56	14.95%
ASPHALT	187,175.78	5.13	11.55%
CONCRETE	234,373.06	5.38	14.46%
LAKE	103,067.38	2.37	6.36%
TOTAL IMPERVIOUS:	766,846.00	17.60	47.31%
PERVIOUS			
OPEN SPACE	853,895.56	19.60	52.69%
TOTAL PERVIOUS:	853,895.56	19.60	52.69%

BUILDING DATA	
BUILDING HEIGHT:	45' MAX / 24'-2" TO MID POINT
NUMBER OF STORIES:	2
1 BEDROOM UNIT	60
2 BEDROOM UNIT	92
3 BEDROOM UNIT	54
TOTAL UNIT:	206

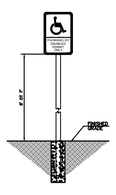
BUILDING SETBACKS REQUIRED		
REQUIRED		PROVIDED
FRONT:	25'	85.31'
N SIDE:	10'	25.39'
S SIDE:	20'	22.00'
REAR:	25'	548.94'

PARKING SPACE REQUIRED	
UNITS:	206
SPACES PER DWELLING UNIT	2
TOTAL SPACES REQUIRED	412
ADA REQUIRED OF REG. SPACES	9
PARKING SPACES PROVIDED	
9' – 6" X 19' 90 & 24 DEG PARKING SPACES	280
DRIVEWAY PARKING SPACES	44
12' X 19' 90 DEG. ADA PARKING SPACES	18
9' – 6" X 22' PARALLEL PARKING	78
DETACHED GARAGE	36
TOTAL SPACES PROVIDED:	456

LEGEND
- PROP. CONCRETE
- PROP. ASPHALT



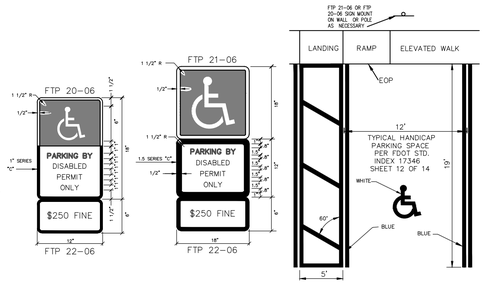
LOCATION MAP



STANDARD PARKING DETAIL (TYP.)

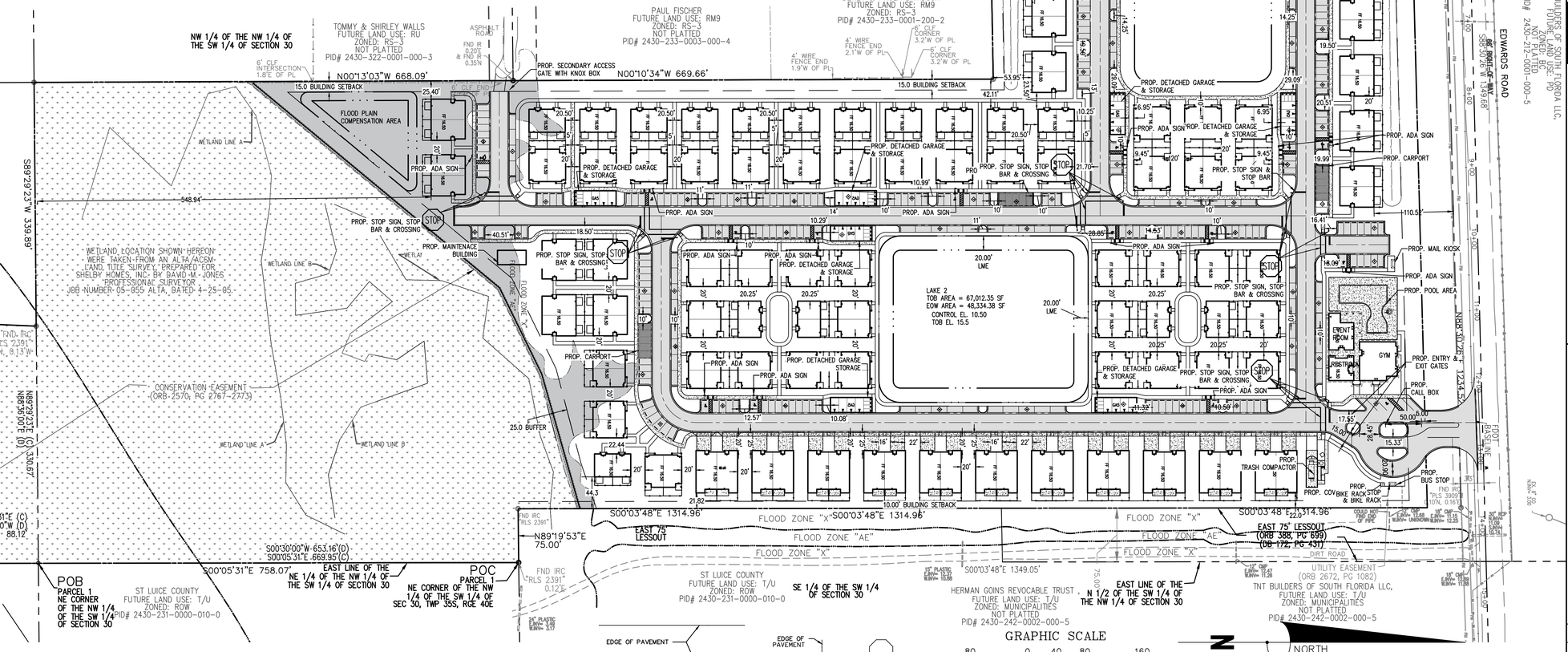
N.T.S.

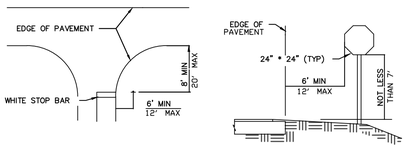
NOTES
1. TOP PORTION OF FTP-20-06 SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER.
2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 20-06 & 21-06 MAY BE FABRICATED ON ONE PANEL OR TWO.
4. FTP 20-06 IS FOR AREAS WHERE SPACE IS LIMITED.
5. FTP 22-06 SHALL BE MOUNTED BELOW THE FTP 20-06 OR 21-06 SIGN.
6. ACCESSIBLE MARKINGS ARE PER FDOT DESIGN STANDARD INDEX 17346 DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
7. DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
8. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595a.



HANDICAP SIGN AND PARKING DETAIL (TYP.)

N.T.S.





STOP SIGN LOCATION DETAIL
SCALE: N.T.S.

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BYSTEPHEN COOPER P.E., SHALL BE WITHOUT LIABILITY TO STEPHEN COOPER P.E. & ASSOCIATES, INC. CONSULTING ENGINEERS

STEPHEN COOPER, P.E.
& ASSOCIATES, INC.
- CONSULTING ENGINEER -
CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7450 SOUTH FEDERAL HIGHWAY
PORT ST. LUCIE, FLORIDA 34952
Tel 1-772-336-2833
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008856

SCPE

No.	REVISION	DATE
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		

FINAL SITE PLAN

VIVA AT TREASURE COAST EAST

CITY OF FORT PIERCE, FLORIDA

DATE:	JAN 2021
DRAWN BY:	CCL
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=80'
VERT. SCALE:	NA

DRAWING NO.
C1.0

JOB NO. 2018-121

Stephen Cooper, P.E. #46557

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

DRAWING INDEX:

LA-1: OVERALL PLAN, LANDSCAPE DATA, & PLANT SCHEDULE

LA-2 - LA-5: DETAIL LANDSCAPE PLANS

LA-6: EXISTING TREE LOCATION & DISPOSITION PLAN

LA-7 - LA-10: BUILDING UNITS TYPICAL LANDSCAPE PLANS

LA-11: LANDSCAPE DETAILS & SPECIFICATIONS

TREE REQUIREMENTS

WEST PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 1,040 LF x 10' WIDE
10,400 S.F. DIV. BY 200 = 52 TREES REQUIRED

SOUTH PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 594 LF x 10' WIDE
5,940 S.F. DIV. BY 200 = 30 TREES REQUIRED

WEST PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 585 LF x 10' WIDE
5,850 SF DIV. BY 300 = 20 TREES REQUIRED

NORTH PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 1,131 LF x 10' WIDE
11,131 SF DIV. BY 300 = 38 TREES REQUIRED

EAST PERIMETER LANDSCAPE STRIP (ABUTTING OTHER PROPERTIES)= 1,186 LF x 10' WIDE
11,860 SF DIV. BY 200 = 60 TREES REQUIRED

INTERIOR VEHICULAR USE AREAS = 189,250 S.F
189,250/15 = 12,617 S.F. REQUIRED PLANTING AREA
126 INTERIOR VUA TREES REQUIRED

TOTAL TREES REQUIRED: 329 TREES

PROVIDED TREES

WEST PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 1,040 LF x 10' WIDE
52 TREES PROVIDED

SOUTH PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 594 LF x 10' WIDE
30 TREES PROVIDED

WEST PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 585 LF x 10' WIDE
20 TREES PROVIDED

NORTH PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 1,131 LF x 10' WIDE
38 TREES PROVIDED

EAST PERIMETER LANDSCAPE STRIP (ABUTTING OTHER PROPERTIES)= 1,186 LF x 10' WIDE
60 TREES PROVIDED

INTERIOR VEHICULAR USE AREAS = 189,250 S.F
126 INTERIOR VUA TREES PROVIDED

TOTAL TREES PROVIDED: 329 TREES

SHRUB REQUIREMENTS

WEST PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 1,040 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 347 SHRUBS REQUIRED

SOUTH PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 594 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 198 SHRUBS REQUIRED

WEST PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 585 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 195 SHRUBS REQUIRED

NORTH PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 1,131 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 377 SHRUBS REQUIRED

EAST PERIMETER LANDSCAPE STRIP (ABUTTING OTHER PROPERTIES)= 1,186 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 396 SHRUBS REQUIRED

TOTAL SHRUBS REQUIRED: 1,513 SHRUBS

PROVIDED SHRUBS

WEST PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 1,040 LF x 10' WIDE
347 SHRUBS PROVIDED

SOUTH PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 594 LF x 10' WIDE
198 SHRUBS PROVIDED

WEST PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 585 LF x 10' WIDE
195 SHRUBS PROVIDED

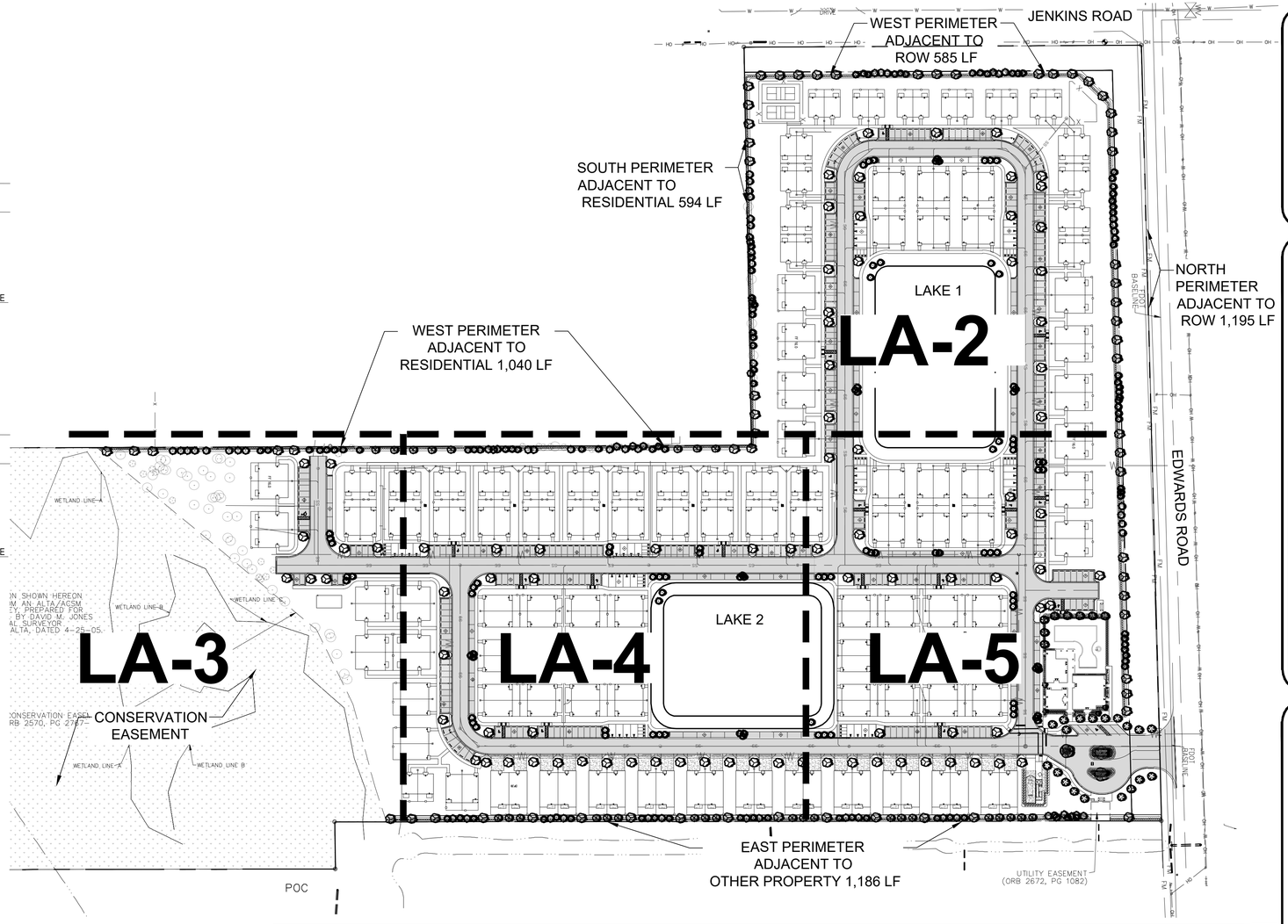
NORTH PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 1,131 LF x 10' WIDE
377 SHRUBS PROVIDED

EAST PERIMETER LANDSCAPE STRIP (ABUTTING OTHER PROPERTIES)= 1,186 LF x 10' WIDE
396 SHRUBS PROVIDED

TOTAL SHRUBS PROVIDED: 1,513 SHRUBS

General Landscape Notes:

1. All plants shall conform to established nursery grades and standards, to be Florida No. 1 or better, and shall be free of disease and insects at the time of installation.
2. Trees shall be a minimum of twelve (12) feet in height and have a caliper of two and one-half (2 1/2) inches at four and one-half (4 1/2) feet above the ground when installed.
3. All required trees, except palms, shall have a minimum of five (5) feet of clear trunk and a minimum five (5) foot canopy spread at the time of planting.
4. All palm trees shall have a minimum clear trunk of ten (10) feet when installed. Three palm trees are equal to one shade tree having a mature canopy spread of fifteen (15) feet.
5. Shrubs shall be a minimum of twenty-four (24) inches in height above grade immediately after planting.
6. Groundcovers, other than grass, shall be planted in a manner as to present a finished appearance and reasonably complete coverage within four (4) months after planting.
7. Turf grass shall be installed using solid sod and shall be either Bahia or St. Augustine sod.
8. All landscape areas other than sod will be provided a mulch cover of at least three (3) inches. Cypress mulch shall not be used.
9. All existing native vegetation found on the site and is not in direct conflict with the proposed buildings or parking areas shall be left undisturbed. A suitable protective barrier, constructed of metal, wood, safety fencing, or other durable material, will be placed around the staked out locations of existing native vegetation.
10. No fill materials, construction materials, concrete, paint, chemicals, or other foreign materials shall be stored, deposited, or disposed of within any areas that have been staked or fenced off as being undisturbed native vegetation areas.
11. Existing understory shall be maintained in areas of undisturbed native vegetation.
12. All Category 1 exotic plant species will be eradicated from the site.
13. Conspicuous, durable barricades will be erected around each individual tree or areas of vegetation that are to be preserved. In the event that any protective barricades are removed or altered and land clearing or construction work is being conducted on the site, all work at the site will be stopped until the barriers are restored and any necessary corrective actions taken to repair or replant any vegetation removed or damaged as a result of these encroachments.
14. Irrigation to conform to all local and State regulations with regard to water consumption.
15. All new landscaping shall be provided with 100% irrigation coverage through the establishment period, not less than 1-year.



Total Site Plant Schedule:

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	DBH
	28	Conocarpus erectus	Buttonwood	45G	12` HT	6`W	6`CT, SP	Native	2.5" DBH
	65	Pinus elliotti densa	South Florida Slash Pine	FG	12` HT	5`W	SP	Native	2.5" DBH
	152	Quercus virginiana	Southern Live Oak	45G	12` HT	5`W	6`CT, SP	Native	2.5" DBH
EXISTING TREES TO REMAIN	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**DBH**
	11	Quercus spp	Oak Species	Existing to Remain				Native	VARIES 6"-55"
	9	Sabal palmetto	Cabbage Palmetto	Existing to Remain	10`-18` CT		SP	Native	
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	3	Bismarckia nobilis `Silver`	Silver Bismarck Palm	FG	8` GW, 12` CT		SP	Non-native	
	* 4	Phoenix roebelenii	Double Pygmy Date Palm	FG	6`OA	6` SPR	4` CT, SP	Non-native	
	*** 191	Sabal palmetto	Sabal Palm	FG	10`-18` CT		SLK, HC, SP	Native	
	27	Wodyetia bifurcata	Single Foxtail Palm	FG	6`GW, 10`CT		SGL, FH, SP	Non-native	

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	* 19	Alcantarea imperialis	Imperial Bromeliad	7G	2` HT	2` W	F	Non-native
	* 177	Bougainvillea `Helen Johnson`	Dwarf Bougainvillea	3G	18" HT	18"W	F	Non-native
	523	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native
	944	Clusia guttifera	Small Leaf Clusia	3G	24" HT	18"W	F	Non-native
	37	Clusia guttifera	Small-Leaf Clusia	7G	48" HT	36" W	F	Non-native
	* 80	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT	18"W	F	Non-native
	46	Hamelia patens 'Compacta'	Dwarf Firebush	3G	24" HT	18"W	F	Non-native
	* 117	Muhlenbergia capillaris	Pink Muhly Grass	3G	24" HT	18"W	F	Native
	* 77	Rondeletia leucophylla	Panama Rose	3G	24" HT	24"W	F	Non-native
	* 76	Schefflera arboricola	Green Schefflera	3G	24" HT	18"W	F	Non-native
	* 43	Serenoa repens `Cinerea`	Silver Saw Palmetto	3G	18" HT	18"W	F	Native
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**
	422	Carissa macrocarpa `Emerald Blanket`	Emerald Blanket Carissa	3G	18"HT	18" W	F	Non-native
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**
	TBD	** Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests	

*NOT INCLUDED IN PROVIDED PLANT CALCULATIONS; QUANTITIES MAY VARY AT OWNER'S DISCRETION
**MAY BE SUBSTITUTED WITH BAHIA SPECIES
***11 TO BE RELOCATED ON SITE

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Landscape Plan

Revisions		
Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 100'

0 25' 50' 200'

LA-1

LA-2 Plant Legend:

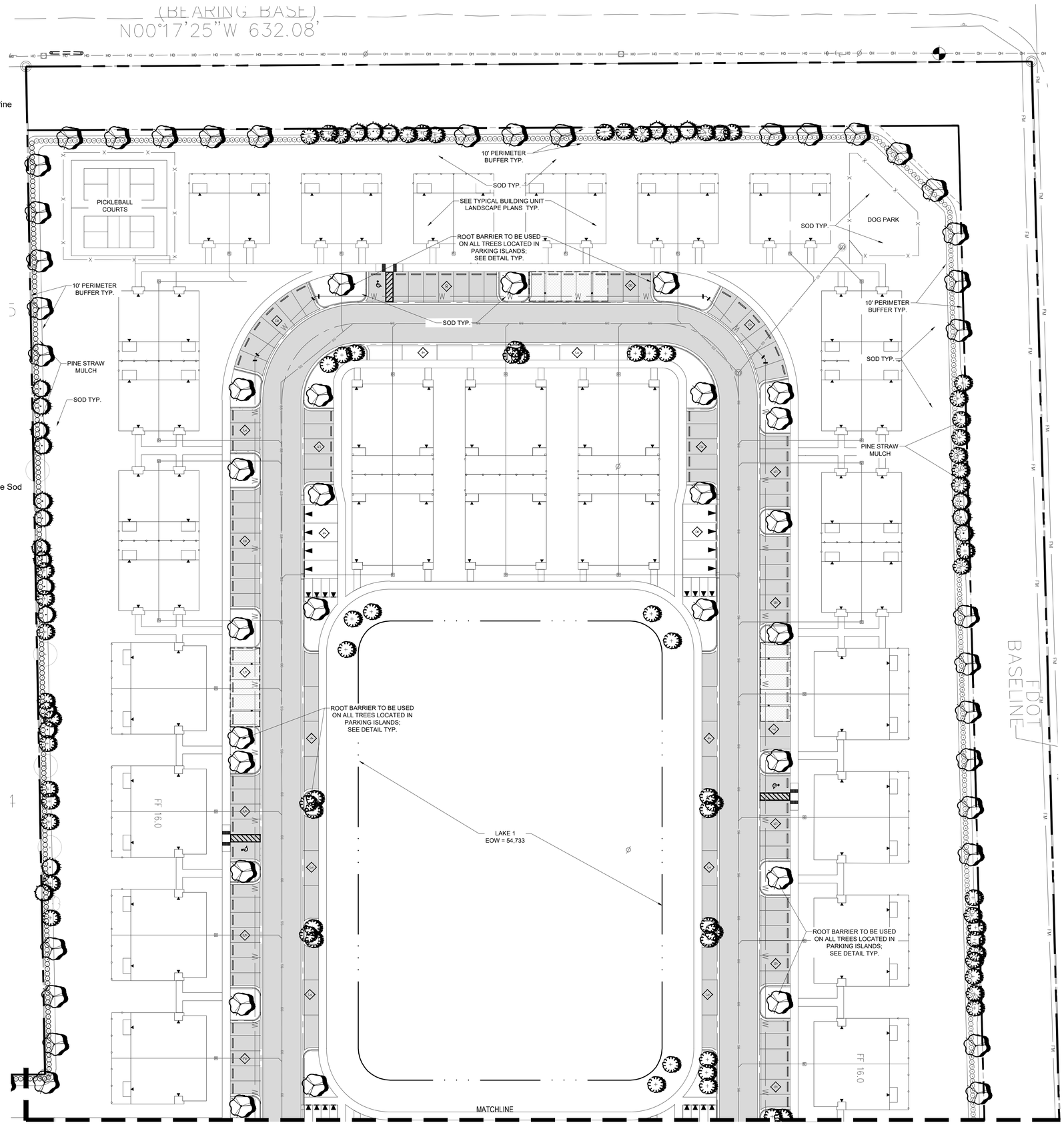
TREES	QTY	BOTANICAL NAME	COMMON NAME
	23	Pinus elliotti densa	South Florida Slash Pine
	57	Quercus virginiana	Southern Live Oak

EXISTING TREES TO REMAIN	QTY	BOTANICAL NAME	COMMON NAME
	4	Quercus spp	Oak Species
	1	Sabal palmetto	Cabbage Palmetto

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME
	65	Sabal palmetto	Sabal Palm

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME
	385	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum
	201	Clusia guttifera	Small Leaf Clusia
	20	Hamelia patens 'Compacta'	Dwarf Firebush
	28	Serenoa repens `Cinerea`	Silver Saw Palmetto

SOD	QTY	BOTANICAL NAME	COMMON NAME
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1800 SE FEDERAL HIGHWAY, SUITE 201
STUART, FLORIDA 34994
(772) 287-1122 FAX (772) 288-0422
CA 0001484

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Detail Landscape Plan

Revisions

Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 30'

0 15' 30' 60'

LA-2

LA-3 Plant Legend:

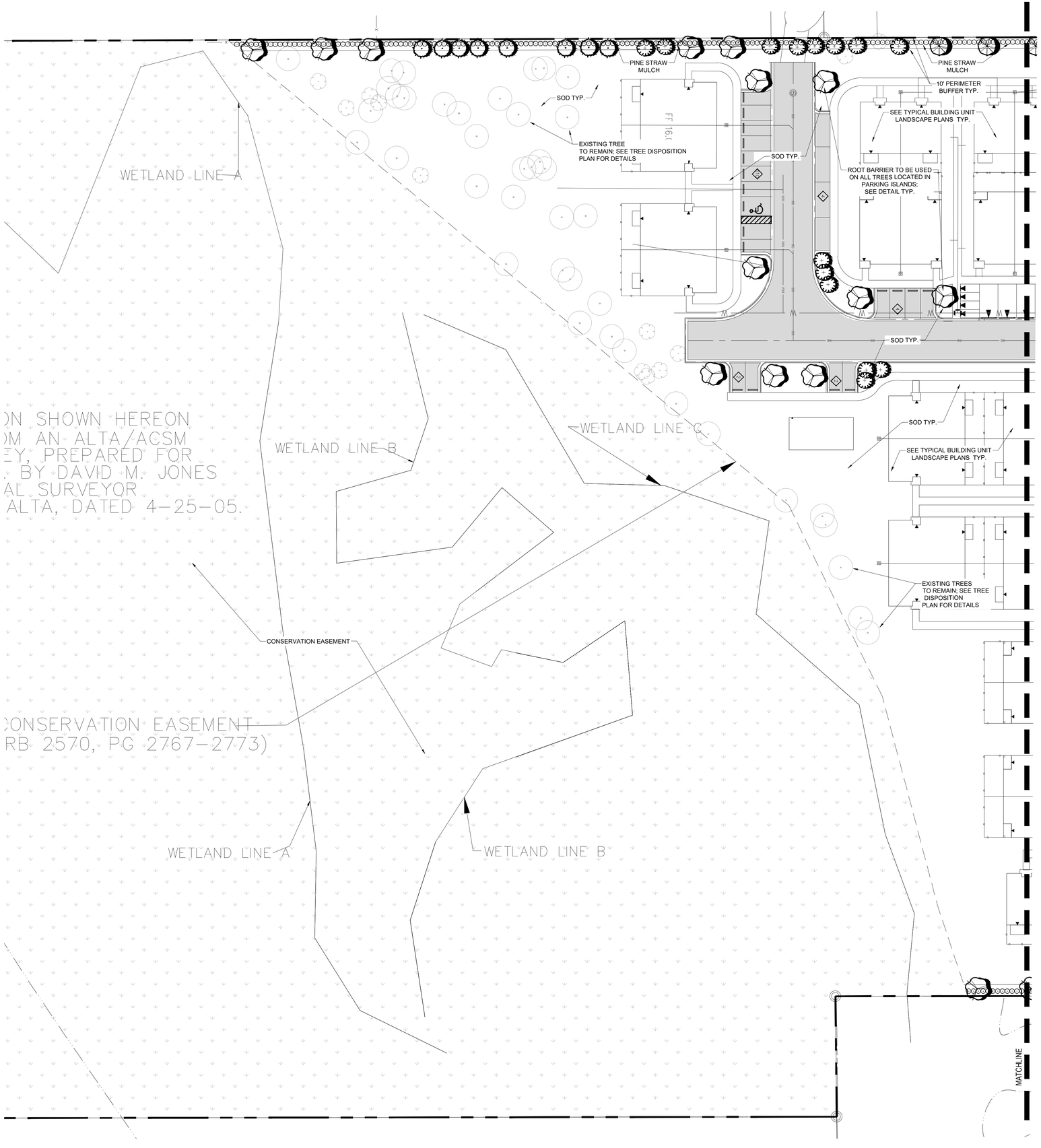
TREES	QTY	BOTANICAL NAME	COMMON NAME
	3	Conocarpus erectus	Green Buttonwood
	8	Pinus elliotti densa	South Florida Slash Pine
	15	Quercus virginiana	Southern Live Oak

EXISTING TREES TO REMAIN	QTY	BOTANICAL NAME	COMMON NAME
	41	Quercus spp	Oak Species
	12	Sabal palmetto	Cabbage Palmetto

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME
	14	Sabal palmetto	Sabal Palm

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME
	182	Clusia guttifera	Small Leaf Clusia

SOD	QTY	BOTANICAL NAME	COMMON NAME
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS

CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1900 SW 27th AVENUE, SUITE 201
FORT LAUDERDALE, FLORIDA 33315
Tel: (772) 220-2100

CERTIFICATE OF AUTHORIZATION NO. 30006000

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Detail Landscape Plan

Revisions

Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 30'

0 15' 30' 60'

LA-3

LA-4 Plant Legend:

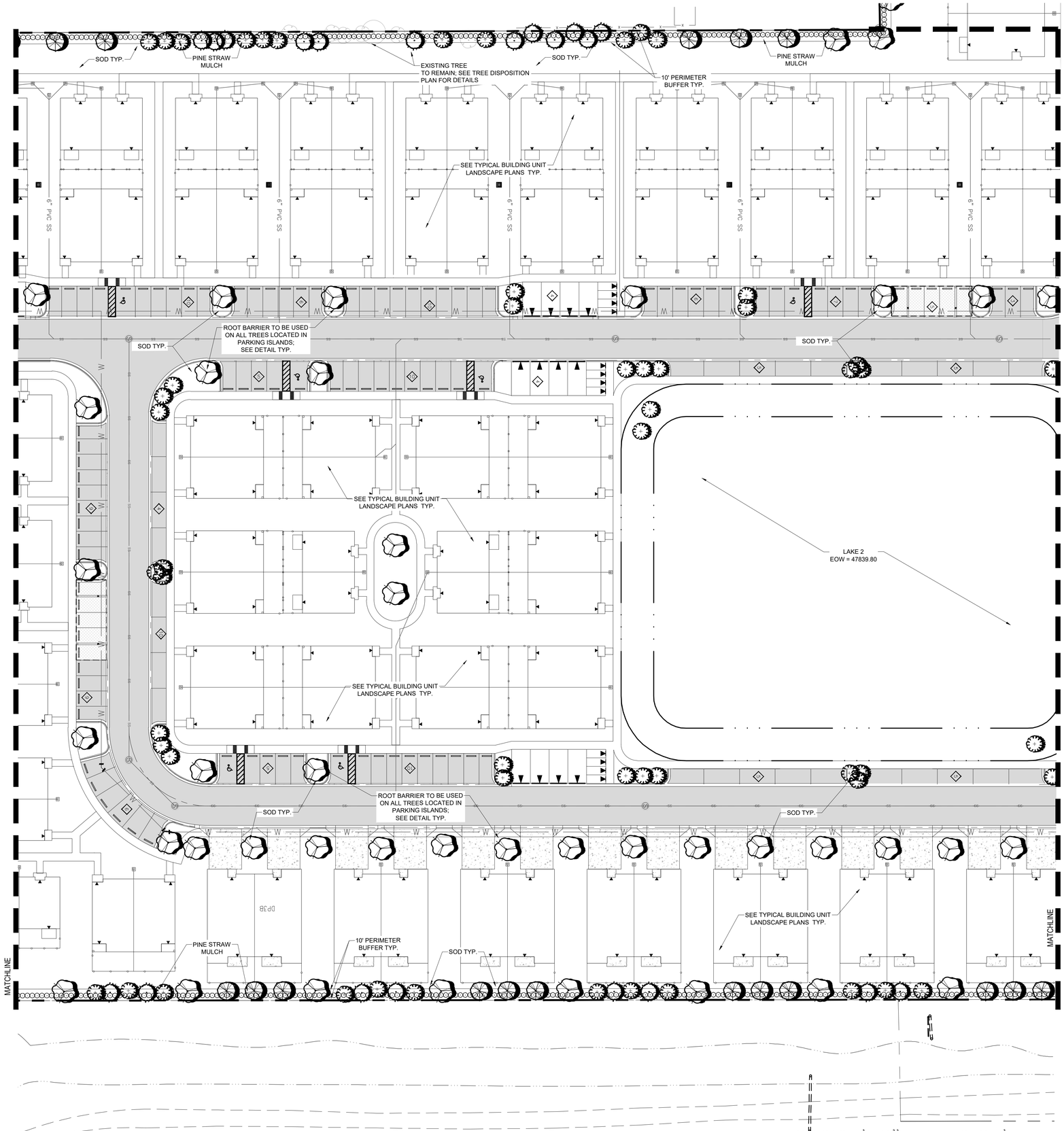
TREES	QTY	BOTANICAL NAME	COMMON NAME
	17	Conocarpus erectus	Green Buttonwood
	20	Pinus elliotti densa	South Florida Slash Pine
	41	Quercus virginiana	Southern Live Oak

EXISTING TREES TO REMAIN	QTY	BOTANICAL NAME	COMMON NAME
	1	Quercus spp	Oak Species
	6	Sabal palmetto	Cabbage Palmetto

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME
	52	Sabal palmetto	Sabal Palm

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME
	399	Clusia guttifera	Small Leaf Clusia

SOD	QTY	BOTANICAL NAME	COMMON NAME
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1900 SW 27th AVENUE, SUITE 201
FORT LAUDERDALE, FLORIDA 33312
Tel: (772) 286-1900

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Detail Landscape Plan

Revisions		
Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

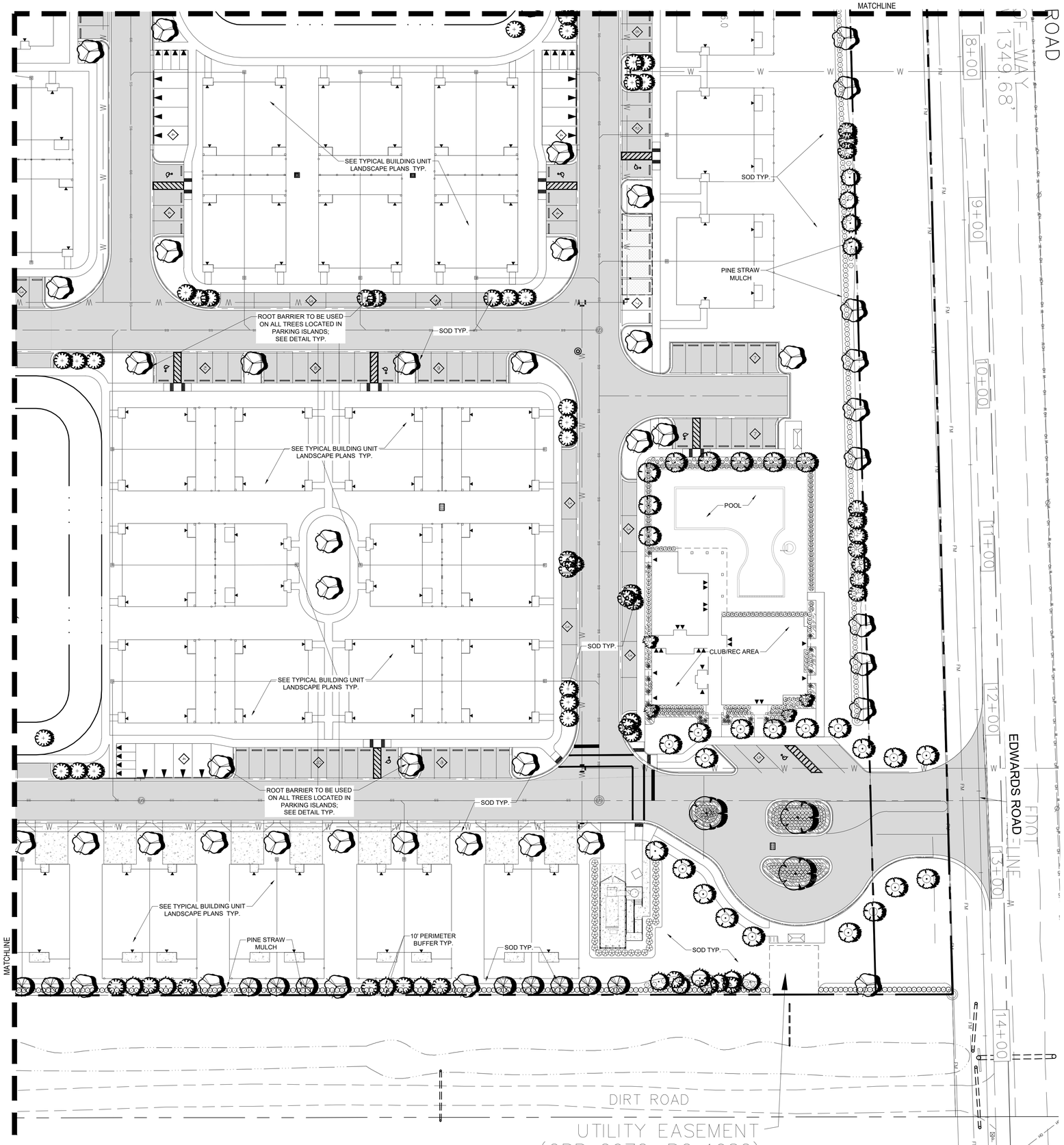
SCALE: 1" = 30'

0 15' 30' 60'

LA-4

LA-5 Plant Legend:

TREES	QTY	BOTANICAL NAME	COMMON NAME
	8	Conocarpus erectus	Green Buttonwood
	14	Pinus elliotti densa	South Florida Slash Pine
	41	Quercus virginiana	Southern Live Oak
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**
	3	Bismarckia nobilis `Silver`	Silver Bismarck Palm
	4	Phoenix roebelenii	Double Pygmy Date Palm
	50	Sabal palmetto	Sabal Palm
	27	Wodyetia bifurcata	Single Foxtail Palm
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**
	19	Alcantarea imperialis	Imperial Bromeliad
	177	Bougainvillea `Helen Johnson`	Dwarf Bougainvillea
	142	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum
	170	Clusia guttifera	Small Leaf Clusia
	37	Clusia guttifera	Small-Leaf Clusia
	80	Codiaeum variegatum `Mammey`	Mammey Croton
	26	Hamelia patens 'Compacta'	Dwarf Firebush
	117	Muhlenbergia capillaris	Pink Muhly Grass
	77	Rondeletia leucophylla	Panama Rose
	76	Schefflera arboricola	Green Schefflera
	15	Serenoa repens `Cinerea`	Silver Saw Palmetto
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**
	422	Carissa macrocarpa `Emerald Blanket`	Emerald Blanket Carissa
SOD/SEED	**QTY**	**BOTANICAL NAME**	**COMMON NAME**
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS

CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1900 SW 17TH STREET, SUITE 201
PORT ST. LUCIE, FLORIDA 34953
561-770-0660

CERTIFICATE OF AUTHORIZATION NO. 28-0000

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Detail Landscape Plan

Revisions		
Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

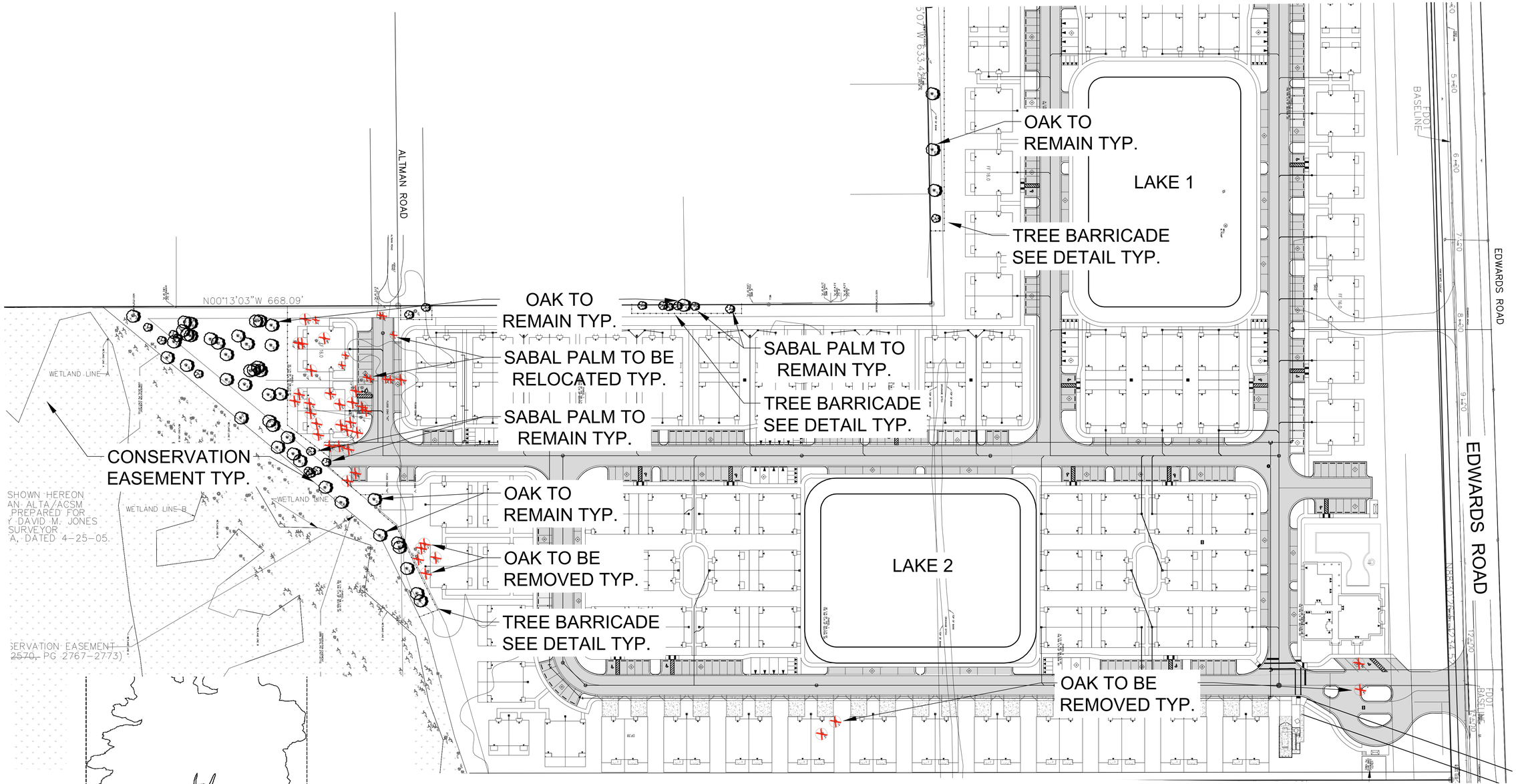
Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

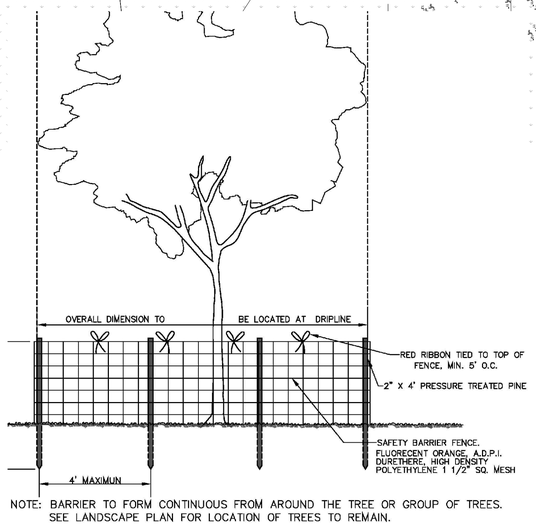
NORTH

SCALE: 1" = 30'

0 15' 30' 60'

LA-5





NOTE: BARRIER TO FORM CONTINUOUS FROM AROUND THE TREE OR GROUP OF TREES. SEE LANDSCAPE PLAN FOR LOCATION OF TREES TO REMAIN.

TREE PROTECTION DETAIL

NOT TO SCALE

PLANT SCHEDULE DISPOSITION

EXISTING TREES TO BE REMOVED	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	NOTES	NATIVE	DBH
	36	Quercus laurifolia	Laurel Oak	Existing to be Removed			Native	14"-55" DBH
	10	Sabal palmetto	Cabbage Palm	Relocated on Site	VARIES 10`-20` CT		Native	

See landscape plans for all Sabal Palm Locations

EXISTING TREES TO REMAIN	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	NOTES	NATIVE	DBH
	47	Quercus spp	Oak Species	Existing to Remain			Native	VARIES 6"-55" DBH
	19	Sabal palmetto	Cabbage Palm	Existing to Remain	10`-18` CT	SP	Native	

TOTAL OAK TREE DBH GREATER THAN 14" TO BE REMOVED = 764" DBH
TOTAL SABAL PALMS TO BE RELOCATED = 10
TOTAL OAK TREE DBH TO BE PRESERVED = 864" DBH
TOTAL SABAL PALMS TO BE PRESERVED = 19
*NO MITIGATION REQUIRED

***See also Tree Survey Provided by Others**

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Tree Location & Disposition Plan

Revisions		
Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 60'

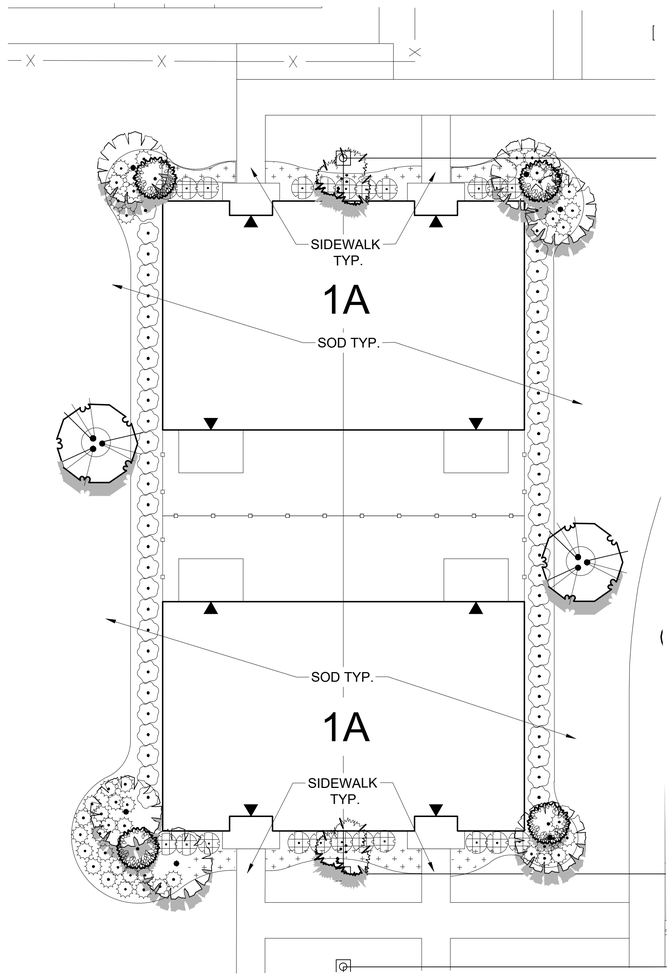
0 30' 60' 120'

LA-6

Unit 1A Plant Schedule:

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	2	Lagerstroemia indica `Muskogee`	Multi-Trunked Muskogee Crape Myrtle	45G	12` HT	6`W	ML, 5` CT	Non-native	
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	2	Phoenix roebelenii	Double Pygmy Date Palm	FG	6`OA	6` SPR	4` CT, SP	Non-native	
	6	Sabal palmetto	Sabal Palm	FG	16`-22` CT, MIX HTS		SLK, HC, SP	Native	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	4	Ilex x attenuata 'Eagleston'	Eagleston Holly	15G	6`HT	3` W	F, SP	Native	1.5" Caliper
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	59	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native	
	46	Muhlenbergia capillaris	Pink Muhly Grass	3G	24" HT	18"W	F	Native	
	22	Rondeletia leucophylla	Panama Rose	3G	24" HT	24"W	F	Non-native	
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	76	Liriope muscari `Super Blue`	Super Blue Liriope	1G	12"HT	12"W	F	Non-native	1
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests		

*PLANT QUANTITIES BASED ON A DOUBLE UNIT LAYOUT



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Building Unit 1A Typical Landscape Plan

Revisions		
Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 10'

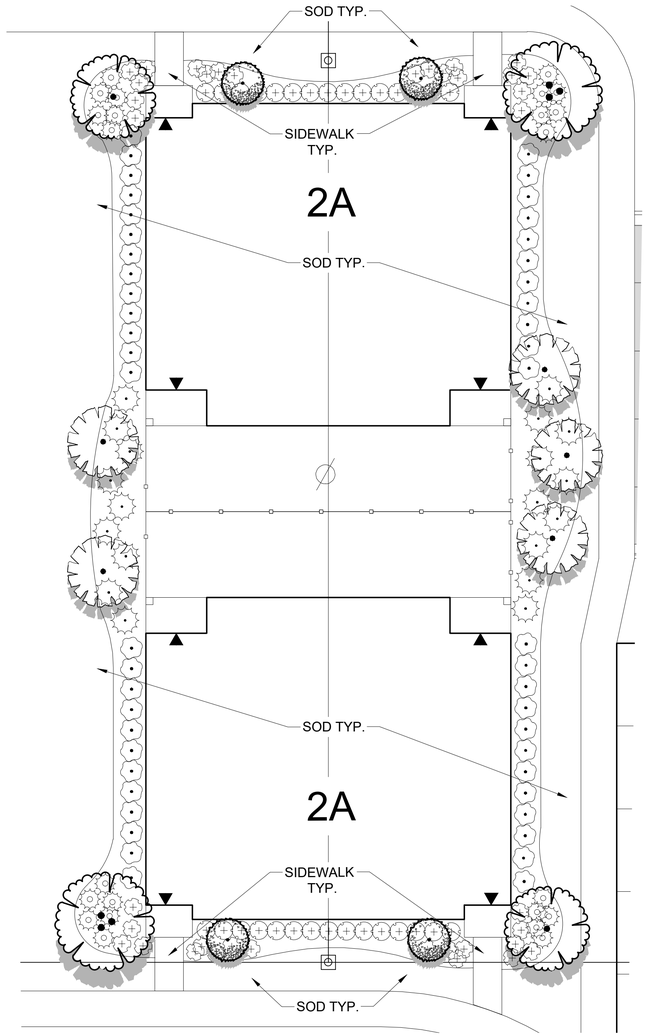
0 5' 10' 20'

LA-7

Unit 2A Plant Schedule:

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	5	Sabal palmetto	Sabal Palm	FG	16`-22` CT, MIX HTS		SLK, HC, SP	Native	
	2	Wodyetia bifurcata	Single Foxtail Palm	FG	6`GW, 10`CT		SGL, FH, SP	Non-native	
	2	Wodyetia bifurcata	Triple Foxtail Palm	FG	6`GW, 10`CT		TRP, FH, SP	Non-native	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	4	Elaeocarpus decipiens	Japanese Blueberry Tree	15G	6-7` OA	4` W	FTB, SP	Non-native	1.5" DBH
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	48	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native	
	38	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT	18"W	F	Non-native	
	23	Pennisetum setaceum `Alba`	White Fountain Grass	3G	24" HT	18"W	F	Non-native	
	30	Schefflera arboricola	Green Schefflera	3G	24" HT	18"W	F	Non-native	
	19	Tripsacum dactyloides	Fakahatchee Grass	3G	30" HT	24"W	F	Native	
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests		

*PLANT QUANTITIES BASED ON A DOUBLE UNIT LAYOUT



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Building Unit 2A Typical Landscape Plan

Revisions

Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

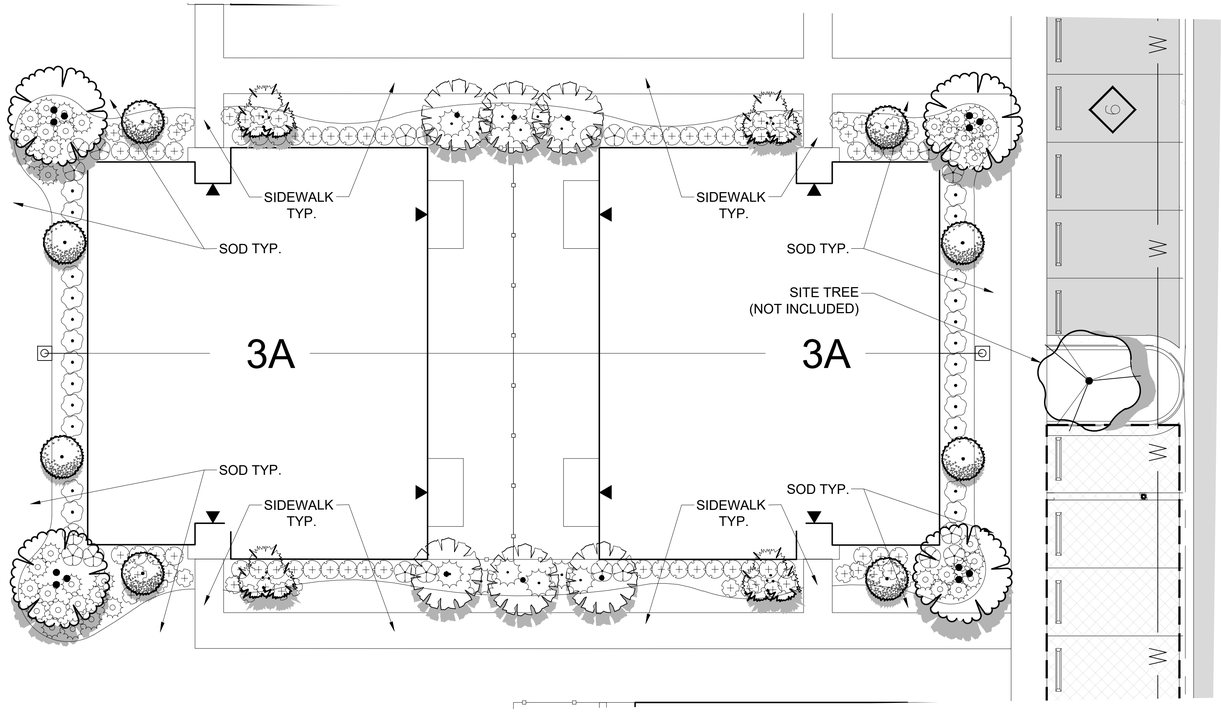
Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 10'

0 5' 10' 20'

LA-8



Unit 3A Plant Schedule:

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	4	Phoenix roebelenii	Double Pygmy Date Palm	FG	6`OA	6` SPR	4` CT, SP	Non-native	
	6	Sabal palmetto	Sabal Palm	FG	16`-22` CT, MIX HTS		SLK, HC, SP	Native	
	4	Wodyetia bifurcata	Triple Foxtail Palm	FG	6`GW, 10`CT		TRP, FH, SP	Non-native	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	8	Elaeocarpus decipiens	Japanese Blueberry Tree	15G	6-7` OA	4` W	FTB, SP	Non-native	1.5" DBH
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	20	Acalypha wilkesiana 'Louisiana Red'	Louisiana Red Wilkes' Copperleaf	7G	36" HT	24"	FULL	Non-native	
	24	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native	
	40	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT	18"W	F	Non-native	
	41	Pennisetum setaceum `Alba`	White Fountain Grass	3G	24" HT	18"W	F	Non-native	
	51	Schefflera arboricola	Green Schefflera	3G	24" HT	18"W	F	Non-native	
	12	Tripsacum dactyloides	Fakahatchee Grass	3G	30" HT	24"W	F	Native	
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests		

*PLANT QUANTITIES BASED ON A DOUBLE UNIT LAYOUT

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Building Unit 3A Typical Landscape Plan

Revisions

Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

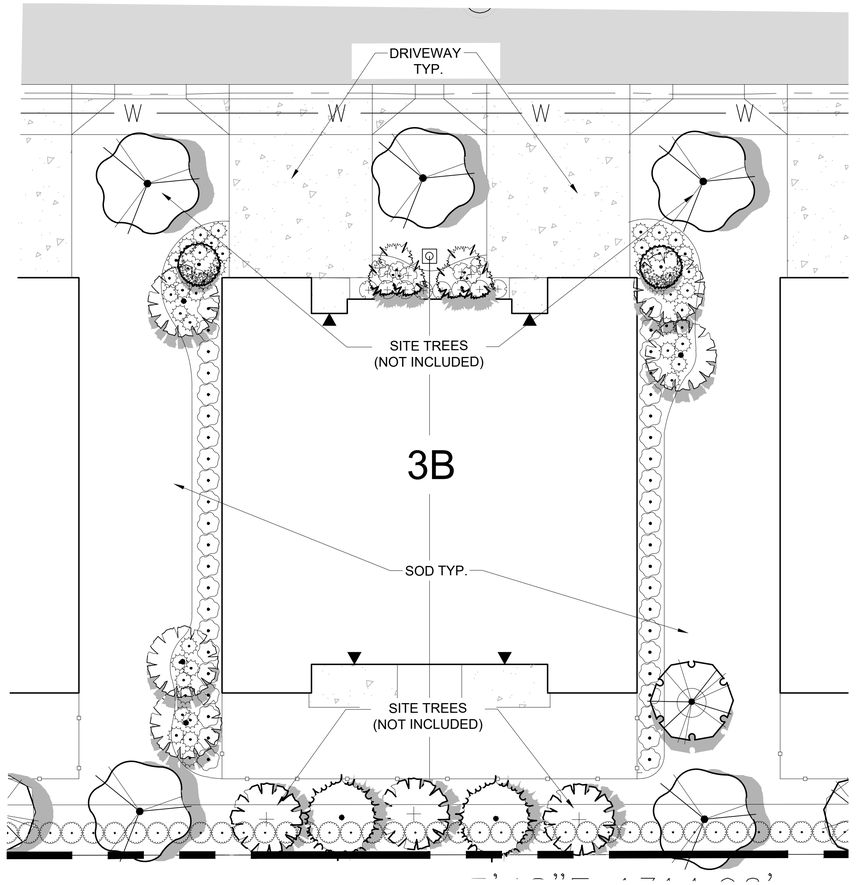
Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 10'

0 5' 10' 20'

LA-9



Unit 3B Plant Schedule:

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	1	Tabebuia caraiba	Silver Trumpet	45G	12` HT	5`W	5` CT, SP	Non-native	2.5" DBH
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	2	Phoenix roebelenii	Double Pygmy Date Palm	FG	6`OA	6` SPR	4` CT, SP	Non-native	
	5	Sabal palmetto	Sabal Palm	FG	16`-22` CT, MIX HTS		SLK, HC, SP	Native	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	2	Elaeocarpus decipiens	Japanese Blueberry Tree	15G	6-7` OA	4` W	FTB, SP	Non-native	1.5" DBH
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	44	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native	
	7	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT	18"W	F	Non-native	
	45	Muhlenbergia capillaris	Pink Muhly Grass	3G	24" HT	18"W	F	Native	
	8	Schefflera arboricola	Green Schefflera	3G	24" HT	18"W	F	Non-native	
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests		

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Building Unit 3B Typical Landscape Plan

Revisions		
Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 10'

0 5' 10' 20'

LA-10

LANDSCAPE SPECIFICATIONS:

PART 1: GENERAL CONDITIONS

1.01 SCOPE:
A. The landscape contract includes the supplying and planting of all trees, shrubs, vines, and ground cover together with all necessary labor, equipment, tools and materials needed for the successful completion, execution and maintenance of the landscape plans.

1.02 AGENCY STANDARDS:
A. Grades and standards of plant materials to be used shall be true to name, size, condition and graded Florida #1 or better as stated in: Grades and Standards of Florida Plant Materials published by the State of Florida Department of Agriculture, Tallahassee, Florida.

1.03 SITE EXAMINATION:
A. The Landscape Contractor shall personally examine the site and fully acquaint him/herself with all of the existing conditions in order that no mis-understanding may afterwards arise as to the character or extent of the work to be performed, and additionally, in order to acquaint him/herself with all precautions to be taken in order to avoid injury to property or persons. No additional compensation will be granted because of any unusual difficulties which may be encountered in the execution or maintenance of any portion of the work.

1.04 ERRORS AND OMISSIONS:
A. The plant list is a part of the drawings and is furnished as a convenience. The plant list indicates the name, size and quantities of specific plant materials as called for and is located on the drawings. The Landscape Contractor is responsible for his/her own quantity count, and any discrepancy between drawings and plant list shall be considered as correct on the drawings.

B. The Landscape Contractor shall not take advantage of errors or omissions in the specifications or contract drawings. Full instruction will be given if such errors are discovered. Upon the discovery of any discrepancies in, or omissions from the drawings or documents, or should the Landscape Contractor be in doubt as to their meaning, the Landscape Architect shall be notified and will determine the actions necessary to each query.

C. If plans and specifications are found to disagree after the contract is awarded, the Landscape Architect shall be the judge as to which was intended.

1.05 EXECUTION OF THE WORK:
A. The Landscape Contractor shall have his labor crews controlled and directed by a Foreman well versed in plant materials, planting methods, reading blueprints, and coordination between job and nursery in order to execute installation correctly and in a timely manner.

B. The Landscape Contractor shall provide a competent English-speaking Foreman on the project at all times, who shall be fully authorized as the Contractor's agent on the work. The Superintendent shall be capable of reading and thoroughly understanding the Plans, Specifications and other Contract Documents. If the Superintendent is deemed incompetent by the Landscape Architect, he (the superintendent) shall be immediately replaced.

C. The Landscape Contractor shall be available for any meetings with the Owner and/or Landscape Architect during implementation of the job. Any additional work or changes required as a result of failure to communicate with the Owner or Landscape Architect during implementation will be the responsibility of the Landscape Contractor.

1.06 PROTECTION OF PUBLIC AND PROPERTY:
A. The Landscape Contractor shall protect all materials and work against injury from any cause and shall provide and maintain all necessary safeguards for the protection of the public. He shall be held responsible for any damage or injury to persons or property which may occur as a result of his fault or negligence in the execution of the work, i.e. damage to underground pipes or cables.

1.07 CHANGES AND EXTRAS:
A. The Contractor shall not start work on any changes or "extras" in the project until a written agreement setting forth the adjusted prices has been executed by the Owner and the Contractor. Any work performed on changes or "extras" prior to execution of a written agreement may or may not be compensated for by the Owner at his discretion.

1.08 GUARANTEE:
A. The Landscape Contractor shall furnish a written guarantee warranting all materials, workmanship and plant materials, except sod, for a period of ONE (1) YEAR from the time of completion and acceptance by the Landscape Architect and Owner. Sod shall be guaranteed to 90 calendar days after acceptance by the Landscape Architect and Owner. All plant material shall be alive and in satisfactory condition and growth for each specific kind of plant at the end of the guarantee period. The guranteeing of plant material shall be construed to mean complete and immediate replacement with plant material of the same variety, type, size, quality and grade as that of the originally specified material. During the guarantee period it shall be the Landscape Contractor's responsibility to immediately replace any dead or unhealthy material as determined by the Landscape Architect. The guarantee will be null and void if plant material is damaged by lightning, hurricane force winds, or any other acts of God, as well as vandalism or lack of proper maintenance.

B. At the end of the specified guarantee period, any plant required under this contract that is dead or not in satisfactory condition, as determined by the Landscape Architect, shall be replaced. The Landscape Contractor shall be responsible for the full replacement cost of plant materials for the first replacement and share subsequent replacement (s) costs equally with the Owner, should the replacement plant fail to survive.

1.09 CARE AND MAINTENANCE:
A. The Landscape Contractor shall be responsible for the care and maintenance of all plant materials and irrigation when applicable until final acceptance by the Owner or Landscape Architect.

B. The Owner agrees to execute the instructions for such care and maintenance.

1.10 SAFETY:
A. It shall be the responsibility of the Landscape Contractor to protect all persons from injury and to avoid property damage. Adequate warning devices shall be placed and maintained during the progress of the work.

B. It shall be the contractor's responsibility to conform to all local, state, and federal safety laws and codes including the Federal Occupational Safety And Health Act (O.S.H.A.) .

1.11 CONTRACTOR QUALIFICATION:
A. The Owner may require the apparent contractor (s) to qualify him/herself to be a responsible entity by furnishing any or all of the following documentary data:
1. A financial statement showing assets and liabilities of the company current to date.
2. A listing of not less than (3) completed projects of similar scope and nature.
3. Permanent name and address of place of business.
4. The number of regular employees of the organization and length of time the organization has been in business under the present name.

1.12 INSURANCE AND BONDING:
A. The contractor (s) shall submit proof of insurance for this job for the time period that the work is done. The minimum amount of insurance shall be $300,000.00 per person and $300,000.00 per aggregate or as required by owner and agreed to in the contract.
The successful bidder shall be required to have this coverage in effect before beginning work on the site.

B. The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

1.13 PERMITS AND CERTIFICATES:
A. All contractors shall secure and pay for all permits and certificates required for his/her class of work.

PART 2: MATERIALS

2.01 PLANT MATERIALS:
A. A complete list of plants is shown on the drawings, including a schedule of quantities, sizes, and such other requirements deemed necessary. In the event discrepancies occur, the specifications on the drawings shall govern.

B. Substitutions: Substitutions of plant materials or changes in size or spacing of materials will be permitted ONLY upon written authorization by the Owner or the Landscape Architect. If plant material is not of sufficient size to meet applicable codes, a letter of variance from the appropriate agency must be obtained by the Contractor prior to issuance of any change order. If material of smaller size is to be accepted, the quantity of material shall be increased, at no additional cost to the Owner, to meet the intent of the drawings.

C. All plant materials shall have a habit of growth that is normal for the species and shall be healthy, vigorous and equal to or exceed the measurements specified in the plant list, which are the minimum acceptable sizes. Plants shall be measured before pruning with branches in normal position. Any necessary pruning shall be done at the time of planting.

D. All plant materials shall be nursery grown, unless otherwise noted, Florida #1 or better and shall comply with all required inspections, grading standards and plant regulations as set forth by the Florida Department of Agriculture's Grades and Standards for Nursery Plants, most current addition and Grades and Standards for Nursery Plants, most current addition.

E. Plants that do not have the normal balance of height and spread typical for the respective plant shall not be acceptable.

F. The Landscape Contractor shall install each plant to display its best side. Adjustments may be required if plants are not installed properly and/or approved by the Landscape Architect at no additional cost to owner.

2.02 INSPECTION
A. The Landscape Architect and Owner may inspect trees and shrubs at place of growth or at site before planting, for compliance with requirements for genus, species, variety, size and quality. The Landscape Architect and Owner retain the right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Rejected plant materials shall be immediately removed from project site.

2.03 PROTECTION OF PLANT MATERIALS:
A. Balled and burlapped plants (B & B) shall be dug with firm natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Balls shall be firmly wrapped with burlap similar materials and bound with cord, rope, or wire mesh. All collected plants shall be balled and burlapped.

B. Plants with broken, damaged or insufficient rootballs will be rejected.

C. All plant material shall be protected from possible bark injury or breakage of branches. All plants transported by open trucks shall be adequately covered to prevent windburn, drying or damage to plants.

D. Plants which cannot be planted immediately on delivery to the site shall be covered with moist soil, mulch or other protection from the drying of wind and sun. All plants shall be watered as necessary by the Landscape Contractor until planted.

2.04 STORAGE:
A. All plant materials shall be stored on the site in designated areas, specified by the Landscape Architect or Owner's agent.

B. No plant material shall be stored longer than seventy-two (72) hours unless approved by by Landscape Architect and/or owner.

C. The Landscape Architect reserves the right to reject any plant materials not in conformance with these specifications.

D. All rejected material shall be immediately removed from the site and replaced with acceptable material at no cost to the Owner.

2.05 PROTECTION DURING PLANTING:
A. Trees moved by winch or crane shall be thoroughly protected from chain marks, girdling or bark slippage by means of burlap, wood battens or other approved methods. Battens shall NOT be attached to the tree with nails.

2.06 PLANTING SOIL:
A. Planting soil for all plantings shall consist of existing native soil and shall be free of debris, roots, clay, stones, plants or other foreign materials which might be a hindrance to planting operations or be detrimental to good growth.

2.07 FERTILIZER:
A. Commercial fertilizer shall comply with the state fertilizer laws. Nitrogen shall not be less than 40% from organic source. Inorganic chemical nitrogen shall not be derived from the sodium form of nitrate. Fertilizers shall be delivered to the site in unopened original containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer that becomes caked or otherwise damaged shall be rejected.

B. Thoroughly mixed 3 lbs. of commercial fertilizer to each cubic yard of planting soil.

C. Tabletized fertilizer shall be Agriform planting tablets 20-10-5 formula, 21 gram or equal. All trees and shrubs shall be fertilized with tabletized fertilizer as follows. While backfilling plant holes, fertilizer tablets shall be equally spaced and placed adjacent to the ball mid-way in depth in accordance with the following rates:

1 gallon container	1 tablet
3 gallon container	2 tablets
5 gallon container	3 tablets
7 gallon	5 tablets

Large tubs, wire baskets, grow bags, and balled and burlapped material shall have 1 tablet for each 1/2 inch of trunk diameter (measured 3 feet from ground) or for each foot of height or spread of larger shrub material.
The Landscape Architect reserves the right to inspect and review the application of fertilizer.

2.08 MULCH:
A. Mulch material shall be clean, dry, free of weeds, seeds and pests, moistened at the time of application to prevent wind displacement. Cypress &/or Red mulch is prohibited.

B. All trees and shrub beds shall receive 3" mulch immediately after planting and thoroughly watered. Apply 2" max on tree & palm rootballs, keep away from tree & palm trunks or as required by local jusidiction.

PART 3: EXECUTION
3.01 DIGGING:
A. The Landscape Contractor shall exercise care in digging and other work so as not to damage existing work, including overhead wires, underground pipes and cables and the pipes and hydrants of watering systems. Should such overhead or underground obstructions be encountered which interfere with planting, the Owner shall be consulted and contractor will adjust the location of plants to clear such obstruction. The Contractor shall be responsible for the immediate repair of any damage caused by his work.

3.02 GRADING:
A. Grading for drainage, swales, etc. to within 4 inches of the finished grade to be provided by others.

B. It shall be the responsibility of the Landscape Contractor to provide the final grading during the course of landscape installation so as to bring sod and planting areas to their proper elevations in relation to walks, paving, drain structures, and other site conditions. The site grading plan must be checked prior to installation of sod to insure that drainage and other conditions will NOT be modified.

3.03 PLANTING:
A. Planting shall take place during favorable weather conditions.

B. The Contractor shall call for utility locates and ascertain the location of all utilities and easements so proper precautions can be taken not to damage or encroach on them.

C. Tree Planting shall be located where it is shown on the plan. No planting holes shall be dug until the proposed locations have been staked on the ground by the Contractor.

D. Excavation of holes shall extend to the required subgrades as specified on the planting diagrams located in the planting plans. Plant pits shall be circular in outline and shall have a profile which conforms to the aforementioned "Tree and Shrub Planting Diagrams".

E. A representative number of planting pits (a minimum of one in every 25 feet throughout the entire site) shall be tested for proper drainage. See Landscape Plan for complete testing methods and requirements.

F. Planting pits shall be excavated to the following dimensions and refilled with a mixture of (1/2) planting soil (1/2) existing native soil];
1 Gallon material (1 gal.): 12" x 12" x 12" min.
3 Gallon material (3 gal.): 20" x 20" x 18" min.
Lerio material (7 gal.): 30" x 30" x 24" min.
Field grown material and trees: 1-1/2 times width of ball and depth of ball plus 12" min.

G. No planting or laying of sod shall be initiated until the area has been cleaned of existing sod or other plant materials, rough grass, weeds, debris, stones etc. and the ground has been brought to an even grade, with positive drainage away from buildings and towards drain inlets and swales and approved by Landscape Architect or owner's rep.

H. Each plant shall be planted in an individual hole as specified for trees, shrubs, and vines.

I. All plants shall be set to ultimate finished grade. No filling will be permitted around trunks or stems. All ropes, wire, stakes, etc., shall be removed from sides and top of the ball and removed from hole before filling in.

J. All flagging ribbon shall be removed from trees and shrubs before planting.

K. Excess excavation (fill) from all holes shall be removed from the site, at no additional expense to Owner.

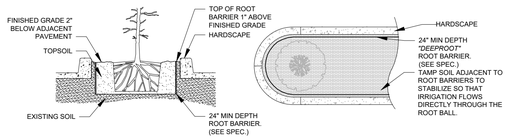
L. All palms shall be backfilled with sand, thoroughly washed in during planting operations and with a shallow saucer depression left at the soil line for future waterings. Saucer areas shall be top-dressed two (2") inches deep with topsoil raked and left in a neat, clean manner.

3.04 PRUNING:
A. Remove dead and broken branches from all plant material. Prune to retain typical growth habit of individual plants with as much height and spread as possible in a manner which will preserve the plant's natural character.

B. Make all cuts with sharp instruments flush with trunk or adjacent branch, in such a manner as to insure elimination of stubs. Cuts made at right angles to line of growth will not be permitted.

C. Trees shall not be poled or topped.

D. Remove all trimmings from site.



SPECIAL APPLICATIONS ROOT BARRIER DETAIL
NOT TO SCALE

NOTES:
1- ROOT BARRIER SHALL BE "DEEPROOT" 24" DEPTH OR APPROVED EQUAL.
2- ROOT BARRIER SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

3.05 GUYING:
A. All trees over six (6') feet in height shall, immediately after setting to proper grade, be guyed with three sets of two strands, No. 12 gauge malleable galvanized iron, in tripod fashion. See Detail.

B. Wires shall not come in direct contact with the tree but shall be covered with an approved protection device at all contact points. Wires shall be fastened in such a manner as to avoid pulling crotches apart.

D. Stake & Brace all treess larger than 12' oa. See detail.
Stakes shall be 2" x 2" lumber of sufficient length to satisfactorily support each tree.

E. Turnbuckles for guying trees shall be galvanized or cadmium plated and shall be of adequate size and strength to properly maintain tight guy wires.

3.06 WATER:
A. Each plant or tree shall be thoroughly watered in after planting. Watering of all newly installed plant materials shall be the responsibility of the Landscape Contractor until final acceptance by the Landscape Architect.

B. See General Notes of Landscape Plan for water source.

3.07 SOD:

A. The Landscape Contractor shall sod all areas indicated on the drawings.

B. It shall be the responsibility of the Landscape Contractor to fine grade all landscape areas, eliminating all bumps, depressions, sticks, stones, and other debris.

C. The sod shall be firm, tough texture, having a compacted growth of grass with good root development. It shall contain no noxious weeds, or any other objectionable vegetation, fungus, insects, or disease. The soil embedded in the sod shall be good clean earth, free from stones and debris.

D. Before being cut and lifted, the sod shall have been mowed at least three times with a lawn mower, with the final mowing not more than seven days before the sod is cut. The sod shall be carefully cut into uniform dimensions.

E. 6-6-6 fertilizer with all trace elements is to be applied at the rate of 40 lbs. per 1,000 sq. ft. prior to laying sod.

F. Solid sod shall be laid with closely abutting, staggered joints with a tamped or rolled, even surface.

G. The finished level of all sod areas after settlement shall be one (1") inch below the top of abutting curbs, walks, paving and wood borders to allow for building turf.

H. If in the opinion of the Landscape Architect, top dressing is necessary after rolling, clean yellow sand will be evenly applied over the entire surface and thoroughly washed in.

3.08 SEEDING:
A. The Landscape Contractor shall remove all vegetation and rocks larger than (1") in diameter from areas to be seeded, scarify the area, then apply fertilizer at a rate of 500 lbs. per acre.

B. Application: Argentine Bahia Grass seed - 200 Pounds per acre mixed with common hulled Bermuda seed - 30 lbs. per acre. All other seed mixtures shall be applied per the manufacturer's instructions.

C. Roll immediately after seeding with a minimum 500 pound roller, then apply straw mulch at the rate of 2,500 pounds per acre.

D. Apply fertilizer at the rate of 150 lbs. per acre 45-60 days after seeding.

3.09 CLEANING UP:
A. The contractor shall at all times keep the premises free from accumulations of waste materials or rubbish caused by his employees or work. He shall leave all paved areas "broom clean" when completed with his work.

3.10 MAINTENANCE:
A. Maintenance shall begin immediately after each plant is installed and shall continue until all planting has been accepted by the Owner or Landscape Architect. Maintenance shall include watering, weeding, removal of dead materials, resetting plants to proper grades or upright positions, spraying, restoration of planting saucer and/or any other necessary operations.

B. Proper protection to lawn areas shall be provided and any damage resulting from planting operations shall be repaired promptly.

C. Replacement of plants during the maintenance period shall be the resposnibility of the Contractor, excluding vandalism or damage on the part of others, lighting, or hurricane force winds, until final acceptance.

D. In the event that weeds or other undesirable vegetation become prevalent, it shall be the Contractor's responsibility to remove them.

E. Trees or other plant material which fall or are blown over during the maintenance period will be reset by the Contractor at no additional expense to the Owner, the only exception being hurricane force winds.

3.11 COMPLETION, INSPECTION AND ACCEPTANCE:
A. Completion of the work shall mean the full and exact compliance and conformity with the provisions expressed or implied in the Drawings and in the Specifications, including the complete removal of all trash, debris, soil or other waste created by the Landscape Contractor.

B. Inspection of work to determine completion of contract, exclusive of the possible replacement of plants, will be made by the Owner and/or Landscape Architect at the conclusion of all planting and at the request of the Landscape Contractor.

C. All plant material shall be alive and in good growing condition for each specified kind of plant at the time of acceptance. The rating of each plant according to Florida Grades and Standards shall be equal to or better than that called for on the plans and in these Specifications at the time of final inspection and acceptance.

D. After inspection, the Landscape Contractor will be notified by the Owner of the acceptance of all plant material and workmanship, exclusive of the possible replacement of plants subject to guarantee.

DRAINAGE TESTING/DRAINAGE CHANNEL REQUIREMENTS

PRIOR TO PLANTING ALL PLANTING PITS SELECTED FOR TESTING SHALL BE TESTED IN THE FOLLOWING MANNER

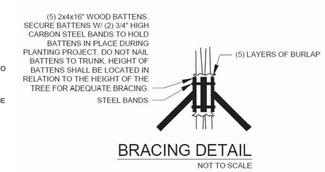
A. DIG EACH PLANTING PIT TO THE MINIMUM SPECIFIED SIZE.

B. FILL PLANTING PIT WITH TWELVE INCHES (12") OF WATER. IF THE WATER LEVEL DROPS FOUR (4") OR MORE WITHIN FOUR (4) HOURS, THE DRAINAGE IS SUFFICIENT AND A DRAINAGE CHANNEL IS NOT REQUIRED IF THE WATER LEVEL DROPS LESS THAN FOUR INCHES (4") WITHIN THE FOUR (4) HOUR PERIOD, A DRAINAGE CHANNEL IS REQUIRED.

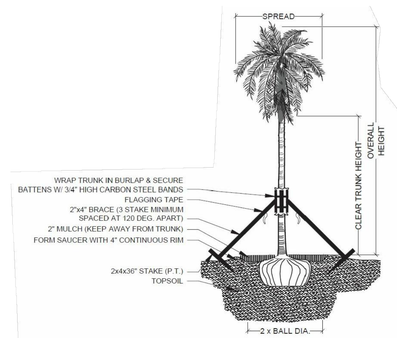
C. WHERE REQUIRED, THE DRAINAGE CHANNEL MUST EXTEND DOWN THROUGH THE NON POROUS SOIL AND INTO POROUS SOIL. (SEE DETAIL)

D. ALL MATERIAL REMOVED FROM THE DRAINAGE CHANNEL SHALL BE DISCARDED.

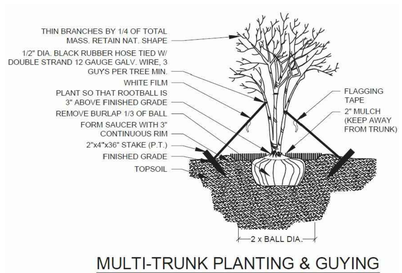
E. WHEN BACKFILLING PLANTING PITS WITH PLANTING MIXTURE, CARE MUST BE TAKEN TO KEEP THE CONSISTENCY OF THE SOIL MIX THE SAME THROUGHOUT THE PLANTING PIT AND DRAINAGE CHANNEL.



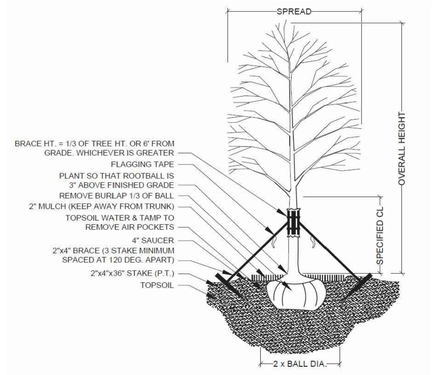
BRACING DETAIL
NOT TO SCALE



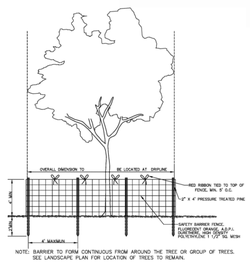
PALM PLANTING - ANGLE STAKE
NOT TO SCALE



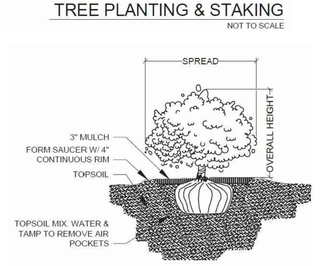
MULTI-TRUNK PLANTING & GUYING
NOT TO SCALE



TREE PLANTING & STAKING
NOT TO SCALE



TREE PROTECTION DETAIL
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
- CONSULTING ENGINEERS -
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1382 SW 12 CT PORT ST. LUCIE, FL 34986
PH: (772) 336-0500 FAX: (772) 336-0501
E-MAIL: SCOOPER@STEPHENCOOPERPE.COM

VIVA AT TREASURE COAST EAST
City of Fort Pierce, Florida
Details & Specifications

Revisions

Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By: PG
Checked By: PG
Municipal Project:
Scale:

LA-11

WATER STATEMENT

POTABLE WATER TO BE PROVIDED BY FORT PIERCE UTILITY AUTHORITY (FPUA) VIA A LOOPED PROPOSED PUBLIC WATER MAIN EXTENSION INTO THE SITE. EXISTING WATERMAIN RUN ALONG THE PERIMETER OF THE PROJECT. THE PROPOSED RESIDENTIAL UNITS WILL BE METERED SEPARATELY.

FIRE HYDRANTS ARE PROPOSED TO BE SPACED PER ST. LUCIE COUNTY FIRE DISTRICT CRITERIA.

WASTEWATER STATEMENT

AN 8" GRAVITY SEWER COLLECTION SYSTEM IS PROPOSED TO CONVEY WASTEWATER FROM THE PLANNED BUILDINGS TO THE EXISTING KOA PUMP STATION PER PRIOR PLANNING.

DRAINAGE STATEMENT

THE PROPOSED SURFACE WATER MANAGEMENT SYSTEM FOR THE PROJECT CONSISTS OF SITE GRADING AND A SERIES OF INLETS AND CULVERTS WHICH DIRECT STORM WATER RUNOFF TO A PROPOSED WET DETENTION/RETENTION AREA. THE PROPOSED WET DETENTION AREA WILL PROVIDE WATER QUALITY TREATMENT ST LUCIE COUNTY OWNED DITCH.

FLOOD PROTECTION PER LOCAL AND STATE REQUIREMENTS TO BE ADDRESSED AS FOLLOWS;

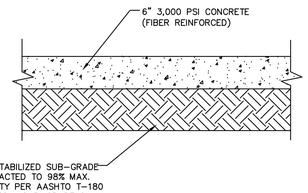
10 YEAR, 1 DAY STORM (ROAD PROTECTION – SFWMD/CITY OF FT PIERCE)

25 YEAR, 3 DAY (CITY OF FT. PIERCE – PRE VERSES POST DISCHARGE)

100 YEAR, 3 DAY (ZERO DISCHARGE MINIMUM FINISHED FLOOR)

THE PROPOSED WET DETENTION SYSTEM SHALL DISCHARGE TO THE EXISTING OUTFALL DITCH ALONG THE EASTERN PERIMETER. THE EXISTING DITCH LEADS TO THE NORTH FORK OF THE ST. LUCIE RIVER AND IS OWNED BY ST. LUCIE COUNTY.

A SMALL PORTION OF THE DEVELOPMENT AREA (ALONG THE SOUTHERN PERIMETER) IS LOCATED WITHIN A FEMA ZONE A. DEVELOPMENT OF THIS AREA WILL BE SUBJECT TO FEMA FLOOD PLAIN CRITERIA.



NOTE:

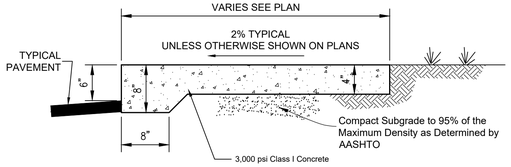
MAXIMUM JOINT SPACING 12ft X 12ft.

RECOMMENDED SAW-CUT DEPTH = 2".

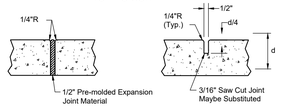
CONCRETE CYLINDER TESTS TO BE PERFORMED AT LEAST EVERY 50 CUBIC YARDS, OR AT LEAST ONCE FOE EACH DAY'S PLACEMENT.

PROVIDE EXPANSION JOINT AT SIDEWALK AND CURB.

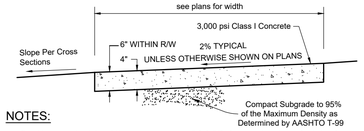
CONCRETE PAVEMENT SECTION
OPTIONAL



RAISED SIDEWALK SECTION
NOT TO SCALE



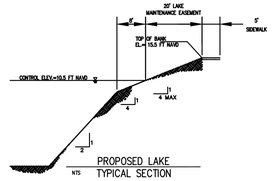
EXPANSION JOINTS **CONTRACTION JOINTS**

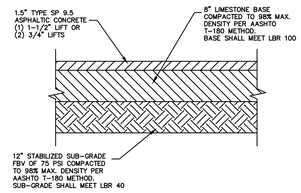


NOTES:

1. Provide expansion joints 20' center to center, at PC & PT of curves, junctions of existing & new sidewalks, and where sidewalk abuts curbs, driveways & similar structures.
2. Provide contraction joints 5' center to center.
3. Sod shall be placed below edge of sidewalk to allow drainage.

TYPICAL SIDEWALK NOT TO SCALE

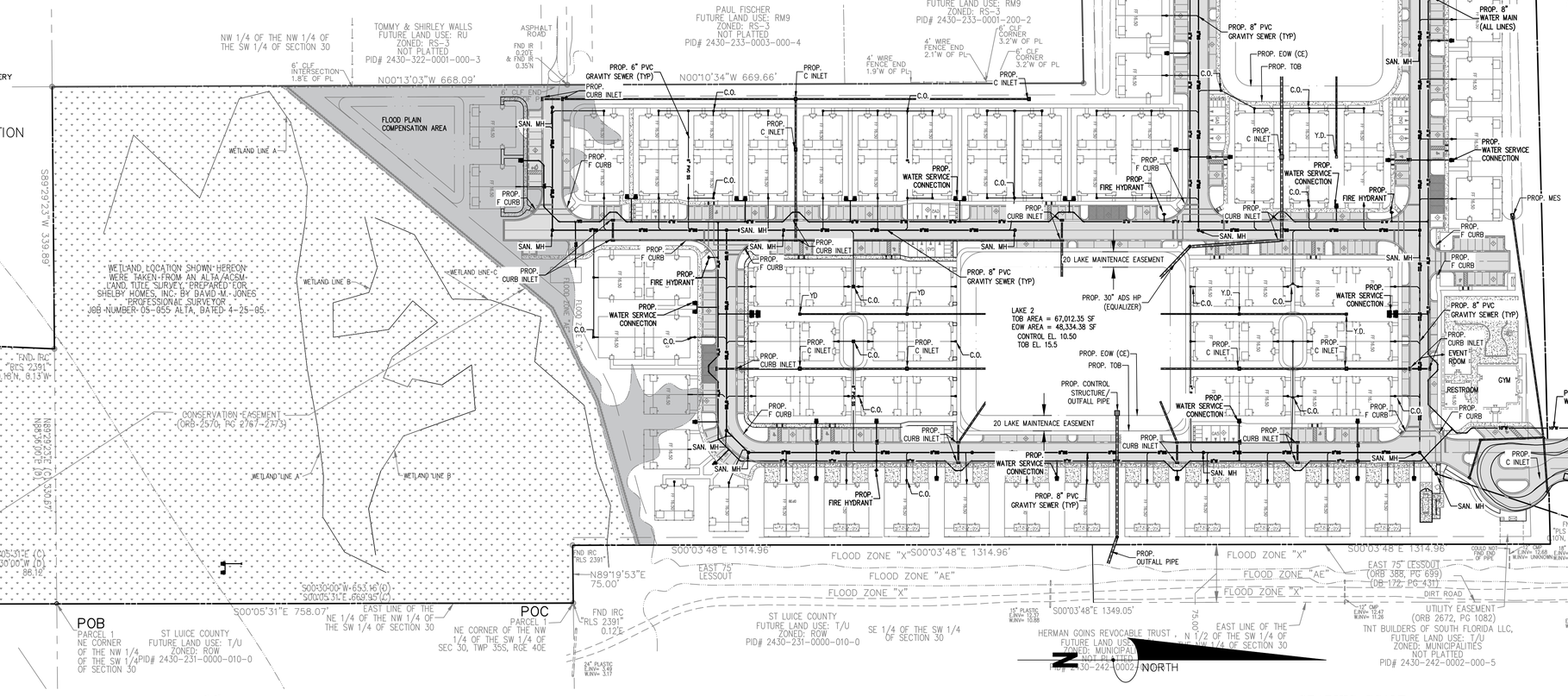


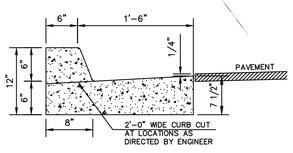


NEW ASPHALT PAVEMENT SECTION

LEGEND

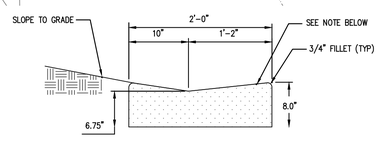
- PROP. CONCRETE
- PROP. ASPHALT
- PROP. WATER METER SERVICE
- PROP. YARD DRAIN
- PROP. C-INLET
- PROP. CURB INLET
- PROP. DRAINAGE PIPE
- PROP. STORM MANHOLE
- PROP. SANITARY CLEANOUT
- PROP. SANITARY MANHOLE





NOTE: 3,000 PSI CONCRETE AT 28 DAYS

TYPE "F" CURB



VALLEY GUTTER CURB DETAIL

GRAPHIC SCALE
80 0 40 80 160
(IN FEET)
1 inch = 80 ft.

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BYSTEPHEN COOPER P.E., SHALL BE WITHOUT LIABILITY TO STEPHEN COOPER P.E. & ASSOCIATES, INC. CONSULTING ENGINEERS

No.	REVISION	DATE
10		
9		
8		
7		
6		
5		
4		
3		
2		
1		

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
- CONSULTING ENGINEER -
CIVIL ENGINEERING • SITE PLANNING • ENVIRONMENTAL PERMITTING
7450 SOUTH FEDERAL HIGHWAY
PORT ST. LUCIE, FLORIDA 34952
Tel 1-772-336-2933
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00008856

SCPE

CONCEPT UTILITY PLAN

VIVA AT TREASURE COAST EAST

CITY OF FORT PIERCE, FLORIDA

DATE:	JAN 2021
DRAWN BY:	CCL
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=80'
VERT. SCALE:	NA

DRAWING NO.
C1.0

JOB NO. 2018-121

Stephen Cooper, P.E. #46557

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

TREASURE COAST EAST
CITY OF FORT PIERCE ENVIRONMENTAL IMPACT REPORT

July 2023

Prepared For:

TEG Developers
365 Route 59, Suite 110
Airmont, New York 10952

Prepared By:

Passarella & Associates, Inc.
13620 Metropolis Avenue, Suite 200
Fort Myers, Florida 33912
(239) 274-0067

Project No. 23TEG4047

TABLE OF CONTENTS

Page

1.0 Introduction....1

2.0 Vegetation and Land Cover....1

3.0 Wetlands....3

4.0 Listed Species....3

5.0 Site Plan....3

6.0 References....4

LIST OF TABLES

Page

Table 1. Existing Land Use and Cover Summary.....1

LIST OF EXHIBITS

Page

Exhibit 1. Project Location Map E1-1

Exhibit 2. Aerial with FLUCFCS and Wetlands Map E2-1

Exhibit 3. Listed Species Survey Report E3-1

Exhibit 4. Aerial with Site Plan E4-1

Exhibit 5. SFWMD ERP No. 56-02352-P E5-1

1.0 INTRODUCTION

The following Environmental Impact Report (EIR) Report is provided in support of the City of Fort Pierce site development plan application for Treasure Coast East (Project).

The Project site totals 39.12± acres and is located in Section 30, Township 35 South, Range 40 East, St. Lucie County (Appendix A). More specifically, the Project is located east of South Jenkins Road, south of Edwards Road, and approximately 0.33 mile east of Interstate 95.

The Project site is comprised of forested upland and wetland areas and disturbed land that contain moderate to high levels of cover by exotic vegetation, including Brazilian pepper (*Schinus terebinthifolia*) and smutgrass (*Sporobolus indicus*).

The following EIR includes details regarding the various habitats on-site, results of the listed species survey, and the impacts and preserves associated with the proposed site plan.

2.0 VEGETATION AND LAND COVER

Vegetation associations and land cover for the Project were delineated using Florida Department of Transportation (FDOT) December 2022 rectified color aerials, and groundtruthing was conducted on July 5, 2023. The vegetation and land cover types were classified based on the nomenclature of the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Levels III and IV (FDOT 1999). Level IV FLUCFCS codes were utilized to denote disturbance, and "E" codes were used to identify levels of exotic species invasion (e.g., Brazilian pepper and earleaf acacia (*Acacia auriculiformis*)). AutoCAD Map 3D 2021 software was used to determine the acreage of each mapped polygon, produce summaries, and generate the FLUCFCS map (Exhibit 2).

Table 1. Existing Land Use and Cover Summary

FLUCFCS Code	Description	Acreage (±)	Percent of Total
4279 E3	Live Oak, Disturbed (50-75% Exotics)	4.03	10.3
514	Ditch	0.30	0.8
6309 E4	Mixed Wetland Forest, Disturbed (76-100% Exotics)	7.56	19.3
6419 E2	Freshwater Marsh, Disturbed (25-49% Exotics)	0.73	1.9
740	Disturbed Land	26.37	67.4
814	Road	0.13	0.3
Totals		**39.12**	**100.0**

<u>Live Oak, Disturbed (50-75% Exotics) (FLUCFCS Code 4279 E3)</u>
The canopy of this habitat type consists of co-dominant live oak (*Quercus virginiana*), cabbage palm (*Sabal palmetto*), and Indian laurel (*Ficus microcarpa*). The sub-canopy includes cabbage palm, Brazilian pepper, shoebutton ardisia (*Ardisia elliptica*), American beautybush (*Callicarpa americana*), queen palm (*Syagrus romanzoffiana*), orange (*Citrus* sp.), Jack-in-the-bush

(*Chromolaena odorata*), rosary pea (*Abrus precatorius*), and coral bean (*Erythrina herbacea*). The ground cover consists of caesarweed (*Urena lobata*), muscadine grapevine (*Vitis rotundifolia*), American beautybush, wild coffee (*Psychotria* sp.), greenbrier (*Smilax* sp.), and rosary pea.

Ditch (FLUCFCS Code 514)
The canopy and ground cover of this habitat type are mostly open. The sub-canopy is dominated by Brazilian pepper.

Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)
The canopy of this habitat type includes cabbage palm, laurel oak (*Quercus laurifolia*), and water hickory (*Carya aquatica*). The sub-canopy consists of Brazilian pepper, marlberry (*Ardisia escallonioides*), cabbage palm, wild coffee, water hickory, Senegal date palm (*Phoenix reclinata*), and buttonbush (*Cephalanthus occidentalis*). The ground cover includes swamp fern (*Telmatoblechnum serrulatum*), bacopa (*Bacopa repens*), red ludwigia (*Ludwigia repens*), shrubby camphorweed (*Pluchea odorata*), water pennywort (*Hydrocotyle umbellata*), caesarweed, shield fern (*Thelypteris* sp.), and Japanese climbing fern (*Lygodium japonicum*).

Freshwater Marsh, Disturbed (25-49% Exotics) (FLUCFCS Code 6419 E2)
The canopy of this habitat type is open with cabbage palm on the perimeter. The sub-canopy consists of cabbage palm, water hickory, bushy seedbox (*Ludwigia alternifolia*), giant leather fern (*Acrostichum danaeifolium*), cattails (*Typha latifolia*), buttonbush, and willow (*Salix caroliniana*). The ground cover includes smartweed (*Persicaria* sp.), dotted duckweed (*Spirodela punctata*), Carolina mosquito fern (*Azolla caroliniana*), water pennywort, bulltongue arrowhead (*Sagittaria lancifolia* subsp. *lancifolia*), sedge (*Carex* sp.), and swamp-lily (*Crinum americanum*).

Disturbed Land (FLUCFCS Code 740)
The canopy consists of scattered laurel oak and live oak. The sub-canopy contains scattered Brazilian pepper, wax myrtle (*Morella cerifera*), saltbush (*Baccharis halimifolia*), and cabbage palm. The ground cover consists of smutgrass (*Sporobolus indicus*), cogongrass (*Imperata cylindrica*), bahiagrass (*Paspalum notatum*), dog fennel (*Eupatorium capillifolium*), paragrass (*Urochloa mutica*), caesarweed, loosestrife (*Lythrum alatum* var. *lanceolatum*), common ragweed (*Ambrosia artemisiifolia*), St. Augustine grass (*Stenotaphrum secundatum*), spermacoce (*Spermacoce verticillata*), guineagrass (*Urochloa maxima*), muscadine grape, sida (*Sida* sp.), beggarticks (*Bidens alba*), torpedograss (*Panicum repens*), natalgrass (*Melinis repens*), Jack-in-the-bush, hairy indigo (*Indigofera hirsuta*), elephant's foot (*Elephantopus elatus*), and golden aster (*Pityopsis graminifolia*).

Road (FLUCFCS Code 814)
This FLUCFCS code consists of a small, paved road.

A total of six vegetative associations on-site (i.e., FLUCFCS codes) were identified on the Project. The dominant habitat types on the Project include Disturbed Land (FLUCFCS Code 740), accounting for 67.4 percent of the property (26.37± acres); and Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4), accounting for 19.3 percent of the property (7.56± acres).

The Project site contains 25 to 100 percent exotic vegetation throughout the property. Exotic vegetation documented on-site includes, but is not limited to, Brazilian pepper, shoebutton ardisia (*Ardisia elliptica*), caesarweed (*Urena lobata*), and cogongrass (*Imperata cylindrica*).

3.0 WETLANDS

The Project site contains 8.29± acres of South Florida Water Management District (SFWMD) wetlands (Exhibit 2). The on-site wetlands are identified by the following FLUCFCS codes: Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4) and Freshwater Marsh, Disturbed (25-49% Exotics) (FLUCFCS Code 6419 E2).

4.0 LISTED SPECIES

A listed species survey was conducted by PAI on the Project in July 2023 to determine if the site was being utilized by wildlife species listed by the Florida Fish and Wildlife Conservation Commission (FWCC) and the U.S. Fish and Wildlife Service as threatened or endangered.

A total of three gopher tortoise (*Gopherus polyphemus*) burrows were documented on the Project site during the survey. The gopher tortoise is listed as threatened by the FWCC. No listed plant species were documented on the Project site during the field survey.

A copy of the listed species survey report is provided as Exhibit 3.

5.0 SITE PLAN

The Project includes a proposed multi-family residential development with associated parking and roadways (Exhibit 4). Development has been focused on areas previously disturbed for agricultural uses. The site plan does not propose impacts to the forested upland and wetland areas of the property. Since no wetland impacts are proposed, no wetland mitigation will be required.

There is an existing Environmental Resource Permit (ERP) for the Project site (Permit No. 56-02352-P). The ERP includes delineation of the on-site wetlands, as shown on Exhibit 2. The applicant proposes to preserve the wetlands on-site, as well as an upland buffer area. The proposed preserve location provides for connection to Tenmile Creek. The preserve will be protected in perpetuity via a conservation easement.

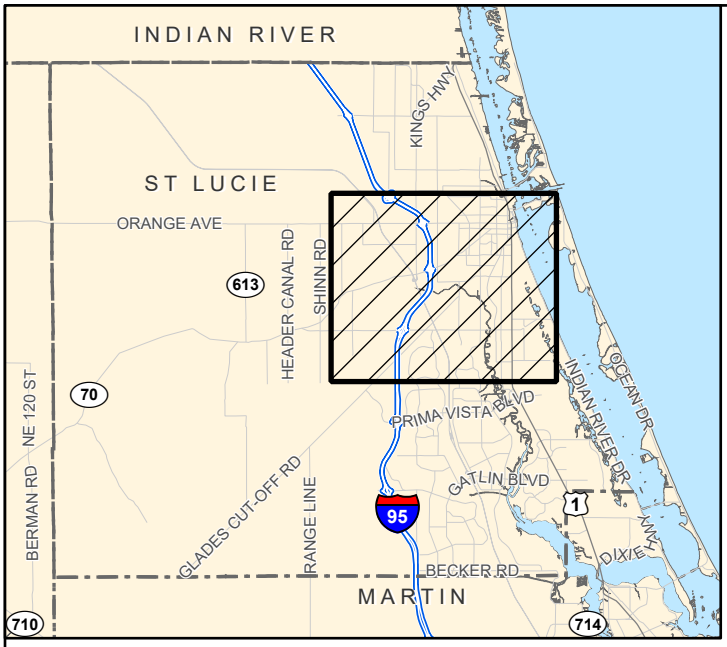
The Project will adhere to state regulations regarding gopher tortoise burrows. An FWCC permit will be obtained for activities within 25 feet of an identified gopher tortoise burrow.

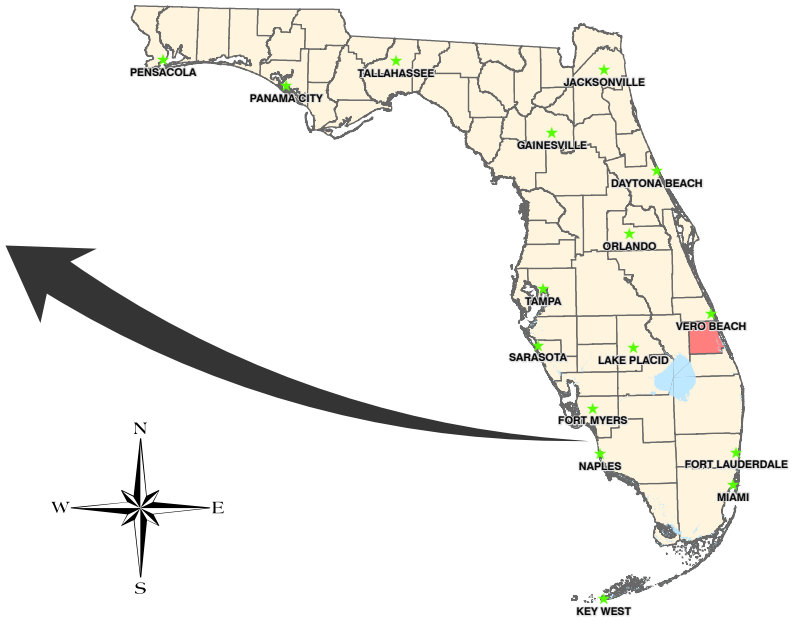
6.0 REFERENCES

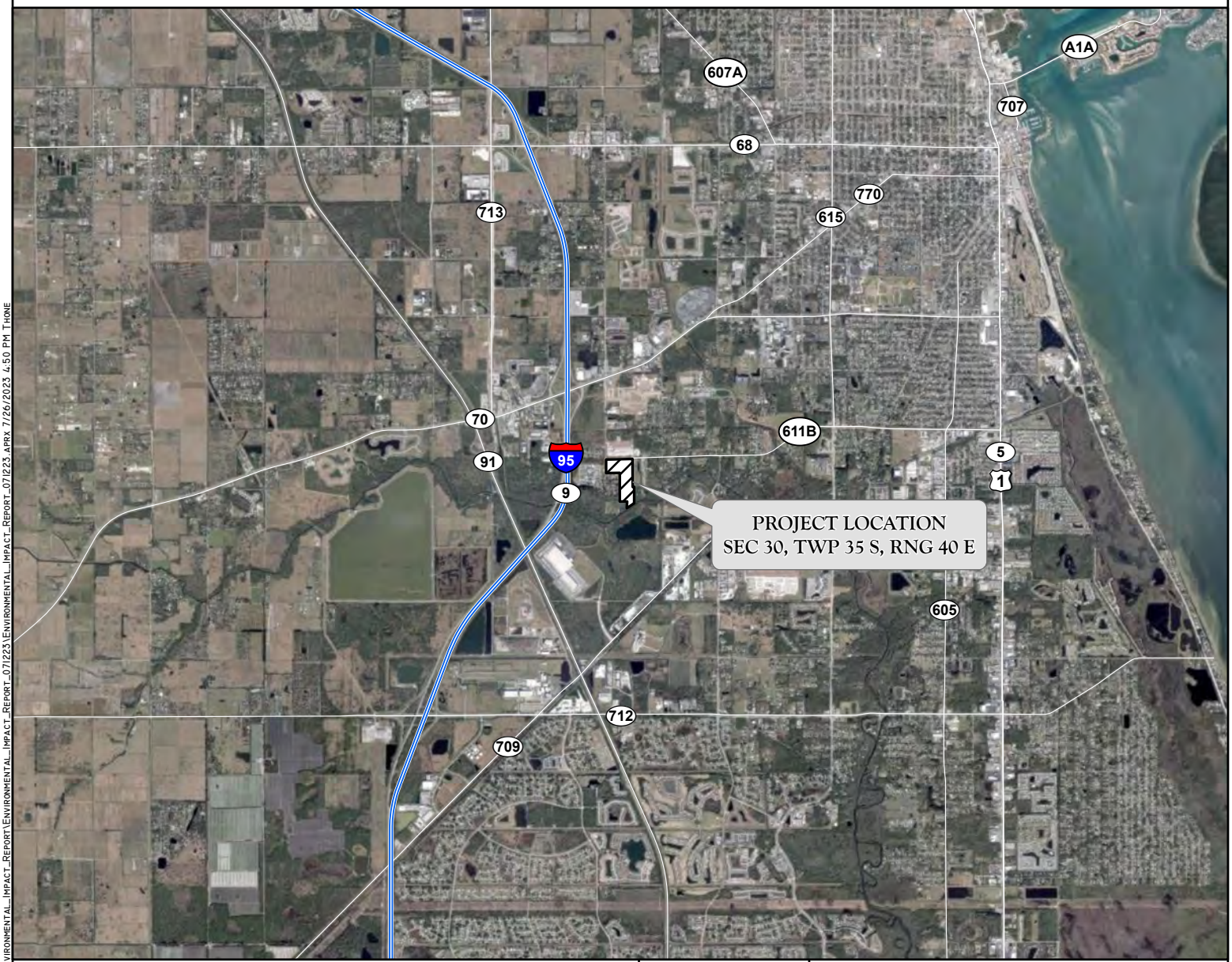
Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a. Second Edition.

EXHIBIT 1

PROJECT LOCATION MAP







J:\2023\23TE64047\Environmental_Impact_Report\Environmental_Impact_Report_071223\Environmental_Impact_Report_071223.aprx 7/26/2023 4:50 PM THONE

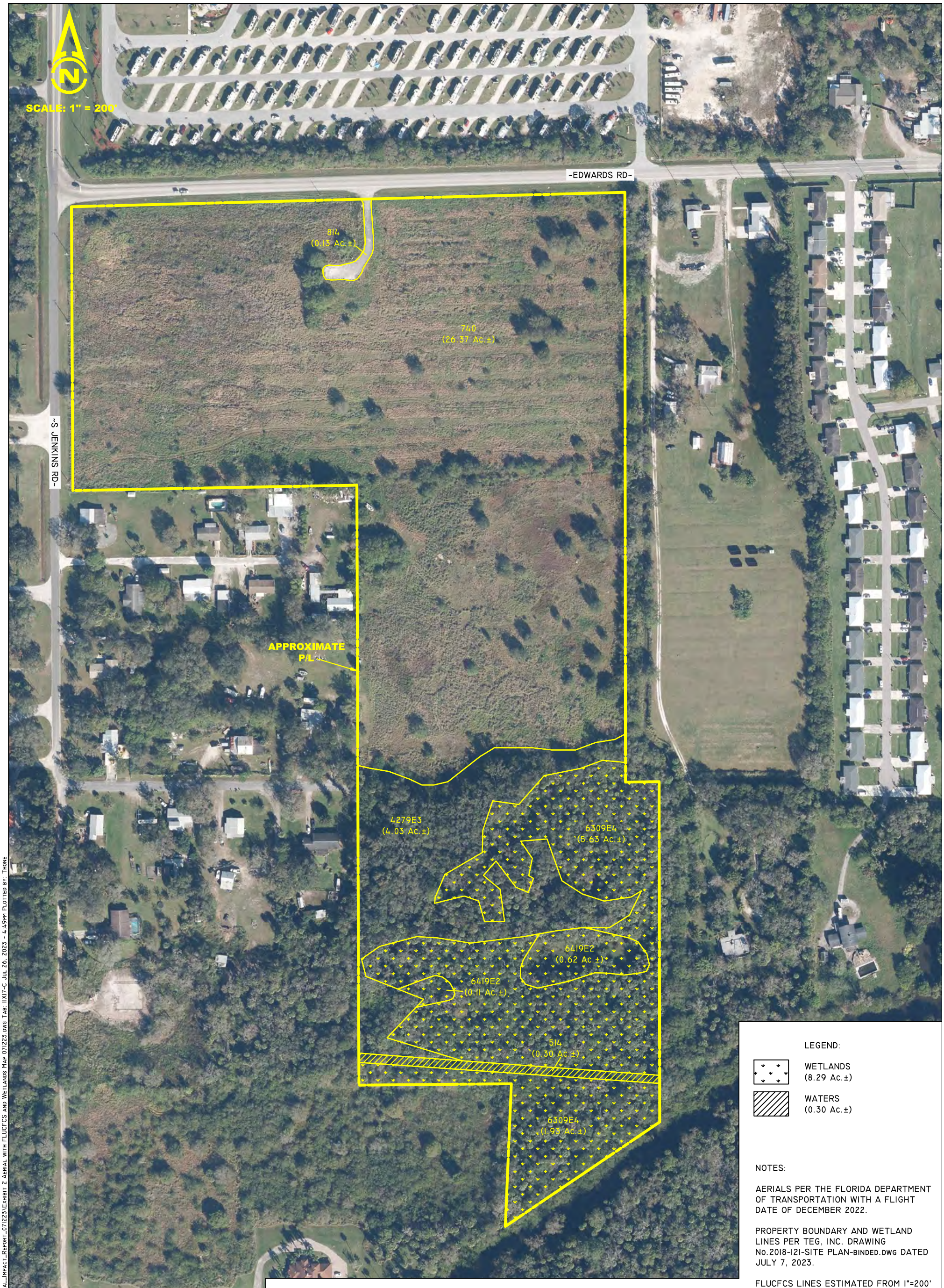
EXHIBIT 1. PROJECT LOCATION MAP
TREASURE COAST EAST

DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
H.S.	7/12/23
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

EXHIBIT 2

AERIAL WITH FLUCFCS AND WETLANDS MAP



FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
4279 E3	LIVE OAK, DISTURBED (50-75% EXOTICS)	4.03 Ac.±	10.3%
514	DITCH	0.30 Ac.±	0.8%
6309 E4	MIXED WETLAND FOREST, DISTURBED (76-100% EXOTICS)	7.56 Ac.±	19.3%
6419 E2	FRESHWATER MARSH, DISTURBED (25-49% EXOTICS)	0.73 Ac.±	1.9%
740	DISTURBED LAND	26.37 Ac.±	67.4%
814	ROAD	0.13 Ac.±	0.3%
	TOTAL	**39.12 Ac.±**	**100.0%**

LEGEND:

WETLANDS (8.29 Ac.±)

WATERS (0.30 Ac.±)

NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY AND WETLAND LINES PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

UPLAND/WETLAND LIMITS HAVE NOT BEEN REVIEWED BY ANY REGULATORY AGENCY AND ARE SUBJECT TO CHANGE.

J:\2023\23TEG4047\ENVIRONMENTAL_IMPACT_REPORT\ENVIRONMENTAL_IMPACT_REPORT_071223\EXHIBIT 2 AERIAL WITH FLUCFCS AND WETLANDS MAP 071223.DWG TAB: 11X17-C JUL 26, 2023 - 4:49PM PLOTTED BY: THONE

DRAWN BY	DATE
H.H.	07/10/23
REVIEWED BY	DATE
K.C.	07/10/23
REVISED	DATE

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

TREASURE COAST EAST
AERIAL WITH FLUCFCS AND WETLANDS MAP

DRAWING No. 23TEG4047

SHEET No. EXHIBIT 2

EXHIBIT 3

LISTED SPECIES SURVEY REPORT

TREASURE COAST EAST
LISTED SPECIES SURVEY REPORT

July 2023

Prepared For:

TEG Developers
365 Route 59, Suite 110
Airmont, New York 10952

Prepared By:

Passarella & Associates, Inc.
13620 Metropolis Avenue, Suite 200
Fort Myers, Florida 33912
(*239*) *274-0067*

Project No. 23TEG4047

TABLE OF CONTENTS

Page

1.0 Introduction....1

2.0 Vegetation Mapping....1

3.0 Survey Methodology....2

3.1 Literature and Database Review....2
3.2 Field Survey....3

4.0 Survey Results....4

4.1 Literature and Database Review....4
4.2 Field Survey....4

5.0 Summary....4

6.0 References....5

LIST OF TABLES

Page

Table 1. Existing Land Use and Cover Summary.....1

Table 2. Weather Conditions During Survey.....3

LIST OF APPENDICES

Page

Appendix A. Project Location Map..... A-1

Appendix B. Aerial with FLUCFCS and Wetlands Map.....B-1

Appendix C. Documented Occurrences of Listed Species.....C-1

Appendix D. Aerial with Survey Transects..... D-1

Appendix E. Aerial with Listed Species Locations E-1

1.0 INTRODUCTION

This report documents the results of the listed species survey conducted by Passarella & Associates, Inc. (PAI) for Treasure Coast East (Project). The survey was conducted for wildlife species listed by the Florida Fish and Wildlife Conservation Commission (FWCC) and the U.S. Fish and Wildlife Service (USFWS) as endangered, threatened, or species of special concern; and for plant species listed by the Florida Department of Agriculture and Consumer Services (FDACS) and the USFWS as endangered, threatened, or commercially exploited.

The Project site totals 39.12± acres and is located in Section 30, Township 35 South, Range 40 East, St. Lucie County (Appendix A). More specifically, the Project is located east of South Jenkins Road, south of Edwards Road, and approximately 0.33 mile east of Interstate 95.

2.0 VEGETATION MAPPING

Vegetation mapping was conducted for the Project using Florida Department of Transportation (FDOT) December 2022 rectified color aerials (Scale 1 inch = 200 feet). Groundtruthing to map the vegetative communities was conducted on July 5, 2023, utilizing the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Levels III and IV (FDOT 1999). Level IV FLUCFCS was utilized to denote hydrological conditions and disturbance. Exotic or "E" codes were used to show levels of exotic species invasion (e.g., Brazilian pepper (*Schinus terebinthifolia*)). AutoCAD Map 3D 2021 software was used to determine the acreage of each mapped area, produce summaries, and generate the FLUCFCS map for the property (Appendix B). A total of six vegetative associations and/or land uses (i.e., FLUCFCS codes) were identified on the Project. Table 1 provides the breakdown of the FLUCFCS codes by acreage for the Project, and a description of each classification follows.

Table 1. Existing Land Use and Cover Summary

FLUCFCS Code	Description	Acreage (±)	Percent of Total
4279 E3	Live Oak, Disturbed (50-75% Exotics)	4.03	10.3
514	Ditch	0.30	0.8
6309 E4	Mixed Wetland Forest, Disturbed (76-100% Exotics)	7.56	19.3
6419 E2	Freshwater Marsh, Disturbed (25-49% Exotics)	0.73	1.9
740	Disturbed Land	26.37	67.4
814	Road	0.13	0.3
Totals		**39.12**	**100.0**

Live Oak, Disturbed (50-75% Exotics) (FLUCFCS Code 4279 E3)

The canopy of this habitat type consists of co-dominant live oak (*Quercus virginiana*), cabbage palm (*Sabal palmetto*), and Indian laurel (*Ficus microcarpa*). The sub-canopy includes cabbage palm, Brazilian pepper, shoebutton ardisia (*Ardisia elliptica*), American beautybush (*Callicarpa americana*), queen palm (*Syagrus romanzoffiana*), orange (*Citrus* sp.), Jack-in-the-bush (*Chromolaena odorata*), rosary pea (*Abrus precatorius*), and coral bean (*Erythrina herbacea*). The

ground cover consists of caesarweed (*Urena lobata*), muscadine grapevine (*Vitis rotundifolia*), American beautybush, wild coffee (*Psychotria* sp.), greenbrier (*Smilax* sp.), and rosary pea.

Ditch (FLUCFCS Code 514)
The canopy and ground cover of this habitat type are mostly open. The sub-canopy is dominated by Brazilian pepper.

Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)
The canopy of this habitat type includes cabbage palm, laurel oak (*Quercus laurifolia*), and water hickory (*Carya aquatica*). The sub-canopy consists of Brazilian pepper, marlberry (*Ardisia escallonioides*), cabbage palm, wild coffee, water hickory, Senegal date palm (*Phoenix reclinata*), and buttonbush (*Cephalanthus occidentalis*). The ground cover includes swamp fern (*Telmatoblechnum serrulatum*), bacopa (*Bacopa repens*), red ludwigia (*Ludwigia repens*), shrubby camphorweed (*Pluchea odorata*), water pennywort (*Hydrocotyle umbellata*), caesarweed, shield fern (*Thelypteris* sp.), and Japanese climbing fern (*Lygodium japonicum*).

Freshwater Marsh, Disturbed (25-49% Exotics) (FLUCFCS Code 6419 E2)
The canopy of this habitat type is open with cabbage palm on the perimeter. The sub-canopy consists of cabbage palm, water hickory, bushy seedbox (*Ludwigia alternifolia*), giant leather fern (*Acrostichum danaeifolium*), cattails (*Typha latifolia*), buttonbush, and willow (*Salix caroliniana*). The ground cover includes smartweed (*Persicaria* sp.), dotted duckweed (*Spirodela punctata*), Carolina mosquito fern (*Azolla caroliniana*), water pennywort, bulltongue arrowhead (*Sagittaria lancifolia* subsp. *lancifolia*), sedge (*Carex* sp.), and swamp-lily (*Crinum americanum*).

Disturbed Land (FLUCFCS Code 740)
The canopy consists of scattered laurel oak and live oak. The sub-canopy contains scattered Brazilian pepper, wax myrtle (*Morella cerifera*), saltbush (*Baccharis halimifolia*), and cabbage palm. The ground cover consists of smutgrass (*Sporobolus indicus*), cogongrass (*Imperata cylindrica*), bahiagrass (*Paspalum notatum*), dog fennel (*Eupatorium capillifolium*), paragrass (*Urochloa mutica*), caesarweed, loosestrife (*Lythrum alatum* var. *lanceolatum*), common ragweed (*Ambrosia artemisiifolia*), St. Augustine grass (*Stenotaphrum secundatum*), spermacoce (*Spermacoce verticillata*), guineagrass (*Urochloa maxima*), muscadine grape, sida (*Sida* sp.), beggarticks (*Bidens alba*), torpedograss (*Panicum repens*), natalgrass (*Melinis repens*), Jack-in-the-bush, hairy indigo (*Indigofera hirsuta*), elephant's foot (*Elephantopus elatus*), and golden aster (*Pityopsis graminifolia*).

Road (FLUCFCS Code 814)
This FLUCFCS code consists of a small, paved road.

3.0 SURVEY METHODOLOGY

3.1 Literature and Database Review

Existing literature and agency databases were reviewed to determine the potential for listed species to occur on the Project site. The literature search involved an examination of

available information on protected species in the Project's geographical region. The literature sources reviewed included: the FWCC's Florida's Endangered and Threatened Species (2022); Florida Atlas of Breeding Sites for Herons and Their Allies (Runde *et al*. 1991); USFWS Habitat Management Guidelines for the Bald Eagle in the Southeast Region (1987); the Landscape Conservation Strategy Map (Kautz *et al*. 2006); and FWCC and/or USFWS databases for telemetry locations of bald eagle (*Haliaeetus leucocephalus*), Florida scrub jay (*Aphelocoma coerulescens*), crested caracara (*Caracara cheriway*), and wading bird rookeries in St. Lucie County.

The wildlife agencies' database information is updated periodically and is current through different dates, depending on the species. The FWCC information reviewed for this report is current through the noted dates for the following species: Florida scrub jay – August 2022 (acquired), crested caracara – August 2022 (acquired), and wading bird locations – 1999. Bald eagle nest locations were acquired from the Audubon EagleWatch and are current to the end of the 2022 nesting season. Appendix C displays the documented species locations in relation to the Project.

3.2 Field Survey

A field survey for listed wildlife and plant species was conducted by PAI for the Project on July 5, 2023.

The survey was conducted for wildlife species listed by the FWCC and the USFWS as endangered, threatened, or species of special concern; and for plant species listed by the FDACS and the USFWS as endangered, threatened, or commercially exploited.

The field survey was conducted by qualified ecologists walking parallel belt transects and meandering pedestrian transects through suitable habitats to ensure that sufficient visual coverage of ground and flora was obtained. Transect spacing varied from 75 to 100 feet, depending on vegetative cover and visibility. Approximate survey transects are shown on Appendix D. At regular intervals, the ecologists stopped, remained quiet, and listened for wildlife vocalizations. The survey was conducted during daylight hours with the aid of 8x or 10x power binoculars. Table 2 provides the weather conditions during the survey.

Table 2. Weather Conditions During Survey

Survey Date	Weather Conditions
July 5, 2023	Temperatures in the high 80s to low 90s, clear skies, and 5 to 10 mph east winds.

4.0 SURVEY RESULTS

4.1 Literature and Database Review

The results of the literature and database review found no documented occurrences of listed wildlife or plant species occurring on the Project (Appendix C).

According to the Audubon EagleWatch database, the closest bald eagle nest (SL-006) is located approximately 0.39 mile southwest of the Project (Appendix C). This distance is beyond the USFWS-recommended 660-foot buffer protection zone for active and alternate bald eagle nests. The bald eagle was delisted under the federal Endangered Species Act in 2007, but it is still protected under the Bald and Golden Eagle Protection Act.

The USFWS database for crested caracara locations shows the closest documented crested caracara occurrence is approximately 2.46 miles west of the Project (Appendix C). The Project does not contain suitable habitat that could be utilized by crested caracara. The crested caracara is listed as threatened by the USFWS and the FWCC.

The USFWS database for Florida scrub jay locations shows the closest documented Florida scrub jay occurrence is approximately 4.26 miles east of the Project (Appendix C). The Project site does not contain suitable habitat such as scrub oak (*Quercus inopina*) or Chapman oak (*Q. chapmanii*) that may be used by scrub jays. The Florida scrub jay is a state- and federally threatened species.

The Florida Atlas of Breeding Sites for Herons and Their Allies (Runde *et al*. 1991) and the FWCC database were referenced for the locations of breeding colonies for both listed and non-listed wading birds, including, but not limited to, snowy egret (*Egretta thula*), roseate spoonbill (*Platalea ajaja*), little blue heron (*Egretta caerulea*), and tri-colored heron (*Egretta tricolor*). According to these sources, the nearest wading bird colony is located approximately 5.44 miles northeast of the Project (Appendix C).

4.2 Field Survey

Three gopher tortoise (*Gopherus polyphemus*) burrows were documented on the Project site during the field survey (Appendix E). The gopher tortoise burrows occurred in areas identified as Disturbed Land (FLUCFCS Code 740). The gopher tortoise is listed as threatened by the FWCC. No listed plant species were documented on the Project site during the field survey.

5.0 SUMMARY

The literature review for the Project found no documented listed species on the Project site. The field survey documented a total of three gopher tortoise burrows on-site. The gopher tortoise is listed as threatened by the FWCC. No listed plant species were documented on the Project site during the survey.

6.0 REFERENCES

Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a. Third Edition.

Florida Fish and Wildlife Conservation Commission. 2022. Florida's Endangered and Threatened Species (Updated December 2022). Florida Fish and Wildlife Conservation Commission. Tallahassee, Florida

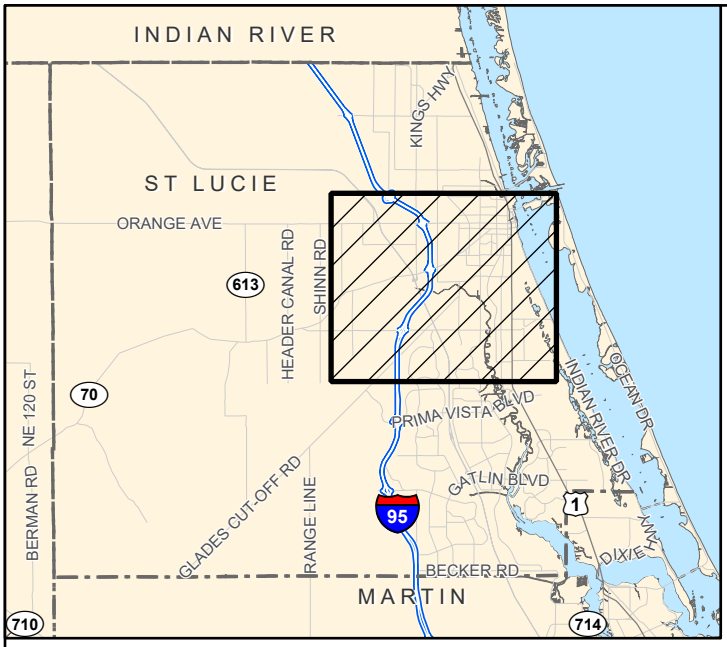
Kautz, R., R. Kawula, T. Hoctor, J. Comiskey, D. Jansen, D. Jennings, J. Kasbohm, F. Mazzotti, R. McBride, L. Richardson, K. Root. 2006. How much is enough? Landscape-Scale Conservation for the Florida Panther. Biological Conservation, Volume 130, Issue 1, Pages 118-133.

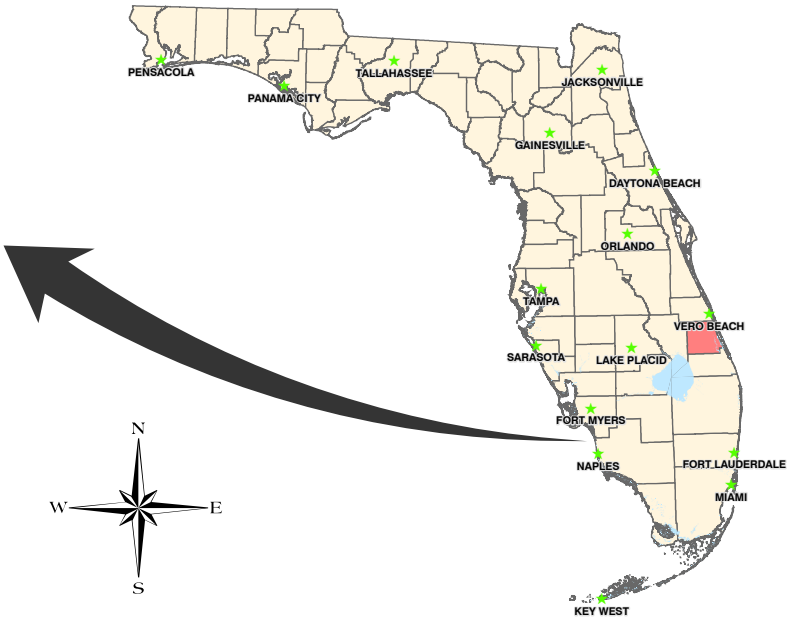
Runde, D.E., J.A. Gore, J.A. Hovis, M.S. Robson, and P.D. Southall. 1991. Florida Atlas of Breeding Sites for Herons and Their Allies, Update 1986 - 1989. Nongame Wildlife Program Technical Report No. 10. Florida Game and Fresh Water Fish Commission, Tallahassee, Florida.

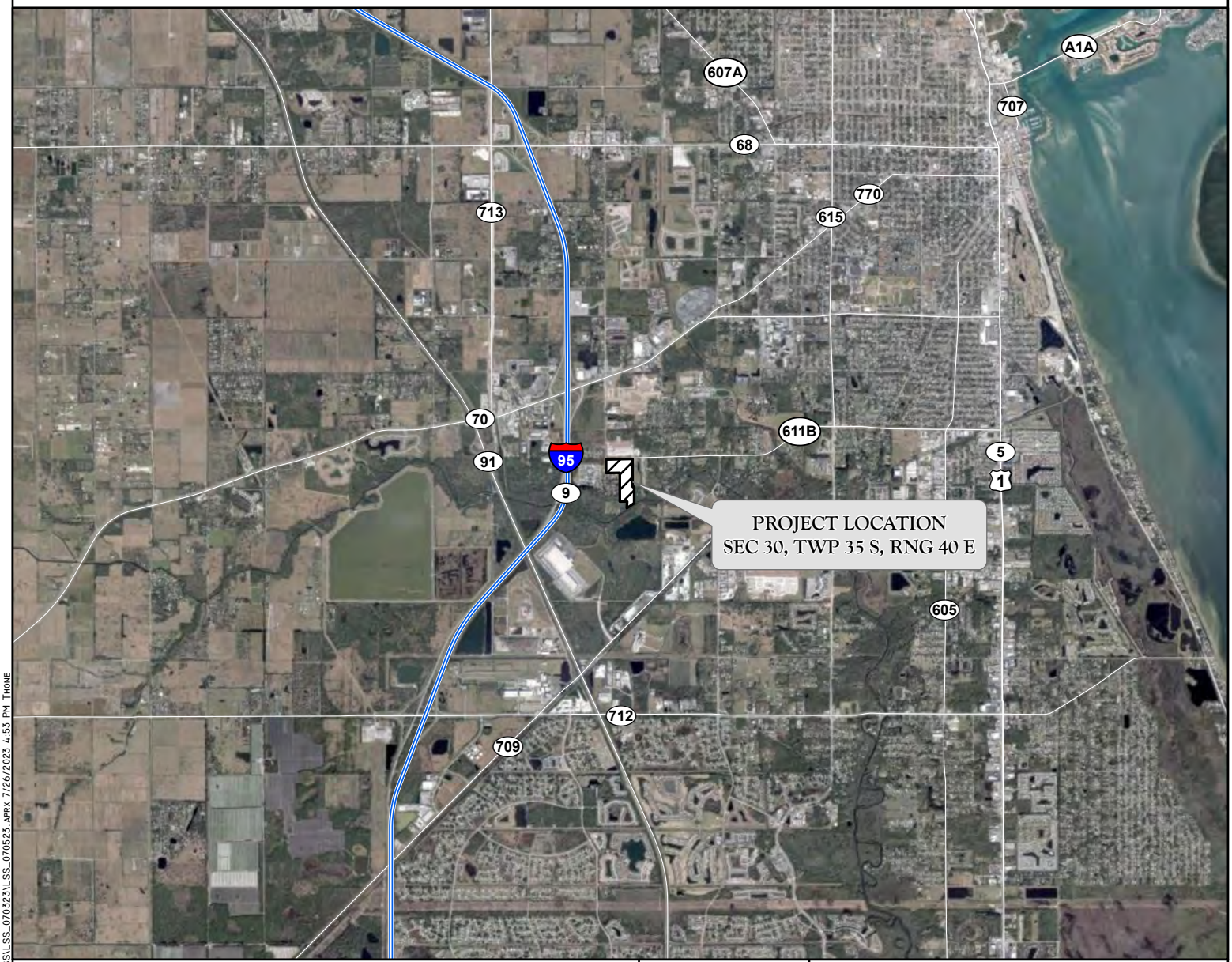
U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeast Region.

APPENDIX A

PROJECT LOCATION MAP







J:\2023\23TE64047\LSSVLLSS_070323\LSS_070523 APRX 7/26/2023 4:53 PM THONE

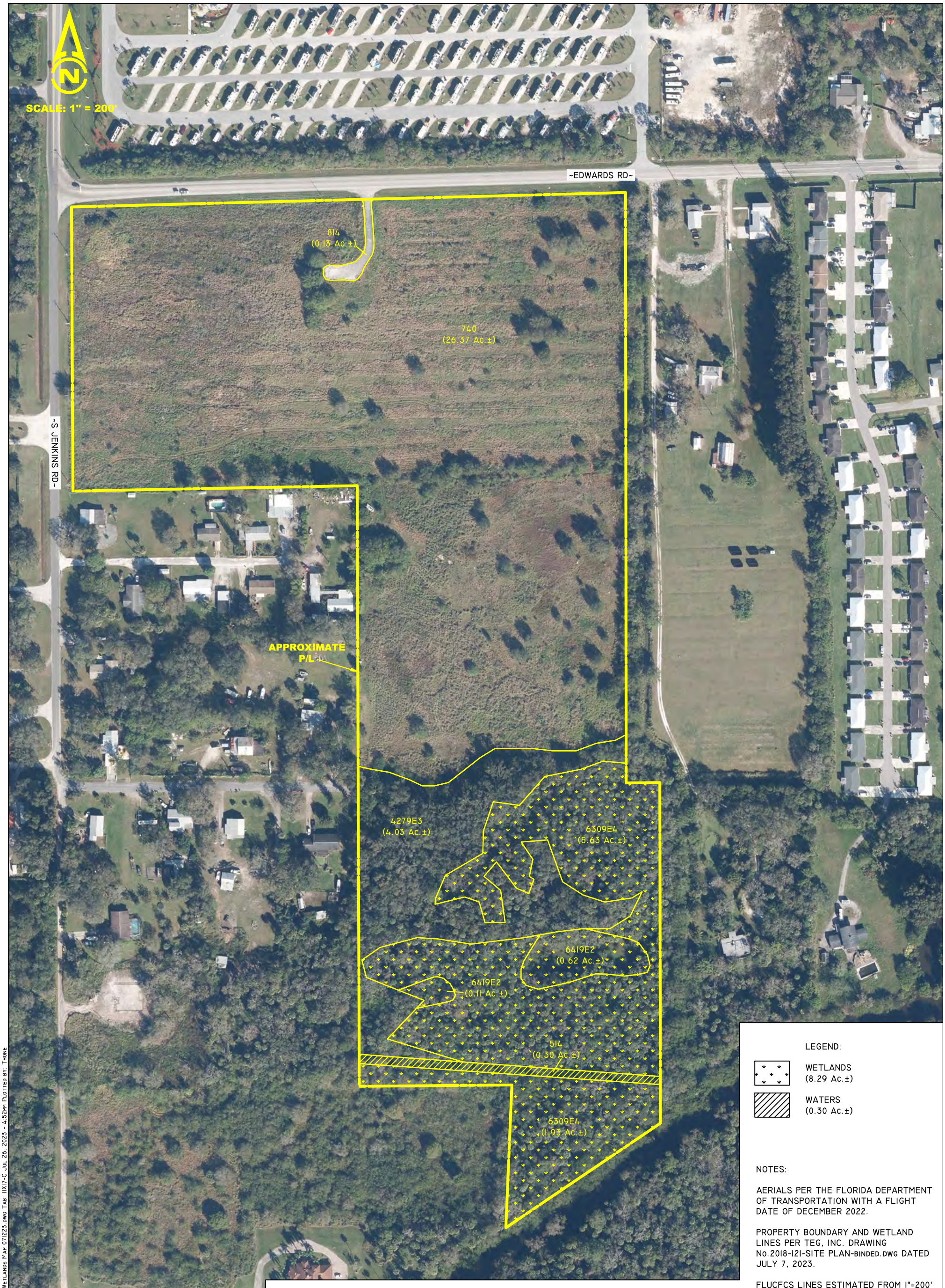
APPENDIX A. PROJECT LOCATION MAP
TREASURE COAST EAST

DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
H.S.	7/12/23
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

APPENDIX B

AERIAL WITH FLUCFCS AND WETLANDS MAP



FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
4279 E3	LIVE OAK, DISTURBED (50-75% EXOTICS)	4.03 Ac.±	10.3%
514	DITCH	0.30 Ac.±	0.8%
6309 E4	MIXED WETLAND FOREST, DISTURBED (76-100% EXOTICS)	7.56 Ac.±	19.3%
6419 E2	FRESHWATER MARSH, DISTURBED (25-49% EXOTICS)	0.73 Ac.±	1.9%
740	DISTURBED LAND	26.37 Ac.±	67.4%
814	ROAD	0.13 Ac.±	0.3%
	TOTAL	**39.12 Ac.±**	**100.0%**

LEGEND:

WETLANDS (8.29 Ac.±)

WATERS (0.30 Ac.±)

NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY AND WETLAND LINES PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

UPLAND/WETLAND LIMITS HAVE NOT BEEN REVIEWED BY ANY REGULATORY AGENCY AND ARE SUBJECT TO CHANGE.

J:\2023\23TEG4047\LSS\APPENDIX B AERIAL WITH FLUCFCS AND WETLANDS MAP 071223.DWG TAB: 11X17-C JUL 26, 2023 - 4:52PM PLOTTED BY: THONE

DRAWN BY	DATE
H.H.	07/10/23
REVIEWED BY	DATE
K.C.	07/10/23
REVISED	DATE

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

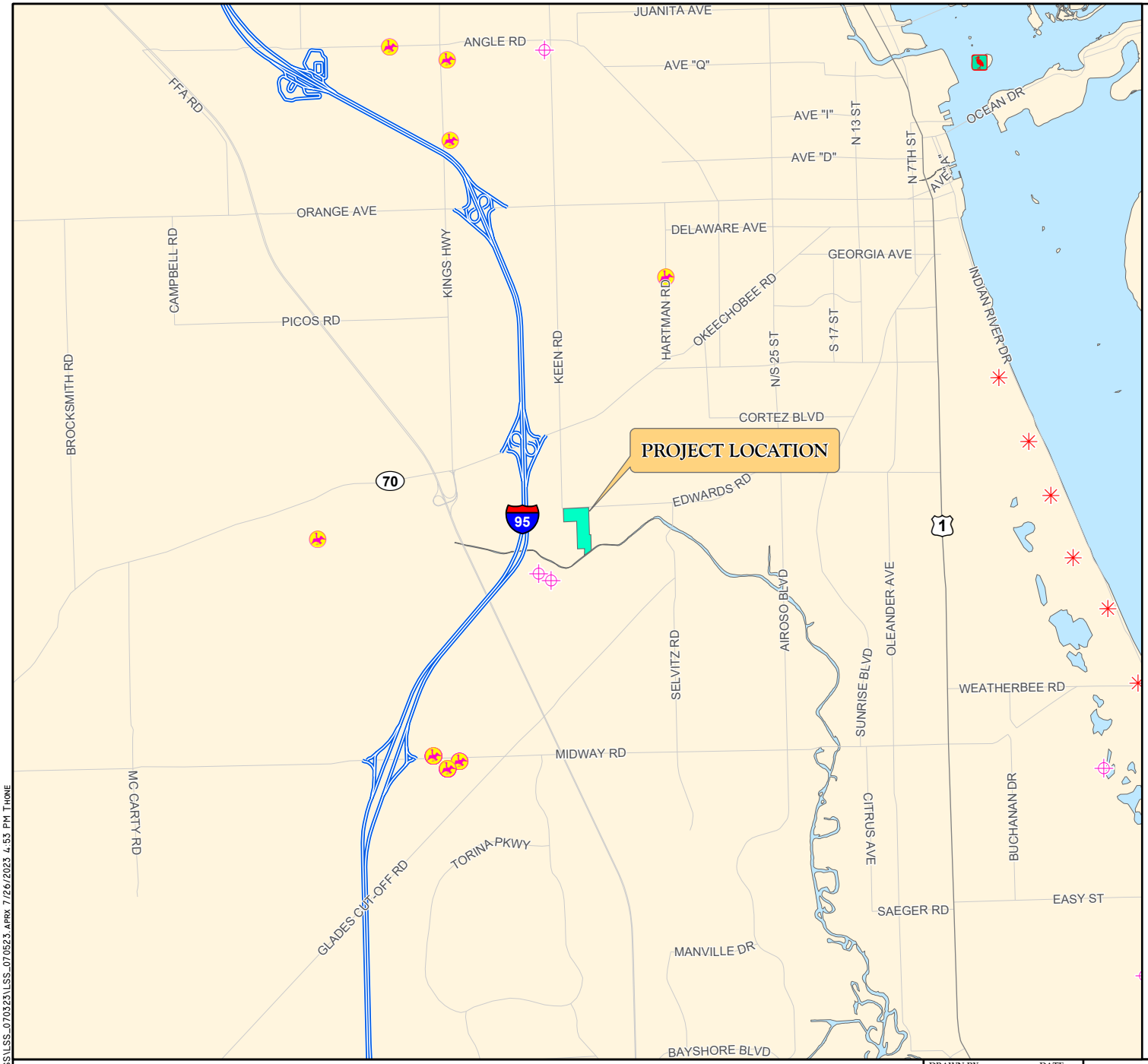
TREASURE COAST EAST
AERIAL WITH FLUCFCS AND WETLANDS MAP

DRAWING No. 23TEG4047

SHEET No. APPENDIX B

APPENDIX C

DOCUMENTED OCCURRENCES OF LISTED SPECIES



LEGEND

- TREASURE COAST EAST
- BALD EAGLE NEST LOCATION
- CRESTED CARACARA LOCATION
- SCRUB JAY LOCATION
- WADING BIRD LOCATION

N
W E
S

0 1 2
Miles

NOTES:

EAGLE NEST LOCATIONS WERE ACQUIRED FROM THE AUDUBON EAGLEWATCH ON FEBRUARY 2023.

CRESTED CARACARA LOCATIONS WERE ACQUIRED FROM THE USFWS ON AUGUST 2022 AND ARE CURRENT TO 2022.

SCRUB JAY LOCATIONS WERE ACQUIRED FROM THE USFWS ON AUGUST 2022.

WADING BIRD ROOKERIES WERE ACQUIRED FROM THE FWCC ON AUGUST 2022 AND ARE CURRENT TO 1999.

APPENDIX C. DOCUMENTED OCCURRENCES OF LISTED SPECIES
TREASURE COAST EAST

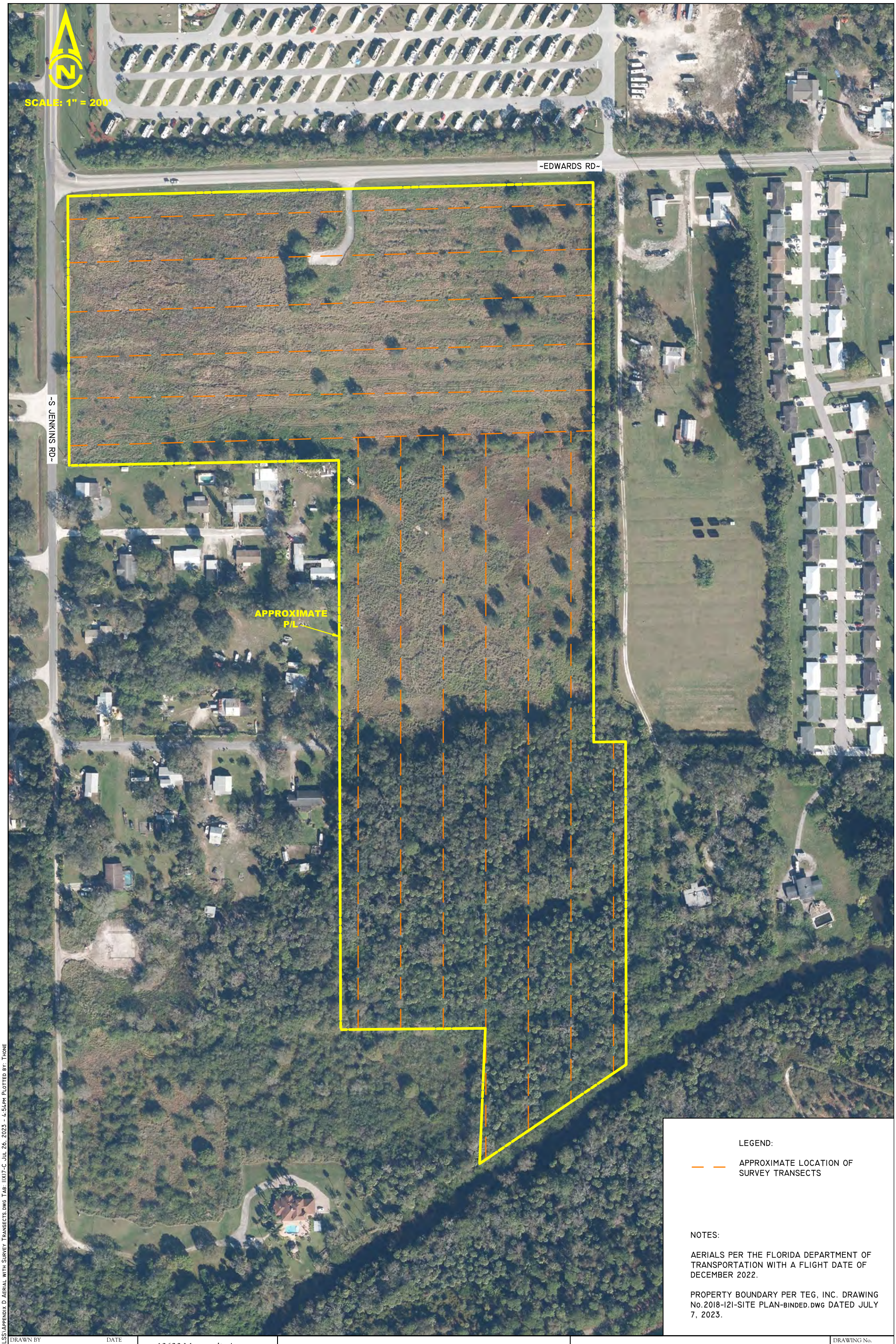
DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
H.S.	7/12/23
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

J:\2023\23TE64047\LSS\LSS_070523\LSS_070523.APRX 7/26/2023 4:53 PM THONE

APPENDIX D

AERIAL WITH SURVEY TRANSECTS



LEGEND:

— — APPROXIMATE LOCATION OF SURVEY TRANSECTS

NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
K.C.	7/12/23
REVISED	DATE

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

TREASURE COAST EAST
AERIAL WITH SURVEY TRANSECTS

DRAWING No. 23TEG4047

SHEET No. APPENDIX D

J:\2023\23TEG4047\LSS\APPENDIX D AERIAL WITH SURVEY TRANSECTS.DWG TAB: 11X17-C JUL 26, 2023 - 4:54PM PLOTTED BY: THONE

APPENDIX E

AERIAL WITH LISTED SPECIES LOCATIONS

N

SCALE: 1" = 200'

~EDWARDS RD~

~S JENKINS RD~

GT-1

GT-3

GT-2

APPROXIMATE P/L

LEGEND:

GT-1 APPROXIMATE LOCATION OF GOPHER TORTOISE BURROW (TYP.)

NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

J:\2023\23TEG4047\LSS\APPENDIX E AERIAL WITH LISTED SPECIES LOCATIONS.DWG TAB: 11X17-C JUL 26, 2023 - 4:54PM PLOTTED BY: THONE

DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
K.C.	7/12/23
REVISED	DATE

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

Consulting Ecologists PASSARELLA & ASSOCIATES INC

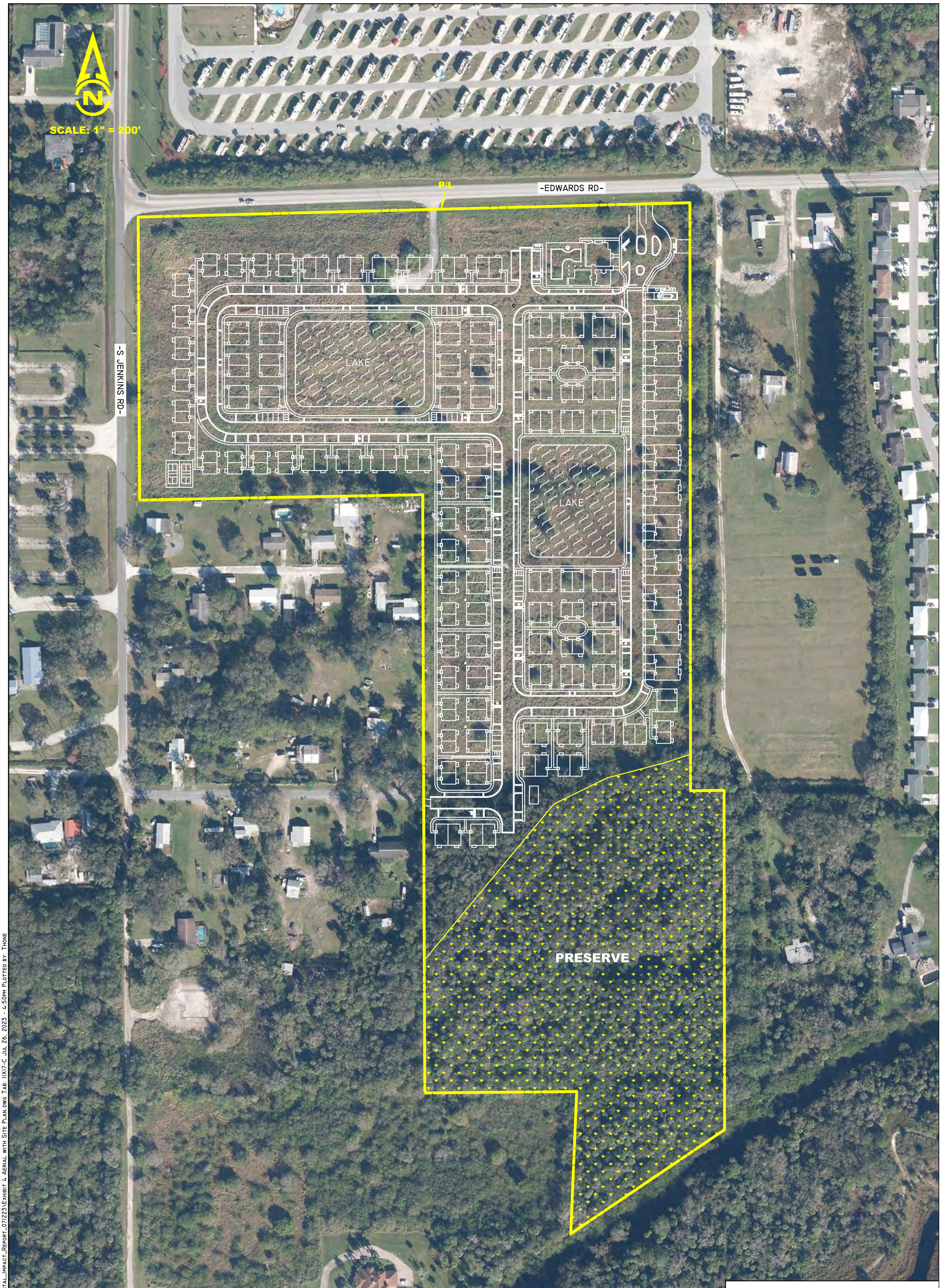
TREASURE COAST EAST
AERIAL WITH LISTED SPECIES LOCATIONS

DRAWING No. 23TEG4047

SHEET No. APPENDIX E

EXHIBIT 4

AERIAL WITH SITE PLAN



NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

DRAWN BY	T.S.
DATE	7/14/23
REVIEWED BY	K.C.
DATE	7/14/23
REVISED	
DATE	

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

TREASURE COAST EAST
AERIAL WITH SITE PLAN

DRAWING No. 23TEG4047

SHEET No. EXHIBIT 4

J:\2023\23TEG4047\Environmental_Impact_Report\Environmental_Impact_Report_071223\Exhibit 4 Aerial with Site Plan.dwg Tab: 11X17-C Jul 26, 2023 - 4:50pm Plotted by: Thone

EXHIBIT 5

SFWMD ERP No. 56-02352-P

South Florida Water Management District
Individual Environmental Resource Permit No. 56-02352-P
Date Issued: December 11, 2015
Modified On: December 16, 2019

Permittee: Mariner Cove Builders LLC
1400 E Oakland Park Blvd Suite 103
Ft Lauderdale, FL 33334

Project: Mariner Cove

Application No. 191202-2401

Location: St Lucie County, See Exhibit 1

Your application for an Individual Environmental Resource Permit is approved. This action is taken based on Chapter 373, Part IV, of Florida Statutes (F.S.) and the rules in Chapter 62-330, Florida Administrative Code (F.A.C.). Unless otherwise stated, this permit constitutes certification of compliance with state water quality standards under section 401 of the Clean Water Act, 33 U.S.C. 1341, and a finding of consistency with the Florida Coastal Management Program. Please read this entire agency action thoroughly and understand its contents.

This permit is subject to:

- Not receiving a filed request for a Chapter 120, F.S., administrative hearing.
- The attached General Conditions for Environmental Resource Permits.
- The attached Special Conditions.
- All referenced Exhibits.

All documents are available online through the District's ePermitting site at www.sfwmd.gov/ePermitting.

If you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

The District does not publish notices of action. If you wish to limit the time within which a person may request an administrative hearing regarding this action, you are encouraged to publish, at your own expense, a notice of agency action in the legal advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Legal requirements and instructions for publishing a notice of agency action, as well as a noticing format that can be used, are available upon request. If you publish a notice of agency action, please send a copy of the affidavit of publication provided by the newspaper to the District's West Palm Beach office for retention in this file.

If you have any questions regarding your permit or need any other information, please call us at 1-800-432-2045 or email ERP@sfwmd.gov.

Gary R. Priest, P.E.
Section Leader, Environmental Resource Bureau

South Florida Water Management District
Individual Environmental Resource Permit No. 56-02352-P

Date Issued: December 11, 2015 **Expiration Date:** December 13, 2024

Modified On: December 16, 2019

Project Name: Mariner Cove

Permittee: Mariner Cove Builders LLC
1400 E Oakland Park Blvd Suite 103
Ft Lauderdale, FL 33334

Operating Entity: Mariner Cove Builders LLC
1400 E Oakland Park Blvd Suite 103
Ft Lauderdale, FL 33334

Location: St Lucie County

Permit Acres: 39.10 acres

Project Land Use: Residential

Special Drainage District: North St Lucie River Water Control District

Water Body Classification: CLASS III

FDEP Water Body ID: 3194A

Conservation Easement to District: No

Sovereign Submerged Lands: No

Project Summary
This Environmental Resource Permit authorizes Construction and Operation of a stormwater management (SWM) system serving 39.10 acres of residential development known as Mariner Cove.

The project consists of multi-family residential buildings with associated parking and roadways. The permitted SWM system consists of roadway catch basins and conveyance directing stormwater runoff to three inconnect lakes that provide water quality treatment and attenuation. The SWM system discharges to a St. Lucie County drainage easement along the eastern property boundary. Please refer to Exhibit 2.0.1 for additional details.

Issuance of this permit constitutes certification of compliance with state water quality standards in accordance with Rule 62-330.062, F.A.C..

Site Description
The site is located in St. Lucie County at the intersection of Jenkins and Edwards Roads. Please refer to Exhibit 1.0 Location Map.

There are no SWM facilities constructed within the project site. Please refer to the Permit Modification History section. The project site was previously used as a citrus grove and contains furrows to promote drainage. The southern portion of the project site is heavily wooded.

For information on wetland and surface water impacts, please see the Wetlands and Other Surface Water section of this permit.

Ownership, Operation and Maintenance
Perpetual operation and maintenance of the stormwater management system will be the responsibility of Mariner Cove Builders, LLC. Upon conveyance or division of ownership or control of the property or the system, the permittee must notify the Agency in writing within 30 days, and the new owner must request transfer of the permit.

Current Authorization (Application No. 191202-2401)
The purpose of this request is to authorize a five (5) year extension of Permit No. 56-02352-P, Application No. 150313-19, pursuant to Rule 40E-4.321(3) F.A.C., for 39.10 acres of residential development known as Mariner Cove. The Project Work Schedule is also being modified.

Permit Modification History
Please see Exhibit No. 5.0 for a list of authorizations that constitute this permit.

Engineering Evaluation:

Land Use
Please refer to Exhibit 2.1.

Water Quality
The project provides the required water quality treatment volume based on 2.5 inches times the percent impervious over the controlled basin area.

The project includes implementation of a Stormwater Pollution Prevention Plan (Exhibit 2.0.1) as additional reasonable assurance of compliance with water quality criteria during construction and operation.

Discharge
The project is located within the North St. Lucie River Water Control District and has an allowable discharge of two (2) inches per day over the controlled basin area. As found in Water Quantity Data Table, the project discharge is within the allowable limit for the area.

Road Design
As found in Water Quantity Data Table and the attached Exhibit 2.0.1, minimum road center line elevations have been set at or above the calculated design storm flood elevation.

Perimeter Berm
As found in Water Quantity Data Table and the attached Exhibit 2.0.1, minimum perimeter berm elevations have been set at or above the calculated design storm flood elevation.

Finished Floors
As found in Water Quantity Data Table and the attached Exhibit 2.0.1, minimum finished floor elevations have been set at or above the calculated design storm flood elevation.

Flood Plain/Compensating Storage
The permittee's engineer previously submitted calculations demonstrating that the project will meet the compensating storage requirements for the Ten Mile Creek floodplain. Refer to the ePermitting file for additional information.

Certification, Operation, and Maintenance
Pursuant to Chapter 62-330.310, F.A.C., Individual Permits will not be converted from the construction phase to the operation phase until construction completion certification of the project is submitted to and accepted by the District. This includes compliance with all permit conditions, except for any long term maintenance and monitoring requirements. It is suggested that the

permittee retain the services of an appropriate professional registered in the State of Florida for periodic observation of construction of the project.

For projects permitted with an operating entity that is different from the permittee, it should be noted that until the construction completion certification is accepted by the District and the permit is transferred to an acceptable operating entity pursuant to Sections 12.1-12.3 of the Applicant's Handbook Volume I and Section 62-330.310, F.A.C., the permittee is liable for operation and maintenance in compliance with the terms and conditions of this permit.

In accordance with Section 373.416(2), F.S., unless revoked or abandoned, all SWM systems and works permitted under Part IV of Chapter 373, F.S., must be operated and maintained in perpetuity.

The efficiency of SWM systems, dams, impoundments, and most other project components will decrease over time without periodic maintenance. The operation and maintenance entity must perform periodic inspections to identify if there are any deficiencies in structural integrity, degradation due to insufficient maintenance, or improper operation of projects that may endanger public health, safety, or welfare, or the water resources. If deficiencies are found, the operation and maintenance entity is responsible for correcting the deficiencies in a timely manner to prevent compromises to flood protection and water quality. See Section 12.4 of the Applicant's Handbook Volume I for Minimum Operation and Maintenance Standards.

Engineering Evaluation Tables:

Land Use

Basin	Land Type	Area (ac)	% of Total Basin
Site	Building Coverage	4.37	16.05
	Impervious	6.03	22.15
	Lake	2.64	9.70
	Pervious	14.18	52.09
	Total:	27.22	100%

Water Quality

Basin	Treatment Type	Treatment System	Volume Required (ac-ft)	Volume Provided (ac-ft)	Area (ac)	Overflow Elevation (ft NGVD29)
Site	Treatment	WET DETENTION	2.26	2.26	2.64	15.60

Water Quantity

Basin	Elevation Type	Storm Event (Yr/Day)	Precipitation Depth (in)	Peak Stage (ft NGVD29)	Min. EL (ft NGVD29)	Peak Discharge Rate (cfs)	Allowable Discharge Rate (cfs)
Site	Finished Floor	100Y3D	11.00	16.83	17.00	N/A	N/A
	Perimeter Berm/ Discharge	10YR3D	8.50	15.30	16.08	3.70	3.70
	Road Crown	10YR1D	6.00	14.58	16.08	N/A	N/A

Bleeder

Basin	Control EL (ft NGVD29)	Structure #	Structure Type	Count	Type	Dia.(in)	Invert EL (ft NGVD29)	Receiving Body
Site	12.00	CS#1	Discharge	1	Circular Orifice	3.75	12.00	SLC Road Ditch

Weir

Basin	Control EL (ft NGVD29)	Structure #	Structure Type	Count	Type	Width (in)	Height (in)	Crest EL (ft NGVD29)	Receiving Body
Site	12.00	CS#1	Discharge	1	V-Notch	54.00	14.04	14.43	SLC Road Ditch

Environmental Evaluation:

Wetlands and Other Surface Waters
The site contains 8.20 acres of wetlands adjacent to Ten Mile Creek, of which, 2.25 acres consist of freshwater marsh and 5.95 acres consist of a riverine swamp. The proposed project is to preserve the existing wetlands and 2.5 acres of uplands adjacent to the preserved wetlands to provide a buffer. The buffer is an average 25', minimum 15' wide Therefore, no impacts are proposed and no mitigation is required.

The proposed project will preserve the 10.7 acres of wetlands and associated buffer through a conservation easement (refer to Exhibit No. 3.1) dedicated to the District and a maintenance & monitoring plan (refer to the Wetland Monitoring and Maintenance Plan - Exhibit No. 3.0).

Monitoring/Maintenance
The proposed preserve plan consists of the preservation of 8.2 acres of wetlands and 2.5 acres of upland buffer area. The wetland preserve area and associated buffer area will be monitored and maintained as indicated on Exhibit No. 3.0 (Wetland Monitoring and Maintenance Plan) & Special Condition Nos. 19 & 21. These preserved areas will be subjected to regular maintenance activities tailored for the control of exotic and nuisance plant species and a 5 year monitoring program to ensure a trend toward success. The 2.5-acre upland buffer zone for the preserved wetland areas onsite were designed as set forth in the Basis of Review chapter 4.2.7 to address secondary impacts to the on-site wetland conservation areas.

Legal Issues
The applicant has submitted draft Articles of Incorporation and Declaration of Condominium for the Mariner Cove Condominium Association, Inc., which will be the operating entity of the surface water management system and will be responsible for the monitoring and maintenance of the on-site wetland and upland buffer preserve areas. These documents are included in the permit file.

As an assurance that the wetlands will be preserved in perpetuity, the applicant has provided a copy of the Monitoring and Management Plan for the proposed natural areas, included as Exhibit No. 3.0. The preserve and associated buffer areas shall be maintained in their natural condition as indicated by Special Condition No. 16 of this permit. To accomplish this, the applicant proposes to place the onsite wetland and upland buffer preserve areas under conservation easement dedication to the District. The draft language for conservation easement over the wetland and upland preserve areas was provided by the applicant and is included as Exhibit No. 3.1. As indicated by Special Condition Nos. 24 & 26 the applicant is required to record a conservation easement in substantial conformance with Exhibit Nos. 3.1 & 3.3 within sixty (60) days after construction permit issuance and prior to the commencement of construction activities.

Sovereignty Submerged Lands
On October 27, 2005, The Florida Department of Environmental Protection, Division of State Lands, Bureau of Survey and Mapping, Title and Land Records Section commented that the State holds title to the lands lying below the Ordinary High Water Line (OHWL) at this site (refer to Exhibit No. 3.2). The proposed work is not located within and is not anticipated to adversely affect sovereign submerged lands. Any future activities proposed within State owned lands will require a modification of this permit and an authorization for the use of Sovereign Submerged Lands in accordance with the criteria in effect at the time of permit modification as required by Special Condition No. 27.

Environmental Evaluation Tables:
Summary

Wetlands and Other Surface Waters:	8.2	acres
Direct Impacts:	0	acres
Secondary impacts:	0	acres
Net UMAM Functional Loss/ Gain:	0	units
Total Onsite Mitigation Area:	8.2	acres
Total Offsite Mitigation Area:	0	acres
Mitigation Provided in Permit No.:		

Mariner Cove

UMAM Mitigation and Preservation

ID	Acres	Action	Existing Community Description	Proposed Community Description	Current or Without Preserve Score	With Project Score	Time Lag Years.	Risk	P. A. F.	UMAM Gain
01	2.25	Preservation	Freshwater Marshes	Freshwater Marshes						0.000
02	5.95	Preservation	Stream And Lake Swamps (Bottomland)	Stream and Lake Swamps						0.000
Total:	**8.2**									**0.000**

Related Concerns:

Water Use Permit Status
Water Use Permit No. 56-02416-W was issued for the project but has now expired. The applicant will be required to submit a water use application for landscape irrigation.

The expiration date for Water Use Permit No. 56-03454-W for dewatering was extended until December 11, 2021.

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation.

Historical/Archeological Resources
On October 14, 2005, the District received a letter from the Florida Department of State, Division of Historical Resources (DHR) requesting the applicant to perform a systematic, professional archaeological and historical survey. The applicant has performed the requested archaeological and historical survey for the property (prepared by Archaeological Consultants, Inc., dated December 2005). On March 31, 2006, the DHR issued a follow-up letter that stated that no significant archaeological or historical resources are recorded within the project area and due to the location and/or nature of the project it is unlikely that any such site will be affected. Reference the permit file for DHR letters and archaeological and historical survey. This permit does not release the permittee from compliance with any other agencies' requirements in the event that historical and/or archaeological resources are found on the site (refer to Special Condition No. 25).

Water and Wastewater Service
Fort Pierce Utilities Authority.

General Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, Florida Administrative Code (F.A.C.). Any deviations that are not so authorized shall subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.

2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.

3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the "State of Florida Erosion and Sediment Control Designer and Reviewer Manual" (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the "Florida Stormwater Erosion and Sedimentation Control Inspector's Manual" (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice" indicating the expected start and completion dates. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.

5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.

6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
   a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex- "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit"[Form 62-330.310(3)]; or
   b. For all other activities- "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
   c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

7. If the final operation and maintenance entity is a third party:
   a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as- built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Applicant's Handbook Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
   b. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form

62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:
   a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
   b. Convey to the permittee or create in the permittee any interest in real property;
   c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
   d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the Agency in writing:
    a. Immediately if any previously submitted information is discovered to be inaccurate; and
    b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule

62-330.201, F.A.C., provides otherwise.

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

Special Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

1. The construction authorization for this permit shall expire on the date shown on page 2.

2. Operation of the surface water management system shall be the responsibility of Mariner Cove Builders, LLC. Within one year of permit issuance or concurrent with the engineering certification of construction completion, whichever comes first, the permittee shall submit a copy of the recorded deed restrictions (or declaration of condominium, if applicable), a copy of the filed articles of incorporation, and a copy of the certificate of incorporation for the association.

3. Discharge Facilities: through previously authorized facilities.

4. The permittee shall be responsible for the correction of any erosion, shoaling or water quality problems that result from the construction or operation of the surface water management system.

5. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.

6. The District reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.

7. Lake side slopes shall be no steeper than 4:1 (horizontal:vertical) to a depth of two feet below the control elevation. Side slopes shall be nurtured or planted from 2 feet below to 1 foot above control elevation to insure vegetative growth, unless shown on the plans.

8. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.

9. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on or with the certification report.

10. The permittee shall provide routine maintenance of all of the components of the surface water management system in order to remove all trapped sediments/debris. All materials shall be properly disposed of as required by law. Failure to properly maintain the system may result in adverse flooding conditions.

11. This permit is issued based on the applicant's submitted information which reasonably demonstrates that adverse water resource related impacts will not be caused by the completed permit activity. Should any adverse impacts caused by the completed surface water management system occur, the District will require the permittee to provide appropriate mitigation to the District or other impacted party. The District will require the permittee to

modify the surface water management system, if necessary, to eliminate the cause of the adverse impacts.

12. Minimum road crown elevation: Basin: Site - 16.08 feet NGVD.

13. Prior to the commencement of construction, the permittee shall conduct a pre-construction meeting with field representatives, contractors and District staff. The purpose of the meeting will be to discuss construction methods and sequencing for the type and location of turbidity and erosion controls to be implemented during construction, mobilization and staging of contractor equipment and wetland/buffer protection methods with the permittee and contractors. The permittee shall contact District Environmental Resource Compliance staff from the Okeechobee Service Center at (633)462-5260 to schedule the pre-construction meeting.

14. Permanent physical markers designating the preserve status of the wetland preservation areas and buffer zones shall be placed as shown on Exhibit No. 2.0. The markers shall be maintained in perpetuity.

15. The wetland conservation areas and upland buffer zones shown on Exhibit Nos. 2 & 3 may in no way be altered from their natural or permitted state. Activities prohibited within the conservation areas include, but are not limited to: construction or placing of buildings on or above the ground; dumping or placing soil or other substances such as trash; removal or destruction of trees, shrubs, or other vegetation - with the exception of exotic vegetation removal; excavation, dredging, or removal of soil materials; diking or fencing; and any other activities detrimental to drainage, flood control, water conservation, erosion control, or fish and wildlife habitat conservation or preservation.

16. Wetland preservation/mitigation areas, upland buffer zones and/or upland preservation areas shall be dedicated as conservation and common areas in the deed restrictions & conservation easements as well as on the plat if the project will be platted. Restrictions for use of the conservation/ common areas shall stipulate: The wetland preservation/mitigation areas, upland buffer zones, and/or upland preservation areas are hereby dedicated as conservation and common areas. The conservation/common areas shall be the perpetual responsibility of the Mariner's Cove HOA and may in no way be altered from their natural or permitted state as documented in Permit No. 56-02352-P with the exception of permitted restoration activities. Activities prohibited within the conservation areas include, but are not limited to: construction or placing soil or other substances such as trash; removal or destruction of trees, shrubs, or other vegetation - with the exception of exotic/nuisance vegetation removal; excavation, dredging, or removal of soil material; diking or fencing; and any other activities detrimental to drainage, flood control, water conservation, erosion control, or fish and wildlife habitat conservation or preservation. Copies of recorded documents shall be submitted to the District's Environmental Resource Compliance staff concurrently with engineering certification of construction completion.

17. The existing upland areas of the project site did not contain evidence of endangered species, threatened species and/or species of special concern. It shall be the permittee's responsibility to coordinate with the Florida Fish and Wildlife Conservation Commission and/or the U.S. Fish and Wildlife Service for appropriate guidance, recommendations and/or necessary permits to avoid impacts to listed species if located on the site during construction

18. District criteria requires an average 25' wide, minimum 15', buffer of undisturbed upland vegetation shall be maintained between the proposed development and existing wetlands (refer to Exhibit Nos. 2 & 3). Buffers shall be staked and roped and District environmental staff notified for inspection prior to clearing.

19. A monitoring program shall be implemented in accordance with Exhibit No. 3.0. The monitoring program shall extend for a period of 5 years with annual reports submitted to District staff. The monitoring of the preservation area shall demonstrate that the coverage of exotic and nuisance plant species shall not exceed 5% of the total cover.

20. A baseline wetland monitoring report for the wetland preservation area shall be submitted in accordance with Exhibit No. 3.0 and the work schedule attached herein.

21. A maintenance program shall be implemented in accordance with Exhibit No. 3.0 for the preserved wetland/restored upland areas on a regular basis to ensure the integrity and viability of those areas as permitted. Maintenance shall be conducted in perpetuity to ensure that the conservation areas are maintained free from Category 1 exotic vegetation (as defined by the Florida Exotic Pest Plant Council at the time of permit issuance) immediately following a maintenance activity. Maintenance in perpetuity shall also insure that conservation areas, including buffers, maintain the species and coverage of native, desirable vegetation specified in the permit. Coverage of exotic and nuisance plant species shall not exceed 5% of total cover between maintenance activities. In addition, the permittee shall manage the conservation areas such that exotic/nuisance plant species do not dominate any one section of those areas.

22. The District reserves the right to require remedial measures to be taken by the permittee if monitoring or other information demonstrates that adverse impacts to onsite or offsite wetlands, upland conservation areas or buffers, or other surface waters have occurred due to project related activities.

23. Silt screens, hay bales, turbidity screens/barriers or other such sediment control measures shall be utilized during construction. The selected sediment control measure shall be installed landward of the upland buffer zones around all protected wetlands and shall be properly "trenched" etc, in accordance with Exhibit No. 2.0. All areas shall be stabilized and vegetated immediately after construction to prevent erosion into the wetlands and upland buffer zones.

24. Activities associated with the implementation of the preservation monitoring and maintenance plan shall be completed in accordance with the work schedule attached herein. Any deviation from these time frames will require prior approval from the District's Environmental Resource Compliance staff. Such requests must be made in writing and shall include (1) reason for the change, (2) proposed start/finish and/or completion dates; and (3) progress report on the status of the project development or mitigation effort.

25. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee,

should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

26. Prior to the commencement of construction and in accordance with the work schedule in Exhibit No. 3.3, the permittee shall submit two certified copies of the recorded conservation easement for the preserve area and associated buffers. The data shall be supplied in a digital ESRI Geodatabase (mdb), ESRI Shapefile (shp) or AutoCAD Drawing Interchange (dxf) file format using Florida State Plane coordinate system, East Zone (3601), Datum NAD83, HARN with the map units in feet. This data shall be submitted as a paper map depicting the Conservation Easement over the best available satellite or aerial imagery. This data shall also reside on a CD or floppy disk and be submitted to the District's Environmental Resource Compliance Division in the service area office where the application was submitted. The recorded easement shall be in substantial conformance with Exhibit No. 3.1. Any proposed modifications to the approved form must receive prior written consent from the District. The easement must be free of encumbrances or interests in the easement which the District determines are contrary to the intent of the easement. In the event it is later determined that there are encumbrances or interests in the easement which the District determines are contrary to the intent of the easement, the permittee shall be required to provide release or subordination of such encumbrances or interests.

27. The proposed project does not include any work within Sovereign Submerged Lands (SSL) refer to Exhibit No. 3.2. Any future activities that are proposed below OHWL of 10 Mile Creek will require a modification of this permit and an authorization for the use of SSL in accordance with the criteria in effect at the time of permit modification.

Project Work Schedule for Permit No. 56-02352-P

The following activities are requirements of this Permit and shall be completed in accordance with the Project Work Schedule below. Please refer to both General and Special Conditions for more information. Any deviation from these time frames will require prior approval from the District's Environmental Resources Bureau and may require a minor modification to this permit. Such requests must be made in writing and shall include: (1) reason for the change, (2) proposed start/finish and/or completion dates, and (3) progress report on the status of the project.

Condition No.	Date Added	Description	Due Date	Date Satisfied
GC 4	12/16/2019	Construction Commencement Notice	48 hours prior to Construction	
GC 6	12/16/2019	Submit Certification	30 Days After Construction Completion	
GC 7	12/16/2019	Submit Operation Entity Documentation	Within 30 days of Certification	
SC 13	12/16/2019	Pre-Construction Meeting	Prior to Construction	
SC 14	12/16/2019	Install Preserve Signs	30 Days After Construction Completion	
SC 19	12/16/2019	Submit Monitoring Reports 1	Annually for 5 years	
SC 19		Submit Monitoring Reports 2	1 year after previous submission	
SC 19		Submit Monitoring Reports 3	1 year after previous submission	
SC 19		Submit Monitoring Reports 4	1 year after previous submission	
SC 19		Submit Monitoring Reports 5	1 year after previous submission	
SC 20	12/16/2019	Submit Baseline Monitoring Report	01/10/2016	
SC 26	07/11/2006	Submit Recorded Conservation Easement	07/24/2006	07/11/2006

GC = General Condition

SC = Special Condition

Distribution List

Arnaud Roux, EW Consultants, Inc

City of Port St Lucie - Planning and Zoning Division

City of Port St Lucie - Public Works

US Army Corps of Engineers - Permit Section

St. Lucie County Engineer

St. Lucie County Planning and Development Services

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website at http://my.sfwmd.gov/ePermitting and searching under this application number 191202-2401.

Exhibit 1.0 Location Map

Exhibit 2.0 SWM Plans

Exhibit 2.0.1 SWM Plans

Exhibit 2.1 Calculations

Exhibit 3.0 Monitoring and Maintenance Plan

Exhibit 3.1 Conservation Easement

Exhibit 3.2 Title Determination

Exhibit 5.0 Permit History

NOTICE OF RIGHTS

As required by Sections 120.569 and 120.60(3), Fla. Stat., the following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all of the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a SFWMD decision which affects or may affect their substantial interests shall file a petition for hearing with the Office of the District Clerk of the SFWMD, in accordance with the filing instructions set forth herein, within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: (1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or (2) within 14 days of service of an Administrative Order pursuant to Section 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

If the District takes final agency action which materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional Rule 28-106.111, Fla. Admin. Code, point of entry.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Fla. Stat., shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

FILING INSTRUCTIONS

A petition for administrative hearing must be filed with the Office of the District Clerk of the SFWMD. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at SFWMD headquarters in West Palm Beach, Florida. The District's normal business hours are 8:00 a.m. – 5:00 p.m., excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed filed as of 8:00 a.m. on the next regular business day.

Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, 3301 Gun Club Road, West Palm Beach, Florida 33406.
- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the SFWMD's security desk does not constitute filing. It will be necessary to request that the SFWMD's security officer contact the Office of the District Clerk. An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed.

INITIATION OF ADMINISTRATIVE HEARING

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Fla. Stat., and Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, SFWMD file number or any other SFWMD identification number, if known.
2. The name, address, any email address, any facsimile number, and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

MEDIATION

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401–.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Section 120.68, Fla. Stat., and in accordance with Florida Rule of Appellate Procedure 9.110, a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal with the Office of the District Clerk of the SFWMD in accordance with the filing instructions setforth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the clerk of the appropriate district court of appeal.

Attn: City of Fort Pierce, Planning Department
100 N. US Hwy 1
Fort Pierce, FL 34950

August 01, 2023

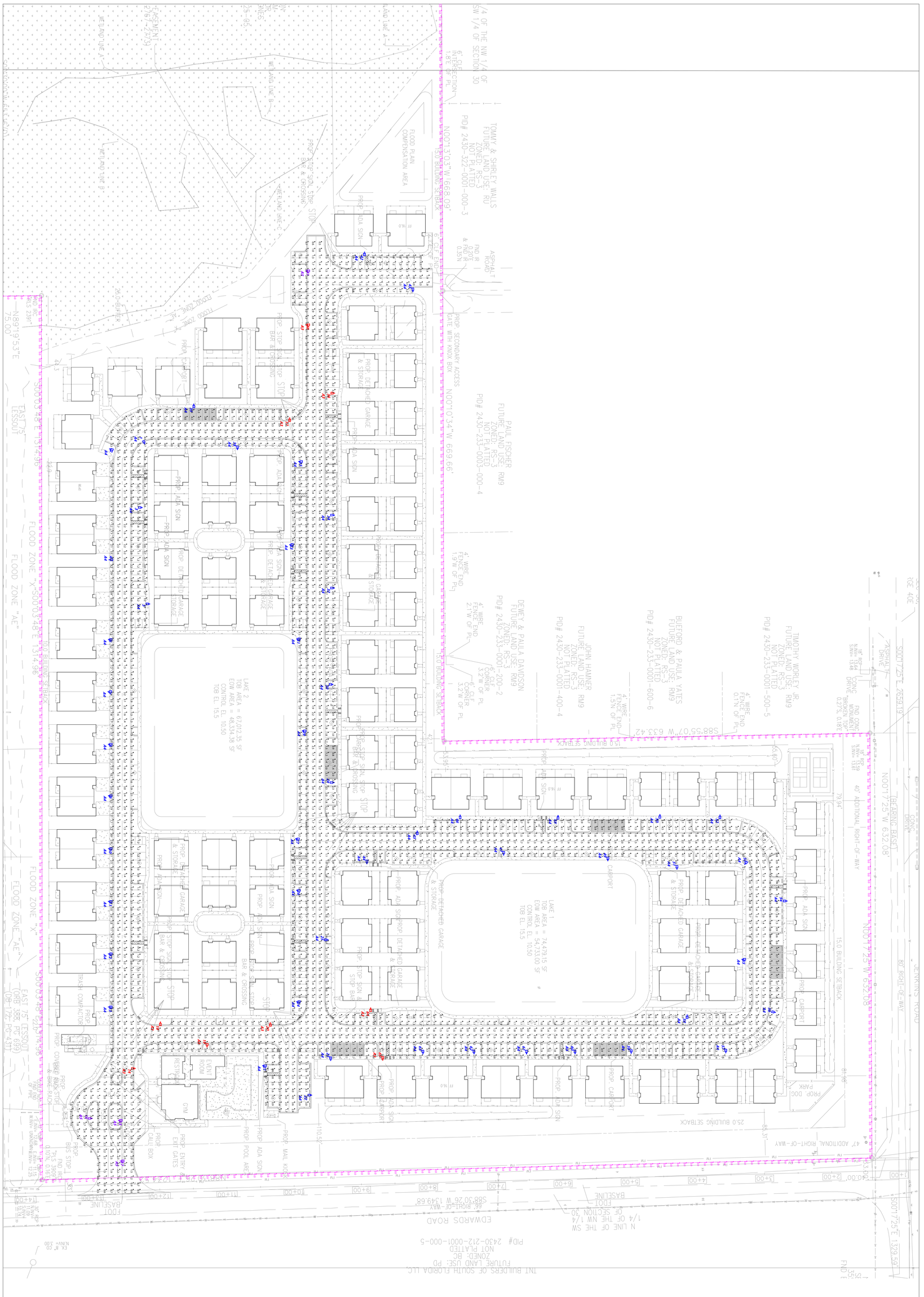
Re: Viva Communities at Treasure Coast East

Beach / Dune Protection Plan

Beach / Dune protection plan not applicable.

Francarlos Rivera, AIA, CGC
Senior Project Manager
TEG Developers, LLC

Phone: 813.853.3077
Email: frivera@tegdevelopers.com


Scale: 1 inch= 60 Ft.
LAKE 2
TOB AREA = 67,012.35 SF
EOW AREA = 48,334.38 SF
CONTROL EL 10.50
TOB EL 15.5
LAKE 1
TOB AREA = 74,478.15 SF
EOW AREA = 54,733.00 SF
CONTROL EL 10.50
TOB EL 15.5
PROP. DETACHED GARAGE & STORAGE
PROP. ADA SIGN
PROP. STOP SIGN, STOP BAR & CROSSING
PROP. AIRPORT
PROP. CARPORT
PROP. DOG PARK
PROP. COMMUNITY BUILDING
PROP. POOL AREA
PROP. MAIL KIOSK
PROP. BUS STOP
PROP. MAIL BOX
PROP. ENTRY GATES
PROP. SECONDARY ACCESS GATE WITH KNOX BOX
PROP. TOP SIGN, STOP BAR & CROSSING
FLOOD ZONE "AE"
FLOOD ZONE "X"
FLOOD PLAIN COMPENSATION AREA
WETLAND LINE A
WETLAND LINE B
WETLAND LINE C
WETLAND LINE D
WETLAND LINE E
WETLAND LINE F
WETLAND LINE G
WETLAND LINE H
WETLAND LINE I
WETLAND LINE J
WETLAND LINE K
WETLAND LINE L
WETLAND LINE M
WETLAND LINE N
WETLAND LINE O
WETLAND LINE P
WETLAND LINE Q
WETLAND LINE R
WETLAND LINE S
WETLAND LINE T
WETLAND LINE U
WETLAND LINE V
WETLAND LINE W
WETLAND LINE X
WETLAND LINE Y
WETLAND LINE Z
EASEMENT 2767-2703
EASEMENT 2767-2703
EASEMENT 2767-2703

PLOT TO 24"X36"PAG

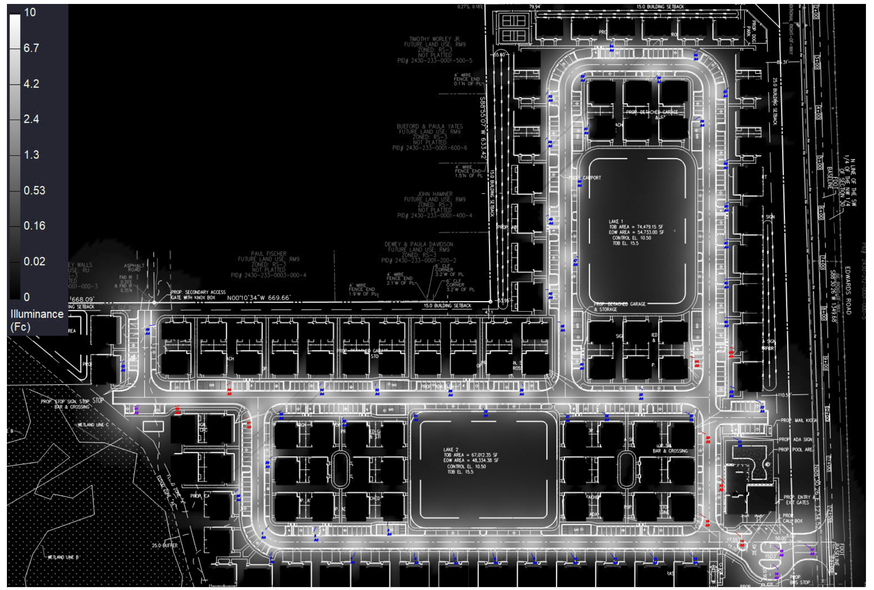
Calculation Summary											
Label	**CalcType**	**Units**	**Avg**	**Max**	**Min**	**Avg/Min**	**Max/Min**	**Description**	**PtSpcLr**	**PtSpcTb**	**Meter Type**
Property Line	Illuminance	Fc	0.01	0.8	0.0	N.A.	N.A.	Readings taken at grade	10	N.A.	Horizontal
Site Lighting	Illuminance	Fc	2.09	5.0	0.4	5.23	12.50	Readings taken at grade	10	10	Horizontal

Luminaire Tag Summary	
Tag	**Qty**
A3	9
A4	52
A5	4

Luminaire Schedule			All quotes/orders generated from this layout must be forwarded to the Local Rep Agency								
Symbol	**Qty**	**Tag**	**Label**	**Arrangement**	**LLF**	**Lum. Lumens**	**Arr. Lum. Lumens**	**Description**	**Lum. Watts**	**Arr. Watts**	**Total Watts**	**BUG Rating**
	4	A5	ALEDM5TN_78w	Single	1.000	11825	11825	ALEDM5TN	76.6	76.6	306.4	B4-U0-G2
	52	A4	ALEDM4TN_78w	Single	1.000	10750	10750	POLE MOUNT	74.8	74.8	3889.6	B1-U0-G3
	9	A3	ALEDM3TN_78w	Single	1.000	10765	10765	POLE MOUNT	76	76	684	B1-U0-G2

Expanded Luminaire Location Summary

LumNo	Tag	X	Y	MTG HT	Orient	Tilt
1	A4	1360.305	513.661	22.5	200.409	0
2	A4	1368.273	462.344	22.5	74.058	0
3	A4	1455.308	509.474	22.5	270	0
4	A4	1532.982	461.692	22.5	90.382	0
5	A4	1598.732	520.628	22.5	270.551	0
6	A4	1651.66	460.73	22.5	90	0
7	A4	1729.246	460.021	22.5	90	0
8	A4	1807.54	460.73	22.5	90	0
9	A4	1884.063	460.73	22.5	90	0
10	A4	1962.711	460.73	22.5	90	0
11	A4	2041.359	460.73	22.5	90	0
12	A4	2119.299	460.73	22.5	90	0
13	A4	2198.302	460.73	22.5	90	0
14	A3	2289.705	499.179	22.5	270	0
15	A5	2366.936	475.608	22.5	90	0
16	A5	2364.085	435.055	22.5	269.349	0
17	A5	2427.389	478.372	22.5	90	0
18	A3	2221.303	537.279	22.5	359.724	0
19	A3	2257.301	606.739	22.5	180	0
20	A3	2222.153	700.788	22.5	0.389	0
21	A4	2285.669	690.105	22.5	90	0
22	A4	2329.433	761.474	22.5	270.143	0
23	A4	2277.212	790.528	22.5	179.776	0
24	A4	2190.498	740.652	22.5	90	0
25	A4	2098.37	786.188	22.5	269.345	0
26	A4	2024.698	740.653	22.5	90	0
27	A4	1948.175	739.235	22.5	90	0
28	A4	1864.425	795.015	22.5	269.578	0
29	A4	1787.558	749.126	22.5	90	0
30	A4	1718.475	793.245	22.5	270	0
31	A4	1650.809	740.612	22.5	90	0
32	A4	1574.995	795.37	22.5	270	0
33	A4	1510.517	730.35	22.5	90	0
34	A4	1466.587	795.37	22.5	270	0
35	A4	1386.875	743.812	22.5	90	0
36	A3	1285.198	795.724	22.5	270	0
37	A3	1322.48	729.545	22.5	359.483	0
38	A4	1368.37	651.966	22.5	180.29	0
39	A4	1302.116	586.979	22.5	0.255	0
40	A3	1183.489	754.504	22.5	90	0
41	A5	1103.166	754.505	22.5	90	0
42	A4	1075.873	840.845	22.5	359.293	0
43	A4	1133.525	912.844	22.5	180.32	0
44	A4	1984.418	844.483	22.5	180.264	0
45	A4	1937.253	919.307	22.5	359.797	0
46	A4	1913.446	983.106	22.5	0.924	0
47	A4	1971.588	1047.942	22.5	180.6	0
48	A4	1914.186	1128.835	22.5	359.17	0
49	A4	1979.933	1202.868	22.5	179.794	0
50	A4	1912.735	1280.304	22.5	359.537	0
51	A4	1992.629	1305.713	22.5	179.858	0
52	A4	1913.431	1369.647	22.5	359.132	0
53	A4	1985.615	1406.938	22.5	140.477	0
54	A4	2040.623	1468.776	22.5	269.235	0
55	A4	2127.435	1403.076	22.5	90	0
56	A4	2206.206	1451.442	22.5	257.823	0
57	A4	2265.786	1378.348	22.5	180.403	0
58	A4	2210.728	1320.882	22.5	359.231	0
59	A4	2266.467	1237.682	22.5	180.372	0
60	A4	2267.374	1154.04	22.5	179.454	0
61	A4	2267.374	1081.938	22.5	179.454	0
62	A4	2267.374	1003.715	22.5	179.454	0
63	A4	2267.374	927.759	22.5	179.454	0
64	A3	2200.427	850.004	22.5	0.363	0
65	A3	2276.748	868.012	22.5	180.442	0
Total Quantity: 65						



*Note: Poles are 20ft mounted on 2.5ft concrete base by others.

NOTES:
* The light loss factor (LLF) is a product of many variables. RAB's standard is to use the initial 1.0 LLF in accordance with most municipal lighting ordinance light trespass requirements, unless otherwise noted.

* Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.

* The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of RAB Lighting Inc.

* Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.

* RAB disclaims all responsibility for the suitability of existing or proposed poles and bases to support proposed fixtures. This is the owner's, installer's and/or end-user's responsibility based on the weight and effective projected area ("EPA") of the proposed fixtures and the owner's site and soil conditions, wind zone, and many other factors. A professional engineer licensed to practice in the state the site is located should be engaged to assist in this determination.

* The landscape material shown hereon is conceptual and is not intended to be an accurate representation of any particular plant, shrub, bush, or tree, as these materials are living objects, and subject to constant change. The conceptual objects shown are for illustrative purposes only. The actual illumination values measured in the field will vary.

* Photometric model elements such as buildings, rooms, plants, furnishings or any architectural details which impact the dispersion of light must be detailed by the customer documents for inclusion in the RAB Lighting Design. The owner/contractor/customer/end-user must provide accurate and complete construction drawings that reflect what will be the final construction RAB is not responsible for any inaccuracies caused by incomplete, inaccurate, or outdated information provided by the owner/contractor/customer/end-user.

* RAB Lighting Inc. luminaire and product designs are protected under U.S. and International intellectual property laws. Patents issued or pending may apply. Please see www.rablighting.com/ip.

* The Lighting Analysis, EZLayout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by RAB Lighting Inc. ("RAB") represents an anticipated prediction of lighting system performance based upon design parameters and information supplied by others. These design parameters and information provided by others have not been field verified by RAB and therefore actual measured results may vary from the actual field conditions. RAB recommends that design parameters and other information be field verified to reduce variation.

* RAB does not warranty, either implied or stated, actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design.

* RAB does not warranty, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design as compliant with any applicable regulatory code requirements with the exception of those expressly stated on drawings created and submitted by RAB. The Lighting Design is issued, in whole or in part, as advisory documents for informational and convenience purposes only, is not intended for construction nor as a part of a project's construction documentation package, and should not be relied upon for any purpose.

* Immediately prior to any party ordering RAB products used in the Lighting Design, the ordering party must verify that the lumen output of the fixtures being ordered (as shown on RAB's website) match the lumen output shown in the Lighting Design. Occasionally, Lighting Designs previously provided use fixtures that are then updated prior to an order and such updates could change the lumen output of the fixture. This in turn, could impact the installed lighting performance that differs from the Lighting Design.

The Lighting Analysis, EZLayout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by RAB Lighting Inc. ("RAB") represents an anticipated prediction of lighting system performance based upon design parameters and information supplied by others. These design parameters and information provided by others have not been field verified by RAB and therefore actual measured results may vary from the actual field conditions. RAB recommends that design parameters and other information be field verified to reduce variation.

RAB does not warranty, either implied or stated, actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design.

RAB does not warranty, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design as compliant with any applicable regulatory code requirements with the exception of those expressly stated on drawings created and submitted by RAB. The Lighting Design is issued, in whole or in part, as advisory documents for informational and convenience purposes only, is not intended for construction nor as a part of a project's construction documentation package, and should not be relied upon for any purpose.

Immediately prior to any party ordering RAB products used in the Lighting Design, the ordering party must verify that the lumen output of the fixtures being ordered (as shown on RAB's website) match the lumen output shown in the Lighting Design. Occasionally, Lighting Designs previously provided use fixtures that are then updated prior to an order and such updates could change the lumen output of the fixture. This in turn, could impact the installed lighting performance that differs from the Lighting Design.

Scale: as noted
Date:8/11/2023
Drawn By: dvento

PROJECT #214555
CASE #1148209

Filename: Viva Communities TC East 1148209A.AGI

Job Name:
Viva Communities at TC East
Fort Pierce, FL

Lighting Layout
Version A

Prepared For:
Coresential
3119 Queen Palm Drive
Tampa, FL 33619
Tel: 813-349-0090

Filename: C:\Users\donna.vento\OneDrive - RAB Lighting\Desktop\Viva Communities TC East 1148209A.AGI

RAB
409 W 44th Street, New York, NY 10014
888 722-1000 • rablighting.com

Attn: City of Fort Pierce, Planning Department
100 N. US Hwy 1
Fort Pierce, FL 34950

August 01, 2023

Re: Viva Communities at Treasure Coast East

Design Review Submittals

Please see design review folder.

Francarlos Rivera, AIA, CGC
Senior Project Manager
TEG Developers, LLC

Phone: 813.853.3077
Email: frivera@tegdevelopers.com

O'ROURKE
ENGINEERING & PLANNING

TRAFFIC ANALYSIS

FOR

Viva at Treasure Coast East

Prepared for:

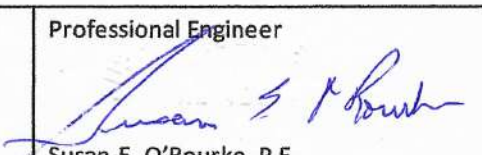
TEG Developers, LLC
VCorp Agent Services, Inc
1200 South Pine Island Road
Plantation, Florida 33324

Prepared by:

O'Rourke Engineering & Planning
22 SE Seminole Street
Stuart, Florida 34994
772-781-7918

July 13, 2023

SR23061.0

Prepared by: O'Rourke Engineering & Planning Certificate of Authorization: #26869 22 SE Seminole Street Stuart, Florida 34994 772-781-7918	Professional Engineer  Susan E. O'Rourke, P.E. Date signed and sealed: 7/13/2023 License #: 42684

O'ROURKE
ENGINEERING & PLANNING

July 13, 2023

Mr. Francarlos Rivera
TEG Developers, LLC
VCorp Agent Services, Inc
1200 South Pine Island Road
Plantation, Florida 33324

Re: Viva at Treasure Coast East

Dear Mr. Rivera:

O'Rourke Engineering & Planning has completed the analysis of the proposed development located on Jenkins Road and Edwards Road in St. Lucie County, Florida. The steps in the analysis and the ensuing results are presented herein.

It has been a pleasure working with you. If you have any questions or comments, please give me a call.

Respectfully submitted,

O'Rourke Engineering & Planning

Susan E. O'Rourke, P.E.
Registered Civil Engineer

TABLE OF CONTENTS

INTRODUCTION	1
PROJECT DESCRIPTION	1
EXISTING CONDITIONS	3
PROJECT TRAFFIC	3
PROJECT DISTRIBUTION/ ASSIGNMENT/ IMPACT	5
LINK ANALYSIS / REVIEW	5
INTERSECTION ANALYSIS	5
DRIVEWAY ANALYSIS	9
CONCLUSION	9

TABLES

TABLE 1: Project Trip Generation - Proposed	4
TABLE 2: Project Percent Assignment	7
TABLE 3: Link Analysis	8

FIGURES

FIGURE 1: Project Location	2
FIGURE 2: Project Traffic Assignment	6
FIGURE 3: Driveway Volumes	10

APPENDICES

APPENDIX A: Site Plan
APPENDIX B: St. Lucie County 2023 Level of Service Report
APPENDIX C: Other Project Data/Growth Rate
APPENDIX D: Intersection Analysis Data
APPENDIX E: Driveway Data & Analysis

INTRODUCTION

O'Rourke Engineering & Planning was retained to prepare a traffic analysis for the proposed development consisting of 206 multi-family dwelling units located on Jenkins Road and Edwards Road in Ft. Pierce, St. Lucie County, Florida. The purpose of this report is to determine the projects impact on the surrounding roadway system.

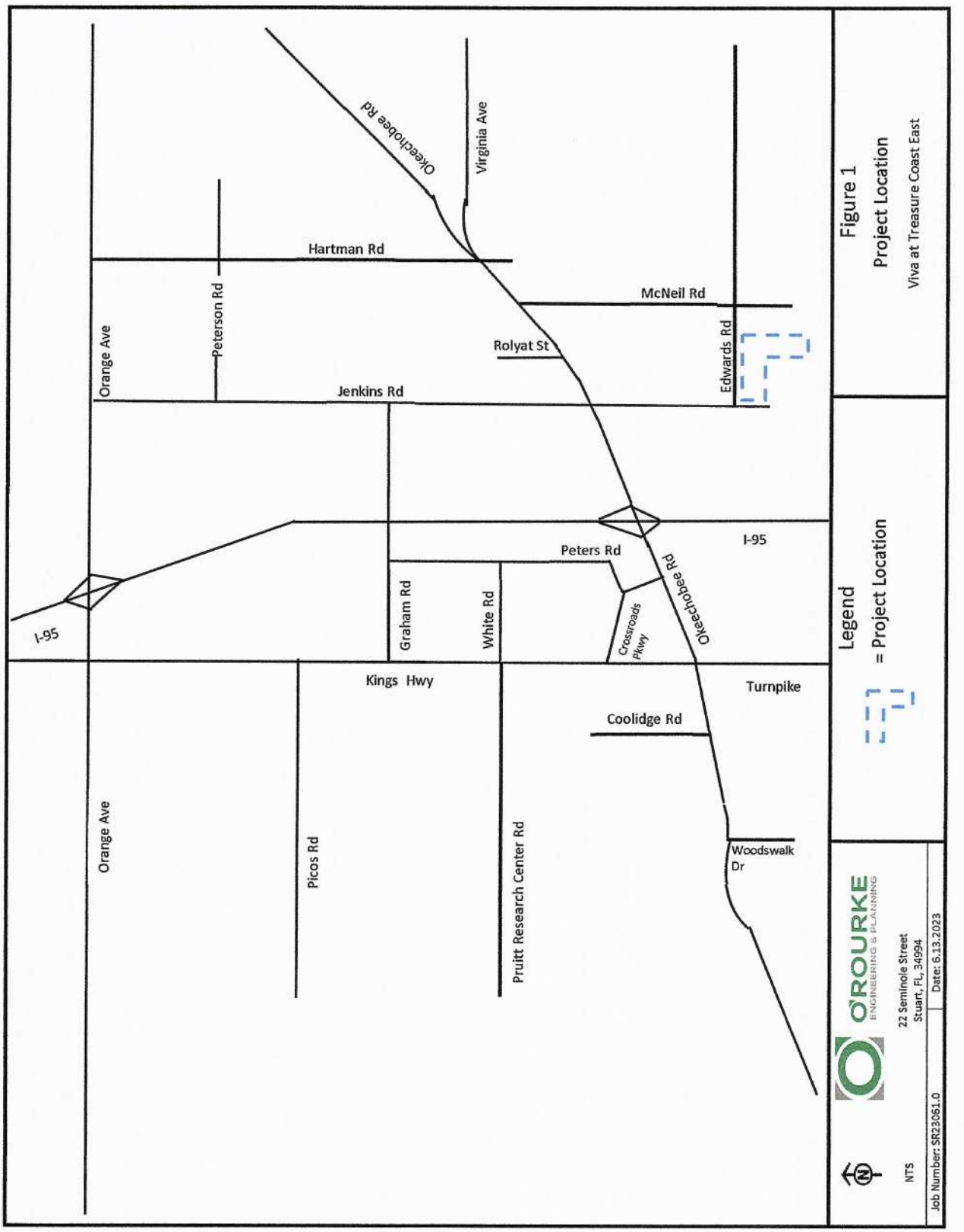
In order to make the determination that the project complies with County Concurrency Guidelines, the following analytical steps were taken:

- summary of the project
- summary of existing lane geometries
- summary of the existing traffic volumes
- assessment of project traffic
- determination of impact area
- summary of buildout cumulative traffic volumes
- summary of levels of service with the project traffic added

Each of these steps is outlined herein.

PROJECT DESCRIPTION

The proposed development will consist of 206 multi-family dwelling units. The project is located east of Jenkins Road and south of Edwards Road. The location is shown in **Figure 1**.


Okeechobee Rd
Virginia Ave
Hartman Rd
McNeil Rd
Peterson Rd
Orange Ave
Rolyat St
Edwards Rd
Jenkins Rd
I-95
Peters Rd
Graham Rd
White Rd
Crossroads Pkwy
Okeechobee Rd
I-95
Kings Hwy
Turnpike
Coolidge Rd
Orange Ave
Picos Rd
Pruitt Research Center Rd
Woodswalk Dr
Figure 1
Project Location
Viva at Treasure Coast East
Legend
= Project Location
O'ROURKE
ENGINEERING & PLANNING
22 Seminole Street
Stuart, FL, 34994
NTS
Job Number: SR23061.0
Date: 6.13.2023

EXISTING CONDITIONS

The study area is defined as the roadways upon which the project has an impact of 3% of the level of service capacity of the roadway and 1% on the adjacent link. Once the project traffic was assigned, the study area was refined based on the impact percentages.

The study area roadways were defined in terms of existing lane geometrics and existing traffic volumes.

Existing/Proposed Lane Geometrics and Traffic Control

The study area was reviewed to determine the existing number and type of lanes, and the traffic control along the roadway. Each roadway is described below.

- Okeechobee Road is a multi-lane divided arterial roadway with an east/west alignment. It is four-lane divided west of Kings Highway and east of Virginia Avenue. It is six-lane divided from Rolyat Street to Virginia Avenue and from Kings Highway to I-95. There is an eight-lane divided section from east of I-95 to Rolyat Street. There are numerous extended turn lanes and freeway auxiliary lanes.
- Kings Highway is a two-lane arterial with a north/south alignment and is under construction in portions and included in the 5-year TIP to be widened to a four-lane divided roadway.
- Edwards Road is a two-lane arterial roadway with an E/W alignment.
- Jenkins Road is a two-lane arterial roadway with a N/S alignment.

Existing Traffic Volumes/Service Volume

Traffic volumes were obtained from the St. Lucie County TPO and FDOT. The count data along with the number of lanes and the associated peak hour/peak direction service volumes will be summarized in the upcoming sections of the report. Sources of the data are included in **Appendix B.**

PROJECT TRAFFIC

To estimate future traffic generated by the development, the ITE Trip Generation, 11th Edition trip rates for Multi-Family Housing – Low Rise (Land Use Code 220) was applied to estimate the trips generated by the proposed development. These calculations are shown in **Tables 1a, 1b, and 1c**.

As shown, the project will generate 1,396 new daily trips. There will be 87 AM peak hour trips with 21 entering the project and 66 trips exiting the project. The project will generate 109 new PM peak hour trips. There will be 69 trips entering the project and 40 trips exiting the project in the PM peak hour.

Table 1 - Trip Generation

Table 1a: Daily

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips		
					In	Out	In	Out	Total
Multi-Family (Low-Rise)	220	206	DU	T = 6.41(X) + 75.31	50%	50%	698	698	1,396
TOTALS							**698**	**698**	**1,396**

Source: ITE 11th Edition Trip Generation Rates

Table 1b: AM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips		
					In	Out	In	Out	Total
Multi-Family (Low-Rise)	220	206	DU	T = 0.31(X) + 22.85	24%	76%	21	66	87
TOTALS							**21**	**66**	**87**

Source: ITE 11th Edition Trip Generation Rates

Table 1c: PM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Gross Trips		
					In	Out	In	Out	Total
Multi-Family (Low-Rise)	220	206	DU	T = 0.43(X) + 20.55	63%	37%	69	40	109
TOTALS							**69**	**40**	**109**

Source: ITE 11th Edition Trip Generation Rates

PROJECT DISTRIBUTION/ ASSIGNMENT/IMPACT

The project traffic was distributed by general geographic direction and then assigned to the roadway network.

Distribution/ Assignment – This general distribution led to an assignment of trips based on the anticipated ultimate destinations and the roadway paths used to reach those destinations. The project assignment is shown in **Figure 2.**

Impact – Tables 2a and 2b summarize the project impact as a percent of service volume capacity. Significant is defined as 1% or more on an adjacent link and 3% or more on all other links. As shown, the project is significant on Jenkins Road between Okeechobee Road and Edwards Road.

LINK ANALYSIS / REVIEW

Links where the project was significant were analyzed further to ensure they will meet concurrency at project buildout-2026. A growth rate of 7.39% was calculated for each significant link. Other project data includes committed traffic from Ferrell Communities, Kings Highway Commerce Park, Sunnyland, Pineapple Grove, KRE, Stonemont, Creekside, Orange 95 Parcel B, Orange 95 Parcel D & E, Bent Creek, Celebration Pointe, Hillpointe Residential, Interstate Commerce Center, Whispering Oaks, Viva at Treasure Coast West, 3000 Virginia, Project Hunt, Wawa Kings Highway, Kings Highway Warehouse, 7/11 Angle Road, Jenkins Waypoint, Walsh Crossroads, and Project Hurricane.

Details of the background traffic are included in **Appendix C**.

Table 3a and 3b summarizes the results of the link analysis. As shown, all roadways will operate at acceptable levels of service at project buildout.

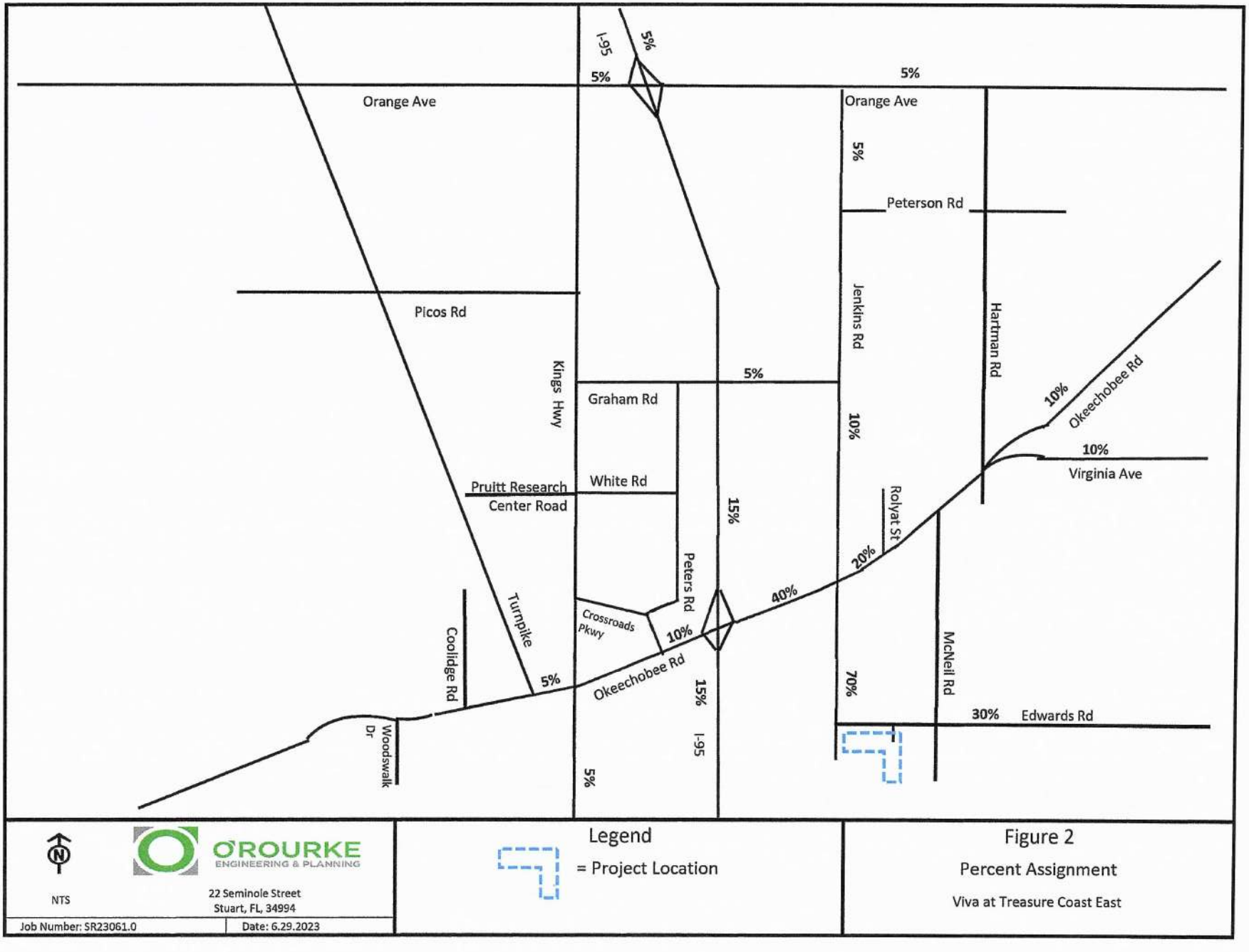

I-95
5%
5%
5%
Orange Ave
Orange Ave
5%
Peterson Rd
Picos Rd
Jenkins Rd
Hartman Rd
Kings Hwy
5%
Graham Rd
10%
10%
Okeechobee Rd
10%
Virginia Ave
Pruitt Research
Center Road
White Rd
15%
Rolyat St
20%
Peters Rd
40%
Crossroads Pkwy
10%
Turnpike
Coolidge Rd
5%
Okeechobee Rd
15%
I-95
70%
McNeil Rd
30%
Edwards Rd
Woodswalk Dr
5%
NTS
O'ROURKE
ENGINEERING & PLANNING
22 Seminole Street
Stuart, FL, 34994
Job Number: SR23061.0
Date: 6.29.2023
Legend
= Project Location
Figure 2
Percent Assignment
Viva at Treasure Coast East

TABLE 2a - Project Percent Impact - AM

Segment	From	To	Lanes	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	Peak Hour Service Capacity	Project Volume Peak Direction	% Project of Capacity- Peak Hour	Project Percent Assignment
Edwards Rd	Jenkins Rd	McNeil Rd	2L	EB	IN	NO	630	15	2.38%	70%
	Jenkins Rd	McNeil Rd	2L	WB	OUT	YES	630	46	7.30%	70%
	McNeil Rd	Selvitz Rd	2L	EB	OUT	NO	700	20	2.86%	30%
	McNeil Rd	Selvitz Rd	2L	WB	IN	NO	700	6	0.86%	30%
Jenkins Rd	Orange Ave	Peterson Rd	2L	NB	OUT	NO	920	3	0.33%	5%
	Orange Ave	Peterson Rd	2L	SB	IN	NO	920	1	0.11%	5%
	Peterson Rd	Graham Rd	2L	NB	OUT	NO	630	3	0.48%	5%
	Peterson Rd	Graham Rd	2L	SB	IN	NO	630	1	0.16%	5%
	Graham Rd	Okeechobee Rd	2L	NB	OUT	NO	920	7	0.76%	10%
	Graham Rd	Okeechobee Rd	2L	SB	IN	NO	920	2	0.22%	10%
	Okeechobee Rd	Edwards Rd	2L	NB	OUT	YES	880	46	5.23%	70%
	Okeechobee Rd	Edwards Rd	2L	SB	IN	YES	880	15	1.70%	70%
Orange Ave	I-95	Jenkins Rd	4LD	EB	IN	NO	2,100	1	0.05%	5%
	I-95	Jenkins Rd	4LD	WB	OUT	NO	2,100	3	0.14%	5%
	Jenkins Rd	Hartman Rd	4LD	EB	OUT	NO	2,100	3	0.14%	5%
	Jenkins Rd	Hartman Rd	4LD	WB	IN	NO	2,100	1	0.05%	5%
Okeechobee Rd	Florida's Turnpike	Kings Hwy	4LD	EB	IN	NO	2,100	1	0.05%	5%
	Florida's Turnpike	Kings Hwy	4LD	WB	OUT	NO	2,100	3	0.14%	5%
	Kings Hwy	Crossroads Pkwy	8LD	EB	IN	NO	4,240	2	0.05%	10%
	Kings Hwy	Crossroads Pkwy	8LD	WB	OUT	NO	4,240	7	0.17%	10%
	Crossroads Pkwy	I-95	8LD	EB	IN	NO	4,240	2	0.05%	10%
	Crossroads Pkwy	I-95	8LD	WB	OUT	NO	4,240	7	0.17%	10%
	I95	Jenkins Rd	6LD	EB	IN	NO	4,240	8	0.19%	40%
	I95	Jenkins Rd	6LD	WB	OUT	NO	4,240	26	0.61%	40%
	Jenkins Rd	McNeil Rd	6LD	EB	OUT	NO	4,040	13	0.32%	20%
	Jenkins Rd	McNeil Rd	6LD	WB	IN	NO	4,040	4	0.10%	20%
	McNeil Rd	Virginia Ave	6LD	EB	OUT	NO	3,170	13	0.41%	20%
	McNeil Rd	Virginia Ave	6LD	WB	IN	NO	3,170	4	0.13%	20%
	Virginia Ave	Hartman Rd	4LD	EB	OUT	NO	2,100	7	0.33%	10%
	Virginia Ave	Hartman Rd	4LD	WB	IN	NO	2,100	2	0.10%	10%
Virginia Ave	Okeechobee Rd	Hartman Rd	6LD	EB	OUT	NO	3,020	7	0.23%	10%
	Okeechobee Rd	Hartman Rd	6LD	WB	IN	NO	3,020	2	0.07%	10%
I-95	Orange Ave	Okeechobee Rd	8LD	NB	OUT	NO	7,320	10	0.14%	15%
	Orange Ave	Okeechobee Rd	8LD	SB	IN	NO	7,320	3	0.04%	15%
	Okeechobee Rd	Midway Rd	6LD	NB	IN	NO	5,500	3	0.05%	15%
	Okeechobee Rd	Midway Rd	6LD	SB	OUT	NO	5,500	10	0.18%	15%

Source: St. Lucie County Traffic Counts and Level of Service Report 2023

IN: 21
OUT: 66

TABLE 2b - Project Percent Impact - PM

Segment	From	To	Lanes	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	Peak Hour Service Capacity	Project Volume Peak Direction	% Project of Capacity- Peak Hour	Project Percent Assignment
Edwards Rd	Jenkins Rd	McNeil Rd	2L	EB	IN	YES	630	48	7.62%	70%
	Jenkins Rd	McNeil Rd	2L	WB	OUT	YES	630	28	4.44%	70%
	McNeil Rd	Selvitz Rd	2L	EB	OUT	NO	700	12	1.71%	30%
	McNeil Rd	Selvitz Rd	2L	WB	IN	NO	700	21	3.00%	30%
Jenkins Rd	Orange Ave	Peterson Rd	2L	NB	OUT	NO	920	2	0.22%	5%
	Orange Ave	Peterson Rd	2L	SB	IN	NO	920	3	0.33%	5%
	Peterson Rd	Graham Rd	2L	NB	OUT	NO	630	2	0.32%	5%
	Peterson Rd	Graham Rd	2L	SB	IN	NO	630	3	0.48%	5%
	Graham Rd	Okeechobee Rd	2L	NB	OUT	NO	920	4	0.43%	10%
	Graham Rd	Okeechobee Rd	2L	SB	IN	NO	920	7	0.76%	10%
	Okeechobee Rd	Edwards Rd	2L	NB	OUT	YES	880	28	3.18%	70%
	Okeechobee Rd	Edwards Rd	2L	SB	IN	YES	880	48	5.45%	70%
Orange Ave	I-95	Jenkins Rd	4LD	EB	IN	NO	2,100	3	0.14%	5%
	I-95	Jenkins Rd	4LD	WB	OUT	NO	2,100	2	0.10%	5%
	Jenkins Rd	Hartman Rd	4LD	EB	OUT	NO	2,100	2	0.10%	5%
	Jenkins Rd	Hartman Rd	4LD	WB	IN	NO	2,100	3	0.14%	5%
Okeechobee Rd	Florida's Turnpike	Kings Hwy	4LD	EB	IN	NO	2,100	3	0.14%	5%
	Florida's Turnpike	Kings Hwy	4LD	WB	OUT	NO	2,100	2	0.10%	5%
	Kings Hwy	Crossroads Pkwy	8LD	EB	IN	NO	4,240	7	0.17%	10%
	Kings Hwy	Crossroads Pkwy	8LD	WB	OUT	NO	4,240	4	0.09%	10%
	Crossroads Pkwy	I-95	8LD	EB	IN	NO	4,240	7	0.17%	10%
	Crossroads Pkwy	I-95	8LD	WB	OUT	NO	4,240	4	0.09%	10%
	I95	Jenkins Rd	6LD	EB	IN	NO	4,240	28	0.66%	40%
	I95	Jenkins Rd	6LD	WB	OUT	NO	4,240	16	0.38%	40%
	Jenkins Rd	McNeil Rd	6LD	EB	OUT	NO	4,040	8	0.20%	20%
	Jenkins Rd	McNeil Rd	6LD	WB	IN	NO	4,040	14	0.35%	20%
	McNeil Rd	Virginia Ave	6LD	EB	OUT	NO	3,170	8	0.25%	20%
	McNeil Rd	Virginia Ave	6LD	WB	IN	NO	3,170	14	0.44%	20%
	Virginia Ave	Hartman Rd	4LD	EB	OUT	NO	2,100	4	0.19%	10%
	Virginia Ave	Hartman Rd	4LD	WB	IN	NO	2,100	7	0.33%	10%
Virginia Ave	Okeechobee Rd	Hartman Rd	6LD	EB	OUT	NO	3,020	4	0.13%	10%
	Okeechobee Rd	Hartman Rd	6LD	WB	IN	NO	3,020	7	0.23%	10%
I-95	Orange Ave	Okeechobee Rd	8LD	NB	OUT	NO	7,320	6	0.08%	15%
	Orange Ave	Okeechobee Rd	8LD	SB	IN	NO	7,320	10	0.14%	15%
	Okeechobee Rd	Midway Rd	6LD	NB	IN	NO	5,500	10	0.18%	15%
	Okeechobee Rd	Midway Rd	6LD	SB	OUT	NO	5,500	6	0.11%	15%

Source: St. Lucie County Traffic Counts and Level of Service Report 2023

IN: 69
OUT: 40

TABLE 3a - Link Analysis - AM

Segment	From	To	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	D Factor (3)	2021 Peak Hour Volumes (From 2023 TPO)	Growth Rate (2)	2023 Peak Hour Volumes	2026 Peak Hour Volumes w/ Growth Factor	2026 Peak Hour w/ 1% Growth	AM Peak Hour Committed Projects Directional	2026 1% Growth + Committed Peak Direction	Higher of Growth Rate or 1% + Commited	Peak Hour Service Capacity (E+C)	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity- Peak Hour	Does Project Meet Concurrency?	Project Percent Assignment
Edwards Rd	Jenkins Rd	McNeil Rd	EB	IN	YES	0.49	529	7.39%	611	756	629	27	656	756	630 (5)	19	675	3.02%	YES (4)	90%
	Jenkins Rd	McNeil Rd	WB	OUT	YES	0.51	551	7.39%	635	787	655	8	663	787	630 (5)	59	846	9.37%	YES (4)	90%
Jenkins Rd	Okeechobee Rd	Edwards Rd	NB	OUT	YES	0.51	480	7.39%	554	686	570	93	663	686	880	59	745	6.70%	YES	90%
	Okeechobee Rd	Edwards Rd	SB	IN	YES	0.49	461	7.39%	532	659	548	48	596	659	880	19	678	2.16%	YES	90%

Note: TPO Provides Peak Direction, off-peak derived from D Factor

(1) St. Lucie County Traffic Counts and Level of Service Report 2023 (2021 numbers grown to 2023)

(2) Growth rate calculated from FDOT Historical Traffic Counts

(3) FDOT Hourly County Data

(4) Fails with background traffic therefore improvements assumed in place

(5) Roadway is included in TIP 5-Year road plan but specifics of improvement are unavailable at the moment

Net In: 21
Net Out: 66
Years Grown: 3

TABLE 3b - Link Analysis - PM

Segment	From	To	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	D Factor (3)	2021 Peak Hour Volumes (From 2023 TPO)	Growth Rate (2)	2023 Peak Hour Volumes	2026 Peak Hour Volumes w/ Growth Factor	2026 Peak Hour w/ 1% Growth	PM Peak Hour Committed Projects Directional	2026 1% Growth + Committed Peak Direction	Higher of Growth Rate or 1% + Commited	Peak Hour Service Capacity (E+C)	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity- Peak Hour	Does Project Meet Concurrency?	Project Percent Assignment
Edwards Rd	Jenkins Rd	McNeil Rd	EB	IN	YES	0.52	571	7.39%	659	816	678	16	694	816	630 (5)	62	878	9.84%	YES (4)	90%
	Jenkins Rd	McNeil Rd	WB	OUT	YES	0.48	527	7.39%	608	753	626	27	653	753	630 (5)	36	789	5.71%	YES (4)	90%
Jenkins Rd	Okeechobee Rd	Edwards Rd	NB	OUT	YES	0.43	396	7.39%	457	566	471	72	543	566	880	36	579	4.09%	YES	90%
	Okeechobee Rd	Edwards Rd	SB	IN	YES	0.57	525	7.39%	605	750	624	102	726	750	880	62	788	7.05%	YES	90%

Note: TPO Provides Peak Direction, off-peak derived from D Factor

(1) St. Lucie County Traffic Counts and Level of Service Report 2023 (2021 numbers grown to 2023)

(2) Growth rate calculated from FDOT Historical Traffic Counts

(3) FDOT Hourly Count Data

(4) Fails with background traffic therefore improvements assumed in place

(5) Roadway is included in TIP 5-Year road plan but specifics of improvement are unavailable at the moment

Net In: 69
Net Out: 40
Years Grown: 3

INTERSECTION ANALYSIS

The intersections of Okeechobee at Jenkins and Edwards at Jenkins were analyzed for three scenarios; existing, 2026 without project traffic and 2026 with project traffic. The AM and PM peak hours were analyzed for each scenario. **Table 4** summarizes the delay and LOS.

Table 4: Intersection Analysis Results

	Okeechobee / Jenkins				Edwards / Jenkins				Edwards / Jenkins w/ Improvements			
	AM	LOS	PM	LOS	AM	LOS	PM	LOS	AM	LOS	PM	LOS
Existing	42.7	D	40.4	D	148.4	F	292.0	F	NA	NA	NA	NA
2026 Without Project	51.8	D	53.2	D	226.2	F	465.1	F	126.7 (11.4)	F (B)	72.1 (9.1)	F (A)
2026 With Project	52.4	D	53.2	D	263.7	F	442.0	F	155.4 (12.3)	F (B)	91.2 (9.7)	F (A)

XX = w/ Stop Sign Changes
(XX) = w/ Roundabout Changes

The intersection data is included in **Appendix D.**

Okeechobee/Jenkins

Okeechobee/Jenkins is an existing signalized intersection. The intersection operates at LOS D under existing conditions and will continue to operate at LOS D through project buildout.

Edwards/Jenkins

The intersection of Edwards/Jenkins is an unsignalized intersection with no turn lanes. The level of service is F under existing conditions and with no improvements would remain LOS F. As a background failure, the project is not responsible for the improvements and improvement needed to improve background will accommodate the project as well. Edwards Road is included in St Lucie County's Roadway Widening Program but is unclear about the future design. This improvement may result in a better performance at this intersection. Changing the stop sign to the south leg will minimize the delay to the major movements. A SIDRA analysis was used due to the stop sign placement. A roundabout would mitigate the delay for the 2026 with and without project traffic scenarios. Again, these measures are not the responsibility of the project.

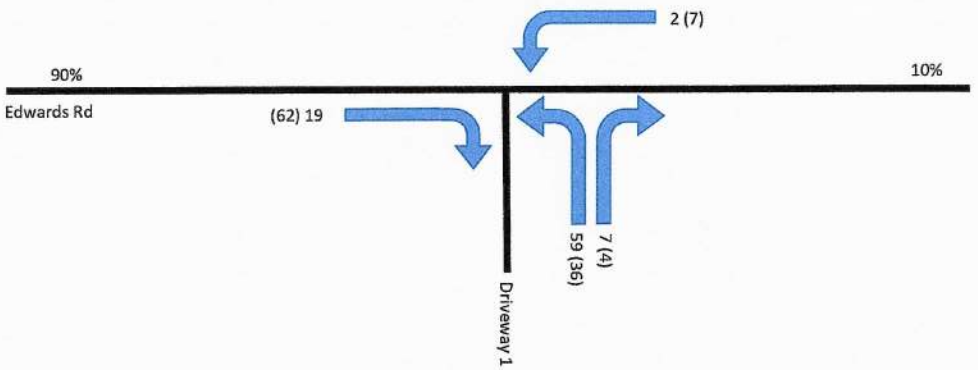
DRIVEWAY ANALYSIS

The project will have a single driveway that will be a full access driveway located on Edwards Road. **Figure 3** shows the driveway volumes for the AM and PM peak hours. These driveways were analyzed using HCS. The analysis shows the driveway will operate at LOS F for the northbound movement and LOS A on Edwards Road during the AM and PM peak hours. NCHRP 457 was used to determine that a left turn lane is not needed at 0.3% of the advancing volume for the AM volume and 1.2% of the advancing volume in the PM peak hour. FDOT criteria for a right turn has a threshold of 80 for a right turn lane. The highest volume is 62 so a right turn lane is not required. The driveway data and analyses are in **Appendix E.**

CONCLUSION

With 87 net new AM peak hour trips and 109 net new PM peak hour trips, all links and intersections operate at acceptable levels of service with the existing roadway network. Therefore, the project meets the requirements for concurrency.

	IN	OUT
AM	21	66
PM	69	40



NTS

O'ROURKE ENGINEERING & PLANNING

22 SE Seminole Street
Stuart, FL, 34994

Job Number: SR23061.0 | Date: 6.13.2023

Legend

XX (XX) = AM (PM)

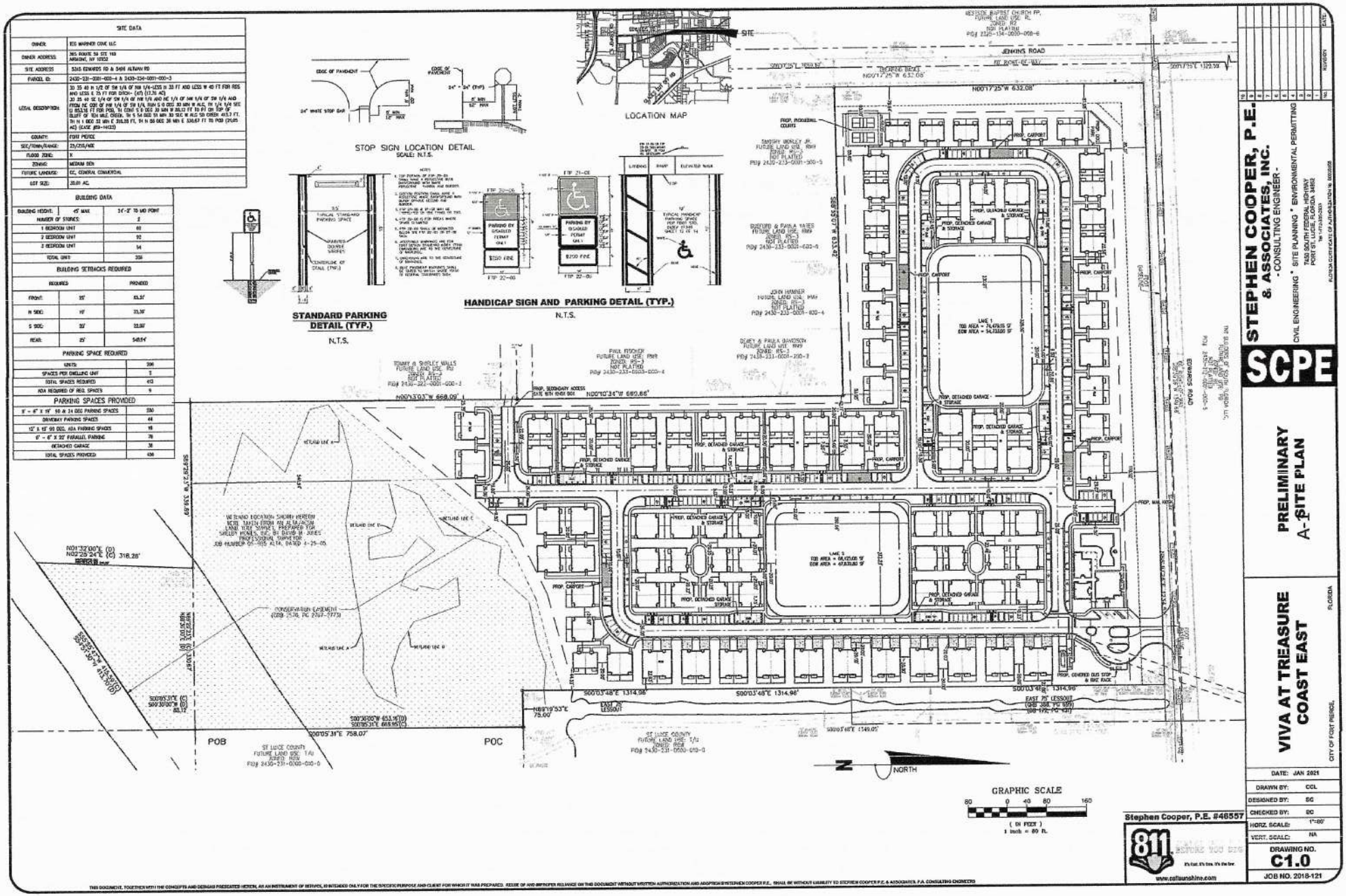
Figure 3

Driveway Volumes

Viva at Treasure Coast East

APPENDIX A

SITE PLAN



SITE DATA	
OWNER:	TEG MARINER COVE LLC
OWNER ADDRESS:	365 ROUTE 59 STE 103 ARMONK, NY 10952
SITE ADDRESS:	5345 EDWARDS RD & 5404 ALTMAN RD
PARCEL ID:	2430-231-0001-000-4 & 2430-234-0001-000-3
LEGAL DESCRIPTION:	30 35 40 N 1/2 OF SW 1/4 OF NW 1/4-LESS N 33 FT AND LESS W 40 FT FOR RDS AND LESS E 75 FT FOR DITCH- (47) (17.36 AC) 30 35 40 SE 1/4 OF SW 1/4 OF NW 1/4 AND NE 1/4 OF NW 1/4 OF SW 1/4 AND FROM NE CORE OF NW 1/4 OF SW 1/4, RUN S 0 DEG 30 MIN W ALG, TH 1/4 1/4 SEC 0 853.16 FT FOR POB, TH CONT S 0 DEG 30 MIN W 88.12 FT TO PT ON TOP OF BLUFF OF TEN MILE CREEK, TH S 54 DEG 51 MIN 30 SEC W ALG SD CREEK 413.7 FT, TH N 1 DEG 32 MIN E 318.28 FT, TH N 55 DEG 36 MIN E 336.67 FT TO POB (24.05 AC) (EASE #89-14123)
COUNTY:	FORT PIERCE
SEC/TOWN/RANGE:	23/35S/40E
FLOOD ZONE:	X
ZONING:	MEDIUM DEN
FUTURE LANDUSE:	CC, GENERAL COMMERCIAL
LOT SIZE:	30.00 AC.

BUILDING DATA		
BUILDING HEIGHT:	45' MAX	24'-2" TO MID POINT
NUMBER OF STORIES:		2
1 BEDROOM UNIT		60
2 BEDROOM UNIT		92
3 BEDROOM UNIT		54
TOTAL UNIT:		206

BUILDING SETBACKS REQUIRED		
REQUIRED		PROVIDED
FRONT:	25'	65.37'
N SIDE:	10'	35.39'
S SIDE:	20'	22.00'
REAR:	25'	548.64'

PARKING SPACE REQUIRED	
UNITS:	206
SPACES PER DWELLING UNIT	2
TOTAL SPACES REQUIRED	412
ADA REQUIRED OF REQ. SPACES	9

PARKING SPACES PROVIDED	
9' - 6" X 19' 90 & 24 DEG PARKING SPACES	280
DRIVEWAY PARKING SPACES	44
12' X 19' 90 DEG. ADA PARKING SPACES	18
9' - 6" X 22' PARALLEL PARKING	78
DETACHED GARAGE	36
TOTAL SPACES PROVIDED	456

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
- CONSULTING ENGINEER -
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
7450 SOUTH FEDERAL HIGHWAY
PORT ST. LUCIE, FLORIDA 34952
FLORIDA CERTIFICATE OF AUTHORIZATION No. 00002058

SCPE

PRELIMINARY
A-1 SITE PLAN

VIVA AT TREASURE COAST EAST
CITY OF FORT PIERCE, FLORIDA

DATE:	JAN 2021
DRAWN BY:	CCL
DESIGNED BY:	SC
CHECKED BY:	SC
HORZ. SCALE:	1"=80'
VERT. SCALE:	NA
DRAWING NO.	C1.0
JOB NO.	2018-121

Stephen Cooper, P.E. #46557

811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADOPTION BY STEPHEN COOPER P.E., SHALL BE WITHOUT LIABILITY TO STEPHEN COOPER P.E. & ASSOCIATES, P.A. CONSULTING ENGINEERS

APPENDIX B

ST. LUCIE COUNTY 2023 LEVEL OF SERVICE REPORT

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	STATION ID	2023 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
CROSSTOWN PKWY	CASHMERE BLVD to CAMEO BLVD	653	32,571	2021	3,170	1,763	C	0.556	1,694	C	0.534
CROSSTOWN PKWY	CAMEO BLVD to BAYSHORE BLVD	654	37,282	2021	3,170	1,854	C	0.585	1,943	C	0.613
CROSSTOWN PKWY	BAYSHORE BLVD to AIROSO BLVD	655	28,807	2021	3,170	1,497	C	0.472	1,470	C	0.464
CROSSTOWN PKWY	AIROSO BLVD to SANDIA DR	656	15,859	2021	3,170	1,023	C	0.323	872	C	0.275
CROSSTOWN PKWY	SANDIA DR to MANTH LN	657	19,123	2021	3,170	1,030	C	0.325	1,075	C	0.339
CROSSTOWN PKWY	FLORESTA DR to US 1	66	34,000	2023	3,170	2,257	C	0.712	2,055	C	0.648
CROSSROADS PKWY	OKEECHOBEE RD to KINGS HWY	649	2,100	2022	790	106	C	0.134	105	C	0.133
DARWIN BLVD	BECKER RD to PAAR DR	235	7,762	2021	630	691	F	1.097	639	F	1.014
DARWIN BLVD	PAAR DR to TULIP BLVD	235	7,762	2021	920	691	C	0.751	639	C	0.695
DARWIN BLVD	TULIP BLVD to PORT ST LUCIE BLVD	659	12,900	2023	920	608	C	0.661	603	C	0.655
DEL RIO BLVD	PORT ST LUCIE BLVD to CALIFORNIA BLVD	311	10,000	2022	920	781	C	0.849	704	C	0.765
DEL RIO BLVD	CALIFORNIA BLVD to CASHMERE BLVD	660	2,300	2022	880	140	C	0.159	139	C	0.158
DEL RIO BLVD	CASHMERE BLVD to CALFORNIA BLVD	661	5,015	2021	880	267	C	0.303	270	C	0.307
DELAWARE AVE	HARTMAN RD to 33RD ST	662	1,900	2022	600	295	C	0.492	237	C	0.395
DELAWARE AVE	33RD ST to 25TH ST	500	3,100	2022	1,710	206	C	0.12	235	C	0.137
DELAWARE AVE	25TH ST to OKEECHOBEE RD	948526	1,428	2022	1,220	65	C	0.053	65	C	0.053
DELAWARE AVE	OKEECHOBEE RD to 13TH ST	663	11,714	2023	790	641	D	0.811	597	D	0.756
DELAWARE AVE	13TH ST to 10TH ST	664	7,505	2021	750	408	D	0.544	388	D	0.517
DELAWARE AVE	10TH ST to 7TH ST	664	7,505	2021	600	408	D	0.68	388	D	0.647
DELAWARE AVE	7TH ST to US 1	665	7,231	2023	750	392	D	0.523	403	D	0.537
EAST TORINO PKWY	CASHMERE BLVD to TORINO PKWY	710	12,128	2021	830	715	C	0.861	707	C	0.852
EAST TORINO PKWY	TORINO PKWY to MIDWAY RD	237	14,432	2023	880	936	F	1.064	807	C	0.917
EASY ST	US 1 to BUCHANAN DR	106	7,210	2021	750	400	D	0.533	506	D	0.675
EASY ST	BUCHANAN DR to YUCCA DR	106	7,210	2021	540	400	D	0.741	506	D	0.937
EDWARDS RD	JENKINS RD to MCNEIL RD	174	11,057	2021	630	551	C	0.875	571	C	0.906
EDWARDS RD	MCNEIL RD to SELVITZ RD	174	11,057	2021	700	551	C	0.787	571	C	0.816

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)

B-1

* **NOTE:** If the Last Count Year is older than the year of the report the AADT is projected from historical traffic count data.
* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	STATION ID	2023 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
GLADES CUT-OFF RD	RANGE LINE RD to RESERVE BLVD	668	2,700	2022	1,070	191	B	0.179	240	B	0.224
GLADES CUT-OFF RD	RESERVE BLVD to COMMERCE CENTER DR	119	7,700	2022	1,070	713	C	0.666	713	C	0.666
GLADES CUT-OFF RD	CARLTON RD to RANGE LINE RD	668	2,700	2022	390	191	B	0.49	240	C	0.615
GLADES CUT-OFF RD	COMMERCE CENTER DR to MIDWAY RD	940279	3,104	2022	920	181	C	0.197	165	C	0.179
GLADES CUT-OFF RD	MIDWAY RD to JENKINS RD	115	10,496	2021	790	629	D	0.796	667	D	0.844
GLADES CUT-OFF RD	JENKINS RD to SELVITZ RD	113	6,831	2023	830	382	C	0.46	399	C	0.481
GRAHAM RD	KINGS HWY to JENKINS RD	669	2,400	2022	630	164	C	0.26	156	C	0.248
GREEN RIVER PKWY	MARTIN C.L. to CHARLESTON DR	319	5,571	2021	1,070	386	C	0.361	351	B	0.328
GREEN RIVER PKWY	CHARLESTON DR to MELALEUCA BLVD	319	5,571	2021	1,070	386	C	0.361	351	B	0.328
GREEN RIVER PKWY	MELALEUCA BLVD to WALTON RD	319	5,571	2021	1,070	386	C	0.361	351	B	0.328
HARTMAN RD	OKEECHOBEE RD to PETERSON RD	670	6,110	2021	750	291	C	0.388	285	C	0.38
HARTMAN RD	PETERSON RD to DELAWARE AVE	670	6,110	2021	540	291	D	0.539	285	D	0.528
HARTMAN RD	DELAWARE AVE to ORANGE AVE	670	6,110	2021	790	291	C	0.368	285	C	0.361
HEADER CANAL RD	OKEECHOBEE RD to ORANGE AVE	121	589	2019	670	49	B	0.073	59	B	0.088
HILLMOOR DR	US 1 to LENNARD RD	671	7,803	2023	790	405	D	0.513	515	D	0.652
I-95	GATLIN BLVD to ST LUCIE WEST BLVD	941901	85,025	2022	5,500	4,596	D	0.836	4,151	C	0.755
I-95	ST LUCIE WEST BLVD to MIDWAY RD	941904	68,355	2022	5,500	4,058	C	0.738	3,500	C	0.636
I-95	MIDWAY RD to OKEECHOBEE RD	941902	82,322	2022	5,500	5,490	D	0.998	4,457	C	0.81
I-95	OKEECHOBEE RD to ORANGE AVE	940260	65,287	2022	7,320	3,200	B	0.437	3,200	B	0.437
I-95	ORANGE AVE to INDRIO RD	941905	50,041	2022	7,320	2,690	B	0.367	2,476	B	0.338
INDIAN RIVER DR	CITRUS AVE to ORANGE AVE	945029	5,755	2022	750	285	C	0.38	326	C	0.435
INDIAN RIVER DR	ORANGE AVE to AVENUE A	940003	5,907	2022	750	295	C	0.393	287	C	0.383
INDIAN RIVER DR	AVENUE D to SEAWAY DR	940004	6,514	2022	790	329	C	0.416	387	C	0.49
INDIAN RIVER DR	AVENUE A to AVENUE D	940004	6,514	2022	540	329	D	0.609	387	D	0.717
INDRIO RD	PRIVATE RD to I-95 W RAMP	940128	1,038	2022	1,080	51	B	0.047	55	B	0.051
INDRIO RD	I-95 W RAMP to I-95 E RAMP	940128	1,038	2022	3,240	51	B	0.016	55	B	0.017

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
* **NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.
* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	STATION ID	2023 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
INDRIO RD	I-95 E RAMP to KOBLEGARD RD	940038	10,195	2022	3,240	527	B	0.163	554	B	0.171
INDRIO RD	KOBLEGARD RD to JOHNSTON RD	940038	10,195	2022	700	527	C	0.753	554	C	0.791
INDRIO RD	JOHNSTON RD to EMERSON AVE	940038	10,195	2022	880	527	C	0.599	554	C	0.63
INDRIO RD	EMERSON RD to SEMINOLE RD	940281	9,891	2022	920	572	C	0.622	482	C	0.524
INDRIO RD	SEMINOLE RD to KINGS HWY	940281	9,891	2022	790	572	D	0.724	482	D	0.61
INDRIO RD	KINGS HWY to SLASH PINE TRL	114	5,901	2023	790	377	C	0.477	369	C	0.467
INDRIO RD	SLASH PINE TRL to US 1	114	5,901	2023	920	377	C	0.41	369	C	0.401
INDRIO RD	US 1 to OLD DIXIE HWY	672	1,300	2022	750	91	C	0.121	123	C	0.164
JENKINS RD	EDWARDS RD to OKEECHOBEE RD	133	10,193	2021	880	480	C	0.545	525	C	0.597
JENKINS RD	OKEECHOBEE RD to GRAHAM RD	131	10,669	2021	920	558	C	0.607	564	C	0.613
JENKINS RD	GRAHAM RD to PETERSON RD	131	10,669	2021	630	558	C	0.886	564	C	0.895
JENKINS RD	PETERSON RD to ORANGE AVE	131	10,669	2021	920	558	C	0.607	564	C	0.613
JENNINGS RD	US 1 to LENNARD RD	673	5,500	2022	2,100	364	C	0.173	297	C	0.141
JOHNSTON RD	ANGLE RD to L20	674	2,800	2022	1,070	190	B	0.178	184	B	0.172
JOHNSTON RD	L20 to MEADOWOOD DR	675	2,500	2022	1,070	159	B	0.149	154	B	0.144
JOHNSTON RD	MEADOWOOD DR to OLD JOHNSTON RD	675	2,500	2022	1,070	159	B	0.149	154	B	0.144
JOHNSTON RD	OLD JOHNSTON RD to INDRIO RD	675	2,500	2022	1,070	159	B	0.149	154	B	0.144
JOHNSTON RD	INDRIO RD to RUSSOS RD	135	8,819	2023	1,070	500	C	0.467	501	C	0.468
JOHNSTON RD	RUSSOS RD to INDIAN RIVER C.L.	135	8,819	2023	1,070	500	C	0.467	501	C	0.468
JUANITA AVE	53RD ST to 25TH ST	122	2,900	2022	750	187	C	0.249	171	C	0.228
JUANITA AVE	25TH ST to US 1	120	4,800	2022	750	268	C	0.357	263	C	0.351
KEEN RD	ANGLE RD to JUANITA AVE	129	3,008	2023	630	181	C	0.287	212	C	0.337
KEEN RD	JUANITA AVE to ST LUCIE BLVD	129	3,008	2023	630	181	C	0.287	212	C	0.337
KINGS HWY	OKEECHOBEE RD to CROSSROADS PKWY	940757	9,000	2022	880	436	C	0.495	446	C	0.507
KINGS HWY	CROSSROADS PKWY to GRAHAM RD	940757	9,000	2022	700	436	C	0.623	446	C	0.637
KINGS HWY	GRAHAM RD to PICOS RD	940076	7,762	2022	700	395	C	0.564	379	C	0.541

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
* **NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.
* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	STATION ID	2023 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
OKEECHOBEE RD	MCCARTY RD to FLORIDA'S TURNPIKE	940025	8,360	2022	3,240	401	B	0.124	416	B	0.128
OKEECHOBEE RD	FLORIDA'S TURNPIKE to KINGS HWY	940025	8,360	2022	2,100	401	C	0.191	416	C	0.198
OKEECHOBEE RD	KINGS HWY to CROSSROADS PKWY	940748	21,934	2022	4,240	1,058	C	0.25	1,116	C	0.263
OKEECHOBEE RD	CROSSROADS PKWY to I-95	940106	26,526	2022	4,240	1,282	C	0.302	1,310	C	0.309
OKEECHOBEE RD	I-95 to JENKINS RD	940029	31,865	2022	4,240	2,082	C	0.491	1,801	C	0.425
OKEECHOBEE RD	JENKINS RD to MCNEIL RD	940029	31,865	2022	4,040	2,082	C	0.515	1,801	C	0.446
OKEECHOBEE RD	MCNEIL RD to VIRGINIA AVE	940742	29,519	2022	3,170	1,550	C	0.489	1,618	C	0.51
OKEECHOBEE RD	VIRGINIA AVE to HARTMAN RD	688	12,094	2023	2,100	665	C	0.317	704	C	0.335
OKEECHOBEE RD	HARTMAN RD to 35TH ST	688	12,094	2023	1,630	665	C	0.408	704	C	0.432
OKEECHOBEE RD	35TH ST to 33RD ST	689	16,610	2023	1,630	901	D	0.553	881	D	0.54
OKEECHOBEE RD	33RD ST to 25TH ST	689	16,610	2023	1,630	901	D	0.553	881	D	0.54
OKEECHOBEE RD	25TH ST to GEORGIA AVE	690	13,247	2023	1,630	762	D	0.467	724	C	0.444
OKEECHOBEE RD	GEORGIA AVE to DELAWARE AVE	690	13,247	2023	1,710	762	C	0.446	724	C	0.423
OLD DIXIE HWY	US 1 to SR A1A NORTH	691	150	2022	790	11	C	0.014	10	C	0.013
OLD DIXIE HWY	SR A1A NORTH to ST LUCIE BLVD	948521	1,452	2022	750	68	C	0.091	68	C	0.091
OLD DIXIE HWY	ST LUCIE BLVD to INDRIO RD	227	2,200	2022	790	162	C	0.205	126	C	0.159
OLD DIXIE HWY	INDRIO RD to INDIAN RIVER C.L.	948523	1,323	2022	870	62	C	0.071	62	C	0.071
OLEANDER AVE	BEACH AVE to KITTERMAN RD	692	2,943	2021	540	170	C	0.315	193	C	0.357
OLEANDER AVE	KITTERMAN RD to MIDWAY RD	141	6,151	2021	750	384	D	0.512	404	D	0.539
OLEANDER AVE	MIDWAY RD to WEATHERBEE RD	139	6,759	2023	750	370	C	0.493	401	D	0.535
OLEANDER AVE	WEATHERBEE RD to BELL AVE	139	6,759	2023	540	370	D	0.685	401	D	0.743
OLEANDER AVE	BELL AVE to FARMER'S MARKET RD	240	12,543	2021	540	605	F	1.12	574	E	1.063
OLEANDER AVE	FARMER'S MARKET RD to EDWARDS RD	240	12,543	2021	750	605	D	0.807	574	D	0.765
OLEANDER AVE	EDWARDS RD to WISTERIA AVE	505	9,891	2021	750	600	D	0.8	499	D	0.665
OLEANDER AVE	WISTERIA AVE to GARDENIA AVE	505	9,891	2021	540	600	F	1.111	499	D	0.924
OLEANDER AVE	GARDENIA AVE to VIRGINIA AVE	505	9,891	2021	790	600	D	0.759	499	D	0.632

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
* **NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.
* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	STATION ID	2023 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
OLEANDER AVE	VIRGINIA AVE to SUNRISE BLVD	503	4,537	2023	600	258	C	0.43	268	C	0.447
ORANGE AVE	OKEECHOBEE C.L. to SNEED RD	144	5,052	2021	670	295	C	0.44	281	C	0.419
ORANGE AVE	SNEED RD to HEADER CANAL RD	144	5,052	2021	670	295	C	0.44	281	C	0.419
ORANGE AVE	SHINN RD to CAMPBELL RD	940144	2,851	2022	1,070	156	B	0.146	156	B	0.146
ORANGE AVE	CAMPBELL RD to KINGS HWY	940144	2,851	2022	1,070	156	B	0.146	156	B	0.146
ORANGE AVE	KINGS HWY to I-95	940041	18,954	2022	2,100	902	C	0.43	909	C	0.433
ORANGE AVE	I-95 to JENKINS RD	940035	14,453	2022	2,100	827	C	0.394	778	C	0.37
ORANGE AVE	JENKINS RD to HARTMAN RD	940028	15,435	2022	2,100	797	C	0.38	741	C	0.353
ORANGE AVE	HARTMAN RD to ANGLE RD	940028	15,435	2022	2,100	797	C	0.38	741	C	0.353
ORANGE AVE	ANGLE RD to 25TH ST	940151	9,848	2013	1,710	505	C	0.295	587	C	0.343
ORANGE AVE	25TH ST to 17TH ST	945040	12,894	2022	1,630	622	C	0.382	682	C	0.418
ORANGE AVE	17TH ST to 13TH ST	945040	12,894	2022	1,710	622	C	0.364	682	C	0.399
ORANGE AVE	13TH ST to 10TH ST	945040	12,894	2022	750	622	D	0.829	682	D	0.909
ORANGE AVE	10TH ST to 7TH ST	940155	8,912	2022	600	428	D	0.713	492	D	0.82
ORANGE AVE	7TH ST to US 1	945134	7,206	2022	600	441	D	0.735	392	D	0.653
ORANGE AVE	US 1 to 2ND ST	945133	3,934	2022	600	208	C	0.347	204	C	0.34
ORANGE AVE	2ND ST to INDIAN RIVER DR	945133	3,934	2022	750	208	C	0.277	204	C	0.272
PARR DR	PORT ST LUCIE BLVD to DARWIN BLVD	209	3,500	2022	700	257	C	0.367	227	C	0.324
PARR DR	DARWIN BLVD to TULIP BLVD	723	1,954	2023	540	171	C	0.317	130	C	0.241
PARR DR	SAVONA BLVD to PORT ST LUCIE BLVD	209	3,500	2022	700	257	C	0.367	227	C	0.324
PARR DR	ROSSER BLVD to SAVONA BLVD	209	3,500	2022	630	257	C	0.408	227	C	0.36
PEACOCK BLVD	CALIFORNIA BLVD to CASHMERE BLVD	693	5,198	2021	630	329	C	0.522	365	C	0.579
PEACOCK BLVD	UNIVERSITY BLVD to CALIFORNIA BLVD	694	10,952	2021	920	752	C	0.817	616	C	0.67
PEACOCK BLVD	ST LUCIE WEST BLVD to UNIVERSITY BLVD	948514	16,197	2022	2,100	747	C	0.356	747	C	0.356
PETERSON RD	BENT CREEK DR to HARTMAN RD	695	2,300	2022	540	184	C	0.341	157	C	0.291
PICOS RD	CAMPBELL RD to KINGS HWY	696	1,333	2023	540	92	C	0.17	86	C	0.159

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
* **NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.
* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	STATION ID	2023 AADT *	Last Physical Count Year	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
						Volume	LOS	V/C	Volume	LOS	V/C
VIRGINIA AVE	35TH ST to 25TH ST	940032	21,812	2022	3,020	1,125	C	0.373	1,096	C	0.363
VIRGINIA AVE	OKEECHOBEE RD to HARTMAN RD	940030	21,679	2022	3,020	1,116	C	0.37	1,075	C	0.356
VIRGINIA AVE	HARTMAN RD to 35TH ST	940030	21,679	2022	3,020	1,116	C	0.37	1,075	C	0.356
VIRGINIA AVE	25TH ST to 13TH ST	940033	20,792	2022	3,020	1,033	C	0.342	1,100	C	0.364
VIRGINIA AVE	13TH ST to 11TH ST	940794	22,011	2022	3,020	1,083	C	0.359	1,083	C	0.359
VIRGINIA AVE	11TH ST to SUNRISE BLVD	940794	22,011	2022	3,170	1,083	C	0.342	1,083	C	0.342
VIRGINIA AVE	SUNRISE BLVD to OLEANDER AVE	940792	19,107	2022	3,020	1,009	C	0.334	942	C	0.312
VIRGINIA AVE	OLEANDER AVE to COLONIAL RD	940034	17,378	2022	3,170	904	C	0.285	884	C	0.279
VIRGINIA AVE	COLONIAL RD to US 1	940034	17,378	2022	3,020	904	C	0.299	884	C	0.293
WALTON RD	US 1 to VILLAGE GREEN DR	330	13,898	2021	1,710	711	C	0.416	750	C	0.439
WALTON RD	VILLAGE GREEN DR to LENNARD RD	328	19,500	2023	1,710	1,110	D	0.649	1,039	D	0.608
WALTON RD	LENNARD RD to GREEN RIVER PKWY	326	10,505	2021	880	573	C	0.651	625	C	0.71
WALTON RD	GREEN RIVER PKWY to INDIAN RIVER DR	324	8,300	2022	630	640	F	1.016	661	F	1.049
WEATHERBEE RD	OLEANDER AVE to US 1	721	4,235	2023	750	314	C	0.419	287	C	0.383
WEATHERBEE RD	US 1 to MIDWAY RD	158	6,370	2023	750	436	D	0.581	466	D	0.621
WESTCLIFFE LN	TREMONTE AVE to VILLAGE PKWY	722	8,667	2023	1,470	607	C	0.413	468	C	0.318
WESTMORELAND BLVD	MORNINGSIDE BLVD to PORT ST LUCIE BLVD	339	14,818	2023	920	731	C	0.795	791	C	0.86
WESTMORELAND BLVD	MARTIN C.L. to MORNINGSIDE BLVD	245	8,800	2022	920	490	C	0.533	543	C	0.59

Countywide Performance

Weighted V/C = **0.71**

% VMT below Standard = **6.20%**

* **NOTE:** A six digit number in the "STATION ID" column identifies segment counted by FDOT
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic (volumes for both directions where applicable)
* **NOTE:** If the Last Count Year is older than the year of the report, the AADT is projected from historical traffic count data.
* **Counts with an ID format of 6 digits have data extracted from FDOT count stations.**

TABLE 7

Generalized **Peak Hour Directional** Volumes for Florida's Urbanized Areas

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	830	880	**
2	Divided	*	1,910	2,000	**
3	Divided	*	2,940	3,020	**
4	Divided	*	3,970	4,040	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	370	750	800
2	Divided	*	730	1,630	1,700
3	Divided	*	1,170	2,520	2,560
4	Divided	*	1,610	3,390	3,420

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	150	390	1,000
50-84%	110	340	1,000	>1,000
85-100%	470	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Core Urbanized

Lanes	B	C	D	E
2	2,230	3,100	3,740	4,080
3	3,280	4,570	5,620	6,130
4	4,310	6,030	7,490	8,170
5	5,390	7,430	9,370	10,220
6	6,380	8,990	11,510	12,760

Urbanized

Lanes	B	C	D	E
2	2,270	3,100	3,890	4,230
3	3,410	4,650	5,780	6,340
4	4,550	6,200	7,680	8,460
5	5,690	7,760	9,520	10,570

Freeway Adjustments

Auxiliary Lane	Ramp Metering
+ 1,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
1	Undivided	580	890	1,200	1,610
2	Divided	1,800	2,600	3,280	3,730
3	Divided	2,700	3,900	4,920	5,600

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1] Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2] Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3] Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

JENKINS RD FROM MIDWAY RD TO ORANGE AVE

4463311 Non-SIS



Project Description: PD&E/EMO STUDY
Extra Description: 2022 TPO PRIORITY #7 LFA WITH ST. LUCIE COUNTY IS R/W NEEDED
Lead Agency: MANAGED BY FDOT **From:** MIDWAY RD **County:** ST. LUCIE
To: ORANGE AVE
Length: 2.128
Phase Group: P D & E

Phase	Fund Code	2023	2024	2025	2026	2027	Total
PDE	GFSU	667,925	0	0	0	0	667,925
PDE	LFP	0	1,000,000	0	0	0	1,000,000
PDE	SU	20,000	20,000	0	0	0	40,000
PDE	TRIP	104,900	1,000,000	0	0	0	1,104,900
		792,825	**2,020,000**				**2,812,825**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 2,812,825
LRTP: Page 8-3

B-8

KINGS HWY FROM 500 SOUTH OF OKEECHOBEE RD TO NORTH OF PICOS RD
2302566 SIS



Project Description: ADD LANES & RECONSTRUCT
Extra Description: PE/ENGINEERING UNDER 230256-2 2012 TPO PRIORITY #2 1,550 FT OF PROJECT WILL BE CONCRETE, BALANCE IS FLEXIBLE PAVEMENT PH5202=LFA WITH ST LUCIE COUNTY; $187,669 LF REC 3/1/17
Lead Agency: MANAGED BY FDOT
From: 500 SOUTH OF OKEECHOBEE RD
County: ST. LUCIE
To: NORTH OF PICOS RD
Length: 2.2
Phase Group: RIGHT OF WAY, RAILROAD & UTILITIES, CONSTRUCTION, ENVIRONMENTAL

Phase	Fund Code	2023	2024	2025	2026	2027	Total
ROW	DDR	33,059	0	0	0	0	33,059
ROW	DS	0	7,000	0	0	0	7,000
ROW	SA	0	1,753,453	0	0	0	1,753,453
ROW	SU	36,941	133,052	0	0	0	169,993
		70,000	**1,893,505**				**1,963,505**

Prior Year Cost: 70,502,690
Future Year Cost: 0
Total Project Cost: 73,166,819
LRTP: Page 8-2

B-9

KINGS HWY FROM NORTH OF COMMERCIAL CIR TO NORTH OF ST. LUCIE BLVD

4383792 Non-SIS



Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2017 TPO PRIORITY #4 WIDENING FROM 2 TO 4 LANES; PD&E UNDER 230256-5
Lead Agency: MANAGED BY FDOT
From: NORTH OF COMMERCIAL CIR
County: ST. LUCIE
To: NORTH OF ST. LUCIE BLVD
Length: 1.21
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, ENVIRONMENTAL

Phase	Fund Code	2023	2024	2025	2026	2027	Total
ROW	DDR	0	600	0	0	0	600
ROW	DDR	0	0	0	0	3,767,912	3,767,912
ROW	DS	0	0	1,000,000	0	2,438,156	3,438,156
ROW	SN	0	0	0	1,166,005	0	1,166,005
ROW	SU	363,993	277,699	87,000	0	0	728,692
		363,993	**278,299**	**1,087,000**	**1,166,005**	**6,206,068**	**9,101,365**

Prior Year Cost: 8,498,626
Future Year Cost: 0
Total Project Cost: 61,519,912
LRTP: Page 8-2

B-10

KINGS HWY FROM NORTH OF I-95 OVERPASS TO NORTH OF COMMERCIAL CIR
4383791 Non-SIS



Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2017 TPO PRIORITY #4 WIDENING 2 TO 4 LANES PD&E UNDER 230256-5
Lead Agency: MANAGED BY FDOT
From: NORTH OF I-95 OVERPASS
County: ST. LUCIE
To: NORTH OF COMMERCIAL CIR
Length: 1.4
Phase Group: PRELIMINARY ENGINEERING, RIGHT OF WAY, ENVIRONMENTAL

Phase	Fund Code	2023	2024	2025	2026	2027	Total
ROW	DDR	0	2,496,483	3,812,937	0	0	6,309,420
ROW	SA	0	0	0	6,000,000	4,344,156	10,344,156
ROW	SN	0	0	135,047	0	0	135,047
ROW	SU	304,523	0	50,000	0	0	354,523
		304,523	**2,496,483**	**3,997,984**	**6,000,000**	**4,344,156**	**17,143,146**

Prior Year Cost: 8,498,626
Future Year Cost: 0
Total Project Cost: 61,519,912
LRTP: Page 8-2

B-11

KINGS HWY FROM NORTH OF PICOS RD TO NORTH OF I-95 OVERPASS

2302567 Non-SIS



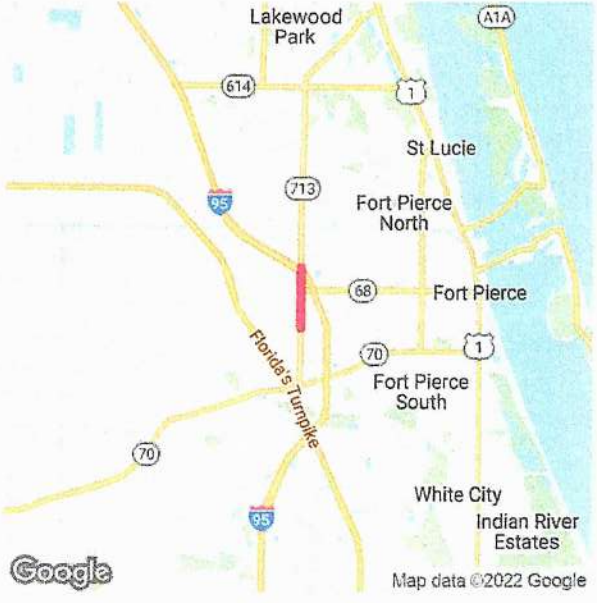
Project Description: ADD LANES & RECONSTRUCT
Extra Description: PE/ENGINEERING UNDER 230256-2 2013 TPO PRIORITY #1 CONCRETE AT THE INTERSECTION OF SR-68/ORANGE AVENUE
Lead Agency: MANAGED BY FDOT
From: NORTH OF PICOS RD
County: ST. LUCIE
To: NORTH OF I-95 OVERPASS
Length: 1.217
Phase Group: RIGHT OF WAY, RAILROAD & UTILITIES, CONSTRUCTION, ENVIRONMENTAL

Phase	Fund Code	2023	2024	2025	2026	2027	Total
ROW	DS	0	205,832	0	0	0	205,832
			205,832				**205,832**

Prior Year Cost: 70,502,690
Future Year Cost: 0
Total Project Cost: 73,166,819
LRTP: Page 8-2

B-12

KINGS HWY FROM NORTH OF PICOS RD TO NORTH OF I-95 OVERPASS
4380411 Non-SIS



Project Description: LANDSCAPING
Extra Description: STANDALONE DEPENDENT PROJECT FOR 230256-7
Lead Agency: MANAGED BY FDOT **From:**
County: ST. LUCIE **To:**
Length: 1.576
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2023	2024	2025	2026	2027	Total
CST	DDR	0	736,047	0	0	0	736,047
CST	DIH	0	37,746	0	0	0	37,746
			773,793				**773,793**

Prior Year Cost: 149,220
Future Year Cost: 0
Total Project Cost: 923,013
LRTP: Page 8-2

B-13

KINGS HWY FROM SOUTH OF OKEECHOBEE RD TO NORTH OF PICOS RD
2302568 Non-SIS



Project Description: LANDSCAPING
Extra Description: STANDALONE DEPENDENT PROJECT FOR 230256-6
Lead Agency: MANAGED BY FDOT
From: SOUTH OF OKEECHOBEE RD
County: ST. LUCIE
To: NORTH OF PICOS RD
Length: 1.397
Phase Group: PRELIMINARY ENGINEERING, CONSTRUCTION

Phase	Fund Code	2023	2024	2025	2026	2027	Total
CST	DDR	0	454,772	0	0	0	454,772
CST	DIH	0	40,020	0	0	0	40,020
			494,792				**494,792**

Prior Year Cost: 70,502,690
Future Year Cost: 0
Total Project Cost: 73,166,819
LRTP: Page 8-2

KINGS HWY NORTH OF I-95 OVERPASS TO SOUTH OF ANGLE RD
4383794 Non-SIS



Project Description: ADD LANES & RECONSTRUCT
Extra Description: 2017 TPO PRIORITY #4 WIDENING 2 TO 4 LANES, PD&E UNDER 230256-5, DESIGN & ROW UNDER FM# 438379.1
Lead Agency: MANAGED BY FDOT
From: NORTH OF I-95 OVERPASS
County: ST. LUCIE
To: SOUTH OF ANGLE RD
Length: 0.97
Phase Group: CONSTRUCTION

Phase	Fund Code	2023	2024	2025	2026	2027	Total
CST	DDR	0	0	0	0	11,898,957	11,898,957
CST	DIH	0	0	0	0	116,421	116,421
CST	DS	0	0	0	0	9,000,000	9,000,000
CST	SA	0	0	0	0	3,000,000	3,000,000
CST	SU	0	0	0	0	2,761,397	2,761,397
						26,776,775	**26,776,775**

Prior Year Cost: 8,498,626
Future Year Cost: 0
Total Project Cost: 61,519,912
LRTP: Page 8-2

B-15

ORANGE AVE FROM KINGS HWY TO EAST OF I-95 SB RAMP
4461681 SIS



Project Description: INTERCHANGE - ADD LANES
Extra Description: ADD EB RIGHT TURN LANE FROM ORANGE AVE/SR-68 TO I-95 SB ON-RAMP & ADD WB RIGHT-TURN LANE FR ORANGE AVE/SR-68 TO NB KINGS HWY/SR-713. NB & WB PROTECTED RIGHT TURN PHASES TO BE ADDED AT INTERSECTION OF ORANGE AVE/SR-68 AND KINGS HWY/ SR-713. EB TO SB ON-RAMP ENTRANCE TO BE RELOCATED TO THE EXISTING SIGNALIZED INTERSECTION FOR THE WB TO SB (SEE WP45)
Lead Agency: MANAGED BY FDOT
From: KINGS HWY
County: ST. LUCIE
To: EAST OF I-95 SB RAMP
Length: 0.646
Phase Group: P D & E, PRELIMINARY ENGINEERING, RIGHT OF WAY, ENVIRONMENTAL

Phase	Fund Code	2023	2024	2025	2026	2027	Total
PE	ACFP	0	541,608	24,423	0	0	566,031
ROW	ACFP	0	0	382,386	0	0	382,386
ROW	DDR	0	0	145,513	0	0	145,513
ENV	ACFP	0	10,000	0	0	0	10,000
			551,608	**552,322**			**1,103,930**

Prior Year Cost: 55,918
Future Year Cost: 0
Total Project Cost: 1,159,848
LRTP: Page 8-3

B-16

ORANGE AVE FROM KINGS HWY TO US-1
4496961 Non-SIS



Project Description: ATMS - ARTERIAL TRAFFIC MGMT
Extra Description: 2022 TPO CMP PRIORITY #3 INCLUDES SOUTH 7TH STREET FROM SR-68/ORANGE AVE TO AVE A INSTALL FIBER OPTIC CABLE, TRAFFIC CAMERAS/VIDEO DETECTORS AND ADAPTIVE SIGNAL CONTROL AT SIGNALIZED INTERSECTIONS NO R/W NEEDED
Lead Agency: MANAGED BY FDOT
From: KINGS HWY
County: ST. LUCIE
To: US-1
Length: 4.187
Phase Group: PRELIMINARY ENGINEERING

Phase	Fund Code	2023	2024	2025	2026	2027	Total
PE	DDR	0	0	0	0	320,627	320,627
PE	DIH	0	0	0	0	25,650	25,650
						346,277	**346,277**

Prior Year Cost: 0
Future Year Cost: 0
Total Project Cost: 346,277
LRTP: Page 8-11

B-17

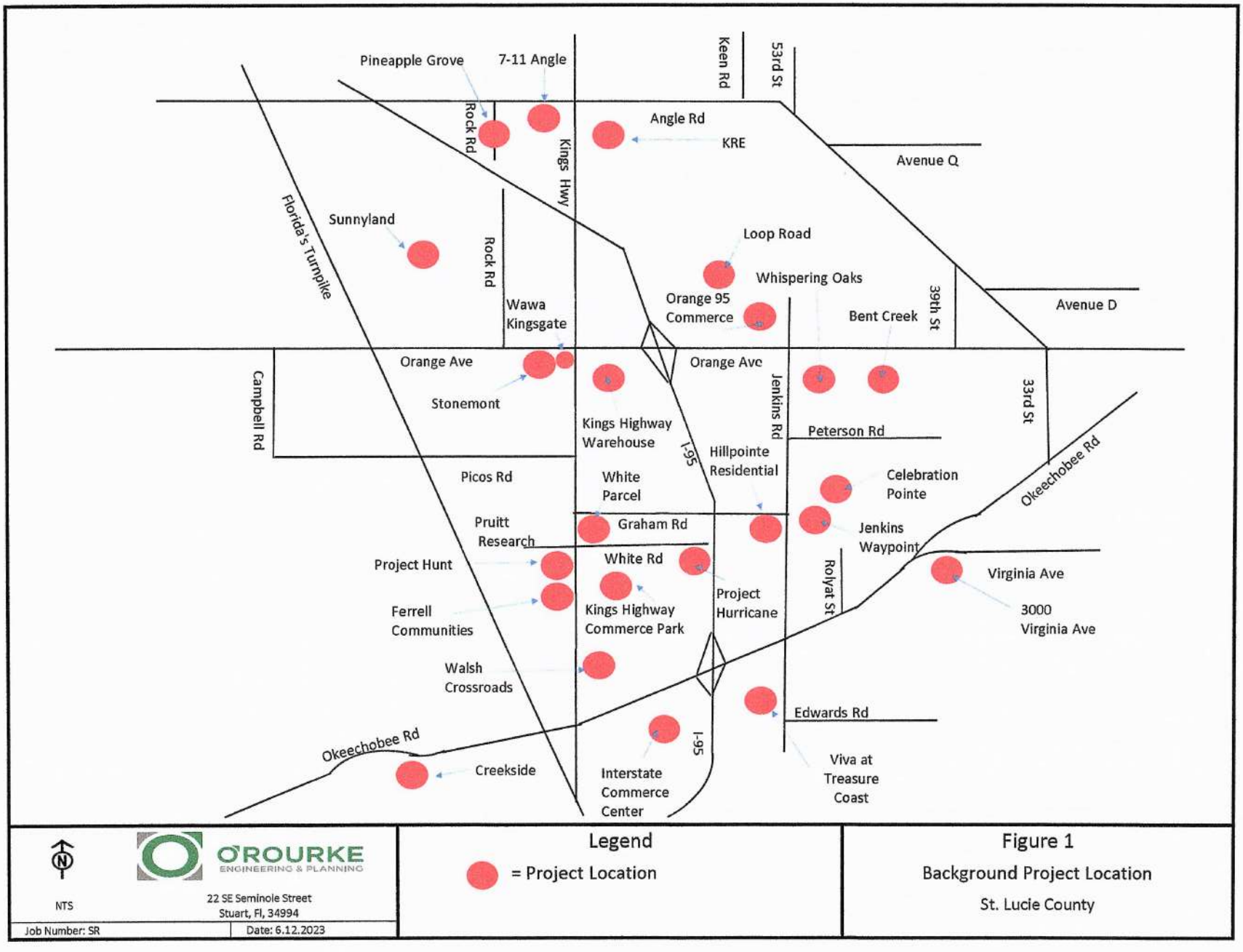
ST. LUCIE COUNTY PLANNED ROADWAY WIDENING PROJECTS (FY21-FY25)
PROGRAMMED ROAD IMPACT FEE REVENUE

PLANNED CAPACITY IMPROVEMENT PROJECTS FUNDED BY IMPACT FEES (FY2021-FY2031)													
ID #	PLANNED ROADWAY PROJECTS (2021-2031)	FY2021	FY2022	FY2023	FY2024	FY2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	Out Year Costs
1	Midway Road Widening Phase 1 (Selvitz Road to Jenkins Road)*												
	Design Phase	500,000											
	Construction Funds			28,000,000									
2	Midway Road Widening Phase 2 (Jenkins Road to Glades Cut-off Road)* Includes Turnpike Interchange												
	PD&E Re-Evaluation for Interchange (Design)		1,500,000										
	Design Phase		2,000,000										
	Right of Way Phase												
	Construction Phase						2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	2,000,000	50,000,000
3	Jenkins Road Extension South (Midway Road to Glades Cut-off Road)												
	Design Phase	2,000,000											
	Right of Way Phase		3,500,000										
	Construction Phase				12,000,000								-
4	Jenkins Road Widening (Glades Cut-off Road to Orange Ave.)*												
	Trip Grant Obligation - PD &E Phase			375,000	1,000,000								
	Design Phase								5,000,000				
	Right of Way Phase									6,000,000	6,000,000		
	Construction Phase											45,000,000	
5	Selvitz Road Widening (Edwards Road to Glades Cut-off Road) Includes Glades Cut-Off Road & Selvitz Intersection												
	Design Phase	2,685,000	1,315,000										
	Right of Way Phase		3,000,000										
	Construction Phase					17,000,000							
6	Glades Cut-off Road Widening (Selvitz Road to Midway Road)												
	PD &E Phase** (covers Selvitz Road to Rangeline Road)		4,500,000										
	Design Phase				2,500,000								
	Right of Way Phase						2,000,000	6,000,000	2,000,000				
	Construction Phase												60,100,000
7	Edwards Road Widening (S. 25th Street to Jenkins Road)												
	PD &E Phase												
	Design Phase				1,500,000								
	Right of Way Phase					2,000,000							
	Construction Phase						10,000,000						
8	Glades Cut-off Road Widening (Midway Road to Rangeline)												
	PD & E Phase												
	Design Phase									2,000,000			
	Right of Way Phase										10,000,000		
	Construction Phase												
9	Jenkins Road Extension North (Orange Avenue to St. Lucie Boulevard)							2,000,000					
	PD &E Phase												
	Design Phase									2,000,000	2,000,000		
	Right of Way Phase										10,000,000		10,000,000
	Construction Phase												40,000,000
10	North County Airport Connector Road (St. Lucie Boulevard to I-95)												
	PD &E Phase							2,000,000					
	Design Phase										2,000,000		
	Right of Way Phase												10,000,000
	Construction Phase												40,600,000
11	Lennard Road (Silver Oak Drive to US Hwy 1)												
	Stormwater Pond Design Phase	350,000											
	Stormwater Pond Construction		2,000,000										
	PD&E Re-evaluation												
12	Oleander Vision Study (Edwards Road Intersection to Midway Road)												
	Planning & Design Phase	550,000											
	PLANNED INTERSECTION EXPANSION PROJECTS (2021-2025)												
13	St. Lucie West Boulevard & Peacock Boulevard Expansion by City of PSL												
	Matching Funds -Construction Phase 1				500,000								
	Matching Funds - Construction Phase 2							1,000,000					
	PLANNED SIDEWALK PROJECTS (2021-2025)												
	Oleander Ave Sidewalk (S Market Avenue to Edwards Road)*												
	Matching Funds - Design Phase				1,000,000	200,000							
	Bell Avenue Sidewalk (25th Street to Sunrise Blvd.)*												
	Matching Funds - Design Phase		200,000										
	Construction			100,000									
	Walton Road Sidewalk - Lennard Road to Green River Parkway*												
	Matching Funds - Design Phase			200,000									
	Construction				1,000,000								
	Impact Fee Expenditure TOTALS:	6,085,000	18,015,000	28,675,000	19,500,000	19,200,000	14,000,000	13,000,000	9,000,000	12,000,000	32,000,000	47,000,000	210,700,000
	Impact Fee Account Balance		46,812,314	35,497,314	13,522,314	722,314	(11,777,686)	(19,077,686)	(25,377,686)	(27,677,686)	(32,977,686)	(58,277,686)	
	Forecasted Impact Fee Revenue**		6,700,000	6,700,000	6,700,000	6,700,000	6,700,000	6,700,000	6,700,000	6,700,000	6,700,000	6,700,000	

**=Based on estimates from Office of Management and Budget
* = Funding amounts reflected in FDOT current 5-year work plan

APPENDIX C

OTHER PROJECT DATA/GROWTH RATE


Pineapple Grove
7-11 Angle
Keen Rd
53rd St
Rock Rd
Angle Rd
KRE
Kings Hwy
Avenue Q
Florida's Turnpike
Sunnyland
Rock Rd
Loop Road
Whispering Oaks
Orange 95 Commerce
Bent Creek
39th St
Avenue D
Wawa Kingsgate
Orange Ave
Orange Ave
Campbell Rd
Stonemont
Jenkins Rd
33rd St
Kings Highway Warehouse
I-95
Peterson Rd
Hillpointe Residential
Picos Rd
White Parcel
Celebration Pointe
Okeechobee Rd
Pruitt Research
Graham Rd
Jenkins Waypoint
Project Hunt
White Rd
Rolyat St
Virginia Ave
Project Hurricane
Ferrell Communities
Kings Highway Commerce Park
3000 Virginia Ave
Walsh Crossroads
Edwards Rd
I-95
Okeechobee Rd
Creekside
Interstate Commerce Center
Viva at Treasure Coast
NTS
O'ROURKE ENGINEERING & PLANNING
22 SE Seminole Street
Stuart, Fl, 34994
Job Number: SR
Date: 6.12.2023
Legend
= Project Location
Figure 1
Background Project Location
St. Lucie County

AM APPROVED PROJECTS			Cabo Rio RV Resort						Publix at Indrio						Indrio & I-95						Indrio & I-95 Gas Station					
Road Name	From	To	%	Daily	Two-Way Trips	In N/E to or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E to or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E to or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E to or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
	Graham Rd	Okeechobee	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
				766	42		In	15		3,220	118		In	65		0	392		In	133		0	374		In	187
				Daily	Two-Way		Out	27		Daily	Two-Way		Out	53		Daily	Two-Way		Out	259		Daily	Two-Way		Out	187

AM APPROVED PROJECTS			Indrio Groves @ 25%						Ferrell Communities						Kings Hwy Commerce Park / White Parcel						Sunnyland					
Road Name	From	To	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	10%	514	58	OUT	11	46	5%	205	15	IN	4	11
	Graham Rd	Okeechobee	0%	0	0	-	0	0	0%	0	0	-	0	0	10%	514	58	IN	46	11	5%	205	15	IN	4	11
	Okeechobee	Edwards	0%	0	0	-	0	0	5%	133	9	IN	2	7	0%	0	0	-	0	0	0%	0	0	-	0	0
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	5%	133	9	OUT	7	2	0%	0	0	-	0	0	0%	0	0	-	0	0
				2,539	330		In	135		2,655	181		In	42		5,135	577		In	463		4,092	298		In	75
				Daily	Two-Way		Out	195		Daily	Two-Way		Out	139		Daily	Two-Way		Out	114		Daily	Two-Way		Out	223

AM APPROVED PROJECTS			Drawdy Angle Road FKA: Pineapple Grove						KRE						Stonemont						Creekside					
Road Name	From	To	%	Daily	Two-Way Trips	In N/E In or Out	Direction at N/E	Direction at S/W	%	Daily	Two-Way Trips	In N/E In or Out	Direction at N/E	Direction at S/W	%	Daily	Two-Way Trips	In N/E In or Out	Direction at N/E	Direction at S/W	%	Daily	Two-Way Trips	In N/E In or Out	Direction at N/E	Direction at S/W
Jenkins Rd	Peterson	Graham Rd	2%	73	5	IN	1	4	2%	96	10	IN	8	2	5%	111	13	OUT	3	10	5%	372	28	OUT	21	7
	Graham Rd	Okeechobee	2%	73	5	IN	1	4	2%	96	10	IN	8	2	3%	67	8	IN	6	2	5%	372	28	OUT	21	7
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	5%	372	28	OUT	21	7
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
				3,646	265		In	66		4,778	510		In	393		2,226	259		In	203		7,443	564		In	143
				Daily	Two-Way		Out	199		Daily	Two-Way		Out	117		Daily	Two-Way		Out	56		Daily	Two-Way		Out	421

AM APPROVED PROJECTS			Orange 95 Parcel B						Orange 95 Parcels D & E						Bent Creek @ 50% Complete City of Fort Pierce						Celebration Pointe @ 25% Complete City of Fort Pierce					
Road Name	From	To	%	Daily	Two-Way Trips	In/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	12%	121	15	IN	12	2	12%	130	16	IN	13	3	2%	0	5	IN	1	4	50%	793	64	OUT	48	16
	Graham Rd	Okeechobee	12%	121	15	IN	12	2	12%	130	16	IN	13	3	2%	0	5	IN	1	4	50%	793	64	IN	16	48
	Okeechobee	Edwards	2%	20	2	IN	2	0	2%	22	3	IN	2	0	0%	0	0	-	0	0	5%	79	6	IN	2	5
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	5%	79	6	OUT	5	2
				1,012	123		In	103		1,086	133		In	111		0	348		In	62		1,585	128		In	32
				Daily	Two-Way		Out	20		Daily	Two-Way		Out	22		Daily	Two-Way		Out	186		Daily	Two-Way		Out	96

AM APPROVED PROJECTS			Hillpointe Residential						Interstate Commerce Center						Whispering Oaks					
Road Name	From	To	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	56%	947	57	OUT	43	13	0%	0	0	-	0	0	12%	337	25	IN	5	20
	Graham Rd	Okeechobee	34%	575	34	IN	8	26	0%	0	0	-	0	0	12%	337	25	IN	5	20
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	5%	140	11	IN	2	8
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	5%	140	11	OUT	8	2
				1,691	101		In	24		373	35		In	27		2,806	212		In	45
				Daily	Two-Way		Out	77		Daily	Two-Way		Out	8		Daily	Two-Way		Out	167

AM APPROVED PROJECTS			Viva at Treasure Coast West						Viva at Treasure Coast East						3000 Virginia						Project Hunt					
Road Name	From	To	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	5%	75	5	OUT	4	1	5%	0	0	OUT	0	0	0%	0	0	-	0	0	2%	19	2	OUT	0	2
	Graham Rd	Okeechobee	10%	150	9	OUT	7	2	10%	0	0	OUT	0	0	0%	0	0	-	0	0	5%	48	5	IN	4	1
	Okeechobee	Edwards	90%	1,348	83	OUT	63	20	90%	0	0	OUT	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
Edwards Rd.	25th	Jenkins Rd	10%	150	9	OUT	7	2	10%	0	0	OUT	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
				1,498	92		In	22		0	0		In	0		2,383	154		In	32		956	101		In	84
				Daily	Two-Way		Out	70		Daily	Two-Way		Out	0		Daily	Two-Way		Out	102		Daily	Two-Way		Out	17

AM APPROVED PROJECTS			Wawa Kings Highway						Kings Highway Warehouse						7/11 Angle Road						Jenkins Waypoint / Resurrection Life					
Road Name	From	To	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	56%	1,858	117	OUT	87	30
	Graham Rd	Okeechobee	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	34%	1,128	71	IN	18	53
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
Edwards Rd.	25th	Jenkins Rd	0.0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
				1,422	127		In	63		5,100	683		In	342		900	91		In	46		3,318	209		In	53
				Daily	Two-Way		Out	64		Daily	Two-Way		Out	341		Daily	Two-Way		Out	45		Daily	Two-Way		Out	156

AM APPROVED PROJECTS			Walsh Crossroads						Project Hurricane						SUM Daily		SUM 2 Way		SUM Directional N/E		SUM Directional S/W		Two Way		Directional N/E		Directional S/W	
Road Name	From	To	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W	Residential	Non-Residential	Residential	Non-Residential	Residential	Non-Residential	Residential	Non-Residential	Double Count	Net 2 Way	Double Count	Net	Double Count	Net
Jenkins Rd	Peterson	Graham Rd	0%	0	0	-	0	0	15%	63	7	OUT	2	5	4,659	1,055	321	121	215	50	106	71	-24	418	-10	255	-14	163
	Graham Rd	Okeechobee	0%	0	0	-	0	0	20%	84	10	IN	7	2	3,632	1,060	257	121	82	97	175	24	-24	354	-19	160	-5	194
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	2,073	42	137	5	90	4	47	1	-1	141	-1	93	0	48
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	502	0	35	0	27	0	8	0	0	35	0	27	0	8
				184	12		In	7		422	48		In	36														
				Daily	Two-Way		Out	5		Daily	Two-Way		Out	12														

PM APPROVED PROJECTS			Cabo Rio RV Resort						Publix at Indrio						Indrio & I-95						Indrio & I-95 Gas Station					
Road Name	From	To	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
	Graham Rd	Okeechobee	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
				766	55		In	36		3,220	278		In	136		0	384		In	237		0	314		In	157
				Daily	Two-Way		Out	19		Daily	Two-Way		Out	142		Daily	Two-Way		Out	147		Daily	Two-Way		Out	157

PM APPROVED PROJECTS			Indrio Groves @ 25%						Farrell Communities						Kings Hwy Commerce Park / White Parcel						Sunnyland					
Road Name	From	To	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Petersen	Graham Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	10%	514	60	OUT	46	14	5%	205	21	IN	13	8
	Graham Rd	Okeechobee	0%	0	0	-	0	0	0%	0	0	-	0	0	10%	514	60	IN	14	46	5%	205	21	IN	13	8
	Okeechobee	Edwards	0%	0	0	-	0	0	5%	133	10	IN	6	4	0%	0	0	-	0	0	0%	0	0	-	0	0
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	5%	133	10	OUT	4	6	0%	0	0	-	0	0	0%	0	0	-	0	0
				2,539	278		In	164		2,665	190		In	116		5,135	600		In	142		4,092	415		In	261
				Daily	Two-Way		Out	114		Daily	Two-Way		Out	74		Daily	Two-Way		Out	458		Daily	Two-Way		Out	154

PM APPROVED PROJECTS			Drawdy Angle Road FKA: Pineapple Grove						KRE						Stonemont						Creekside					
Road Name	From	To	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	2%	73	7	IN	5	3	2%	96	11	IN	3	8	5%	111	13	OUT	10	4	5%	372	34	OUT	13	21
	Graham Rd	Okeechobee	2%	73	7	IN	5	3	2%	96	11	IN	3	8	3%	67	8	IN	2	6	5%	372	34	OUT	13	21
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	5%	372	34	OUT	13	21
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
				5,646	369		In	232		4,778	540		In	151		2,226	262		In	70		7,443	682		In	426
				Daily	Two-Way		Out	137		Daily	Two-Way		Out	389		Daily	Two-Way		Out	192		Daily	Two-Way		Out	256

PM APPROVED PROJECTS			Orange 95 Parcel B						Orange 95 Parcels D & E						Bent Creek @ 50% Complete City of Fort Pierce						Celebration Pointe @ 25% Complete City of Fort Pierce					
Road Name	From	To	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	12%	121	15	IN	3	12	12%	130	16	IN	4	13	2%	0	6	IN	4	2	50%	793	79	OUT	29	51
	Graham Rd	Okeechobee	12%	121	15	IN	3	12	12%	130	16	IN	4	13	2%	0	6	IN	4	2	50%	793	79	IN	51	29
	Okeechobee	Edwards	2%	20	3	IN	1	2	2%	22	3	IN	1	2	0%	0	0	-	0	0	5%	79	8	IN	5	3
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	5%	79	8	OUT	3	5
				1,012	127		In	28		1,086	137		In	30		0	306		In	193		1,585	158		In	101
				Daily	Two-Way		Out	99		Daily	Two-Way		Out	107		Daily	Two-Way		Out	113		Daily	Two-Way		Out	57

PM APPROVED PROJECTS			Hilpointe Residential						Interstate Commerce Center						Whispering Oaks					
Road Name	From	To	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	56%	947	72	OUT	27	45	0%	0	0	-	0	0	12%	337	32	IN	21	11
	Graham Rd	Okeechobee	34%	575	44	IN	28	16	0%	0	0	-	0	0	12%	337	32	IN	21	11
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	5%	140	13	IN	9	5
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	5%	140	13	OUT	5	9
				1,691	129		In	81		373	39		In	11		2,806	266		In	172
				Daily	Two-Way		Out	48		Daily	Two-Way		Out	28		Daily	Two-Way		Out	94

PM APPROVED PROJECTS			Viva at Treasure Coast West						Viva at Treasure Coast East						3000 Virginia						Project Hunt					
Road Name	From	To	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	Is N/E In or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	5%	75	6	OUT	2	4	5%	0	0	OUT	0	0	0%	0	0	-	0	0	2%	19	2	OUT	2	1
	Graham Rd	Okeechobee	10%	150	12	OUT	4	7	10%	0	0	OUT	0	0	0%	0	0	-	0	0	5%	48	6	IN	1	4
	Okeechobee	Edwards	90%	1,348	104	OUT	39	66	90%	0	0	OUT	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
Edwards Rd.	25th	Jenkins Rd	10%	150	12	OUT	4	7	10%	0	0	OUT	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
				1,498	116		In	73		0	0		In	0		2,385	175		In	110		956	114		In	29
				Daily	Two-Way		Out	43		Daily	Two-Way		Out	0		Daily	Two-Way		Out	65		Daily	Two-Way		Out	85

PM APPROVED PROJECTS			Wawa Kings Highway						Kings Highway Warehouse						7/11 Angle Road						Jenkins Waypoint / Resurrection Life					
Road Name	From	To	%	Daily	Two-Way Trips	In N/E to or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E to or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E to or Out	Directional N/E	Directional S/W	%	Daily	Two-Way Trips	In N/E to or Out	Directional N/E	Directional S/W
Jenkins Rd	Peterson	Graham Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	56%	1,858	153	OUT	57	96
	Graham Rd	Okeechobee	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	34%	1,128	93	IN	58	35
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0	0%	0	0	-	0	0
				1,422	115		In	57		5,100	674		In	458		900	80		In	40		3,318	274		In	172
				Daily	Two-Way		Out	58		Daily	Two-Way		Out	216		Daily	Two-Way		Out	40		Daily	Two-Way		Out	102

PM APPROVED PROJECTS			Walsh Crossroads						Project Hurricane						SUM Daily		SUM 2 Way		SUM Directional N/E		SUM Directional S/W		Two Way		Directional N/E		Directional S/W	
Road Name	From	To	%	Daily	Two Way Trips	In N/E In or Out	Directional N/E	Directional S/W	%	Daily	Two Way Trips	In N/E In or Out	Directional N/E	Directional S/W	Residential	Non-Residential	Residential	Non-Residential	Residential	Non-Residential	Residential	Non-Residential	Double Count	Net 2 Way	Double Count	Net	Double Count	Net
Jenkins Rd	Peterson	Graham Rd	0%	0	0	-	0	0	15%	63	9	OUT	6	3	4,659	1,055	411	127	170	73	241	54	-25	512	-15	228	-11	284
	Graham Rd	Okeechobee	0%	0	0	-	0	0	20%	84	12	IN	5	7	3,632	1,060	328	128	196	32	132	96	-26	430	-6	222	-19	209
	Okeechobee	Edwards	0%	0	0	-	0	0	0%	0	0	-	0	0	2,073	42	169	5	71	1	98	4	-1	173	0	72	-1	102
Edwards Rd.	25th	Jenkins Rd	0%	0	0	-	0	0	0%	0	0	-	0	0	502	0	42	0	16	0	27	0	0	42	0	16	0	27
				184	21		In	10		422	60		In	23														
				Daily	Two-Way		Out	11		Daily	Two-Way		Out	37														

Historical Growth Rate Calculation

Segment	From	To	2019 AADT	2022 AADT	3 Year Historical Growth Rate
Edwards Rd	Jenkins Rd	McNeil Rd	10,100	11,800	5.32%
Jenkins Rd	Okeechobee Rd	Edwards Rd	7,500	10,000	10.06%
		Total	17,600	21,800	7.39%

*Source FDOT Historical Traffic Counts

COUNTY: 94
STATION: 7027
DESCRIPTION: ON JENKINS RD SOUTH - S. OF OKEECHOBEE RD (COUNTY
START DATE: 01/26/2022
START TIME: 0000

TIME	DIRECTION: N 1ST	2ND	3RD	4TH	TOTAL	DIRECTION: S 1ST	2ND	3RD	4TH	TOTAL	COMBINED TOTAL
0000	10	6	8	10	34	6	16	9	9	40	74
0100	5	8	3	6	22	7	4	10	5	26	48
0200	9	8	8	10	35	10	12	4	6	32	67
0300	4	3	7	22	36	5	2	12	6	25	61
0400	10	17	9	31	67	9	12	16	17	54	121
0500	17	28	40	64	149	16	21	34	30	101	250
0600	76	76	85	91	328	42	60	63	91	256	584
0700	86	101	99	138	424	102	89	103	125	419	843
0800	131	113	122	82	448	90	90	94	90	364	812
0900	88	99	105	80	372	80	79	83	87	329	701
1000	79	69	64	61	273	76	87	66	90	319	592
1100	74	80	82	73	309	78	90	79	83	330	639
1200	94	62	72	96	324	74	74	98	64	310	634
1300	56	98	84	75	313	84	87	95	80	346	659
1400	81	80	75	63	299	88	81	77	87	333	632
1500	70	76	95	92	333	90	93	100	96	379	712
1600	80	83	104	105	372	126	127	127	109	489	861
1700	116	104	114	73	407	129	120	104	80	433	840
1800	80	58	58	40	236	78	101	70	73	322	558
1900	61	28	35	22	146	49	42	40	27	158	304
2000	23	38	30	27	118	33	31	18	22	104	222
2100	32	25	19	11	87	22	30	26	20	98	185
2200	14	13	7	10	44	16	16	15	12	59	103
2300	10	4	7	6	27	10	13	14	21	58	85
24-HOUR TOTALS:					5203					5384	10587

PEAK VOLUME INFORMATION

	DIRECTION: N HOUR	VOLUME	DIRECTION: S HOUR	VOLUME	COMBINED DIRECTIONS HOUR	VOLUME
A.M.	745	504	700	419	745	903
P.M.	1645	439	1615	492	1630	914
DAILY	745	504	1615	492	1630	914

AM = NB Peak
↑ 0.51 ↓ 0.49

PM = SB Peak
↑ 0.43 ↓ 0.57

GENERATED BY SPS 5.0.57P

COUNTY: 94
STATION: 7056
DESCRIPTION: EDWARDS RD - W. OF SELVITZ RD (COUNTY 174)
START DATE: 01/26/2022
START TIME: 0000

TIME	DIRECTION: E 1ST	2ND	3RD	4TH	TOTAL	DIRECTION: W 1ST	2ND	3RD	4TH	TOTAL	COMBINED TOTAL
0000	13	11	8	8	40	10	12	4	11	37	77
0100	9	6	5	9	29	4	8	4	12	28	57
0200	9	13	7	8	37	8	10	6	11	35	72
0300	5	3	9	12	29	4	7	11	20	42	71
0400	6	13	20	19	58	9	23	10	35	77	135
0500	22	26	38	42	128	14	31	39	68	152	280
0600	51	68	73	94	286	77	75	83	90	325	611
0700	119	107	113	111	450	93	116	134	123	466	916
0800	114	114	104	119	451	100	113	111	96	420	871
0900	89	94	89	108	380	108	118	120	105	451	831
1000	85	87	89	103	364	92	96	79	81	348	712
1100	85	115	99	85	384	96	90	95	91	372	756
1200	92	89	100	86	367	106	80	96	105	387	754
1300	93	113	105	97	408	74	111	91	96	372	780
1400	94	91	94	100	379	97	108	102	89	396	775
1500	120	123	126	105	474	109	107	130	106	452	926
1600	136	142	119	152	549	114	106	143	136	499	1048
1700	149	129	124	103	505	138	123	115	97	473	978
1800	90	106	82	62	340	88	72	75	56	291	631
1900	59	50	54	30	193	82	45	46	34	207	400
2000	47	45	20	29	141	36	44	29	37	146	287
2100	32	32	34	21	119	40	31	30	22	123	242
2200	21	19	14	17	71	17	23	11	14	65	136
2300	13	19	18	19	69	10	7	11	8	36	105
24-HOUR TOTALS:					6251					6200	12451

AM = WB Peak
← 0.51
→ 0.49

PM = EB Peak
← 0.48
→ 0.52

C-20

PEAK VOLUME INFORMATION

	DIRECTION: E HOUR	VOLUME	DIRECTION: W HOUR	VOLUME	COMBINED DIRECTIONS HOUR	VOLUME
A.M.	730	452	715	473	730	922
P.M.	1615	562	1630	540	1630	1089
DAILY	1615	562	1630	540	1630	1089

GENERATED BY SPS 5.0.57P

APPENDIX D

INTERSECTION ANALYSIS

DE TRAFFIC

detraffic.com
(386) 341-4186
Jenkins Rd at Edwards Rd
St. Lucie County, Fl

File Name : jenkins at edwards
Site Code : 00000002
Start Date : 6/15/2023
Page No : 1

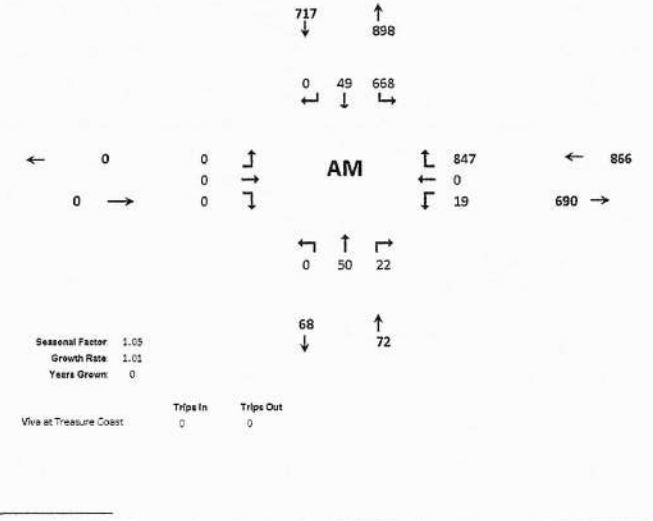
Groups Printed- Autmobiles - Commercial

	Jenkins Rd Southbound				Edward Rd Westbound				Jenkins Rd Northbound				N/A Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	91	6	0	97	3	0	140	143	0	8	4	12	0	0	0	0	252
07:15 AM	110	5	0	115	4	0	158	162	0	9	2	11	0	0	0	0	288
07:30 AM	128	6	0	134	2	0	184	186	0	13	7	20	0	0	0	0	340
07:45 AM	159	9	0	168	2	0	194	196	0	8	4	12	0	0	0	0	376
Total	488	26	0	514	11	0	676	687	0	38	17	55	0	0	0	0	1256
08:00 AM	182	16	0	198	6	0	206	212	0	13	7	20	0	0	0	0	430
08:15 AM	159	12	0	171	5	0	223	228	0	16	4	20	0	0	0	0	419
08:30 AM	136	10	0	146	5	0	184	189	0	11	6	17	0	0	0	0	352
08:45 AM	121	9	0	130	4	0	160	164	0	6	3	9	0	0	0	0	303
Total	598	47	0	645	20	0	773	793	0	46	20	66	0	0	0	0	1504
04:00 PM	133	6	0	139	11	0	121	132	0	11	9	20	0	0	0	0	291
04:15 PM	162	7	0	169	18	0	151	169	0	25	7	32	0	0	0	0	370
04:30 PM	147	9	0	156	11	0	180	191	0	11	8	19	0	0	0	0	366
04:45 PM	153	8	0	161	8	0	155	163	0	9	8	17	0	0	0	0	341
Total	595	30	0	625	48	0	607	655	0	56	32	88	0	0	0	0	1368
05:00 PM	182	8	0	190	7	0	140	147	0	8	8	16	0	0	0	0	353
05:15 PM	153	10	0	163	9	0	161	170	0	13	10	23	0	0	0	0	356
05:30 PM	121	9	0	130	7	0	147	154	0	8	7	15	0	0	0	0	299
05:45 PM	113	7	0	120	8	0	140	148	0	7	9	16	0	0	0	0	284
Total	569	34	0	603	31	0	588	619	0	36	34	70	0	0	0	0	1292
Grand Total	2250	137	0	2387	110	0	2644	2754	0	176	103	279	0	0	0	0	5420
Apprch %	94.3	5.7	0		4	0	96		0	63.1	36.9		0	0	0		
Total %	41.5	2.5	0	44	2	0	48.8	50.8	0	3.2	1.9	5.1	0	0	0	0	
Autmobiles	2131	135	0	2266	107	0	2545	2652	0	176	99	275	0	0	0	0	5193
% Autmobiles	94.7	98.5	0	94.9	97.3	0	96.3	96.3	0	100	96.1	98.6	0	0	0	0	95.8
Commercial	119	2	0	121	3	0	99	102	0	0	4	4	0	0	0	0	227
% Commercial	5.3	1.5	0	5.1	2.7	0	3.7	3.7	0	0	3.9	1.4	0	0	0	0	4.2

TURNING MOVEMENT VOLUME COUNTS

N/S STREET Jenkins Rd **E/W STREET** Edwards Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/13/2023 **DAY** Thursday **CITY** St. Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2023

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15	0	8	4	91	6	0	6	0	0	3	0	140	252	1256
7:15-7:30	0	9	2	110	5	0	0	0	0	4	0	158	288	1484
7:30-7:45	0	13	7	128	6	0	0	0	0	2	0	184	340	1565
7:45-8:00	0	8	4	139	9	0	0	0	0	2	0	194	376	1577
8:00-8:15	0	13	7	182	16	0	0	0	0	6	0	206	430	1504
8:15-8:30	0	16	4	159	12	0	0	0	0	5	0	223	419	
8:30-8:45	0	11	6	138	10	0	0	0	0	5	0	184	352	
8:45-9:00	0	6	3	121	9	0	0	0	0	4	0	160	303	
AM PEAK HOUR IS FROM:			7:45AM TO 8:45AM											
Volumes	0	48	21	638	47	0	0	0	0	18	0	807	1577	
Season Factor	0	50	22	668	49	0	0	0	0	19	0	847	1656	
Growth	0	50	22	668	49	0	0	0	0	19	0	847	1656	
In/Out		OUT	OUT		IN							IN		
Percentage	0%	90%	10%	0%	90%	0%	0%	0%	0%	0%	0%	90%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	50	22	668	49	0	0	0	0	19	0	847	1656	

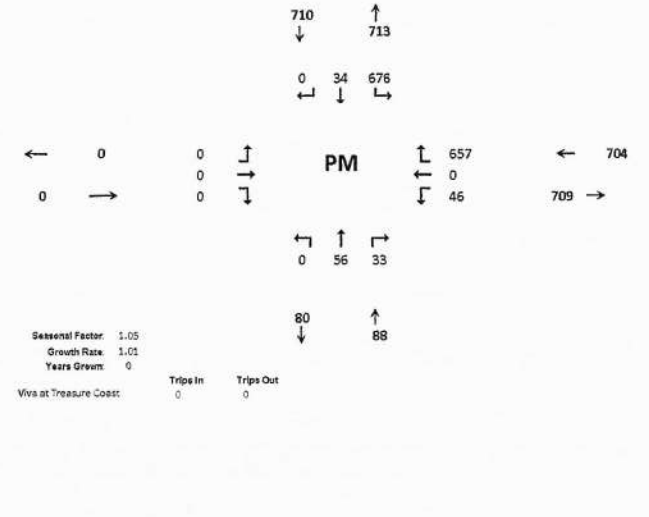


Seasonal Factor: 1.05
Growth Rate: 1.01
Years Grown: 0

	Trips In	Trips Out
Viva at Treasure Coast	0	0

N/S STREET Jenkins Rd **E/W STREET** Edwards Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/13/2023 **DAY** Thursday **CITY** St Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2023

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	0	11	9	133	6	0	0	0	0	11	0	121	291	1368
4:15-4:30	0	25	7	162	7	0	0	0	0	18	0	151	370	1430
4:30-4:45	0	11	8	147	9	0	0	0	0	11	0	180	366	1416
4:45-5:00	0	9	8	133	8	0	0	0	0	8	0	155	341	1349
5:00-5:15	0	8	8	182	8	0	0	0	0	7	0	140	353	1292
5:15-5:30	0	13	10	138	10	0	0	0	0	9	0	161	356	
5:30-5:45	0	8	7	121	9	0	0	0	0	7	0	147	299	
5:45-6:00	0	7	9	113	7	0	0	0	0	8	0	140	284	
PM PEAK HOUR IS FROM:			4:15PM TO 5:15PM											
Volumes	0	53	31	644	32	0	0	0	0	44	0	626	1430	
Season Factor	0	56	33	676	34	0	0	0	0	46	0	657	1502	
Growth	0	56	33	676	34	0	0	0	0	46	0	657	1502	
In/Out		OUT	OUT		IN							IN		
Percentage	0%	90%	10%	0%	90%	0%	0%	0%	0%	0%	0%	90%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	0	56	33	676	34	0	0	0	0	46	0	657	1502	



Seasonal Factor: 1.05
Growth Rate: 1.01
Years Grown: 0

	Trips In	Trips Out
Viva at Treasure Coast	0	0

D-2

HCS Two-Way Stop-Control Report

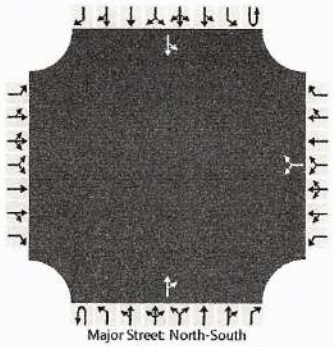
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2023
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	Jenkins and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Jenkins
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						19		847			50	22		668	49	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							941							726		
Capacity, c (veh/h)							745							1514		
v/c Ratio							1.26							0.48		
95% Queue Length, Q_{95} (veh)							34.7							2.7		
Control Delay (s/veh)							148.4							9.6	4.7	
Level of Service (LOS)							F							A	A	
Approach Delay (s/veh)						148.4								9.2		
Approach LOS						F								A		

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

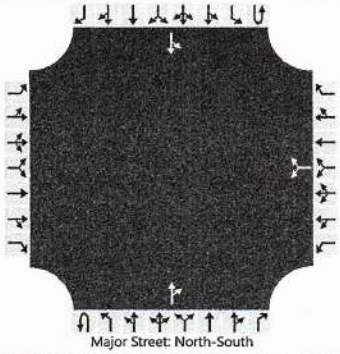
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2023
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	Jenkins and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Jenkins
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						46		657			56	33		676	34	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							725							697		
Capacity, c (veh/h)							530							1497		
v/c Ratio							1.37							0.47		
95% Queue Length, Q_{95} (veh)							32.7							2.5		
Control Delay (s/veh)							199.4							9.5	4.5	
Level of Service (LOS)							F							A	A	
Approach Delay (s/veh)					199.4								9.2			
Approach LOS					F								A			

Copyright © 2023 University of Florida. All Rights Reserved.

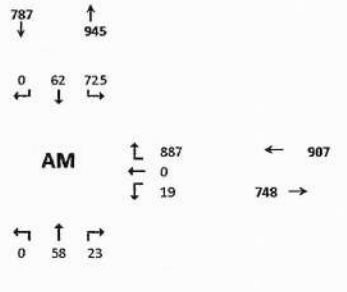
TURNING MOVEMENT VOLUME COUNTS

N/S STREET Jenkins Rd **E/W STREET** Edwards Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/15/2023 **DAY** Thursday **CITY** St. Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2026

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15	0	8	4	91	6	0	0	0	0	3	0	140	252	1256
7:15-7:30	0	9	2	110	5	0	0	0	0	4	0	158	288	1434
7:30-7:45	0	13	7	128	6	0	0	0	0	2	0	184	340	1565
7:45-8:00	0	8	4	159	9	0	0	0	0	2	0	194	376	1577
8:00-8:15	0	13	7	182	16	0	0	0	0	6	0	206	430	1504
8:15-8:30	0	16	4	159	12	0	0	0	0	5	0	223	419	
8:30-8:45	0	11	6	136	10	0	0	0	0	5	0	184	352	
8:45-9:00	0	6	3	121	9	0	0	0	0	4	0	160	303	
AM PEAK HOUR IS FROM:			7:45AM TO 8:45AM											
Volumes	0	48	21	636	47	0	0	0	0	18	0	807	1577	
Season Factor	0	50	22	668	49	0	0	0	0	19	0	847	1656	
Growth	0	52	23	688	51	0	0	0	0	19	0	873	1706	
In/Out				IN								OUT		
Percentage	0%	0%	0%	90%	0%	0%	0%	0%	0%	0%	0%	90%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
SUBPROJECTS														
%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%		
In/Out				OUT								IN		
Volume	0	0	0	19	0	0	0	0	0	0	0	6	0	
%	0.0%	2.5%	0.0%	2.5%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%		
In/Out		IN		OUT	OUT							IN		
Volume	0	4	0	11	11	0	0	0	0	0	0	3.575	0	
%	0.0%	1.0%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	1	0	0	0	0	0	0	0	0	0	1.03	0	
%	0.0%	1.0%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	1	0	0	0	0	0	0	0	0	0	1.11	0	
%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%		
In/Out				OUT								IN		
Volume	0	0	0	7	0	0	0	0	0	0	0	2	0	
Subtotal	0	6	0	37	11	0	0	0	0	0	0	14	0	
Total	0	58	23	725	62	0	0	0	0	19	0	887	1706	

Seasonal Factor 1.05
Growth Rate 1.01
Years Grown 3

	Trips In	Trips Out
Viva at Treasure Coast East	0	0
Celebration Pointe - 25%	128	383
Creekside	143	421
Orange 95 Parcel B	103	20
Orange 95 Parcel D + E	111	22
Viva at Treasure Coast West	22	70

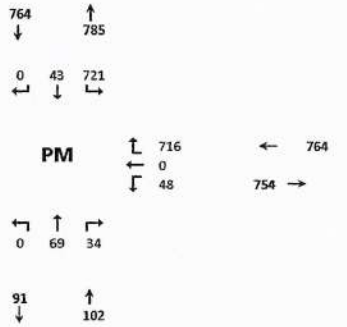


N/S STREET Jenkins Rd **E/W STREET** Edwards Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/15/2023 **DAY** Thursday **CITY** St Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2026

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	0	11	9	133	6	0	0	0	0	11	0	121	291	1368
4:15-4:30	0	25	7	162	7	0	0	0	0	18	0	151	370	1430
4:30-4:45	0	11	8	147	9	0	0	0	0	11	0	180	366	1416
4:45-5:00	0	9	8	153	8	0	0	0	0	8	0	155	341	1349
5:00-5:15	0	8	8	182	8	0	0	0	0	7	0	140	353	1292
5:15-5:30	0	13	10	153	10	0	0	0	0	9	0	161	356	
5:30-5:45	0	8	7	121	9	0	0	0	0	7	0	147	299	
5:45-6:00	0	7	9	113	7	0	0	0	0	8	0	140	284	
PM PEAK HOUR IS FROM:			4:15PM TO 5:15PM											
Volumes	0	53	31	644	32	0	0	0	0	44	0	626	1430	
Season Factor	0	56	33	676	34	0	0	0	0	46	0	657	1502	
Growth	0	57	34	697	35	0	0	0	0	48	0	677	1547	
In/Out		0	0	0								OUT		
Percentage	0%	0%	0%	90%	0%	0%	0%	0%	0%	0%	0%	90%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
SUBPROJECTS														
%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%		
In/Out				OUT								IN		
Volume	0	0	0	11	0	0	0	0	0	0	0	20	0	
%	0.0%	2.5%	0.0%	2.5%	2.5%	0.0%	0%	0%	0.0%	0.0%	0.0%	2.5%		
In/Out		IN		OUT	OUT							IN		
Volume	0	11	0	6	6	0	0	0	0	0	0	11	0	
%	0.0%	1.0%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	
%	0.0%	1.0%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	
%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0%	0%	0.0%	0.0%	0.0%	10.0%		
In/Out				OUT								IN		
Volume	0	0	0	4	0	0	0	0	0	0	0	7	0	
Subtotal	0	11	0	24	8	0	0	0	0	0	0	39	0	
Total	0	69	34	721	43	0	0	0	0	48	0	716	1547	

Seasonal Factor 1.05
Growth Rate 1.01
Years Grown 3

	Trips In	Trips Out
Viva at Treasure Coast East	0	0
Celebration Pointe - 25%	405	228
Creekside	426	256
Orange 95 Parcel B	28	99
Orange 95 Parcel D + E	30	107
Viva at Treasure Coast West	73	43



HCS Two-Way Stop-Control Report

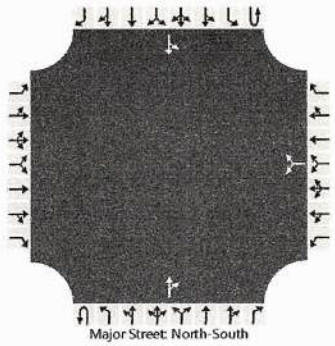
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Without Project

Site Information

Intersection	Jenkins and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Jenkins
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						19		887			58	23		725	62	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							985							788		
Capacity, c (veh/h)							682							1501		
v/c Ratio							1.44							0.52		
95% Queue Length, Q_{95} (veh)							45.9							3.2		
Control Delay (s/veh)							226.2							10.0	5.5	
Level of Service (LOS)							F							B	A	
Approach Delay (s/veh)					226.2								9.7			
Approach LOS					F								A			

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

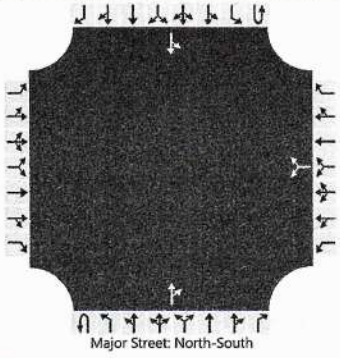
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Without Project

Site Information

Intersection	Jenkins and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Jenkins
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						48		716			69	34		721	43	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							788							743		
Capacity, c (veh/h)							472							1479		
v/c Ratio							1.67							0.50		
95% Queue Length, Q_{95} (veh)							45.9							2.9		
Control Delay (s/veh)							331.4							9.9	5.1	
Level of Service (LOS)							F							A	A	
Approach Delay (s/veh)					331.4								9.6			
Approach LOS					F								A			

Copyright © 2023 University of Florida. All Rights Reserved.

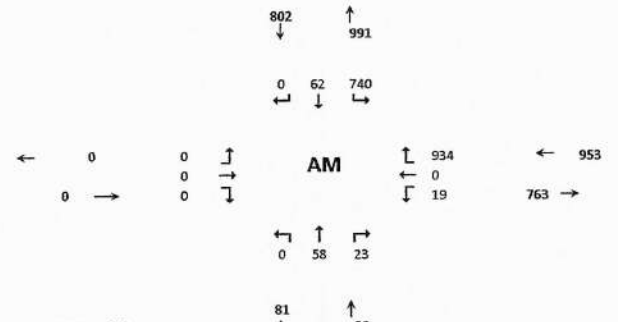
TURNING MOVEMENT VOLUME COUNTS

N/S STREET Jenkins Rd **E/W STREET** Edwards Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/15/2023 **DAY** Thursday **CITY** St. Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2026

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15	0	8	4	91	6	0	0	0	0	3	0	140	252	1256
7:15-7:30	0	9	2	110	5	0	0	0	0	4	0	158	288	1434
7:30-7:45	0	13	7	128	6	0	0	0	0	2	0	184	340	1565
7:45-8:00	0	8	4	159	9	0	0	0	0	2	0	194	376	1577
8:00-8:15	0	13	7	182	16	0	0	0	0	6	0	206	430	1504
8:15-8:30	0	16	4	159	12	0	0	0	0	5	0	223	419	
8:30-8:45	0	11	6	136	10	0	0	0	0	5	0	184	352	
8:45-9:00	0	6	3	121	9	0	0	0	0	4	0	160	303	
AM PEAK HOUR IS FROM:				7:45AM TO 8:45AM										
Volumes	0	48	21	636	47	0	0	0	0	18	0	807	1577	
Season Factor	0	50	22	668	49	0	0	0	0	19	0	847	1656	
Growth	0	52	23	688	51	0	0	0	0	19	0	873	1706	
In/Out				IN								OUT		
Percentage	0%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	70%		
PROJECT	0	0	0	15	0	0	0	0	0	0	0	46	61	
SUBPROJECTS														
%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%		
In/Out				OUT								IN		
Volume	0	0	0	19	0	0	0	0	0	0	0	6	0	
%	0.0%	2.5%	0.0%	2.5%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%		
In/Out		IN		OUT	OUT							IN		
Volume	0	4	0	11	11	0	0	0	0	0	0	4	0	
%	0.0%	1.0%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	1	0	0	0	0	0	0	0	0	0	1	0	
%	0.0%	1.0%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	1	0	0	0	0	0	0	0	0	0	1	0	
%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%		
In/Out				OUT								IN		
Volume	0	0	0	7	0	0	0	0	0	0	0	2	0	
Subtotal	0	6	0	37	11	0	0	0	0	0	0	14	0	
Total	0	58	23	740	62	0	0	0	0	19	0	934	1767	

	Seasonal Factor	1.05
	Growth Rate	1.01
	Years Grown	3

	Trips In	Trips Out
Viva at Treasure Coast East	21	66
Celebration Pointe - 25%	128	383
Creekside	143	421
Orange 95 Parcel B	103	20
Orange 95 Parcel D + E	111	22
Viva at Treasure Coast West	22	70

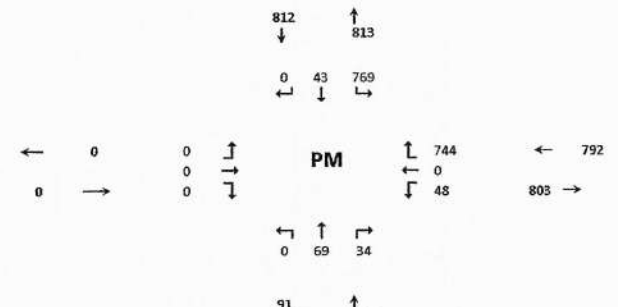


N/S STREET Jenkins Rd **E/W STREET** Edwards Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/15/2023 **DAY** Thursday **CITY** St Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2026

15 Min Period lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	0	11	9	133	6	0	0	0	0	11	0	121	291	1368
4:15-4:30	0	25	7	162	7	0	0	0	0	18	0	151	370	1430
4:30-4:45	0	11	8	147	9	0	0	0	0	11	0	180	366	1416
4:45-5:00	0	9	8	153	8	0	0	0	0	8	0	155	341	1349
5:00-5:15	0	8	8	182	8	0	0	0	0	7	0	140	353	1292
5:15-5:30	0	13	10	153	10	0	0	0	0	9	0	161	356	
5:30-5:45	0	8	7	121	9	0	0	0	0	7	0	147	299	
5:45-6:00	0	7	9	113	7	0	0	0	0	8	0	140	284	
PM PEAK HOUR IS FROM:				4:15PM TO 5:15PM										
Volumes	0	53	31	644	32	0	0	0	0	44	0	626	1430	
Season Factor	0	56	33	676	34	0	0	0	0	46	0	657	1502	
Growth	0	57	34	697	35	0	0	0	0	48	0	677	1547	
In/Out		0	0	IN	0							OUT		
Percentage	0%	0%	0%	70%	0%	0%	0%	0%	0%	0%	0%	70%		
PROJECT	0	0	0	48	0	0	0	0	0	0	0	28	76	
SUBPROJECTS														
%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%		
In/Out				OUT								IN		
Volume	0	0	0	11	0	0	0	0	0	0	0	20	0	
%	0.0%	2.5%	0.0%	2.5%	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.5%		
In/Out		IN		OUT	OUT							IN		
Volume	0	11	0	6	6	0	0	0	0	0	0	11	0	
%	0.0%	1.0%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	
%	0.0%	1.0%	0.0%	1.0%	1.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	0	0	1	1	0	0	0	0	0	0	0	0	
%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%		
In/Out				OUT								IN		
Volume	0	0	0	4	0	0	0	0	0	0	0	7	0	
Subtotal	0	11	0	24	8	0	0	0	0	0	0	39	0	
Total	0	69	34	769	43	0	0	0	0	48	0	744	1823	

	Seasonal Factor	1.05
	Growth Rate	1.01
	Years Grown	3

	Trips In	Trips Out
Viva at Treasure Coast East	69	40
Celebration Pointe - 25%	405	228
Creekside	426	256
Orange 95 Parcel B	28	99
Orange 95 Parcel D + E	30	107
Viva at Treasure Coast West	73	43



HCS Two-Way Stop-Control Report

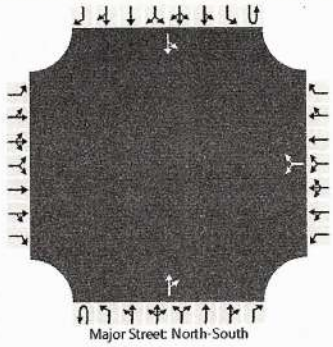
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	With Project

Site Information

Intersection	Jenkins and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Jenkins
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						19		934			58	23		740	62	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							1036							804		
Capacity, c (veh/h)							677							1501		
v/c Ratio							1.53							0.54		
95% Queue Length, Q_{95} (veh)							52.3							3.3		
Control Delay (s/veh)							263.7							10.1	5.6	
Level of Service (LOS)							F							B	A	
Approach Delay (s/veh)						263.7								9.8		
Approach LOS						F								A		

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

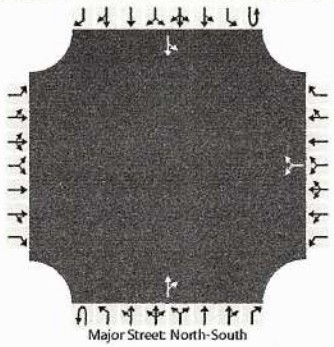
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	With Project

Site Information

Intersection	Jenkins and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Jenkins
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	0	1	0
Configuration							LR					TR		LT		
Volume (veh/h)						48		744			69	34		769	43	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage						Undivided										

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							816							793		
Capacity, c (veh/h)							426							1479		
v/c Ratio							1.91							0.54		
95% Queue Length, Q_{95} (veh)							54.4							3.3		
Control Delay (s/veh)							442.0							10.2	5.6	
Level of Service (LOS)							F							B	A	
Approach Delay (s/veh)						442.0								10.0		
Approach LOS						F								A		

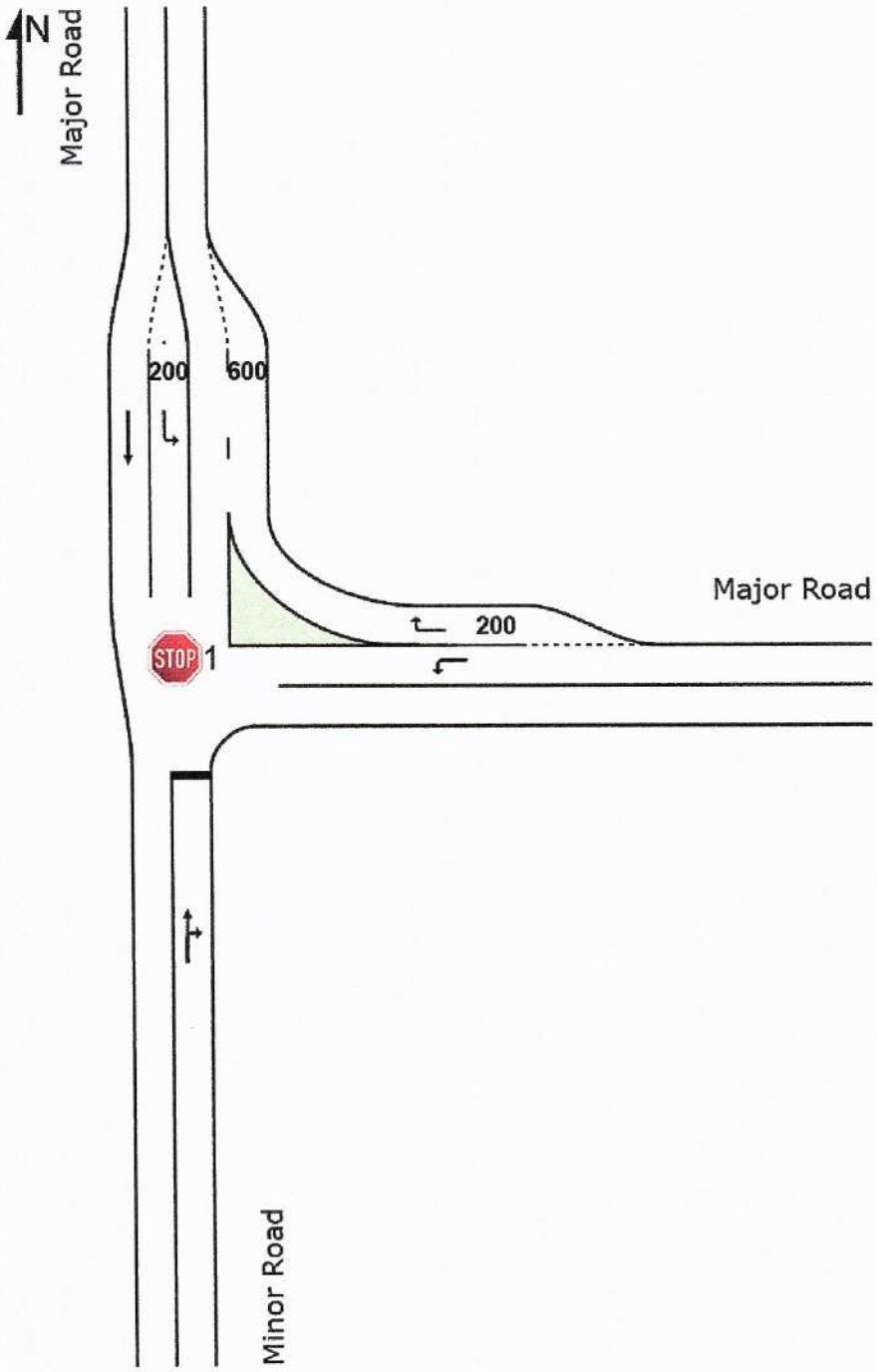
Copyright © 2023 University of Florida. All Rights Reserved.

SITE LAYOUT

Site: 1 [Stop 3-way 2-Lane Major US (Site Folder: General)]

Three-way intersection with 2-lane major road (Stop control)
Site Category: (None)
Stop (Two-Way)

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



AM w/o project

MOVEMENT SUMMARY

Site: 1 [Stop 3-way 2-Lane Major US (Site Folder: General)]

Three-way intersection with 2-lane major road (Stop control)
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Minor Road														
50	T1	58	0	63	0.0	0.852	136.9	LOS F	4.5	111.9	0.96	1.27	2.24	11.6
22	R2	23	0	25	0.0	0.852	101.0	LOS F	4.5	111.9	0.96	1.27	2.24	11.6
Approach		81	0	88	0.0	0.852	126.7	LOS F	4.5	111.9	0.96	1.27	2.24	11.6
East: Major Road														
19	L2	19	0	21	0.0	0.026	4.8	LOS A	0.1	2.4	0.56	0.45	0.56	32.3
847	R2	887	0	964	0.0	0.599	7.4	LOS A	0.0	0.0	0.00	0.00	0.00	35.5
Approach		906	0	985	0.0	0.599	7.7	NA	0.1	2.4	0.01	0.01	0.01	35.4
North: Major Road														
668	L2	725	0	788	0.0	0.435	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	34.9
49	T1	62	0	67	0.0	0.035	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		787	0	855	0.0	0.435	0.1	NA	0.0	0.0	0.00	0.00	0.00	35.2
All Vehicles		1774	0	1928	0.0	0.852	9.5	NA	4.5	111.9	0.05	0.06	0.11	32.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Minor Road Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: O'ROURKE ENGINEERING & PLANNING | Licence: PLUS / 1PC | Processed: Thursday, July 13, 2023 1:57:34 PM
Project: C:\Users\Taylor\Desktop\Intersect Existing 01.sip9

PM w/o project

MOVEMENT SUMMARY

Site: 1 [Stop 3-way 2-Lane Major US (Site Folder: General)]

Three-way intersection with 2-lane major road (Stop control)
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Minor Road														
50	T1	69	0	71	0.0	0.705	79.7	LOS F	3.5	87.4	0.93	1.16	1.85	16.3
22	R2	34	0	35	0.0	0.705	56.8	LOS F	3.5	87.4	0.93	1.16	1.85	16.3
Approach		103	0	106	0.0	0.705	72.1	LOS F	3.5	87.4	0.93	1.16	1.85	16.3
East: Major Road														
19	L2	48	0	49	0.0	0.059	4.8	LOS A	0.2	5.7	0.55	0.47	0.55	32.2
847	R2	716	0	738	0.0	0.458	5.8	LOS A	0.0	0.0	0.00	0.00	0.00	35.6
Approach		764	0	788	0.0	0.458	5.9	NA	0.2	5.7	0.03	0.03	0.03	35.4
North: Major Road														
668	L2	721	0	743	0.0	0.411	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	34.9
49	T1	43	0	44	0.0	0.023	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		764	0	788	0.0	0.411	0.1	NA	0.0	0.0	0.00	0.00	0.00	35.1
All Vehicles		1631	0	1681	0.0	0.705	7.2	NA	3.5	87.4	0.07	0.09	0.13	32.9

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Minor Road Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

AM w/ project

MOVEMENT SUMMARY

Site: 1 [Stop 3-way 2-Lane Major US (Site Folder: General)]

Three-way intersection with 2-lane major road (Stop control)
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Minor Road														
50	T1	58	0	63	0.0	0.933	166.8	LOS F	5.5	136.9	0.98	1.36	2.55	10.1
22	R2	23	0	25	0.0	0.933	126.6	LOS F	5.5	136.9	0.98	1.36	2.55	10.1
Approach		81	0	88	0.0	0.933	155.4	LOS F	5.5	136.9	0.98	1.36	2.55	10.1
East: Major Road														
19	L2	19	0	21	0.0	0.026	4.9	LOS A	0.1	2.5	0.56	0.45	0.56	32.2
847	R2	934	0	1015	0.0	0.631	7.9	LOS A	0.0	0.0	0.00	0.00	0.00	35.5
Approach		953	0	1036	0.0	0.631	8.2	NA	0.1	2.5	0.01	0.01	0.01	35.4
North: Major Road														
668	L2	740	0	804	0.0	0.445	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	34.9
49	T1	62	0	67	0.0	0.035	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		802	0	872	0.0	0.445	0.2	NA	0.0	0.0	0.00	0.00	0.00	35.2
All Vehicles		1836	0	1996	0.0	0.933	10.9	NA	5.5	136.9	0.05	0.06	0.12	31.8

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Minor Road Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: O'ROURKE ENGINEERING & PLANNING | Licence: PLUS / 1PC | Processed: Thursday, July 13, 2023 1:59:51 PM
Project: C:\Users\Taylor\Desktop\Intersect Existing 01.sip9

PM w/ project

MOVEMENT SUMMARY

Site: 1 [Stop 3-way 2-Lane Major US (Site Folder: General)]

Three-way intersection with 2-lane major road (Stop control)
Site Category: (None)
Stop (Two-Way)

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Minor Road														
50	T1	69	0	71	0.0	0.784	99.8	LOS F	4.2	103.9	0.95	1.23	2.10	14.3
22	R2	34	0	35	0.0	0.784	73.8	LOS F	4.2	103.9	0.95	1.23	2.10	14.3
Approach		103	0	106	0.0	0.784	91.2	LOS F	4.2	103.9	0.95	1.23	2.10	14.3
East: Major Road														
19	L2	48	0	49	0.0	0.061	5.1	LOS A	0.2	5.9	0.56	0.49	0.56	32.1
847	R2	744	0	767	0.0	0.476	5.9	LOS A	0.0	0.0	0.00	0.00	0.00	35.6
Approach		792	0	816	0.0	0.476	6.1	NA	0.2	5.9	0.03	0.03	0.03	35.4
North: Major Road														
668	L2	769	0	793	0.0	0.438	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	34.9
49	T1	43	0	44	0.0	0.023	0.0	LOS A	0.0	0.0	0.00	0.00	0.00	40.0
Approach		812	0	837	0.0	0.438	0.2	NA	0.0	0.0	0.00	0.00	0.00	35.1
All Vehicles		1707	0	1760	0.0	0.784	8.2	NA	4.2	103.9	0.07	0.09	0.14	32.4

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Minor Road Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

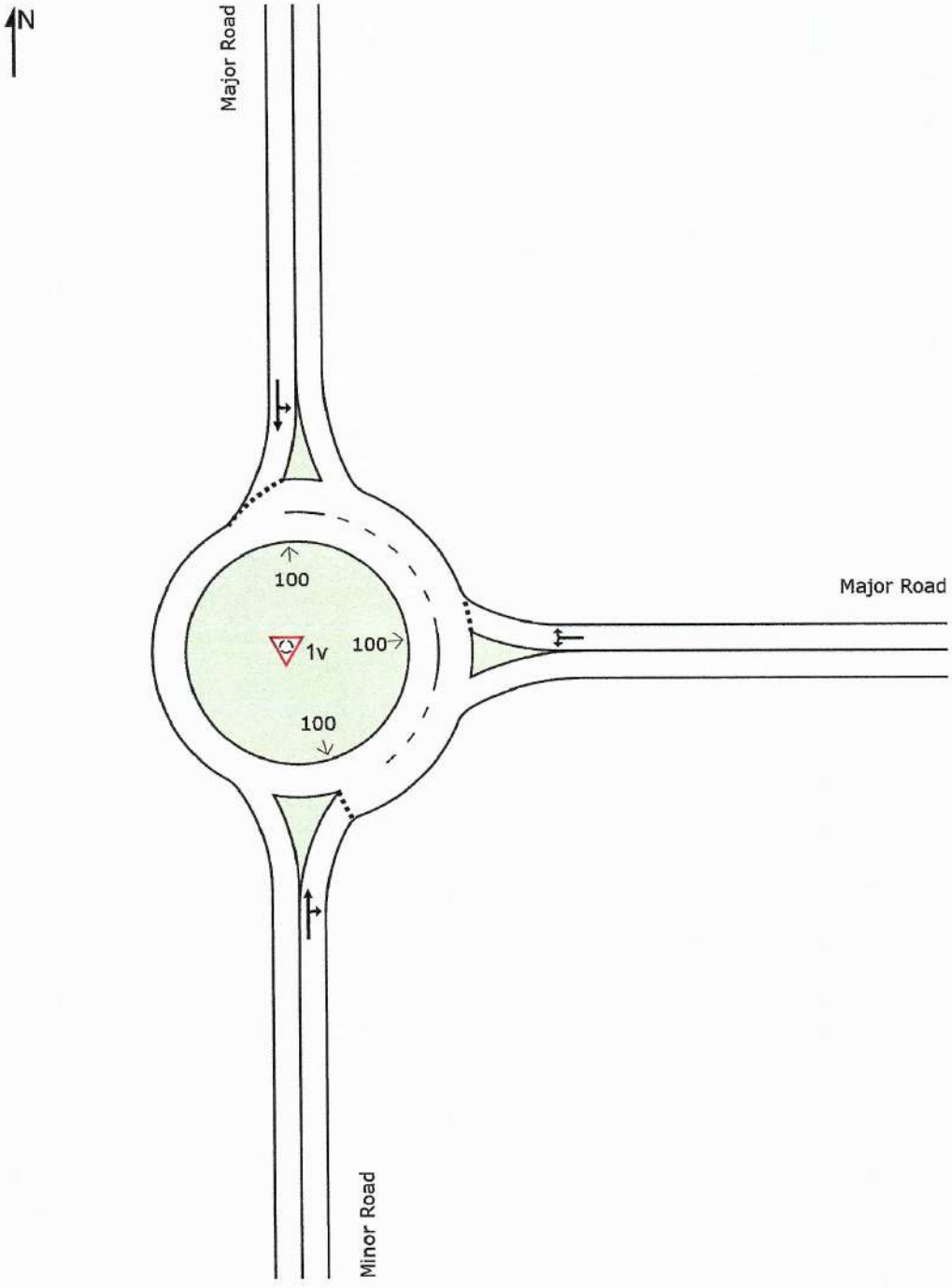
SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: O'ROURKE ENGINEERING & PLANNING | Licence: PLUS / 1PC | Processed: Thursday, July 13, 2023 2:09:30 PM
Project: C:\Users\Taylor\Desktop\Intersect Existing 01.sip9

SITE LAYOUT

Site: 1v [Stop 3-way 2-Lane Major US - Conversion (Site Folder: General)]

Three-way intersection with 2-lane major road (Stop control)
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com

AM w/o project

MOVEMENT SUMMARY

Site: 1v [Stop 3-way 2-Lane Major US - Conversion (Site Folder: General)]

Three-way Roundabout with 2-lane major road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Minor Road														
50	T1	58	0	63	0.0	0.143	7.5	LOS A	0.6	14.1	0.64	0.64	0.64	34.1
22	R2	23	0	25	0.0	0.143	7.5	LOS A	0.6	14.1	0.64	0.64	0.64	33.1
Approach		81	0	88	0.0	0.143	7.5	LOS A	0.6	14.1	0.64	0.64	0.64	33.8
East: Major Road														
19	L2	19	0	21	0.0	0.732	13.2	LOS B	8.6	213.8	0.47	0.22	0.47	31.2
847	R2	887	0	964	0.0	0.732	13.2	LOS B	8.6	213.8	0.47	0.22	0.47	30.4
Approach		906	0	985	0.0	0.732	13.2	LOS B	8.6	213.8	0.47	0.22	0.47	30.4
North: Major Road														
668	L2	725	0	788	0.0	0.613	9.6	LOS A	5.5	138.6	0.19	0.06	0.19	30.8
49	T1	62	0	67	0.0	0.613	9.6	LOS A	5.5	138.6	0.19	0.06	0.19	30.7
Approach		787	0	855	0.0	0.613	9.6	LOS A	5.5	138.6	0.19	0.06	0.19	30.8
All Vehicles		1774	0	1928	0.0	0.732	11.4	LOS B	8.6	213.8	0.35	0.17	0.35	30.7

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: O'ROURKE ENGINEERING & PLANNING | Licence: PLUS / 1PC | Processed: Thursday, July 13, 2023 2:12:12 PM
Project: C:\Users\Taylor\Desktop\Intersect Existing 01.sip9

PM w/o project

MOVEMENT SUMMARY

Site: 1v [Stop 3-way 2-Lane Major US - Conversion (Site Folder: General)]

Three-way Roundabout with 2-lane major road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Minor Road														
50	T1	69	0	71	0.0	0.164	7.5	LOS A	0.7	16.6	0.63	0.63	0.63	34.1
22	R2	34	0	35	0.0	0.164	7.5	LOS A	0.7	16.6	0.63	0.63	0.63	33.1
Approach		103	0	106	0.0	0.164	7.5	LOS A	0.7	16.6	0.63	0.63	0.63	33.8
East: Major Road														
19	L2	48	0	49	0.0	0.589	9.4	LOS A	4.7	118.4	0.34	0.17	0.34	32.9
847	R2	716	0	738	0.0	0.589	9.4	LOS A	4.7	118.4	0.34	0.17	0.34	31.9
Approach		764	0	788	0.0	0.589	9.4	LOS A	4.7	118.4	0.34	0.17	0.34	32.0
North: Major Road														
668	L2	721	0	743	0.0	0.578	9.1	LOS A	4.7	116.5	0.28	0.12	0.28	31.0
49	T1	43	0	44	0.0	0.578	9.1	LOS A	4.7	116.5	0.28	0.12	0.28	30.8
Approach		764	0	788	0.0	0.578	9.1	LOS A	4.7	116.5	0.28	0.12	0.28	31.0
All Vehicles		1631	0	1681	0.0	0.589	9.1	LOS A	4.7	118.4	0.33	0.17	0.33	31.6

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: O'ROURKE ENGINEERING & PLANNING | Licence: PLUS / 1PC | Processed: Thursday, July 13, 2023 2:16:51 PM
Project: C:\Users\Taylor\Desktop\Intersect Existing 01.sip9

AM w/ project

MOVEMENT SUMMARY

Site: 1v [Stop 3-way 2-Lane Major US - Conversion (Site Folder: General)]

Three-way Roundabout with 2-lane major road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Minor Road														
50	T1	58	0	63	0.0	0.145	7.7	LOS A	0.6	14.3	0.64	0.64	0.64	34.0
22	R2	23	0	25	0.0	0.145	7.7	LOS A	0.6	14.3	0.64	0.64	0.64	33.0
Approach		81	0	88	0.0	0.145	7.7	LOS A	0.6	14.3	0.64	0.64	0.64	33.7
East: Major Road														
19	L2	19	0	21	0.0	0.770	14.8	LOS B	10.2	254.8	0.53	0.25	0.53	30.6
847	R2	934	0	1015	0.0	0.770	14.8	LOS B	10.2	254.8	0.53	0.25	0.53	29.7
Approach		953	0	1036	0.0	0.770	14.8	LOS B	10.2	254.8	0.53	0.25	0.53	29.7
North: Major Road														
668	L2	740	0	804	0.0	0.625	9.9	LOS A	5.8	145.4	0.19	0.06	0.19	30.7
49	T1	62	0	67	0.0	0.625	9.9	LOS A	5.8	145.4	0.19	0.06	0.19	30.6
Approach		802	0	872	0.0	0.625	9.9	LOS A	5.8	145.4	0.19	0.06	0.19	30.7
All Vehicles		1836	0	1996	0.0	0.770	12.3	LOS B	10.2	254.8	0.39	0.18	0.39	30.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: O'ROURKE ENGINEERING & PLANNING | Licence: PLUS / 1PC | Processed: Thursday, July 13, 2023 2:13:15 PM
Project: C:\Users\Taylor\Desktop\Intersect Existing 01.sip9

PM w/ project

MOVEMENT SUMMARY

Site: 1v [Stop 3-way 2-Lane Major US - Conversion (Site Folder: General)]

Three-way Roundabout with 2-lane major road
Site Category: (None)
Roundabout

Vehicle Movement Performance

Mov ID	Turn	INPUT VOLUMES [Total veh/h	HV] veh/h	DEMAND FLOWS [Total veh/h	HV] %	Deg. Satn v/c	Aver. Delay sec	Level of Service	95% BACK OF QUEUE [Veh. veh	Dist] ft	Prop. Que	Effective Stop Rate	Aver. No. Cycles	Aver. Speed mph
South: Minor Road														
50	T1	69	0	71	0.0	0.173	7.9	LOS A	0.7	17.3	0.65	0.65	0.65	33.9
22	R2	34	0	35	0.0	0.173	7.9	LOS A	0.7	17.3	0.65	0.65	0.65	32.9
Approach		103	0	106	0.0	0.173	7.9	LOS A	0.7	17.3	0.65	0.65	0.65	33.5
East: Major Road														
19	L2	48	0	49	0.0	0.611	9.9	LOS A	5.1	128.7	0.36	0.18	0.36	32.7
847	R2	744	0	767	0.0	0.611	9.9	LOS A	5.1	128.7	0.36	0.18	0.36	31.7
Approach		792	0	816	0.0	0.611	9.9	LOS A	5.1	128.7	0.36	0.18	0.36	31.8
North: Major Road														
668	L2	769	0	793	0.0	0.615	9.8	LOS A	5.4	134.3	0.30	0.13	0.30	30.7
49	T1	43	0	44	0.0	0.615	9.8	LOS A	5.4	134.3	0.30	0.13	0.30	30.5
Approach		812	0	837	0.0	0.615	9.8	LOS A	5.4	134.3	0.30	0.13	0.30	30.7
All Vehicles		1707	0	1760	0.0	0.615	9.7	LOS A	5.4	134.3	0.35	0.18	0.35	31.3

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: Same as Sign Control.
Vehicle movement LOS values are based on average delay and v/c ratio (degree of saturation) per movement.
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all movements (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Geometric Delay is not included).
Queue Model: HCM Queue Formula.
Gap-Acceptance Capacity: Traditional M1.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

SIDRA INTERSECTION 9.0 | Copyright © 2000-2020 Akcelik and Associates Pty Ltd | sidrasolutions.com
Organisation: O'ROURKE ENGINEERING & PLANNING | Licence: PLUS / 1PC | Processed: Thursday, July 13, 2023 2:17:52 PM
Project: C:\Users\Taylor\Desktop\Intersect Existing 01.sip9

DE TRAFFIC

detraffic.com
(386) 341-4186
Jenkins Rd at Okeechobee Rd
St. Lucie County, Fl

File Name : jenkins at okee
Site Code : 00000001
Start Date : 6/15/2023
Page No : 1

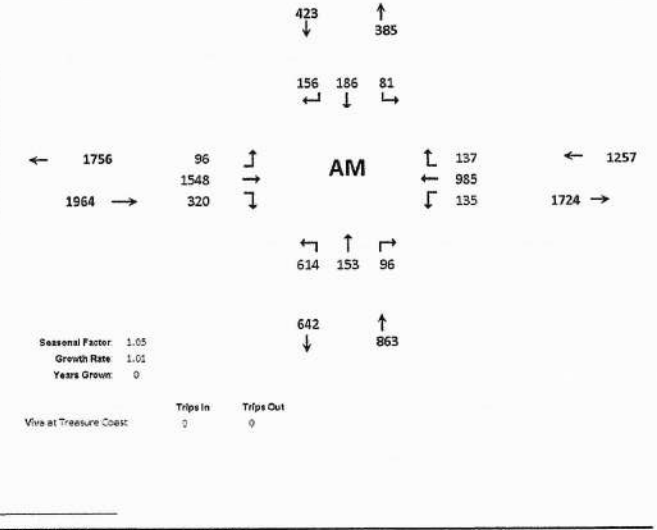
Groups Printed- Automobiles - Commercial

	Jenkins Rd Southbound				Okeechobee Rd Westbound				Jenkins Rd Northbound				Okeechobee Rd Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	12	27	20	59	9	154	12	175	108	29	17	154	11	237	42	290	678
07:15 AM	19	36	28	83	20	239	22	281	119	35	19	173	18	320	52	390	927
07:30 AM	20	41	36	97	26	229	28	283	127	43	19	189	19	344	76	439	1008
07:45 AM	21	53	30	104	29	227	21	277	142	35	26	203	21	418	68	507	1091
Total	72	157	114	343	84	849	83	1016	496	142	81	719	69	1319	238	1626	3704
08:00 AM	19	43	39	101	31	255	28	314	152	32	29	213	27	379	84	490	1118
08:15 AM	17	40	44	101	43	227	53	323	164	36	17	217	24	333	77	434	1075
08:30 AM	24	51	39	114	29	214	47	290	117	43	21	181	22	319	67	408	993
08:45 AM	22	44	28	94	24	207	45	276	98	34	14	146	17	296	76	389	905
Total	82	178	150	410	127	903	173	1203	531	145	81	757	90	1327	304	1721	4091
04:00 PM	47	38	24	109	23	207	34	264	106	32	7	145	34	215	63	312	830
04:15 PM	47	53	26	126	28	201	42	271	121	36	11	168	24	207	73	304	869
04:30 PM	44	45	46	135	22	229	55	306	143	31	19	193	20	230	88	338	972
04:45 PM	52	54	29	135	30	224	45	299	119	29	14	162	26	246	68	340	936
Total	190	190	125	505	103	861	176	1140	489	128	51	668	104	898	292	1294	3607
05:00 PM	47	37	33	117	33	265	38	336	105	26	16	147	29	289	64	382	982
05:15 PM	41	31	32	104	28	241	45	314	123	25	13	161	30	294	79	403	982
05:30 PM	43	36	33	112	28	252	33	313	104	33	11	148	26	284	70	380	953
05:45 PM	39	31	23	93	33	235	25	293	100	29	7	136	31	245	47	323	845
Total	170	135	121	426	122	993	141	1256	432	113	47	592	116	1112	260	1488	3762
Grand Total	514	660	510	1684	436	3606	573	4615	1948	528	260	2736	379	4656	1094	6129	15164
Apprch %	30.5	39.2	30.3		9.4	78.1	12.4		71.2	19.3	9.5		6.2	76	17.8		
Total %	3.4	4.4	3.4	11.1	2.9	23.8	3.8	30.4	12.8	3.5	1.7	18	2.5	30.7	7.2	40.4	
Automobiles	490	643	459	1592	423	3502	531	4456	1886	500	244	2630	359	4534	1049	5942	14620
% Automobiles	95.3	97.4	90	94.5	97	97.1	92.7	96.6	96.8	94.7	93.8	96.1	94.7	97.4	95.9	96.9	96.4
Commercial	24	17	51	92	13	104	42	159	62	28	16	106	20	122	45	187	544
% Commercial	4.7	2.6	10	5.5	3	2.9	7.3	3.4	3.2	5.3	6.2	3.9	5.3	2.6	4.1	3.1	3.6

TURNING MOVEMENT VOLUME COUNTS

N/S STREET Jenkins Rd **EW STREET** Okeechobee Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/15/2023 **DAY** Thursday **CITY** St. Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2023

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15	108	29	17	22	27	20	11	237	42	9	154	12	678	3704
7:15-7:30	119	35	19	19	36	28	18	320	52	20	239	22	927	4144
7:30-7:45	127	43	19	20	41	36	19	344	76	26	229	28	1008	4252
7:45-8:00	142	35	26	21	53	30	21	418	68	29	227	21	1091	4277
8:00-8:15	152	32	29	19	43	39	27	379	84	31	255	28	1118	4091
8:15-8:30	164	36	17	17	40	44	24	333	77	43	227	53	1075	
8:30-8:45	127	43	21	24	51	39	22	319	67	29	214	47	993	
8:45-9:00	98	34	14	22	44	28	17	296	76	24	207	45	905	
AM PEAK HOUR IS FROM:	7:30 AM TO 8:30AM													
Volumes	585	146	91	77	177	149	91	1474	305	129	938	130	4292	
Season Factor	614	153	96	81	186	156	96	1548	320	135	985	137	4507	
Growth	614	153	96	81	186	156	96	1548	320	135	985	137	4507	
In/Out	OUT	OUT	OUT		IN				IN	IN				
Percentage	40%	10%	40%	0%	90%	0%	0%	0%	90%	90%	0%	0%	0%	
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	614	153	96	81	186	156	96	1548	320	135	985	137	4507	

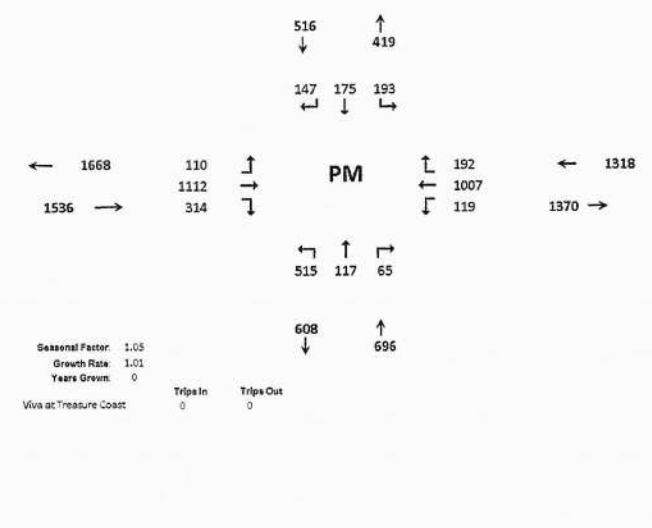


Seasonal Factor: 1.05
Growth Rate: 1.01
Years Grown: 0

	Trips In	Trips Out
Viva at Treasure Coast	0	0

N/S STREET Jenkins Rd **EW STREET** Okeechobee Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/15/2023 **DAY** Thursday **CITY** St Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2023

15 Min Period Tanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	106	32	7	47	38	24	34	215	63	23	207	34	830	3607
4:15-4:30	121	36	11	47	53	26	24	207	73	28	201	42	869	3759
4:30-4:45	143	31	19	44	45	46	20	230	88	22	229	55	972	3872
4:45-5:00	119	29	14	52	54	29	26	246	68	30	224	45	936	3853
5:00-5:15	103	26	16	47	37	33	29	289	64	33	265	38	982	3762
5:15-5:30	123	25	13	41	31	32	30	294	79	28	241	45	982	
5:30-5:45	104	33	11	43	36	33	26	284	70	28	252	33	953	
5:45-6:00	100	29	7	39	31	23	31	245	47	33	235	25	849	
PM PEAK HOUR IS FROM:	4:30 PM TO 5:30PM													
Volumes	480	111	62	184	167	140	105	1059	269	113	859	183	3872	
Season Factor	515	117	65	193	175	147	110	1112	314	119	1007	192	4066	
Growth	515	117	65	193	175	147	110	1112	314	119	1007	192	4066	
In/Out	OUT	OUT	OUT		IN				IN	IN				
Percentage	40%	10%	40%	0%	90%	0%	0%	0%	90%	90%	0%	0%	0%	
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Subtotal	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	515	117	65	193	175	147	110	1112	314	119	1007	192	4066	

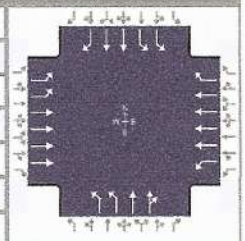


Seasonal Factor: 1.05
Growth Rate: 1.01
Years Grown: 0

	Trips In	Trips Out
Viva at Treasure Coast	0	0

HCS Signalized Intersection Results Summary

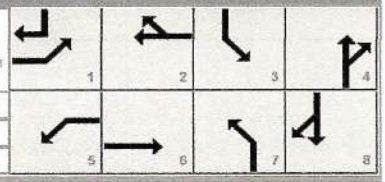
General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	KS	Analysis Date	12/16/2021	Area Type	Other
Jurisdiction		Time Period	AM	PHF	0.96
Urban Street	Okeechobee Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee and Jenkins - EXISTING AM -...		
Project Description	Existing AM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	96	1548		135	985	137	614	153	96	81	186	156

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.8	5.3	48.2	6.7	10.7	15.7	
Yellow	4.8	0.0	4.8	4.8	4.8	4.8	
Red	2.5	0.0	2.5	2.5	2.5	2.5	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	14.1	55.5	19.4	60.8	32.0	41.1	14.0	23.0
Change Period, ($Y+R_c$), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (g_s), s	5.6		11.9		25.4	9.9	5.0	14.1
Green Extension Time (g_e), s	0.3	0.0	0.3	0.0	0.0	2.3	0.2	1.7
Phase Call Probability	0.97		0.99		1.00	1.00	0.95	1.00
Max Out Probability	0.00		0.01		1.00	0.00	0.00	0.14

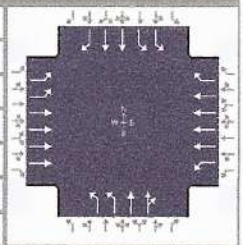
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6		5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	100	1613		141	1026	143	640	134	126	84	194	163
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1725		1810	1725	1610	1757	1900	1662	1757	1809	1610
Queue Service Time (g_s), s	3.6	24.9		9.9	13.4	7.4	23.4	7.3	7.9	3.0	6.5	12.1
Cycle Queue Clearance Time (g_c), s	3.6	24.9		9.9	13.4	7.4	23.4	7.3	7.9	3.0	6.5	12.1
Green Ratio (*g/C*)	0.05	0.37		0.09	0.41	0.41	0.19	0.26	0.26	0.05	0.12	0.17
Capacity (*c*), veh/h	184	2561		169	2842	663	668	494	432	180	438	279
Volume-to-Capacity Ratio (*X*)	0.543	0.630		0.834	0.361	0.215	0.958	0.271	0.291	0.468	0.442	0.582
Back of Queue (Q), ft/ln (95 th percentile)	73.8	388.7		214	230	130.5	452.5	152	143.7	61.9	131.6	213.2
Back of Queue (Q), veh/ln (95 th percentile)	3.0	15.5		8.6	9.2	5.2	18.1	6.1	5.7	2.5	5.3	8.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	60.1	33.5		58.0	26.4	24.7	52.1	38.3	38.5	59.9	53.1	49.4
Incremental Delay (d_2), s/veh	2.5	1.2		10.2	0.4	0.7	24.8	0.3	0.4	1.9	0.7	1.9
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	62.6	34.7		68.1	26.8	25.4	76.9	38.6	38.9	61.8	53.8	51.3
Level of Service (LOS)	E	C		E	C	C	E	D	D	E	D	D
Approach Delay, s/veh / LOS	36.4	D		31.1	C		65.9	E		54.4	D	
Intersection Delay, s/veh / LOS	42.7						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.44	B	2.58	C	2.97	C	2.98	C
Bicycle LOS Score / LOS	1.19	A	1.03	A	1.23	A	0.85	A

Copyright © 2023 University of Florida, All Rights Reserved.

HCS Signalized Intersection Results Summary

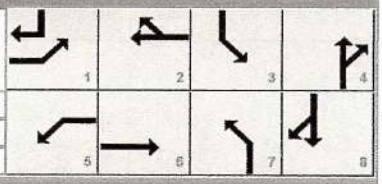
General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	KS	Analysis Date	12/16/2021	Area Type	Other
Jurisdiction		Time Period	PM	PHF	0.98
Urban Street	Okeechobee Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee and Jenkins - EXISTING PM -...		
Project Description	Existing PM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	110	1112		119	1007	192	515	117	65	193	175	147

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.9	3.6		55.6	9.7	3.7	14.1					
Yellow	4.8	0.0		4.8	4.8	4.8	4.8					
Red	2.5	0.0		2.5	2.5	2.5	2.5					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	14.2	62.9	17.8	66.5	28.0	32.4	17.0	21.4
Change Period, (*Y+R c*), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (*g s*), s	6.1		10.6		21.2	8.0	9.1	13.2
Green Extension Time (*g e*), s	0.3	0.0	0.0	0.0	0.0	1.8	0.5	0.9
Phase Call Probability	0.98		0.99		1.00	1.00	1.00	1.00
Max Out Probability	0.00		1.00		1.00	0.00	0.00	0.84

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6		5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	112	1135		121	1028	196	526	95	91	197	179	150
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1725		1810	1725	1610	1757	1900	1679	1757	1809	1610
Queue Service Time (*g s*), s	4.1	14.6		8.6	12.4	9.8	19.2	5.5	6.0	7.1	6.0	11.2
Cycle Queue Clearance Time (*g c*), s	4.1	14.6		8.6	12.4	9.8	19.2	5.5	6.0	7.1	6.0	11.2
Green Ratio (*g/C*)	0.05	0.43		0.08	0.46	0.46	0.16	0.19	0.19	0.07	0.11	0.16
Capacity (*c*), veh/h	186	2949		146	3141	733	560	367	324	261	391	259
Volume-to-Capacity Ratio (*X*)	0.604	0.385		0.832	0.327	0.267	0.939	0.259	0.280	0.754	0.457	0.578
Back of Queue (*Q*), ft/ln (95 th percentile)	83.6	246.6		216.9	214.2	169.9	384	116.7	112.4	147.2	123	201.8
Back of Queue (*Q*), veh/ln (95 th percentile)	3.3	9.9		8.7	8.6	6.8	15.4	4.7	4.5	5.9	4.9	8.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	60.2	25.5		58.9	22.7	22.0	54.0	44.6	44.7	59.0	54.4	50.5
Incremental Delay (*d 2*), s/veh	3.1	0.4		28.3	0.3	0.9	24.0	0.4	0.5	4.4	0.8	2.0
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	63.4	25.9		87.2	23.0	22.9	78.0	44.9	45.2	63.4	55.2	52.5
Level of Service (LOS)	E	C		F	C	C	E	D	D	E	E	D
Approach Delay, s/veh / LOS	29.3	C		28.7	C		69.4	E		57.5	E	
Intersection Delay, s/veh / LOS	40.4						D					

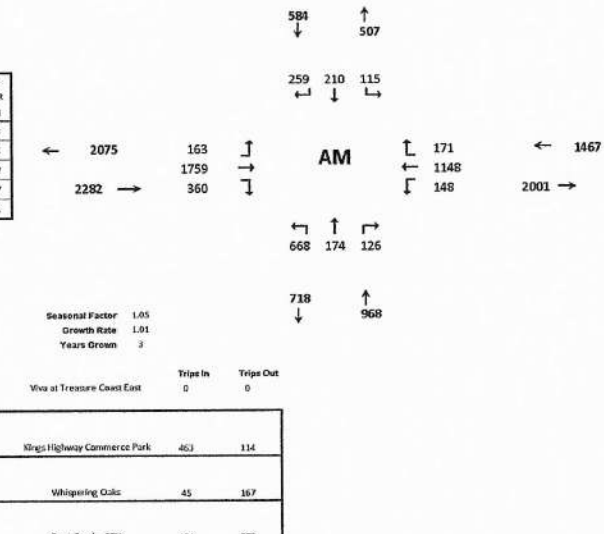
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.57	C	2.97	C	2.98	C
Bicycle LOS Score / LOS	1.00	A	1.04	A	1.07	A	0.92	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

N/S STREET Jenkins Rd **E/W STREET** Okeechobee Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/15/2023 **DAY** Thursday **CITY** St. Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2026

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15	108	29	17	12	27	20	11	237	42	9	154	12	678	3704
7:15-7:30	119	35	19	19	36	28	18	320	52	20	239	22	927	4144
7:30-7:45	127	43	19	20	41	36	19	344	76	26	229	28	1008	4292
7:45-8:00	142	35	26	21	53	30	21	418	68	29	227	21	1091	4277
8:00-8:15	152	32	29	19	43	39	27	379	84	31	255	28	1118	4091
8:15-8:30	164	36	17	17	49	44	24	333	77	43	227	53	1075	
8:30-8:45	117	43	21	24	51	39	22	319	67	29	214	47	993	
8:45-9:00	98	34	14	22	44	28	17	296	76	24	207	45	905	



AM PEAK HOUR IS FROM: 7:30 AM TO 8:30AM

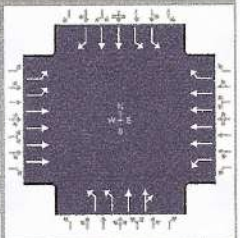
Volumes	585	146	91	77	177	149	91	1474	305	129	938	130	4292
Season Factor	614	153	96	81	186	156	96	1548	320	135	985	137	4507
Growth	633	158	98	83	191	161	98	1595	330	140	1015	141	4643
In/Out	OUT	OUT	OUT		IN				IN	IN			
Percentage	40%	10%	40%	0%	90%	0%	0%	0%	90%	90%	0%	0%	0%

Seasonal Factor 1.05
Growth Rate 1.01
Years Grown 3

															Trips In	Trips Out
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	Viva at Treasure Coast East	0	0
SUBPROJECTS																
%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	10%	0%				
In/Out								OUT			IN					
Volume	0	0	0	0	0	0	0	11	0	0	46	0	0	Kings Highway Commerce Park	461	114
%	0.0%	5.0%	0.0%	2.0%	5.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	2.0%				
In/Out		IN		OUT	OUT	OUT	IN					IN				
Volume	0	2	0	3	8	8	2	0	0	0	0	1	0	Whispering Oaks	45	167
%	0.0%	2.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
In/Out		IN			OUT											
Volume	0	2	0	0	7	0	0	0	0	0	0	0	0	Bent Creek - 50%	124	372
%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	0.0%				
In/Out						OUT	IN									
Volume	0	0	0	0	0	11	4	0	0	0	0	0	0	Sunnyland	75	223
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	6.0%	0.0%				
In/Out								OUT			IN					
Volume	0	0	0	0	0	0	0	20	0	0	21	0	0	Kings Highway Warehouse	342	341
%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	5%	0%	0.0%	0.0%	0.0%	0.0%				
In/Out						IN	OUT									
Volume	0	0	0	0	0	6	3	0	0	0	0	0	0	Stonemont	201	56
%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
In/Out						IN	OUT									
Volume	0	0	0	0	0	1	10	0	0	0	0	0	0	Pineapple Grove	66	199
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%	40%	0.0%	0.0%	40.0%	0.0%				
In/Out								OUT			IN					
Volume	0	0	0	0	0	0	0	5	0	0	14	0	0	Project Hurricane	36	12
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
In/Out																
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Celebration Pointe - 25%	128	383
%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	5%	0%	0.0%	0.0%	0.0%	0.0%				
In/Out						IN	OUT									
Volume	0	0	0	0	0	8	6	0	0	0	0	0	0	KRE	393	117
%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5.0%	30.0%	5.0%	0.0%	30.0%	0.0%				
In/Out	IN				IN	OUT	OUT	OUT		IN						
Volume	7	0	0	0	0	7	21	126	21	0	43	0	0	Creekside	141	421
%	0.0%	2.0%	0.0%	10.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out		IN		OUT	OUT							IN				
Volume	0	2	0	2	0	0	0	0	0	0	0	10.3	0	Orange 95 Parcel B	103	20
%	0.0%	2.0%	0.0%	10.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out		IN		OUT	OUT							IN				
Volume	0	2	0	2	0	0	0	0	0	0	0	11.1	0	Orange 95 Parcel D + E	111	22
%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	11.0%	0.0%				
In/Out				OUT				OUT			IN					
Volume	0	0	0	1	0	0	0	2	0	0	9	0	0	Project Hunt	84	17
%	0.0%	0.0%	0.0%	10.0%	0.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out				OUT		OUT	IN					IN				
Volume	0	0	0	16	0	37	13	0	0	0	0	5.3	0	Jenkins Waypoint	53	156
%	0.0%	0.0%	0.0%	10.0%	0.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out				OUT		OUT	IN					IN				
Volume	0	0	0	8	0	18	6	0	0	0	0	2	0	Hillpointe	24	77
%	40.0%	10.0%	40.0%	0.0%	10.0%	0.0%	0.0%	0.0%	40.0%	40.0%	0.0%	0.0%				
In/Out	OUT	OUT	OUT		IN				IN	IN						
Volume	28	7	28	0	7	0	0	0	9	9	0	0		Viva at Treasure Coast West	22	70
Subtotal	35	16	28	32	19	98	64	165	30	9	133	30	0			
Total	668	174	126	115	210	259	163	1759	360	148	1148	171	4643			

HCS Signalized Intersection Results Summary

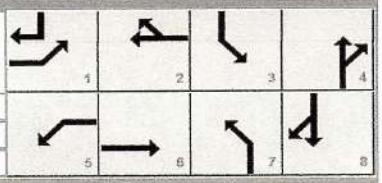
General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	KS	Analysis Date	12/16/2021	Area Type	Other
Jurisdiction		Time Period	AM	PHF	0.96
Urban Street	Okeechobee Road	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee and Jenkins - without project A...		
Project Description	w/o Project AM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	163	1759		148	1148	171	668	174	126	115	210	259

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.4	4.5	40.6	6.9	10.5	22.6	
Yellow	4.8	0.0	4.8	4.8	4.8	4.8	
Red	2.5	0.0	2.5	2.5	2.5	2.5	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	15.7	47.9	20.2	52.4	32.0	47.7	14.2	29.9
Change Period, ($Y+R_c$), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (g_s), s	8.2		12.9		26.7	11.0	6.3	21.9
Green Extension Time (g_e), s	0.3	0.0	0.1	0.0	0.0	3.1	0.3	0.7
Phase Call Probability	1.00		1.00		1.00	1.00	0.99	1.00
Max Out Probability	0.10		1.00		1.00	0.00	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6		5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	170	1832		154	1196	178	696	163	150	120	219	270
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1725		1810	1725	1610	1757	1900	1641	1757	1809	1610
Queue Service Time (g_s), s	6.2	32.3		10.9	17.8	10.6	24.7	8.4	9.0	4.3	6.9	19.9
Cycle Queue Clearance Time (g_c), s	6.2	32.3		10.9	17.8	10.6	24.7	8.4	9.0	4.3	6.9	19.9
Green Ratio (*g/C*)	0.06	0.31		0.10	0.35	0.35	0.19	0.31	0.31	0.05	0.17	0.24
Capacity (*c*), veh/h	228	2155		180	2393	558	668	590	510	187	628	384
Volume-to-Capacity Ratio (*X*)	0.743	0.850		0.856	0.500	0.319	1.042	0.276	0.294	0.641	0.348	0.702
Back of Queue (*Q*), ft/ln (95 th percentile)	128	501.5		255.9	295.4	190.5	541.4	172.6	160.5	89.7	139	326.1
Back of Queue (*Q*), veh/ln (95 th percentile)	5.1	20.1		10.2	11.8	7.6	21.7	6.9	6.4	3.6	5.6	13.0
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	59.7	41.9		57.6	33.6	31.2	52.7	33.8	34.0	60.3	47.2	45.3
Incremental Delay (d_2), s/veh	4.7	4.5		25.8	0.7	1.5	46.3	0.3	0.3	3.6	0.3	5.3
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	64.4	46.3		83.4	34.3	32.7	98.9	34.0	34.3	64.0	47.6	50.5
Level of Service (LOS)	E	D		F	C	C	F	C	C	E	D	D
Approach Delay, s/veh / LOS	47.9	D		39.1	D		78.9	E		52.1	D	
Intersection Delay, s/veh / LOS	51.8						D					

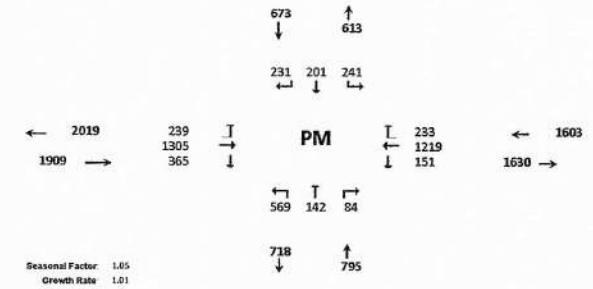
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.58	C	2.96	C	2.98	C
Bicycle LOS Score / LOS	1.31	A	1.12	A	1.32	A	0.99	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

N/S STREET Jenkins Rd | **E/W STREET** Okeechobee Rd | **CONTROL** Signalized
FILENAME
COUNT DATE 6/15/2023 | **DAY** Thursday | **CITY** St Lucie
REPORT DATE 6/16/2023 | **ANALYSIS YEAR** 2026

15 Min Period Times	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	106	32	7	47	38	24	34	215	63	23	207	34	830	3607
4:15-4:30	121	36	11	47	53	26	24	207	73	28	201	42	869	3759
4:30-4:45	143	31	19	44	45	46	20	230	88	22	229	55	972	3872
4:45-5:00	119	29	14	52	54	29	26	246	68	30	224	45	936	3853
5:00-5:15	165	26	16	47	37	33	29	289	64	33	265	38	982	3762
5:15-5:30	123	25	13	41	31	32	30	294	79	28	241	45	982	
5:30-5:45	104	33	11	43	36	33	26	284	70	28	252	33	953	
5:45-6:00	100	29	7	39	31	23	31	245	47	33	235	25	845	
PM PEAK HOUR IS FROM:			4:30 PM TO 5:30PM											
Volumes	490	111	62	181	167	140	105	1059	299	112	959	183	3872	
Season Factor	515	117	65	193	175	147	110	1112	314	119	1007	192	4066	
Growth	530	120	67	199	181	151	114	1146	323	122	1037	198	4189	
In/Out	OUT	OUT	OUT		IN				IN	IN				
Percentage	40%	10%	40%	0%	10%	0%	0%	0%	40%	40%	0%	0%	0%	
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	



Seasonal Factor 1.05
Growth Rate 1.01
Years Grown 3

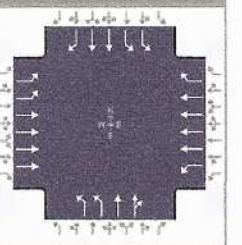
	Trips In	Trips Out
Viva at Treasure Coast East	0	0

SUBPROJECTS

															Trips In	Trips Out
%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	10%	0%				
In/Out								OUT			IN					
Volume	0	0	0	0	0	0	0	46	0	0	14	0	0	Kings Highway Commerce Park	142	458
%	0.0%	5.0%	0.0%	2.0%	5.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	2.0%				
In/Out		IN		OUT	OUT	OUT	IN					IN				
Volume	0	9	0	2	5	5	9	0	0	0	0	3	0	Whispering Oaks	172	94
%	0.0%	2.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
In/Out		IN			OUT											
Volume	0	8	0	0	5	0	0	0	0	0	0	0	0	Bent Creek - 50%	386	226
%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	0.0%				
In/Out						OUT	IN									
Volume	0	0	0	0	0	8	13	0	0	0	0	0	0	Sunnyland	261	154
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	6.0%	0.0%				
In/Out								OUT			IN					
Volume	0	0	0	0	0	0	0	13	0	0	27	0	0	Kings Highway Warehouse	458	216
%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	5%	0%	0.0%	0.0%	0.0%	0.0%				
In/Out						IN	OUT									
Volume	0	0	0	0	0	2	4	0	0	0	0	0	0	Storement	70	192
%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	5.0%	0.0%	0.0%		0.0%	0.0%				
In/Out						IN	OUT									
Volume	0	0	0	0	0	5	7	0	0	0	0	0	0	Pineapple Grove	232	137
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%	40%	0.0%	0.0%	40.0%	0.0%				
In/Out								OUT			IN					
Volume	0	0	0	0	0	0	0	15	0	0	9	0	0	Project Hurricane	39	37
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.0%				
In/Out																
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Celebration Pointe - 25%	405	228
%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	5%	0%	0.0%	0.0%	0.0%	0.0%				
In/Out						IN	OUT									
Volume	0	0	0	0	0	3	19	0	0	0	0	0	0	RRE	151	389
%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5.0%	30.0%	5.0%	0.0%	30.0%	0.0%				
In/Out	IN					IN	OUT	OUT	OUT		IN					
Volume	21	0	0	0	0	21	13	77	13	0	128	0	0	Creekside	426	256
%	0.0%	2.0%	0.0%	10.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out		IN		OUT	OUT							IN				
Volume	0	1	0	10	2	0	0	0	0	0	0	3	0	Orange 95 Parcel B	28	99
%	0.0%	2.0%	0.0%	10.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out		IN		OUT	OUT							IN				
Volume	0	1	0	11	2	0	0	0	0	0	0	3	0	Orange 95 Parcel D + E	30	107
%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	11.0%	0.0%				
In/Out				OUT				OUT			IN					
Volume	0	0	0	4	0	0	0	9	0	0	3	0	0	Project Hunt	29	85
%	0.0%	0.0%	0.0%	10.0%	0.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out				OUT		OUT	IN					IN				
Volume	0	0	0	10	0	24	41	0	0	0	0	17	0	Jenkins Waypoint	172	102
%	0.0%	0.0%	0.0%	10.0%	0.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out				OUT		OUT	IN					IN				
Volume	0	0	0	5	0	12	19	0	0	0	0	8		Hillpointe	81	48
%	40.0%	10.0%	40.0%	0.0%	10.0%	0.0%	0.0%	0.0%	40.0%	40.0%	0.0%	0.0%				
In/Out	OUT	OUT	OUT		IN				IN	IN						
Volume	17	4	17	0	7	0	0	0	29	29	0	0		Viva at Treasure Coast West	73	43
Subtotal	39	22	17	42	21	79	125	159	42	29	182	35	0			
Total	569	142	84	241	201	231	239	1305	365	151	1219	233	4189			

HCS Signalized Intersection Results Summary

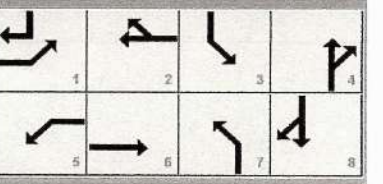
General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	KS	Analysis Date	12/16/2021	Area Type	Other
Jurisdiction		Time Period	PM	PHF	0.98
Urban Street	Okeechobee Road	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee and Jenkins - without project P...		
Project Description	w/o Project PM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	239	1305		151	1219	233	569	142	84	241	201	231

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.7	3.6		51.1	11.5	1.9		17.7				
Yellow	4.8	0.0		4.8	4.8	4.8		4.8				
Red	2.5	0.0		2.5	2.5	2.5		2.5				



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	18.6	62.0	15.0	58.4	28.0	34.2	18.8	25.0
Change Period, (*Y+R c*), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (*g s*), s	10.8		9.7		22.7	9.4	10.9	19.3
Green Extension Time (*g e*), s	0.5	0.0	0.0	0.0	0.0	2.3	0.6	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.13		1.00		1.00	0.01	0.02	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6		5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	244	1332		154	1244	238	581	119	112	246	205	236
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1725		1810	1725	1610	1757	1900	1670	1757	1809	1610
Queue Service Time (*g s*), s	8.8	18.0		7.7	17.4	13.7	20.7	6.9	7.4	8.9	6.7	17.3
Cycle Queue Clearance Time (*g c*), s	8.8	18.0		7.7	17.4	13.7	20.7	6.9	7.4	8.9	6.7	17.3
Green Ratio (*g/C*)	0.09	0.42		0.06	0.39	0.39	0.16	0.21	0.21	0.09	0.14	0.22
Capacity (*c*), veh/h	307	2904		107	2710	632	560	393	345	312	493	360
Volume-to-Capacity Ratio (*X*)	0.795	0.459		1.438	0.459	0.376	1.038	0.302	0.325	0.788	0.416	0.655
Back of Queue (*Q*), ft/ln (95 th percentile)	182.7	291.8		441.7	286	231	470.4	144.9	138.1	183.1	136.7	289.6
Back of Queue (*Q*), veh/ln (95 th percentile)	7.3	11.7		17.7	11.4	9.2	18.8	5.8	5.5	7.3	5.5	11.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d 1*), s/veh	58.2	27.0		61.2	29.2	28.1	54.7	43.6	43.9	58.0	51.4	45.9
Incremental Delay (*d 2*), s/veh	5.0	0.5		241.8	0.6	1.7	48.1	0.4	0.5	4.4	0.6	4.3
Initial Queue Delay (*d 3*), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	63.2	27.5		303.0	29.8	29.8	102.8	44.1	44.4	62.5	52.0	50.2
Level of Service (LOS)	E	C		F	C	C	F	D	D	E	D	D
Approach Delay, s/veh / LOS	33.1	C		55.5	E		86.1	F		55.1	E	
Intersection Delay, s/veh / LOS	53.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.58	C	2.97	C	2.98	C
Bicycle LOS Score / LOS	1.14	A	1.16	A	1.16	A	1.05	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

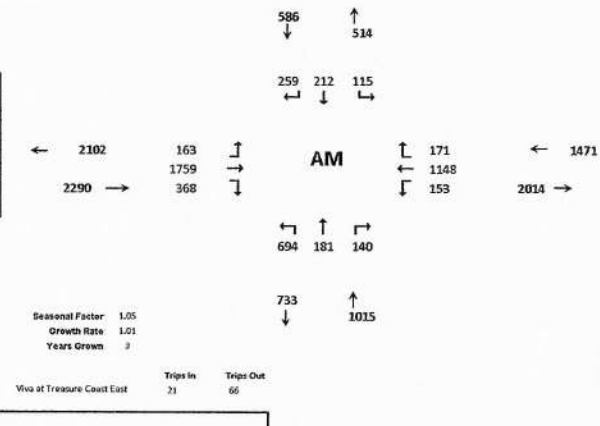
N/S STREET Jenkins Rd **E/W STREET** Okeechobee Rd **CONTROL** Signalized

FILENAME

COUNT DATE 6/15/2023 **DAY** Thursday **CITY** St Lucie

REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2026

15 Min Period	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
7:00-7:15	108	29	17	13	37	20	11	237	42	9	154	12	678	3794
7:15-7:30	119	35	19	19	36	28	18	320	52	20	239	22	927	4144
7:30-7:45	127	43	19	20	41	36	19	344	76	26	229	28	1008	4292
7:45-8:00	142	35	26	21	53	30	21	418	68	29	227	21	1091	4277
8:00-8:15	152	32	29	19	43	39	27	379	84	31	255	28	1118	4091
8:15-8:30	164	36	17	17	40	44	24	333	77	43	227	53	1075	
8:30-8:45	117	43	21	24	51	39	22	319	67	29	214	47	993	
8:45-9:00	98	34	14	22	44	28	17	296	76	24	207	45	905	
AM PEAK HOUR IS FROM:			7:30 AM TO 8:30AM											
Volumes	585	146	91	77	177	149	91	1474	305	129	938	150	4292	
Season Factor	614	153	96	81	186	156	96	1548	320	135	985	157	4507	
Growth	633	158	98	83	191	161	98	1595	330	140	1015	141	4643	
In/Out	OUT	OUT	OUT		IN				IN	IN				
Percentage	40%	10%	20%	0%	10%	0%	0%	0%	40%	20%	0%	0%	0%	
PROJECT	26	7	13	0	2	0	0	0	8	4	0	0	61	
SUBPROJECTS														
%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	10%	0%		
In/Out								OUT			IN			
Volume	0	0	0	0	0	0	0	11	0	0	46	0	0	Kings Highway Commerce Park
%	0.0%	5.0%	0.0%	2.0%	5.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	2.0%		
In/Out		IN		OUT	OUT	OUT	IN					IN		
Volume	0	2	0	3	8	8	2	0	0	0	0	1	0	Whispering Oaks
%	0.0%	2.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
In/Out		IN			OUT									
Volume	0	2	0	0	7	0	0	0	0	0	0	0	0	Bent Creek - 50%
%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	0.0%		
In/Out						OUT	IN							
Volume	0	0	0	0	0	11	4	0	0	0	6	0	0	Sunnyland
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	6.0%	0.0%		
In/Out								OUT			IN			
Volume	0	0	0	0	0	0	0	20	0	0	21	0	0	Kings Highway Warehouse
%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	5%	0%	0.0%	0.0%	0.0%	0.0%		
In/Out						IN	OUT							
Volume	0	0	0	0	0	6	3	0	0	0	0	0	0	Stonewood
%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	5.0%	0.0%	0.0%		0.0%	0.0%		
In/Out						IN	OUT							
Volume	0	0	0	0	0	1	10	0	0	0	0	0	0	Pineapple Grove
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%	40%	0.0%	0.0%	40.0%	0.0%		
In/Out								OUT			IN			
Volume	0	0	0	0	0	0	0	5	0	0	14	0	0	Project Hurricane
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
In/Out														
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Celebration Pointe - 25%
%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	5%	0%	0.0%	0.0%	0.0%	0.0%		
In/Out						IN	OUT							
Volume	0	0	0	0	0	8	6	0	0	0	0	0	0	KRE
%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5.0%	30.0%	5.0%	0.0%	30.0%	0.0%		
In/Out	IN					IN	OUT	OUT	OUT		IN			
Volume	7	0	0	0	0	7	21	126	21	0	43	0	0	Creekside
%	0.0%	2.0%	0.0%	10.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	2	0	2	0	0	0	0	0	0	0	10.3	0	Orange 95 Parcel B
%	0.0%	2.0%	0.0%	10.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%		
In/Out		IN		OUT	OUT							IN		
Volume	0	2	0	2	0	0	0	0	0	0	0	11.1	0	Orange 95 Parcel D + E
%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	11.0%	0.0%		
In/Out			OUT					OUT		IN				
Volume	0	0	0	1	0	0	0	2	0	0	9	0	0	Project Hunt
%	0.0%	0.0%	0.0%	10.0%	0.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	10.0%		
In/Out			OUT			OUT	IN					IN		
Volume	0	0	0	16	0	37	13	0	0	0	0	5.3	0	Jenkins Waypoint
%	0.0%	0.0%	0.0%	10.0%	0.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	10.0%		
In/Out			OUT			OUT	IN					IN		
Volume	0	0	0	8	0	18	6	0	0	0	0	2	0	Hillpointe
%	40.0%	10.0%	40.0%	0.0%	10.0%	0.0%	0.0%	0.0%	40.0%	40.0%	0.0%	0.0%		
In/Out	OUT	OUT	OUT		IN				IN	IN				
Volume	28	7	28	0	7	0	0	0	9	9	0	0		Viva at Treasure Coast West
Subtotal	35	16	28	32	19	98	64	165	30	9	133	60	0	
Total	694	181	140	115	212	259	163	1759	368	153	1148	171	4704	

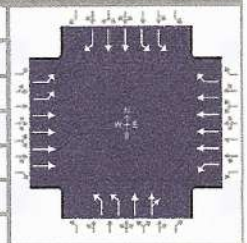


Seasonal Factor 1.05
Growth Rate 1.01
Years Grown 3

	Trips In	Trips Out
Viva at Treasure Coast East	21	66
Kings Highway Commerce Park	463	114
Whispering Oaks	45	167
Bent Creek - 50%	124	372
Sunnyland	75	223
Kings Highway Warehouse	342	341
Stonewood	203	56
Pineapple Grove	66	199
Project Hurricane	36	12
Celebration Pointe - 25%	128	388
KRE	393	117
Creekside	143	421
Orange 95 Parcel B	103	20
Orange 95 Parcel D + E	111	22
Project Hunt	84	17
Jenkins Waypoint	53	156
Hillpointe	24	77
Viva at Treasure Coast West	72	70

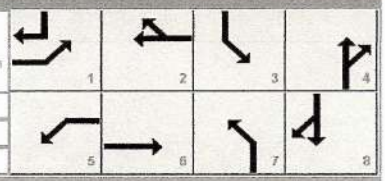
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	KS	Analysis Date	12/16/2021	Area Type	Other
Jurisdiction		Time Period	AM	PHF	0.98
Urban Street	Okeechobee Road	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee and Jenkins - with project AM -...		
Project Description	with Project AM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	163	1759		153	1148	171	694	181	140	115	212	259

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	8.3	4.8		40.7	6.9		10.5		22.3			
Yellow	4.8	0.0		4.8	4.8		4.8		4.8			
Red	2.5	0.0		2.5	2.5		2.5		2.5			

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	15.6	48.0	20.4	52.8	32.0	47.4	14.2	29.6
Change Period, ($Y+R_c$), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (g_s), s	8.0		13.0		26.7	11.5	6.3	21.5
Green Extension Time (g_e), s	0.3	0.0	0.1	0.0	0.0	3.2	0.3	0.8
Phase Call Probability	1.00		1.00		1.00	1.00	0.99	1.00
Max Out Probability	0.07		1.00		1.00	0.00	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6		5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	166	1795		156	1171	174	708	171	157	117	216	264
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1725		1810	1725	1610	1757	1900	1632	1757	1809	1610
Queue Service Time (g_s), s	6.0	31.4		11.0	17.3	10.3	24.7	8.9	9.5	4.3	6.8	19.5
Cycle Queue Clearance Time (g_c), s	6.0	31.4		11.0	17.3	10.3	24.7	8.9	9.5	4.3	6.8	19.5
Green Ratio (*g/C*)	0.06	0.31		0.10	0.35	0.35	0.19	0.31	0.31	0.05	0.17	0.24
Capacity (*c*), veh/h	225	2161		182	2414	563	668	586	503	187	621	379
Volume-to-Capacity Ratio (*X*)	0.739	0.830		0.858	0.485	0.310	1.061	0.292	0.311	0.629	0.349	0.697
Back of Queue (*Q*), ft/ln (95 th percentile)	125.4	486.5		258.1	288.3	185.5	562.9	183	168.9	87.8	137.7	320
Back of Queue (*Q*), veh/ln (95 th percentile)	5.0	19.5		10.3	11.5	7.4	22.5	7.3	6.8	3.5	5.5	12.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	59.8	41.4		57.5	33.1	30.8	52.7	34.2	34.4	60.3	47.4	45.4
Incremental Delay (d_2), s/veh	4.7	3.9		25.4	0.7	1.4	52.0	0.3	0.3	3.5	0.3	5.0
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	64.5	45.3		83.0	33.8	32.3	104.7	34.4	34.7	63.8	47.8	50.4
Level of Service (LOS)	E	D		F	C	C	F	C	C	E	D	D
Approach Delay, s/veh / LOS	46.9	D		38.7	D		82.5	F		52.1	D	
Intersection Delay, s/veh / LOS	52.4						D					

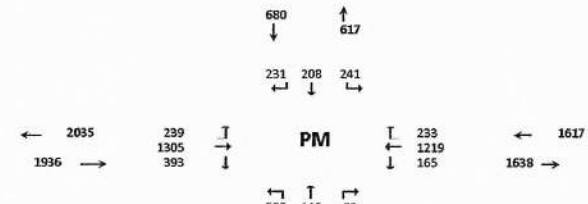
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.58	C	2.96	C	2.98	C
Bicycle LOS Score / LOS	1.30	A	1.11	A	1.34	A	0.98	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

N/S STREET Jenkins Rd **E/W STREET** Okeechobee Rd **CONTROL** Signalized
FILENAME
COUNT DATE 6/15/2023 **DAY** Thursday **CITY** St Lucie
REPORT DATE 6/16/2023 **ANALYSIS YEAR** 2026

15 Min Period Lanes	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	106	32	7	47	38	34	34	215	63	23	207	34	839	3607
4:15-4:30	121	36	11	47	53	26	24	207	73	28	201	42	869	3759
4:30-4:45	143	31	19	44	45	46	20	236	88	22	229	55	979	3872
4:45-5:00	119	29	14	52	54	29	26	246	68	30	224	45	936	3853
5:00-5:15	105	26	16	47	37	33	29	289	64	33	265	38	982	3762
5:15-5:30	123	25	13	41	31	32	30	294	79	28	241	45	982	
5:30-5:45	104	33	11	43	36	33	26	284	70	28	252	39	959	
5:45-6:00	100	29	7	39	31	23	31	245	47	33	235	25	845	



PM PEAK HOUR IS FROM: 4:30 PM TO 5:30PM

Volumes	490	111	62	188	167	140	105	1050	299	113	959	183	3872	
Season Factor	515	117	65	198	175	147	110	1112	314	119	1007	192	4066	
Growth	530	120	67	198	181	151	114	1146	323	122	1037	198	4189	
In/Out	OUT	OUT	OUT		IN				IN	IN				
Percentage	40%	10%	20%	0%	10%	0%	0%	0%	40%	20%	0%	0%	0%	
PROJECT	16	4	8	0	7	0	0	0	28	14	0	0	76	

Seasonal Factor 1.05
Growth Rate 1.01
Years Grown 3

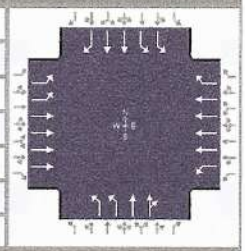
	Trips In	Trips Out
Viva at Treasure Coast East	69	40

SUBPROJECTS

															Trips In	Trips Out
%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	10%	0%				
In/Out								OUT			IN					
Volume	0	0	0	0	0	0	0	46	0	0	14	0	0	Kings Highway Commerce Park	142	458
%	0.0%	5.0%	0.0%	2.0%	5.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	2.0%				
In/Out		IN		OUT	OUT	OUT	IN					IN				
Volume	0	9	0	2	5	5	9	0	0	0	0	3	0	Whispering Oaks	172	94
%	0.0%	2.0%	0.0%	0.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				
In/Out		IN			OUT											
Volume	0	8	0	0	5	0	0	0	0	0	0	0	0	Bent Creek - 50%	386	226
%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5%	0%	0.0%	0.0%	0.0%	0.0%				
In/Out						OUT	IN									
Volume	0	0	0	0	0	8	13	0	0	0	0	0	0	Sunnyland	261	154
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.0%	0.0%	0.0%	6.0%	6.0%				
In/Out								OUT			IN					
Volume	0	0	0	0	0	0	0	13	0	0	77	0	0	Kings Highway Warehouse	438	216
%	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	5%	0%	0.0%	0.0%	0.0%	0.0%				
In/Out						IN	OUT									
Volume	0	0	0	0	0	2	4	0	0	0	0	0	0	Stonemont	70	192
%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	5.0%	0.0%	0.0%	0.0%		0.0%	0.0%			
In/Out						IN	OUT									
Volume	0	0	0	0	0	5	7	0	0	0	0	0	0	Pineapple Grove	232	137
%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0%	40%	0.0%	0.0%	40.0%	0.0%				
In/Out								OUT			IN					
Volume	0	0	0	0	0	0	0	15	0	0	9	0	0	Project Hurricane	29	37
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0.0%				
In/Out																
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Celebration Pointe - 25%	405	228
%	0.0%	0.0%	0.0%	0.0%	0.0%	2.0%	5%	0%	0.0%	0.0%	0.0%	0.0%				
In/Out						IN	OUT									
Volume	0	0	0	0	0	3	19	0	0	0	0	0	0	KRE	151	389
%	5.0%	0.0%	0.0%	0.0%	0.0%	5.0%	5.0%	30.0%	5.0%	0.0%	30.0%	0.0%				
In/Out	IN				IN		OUT	OUT	OUT		IN					
Volume	21	0	0	0	0	21	13	77	13	0	128	0	0	Creekside	426	256
%	0.0%	2.0%	0.0%	10.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out		IN		OUT	OUT							IN				
Volume	0	1	0	10	2	0	0	0	0	0	0	9	0	Orange 95 Parcel B	28	99
%	0.0%	2.0%	0.0%	10.0%	2.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out		IN		OUT	OUT							IN				
Volume	0	1	0	11	2	0	0	0	0	0	0	9	0	Orange 95 Parcel D + E	30	107
%	0.0%	0.0%	0.0%	5.0%	0.0%	0.0%	0.0%	10.0%	0.0%	0.0%	11.0%	0.0%				
In/Out				OUT				OUT		IN						
Volume	0	0	0	4	0	0	0	9	0	0	3	0	0	Project Hunt	29	85
%	0.0%	0.0%	0.0%	10.0%	0.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out				OUT		OUT	IN					IN				
Volume	0	0	0	10	0	24	41	0	0	0	0	17	0	Jenkins Waypoint	172	102
%	0.0%	0.0%	0.0%	10.0%	0.0%	24.0%	24.0%	0.0%	0.0%	0.0%	0.0%	10.0%				
In/Out				OUT		OUT	IN					IN				
Volume	0	0	0	5	0	12	19	0	0	0	0	8		Hillpointe	81	48
%	40.0%	10.0%	40.0%	0.0%	10.0%	0.0%	0.0%	0.0%	40.0%	40.0%	0.0%	0.0%				
In/Out	OUT	OUT	OUT		IN				IN	IN						
Volume	17	4	17	0	7	0	0	0	29	29	0	0		Viva at Treasure Coast West	73	43
Subtotal	39	22	17	42	21	79	125	159	42	29	182	35	0			
Total	585	146	92	341	208	231	239	1305	393	165	1219	233	4265			

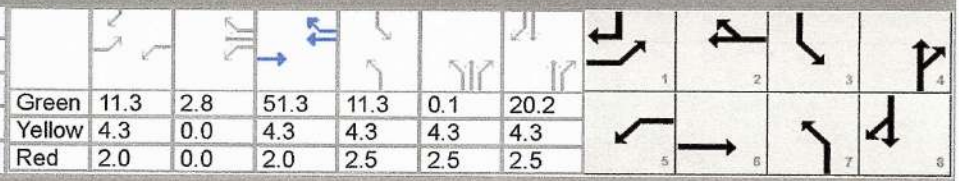
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	KS	Analysis Date	12/16/2021	Area Type	Other
Jurisdiction		Time Period	PM	PHF	0.98
Urban Street	Okeechobee Road	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee and Jenkins - with project PM -...		
Project Description	with Project PM				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	239	1305		165	1219	233	585	146	92	241	208	231

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	11.3	2.8		51.3	11.3	0.1	20.2					
Yellow	4.3	0.0		4.3	4.3	4.3	4.3					
Red	2.0	0.0		2.0	2.5	2.5	2.5					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	4.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	17.6	57.6	20.4	60.4	25.0	33.9	18.1	27.0
Change Period, ($Y+R_c$), s	6.3	6.3	6.3	6.3	6.8	6.8	6.8	6.8
Max Allow Headway (*MAH*), s	3.0	0.0	3.0	0.0	3.0	3.1	3.0	3.1
Queue Clearance Time (g_s), s	10.8		13.9		20.2	9.9	10.9	18.9
Green Extension Time (g_e), s	0.5	0.0	0.2	0.0	0.0	1.4	0.4	1.3
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.00		0.00		1.00	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6		5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	244	1332		168	1244	238	597	125	118	246	212	236
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1725		1810	1725	1610	1757	1900	1662	1757	1809	1610
Queue Service Time (g_s), s	8.8	18.8		11.9	16.7	13.2	18.2	7.3	7.9	8.9	6.8	16.9
Cycle Queue Clearance Time (g_c), s	8.8	18.8		11.9	16.7	13.2	18.2	7.3	7.9	8.9	6.8	16.9
Green Ratio (*g/C*)	0.09	0.39		0.11	0.42	0.42	0.14	0.21	0.21	0.09	0.16	0.24
Capacity (*c*), veh/h	307	2723		196	2869	669	492	396	346	307	562	391
Volume-to-Capacity Ratio (*X*)	0.796	0.489		0.858	0.434	0.355	1.213	0.316	0.340	0.802	0.377	0.603
Back of Queue (*Q*), ft/ln (95 th percentile)	176.6	305.1		235	275.2	222.3	600.7	151.6	143.7	178.3	137	271.1
Back of Queue (*Q*), veh/ln (95 th percentile)	7.1	12.2		9.4	11.0	8.9	24.0	6.1	5.7	7.1	5.5	10.8
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	58.2	29.5		57.0	27.1	26.0	55.9	43.6	43.9	58.2	49.3	43.7
Incremental Delay (d_2), s/veh	1.8	0.6		4.2	0.5	1.5	113.6	0.2	0.2	1.9	0.2	0.6
Initial Queue Delay (d_3), s/veh	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	60.0	30.2		61.1	27.5	27.5	169.5	43.8	44.1	60.1	49.4	44.2
Level of Service (LOS)	E	C		E	C	C	F	D	D	E	D	D
Approach Delay, s/veh / LOS	34.8	C		31.0	C		133.2	F		51.4	D	
Intersection Delay, s/veh / LOS	53.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.44	B	2.58	C	2.97	C	2.98	C
Bicycle LOS Score / LOS	1.14	A	1.17	A	1.18	A	1.06	A

Copyright © 2023 University of Florida, All Rights Reserved.

FORT PIERCE

City of Fort Pierce Engineering Department

Intersection Timing Sheet

Name **SR-70 at Jenkins Road**

Part I — *Actuated Timing Information*

Non-coordinated Operation

Phase	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*		
Approach	EBLT	WBT	SBLT	NBT	WBLT	EBT	NBLT	SBT		
Initial	7	12	7	7	7	12	7	7		
Passage	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		
Max1	25.0	50.0	25.0	25.0	25.0	50.0	25.0	25.0		
Yellow	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8		
Red	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5		
Walk		5.0		5.0		5.0				
Ped Clear		34.0		47.0		26.0				
Recall		Min				Min				
LT Type	Prot		Prot		Prot		Prot			

Part II — *Coordinated Timing Information*

Pattern Tables

PHASE	*1*	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*Cycle*	*Offset*
Split Pattern 1	21	46	32	31	21	46	32	31	130	12
Split Pattern 2	23	57	25	25	23	57	25	25	130	93
Split Pattern 3	25	52	28	25	15	62	28	25	130	36
Split Pattern 4	18	42	18	22	15	45	18	22	100	48
Split Pattern 5	18	57	20	25	18	57	20	25	120	38

Schedule Implementation

Schedule Notes	Day Plan 1 (WEEKDAYS)			Day Plan 2 (WEEKENDS)			Day Plan 3 (Special)		
	Start	End	Pattern	Start	End	Pattern			
	0:00	6:30	Free	0:00	7:00	Free			
	6:30	10:00	1	7:00	10:00	4			
	10:00	15:00	2	10:00	18:00	5			
	15:00	19:00	3	18:00	21:00	4			
	19:00	21:00	4	21:00	0:00	Free			
	21:00	0:00	Free						

Part III — *Notes and Comments*

1. Installed new system and signal timing by AECOM (FDOT Retiming Contract C9O28; FM 230017 7 32 01)

APPENDIX E

DRIVEWAY ANALYSIS

APPENDIX G

TURN LANE NEED AND LENGTH DETERMINATION

a. Right Turn Lanes

The potential need for right-turn lanes at the site access connections shall be evaluated based on guidelines provided in the Florida Department of Transportation's Driveway Handbook (March 2005). These guidelines are essentially based on roadway speed and type.

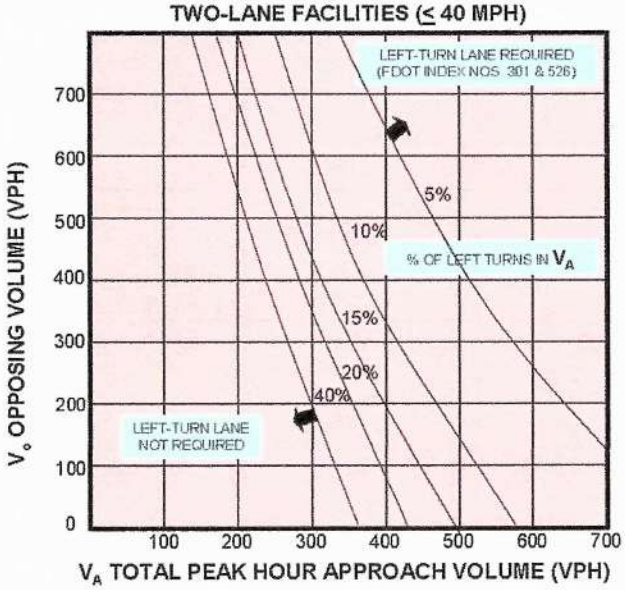
b. Left Turn Lanes

The need for left-turn lanes is typically evaluated based on research documented in National Cooperative Highway Research Program (NCHRP) Report 279 Intersection Channelization Design Guide. The curves included in this report are included below.

c. Deceleration and Storage Lengths

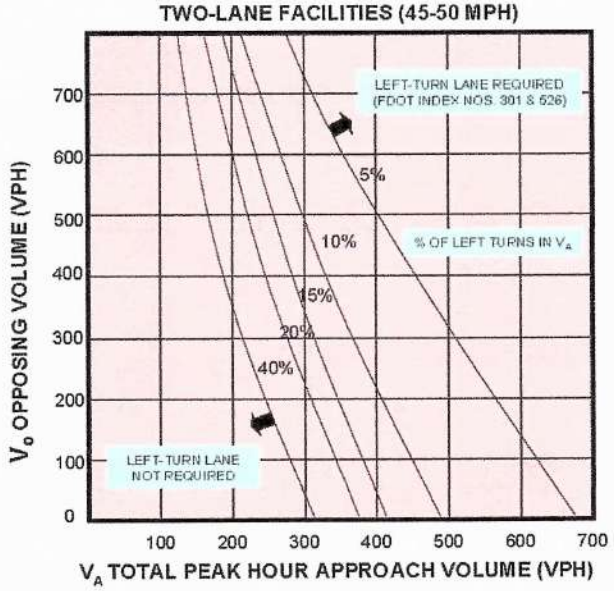
1) Deceleration length shall be based on Index 301 of FDOT's *Design Standards*.
2) Storage Length shall be based on 95th percentile queue estimates provided by the software used in the level of service computation.
3) The provision of deceleration and storage lengths may be modified or waived by the Local Government's Engineer or his/her designee if it is determined that due to site specific constraints, the implementation will not be feasible or practical.

GRAPH 2A. LEFT-TURN LANE WARRANTS – TWO-LANE FACILITIES (≤ 40 MPH)



Note: Left-turn lane not required when intersection of V_A and V_O is below the curve corresponding to the % of left turns in V_A.

GRAPH 2B. LEFT-TURN LANE WARRANTS – TWO-LANE FACILITIES (45-50 MPH)



Note: Left-turn lane not required when intersection of V_A and V_O is below the curve corresponding to the % of left turns in V_A.

Graph 2A & 2B – Source: Derived from National Cooperative Highway Research Program Report #279.

When Not to Consider Exclusive Right-Turn Lanes

- Dense or built-out corridors with limited space
- Right-turn lane that would negatively impact pedestrians or bicyclists
- Vehicular movements from driveways or median openings that cross the right-turn lane resulting in multiple threat crashes
- Context classifications C2T, C4, C5, or C6

When Exclusive Right-Turn Lanes are Beneficial

There are instances when adding an exclusive right-turn lane for unsignalized driveways are beneficial to traffic operations and safety. ***Table 27*** provides some guidance for this situation based on the speed limit of the roadway and how many right turns occur per hour. Locations where the Auto and Truck Modal Emphasis is "High" may be appropriate for consideration of Exclusive Right Turn Lanes.

Table 27 – Recommended Guidelines for Exclusive Right-Turn Lanes to Unsignalized Driveway[10]

Roadway Posted Speed Limit	Number of Right Turns Per Hour
45 mph or less	80 – 125[1]
Over 45 mph	35 – 55[2]
Note: A posted speed limit of 45 mph may be used with these thresholds if the operating speeds are known to be over 45 mph during the time of peak right turn demand.	
Note on traffic projections: Projecting turning volumes is, at best, a knowledgeable estimate. Keep this in mind especially if the projections of right turns are close to meeting the guidelines. In that case, consider requiring the turn lane.	
[1] The lower threshold of 80 right-turn vehicles per hour would be most used for higher volume (greater than 600 vehicles per hour, per lane in one direction on the major roadway) or two-lane roads where lateral movement is restricted. The 125 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with a large entry radius (50 feet or greater).	
[2] The lower threshold of 35 right-turn vehicles per hour would be most appropriately used on higher volume two-lane roadways where lateral movement is restricted. The 55 right-turn vehicles per hour upper threshold would be most appropriate on lower volume roadways, multilane highways, or driveways with large entry radius (50 feet or greater).	

Source: NCHRP Report 420 (Impacts of Access Management Techniques)

These recommendations are primarily based on the research done in NCHRP Report 420, Impacts of Access Management Techniques, Chapter 4 – Unsignalized Access Spacing (Technique 1B), and Use of Speed Differential as a Measure to Evaluate the Need for Right-Turn Deceleration Lane at Unsignalized Intersections.

In the *NCHRP Report 420*, the observed high-speed roads, 30 to 40 right-turn vehicles per hour caused evasive maneuvers on 5 - 10 percent of the following through vehicles. For lower speed roadways, 80 to 110 right-turn vehicles caused 15 - 20 percent of the following through vehicles to make evasive maneuvers. The choice of acceptable percentages of through vehicles impacted is a decision based on reasonable expectations of the different roadways.

In this study, by modeling speed differentials, a better understanding of the impacts of through volume and driveway radius was discovered.

[10] May not be appropriate for signalized locations where signal phasing plays an important role in determining the need for right turn lanes.

HCS Two-Way Stop-Control Report

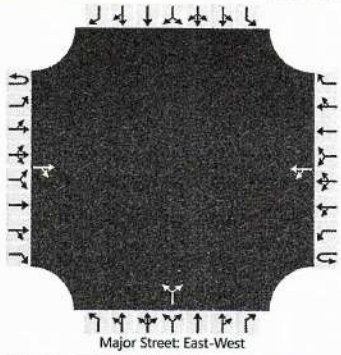
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	With Project

Site Information

Intersection	Project Driveway and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Project Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			767	19		2	966			59		7				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					72					
Capacity, c (veh/h)						781					82					
v/c Ratio						0.00					0.87					
95% Queue Length, Q_{95} (veh)						0.0					4.6					
Control Delay (s/veh)						9.6	0.1				154.7					
Level of Service (LOS)						A	A				F					
Approach Delay (s/veh)					0.1				154.7							
Approach LOS					A				F							

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

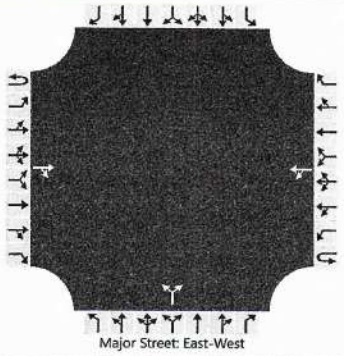
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	With Project

Site Information

Intersection	Project Driveway and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Project Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			790	62		7	800			36		4				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						8					43					
Capacity, c (veh/h)						734					95					
v/c Ratio						0.01					0.46					
95% Queue Length, Q_{95} (veh)						0.0					1.9					
Control Delay (s/veh)						10.0	0.2				71.1					
Level of Service (LOS)						A	A				F					
Approach Delay (s/veh)					0.3				71.1							
Approach LOS					A				F							

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

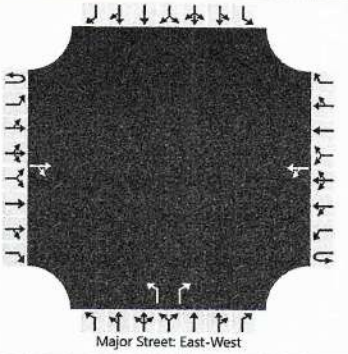
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	With Project

Site Information

Intersection	Project Driveway and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Project Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		1	0	1		0	0	0
Configuration				TR		LT				L		R				
Volume (veh/h)			767	19		2	966			59		7				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized										No						
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2				64		8				
Capacity, c (veh/h)						781				75		362				
v/c Ratio						0.00				0.85		0.02				
95% Queue Length, Q_{95} (veh)						0.0				4.3		0.1				
Control Delay (s/veh)						9.6	0.1			159.1		15.2				
Level of Service (LOS)						A	A			F		C				
Approach Delay (s/veh)					0.1				143.9							
Approach LOS					A				F							

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

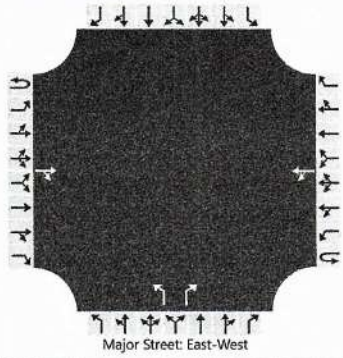
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	With Project

Site Information

Intersection	Project Driveway and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Project Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		1	0	1		0	0	0
Configuration				TR		LT				L		R				
Volume (veh/h)			790	62		7	800			36		4				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized										No						
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						8				39		4				
Capacity, c (veh/h)						734				88		339				
v/c Ratio						0.01				0.44		0.01				
95% Queue Length, Q_{95} (veh)						0.0				1.8		0.0				
Control Delay (s/veh)						10.0	0.2			74.8		15.8				
Level of Service (LOS)						A	A			F		C				
Approach Delay (s/veh)					0.3				68.9							
Approach LOS					A				F							

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

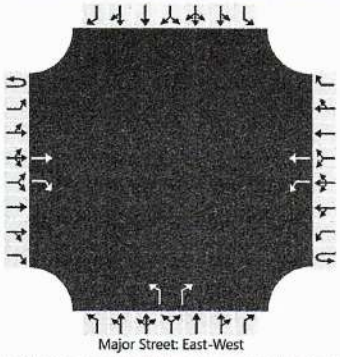
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	With Project

Site Information

Intersection	Project Driveway and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Project Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			767	19		2	966			59		7				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No							No						
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2				64		8				
Capacity, c (veh/h)						781				77		367				
v/c Ratio						0.00				0.84		0.02				
95% Queue Length, Q_{95} (veh)						0.0				4.2		0.1				
Control Delay (s/veh)						9.6				153.1		15.0				
Level of Service (LOS)						A				F		C				
Approach Delay (s/veh)						0.0				138.5						
Approach LOS						A				F						

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

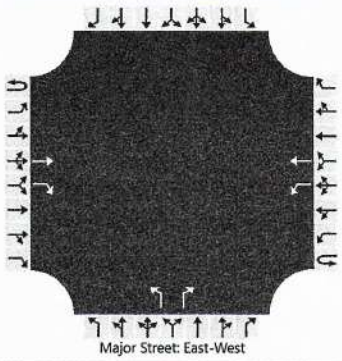
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	With Project

Site Information

Intersection	Project Driveway and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Project Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			790	62		7	800			36		4				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No							No						
Median Type | Storage			Undivided													

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						8				39		4				
Capacity, c (veh/h)						734				94		355				
v/c Ratio						0.01				0.42		0.01				
95% Queue Length, Q_{95} (veh)						0.0				1.7		0.0				
Control Delay (s/veh)						10.0				68.7		15.3				
Level of Service (LOS)						A				F		C				
Approach Delay (s/veh)						0.1				63.3						
Approach LOS						A				F						

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

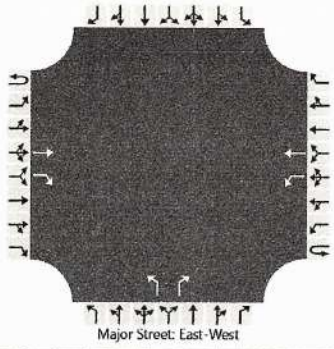
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	East-West
Project Description	With Project

Site Information

Intersection	Project Driveway and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Project Driveway
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			767	19		2	966			59		7				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No							No						
Median Type | Storage			Left Only							1						

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2				64		8				
Capacity, c (veh/h)						781				205		367				
v/c Ratio						0.00				0.31		0.02				
95% Queue Length, Q_{95} (veh)						0.0				1.3		0.1				
Control Delay (s/veh)						9.6				30.4		15.0				
Level of Service (LOS)						A				D		C				
Approach Delay (s/veh)						0.0				28.8						
Approach LOS						A				D						

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

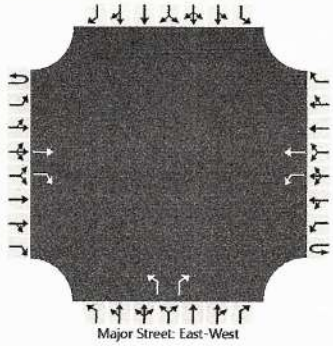
General Information

Analyst	KS
Agency/Co.	OREP
Date Performed	6/19/2023
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	East-West
Project Description	With Project

Site Information

Intersection	Project Driveway and Edwards
Jurisdiction	St Lucie
East/West Street	Edwards
North/South Street	Project Driveway
Peak Hour Factor	0.97
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	1	0	1	1	0		1	0	1		0	0	0
Configuration			T	R		L	T			L		R				
Volume (veh/h)			790	62		7	800			36		4				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized			No							No						
Median Type | Storage			Left Only							1						

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						7				37		4				
Capacity, c (veh/h)						765				243		376				
v/c Ratio						0.01				0.15		0.01				
95% Queue Length, Q_{95} (veh)						0.0				0.5		0.0				
Control Delay (s/veh)						9.8				22.5		14.7				
Level of Service (LOS)						A				C		B				
Approach Delay (s/veh)						0.1				21.7						
Approach LOS						A				C						

Copyright © 2023 University of Florida. All Rights Reserved.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North			
South			
East			
West			

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current					
****Proposed**					N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day
**Proposed Zoning/FLU	Total gallons per day
**Change in Demand	Total gallons per day

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum
Current Zoning/FLU	Total gallons per day
**Proposed Zoning/FLU	Total gallons per day
**Change in Demand	Total gallons per day

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

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

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

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

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

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

Impact	

III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning/FLU		
****Proposed Zoning/FLU**		
***Change in Demand**	Trips	Trips
Impact to Capacity		

IV. Project Description

PHASING
Is this project (phase) part of a larger project? [ ] Yes [ ] No
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.
Total Project: Residential Units: Single Family: Multifamily:
Non-residential (square footage):
Mixed-use (describe use):
(If this is a single phase project, name it Phase I – Total)

RESIDENTIAL DATA

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

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

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

B. 1. Does this application involve demolition or re-use of any structure(s)? [ ] Yes [ ] No
If yes, what is the size of the structure(s) to be demolished or re-used? _____
2. What is the current use of the structure to be demolished or re-used? _____
3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? [ ] Yes [ ] No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

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

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

DESIGN REVIEW

Property Information

Property address or Location _____

Parcel ID #(s) _____

Project description _____

Property Owner(s)	**Applicant/Representative, Title, Company**
Street Address	Street Address
City State Zip	City State Zip
Phone Number	Phone Number
Email Address	Email Address

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

_____

Property Owner(s) Signature(s)

APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS

CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM

For more information, please refer to the website:

https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi

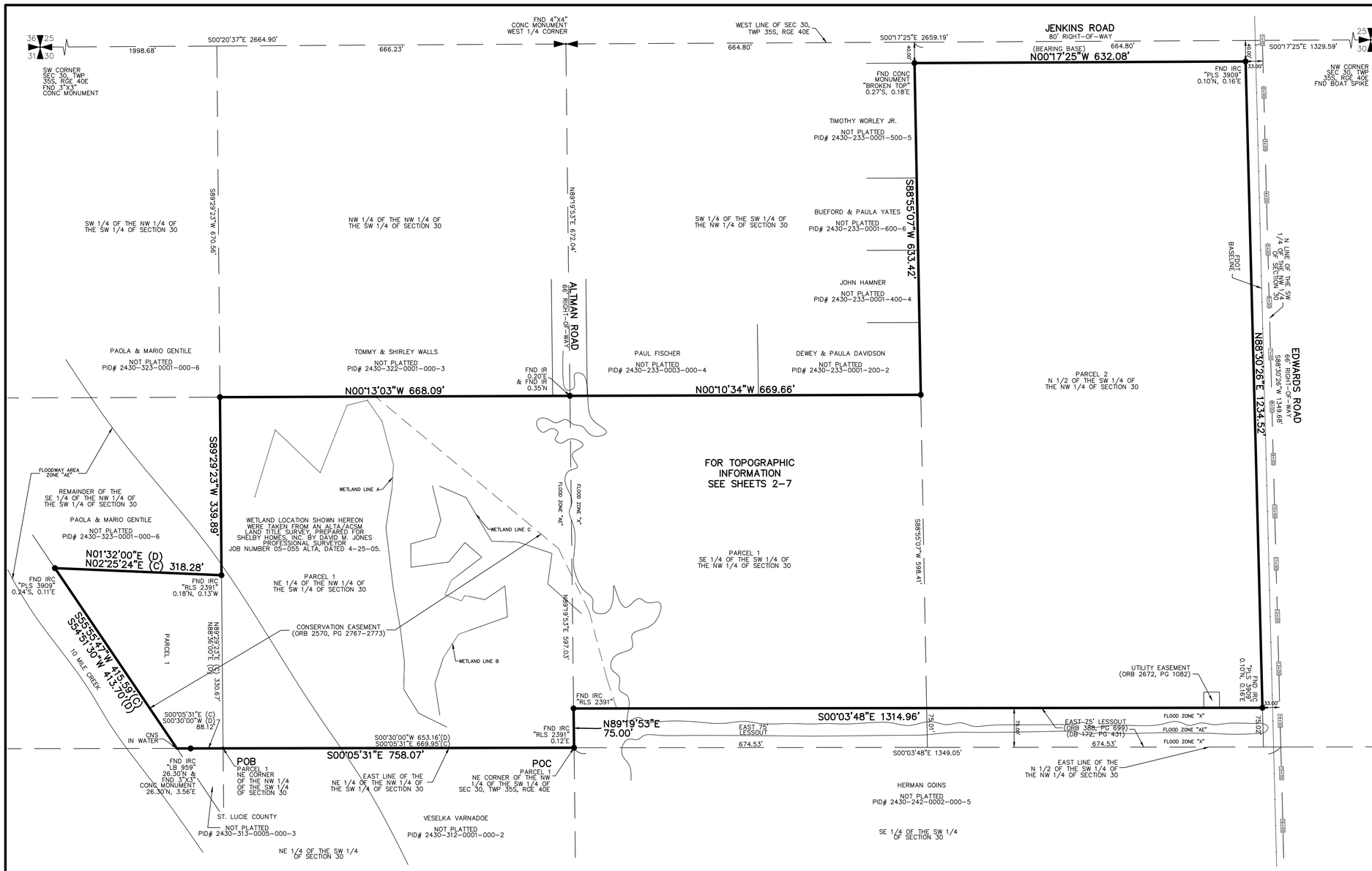
Design Review Application Checklist
(City Code of Ordinances 125-314)

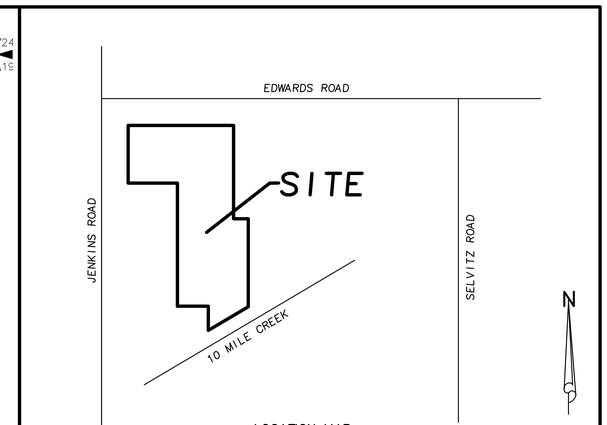
Submittal for Administrative Approval

a. A survey (1" = 30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of section 123-66, location of bordering streets and, if applicable, wetlands and beaches.
b. A site analysis study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment, and other site features that may influence design elements.
c. A draft written narrative describing the design intent of the project, its goals, and objectives and how it reflects the site analysis study results.
d. Context photographs of neighboring uses and architectural styles.
e. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the city's planning department.
f. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty (50) years of age, documentation of these structures with data from the Florida Master Site File form is also required.
g. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
h. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
j. Exterior elevations showing architectural character, external architectural features, and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two (2) properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.
k. Design review concurrent with conceptual development plan procedure according to subsection 125-313 is also available.

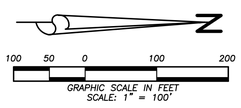
Submittal for Board Approval

a. A written narrative describing how the project conforms to administrative approval and design review guidelines of this section.
b. A final site plan meeting the requirements of section 125-313.
c. A final site lighting plan that meets the requirements of subsection 125-313(d)(8).
d. A final landscape plan that meets the requirements of articles II and III of chapter 123.
e. Final floor plans and elevation drawings (1/8" = 1'-0" minimum scale), as detailed under administrative approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
f. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.





LOCATION MAP
NOT TO SCALE



SURVEY REPORT:

1. THIS IS A BOUNDARY SURVEY AS DEFINED IN CHAPTER 5J-17.050(10)(A-K), FLORIDA ADMINISTRATIVE CODE.
2. SURVEY BASED ST. LUCIE COUNTY SECTIONAL DATA.
3. LEGAL DESCRIPTION WAS FURNISHED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, ORDER NUMBER: 9218519, DATED JANUARY 1, 2021 @ 11:00 PM.

   SUBJECT TO THE FOLLOWING CONDITIONS:

   A. EASEMENT TO THE CITY OF FT. PIERCE RECORDED IN O.R. BOOK 3042, PAGE 853, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #6) (COVERS ENTIRE PARCEL)

   B. DEED OF CONSERVATION EASEMENT RECORDED IN O.R. BOOK 2570, PAGE 2767, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #7) (AS SHOWN)

   C. NOTICE OF ENVIRONMENTAL RESOURCE OF SURFACE WATER MANAGEMENT PERMIT RECORDED IN O.R. BOOK 3353, PAGE 1326, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #8) (COVERS ENTIRE PARCEL)

   D. RIGHT OF WAY DEED RECORDED IN DEED BOOK 172, PAGE 431, AND O.R. BOOK 388, PAGE 699, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #9) (AS SHOWN)

   E. EASEMENT TO BELLSOUTH TELECOMMUNICATIONS, INC. RECORDED IN O.R. BOOK 2672, PAGE 1082, PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA. (BII #12) (AS SHOWN)

   F. ORDINANCE NO. K-269 ESTABLISHING THE FUTURE LAND USE DESIGNATION RECORDED IN OFFICIAL RECORDS BOOK 1971, PAGE 1295. (BII #13) (COVERS ENTIRE PARCEL) (NOT PLOTTABLE)

   G. NOTICE OF WATER/WASTEWATER SUPPLY AGREEMENT RECORDED IN OFFICIAL RECORDS BOOK 3117, PAGE 2790. (BII #14) (COVERS ENTIRE PARCEL) (NOT PLOTTABLE)
4. BEARING BASIS: N00°17'25"W ALONG THE WEST LINE OF SECTION 30, TOWNSHIP 35S, RANGE 40E.
5. NO UNDERGROUND UTILITIES OR IMPROVEMENTS WERE LOCATED UNLESS OTHERWISE SHOWN.
6. THIS SITE LIES WITHIN FLOOD ZONE "X" AND "AE" BASE FLOOD ELEVATION= 13.0, ACCORDING TO THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 12111C0167 J & 12111C0169 J, EFFECTIVE DATE 2-16-12.
7. FLOOD ZONE SHOWN HEREON IS AN INTERPRETATION BY THE SURVEYOR AND IS PROVIDED AS A COURTESY. THE FLOOD ZONE SHOULD BE VERIFIED BY A DETERMINATION AGENCY.
8. THERE MAY BE ADDITIONAL EASEMENTS AND/OR RESTRICTIONS NOT SHOWN ON THIS SURVEY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF ST. LUCIE COUNTY. NO SEARCH OF THE PUBLIC RECORDS HAS BEEN PERFORMED BY ALEXANDER J. PIAZZA PSM, INC.
9. THE EXPECTED USE OF THE SUBJECT PROPERTY IS FOR THE PURCHASE OF SAID PROPERTY AND FALLS WITHIN THE SUBURBAN CATEGORY AS CLASSIFIED IN CHAPTER 5J-17.051(15)(B)(II), FLORIDA ADMINISTRATIVE CODE. ALL FIELD-MEASURED CONTROL MEASUREMENTS EXCEEDED 1:7,500 FEET ACCURACY REQUIREMENTS FOR THIS CLASSIFICATION.
10. SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
11. ADDITIONS OR DELETIONS TO THE SURVEY MAP OR REPORT BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT THE WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
12. THE BEARINGS SHOWN HEREON ARE RELATIVE TO THE STATE PLANE COORDINATE SYSTEM OF THE NORTH AMERICAN DATUM OF 1983 (2007 ADJUSTMENT) AND THE ELEVATIONS SHOWN HEREON ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 AND ARE REFERENCED TO THE LENGEMANN OF FLORIDA'S L-NET GPS NETWORK DEVELOPED WHICH MEETS OR EXCEEDS THE FEDERAL GEODETIC CONTROL COMMITTEE (FGCC) GUIDELINES FOR "GEOMETRIC GEODETIC ACCURACY STANDARDS AND SPECIFICATIONS FOR USING GPS RELATIVE POSITIONING TECHNIQUES" AS WELL AS THE STANDARDS OF PRACTICE SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS IN CHAPTER 5J-17.051 FLORIDA ADMINISTRATIVE CODE, PURSUANT TO CHAPTER 471.027 FLORIDA STATUTES. BENCHMARKS SET OR FOUND FOR THIS SURVEY ARE NOTED ON THE SKETCH.
13. THIS SURVEY IS PREPARED ONLY FOR THE PARTIES LISTED BELOW AND IS NOT ASSIGNABLE.
    PREPARED FOR: TEG ACQUISITIONS, LLC, A FLORIDA LIMITED LIABILITY COMPANY
    FIDELITY NATIONAL TITLE INSURANCE COMPANY
    GREEN & PIOTRKOWSKI, PLLC.
    WILLIAM J. SEGAL, P.A.
14. © COPYRIGHT 2021 BY ALEXANDER J. PIAZZA PSM, INC.
    THE SKETCH OF SURVEY AND SURVEY REPORT COMPRISE THE COMPLETE SURVEY.
    THIS SURVEY IS NOT VALID UNLESS THE SKETCH AND REPORT ACCOMPANY EACH OTHER.
    REPRODUCTIONS OF THIS SURVEY ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER EMPLOYED BY ALEXANDER J. PIAZZA PSM, INC.

DATE OF FIELD SURVEY: 3-21-21

DATE OF SURVEY: 3-22-21

ALEXANDER J. PIAZZA PSM, INC.

ALEXANDER J. PIAZZA
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 6330

LEGAL DESCRIPTION:

PARCEL 1:

THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF THE NORTHWEST 1/4 OF SECTION 30, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS THE EAST 75 FEET THEREOF, ST. LUCIE COUNTY, FLORIDA.

AND

THE NORTHEAST 1/4 OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 30, TOWNSHIP 35 SOUTH, RANGE 40 EAST ST. LUCIE COUNTY, FLORIDA.

AND

FROM THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 30, TOWNSHIP 35 SOUTH, RANGE 40 EAST, RUN SOUTH 00°30' WEST ALONG THE QUARTER-QUARTER SECTION LINE, A DISTANCE OF 653.16 FEET FOR THE POINT OF BEGINNING; THENCE CONTINUE SOUTH 00°30' WEST A DISTANCE OF 88.12 FEET TO A POINT ON THE TOP OF A BLUFF OF 10 MILE CREEK; THENCE RUN SOUTH 54°51'30" WEST ALONG SAID CREEK A DISTANCE OF 413.70 FEET; THENCE RUN NORTH 01°32' EAST A DISTANCE OF 318.28 FEET; THENCE RUN NORTH 88°36' EAST, A DISTANCE 330.67 FEET, TO THE POINT OF BEGINNING, BEING IN ST. LUCIE COUNTY, FLORIDA.

PARCEL 2:

NORTH ONE-HALF(N 1/2) OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 30, TOWNSHIP 35 SOUTH, RANGE 40 EAST, EXCEPTING THEREFROM ALL RIGHTS OF WAY FOR DRAINAGE CANAL AND PUBLIC ROAD PURPOSES. SAID LAND LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

CONTAINING: 1,703,158 SQUARE FEET OR 39.099 ACRES, MORE OR LESS.

ABBREVIATIONS:

(C)	= CALCULATED
CBS	= CONCRETE BLOCK STRUCTURE
CMB	= COMMISSIONERS' MINUTES BOOK
CONC	= CONCRETE
CLF	= CHAIN LINK FENCE
DE	= DRAINAGE EASEMENT
FDOT	= FLORIDA DEPARTMENT OF TRANPORTATION
DB	= DEED BOOK
DIP	= DUCTILE IRON PIPE
FND	= FOUND
FPL	= FLORIDA POWER & LIGHT
IP	= IRON PIPE
INV	= INVERT
IRC	= IRON ROD WITH PLASTIC CAP
LB	= LICENSE BUSINESS
LS	= LICENSE SURVEY
(M)	= MEASURED
MON	= MONUMENT
ORB	= OFFICIAL RECORD BOOK
(P)	= PLAT
PB	= PLAT BOOK
PG	= PAGE
PL	= PROPERTY LINE
POB	= POINT OF BEGINNING
POC	= POINT OF COMMENCEMENT
PRM	= PERMANENT REFERENCE MONUMENT
R/W	= RIGHT-OF-WAY
RCP	= REINFORCED CONCRETE PIPE
RGE	= RANGE
SEC	= SECTION
TWP	= TOWNSHIP
UE	= UTILITY EASEMENT

SYMBOLS:

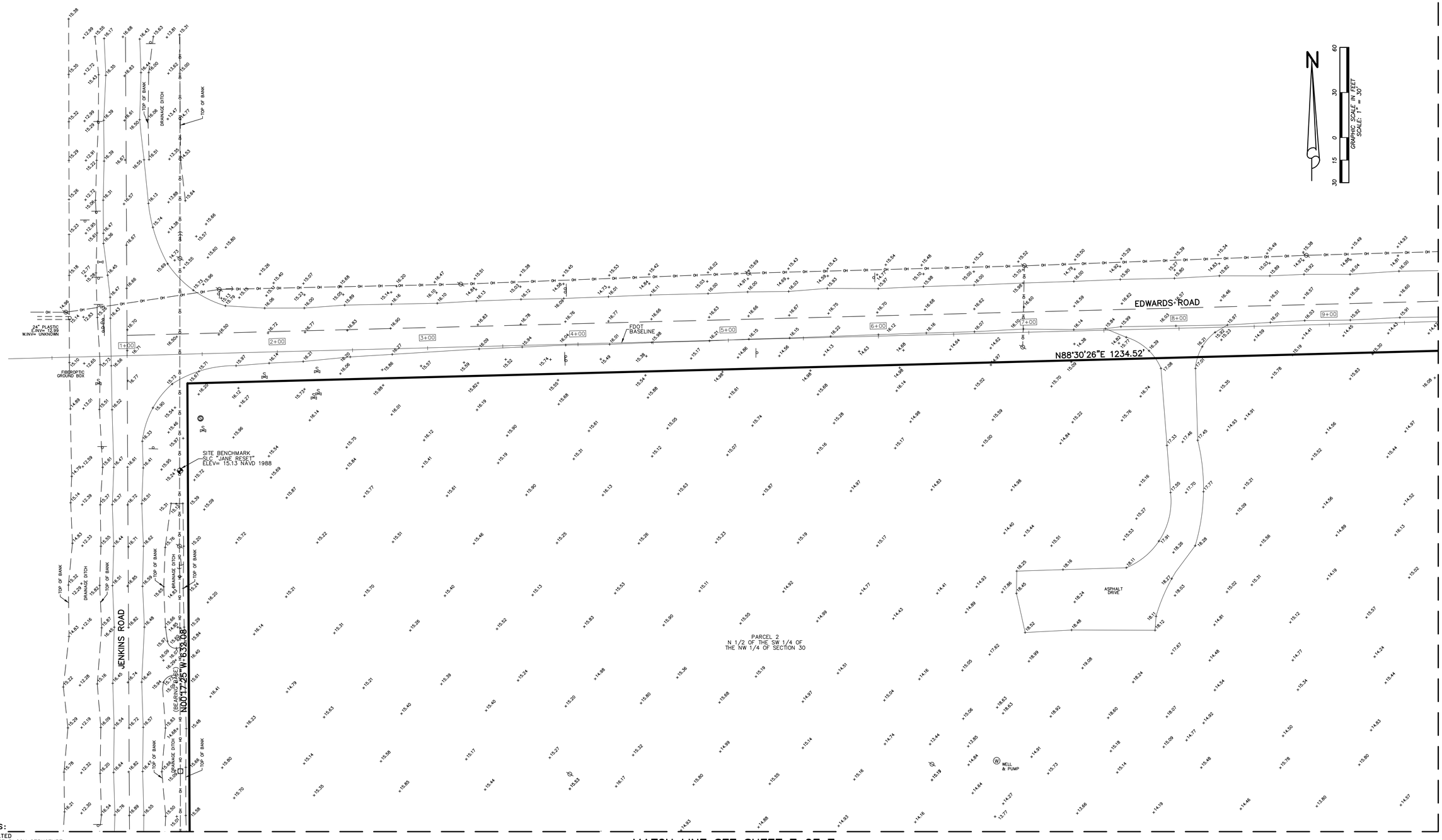
= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CATCH BASIN
= CATCH BASIN INLET
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= BACKFLOW PREVENTOR
= MAIL BOX
= GAS VALVE
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG				
REF	K:\				
FLD	SB	FB.	PG.	JOB	21-7056
OFF	SB			DATE	3-22-21
CKD	AJP	SHEET	1 OF 7	DWG	D-964



MATCH LINE SEE SHEET 3 OF 7

ABBREVIATIONS:

(C) = CALCULATED
CBS = CONCRETE BLOCK STRUCTURE
CONC = CONCRETE
CLF = CHAIN LINK FENCE
FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION
FND = FOUND
FPL = FLORIDA POWER & LIGHT
IP = IRON PIPE
INV = INVERT
IRC = IRON ROD WITH PLASTIC CAP
LB = LICENSE BUSINESS
LS = LICENSE SURVEY
(M) = MEASURED
ORB = OFFICIAL RECORD BOOK
(P) = PLAT
PB = PLAT BOOK
PG = PAGE
PL = PROPERTY LINE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
R/W = RIGHT-OF-WAY
RCP = REINFORCED CONCRETE PIPE
RGE = RANGE
SEC = SECTION
TWP = TOWNSHIP
UE = UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

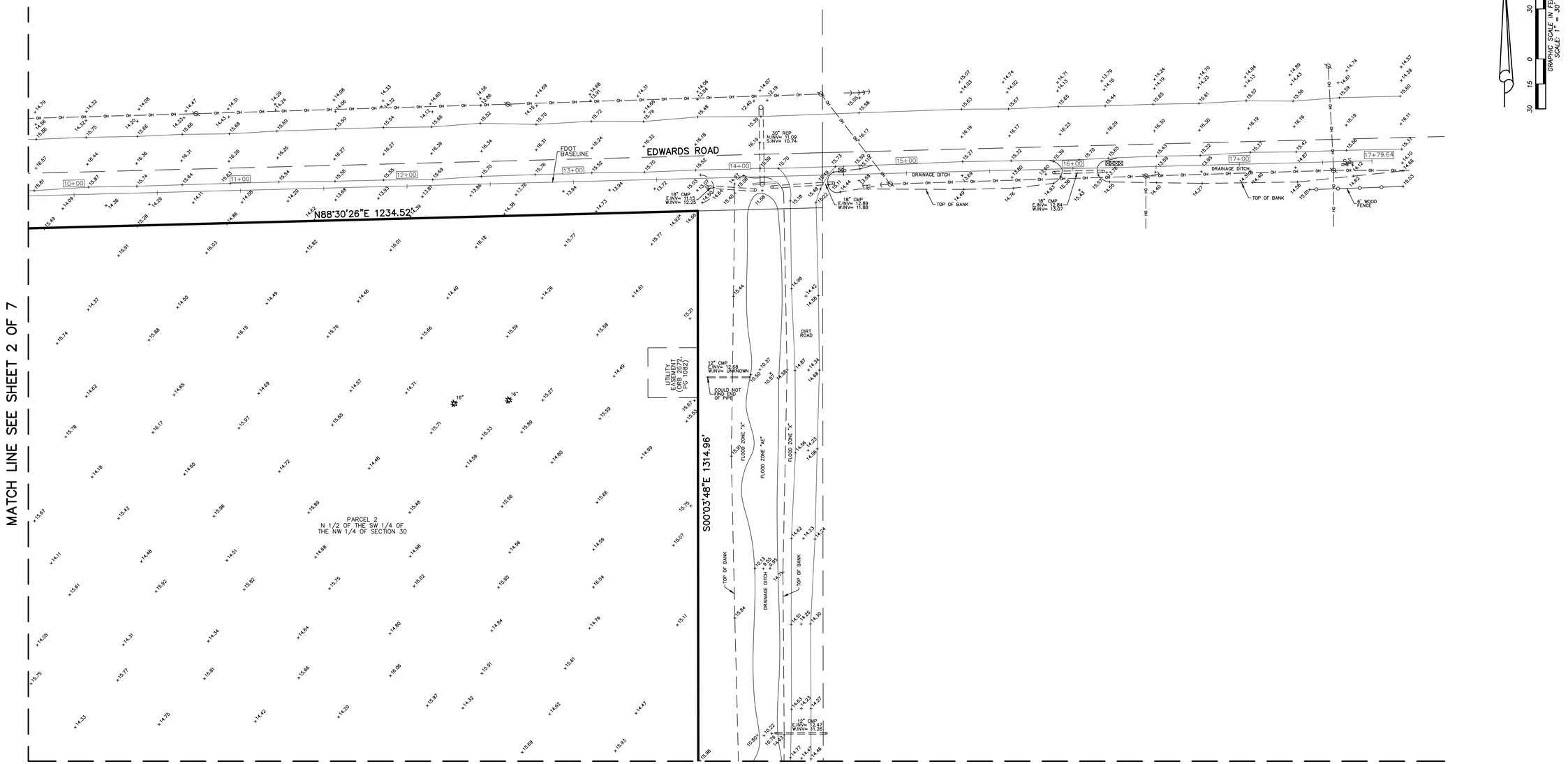
DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG				
REF	K:\				
FLD	SB	FB.	PG.	JOB	21-7056
OFF	SB			DATE	3-22-21
CKD	AJP	SHEET	2 OF 7	DWG	D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:56:42 AM



GRAPHIC SCALE IN FEET
SCALE: 1" = 30'

ABBREVIATIONS:

(C)	= CALCULATED
CBS	= CONCRETE BLOCK STRUCTURE
CONC	= CONCRETE
CLF	= CHAIN LINK FENCE
FDOT	= FLORIDA DEPARTMENT OF TRANSPORTATION
FND	= FOUND
FPL	= FLORIDA POWER & LIGHT
IP	= IRON PIPE
INV	= INVERT
IRC	= IRON ROD WITH PLASTIC CAP
LB	= LICENSE BUSINESS
LS	= LICENSE SURVEY
(M)	= MEASURED
ORB	= OFFICIAL RECORD BOOK
(P)	= PLAT
PB	= PLAT BOOK
PG	= PAGE
PL	= PROPERTY LINE
POB	= POINT OF BEGINNING
POC	= POINT OF COMMENCEMENT
R/W	= RIGHT-OF-WAY
RCP	= REINFORCED CONCRETE PIPE
RGE	= RANGE
SEC	= SECTION
TWP	= TOWNSHIP
UE	= UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

= OAK TREE
= PALM TREE
= UNKNOWN TREE
15" = DENOTES NUMBER OF INCH DIAMETER

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

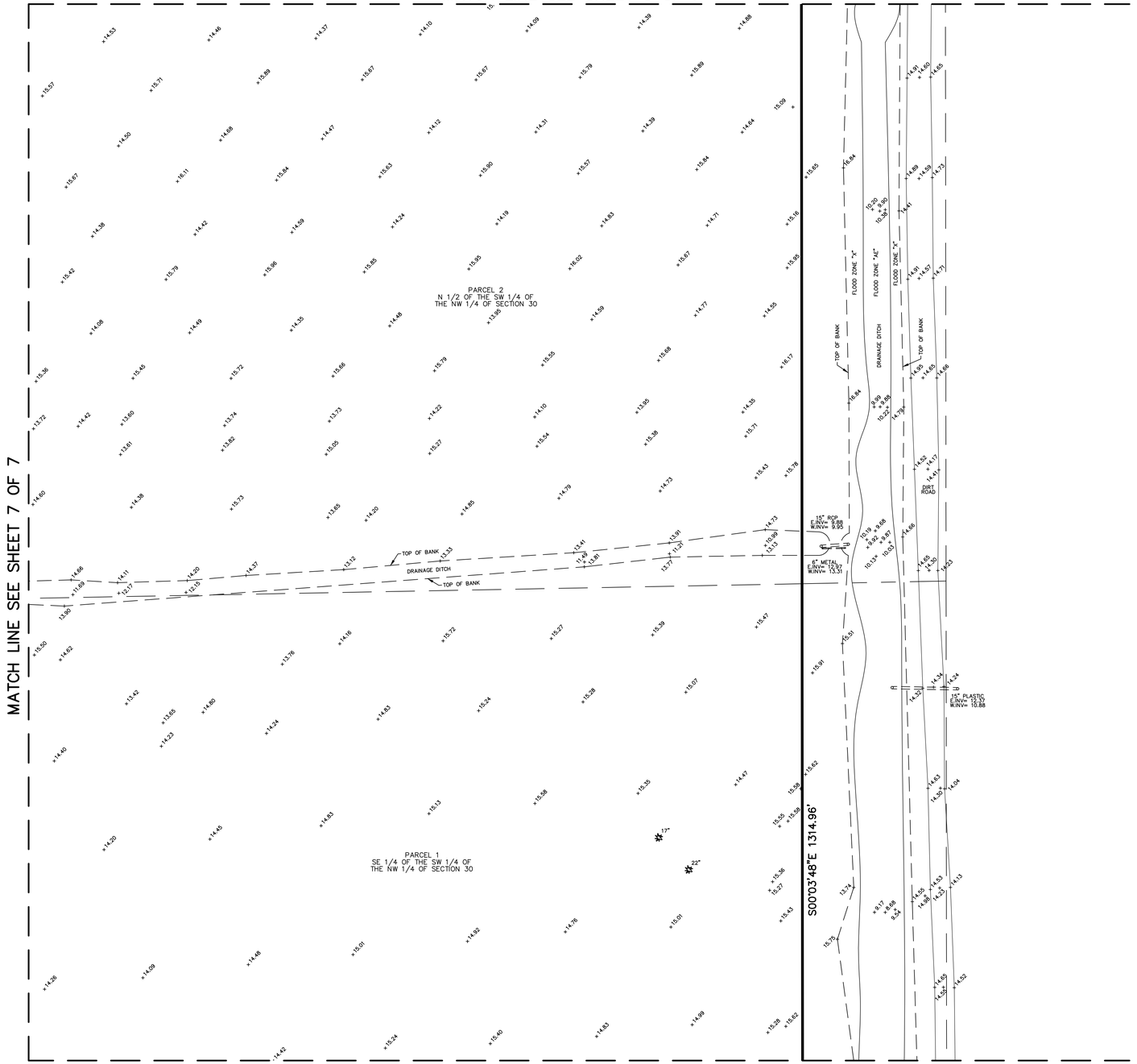
BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG				
REF	K:\				
FLD	SB	FB.	PG.	JOB	21-7056
OFF	SB			DATE	3-22-21
CKD	AJP	SHEET	3 OF 7	DWG	D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:57:18 AM

MATCH LINE SEE SHEET 3 OF 7

MATCH LINE SEE SHEET 7 OF 7



MATCH LINE SEE SHEET 5 OF 7

N

GRAPHIC SCALE IN FEET
SCALE: 1" = 30'
60 30 0 15 30

ABBREVIATIONS:

(C) = CALCULATED
CBS = CONCRETE BLOCK STRUCTURE
CONC = CONCRETE
CLF = CHAIN LINK FENCE
FND = FOUND
FPL = FLORIDA POWER & LIGHT
IP = IRON PIPE
INV = INVERT
IRC = IRON ROD WITH PLASTIC CAP
LB = LICENSE BUSINESS
LS = LICENSE SURVEY
(M) = MEASURED
ORB = OFFICIAL RECORD BOOK
(P) = PLAT
PB = PLAT BOOK
PG = PAGE
PL = PROPERTY LINE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
R/W = RIGHT-OF-WAY
RCP = REINFORCED CONCRETE PIPE
RGE = RANGE
SEC = SECTION
TWP = TOWNSHIP
UE = UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

= OAK TREE
= PALM TREE
= UNKNOWN TREE
15" = DENOTES NUMBER OF INCH DIAMETER

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

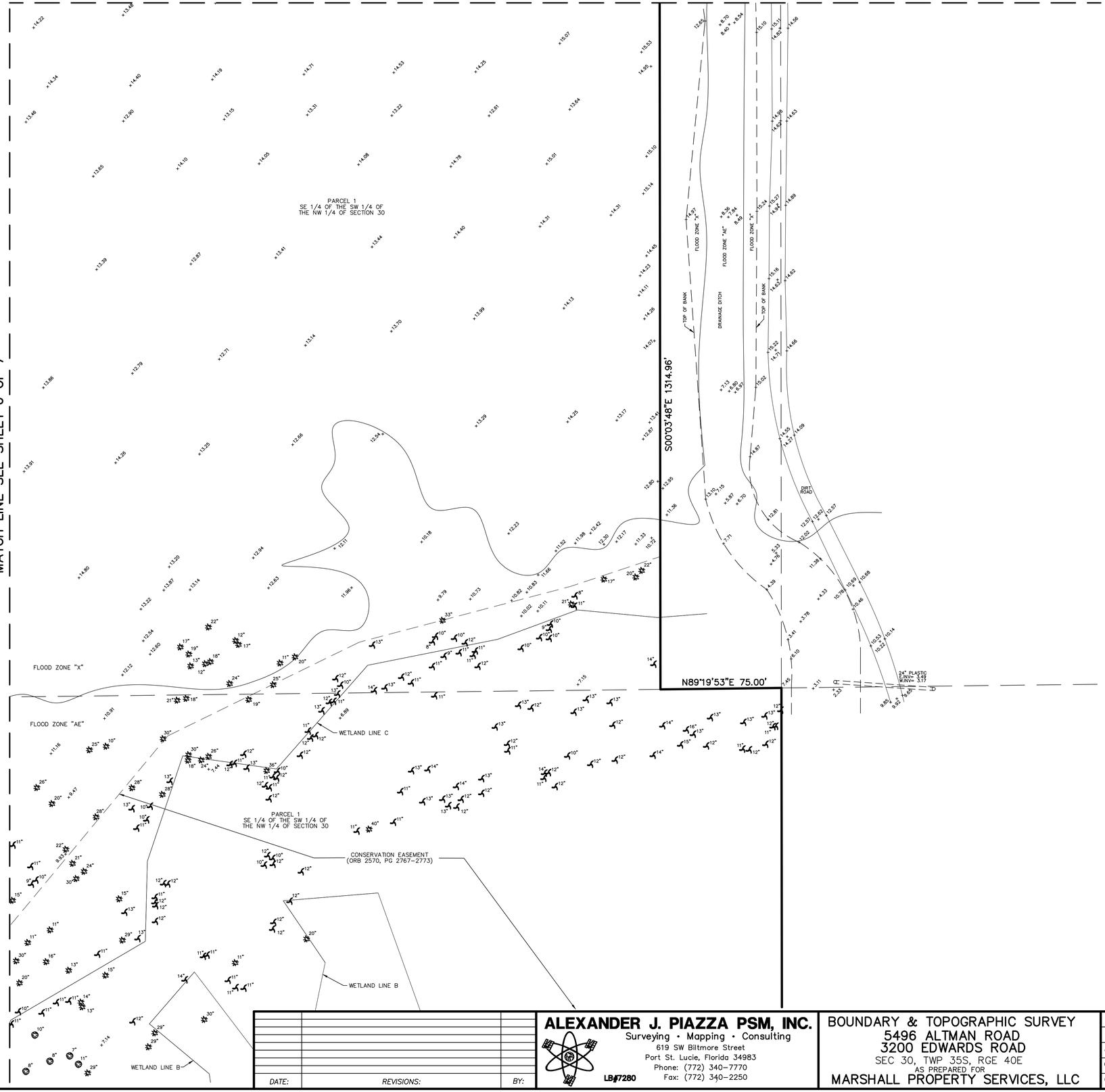
BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG				
REF	K:\				
FLD	SB	FB.	PG.	JOB	21-7056
OFF	SB			DATE	3-22-21
CKD	AJP	SHEET	4 OF 7	DWG	D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:57:52 AM

MATCH LINE SEE SHEET 4 OF 7

MATCH LINE SEE SHEET 6 OF 7



N

GRAPHIC SCALE IN FEET
SCALE: 1" = 30'
60 30 0 15 30

SYMBOLS:

- = GUY WIRE ANCHOR
- = CABLE TELEVISION BOX
- = CLEANOUT
- = ELECTRIC BOX
- = TELEPHONE BOX
- = SIGN
- = SANITARY MANHOLE
- = STORM MANHOLE
- = FIRE HYDRANT
- = LIGHT POLE
- = CONCRETE POWER POLE
- = MAIL BOX
- = SEWER VALVE
- = WATER VALVE
- = WELL
- = WATER METER
- = WOOD POWER POLE
- = SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

- = OAK TREE
- = PALM TREE
- = UNKNOWN TREE
- = PINE TREE
- 15" = DENOTES NUMBER OF INCH DIAMETER

ABBREVIATIONS:

(C)	= CALCULATED
CBS	= CONCRETE BLOCK STRUCTURE
CONC	= CONCRETE
CLF	= CHAIN LINK FENCE
FND	= FOUND
FPL	= FLORIDA POWER & LIGHT
IP	= IRON PIPE
INV	= INVERT
IRC	= IRON ROD WITH PLASTIC CAP
LB	= LICENSE BUSINESS
LS	= LICENSE SURVEY
(M)	= MEASURED
ORB	= OFFICIAL RECORD BOOK
(P)	= PLAT
PB	= PLAT BOOK
PG	= PAGE
PL	= PROPERTY LINE
POB	= POINT OF BEGINNING
POC	= POINT OF COMMENCEMENT
R/W	= RIGHT-OF-WAY
RCP	= REINFORCED CONCRETE PIPE
RGE	= RANGE
SEC	= SECTION
TWP	= TOWNSHIP
UE	= UTILITY EASEMENT

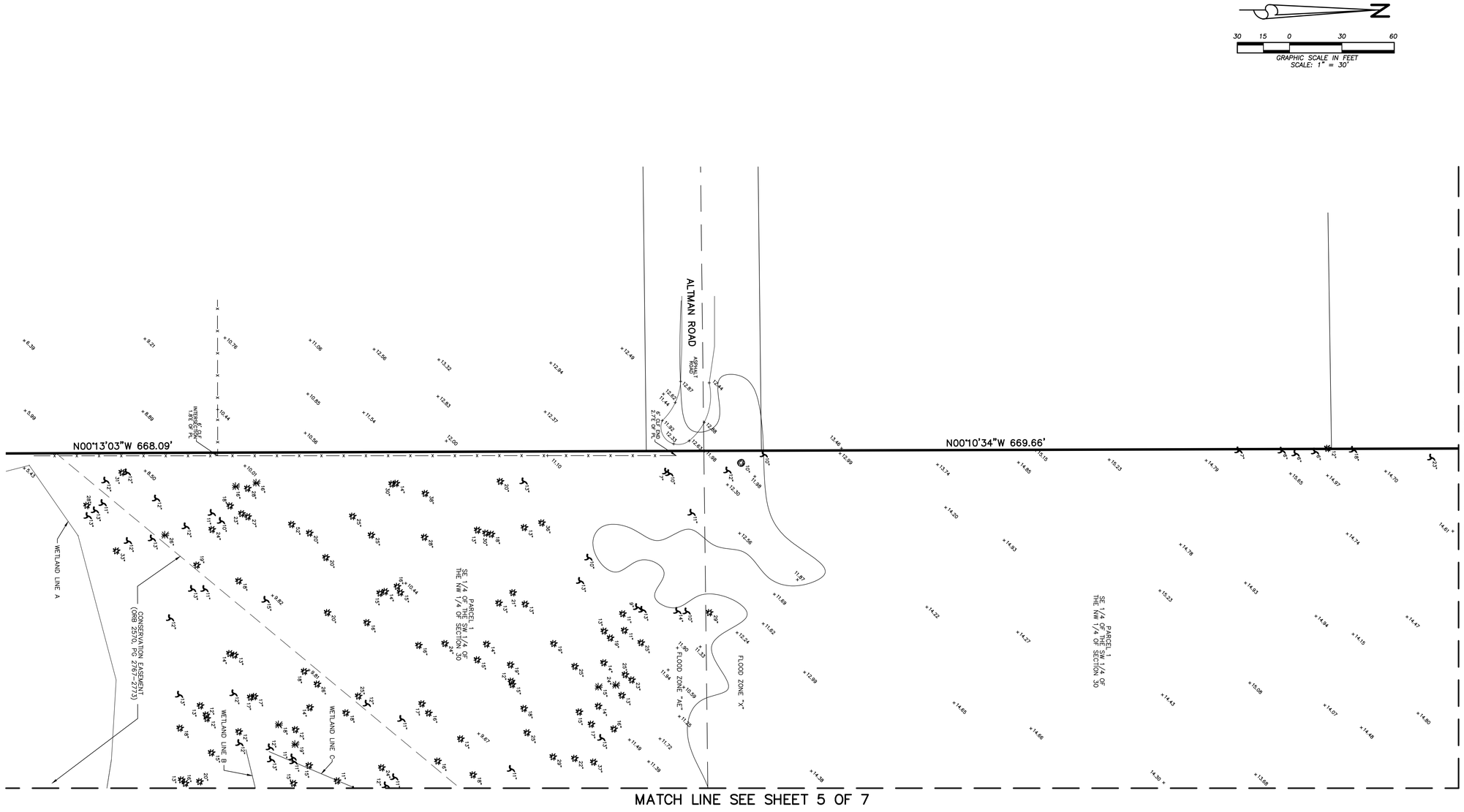
DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG		
REF	K:\		
FLD	SB	FB. PG.	JOB 21-7056
OFF	SB		DATE 3-22-21
CKD	AJP	SHEET 5 OF 7	DWG D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:58:19 AM



ABBREVIATIONS:

(C) = CALCULATED
CBS = CONCRETE BLOCK STRUCTURE
CONC = CONCRETE
CLF = CHAIN LINK FENCE
FND = FOUND
FPL = FLORIDA POWER & LIGHT
IP = IRON PIPE
INV = INVERT
IRC = IRON ROD WITH PLASTIC CAP
LB = LICENSE BUSINESS
LS = LICENSE SURVEY
(M) = MEASURED
ORB = OFFICIAL RECORD BOOK
(P) = PLAT
PB = PLAT BOOK
PG = PAGE
PL = PROPERTY LINE
POB = POINT OF BEGINNING
POC = POINT OF COMMENCEMENT
R/W = RIGHT-OF-WAY
RCP = REINFORCED CONCRETE PIPE
RGE = RANGE
SEC = SECTION
TWP = TOWNSHIP
UE = UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

= OAK TREE
= PALM TREE
= UNKNOWN TREE
= PINE TREE
15" = DENOTES NUMBER OF INCH DIAMETER

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG		
REF	K:\		
FLD	SB	FB. PG.	JOB 21-7056
OFF	SB		DATE 3-22-21
CKD	AJP	SHEET 6 OF 7	DWG D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:58:54 AM

MATCH LINE SEE SHEET 2 OF 7

MATCH LINE SEE SHEET 5 OF 7

MATCH LINE SEE SHEET 6 OF 7

JENKINS ROAD

N00°17'25"W 632.08'

S88°55'07"W 633.42'

N00°10'34"W 669.66'

PARCEL 2
N 1/2 OF THE SW 1/4 OF
THE NW 1/4 OF SECTION 30

PARCEL 1
SE 1/4 OF THE SW 1/4 OF
THE NW 1/4 OF SECTION 30

(BEARING BASIS)

TOP OF BANK

DRAINAGE DITCH

18" RCP
N.INV= 12.00
S.INV= 11.82

18" RCP
N.INV= 13.59
S.INV= 13.61

18" RCP
N.INV= 13.64
S.INV= 13.48

4" WIRE FENCE END 0.1'N OF PL

4" WIRE FENCE END 1.5'N OF PL

4" CLF CORNER 3.2'W OF PL

4" WIRE FENCE END 2.1'W OF PL

4" WIRE FENCE END 1.9'W OF PL

CONC DRIVE

ASPHALT DRIVE

LOW AREA

WELL

GRAPHIC SCALE IN FEET
SCALE: 1" = 30'

60 30 0 15 30

ABBREVIATIONS:

(C)	= CALCULATED
CBS	= CONCRETE BLOCK STRUCTURE
CONC	= CONCRETE
CLF	= CHAIN LINK FENCE
FND	= FOUND
FPL	= FLORIDA POWER & LIGHT
IP	= IRON PIPE
INV	= INVERT
IRC	= IRON ROD WITH PLASTIC CAP
LB	= LICENSE BUSINESS
LS	= LICENSE SURVEY
(M)	= MEASURED
ORB	= OFFICIAL RECORD BOOK
(P)	= PLAT
PB	= PLAT BOOK
PG	= PAGE
PL	= PROPERTY LINE
POB	= POINT OF BEGINNING
POC	= POINT OF COMMENCEMENT
R/W	= RIGHT-OF-WAY
RCP	= REINFORCED CONCRETE PIPE
RGE	= RANGE
SEC	= SECTION
TWP	= TOWNSHIP
UE	= UTILITY EASEMENT

SYMBOLS:

= GUY WIRE ANCHOR
= CABLE TELEVISION BOX
= CLEANOUT
= ELECTRIC BOX
= TELEPHONE BOX
= SIGN
= SANITARY MANHOLE
= STORM MANHOLE
= FIRE HYDRANT
= LIGHT POLE
= CONCRETE POWER POLE
= MAIL BOX
= SEWER VALVE
= WATER VALVE
= WELL
= WATER METER
= WOOD POWER POLE
= SET 5/8" IRON ROD WITH PLASTIC CAP PSM#6330

TREE SYMBOLS:

= OAK TREE
= PALM TREE
= UNKNOWN TREE
15" = DENOTES NUMBER OF INCH DIAMETER

DATE:	REVISIONS:	BY:

ALEXANDER J. PIAZZA PSM, INC.
Surveying • Mapping • Consulting
619 SW Biltmore Street
Port St. Lucie, Florida 34983
Phone: (772) 340-7770
Fax: (772) 340-2250
LB#7280

BOUNDARY & TOPOGRAPHIC SURVEY
5496 ALTMAN ROAD
3200 EDWARDS ROAD
SEC 30, TWP 35S, RGE 40E
AS PREPARED FOR
MARSHALL PROPERTY SERVICES, LLC

CAD	K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.DWG		
REF	K:\		
FLD	SB	FB. PG.	JOB 21-7056
OFF	SB		DATE 3-22-21
CKD	AJP	SHEET 7 OF 7	DWG D-964

K:\SKYMARK\EDWARDS ROAD\DWG\21-7056.dwg, 3/22/2021 9:59:20 AM

TREASURE COAST EAST
CITY OF FORT PIERCE ENVIRONMENTAL IMPACT REPORT

July 2023

Prepared For:

TEG Developers
365 Route 59, Suite 110
Airmont, New York 10952

Prepared By:

Passarella & Associates, Inc.
13620 Metropolis Avenue, Suite 200
Fort Myers, Florida 33912
(239) 274-0067

Project No. 23TEG4047

TABLE OF CONTENTS

Page

1.0 Introduction....1

2.0 Vegetation and Land Cover....1

3.0 Wetlands....3

4.0 Listed Species....3

5.0 Site Plan....3

6.0 References....4

LIST OF TABLES

Page

Table 1. Existing Land Use and Cover Summary.....1

LIST OF EXHIBITS

Page

Exhibit 1. Project Location Map E1-1

Exhibit 2. Aerial with FLUCFCS and Wetlands Map E2-1

Exhibit 3. Listed Species Survey Report E3-1

Exhibit 4. Aerial with Site Plan E4-1

Exhibit 5. SFWMD ERP No. 56-02352-P E5-1

1.0 INTRODUCTION

The following Environmental Impact Report (EIR) Report is provided in support of the City of Fort Pierce site development plan application for Treasure Coast East (Project).

The Project site totals 39.12± acres and is located in Section 30, Township 35 South, Range 40 East, St. Lucie County (Appendix A). More specifically, the Project is located east of South Jenkins Road, south of Edwards Road, and approximately 0.33 mile east of Interstate 95.

The Project site is comprised of forested upland and wetland areas and disturbed land that contain moderate to high levels of cover by exotic vegetation, including Brazilian pepper (*Schinus terebinthifolia*) and smutgrass (*Sporobolus indicus*).

The following EIR includes details regarding the various habitats on-site, results of the listed species survey, and the impacts and preserves associated with the proposed site plan.

2.0 VEGETATION AND LAND COVER

Vegetation associations and land cover for the Project were delineated using Florida Department of Transportation (FDOT) December 2022 rectified color aerials, and groundtruthing was conducted on July 5, 2023. The vegetation and land cover types were classified based on the nomenclature of the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Levels III and IV (FDOT 1999). Level IV FLUCFCS codes were utilized to denote disturbance, and "E" codes were used to identify levels of exotic species invasion (e.g., Brazilian pepper and earleaf acacia (*Acacia auriculiformis*)). AutoCAD Map 3D 2021 software was used to determine the acreage of each mapped polygon, produce summaries, and generate the FLUCFCS map (Exhibit 2).

Table 1. Existing Land Use and Cover Summary

FLUCFCS Code	Description	Acreage (±)	Percent of Total
4279 E3	Live Oak, Disturbed (50-75% Exotics)	4.03	10.3
514	Ditch	0.30	0.8
6309 E4	Mixed Wetland Forest, Disturbed (76-100% Exotics)	7.56	19.3
6419 E2	Freshwater Marsh, Disturbed (25-49% Exotics)	0.73	1.9
740	Disturbed Land	26.37	67.4
814	Road	0.13	0.3
Totals		**39.12**	**100.0**

<u>Live Oak, Disturbed (50-75% Exotics) (FLUCFCS Code 4279 E3)</u>
The canopy of this habitat type consists of co-dominant live oak (*Quercus virginiana*), cabbage palm (*Sabal palmetto*), and Indian laurel (*Ficus microcarpa*). The sub-canopy includes cabbage palm, Brazilian pepper, shoebutton ardisia (*Ardisia elliptica*), American beautybush (*Callicarpa americana*), queen palm (*Syagrus romanzoffiana*), orange (*Citrus* sp.), Jack-in-the-bush

(*Chromolaena odorata*), rosary pea (*Abrus precatorius*), and coral bean (*Erythrina herbacea*). The ground cover consists of caesarweed (*Urena lobata*), muscadine grapevine (*Vitis rotundifolia*), American beautybush, wild coffee (*Psychotria* sp.), greenbrier (*Smilax* sp.), and rosary pea.

Ditch (FLUCFCS Code 514)
The canopy and ground cover of this habitat type are mostly open. The sub-canopy is dominated by Brazilian pepper.

Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)
The canopy of this habitat type includes cabbage palm, laurel oak (*Quercus laurifolia*), and water hickory (*Carya aquatica*). The sub-canopy consists of Brazilian pepper, marlberry (*Ardisia escallonioides*), cabbage palm, wild coffee, water hickory, Senegal date palm (*Phoenix reclinata*), and buttonbush (*Cephalanthus occidentalis*). The ground cover includes swamp fern (*Telmatoblechnum serrulatum*), bacopa (*Bacopa repens*), red ludwigia (*Ludwigia repens*), shrubby camphorweed (*Pluchea odorata*), water pennywort (*Hydrocotyle umbellata*), caesarweed, shield fern (*Thelypteris* sp.), and Japanese climbing fern (*Lygodium japonicum*).

Freshwater Marsh, Disturbed (25-49% Exotics) (FLUCFCS Code 6419 E2)
The canopy of this habitat type is open with cabbage palm on the perimeter. The sub-canopy consists of cabbage palm, water hickory, bushy seedbox (*Ludwigia alternifolia*), giant leather fern (*Acrostichum danaeifolium*), cattails (*Typha latifolia*), buttonbush, and willow (*Salix caroliniana*). The ground cover includes smartweed (*Persicaria* sp.), dotted duckweed (*Spirodela punctata*), Carolina mosquito fern (*Azolla caroliniana*), water pennywort, bulltongue arrowhead (*Sagittaria lancifolia* subsp. *lancifolia*), sedge (*Carex* sp.), and swamp-lily (*Crinum americanum*).

Disturbed Land (FLUCFCS Code 740)
The canopy consists of scattered laurel oak and live oak. The sub-canopy contains scattered Brazilian pepper, wax myrtle (*Morella cerifera*), saltbush (*Baccharis halimifolia*), and cabbage palm. The ground cover consists of smutgrass (*Sporobolus indicus*), cogongrass (*Imperata cylindrica*), bahiagrass (*Paspalum notatum*), dog fennel (*Eupatorium capillifolium*), paragrass (*Urochloa mutica*), caesarweed, loosestrife (*Lythrum alatum* var. *lanceolatum*), common ragweed (*Ambrosia artemisiifolia*), St. Augustine grass (*Stenotaphrum secundatum*), spermacoce (*Spermacoce verticillata*), guineagrass (*Urochloa maxima*), muscadine grape, sida (*Sida* sp.), beggarticks (*Bidens alba*), torpedograss (*Panicum repens*), natalgrass (*Melinis repens*), Jack-in-the-bush, hairy indigo (*Indigofera hirsuta*), elephant's foot (*Elephantopus elatus*), and golden aster (*Pityopsis graminifolia*).

Road (FLUCFCS Code 814)
This FLUCFCS code consists of a small, paved road.

A total of six vegetative associations on-site (i.e., FLUCFCS codes) were identified on the Project. The dominant habitat types on the Project include Disturbed Land (FLUCFCS Code 740), accounting for 67.4 percent of the property (26.37± acres); and Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4), accounting for 19.3 percent of the property (7.56± acres).

The Project site contains 25 to 100 percent exotic vegetation throughout the property. Exotic vegetation documented on-site includes, but is not limited to, Brazilian pepper, shoebutton ardisia (*Ardisia elliptica*), caesarweed (*Urena lobata*), and cogongrass (*Imperata cylindrica*).

3.0 WETLANDS

The Project site contains 8.29± acres of South Florida Water Management District (SFWMD) wetlands (Exhibit 2). The on-site wetlands are identified by the following FLUCFCS codes: Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4) and Freshwater Marsh, Disturbed (25-49% Exotics) (FLUCFCS Code 6419 E2).

4.0 LISTED SPECIES

A listed species survey was conducted by PAI on the Project in July 2023 to determine if the site was being utilized by wildlife species listed by the Florida Fish and Wildlife Conservation Commission (FWCC) and the U.S. Fish and Wildlife Service as threatened or endangered.

A total of three gopher tortoise (*Gopherus polyphemus*) burrows were documented on the Project site during the survey. The gopher tortoise is listed as threatened by the FWCC. No listed plant species were documented on the Project site during the field survey.

A copy of the listed species survey report is provided as Exhibit 3.

5.0 SITE PLAN

The Project includes a proposed multi-family residential development with associated parking and roadways (Exhibit 4). Development has been focused on areas previously disturbed for agricultural uses. The site plan does not propose impacts to the forested upland and wetland areas of the property. Since no wetland impacts are proposed, no wetland mitigation will be required.

There is an existing Environmental Resource Permit (ERP) for the Project site (Permit No. 56-02352-P). The ERP includes delineation of the on-site wetlands, as shown on Exhibit 2. The applicant proposes to preserve the wetlands on-site, as well as an upland buffer area. The proposed preserve location provides for connection to Tenmile Creek. The preserve will be protected in perpetuity via a conservation easement.

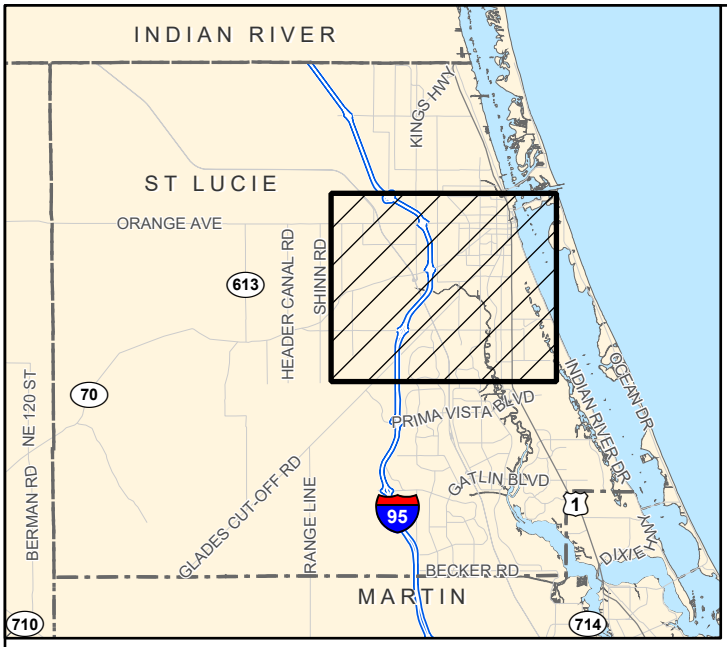
The Project will adhere to state regulations regarding gopher tortoise burrows. An FWCC permit will be obtained for activities within 25 feet of an identified gopher tortoise burrow.

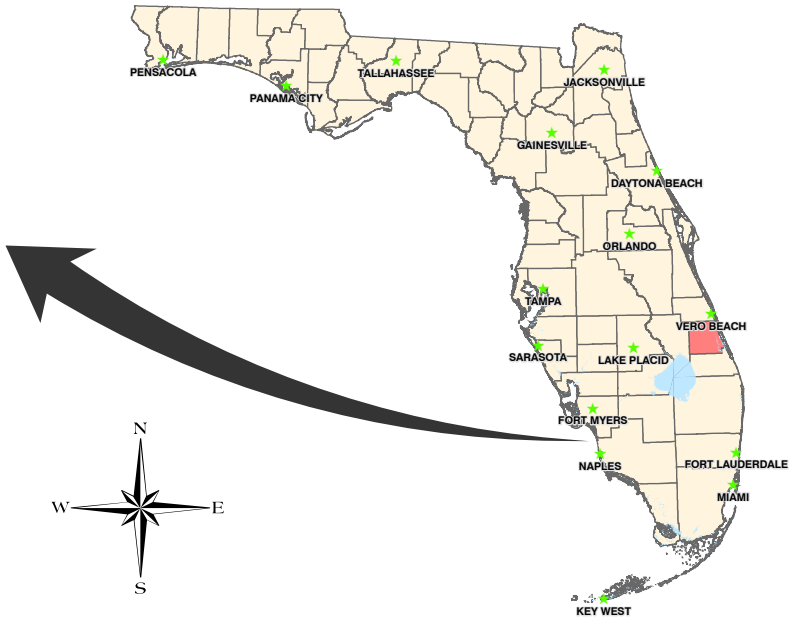
6.0 REFERENCES

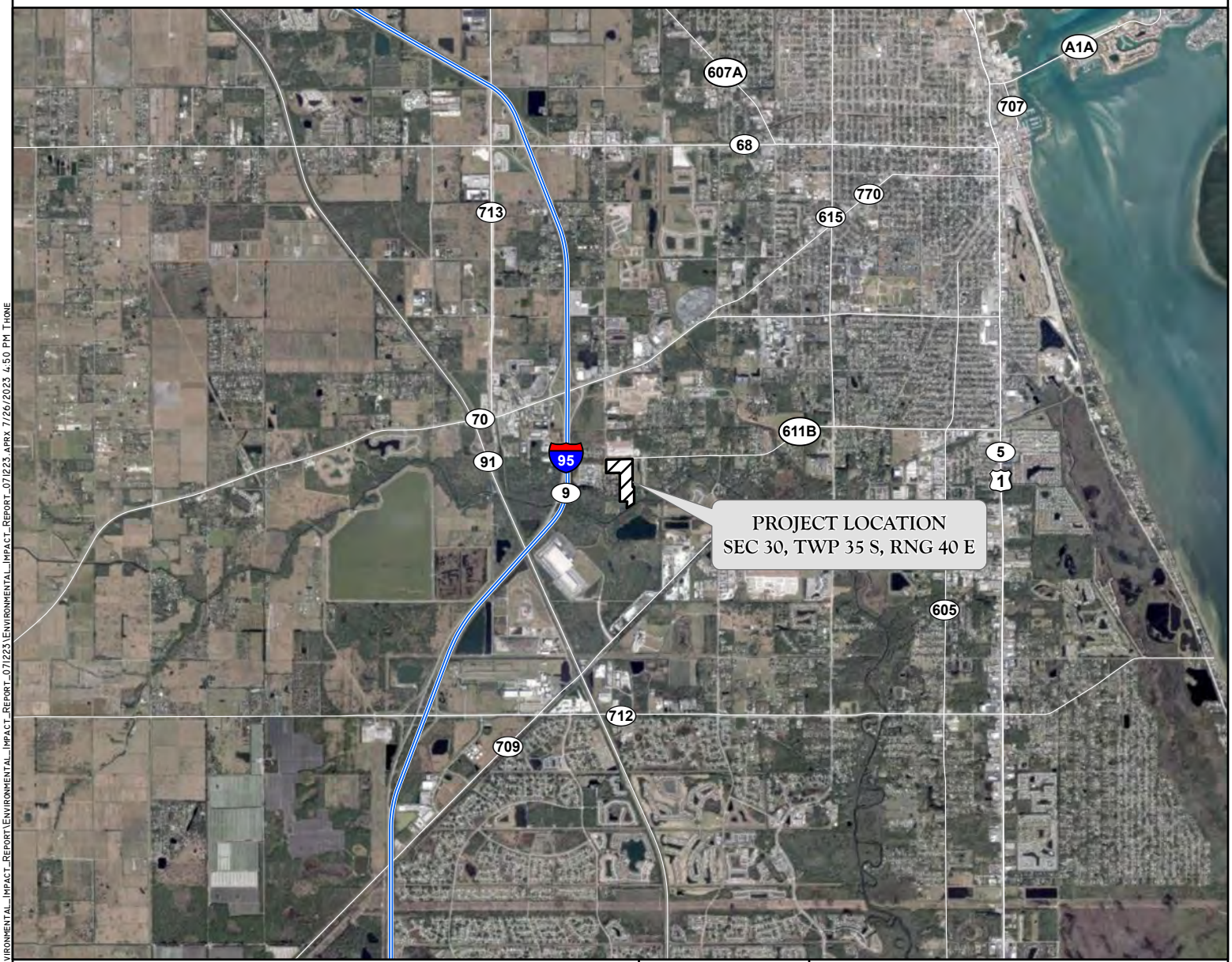
Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a. Second Edition.

EXHIBIT 1

PROJECT LOCATION MAP







J:\2023\23TE64047\Environmental_Impact_Report\Environmental_Impact_Report_071223\Environmental_Impact_Report_071223.aprx 7/26/2023 4:50 PM THONE

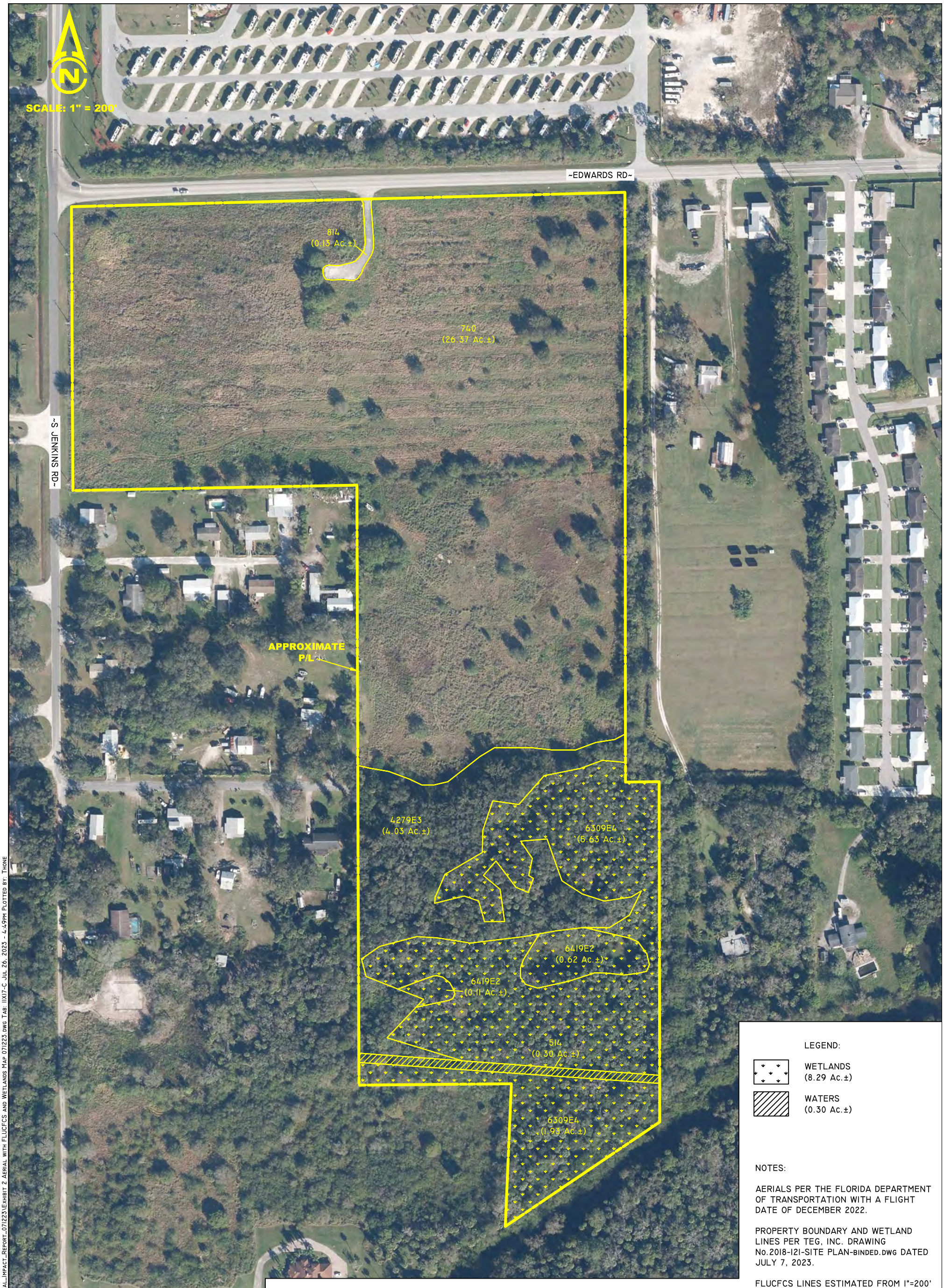
EXHIBIT 1. PROJECT LOCATION MAP
TREASURE COAST EAST

DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
H.S.	7/12/23
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

EXHIBIT 2

AERIAL WITH FLUCFCS AND WETLANDS MAP



FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
4279 E3	LIVE OAK, DISTURBED (50-75% EXOTICS)	4.03 Ac.±	10.3%
514	DITCH	0.30 Ac.±	0.8%
6309 E4	MIXED WETLAND FOREST, DISTURBED (76-100% EXOTICS)	7.56 Ac.±	19.3%
6419 E2	FRESHWATER MARSH, DISTURBED (25-49% EXOTICS)	0.73 Ac.±	1.9%
740	DISTURBED LAND	26.37 Ac.±	67.4%
814	ROAD	0.13 Ac.±	0.3%
	TOTAL	**39.12 Ac.±**	**100.0%**

LEGEND:

WETLANDS (8.29 Ac.±)

WATERS (0.30 Ac.±)

NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY AND WETLAND LINES PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

UPLAND/WETLAND LIMITS HAVE NOT BEEN REVIEWED BY ANY REGULATORY AGENCY AND ARE SUBJECT TO CHANGE.

J:\2023\23TEG4047\ENVIRONMENTAL_IMPACT_REPORT\ENVIRONMENTAL_IMPACT_REPORT_071223\EXHIBIT 2 AERIAL WITH FLUCFCS AND WETLANDS MAP 071223.DWG TAB: 11X17-C JUL 26, 2023 - 4:49PM PLOTTED BY: THONE

DRAWN BY	DATE
H.H.	07/10/23
REVIEWED BY	DATE
K.C.	07/10/23
REVISED	DATE

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

TREASURE COAST EAST
AERIAL WITH FLUCFCS AND WETLANDS MAP

DRAWING No. 23TEG4047

SHEET No. EXHIBIT 2

EXHIBIT 3

LISTED SPECIES SURVEY REPORT

TREASURE COAST EAST
LISTED SPECIES SURVEY REPORT

July 2023

Prepared For:

TEG Developers
365 Route 59, Suite 110
Airmont, New York 10952

Prepared By:

Passarella & Associates, Inc.
13620 Metropolis Avenue, Suite 200
Fort Myers, Florida 33912
(*239*) *274-0067*

Project No. 23TEG4047

TABLE OF CONTENTS

Page

1.0 Introduction....1

2.0 Vegetation Mapping....1

3.0 Survey Methodology....2

3.1 Literature and Database Review....2
3.2 Field Survey....3

4.0 Survey Results....4

4.1 Literature and Database Review....4
4.2 Field Survey....4

5.0 Summary....4

6.0 References....5

LIST OF TABLES

Page

Table 1. Existing Land Use and Cover Summary.....1

Table 2. Weather Conditions During Survey.....3

LIST OF APPENDICES

Page

Appendix A. Project Location Map..... A-1

Appendix B. Aerial with FLUCFCS and Wetlands Map.....B-1

Appendix C. Documented Occurrences of Listed Species.....C-1

Appendix D. Aerial with Survey Transects..... D-1

Appendix E. Aerial with Listed Species Locations E-1

1.0 INTRODUCTION

This report documents the results of the listed species survey conducted by Passarella & Associates, Inc. (PAI) for Treasure Coast East (Project). The survey was conducted for wildlife species listed by the Florida Fish and Wildlife Conservation Commission (FWCC) and the U.S. Fish and Wildlife Service (USFWS) as endangered, threatened, or species of special concern; and for plant species listed by the Florida Department of Agriculture and Consumer Services (FDACS) and the USFWS as endangered, threatened, or commercially exploited.

The Project site totals 39.12± acres and is located in Section 30, Township 35 South, Range 40 East, St. Lucie County (Appendix A). More specifically, the Project is located east of South Jenkins Road, south of Edwards Road, and approximately 0.33 mile east of Interstate 95.

2.0 VEGETATION MAPPING

Vegetation mapping was conducted for the Project using Florida Department of Transportation (FDOT) December 2022 rectified color aerials (Scale 1 inch = 200 feet). Groundtruthing to map the vegetative communities was conducted on July 5, 2023, utilizing the Florida Land Use, Cover and Forms Classification System (FLUCFCS) Levels III and IV (FDOT 1999). Level IV FLUCFCS was utilized to denote hydrological conditions and disturbance. Exotic or "E" codes were used to show levels of exotic species invasion (e.g., Brazilian pepper (*Schinus terebinthifolia*)). AutoCAD Map 3D 2021 software was used to determine the acreage of each mapped area, produce summaries, and generate the FLUCFCS map for the property (Appendix B). A total of six vegetative associations and/or land uses (i.e., FLUCFCS codes) were identified on the Project. Table 1 provides the breakdown of the FLUCFCS codes by acreage for the Project, and a description of each classification follows.

Table 1. Existing Land Use and Cover Summary

FLUCFCS Code	Description	Acreage (±)	Percent of Total
4279 E3	Live Oak, Disturbed (50-75% Exotics)	4.03	10.3
514	Ditch	0.30	0.8
6309 E4	Mixed Wetland Forest, Disturbed (76-100% Exotics)	7.56	19.3
6419 E2	Freshwater Marsh, Disturbed (25-49% Exotics)	0.73	1.9
740	Disturbed Land	26.37	67.4
814	Road	0.13	0.3
Totals		**39.12**	**100.0**

Live Oak, Disturbed (50-75% Exotics) (FLUCFCS Code 4279 E3)

The canopy of this habitat type consists of co-dominant live oak (*Quercus virginiana*), cabbage palm (*Sabal palmetto*), and Indian laurel (*Ficus microcarpa*). The sub-canopy includes cabbage palm, Brazilian pepper, shoebutton ardisia (*Ardisia elliptica*), American beautybush (*Callicarpa americana*), queen palm (*Syagrus romanzoffiana*), orange (*Citrus* sp.), Jack-in-the-bush (*Chromolaena odorata*), rosary pea (*Abrus precatorius*), and coral bean (*Erythrina herbacea*). The

ground cover consists of caesarweed (*Urena lobata*), muscadine grapevine (*Vitis rotundifolia*), American beautybush, wild coffee (*Psychotria* sp.), greenbrier (*Smilax* sp.), and rosary pea.

Ditch (FLUCFCS Code 514)
The canopy and ground cover of this habitat type are mostly open. The sub-canopy is dominated by Brazilian pepper.

Mixed Wetland Forest, Disturbed (76-100% Exotics) (FLUCFCS Code 6309 E4)
The canopy of this habitat type includes cabbage palm, laurel oak (*Quercus laurifolia*), and water hickory (*Carya aquatica*). The sub-canopy consists of Brazilian pepper, marlberry (*Ardisia escallonioides*), cabbage palm, wild coffee, water hickory, Senegal date palm (*Phoenix reclinata*), and buttonbush (*Cephalanthus occidentalis*). The ground cover includes swamp fern (*Telmatoblechnum serrulatum*), bacopa (*Bacopa repens*), red ludwigia (*Ludwigia repens*), shrubby camphorweed (*Pluchea odorata*), water pennywort (*Hydrocotyle umbellata*), caesarweed, shield fern (*Thelypteris* sp.), and Japanese climbing fern (*Lygodium japonicum*).

Freshwater Marsh, Disturbed (25-49% Exotics) (FLUCFCS Code 6419 E2)
The canopy of this habitat type is open with cabbage palm on the perimeter. The sub-canopy consists of cabbage palm, water hickory, bushy seedbox (*Ludwigia alternifolia*), giant leather fern (*Acrostichum danaeifolium*), cattails (*Typha latifolia*), buttonbush, and willow (*Salix caroliniana*). The ground cover includes smartweed (*Persicaria* sp.), dotted duckweed (*Spirodela punctata*), Carolina mosquito fern (*Azolla caroliniana*), water pennywort, bulltongue arrowhead (*Sagittaria lancifolia* subsp. *lancifolia*), sedge (*Carex* sp.), and swamp-lily (*Crinum americanum*).

Disturbed Land (FLUCFCS Code 740)
The canopy consists of scattered laurel oak and live oak. The sub-canopy contains scattered Brazilian pepper, wax myrtle (*Morella cerifera*), saltbush (*Baccharis halimifolia*), and cabbage palm. The ground cover consists of smutgrass (*Sporobolus indicus*), cogongrass (*Imperata cylindrica*), bahiagrass (*Paspalum notatum*), dog fennel (*Eupatorium capillifolium*), paragrass (*Urochloa mutica*), caesarweed, loosestrife (*Lythrum alatum* var. *lanceolatum*), common ragweed (*Ambrosia artemisiifolia*), St. Augustine grass (*Stenotaphrum secundatum*), spermacoce (*Spermacoce verticillata*), guineagrass (*Urochloa maxima*), muscadine grape, sida (*Sida* sp.), beggarticks (*Bidens alba*), torpedograss (*Panicum repens*), natalgrass (*Melinis repens*), Jack-in-the-bush, hairy indigo (*Indigofera hirsuta*), elephant's foot (*Elephantopus elatus*), and golden aster (*Pityopsis graminifolia*).

Road (FLUCFCS Code 814)
This FLUCFCS code consists of a small, paved road.

3.0 SURVEY METHODOLOGY

3.1 Literature and Database Review

Existing literature and agency databases were reviewed to determine the potential for listed species to occur on the Project site. The literature search involved an examination of

available information on protected species in the Project's geographical region. The literature sources reviewed included: the FWCC's Florida's Endangered and Threatened Species (2022); Florida Atlas of Breeding Sites for Herons and Their Allies (Runde *et al*. 1991); USFWS Habitat Management Guidelines for the Bald Eagle in the Southeast Region (1987); the Landscape Conservation Strategy Map (Kautz *et al*. 2006); and FWCC and/or USFWS databases for telemetry locations of bald eagle (*Haliaeetus leucocephalus*), Florida scrub jay (*Aphelocoma coerulescens*), crested caracara (*Caracara cheriway*), and wading bird rookeries in St. Lucie County.

The wildlife agencies' database information is updated periodically and is current through different dates, depending on the species. The FWCC information reviewed for this report is current through the noted dates for the following species: Florida scrub jay – August 2022 (acquired), crested caracara – August 2022 (acquired), and wading bird locations – 1999. Bald eagle nest locations were acquired from the Audubon EagleWatch and are current to the end of the 2022 nesting season. Appendix C displays the documented species locations in relation to the Project.

3.2 Field Survey

A field survey for listed wildlife and plant species was conducted by PAI for the Project on July 5, 2023.

The survey was conducted for wildlife species listed by the FWCC and the USFWS as endangered, threatened, or species of special concern; and for plant species listed by the FDACS and the USFWS as endangered, threatened, or commercially exploited.

The field survey was conducted by qualified ecologists walking parallel belt transects and meandering pedestrian transects through suitable habitats to ensure that sufficient visual coverage of ground and flora was obtained. Transect spacing varied from 75 to 100 feet, depending on vegetative cover and visibility. Approximate survey transects are shown on Appendix D. At regular intervals, the ecologists stopped, remained quiet, and listened for wildlife vocalizations. The survey was conducted during daylight hours with the aid of 8x or 10x power binoculars. Table 2 provides the weather conditions during the survey.

Table 2. Weather Conditions During Survey

Survey Date	Weather Conditions
July 5, 2023	Temperatures in the high 80s to low 90s, clear skies, and 5 to 10 mph east winds.

4.0 SURVEY RESULTS

4.1 Literature and Database Review

The results of the literature and database review found no documented occurrences of listed wildlife or plant species occurring on the Project (Appendix C).

According to the Audubon EagleWatch database, the closest bald eagle nest (SL-006) is located approximately 0.39 mile southwest of the Project (Appendix C). This distance is beyond the USFWS-recommended 660-foot buffer protection zone for active and alternate bald eagle nests. The bald eagle was delisted under the federal Endangered Species Act in 2007, but it is still protected under the Bald and Golden Eagle Protection Act.

The USFWS database for crested caracara locations shows the closest documented crested caracara occurrence is approximately 2.46 miles west of the Project (Appendix C). The Project does not contain suitable habitat that could be utilized by crested caracara. The crested caracara is listed as threatened by the USFWS and the FWCC.

The USFWS database for Florida scrub jay locations shows the closest documented Florida scrub jay occurrence is approximately 4.26 miles east of the Project (Appendix C). The Project site does not contain suitable habitat such as scrub oak (*Quercus inopina*) or Chapman oak (*Q. chapmanii*) that may be used by scrub jays. The Florida scrub jay is a state- and federally threatened species.

The Florida Atlas of Breeding Sites for Herons and Their Allies (Runde *et al*. 1991) and the FWCC database were referenced for the locations of breeding colonies for both listed and non-listed wading birds, including, but not limited to, snowy egret (*Egretta thula*), roseate spoonbill (*Platalea ajaja*), little blue heron (*Egretta caerulea*), and tri-colored heron (*Egretta tricolor*). According to these sources, the nearest wading bird colony is located approximately 5.44 miles northeast of the Project (Appendix C).

4.2 Field Survey

Three gopher tortoise (*Gopherus polyphemus*) burrows were documented on the Project site during the field survey (Appendix E). The gopher tortoise burrows occurred in areas identified as Disturbed Land (FLUCFCS Code 740). The gopher tortoise is listed as threatened by the FWCC. No listed plant species were documented on the Project site during the field survey.

5.0 SUMMARY

The literature review for the Project found no documented listed species on the Project site. The field survey documented a total of three gopher tortoise burrows on-site. The gopher tortoise is listed as threatened by the FWCC. No listed plant species were documented on the Project site during the survey.

6.0 REFERENCES

Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System. Procedure No. 550-010-001-a. Third Edition.

Florida Fish and Wildlife Conservation Commission. 2022. Florida's Endangered and Threatened Species (Updated December 2022). Florida Fish and Wildlife Conservation Commission. Tallahassee, Florida

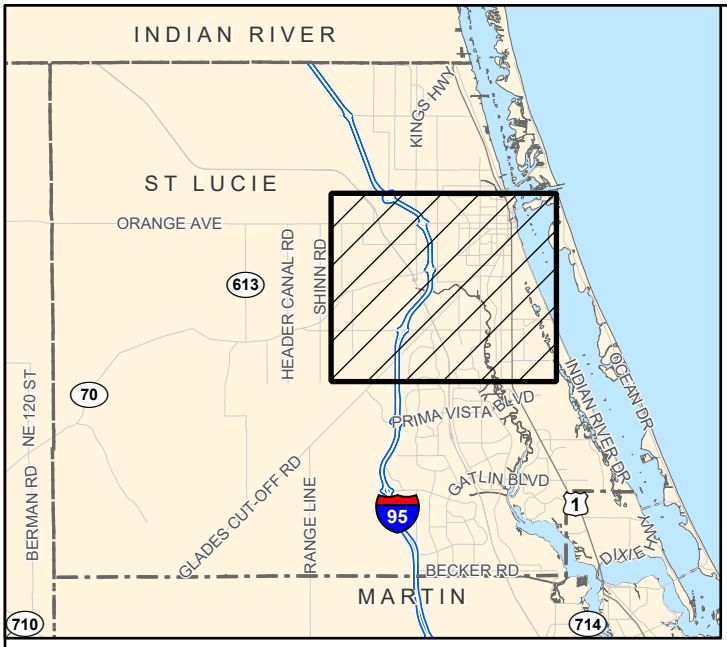
Kautz, R., R. Kawula, T. Hoctor, J. Comiskey, D. Jansen, D. Jennings, J. Kasbohm, F. Mazzotti, R. McBride, L. Richardson, K. Root. 2006. How much is enough? Landscape-Scale Conservation for the Florida Panther. Biological Conservation, Volume 130, Issue 1, Pages 118-133.

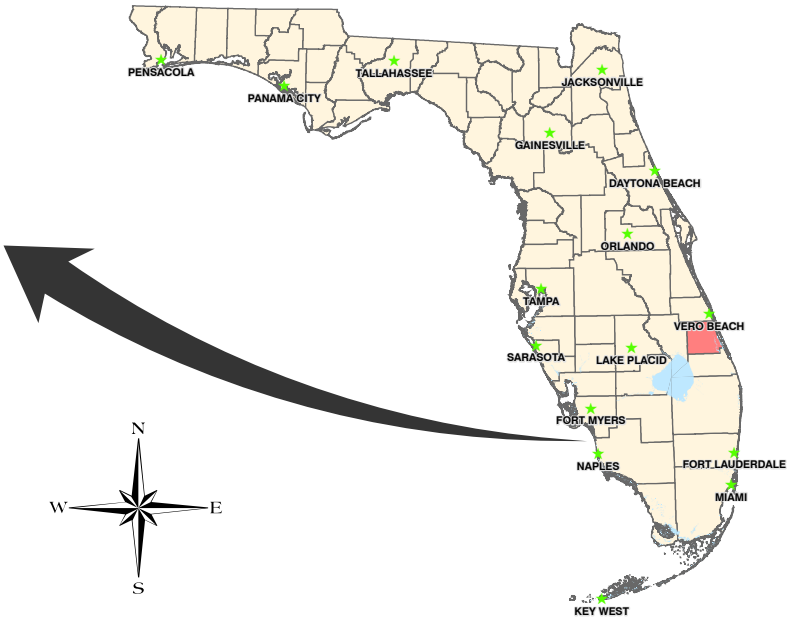
Runde, D.E., J.A. Gore, J.A. Hovis, M.S. Robson, and P.D. Southall. 1991. Florida Atlas of Breeding Sites for Herons and Their Allies, Update 1986 - 1989. Nongame Wildlife Program Technical Report No. 10. Florida Game and Fresh Water Fish Commission, Tallahassee, Florida.

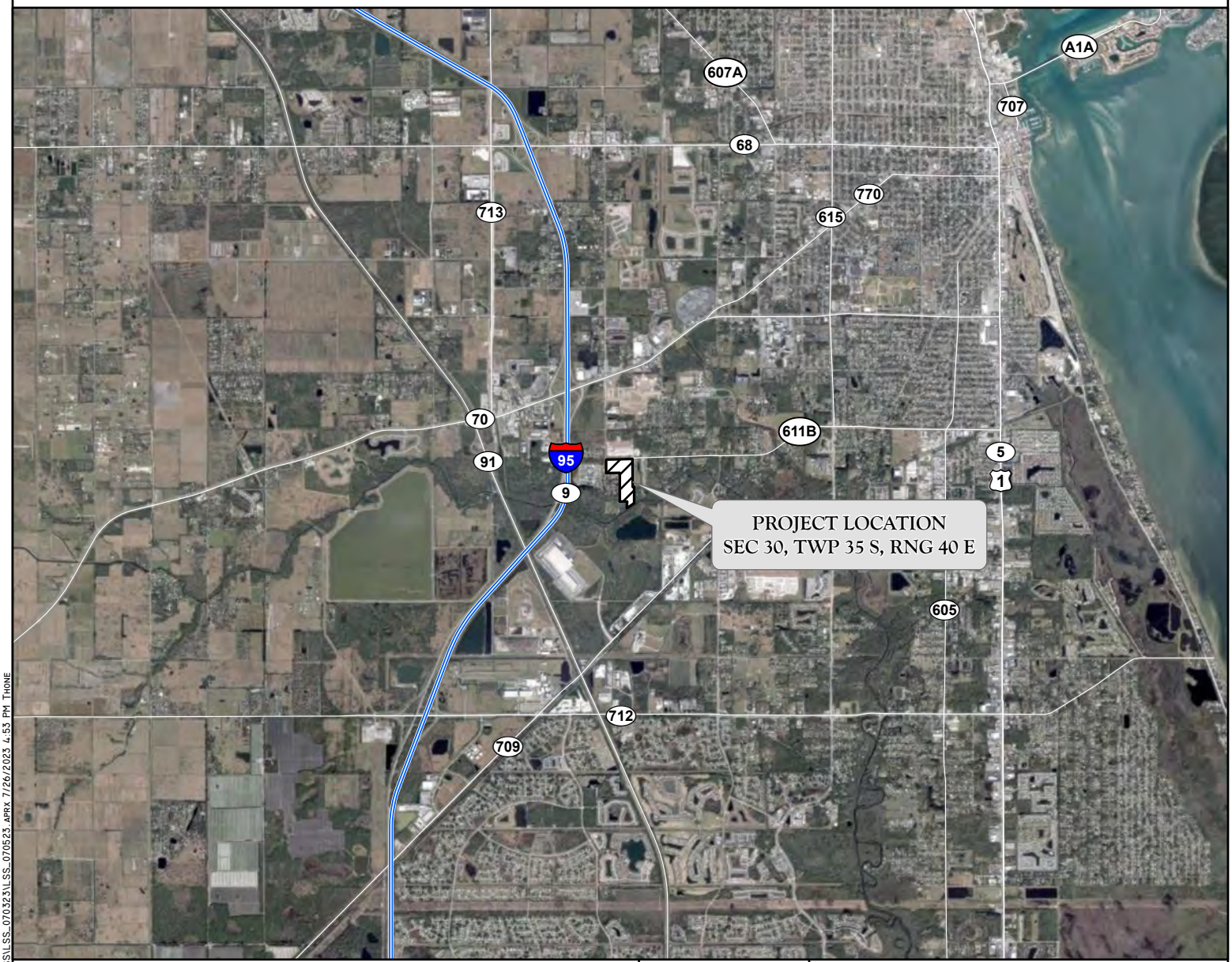
U.S. Fish and Wildlife Service. 1987. Habitat Management Guidelines for the Bald Eagle in the Southeast Region.

APPENDIX A

PROJECT LOCATION MAP







J:\2023\23TE64047\LSSVLLSS_070323\LSS_070523 APRX 7/26/2023 4:53 PM THONE

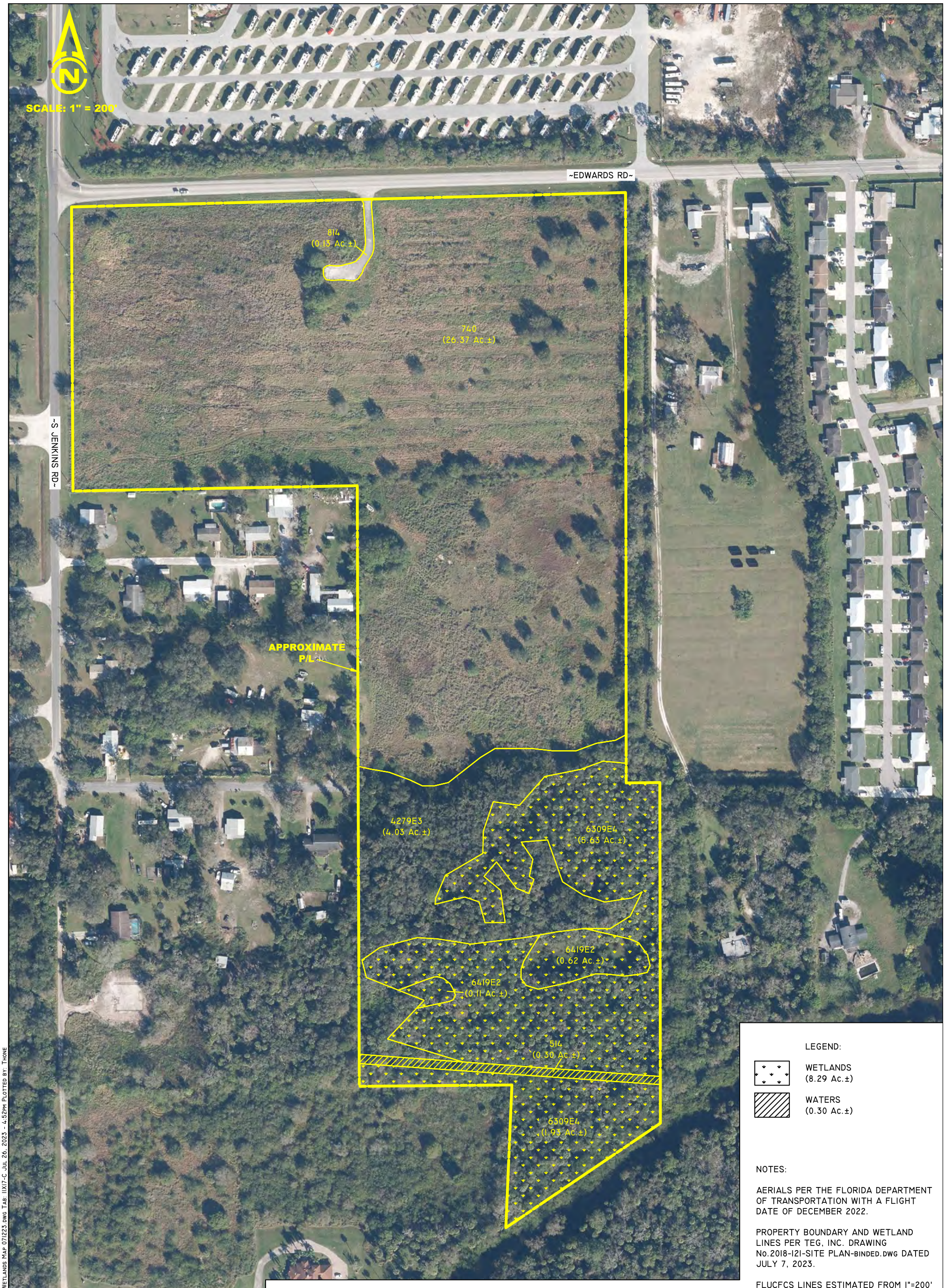
APPENDIX A. PROJECT LOCATION MAP
TREASURE COAST EAST

DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
H.S.	7/12/23
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

APPENDIX B

AERIAL WITH FLUCFCS AND WETLANDS MAP



FLUCFCS CODES	DESCRIPTIONS	ACREAGE	% OF TOTAL
4279 E3	LIVE OAK, DISTURBED (50-75% EXOTICS)	4.03 Ac.±	10.3%
514	DITCH	0.30 Ac.±	0.8%
6309 E4	MIXED WETLAND FOREST, DISTURBED (76-100% EXOTICS)	7.56 Ac.±	19.3%
6419 E2	FRESHWATER MARSH, DISTURBED (25-49% EXOTICS)	0.73 Ac.±	1.9%
740	DISTURBED LAND	26.37 Ac.±	67.4%
814	ROAD	0.13 Ac.±	0.3%
	TOTAL	**39.12 Ac.±**	**100.0%**

LEGEND:

WETLANDS (8.29 Ac.±)

WATERS (0.30 Ac.±)

NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY AND WETLAND LINES PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999).

UPLAND/WETLAND LIMITS HAVE NOT BEEN REVIEWED BY ANY REGULATORY AGENCY AND ARE SUBJECT TO CHANGE.

J:\2023\23TEG4047\LSS\APPENDIX B AERIAL WITH FLUCFCS AND WETLANDS MAP 071223.DWG TAB: 11X17-C JUL 26, 2023 - 4:52PM PLOTTED BY: THONE

DRAWN BY	DATE
H.H.	07/10/23
REVIEWED BY	DATE
K.C.	07/10/23
REVISED	DATE

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

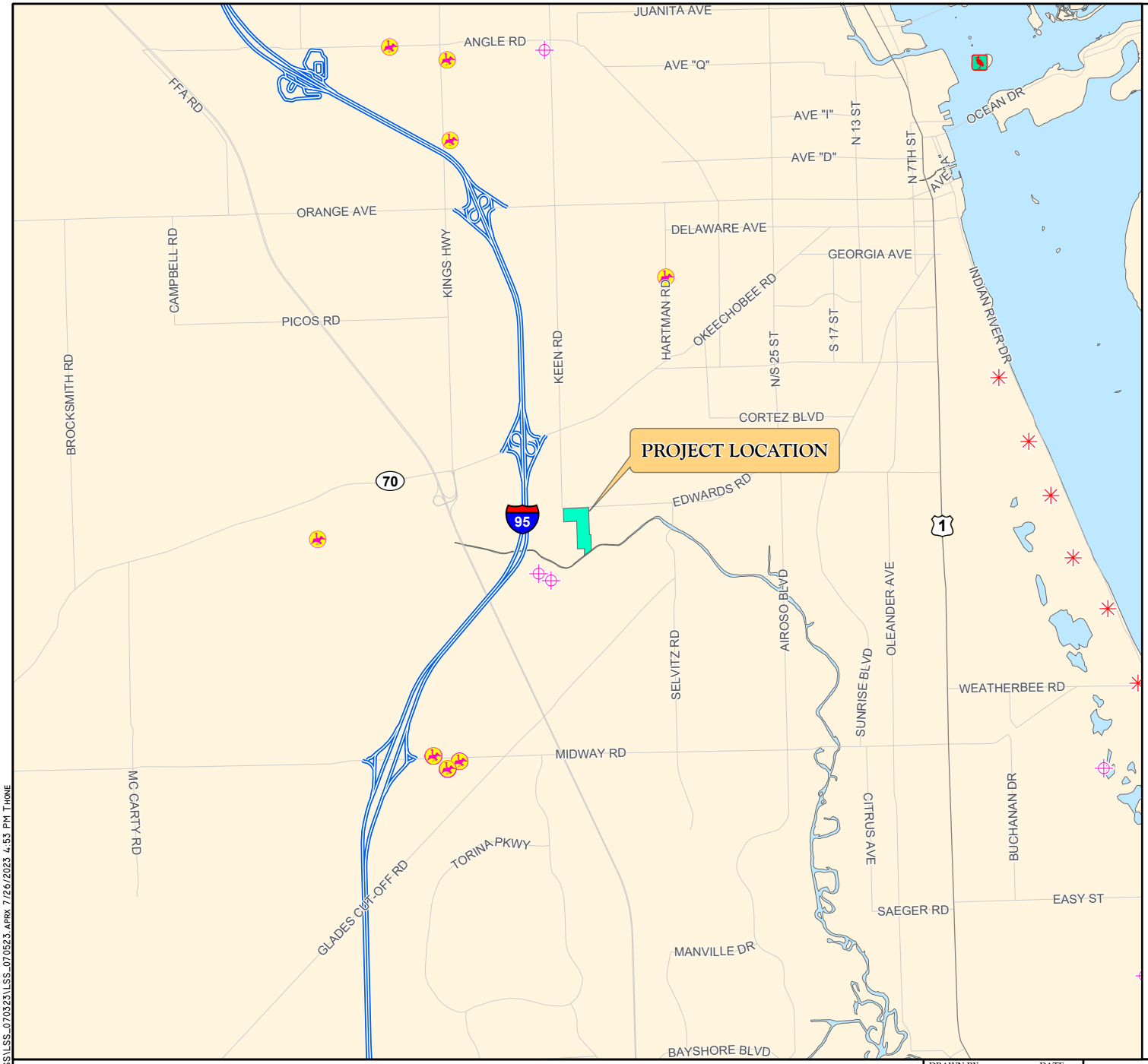
TREASURE COAST EAST
AERIAL WITH FLUCFCS AND WETLANDS MAP

DRAWING No. 23TEG4047

SHEET No. APPENDIX B

APPENDIX C

DOCUMENTED OCCURRENCES OF LISTED SPECIES



LEGEND

- TREASURE COAST EAST
- BALD EAGLE NEST LOCATION
- CRESTED CARACARA LOCATION
- SCRUB JAY LOCATION
- WADING BIRD LOCATION

N
W E
S

0 1 2
Miles

NOTES:

EAGLE NEST LOCATIONS WERE ACQUIRED FROM THE AUDUBON EAGLEWATCH ON FEBRUARY 2023.

CRESTED CARACARA LOCATIONS WERE ACQUIRED FROM THE USFWS ON AUGUST 2022 AND ARE CURRENT TO 2022.

SCRUB JAY LOCATIONS WERE ACQUIRED FROM THE USFWS ON AUGUST 2022.

WADING BIRD ROOKERIES WERE ACQUIRED FROM THE FWCC ON AUGUST 2022 AND ARE CURRENT TO 1999.

APPENDIX C. DOCUMENTED OCCURRENCES OF LISTED SPECIES
TREASURE COAST EAST

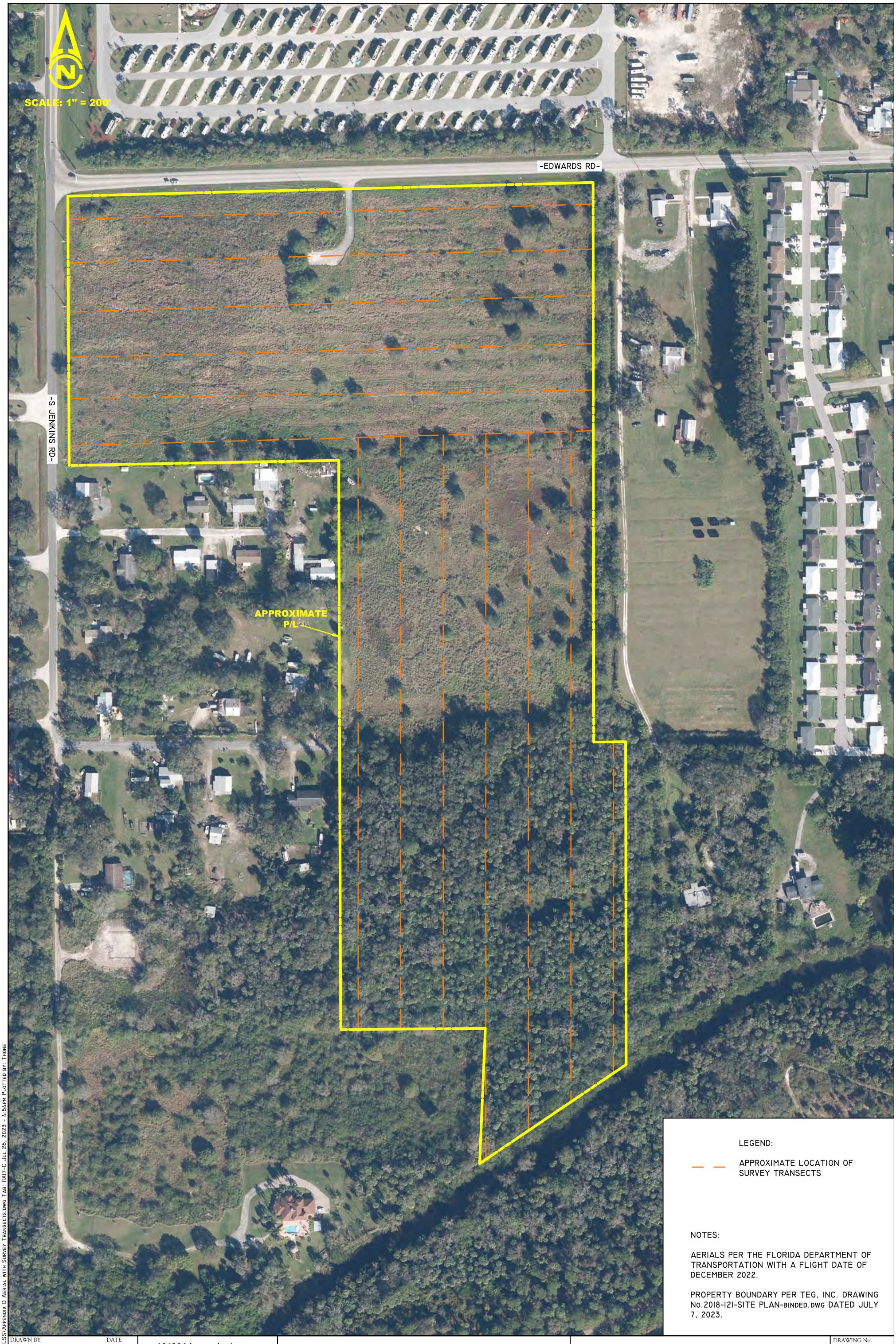
DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
H.S.	7/12/23
REVISED	DATE

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

J:\2023\23TE64047\LSS\LSS_070523\LSS_070523.APRX 7/26/2023 4:53 PM THONE

APPENDIX D

AERIAL WITH SURVEY TRANSECTS



LEGEND:

— — APPROXIMATE LOCATION OF SURVEY TRANSECTS

NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
K.C.	7/12/23
REVISED	DATE

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

TREASURE COAST EAST
AERIAL WITH SURVEY TRANSECTS

DRAWING No. 23TEG4047

SHEET No. APPENDIX D

J:\2023\23TEG4047\LSS\APPENDIX D AERIAL WITH SURVEY TRANSECTS.DWG TAB: 11X17-C JUL 26, 2023 - 4:54PM PLOTTED BY: THONE

APPENDIX E

AERIAL WITH LISTED SPECIES LOCATIONS

N

SCALE: 1" = 200'

~EDWARDS RD~

~S JENKINS RD~

GT-1

GT-3

GT-2

APPROXIMATE P/L

LEGEND:

GT-1 APPROXIMATE LOCATION OF GOPHER TORTOISE BURROW (TYP.)

NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

J:\2023\23TEG4047\LSS\APPENDIX E AERIAL WITH LISTED SPECIES LOCATIONS.DWG TAB: 11X17-C JUL 26, 2023 - 4:54PM PLOTTED BY: THONE

DRAWN BY	DATE
P.F.	7/12/23
REVIEWED BY	DATE
K.C.	7/12/23
REVISED	DATE

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

Consulting Ecologists PASSARELLA & ASSOCIATES INC

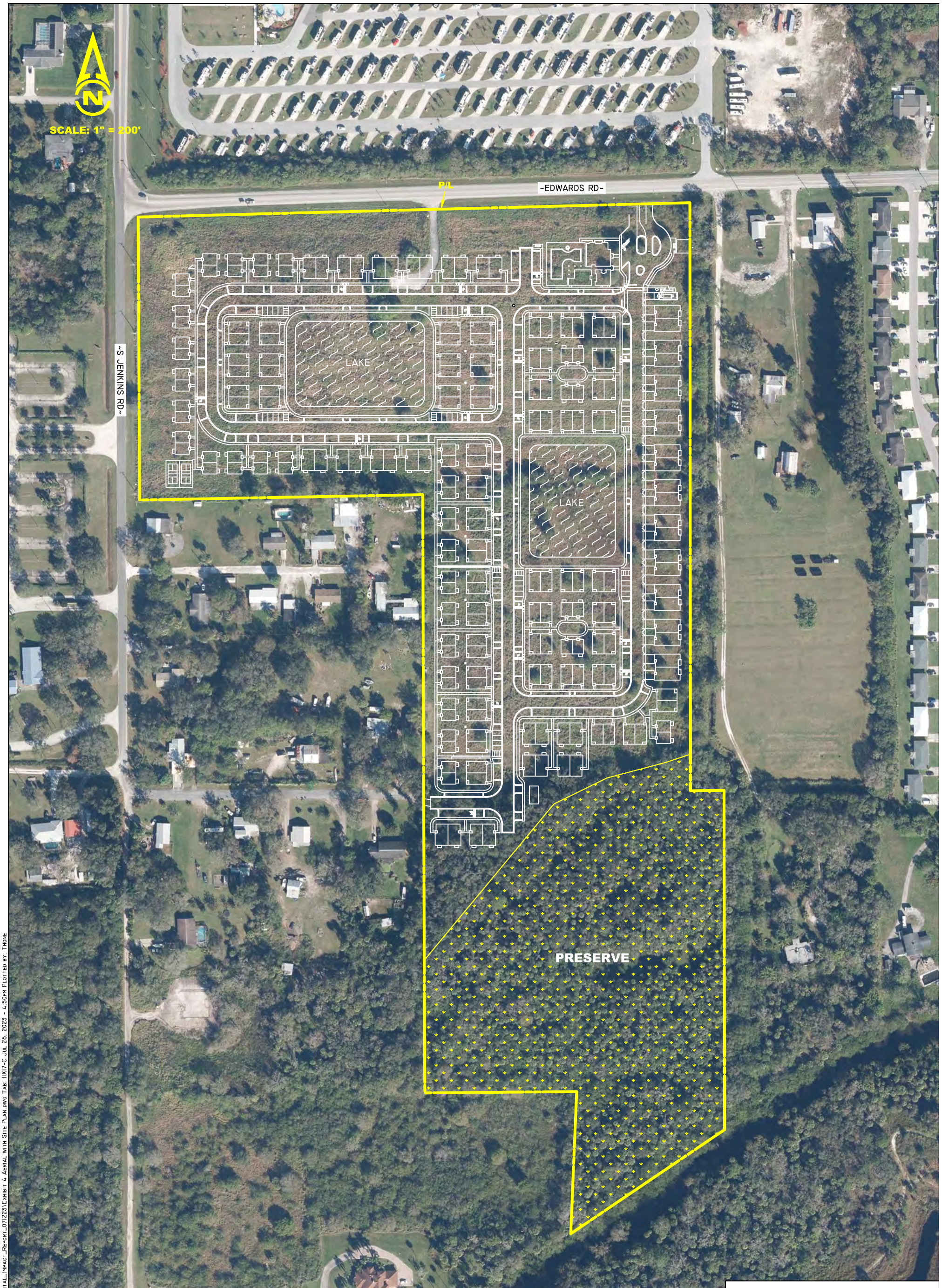
TREASURE COAST EAST
AERIAL WITH LISTED SPECIES LOCATIONS

DRAWING No. 23TEG4047

SHEET No. APPENDIX E

EXHIBIT 4

AERIAL WITH SITE PLAN



NOTES:

AERIALS PER THE FLORIDA DEPARTMENT OF TRANSPORTATION WITH A FLIGHT DATE OF DECEMBER 2022.

PROPERTY BOUNDARY PER TEG, INC. DRAWING No.2018-121-SITE PLAN-BINDED.DWG DATED JULY 7, 2023.

DRAWN BY	T.S.
DATE	7/14/23
REVIEWED BY	K.C.
DATE	7/14/23
REVISED	
DATE	

13620 Metropolis Avenue
Suite 200
Ft. Myers, FL 33912
Phone (239) 274-0067
Fax (239) 274-0069

PASSARELLA & ASSOCIATES INC
Consulting Ecologists

TREASURE COAST EAST
AERIAL WITH SITE PLAN

DRAWING No. 23TEG4047

SHEET No. EXHIBIT 4

J:\2023\23TEG4047\Environmental_Impact_Report\Environmental_Impact_Report_071223\Exhibit 4 Aerial with Site Plan.dwg Tab: 11X17-C Jul 26, 2023 - 4:50pm Plotted by: Thone

EXHIBIT 5

SFWMD ERP No. 56-02352-P

South Florida Water Management District
Individual Environmental Resource Permit No. 56-02352-P
Date Issued: December 11, 2015
Modified On: December 16, 2019

Permittee: Mariner Cove Builders LLC
1400 E Oakland Park Blvd Suite 103
Ft Lauderdale, FL 33334

Project: Mariner Cove

Application No. 191202-2401

Location: St Lucie County, See Exhibit 1

Your application for an Individual Environmental Resource Permit is approved. This action is taken based on Chapter 373, Part IV, of Florida Statutes (F.S.) and the rules in Chapter 62-330, Florida Administrative Code (F.A.C.). Unless otherwise stated, this permit constitutes certification of compliance with state water quality standards under section 401 of the Clean Water Act, 33 U.S.C. 1341, and a finding of consistency with the Florida Coastal Management Program. Please read this entire agency action thoroughly and understand its contents.

This permit is subject to:

- Not receiving a filed request for a Chapter 120, F.S., administrative hearing.
- The attached General Conditions for Environmental Resource Permits.
- The attached Special Conditions.
- All referenced Exhibits.

All documents are available online through the District's ePermitting site at www.sfwmd.gov/ePermitting.

If you object to these conditions, please refer to the attached "Notice of Rights" which addresses the procedures to be followed if you desire a public hearing or other review of the proposed agency action. Please contact this office if you have any questions concerning this matter. If we do not hear from you in accordance with the "Notice of Rights", we will assume that you concur with the District's action.

The District does not publish notices of action. If you wish to limit the time within which a person may request an administrative hearing regarding this action, you are encouraged to publish, at your own expense, a notice of agency action in the legal advertisement section of a newspaper of general circulation in the county or counties where the activity will occur. Legal requirements and instructions for publishing a notice of agency action, as well as a noticing format that can be used, are available upon request. If you publish a notice of agency action, please send a copy of the affidavit of publication provided by the newspaper to the District's West Palm Beach office for retention in this file.

If you have any questions regarding your permit or need any other information, please call us at 1-800-432-2045 or email ERP@sfwmd.gov.

Gary R. Priest, P.E.
Section Leader, Environmental Resource Bureau

South Florida Water Management District
Individual Environmental Resource Permit No. 56-02352-P

Date Issued: December 11, 2015 **Expiration Date:** December 13, 2024

Modified On: December 16, 2019

Project Name: Mariner Cove

Permittee: Mariner Cove Builders LLC
1400 E Oakland Park Blvd Suite 103
Ft Lauderdale, FL 33334

Operating Entity: Mariner Cove Builders LLC
1400 E Oakland Park Blvd Suite 103
Ft Lauderdale, FL 33334

Location: St Lucie County

Permit Acres: 39.10 acres

Project Land Use: Residential

Special Drainage District: North St Lucie River Water Control District

Water Body Classification: CLASS III

FDEP Water Body ID: 3194A

Conservation Easement to District: No

Sovereign Submerged Lands: No

Project Summary
This Environmental Resource Permit authorizes Construction and Operation of a stormwater management (SWM) system serving 39.10 acres of residential development known as Mariner Cove.

The project consists of multi-family residential buildings with associated parking and roadways. The permitted SWM system consists of roadway catch basins and conveyance directing stormwater runoff to three inconnect lakes that provide water quality treatment and attenuation. The SWM system discharges to a St. Lucie County drainage easement along the eastern property boundary. Please refer to Exhibit 2.0.1 for additional details.

Issuance of this permit constitutes certification of compliance with state water quality standards in accordance with Rule 62-330.062, F.A.C..

Site Description
The site is located in St. Lucie County at the intersection of Jenkins and Edwards Roads. Please refer to Exhibit 1.0 Location Map.

There are no SWM facilities constructed within the project site. Please refer to the Permit Modification History section. The project site was previously used as a citrus grove and contains furrows to promote drainage. The southern portion of the project site is heavily wooded.

For information on wetland and surface water impacts, please see the Wetlands and Other Surface Water section of this permit.

Ownership, Operation and Maintenance
Perpetual operation and maintenance of the stormwater management system will be the responsibility of Mariner Cove Builders, LLC. Upon conveyance or division of ownership or control of the property or the system, the permittee must notify the Agency in writing within 30 days, and the new owner must request transfer of the permit.

Current Authorization (Application No. 191202-2401)
The purpose of this request is to authorize a five (5) year extension of Permit No. 56-02352-P, Application No. 150313-19, pursuant to Rule 40E-4.321(3) F.A.C., for 39.10 acres of residential development known as Mariner Cove. The Project Work Schedule is also being modified.

Permit Modification History
Please see Exhibit No. 5.0 for a list of authorizations that constitute this permit.

Engineering Evaluation:

Land Use
Please refer to Exhibit 2.1.

Water Quality
The project provides the required water quality treatment volume based on 2.5 inches times the percent impervious over the controlled basin area.

The project includes implementation of a Stormwater Pollution Prevention Plan (Exhibit 2.0.1) as additional reasonable assurance of compliance with water quality criteria during construction and operation.

Discharge
The project is located within the North St. Lucie River Water Control District and has an allowable discharge of two (2) inches per day over the controlled basin area. As found in Water Quantity Data Table, the project discharge is within the allowable limit for the area.

Road Design
As found in Water Quantity Data Table and the attached Exhibit 2.0.1, minimum road center line elevations have been set at or above the calculated design storm flood elevation.

Perimeter Berm
As found in Water Quantity Data Table and the attached Exhibit 2.0.1, minimum perimeter berm elevations have been set at or above the calculated design storm flood elevation.

Finished Floors
As found in Water Quantity Data Table and the attached Exhibit 2.0.1, minimum finished floor elevations have been set at or above the calculated design storm flood elevation.

Flood Plain/Compensating Storage
The permittee's engineer previously submitted calculations demonstrating that the project will meet the compensating storage requirements for the Ten Mile Creek floodplain. Refer to the ePermitting file for additional information.

Certification, Operation, and Maintenance
Pursuant to Chapter 62-330.310, F.A.C., Individual Permits will not be converted from the construction phase to the operation phase until construction completion certification of the project is submitted to and accepted by the District. This includes compliance with all permit conditions, except for any long term maintenance and monitoring requirements. It is suggested that the

permittee retain the services of an appropriate professional registered in the State of Florida for periodic observation of construction of the project.

For projects permitted with an operating entity that is different from the permittee, it should be noted that until the construction completion certification is accepted by the District and the permit is transferred to an acceptable operating entity pursuant to Sections 12.1-12.3 of the Applicant's Handbook Volume I and Section 62-330.310, F.A.C., the permittee is liable for operation and maintenance in compliance with the terms and conditions of this permit.

In accordance with Section 373.416(2), F.S., unless revoked or abandoned, all SWM systems and works permitted under Part IV of Chapter 373, F.S., must be operated and maintained in perpetuity.

The efficiency of SWM systems, dams, impoundments, and most other project components will decrease over time without periodic maintenance. The operation and maintenance entity must perform periodic inspections to identify if there are any deficiencies in structural integrity, degradation due to insufficient maintenance, or improper operation of projects that may endanger public health, safety, or welfare, or the water resources. If deficiencies are found, the operation and maintenance entity is responsible for correcting the deficiencies in a timely manner to prevent compromises to flood protection and water quality. See Section 12.4 of the Applicant's Handbook Volume I for Minimum Operation and Maintenance Standards.

Engineering Evaluation Tables:

Land Use

Basin	Land Type	Area (ac)	% of Total Basin
Site	Building Coverage	4.37	16.05
	Impervious	6.03	22.15
	Lake	2.64	9.70
	Pervious	14.18	52.09
	Total:	27.22	100%

Water Quality

Basin	Treatment Type	Treatment System	Volume Required (ac-ft)	Volume Provided (ac-ft)	Area (ac)	Overflow Elevation (ft NGVD29)
Site	Treatment	WET DETENTION	2.26	2.26	2.64	15.60

Water Quantity

Basin	Elevation Type	Storm Event (Yr/Day)	Precipitation Depth (in)	Peak Stage (ft NGVD29)	Min. EL (ft NGVD29)	Peak Discharge Rate (cfs)	Allowable Discharge Rate (cfs)
Site	Finished Floor	100Y3D	11.00	16.83	17.00	N/A	N/A
	Perimeter Berm/ Discharge	10YR3D	8.50	15.30	16.08	3.70	3.70
	Road Crown	10YR1D	6.00	14.58	16.08	N/A	N/A

Bleeder

Basin	Control EL (ft NGVD29)	Structure #	Structure Type	Count	Type	Dia.(in)	Invert EL (ft NGVD29)	Receiving Body
Site	12.00	CS#1	Discharge	1	Circular Orifice	3.75	12.00	SLC Road Ditch

Weir

Basin	Control EL (ft NGVD29)	Structure #	Structure Type	Count	Type	Width (in)	Height (in)	Crest EL (ft NGVD29)	Receiving Body
Site	12.00	CS#1	Discharge	1	V-Notch	54.00	14.04	14.43	SLC Road Ditch

Environmental Evaluation:

Wetlands and Other Surface Waters
The site contains 8.20 acres of wetlands adjacent to Ten Mile Creek, of which, 2.25 acres consist of freshwater marsh and 5.95 acres consist of a riverine swamp. The proposed project is to preserve the existing wetlands and 2.5 acres of uplands adjacent to the preserved wetlands to provide a buffer. The buffer is an average 25', minimum 15' wide Therefore, no impacts are proposed and no mitigation is required.

The proposed project will preserve the 10.7 acres of wetlands and associated buffer through a conservation easement (refer to Exhibit No. 3.1) dedicated to the District and a maintenance & monitoring plan (refer to the Wetland Monitoring and Maintenance Plan - Exhibit No. 3.0).

Monitoring/Maintenance
The proposed preserve plan consists of the preservation of 8.2 acres of wetlands and 2.5 acres of upland buffer area. The wetland preserve area and associated buffer area will be monitored and maintained as indicated on Exhibit No. 3.0 (Wetland Monitoring and Maintenance Plan) & Special Condition Nos. 19 & 21. These preserved areas will be subjected to regular maintenance activities tailored for the control of exotic and nuisance plant species and a 5 year monitoring program to ensure a trend toward success. The 2.5-acre upland buffer zone for the preserved wetland areas onsite were designed as set forth in the Basis of Review chapter 4.2.7 to address secondary impacts to the on-site wetland conservation areas.

Legal Issues
The applicant has submitted draft Articles of Incorporation and Declaration of Condominium for the Mariner Cove Condominium Association, Inc., which will be the operating entity of the surface water management system and will be responsible for the monitoring and maintenance of the on-site wetland and upland buffer preserve areas. These documents are included in the permit file.

As an assurance that the wetlands will be preserved in perpetuity, the applicant has provided a copy of the Monitoring and Management Plan for the proposed natural areas, included as Exhibit No. 3.0. The preserve and associated buffer areas shall be maintained in their natural condition as indicated by Special Condition No. 16 of this permit. To accomplish this, the applicant proposes to place the onsite wetland and upland buffer preserve areas under conservation easement dedication to the District. The draft language for conservation easement over the wetland and upland preserve areas was provided by the applicant and is included as Exhibit No. 3.1. As indicated by Special Condition Nos. 24 & 26 the applicant is required to record a conservation easement in substantial conformance with Exhibit Nos. 3.1 & 3.3 within sixty (60) days after construction permit issuance and prior to the commencement of construction activities.

Sovereignty Submerged Lands
On October 27, 2005, The Florida Department of Environmental Protection, Division of State Lands, Bureau of Survey and Mapping, Title and Land Records Section commented that the State holds title to the lands lying below the Ordinary High Water Line (OHWL) at this site (refer to Exhibit No. 3.2). The proposed work is not located within and is not anticipated to adversely affect sovereign submerged lands. Any future activities proposed within State owned lands will require a modification of this permit and an authorization for the use of Sovereign Submerged Lands in accordance with the criteria in effect at the time of permit modification as required by Special Condition No. 27.

Environmental Evaluation Tables:
Summary

Wetlands and Other Surface Waters:	8.2	acres
Direct Impacts:	0	acres
Secondary impacts:	0	acres
Net UMAM Functional Loss/ Gain:	0	units
Total Onsite Mitigation Area:	8.2	acres
Total Offsite Mitigation Area:	0	acres
Mitigation Provided in Permit No.:		

Mariner Cove

UMAM Mitigation and Preservation

ID	Acres	Action	Existing Community Description	Proposed Community Description	Current or Without Preserve Score	With Project Score	Time Lag Years.	Risk	P. A. F.	UMAM Gain
01	2.25	Preservation	Freshwater Marshes	Freshwater Marshes						0.000
02	5.95	Preservation	Stream And Lake Swamps (Bottomland)	Stream and Lake Swamps						0.000
Total:	**8.2**									**0.000**

Related Concerns:

Water Use Permit Status
Water Use Permit No. 56-02416-W was issued for the project but has now expired. The applicant will be required to submit a water use application for landscape irrigation.

The expiration date for Water Use Permit No. 56-03454-W for dewatering was extended until December 11, 2021.

This permit does not release the permittee from obtaining all necessary Water Use authorization(s) prior to the commencement of activities which will require such authorization, including construction dewatering and irrigation.

Historical/Archeological Resources
On October 14, 2005, the District received a letter from the Florida Department of State, Division of Historical Resources (DHR) requesting the applicant to perform a systematic, professional archaeological and historical survey. The applicant has performed the requested archaeological and historical survey for the property (prepared by Archaeological Consultants, Inc., dated December 2005). On March 31, 2006, the DHR issued a follow-up letter that stated that no significant archaeological or historical resources are recorded within the project area and due to the location and/or nature of the project it is unlikely that any such site will be affected. Reference the permit file for DHR letters and archaeological and historical survey. This permit does not release the permittee from compliance with any other agencies' requirements in the event that historical and/or archaeological resources are found on the site (refer to Special Condition No. 25).

Water and Wastewater Service
Fort Pierce Utilities Authority.

General Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

1. All activities shall be implemented following the plans, specifications and performance criteria approved by this permit. Any deviations must be authorized in a permit modification in accordance with Rule 62-330.315, Florida Administrative Code (F.A.C.). Any deviations that are not so authorized shall subject the permittee to enforcement action and revocation of the permit under Chapter 373, F.S.

2. A complete copy of this permit shall be kept at the work site of the permitted activity during the construction phase, and shall be available for review at the work site upon request by the Agency staff. The permittee shall require the contractor to review the complete permit prior to beginning construction.

3. Activities shall be conducted in a manner that does not cause or contribute to violations of state water quality standards. Performance-based erosion and sediment control best management practices shall be installed immediately prior to, and be maintained during and after construction as needed, to prevent adverse impacts to the water resources and adjacent lands. Such practices shall be in accordance with the "State of Florida Erosion and Sediment Control Designer and Reviewer Manual" (Florida Department of Environmental Protection and Florida Department of Transportation June 2007), and the "Florida Stormwater Erosion and Sedimentation Control Inspector's Manual" (Florida Department of Environmental Protection, Nonpoint Source Management Section, Tallahassee, Florida, July 2008), unless a project-specific erosion and sediment control plan is approved or other water quality control measures are required as part of the permit.

4. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), "Construction Commencement Notice" indicating the expected start and completion dates. If available, an Agency website that fulfills this notification requirement may be used in lieu of the form.

5. Unless the permit is transferred under Rule 62-330.340, F.A.C., or transferred to an operating entity under Rule 62-330.310, F.A.C., the permittee is liable to comply with the plans, terms and conditions of the permit for the life of the project or activity.

6. Within 30 days after completing construction of the entire project, or any independent portion of the project, the permittee shall provide the following to the Agency, as applicable:
   a. For an individual, private single-family residential dwelling unit, duplex, triplex, or quadruplex- "Construction Completion and Inspection Certification for Activities Associated With a Private Single-Family Dwelling Unit"[Form 62-330.310(3)]; or
   b. For all other activities- "As-Built Certification and Request for Conversion to Operational Phase" [Form 62-330.310(1)].
   c. If available, an Agency website that fulfills this certification requirement may be used in lieu of the form.

7. If the final operation and maintenance entity is a third party:
   a. Prior to sales of any lot or unit served by the activity and within one year of permit issuance, or within 30 days of as- built certification, whichever comes first, the permittee shall submit, as applicable, a copy of the operation and maintenance documents (see sections 12.3 thru 12.3.3 of Applicant's Handbook Volume I) as filed with the Department of State, Division of Corporations and a copy of any easement, plat, or deed restriction needed to operate or maintain the project, as recorded with the Clerk of the Court in the County in which the activity is located.
   b. Within 30 days of submittal of the as- built certification, the permittee shall submit "Request for Transfer of Environmental Resource Permit to the Perpetual Operation Entity" [Form

62-330.310(2)] to transfer the permit to the operation and maintenance entity, along with the documentation requested in the form. If available, an Agency website that fulfills this transfer requirement may be used in lieu of the form.

8. The permittee shall notify the Agency in writing of changes required by any other regulatory agency that require changes to the permitted activity, and any required modification of this permit must be obtained prior to implementing the changes.

9. This permit does not:
   a. Convey to the permittee any property rights or privileges, or any other rights or privileges other than those specified herein or in Chapter 62-330, F.A.C.;
   b. Convey to the permittee or create in the permittee any interest in real property;
   c. Relieve the permittee from the need to obtain and comply with any other required federal, state, and local authorization, law, rule, or ordinance; or
   d. Authorize any entrance upon or work on property that is not owned, held in easement, or controlled by the permittee.

10. Prior to conducting any activities on state-owned submerged lands or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund, the permittee must receive all necessary approvals and authorizations under Chapters 253 and 258, F.S. Written authorization that requires formal execution by the Board of Trustees of the Internal Improvement Trust Fund shall not be considered received until it has been fully executed.

11. The permittee shall hold and save the Agency harmless from any and all damages, claims, or liabilities that may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment or use of any project authorized by the permit.

12. The permittee shall notify the Agency in writing:
    a. Immediately if any previously submitted information is discovered to be inaccurate; and
    b. Within 30 days of any conveyance or division of ownership or control of the property or the system, other than conveyance via a long-term lease, and the new owner shall request transfer of the permit in accordance with Rule 62-330.340, F.A.C. This does not apply to the sale of lots or units in residential or commercial subdivisions or condominiums where the stormwater management system has been completed and converted to the operation phase.

13. Upon reasonable notice to the permittee, Agency staff with proper identification shall have permission to enter, inspect, sample and test the project or activities to ensure conformity with the plans and specifications authorized in the permit.

14. If any prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, work involving subsurface disturbance in the immediate vicinity of such discoveries shall cease. The permittee or other designee shall contact the Florida Department of State, Division of Historical Resources, Compliance and Review Section, at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Such subsurface work shall not resume without verbal or written authorization from the Division of Historical Resources. If unmarked human remains are encountered, all work shall stop immediately and notification shall be provided in accordance with Section 872.05, F.S.

15. Any delineation of the extent of a wetland or other surface water submitted as part of the permit application, including plans or other supporting documentation, shall not be considered binding unless a specific condition of this permit or a formal determination under Rule

62-330.201, F.A.C., provides otherwise.

16. The permittee shall provide routine maintenance of all components of the stormwater management system to remove trapped sediments and debris. Removed materials shall be disposed of in a landfill or other uplands in a manner that does not require a permit under Chapter 62-330, F.A.C., or cause violations of state water quality standards.

17. This permit is issued based on the applicant's submitted information that reasonably demonstrates that adverse water resource-related impacts will not be caused by the completed permit activity. If any adverse impacts result, the Agency will require the permittee to eliminate the cause, obtain any necessary permit modification, and take any necessary corrective actions to resolve the adverse impacts.

18. A Recorded Notice of Environmental Resource Permit may be recorded in the county public records in accordance with subsection 62-330.090(7), F.A.C. Such notice is not an encumbrance upon the property.

Special Conditions for Individual Environmental Resource Permits, 62-330.350, F.A.C.

1. The construction authorization for this permit shall expire on the date shown on page 2.

2. Operation of the surface water management system shall be the responsibility of Mariner Cove Builders, LLC. Within one year of permit issuance or concurrent with the engineering certification of construction completion, whichever comes first, the permittee shall submit a copy of the recorded deed restrictions (or declaration of condominium, if applicable), a copy of the filed articles of incorporation, and a copy of the certificate of incorporation for the association.

3. Discharge Facilities: through previously authorized facilities.

4. The permittee shall be responsible for the correction of any erosion, shoaling or water quality problems that result from the construction or operation of the surface water management system.

5. Measures shall be taken during construction to insure that sedimentation and/or turbidity violations do not occur in the receiving water.

6. The District reserves the right to require that additional water quality treatment methods be incorporated into the drainage system if such measures are shown to be necessary.

7. Lake side slopes shall be no steeper than 4:1 (horizontal:vertical) to a depth of two feet below the control elevation. Side slopes shall be nurtured or planted from 2 feet below to 1 foot above control elevation to insure vegetative growth, unless shown on the plans.

8. Facilities other than those stated herein shall not be constructed without an approved modification of this permit.

9. A stable, permanent and accessible elevation reference shall be established on or within one hundred (100) feet of all permitted discharge structures no later than the submission of the certification report. The location of the elevation reference must be noted on or with the certification report.

10. The permittee shall provide routine maintenance of all of the components of the surface water management system in order to remove all trapped sediments/debris. All materials shall be properly disposed of as required by law. Failure to properly maintain the system may result in adverse flooding conditions.

11. This permit is issued based on the applicant's submitted information which reasonably demonstrates that adverse water resource related impacts will not be caused by the completed permit activity. Should any adverse impacts caused by the completed surface water management system occur, the District will require the permittee to provide appropriate mitigation to the District or other impacted party. The District will require the permittee to

modify the surface water management system, if necessary, to eliminate the cause of the adverse impacts.

12. Minimum road crown elevation: Basin: Site - 16.08 feet NGVD.

13. Prior to the commencement of construction, the permittee shall conduct a pre-construction meeting with field representatives, contractors and District staff. The purpose of the meeting will be to discuss construction methods and sequencing for the type and location of turbidity and erosion controls to be implemented during construction, mobilization and staging of contractor equipment and wetland/buffer protection methods with the permittee and contractors. The permittee shall contact District Environmental Resource Compliance staff from the Okeechobee Service Center at (633)462-5260 to schedule the pre-construction meeting.

14. Permanent physical markers designating the preserve status of the wetland preservation areas and buffer zones shall be placed as shown on Exhibit No. 2.0. The markers shall be maintained in perpetuity.

15. The wetland conservation areas and upland buffer zones shown on Exhibit Nos. 2 & 3 may in no way be altered from their natural or permitted state. Activities prohibited within the conservation areas include, but are not limited to: construction or placing of buildings on or above the ground; dumping or placing soil or other substances such as trash; removal or destruction of trees, shrubs, or other vegetation - with the exception of exotic vegetation removal; excavation, dredging, or removal of soil materials; diking or fencing; and any other activities detrimental to drainage, flood control, water conservation, erosion control, or fish and wildlife habitat conservation or preservation.

16. Wetland preservation/mitigation areas, upland buffer zones and/or upland preservation areas shall be dedicated as conservation and common areas in the deed restrictions & conservation easements as well as on the plat if the project will be platted. Restrictions for use of the conservation/ common areas shall stipulate: The wetland preservation/mitigation areas, upland buffer zones, and/or upland preservation areas are hereby dedicated as conservation and common areas. The conservation/common areas shall be the perpetual responsibility of the Mariner's Cove HOA and may in no way be altered from their natural or permitted state as documented in Permit No. 56-02352-P with the exception of permitted restoration activities. Activities prohibited within the conservation areas include, but are not limited to: construction or placing soil or other substances such as trash; removal or destruction of trees, shrubs, or other vegetation - with the exception of exotic/nuisance vegetation removal; excavation, dredging, or removal of soil material; diking or fencing; and any other activities detrimental to drainage, flood control, water conservation, erosion control, or fish and wildlife habitat conservation or preservation. Copies of recorded documents shall be submitted to the District's Environmental Resource Compliance staff concurrently with engineering certification of construction completion.

17. The existing upland areas of the project site did not contain evidence of endangered species, threatened species and/or species of special concern. It shall be the permittee's responsibility to coordinate with the Florida Fish and Wildlife Conservation Commission and/or the U.S. Fish and Wildlife Service for appropriate guidance, recommendations and/or necessary permits to avoid impacts to listed species if located on the site during construction

18. District criteria requires an average 25' wide, minimum 15', buffer of undisturbed upland vegetation shall be maintained between the proposed development and existing wetlands (refer to Exhibit Nos. 2 & 3). Buffers shall be staked and roped and District environmental staff notified for inspection prior to clearing.

19. A monitoring program shall be implemented in accordance with Exhibit No. 3.0. The monitoring program shall extend for a period of 5 years with annual reports submitted to District staff. The monitoring of the preservation area shall demonstrate that the coverage of exotic and nuisance plant species shall not exceed 5% of the total cover.

20. A baseline wetland monitoring report for the wetland preservation area shall be submitted in accordance with Exhibit No. 3.0 and the work schedule attached herein.

21. A maintenance program shall be implemented in accordance with Exhibit No. 3.0 for the preserved wetland/restored upland areas on a regular basis to ensure the integrity and viability of those areas as permitted. Maintenance shall be conducted in perpetuity to ensure that the conservation areas are maintained free from Category 1 exotic vegetation (as defined by the Florida Exotic Pest Plant Council at the time of permit issuance) immediately following a maintenance activity. Maintenance in perpetuity shall also insure that conservation areas, including buffers, maintain the species and coverage of native, desirable vegetation specified in the permit. Coverage of exotic and nuisance plant species shall not exceed 5% of total cover between maintenance activities. In addition, the permittee shall manage the conservation areas such that exotic/nuisance plant species do not dominate any one section of those areas.

22. The District reserves the right to require remedial measures to be taken by the permittee if monitoring or other information demonstrates that adverse impacts to onsite or offsite wetlands, upland conservation areas or buffers, or other surface waters have occurred due to project related activities.

23. Silt screens, hay bales, turbidity screens/barriers or other such sediment control measures shall be utilized during construction. The selected sediment control measure shall be installed landward of the upland buffer zones around all protected wetlands and shall be properly "trenched" etc, in accordance with Exhibit No. 2.0. All areas shall be stabilized and vegetated immediately after construction to prevent erosion into the wetlands and upland buffer zones.

24. Activities associated with the implementation of the preservation monitoring and maintenance plan shall be completed in accordance with the work schedule attached herein. Any deviation from these time frames will require prior approval from the District's Environmental Resource Compliance staff. Such requests must be made in writing and shall include (1) reason for the change, (2) proposed start/finish and/or completion dates; and (3) progress report on the status of the project development or mitigation effort.

25. If prehistoric or historic artifacts, such as pottery or ceramics, stone tools or metal implements, dugout canoes, or any other physical remains that could be associated with Native American cultures, or early colonial or American settlement are encountered at any time within the project site area, the permitted project should cease all activities involving subsurface disturbance in the immediate vicinity of such discoveries. The permittee, or other designee,

should contact the Florida Department of State, Division of Historical Resources, Review and Compliance Section at (850) 245-6333 or (800) 847-7278, as well as the appropriate permitting agency office. Project activities should not resume without verbal and/or written authorization from the Division of Historical Resources. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately and the proper authorities notified in accordance with Section 872.05, Florida Statutes.

26. Prior to the commencement of construction and in accordance with the work schedule in Exhibit No. 3.3, the permittee shall submit two certified copies of the recorded conservation easement for the preserve area and associated buffers. The data shall be supplied in a digital ESRI Geodatabase (mdb), ESRI Shapefile (shp) or AutoCAD Drawing Interchange (dxf) file format using Florida State Plane coordinate system, East Zone (3601), Datum NAD83, HARN with the map units in feet. This data shall be submitted as a paper map depicting the Conservation Easement over the best available satellite or aerial imagery. This data shall also reside on a CD or floppy disk and be submitted to the District's Environmental Resource Compliance Division in the service area office where the application was submitted. The recorded easement shall be in substantial conformance with Exhibit No. 3.1. Any proposed modifications to the approved form must receive prior written consent from the District. The easement must be free of encumbrances or interests in the easement which the District determines are contrary to the intent of the easement. In the event it is later determined that there are encumbrances or interests in the easement which the District determines are contrary to the intent of the easement, the permittee shall be required to provide release or subordination of such encumbrances or interests.

27. The proposed project does not include any work within Sovereign Submerged Lands (SSL) refer to Exhibit No. 3.2. Any future activities that are proposed below OHWL of 10 Mile Creek will require a modification of this permit and an authorization for the use of SSL in accordance with the criteria in effect at the time of permit modification.

Project Work Schedule for Permit No. 56-02352-P

The following activities are requirements of this Permit and shall be completed in accordance with the Project Work Schedule below. Please refer to both General and Special Conditions for more information. Any deviation from these time frames will require prior approval from the District's Environmental Resources Bureau and may require a minor modification to this permit. Such requests must be made in writing and shall include: (1) reason for the change, (2) proposed start/finish and/or completion dates, and (3) progress report on the status of the project.

Condition No.	Date Added	Description	Due Date	Date Satisfied
GC 4	12/16/2019	Construction Commencement Notice	48 hours prior to Construction	
GC 6	12/16/2019	Submit Certification	30 Days After Construction Completion	
GC 7	12/16/2019	Submit Operation Entity Documentation	Within 30 days of Certification	
SC 13	12/16/2019	Pre-Construction Meeting	Prior to Construction	
SC 14	12/16/2019	Install Preserve Signs	30 Days After Construction Completion	
SC 19	12/16/2019	Submit Monitoring Reports 1	Annually for 5 years	
SC 19		Submit Monitoring Reports 2	1 year after previous submission	
SC 19		Submit Monitoring Reports 3	1 year after previous submission	
SC 19		Submit Monitoring Reports 4	1 year after previous submission	
SC 19		Submit Monitoring Reports 5	1 year after previous submission	
SC 20	12/16/2019	Submit Baseline Monitoring Report	01/10/2016	
SC 26	07/11/2006	Submit Recorded Conservation Easement	07/24/2006	07/11/2006

GC = General Condition

SC = Special Condition

Distribution List

Arnaud Roux, EW Consultants, Inc

City of Port St Lucie - Planning and Zoning Division

City of Port St Lucie - Public Works

US Army Corps of Engineers - Permit Section

St. Lucie County Engineer

St. Lucie County Planning and Development Services

Exhibits

The following exhibits to this permit are incorporated by reference. The exhibits can be viewed by clicking on the links below or by visiting the District's ePermitting website at http://my.sfwmd.gov/ePermitting and searching under this application number 191202-2401.

Exhibit 1.0 Location Map

Exhibit 2.0 SWM Plans

Exhibit 2.0.1 SWM Plans

Exhibit 2.1 Calculations

Exhibit 3.0 Monitoring and Maintenance Plan

Exhibit 3.1 Conservation Easement

Exhibit 3.2 Title Determination

Exhibit 5.0 Permit History

NOTICE OF RIGHTS

As required by Sections 120.569 and 120.60(3), Fla. Stat., the following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all of the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

RIGHT TO REQUEST ADMINISTRATIVE HEARING

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a SFWMD decision which affects or may affect their substantial interests shall file a petition for hearing with the Office of the District Clerk of the SFWMD, in accordance with the filing instructions set forth herein, within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: (1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or (2) within 14 days of service of an Administrative Order pursuant to Section 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of written notice through mail, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

If the District takes final agency action which materially differs from the noticed intended agency decision, persons who may be substantially affected shall, unless otherwise provided by law, have an additional Rule 28-106.111, Fla. Admin. Code, point of entry.

Any person to whom an emergency order is directed pursuant to Section 373.119(2), Fla. Stat., shall comply therewith immediately, but on petition to the board shall be afforded a hearing as soon as possible.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for an extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

FILING INSTRUCTIONS

A petition for administrative hearing must be filed with the Office of the District Clerk of the SFWMD. Filings with the Office of the District Clerk may be made by mail, hand-delivery, or e-mail. Filings by facsimile will not be accepted. A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the Office of the District Clerk at SFWMD headquarters in West Palm Beach, Florida. The District's normal business hours are 8:00 a.m. – 5:00 p.m., excluding weekends and District holidays. Any document received by the Office of the District Clerk after 5:00 p.m. shall be deemed filed as of 8:00 a.m. on the next regular business day.

Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, 3301 Gun Club Road, West Palm Beach, Florida 33406.
- Filings by hand-delivery must be delivered to the Office of the District Clerk. Delivery of a petition to the SFWMD's security desk does not constitute filing. It will be necessary to request that the SFWMD's security officer contact the Office of the District Clerk. An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by e-mail must be transmitted to the Office of the District Clerk at clerk@sfwmd.gov. The filing date for a document transmitted by electronic mail shall be the date the Office of the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed.

INITIATION OF ADMINISTRATIVE HEARING

Pursuant to Sections 120.54(5)(b)4. and 120.569(2)(c), Fla. Stat., and Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, SFWMD file number or any other SFWMD identification number, if known.
2. The name, address, any email address, any facsimile number, and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency determination.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

MEDIATION

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401–.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

RIGHT TO SEEK JUDICIAL REVIEW

Pursuant to Section 120.68, Fla. Stat., and in accordance with Florida Rule of Appellate Procedure 9.110, a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal with the Office of the District Clerk of the SFWMD in accordance with the filing instructions setforth herein within 30 days of rendition of the order to be reviewed, and by filing a copy of the notice with the clerk of the appropriate district court of appeal.

Attn: City of Fort Pierce, Planning Department
100 N. US Hwy 1
Fort Pierce, FL 34950

August 01, 2023

Re: Viva Communities at Treasure Coast East

Project Narrative

TEG Developers is proud to present Viva Communities at Treasure Coast East, a proposed 206 unit rental community in the City of Fort Pierce. The subject property, located on Edwards Road between Jenkins Road and Westglen Drive. Situated on 10 Mile Creek this 39 acre property enjoys easy access to urban conveniences as well as serene landscapes.

Inspired by the pocket neighborhood concept, Viva Communities at Treasure Coast East aspires to create an enhanced apartment home community. The master plan boasts two large lakes flanked by apartment homes, creating a picturesque waterfront experience while allowing for open gathering areas, common outdoor amenities, and enhancing the overall living experience.

Every residence is thoughtfully designed to maximize comfort and livability. Shared walls are kept to a minimum, and residents are never stacked on top of one another. Additionally, each resident is provided with their own fenced in back yard. The architectural design draws inspiration from the timeless charm of the Florida Cracker vernacular. The buildings feature classic horizontal siding walls and 5:12 sloped roofs with gable accents and 24” overhangs. A carefully arranged mix of horizontal and vertical siding with stone veneer accents, combined with Architectural details such as deep porches and gable accents, add character and authenticity to each home.

A well-appointed clubhouse serves as a hub for community events, social gatherings, and recreational activities. The pool area provides a refreshing escape for residents to relax and unwind, while the generous open common areas offer ample space for outdoor activities and leisure. Residents also enjoy the benefits of having an on-site dog park, fitness center, business lounge, community room, catering kitchen, pet spa, outdoor grilling areas, pickleball courts, and more.

At Viva Communities, we take pride in offering a diverse selection of apartment homes tailored to suit a broad range of lifestyles. Our carefully designed one and two bedroom units cater to the increasing number of young residents in the area. These smaller units are also an excellent option for empty nesters and retirees who seek a more manageable living arrangement without compromising on quality. For young couples

and families seeking more space and functionality, our three-bedroom units offer ample room for families to grow. Additionally, all units are fair housing compliant, ensuring that all residents have equal access to our exceptional living spaces.

In closing, Viva Communities at Treasure Coast East represents a unique opportunity for the City of Fort Pierce to help address current housing demands. Our communities are purpose built for long term rental and are designed with a focus on quality, consistency, and modern amenities. Our primary objective is to offer residents comfortable, well maintained living spaces that provide an elevated living experience and help raise the overall standard of rental properties in the area.

Francarlos Rivera, AIA, CGC
Senior Project Manager
TEG Developers, LLC

Phone: 813.853.3077
Email: frivera@tegdevelopers.com

Viva at Treasure Coast East


View Towards Site


Edwards Rd. – Eastbound


Edwards Rd – Westbound











Neighboring Uses - Westside Church









Neighboring Uses – St. Peters Church







Neighboring Uses – KOA Campground











Neighboring Uses – Briargate Lane Homes









Neighboring Uses – Altman Rd. Homes













Nearby Development – Avalon Crossings











Nearby Development – Celebration Pointe

Attn: City of Fort Pierce, Planning Department
100 N. US Hwy 1
Fort Pierce, FL 34950

August 01, 2023

Re: Viva Communities at Treasure Coast East

Existing Structures

No existing structures on site.

Francarlos Rivera, AIA, CGC
Senior Project Manager
TEG Developers, LLC

Phone: 813.853.3077
Email: frivera@tegdevelopers.com

SITE DATA	
OWNER:	TEG MARINER COVE LLC
OWNER ADDRESS:	365 ROUTE 59 STE 110 AIRMONT, NY 10952
SITE ADDRESS	5315 EDWARDS RD & 5496 ALTMAN RD
PARCEL ID:	2430-231-0001-000-4 & 2430-234-0001-000-3
LEGAL DESCRIPTION:	30 35 40 N 1/2 OF SW 1/4 OF NW 1/4–LESS N 33 FT AND LESS W 40 FT FOR RDS AND LESS E 75 FT FOR DITCH– (47) (17.76 AC) 30 35 40 SE 1/4 OF SW 1/4 OF NW 1/4 AND NE 1/4 OF NW 1/4 OF SW 1/4 AND FROM NE COR OF NW 1/4 OF SW 1/4, RUN S 0 DEG 30 MIN W ALG, TH 1/4 1/4 SEC LI 653.16 FT FOR POB, TH CONT S 0 DEG 30 MIN W 88.12 FT TO PT ON TOP OF BLUFF OF TEN MILE CREEK, TH S 54 DEG 51 MIN 30 SEC W ALG SD CREEK 413.7 FT, TH N 1 DEG 32 MIN E 318.28 FT, TH N 88 DEG 36 MIN E 330.67 FT TO POB (21.05 AC) (CASE #89–14123)
COUNTY:	FORT PIERCE
SEC/TOWN/RANGE:	25/35S/40E
FLOOD ZONE:	X
ZONING:	MEDIUM DEN
FUTURE LANDUSE:	GC, GENERAL COMMERCIAL
LOT SIZE:	39.01 AC.

LAND USE DATA			
USE	AREA	ACRES	PERCENTAGE
TOTAL SITE AREA	1,620,741.56 SF	37.21	100%
IMPERVIOUS			
BUILDING	241,423.66 SF	5.54	14.90%
ASPHALT	37,246.86 SF	5.13	13.79%
CONCRETE	9,354.40 SF	4.30	11.56%
PAVERS	6,443.04 SF	2.37	6.36%
TOTAL IMPERVIOUS:	73,045.30 SF	17.34	46.60%
PERVIOUS			
OPEN SPACE	865,465.16 SF	19.87	53.40%
TOTAL PERVIOUS:	865,465.16 SF	19.87	53.40%

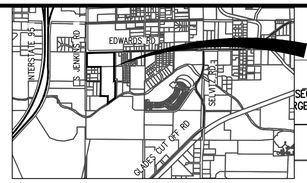
BUILDING DATA	
BUILDING HEIGHT: 45' MAX	24'-2" TO MID POINT
NUMBER OF STORIES:	2
1 BEDROOM UNIT	60
2 BEDROOM UNIT	92
3 BEDROOM UNIT	54
TOTAL UNIT:	206

BUILDING SETBACKS REQUIRED		
REQUIRED		PROVIDED
FRONT:	25'	85.31'
N SIDE:	10'	25.39'
S SIDE:	20'	22.00'
REAR:	25'	548.94'

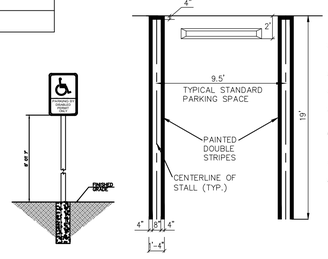
PARKING SPACE REQUIRED	
UNITS:	206
SPACES PER DWELLING UNIT	2
TOTAL SPACES REQUIRED	412
ADA REQUIRED OF REG. SPACES	9

PARKING SPACES PROVIDED	
9' – 6" X 19' 90 & 24 DEG PARKING SPACES	280
DRIVEWAY PARKING SPACES	44
12' X 19' 90 DEG. ADA PARKING SPACES	18
9' – 6" X 22' PARALLEL PARKING	78
DETACHED GARAGE	36
TOTAL SPACES PROVIDED:	456

LEGEND
- PROP. CONCRETE
- PROP. ASPHALT



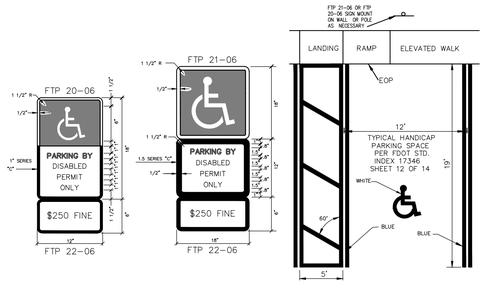
LOCATION MAP



STANDARD PARKING DETAIL (TYP.)

N.T.S.

NOTES
1. TOP PORTION OF FTP-20-06 SHALL HAVE A REFLECTIVE BLUE BACKGROUND WITH WHITE REFLECTIVE SYMBOL AND BORDER.
2. BOTTOM PORTION SHALL HAVE A REFLECTIVE WHITE BACKGROUND WITH BLACK OPAQUE LEGEND AND BORDER.
3. FTP 20-06 & 21-06 MAY BE FABRICATED ON ONE PANEL OR TWO.
4. FTP 20-06 IS FOR AREAS WHERE SPACE IS LIMITED.
5. FTP 22-06 SHALL BE MOUNTED BELOW THE FTP 20-06 OR 21-06 SIGN.
6. ACCESSIBLE MARKINGS ARE PER FDOT DESIGN STANDARD INDEX 17346 DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
7. DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
8. BLUE PAVEMENT MARKINGS SHALL BE TINTED TO MATCH SHADE 15180 OF FEDERAL STANDARDS 595a.



HANDICAP SIGN AND PARKING DETAIL (TYP.)

N.T.S.

NW 1/4 OF THE NW 1/4 OF THE SW 1/4 OF SECTION 30
TOMMY & SHIRLEY WALLS FUTURE LAND USE: RU ZONED: RS-3 NOT PLATTED PID# 2430-322-0001-000-3
ASPHALT ROAD
FND IR 0.20'E & FND IR 0.35'N
PAUL FISCHER FUTURE LAND USE: RM9 ZONED: RS-3 NOT PLATTED PID# 2430-233-0003-000-4
DEWEY & PAULA DAVIDSON FUTURE LAND USE: RM9 ZONED: RS-3 NOT PLATTED PID# 2430-233-0001-200-2
6' CLF INTERSECTION 1.8'E OF PL
N00°13'03"W 1668.09'
6' CLF END
PROP. SECONDARY ACCESS GATE WITH KNOX BOX
N00°10'34"W 669.66'
4' WIRE FENCE END 2.1'W OF PL
6' CLF CORNER 3.2'W OF PL
4' WIRE FENCE END 1.9'W OF PL
15.0 BUILDING SETBACK
42.1
53.95'
FLOOD PLAIN COMPENSATION AREA
WETLAND LINE A
PROP. ADA SIGN
PROP. DETACHED GARAGE & STORAGE
PROP. STOP SIGN, STOP BAR & CROSSING
STOP
548.94'
S89°29'23"W 339.89'
WETLAND LOCATION SHOWN HEREON WERE TAKEN FROM AN ALTA/ACSM LAND TITLE SURVEY, PREPARED FOR SHELBY HOMES, INC. BY DAVID M. JONES PROFESSIONAL SURVEYOR JOB NUMBER 05-655 ALTA, DATED 4-25-05.
WETLAND LINE B
WETLAND LINE C
N01°32'00"E (D)
N02°25'24"E (C) 318.28'
FND IRC "RLS 2391" 0.16'N, 0.13'W
CONSERVATION EASEMENT (ORB 2570, PG 2767-2773)
WETLAND LINE A
N88°36'00"E (D) 330.67'
S05°23'41"W 415.59'(C)
S54°51'30"W 413.70'(D)
10 MILE CREEK
CNS IN WATER
S00°05'31"E (C) S00°30'00"W (D) 88.12'
S00°30'00"W 653.16'(D) S00°05'31"E 669.95'(C)
S00°05'31"E 758.07'
POB PARCEL 1 NE CORNER OF THE NW 1/4 OF THE SW 1/4 OF SECTION 30
POC PARCEL 1 NE CORNER OF THE NW 1/4 OF THE SW 1/4 OF SEC 30, TWP 35S, RGE 40E
ST LUICE COUNTY FUTURE LAND USE: T/U ZONED: ROW PID# 2430-231-0000-010-0
NE 1/4 OF THE NW 1/4 OF THE SW 1/4 OF SECTION 30
EAST LINE OF THE NE 1/4 OF THE SW 1/4 OF SECTION 30
SE 1/4 OF THE SW 1/4 OF SECTION 30
ST LUICE COUNTY FUTURE LAND USE: T/U ZONED: ROW PID# 2430-231-0000-010-0
FND IRC "RLS 2391" 0.12'E
N89°19'53"E 75.00'
EAST 75' LESSOUT
FLOOD ZONE "X"
FLOOD ZONE "AE"
FLOOD ZONE "X"
S00°03'48"E 1314.96'
S00°03'48"E 1314.96'
S00°03'48"E 1349.05'
S00°03'48"E 1314.96'
HERMAN GOINS REVOCABLE TRUST , FUTURE LAND USE: MUNICIPAL ZONED: MUNICIPALITIES NOT PLATTED PID# 2430-242-0002-000-2
EAST LINE OF THE N 1/2 OF THE SW 1/4 OF SECTION 30
NORTH
UTILITY EASEMENT (ORB 2672, PG 1082) TNT BUILDERS OF SOUTH FLORIDA LLC, FUTURE LAND USE: T/U ZONED: MUNICIPALITIES NOT PLATTED PID# 2430-242-0002-000-5
DIRT ROAD
EAST 75' LESSOUT (ORB 388, PG 699) (DB 172, PG 431)
10.0 BUILDING SETBACK
44.3
-22.9
WESTSIDE BAPTIST CHURCH FP, FUTURE LAND USE: RL ZONED: R2 NOT PLATTED PID# 2325-134-0000-000-6
SITE BENCHMARK SLC JANE RESET" ELEV= 15.13 NAVD 1988
FIBEROPTIC GROUND BOX
FND IRC "PLS 3909" 0.10'N, 0.16'E
24" PLASTIC E.W=N= 12.99 W.W=N= UNKNOWN
JENKINS ROAD
80' RIGHT-OF-WAY
S00°17'25"E 2659.19'
BEARING BASE N00°17'25"W 632.08'
S00°17'25"E 1329.59'
40' ADDITIONAL RIGHT-OF-WAY
N00°17'25"W 632.08'
ASPHALT DRIVE
CONC DRIVE
FND CONC MONUMENT "BROKEN TOP" 0.27'S, 0.18'E
79.94'
81.30'
TIMOTHY WORLEY JR. FUTURE LAND USE: RM9 ZONED: RS-3 NOT PLATTED PID# 2430-233-0001-500-5
4' WIRE FENCE END 0.1'N OF PL
55.60'
85.31'
BUEFORD & PAULA YATES FUTURE LAND USE: RM9 ZONED: RS-3 NOT PLATTED PID# 2430-233-0001-600-6
S88°55'07"W 633.42'
4' WIRE FENCE END 1.5'N OF PL
JOHN HAMNER FUTURE LAND USE: RM9 ZONED: RS-3 NOT PLATTED PID# 2430-233-0001-400-4
PROP. ADA SIGN
PROP. CARPORT
PROP. DOG PARK
PROP. DETACHED GARAGE & STORAGE
LAKE 1 TOB AREA = 74,479.15 SF EOW AREA = 54,733.00 SF CONTROL EL. 10.50 TOB EL. 15.5
LAKE 2 TOB AREA = 67,012.35 SF EOW AREA = 48,334.38 SF CONTROL EL. 10.50 TOB EL. 15.5
N LINE OF THE SW 1/4 OF SECTION 30
EDWARDS ROAD
S88°30'26"W 1349.68'
PROP. MAIL KIOSK
PROP. POOL AREA
EVENT ROOM
GYM
RESTROOM
PROP. ENTRY & EXIT GATES
PROP. CALL BOX
PROP. TRASH COMPACTOR
PROP. BUS STOP
PROP. COVBIKE RACK
STOP & BIKE RACK
FND IRC "PLS 3909" 0.10'N, 0.16'E
N88°30'26"E 1324.52'
110.5'
50.00'
17.55'
15.00'
28.45'
15.33'
10.83'
6.00'
FOOT PATH
25' BUILDING SETBACK
10' BUILDING SETBACK
TNT BUILDERS OF SOUTH FLORIDA LLC, FUTURE LAND USE: T/U ZONED: MUNICIPALITIES NOT PLATTED PID# 2430-212-0001-000-5
FND IRC "RLS 2391" 0.12'E
24" PLASTIC E.W=N= 12.67 W.W=N= 11.26
24" PLASTIC E.W=N= 12.75 W.W=N= 10.88
24" PLASTIC E.W=N= 9.49 W.W=N= 3.17
24" RCP N.W=N= 13.00 S.W=N= 11.82
18" RCP N.W=N= 13.44 S.W=N= 13.48
18" RCP N.W=N= 13.59 S.W=N= 13.61
24" CMP E.W=N= 11.15 W.W=N= 11.06
24" CMP E.W=N= 11.08 W.W=N= 11.00
24" CMP E.W=N= 11.08 W.W=N= 11.00
24" RCP E.W=N= 11.08 W.W=N= UNKNOWN
24" CMP E.W=N= 11.08 W.W=N= 12.35
T-4+00
T-3+00
T-2+00
T-1+00
T-0+00
T-5+00
T-6+00
T-7+00
T-8+00
T-9+00
T-10+00
T-11+00
T-12+00
T-13+00
T-14+00
T-15+00
T-16+00
T-17+00
T-18+00
T-19+00
T-20+00
T-21+00
T-22+00
T-23+00
T-24+00
T-25+00
T-26+00
T-27+00
T-28+00
T-29+00
T-30+00
T-31+00
T-32+00
T-33+00
T-34+00
T-35+00
T-36+00
T-37+00
T-38+00
T-39+00
T-40+00
T-41+00
T-42+00
T-43+00
T-44+00

DRAWING INDEX:

LA-1: OVERALL PLAN, LANDSCAPE DATA, & PLANT SCHEDULE

LA-2 - LA-5: DETAIL LANDSCAPE PLANS

LA-6: EXISTING TREE LOCATION & DISPOSITION PLAN

LA-7 - LA-10: BUILDING UNITS TYPICAL LANDSCAPE PLANS

LA-11: LANDSCAPE DETAILS & SPECIFICATIONS

TREE REQUIREMENTS

WEST PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 1,040 LF x 10' WIDE
10,400 S.F. DIV. BY 200 = 52 TREES REQUIRED

SOUTH PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 594 LF x 10' WIDE
5,940 S.F. DIV. BY 200 = 30 TREES REQUIRED

WEST PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 585 LF x 10' WIDE
5,850 SF DIV. BY 300 = 20 TREES REQUIRED

NORTH PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 1,131 LF x 10' WIDE
11,131 SF DIV. BY 300 = 38 TREES REQUIRED

EAST PERIMETER LANDSCAPE STRIP (ABUTTING OTHER PROPERTIES)= 1,186 LF x 10' WIDE
11,860 SF DIV. BY 200 = 60 TREES REQUIRED

INTERIOR VEHICULAR USE AREAS = 189,250 S.F
189,250/15 = 12,617 S.F. REQUIRED PLANTING AREA
126 INTERIOR VUA TREES REQUIRED

TOTAL TREES REQUIRED: 329 TREES

PROVIDED TREES

WEST PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 1,040 LF x 10' WIDE
52 TREES PROVIDED

SOUTH PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 594 LF x 10' WIDE
30 TREES PROVIDED

WEST PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 585 LF x 10' WIDE
20 TREES PROVIDED

NORTH PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 1,131 LF x 10' WIDE
38 TREES PROVIDED

EAST PERIMETER LANDSCAPE STRIP (ABUTTING OTHER PROPERTIES)= 1,186 LF x 10' WIDE
60 TREES PROVIDED

INTERIOR VEHICULAR USE AREAS = 189,250 S.F
126 INTERIOR VUA TREES PROVIDED

TOTAL TREES PROVIDED: 329 TREES

SHRUB REQUIREMENTS

WEST PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 1,040 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 347 SHRUBS REQUIRED

SOUTH PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 594 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 198 SHRUBS REQUIRED

WEST PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 585 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 195 SHRUBS REQUIRED

NORTH PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 1,131 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 377 SHRUBS REQUIRED

EAST PERIMETER LANDSCAPE STRIP (ABUTTING OTHER PROPERTIES)= 1,186 LF x 10' WIDE
CONTINUOUS HEDGE @ 36" OC = 396 SHRUBS REQUIRED

TOTAL SHRUBS REQUIRED: 1,513 SHRUBS

PROVIDED SHRUBS

WEST PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 1,040 LF x 10' WIDE
347 SHRUBS PROVIDED

SOUTH PERIMETER LANDSCAPE STRIP (ABUTTING RESIDENTIAL)= 594 LF x 10' WIDE
198 SHRUBS PROVIDED

WEST PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 585 LF x 10' WIDE
195 SHRUBS PROVIDED

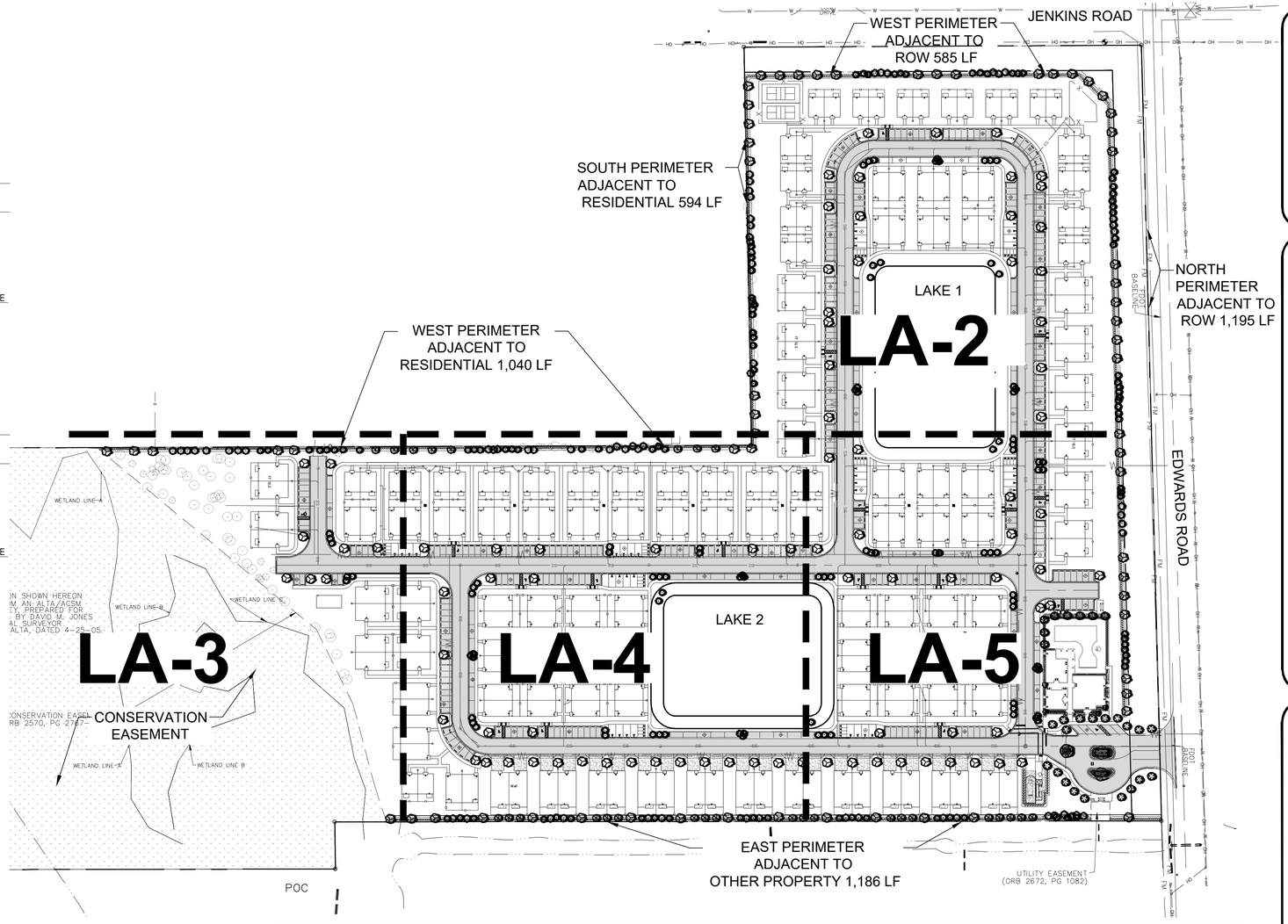
NORTH PERIMETER LANDSCAPE STRIP (ABUTTING ROW)= 1,131 LF x 10' WIDE
377 SHRUBS PROVIDED

EAST PERIMETER LANDSCAPE STRIP (ABUTTING OTHER PROPERTIES)= 1,186 LF x 10' WIDE
396 SHRUBS PROVIDED

TOTAL SHRUBS PROVIDED: 1,513 SHRUBS

General Landscape Notes:

1. All plants shall conform to established nursery grades and standards, to be Florida No. 1 or better, and shall be free of disease and insects at the time of installation.
2. Trees shall be a minimum of twelve (12) feet in height and have a caliper of two and one-half (2 1/2) inches at four and one-half (4 1/2) feet above the ground when installed.
3. All required trees, except palms, shall have a minimum of five (5) feet of clear trunk and a minimum five (5) foot canopy spread at the time of planting.
4. All palm trees shall have a minimum clear trunk of ten (10) feet when installed. Three palm trees are equal to one shade tree having a mature canopy spread of fifteen (15) feet.
5. Shrubs shall be a minimum of twenty-four (24) inches in height above grade immediately after planting.
6. Groundcovers, other than grass, shall be planted in a manner as to present a finished appearance and reasonably complete coverage within four (4) months after planting.
7. Turf grass shall be installed using solid sod and shall be either Bahia or St. Augustine sod.
8. All landscape areas other than sod will be provided a mulch cover of at least three (3) inches. Cypress mulch shall not be used.
9. All existing native vegetation found on the site and is not in direct conflict with the proposed buildings or parking areas shall be left undisturbed. A suitable protective barrier, constructed of metal, wood, safety fencing, or other durable material, will be placed around the staked out locations of existing native vegetation.
10. No fill materials, construction materials, concrete, paint, chemicals, or other foreign materials shall be stored, deposited, or disposed of within any areas that have been staked or fenced off as being undisturbed native vegetation areas.
11. Existing understory shall be maintained in areas of undisturbed native vegetation.
12. All Category 1 exotic plant species will be eradicated from the site.
13. Conspicuous, durable barricades will be erected around each individual tree or areas of vegetation that are to be preserved. In the event that any protective barricades are removed or altered and land clearing or construction work is being conducted on the site, all work at the site will be stopped until the barriers are restored and any necessary corrective actions taken to repair or replant any vegetation removed or damaged as a result of these encroachments.
14. Irrigation to conform to all local and State regulations with regard to water consumption.
15. All new landscaping shall be provided with 100% irrigation coverage through the establishment period, not less than 1-year.



Total Site Plant Schedule:

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	DBH
	28	Conocarpus erectus	Buttonwood	45G	12` HT	6`W	6`CT, SP	Native	2.5" DBH
	65	Pinus elliotti densa	South Florida Slash Pine	FG	12` HT	5`W	SP	Native	2.5" DBH
	152	Quercus virginiana	Southern Live Oak	45G	12` HT	5`W	6`CT, SP	Native	2.5" DBH
EXISTING TREES TO REMAIN	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**DBH**
	11	Quercus spp	Oak Species	Existing to Remain				Native	VARIES 6"-55"
	9	Sabal palmetto	Cabbage Palmetto	Existing to Remain	10`-18` CT		SP	Native	
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	3	Bismarckia nobilis `Silver`	Silver Bismarck Palm	FG	8` GW, 12` CT		SP	Non-native	
	* 4	Phoenix roebelenii	Double Pygmy Date Palm	FG	6`OA	6` SPR	4` CT, SP	Non-native	
	*** 191	Sabal palmetto	Sabal Palm	FG	10`-18` CT		SLK, HC, SP	Native	
	27	Wodyetia bifurcata	Single Foxtail Palm	FG	6`GW, 10`CT		SGL, FH, SP	Non-native	

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	* 19	Alcantarea imperialis	Imperial Bromeliad	7G	2` HT	2` W	F	Non-native
	* 177	Bougainvillea `Helen Johnson`	Dwarf Bougainvillea	3G	18" HT	18"W	F	Non-native
	523	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native
	944	Clusia guttifera	Small Leaf Clusia	3G	24" HT	18"W	F	Non-native
	37	Clusia guttifera	Small-Leaf Clusia	7G	48" HT	36" W	F	Non-native
	* 80	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT	18"W	F	Non-native
	46	Hamelia patens 'Compacta'	Dwarf Firebush	3G	24" HT	18"W	F	Non-native
	* 117	Muhlenbergia capillaris	Pink Muhly Grass	3G	24" HT	18"W	F	Native
	* 77	Rondeletia leucophylla	Panama Rose	3G	24" HT	24"W	F	Non-native
	* 76	Schefflera arboricola	Green Schefflera	3G	24" HT	18"W	F	Non-native
	* 43	Serenoa repens `Cinerea`	Silver Saw Palmetto	3G	18" HT	18"W	F	Native
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**
	422	Carissa macrocarpa `Emerald Blanket`	Emerald Blanket Carissa	3G	18"HT	18" W	F	Non-native
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**
	TBD	** Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests	

*NOT INCLUDED IN PROVIDED PLANT CALCULATIONS; QUANTITIES MAY VARY AT OWNER'S DISCRETION
**MAY BE SUBSTITUTED WITH BAHIA SPECIES
***11 TO BE RELOCATED ON SITE

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Landscape Plan

Revisions		
Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 100'

0 25' 50' 200'

LA-1

LA-2 Plant Legend:

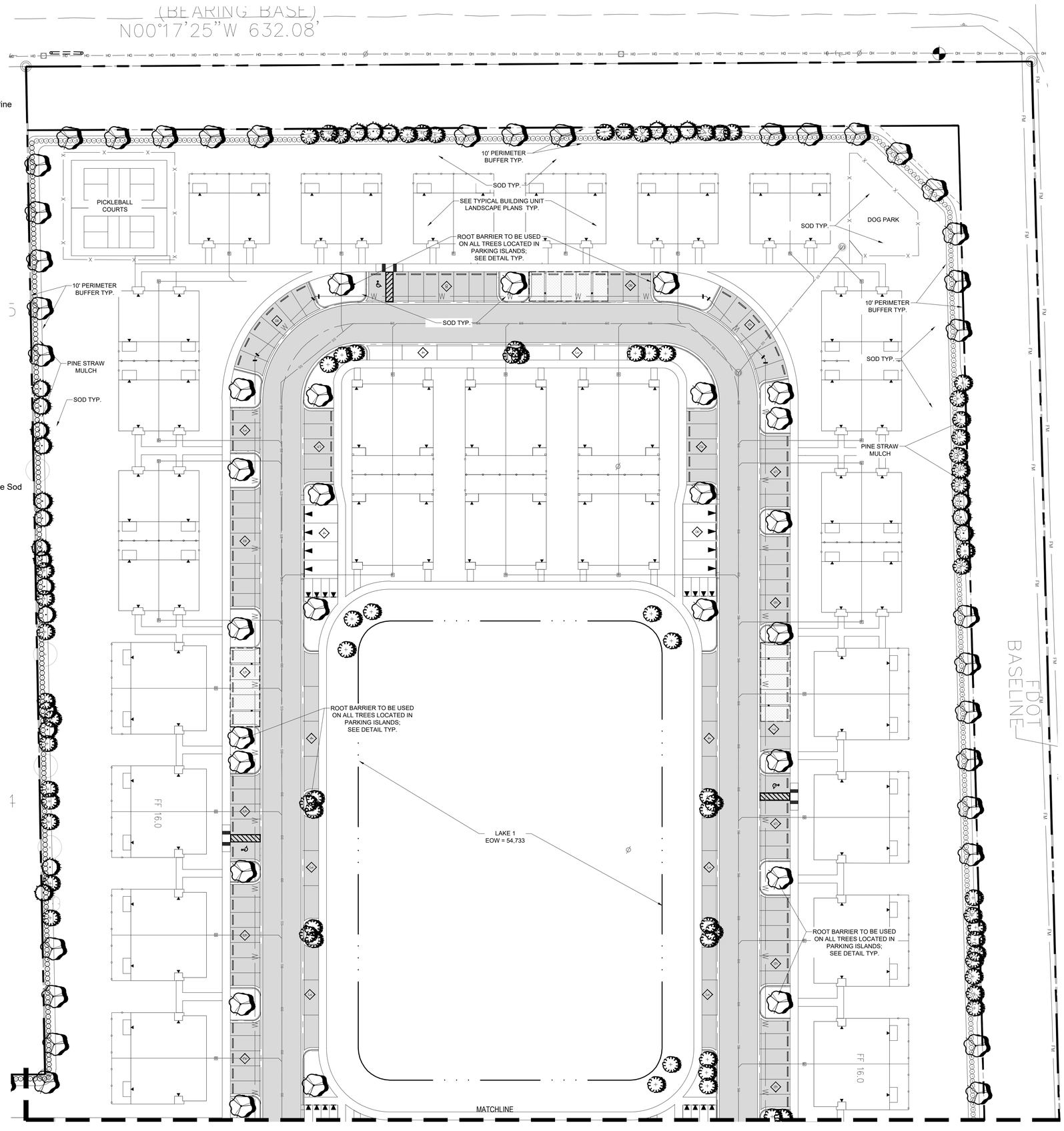
TREES	QTY	BOTANICAL NAME	COMMON NAME
	23	Pinus elliotti densa	South Florida Slash Pine
	57	Quercus virginiana	Southern Live Oak

EXISTING TREES TO REMAIN	QTY	BOTANICAL NAME	COMMON NAME
	4	Quercus spp	Oak Species
	1	Sabal palmetto	Cabbage Palmetto

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME
	65	Sabal palmetto	Sabal Palm

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME
	385	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum
	201	Clusia guttifera	Small Leaf Clusia
	20	Hamelia patens 'Compacta'	Dwarf Firebush
	28	Serenoa repens `Cinerea`	Silver Saw Palmetto

SOD	QTY	BOTANICAL NAME	COMMON NAME
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1800 SE FEDERAL HIGHWAY, SUITE 201
STUART, FLORIDA 34994
(772) 287-1122 FAX (772) 288-0422
CA 0001484

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Detail Landscape Plan

Revisions

Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 30'

0 15' 30' 60'

LA-2

LA-3 Plant Legend:

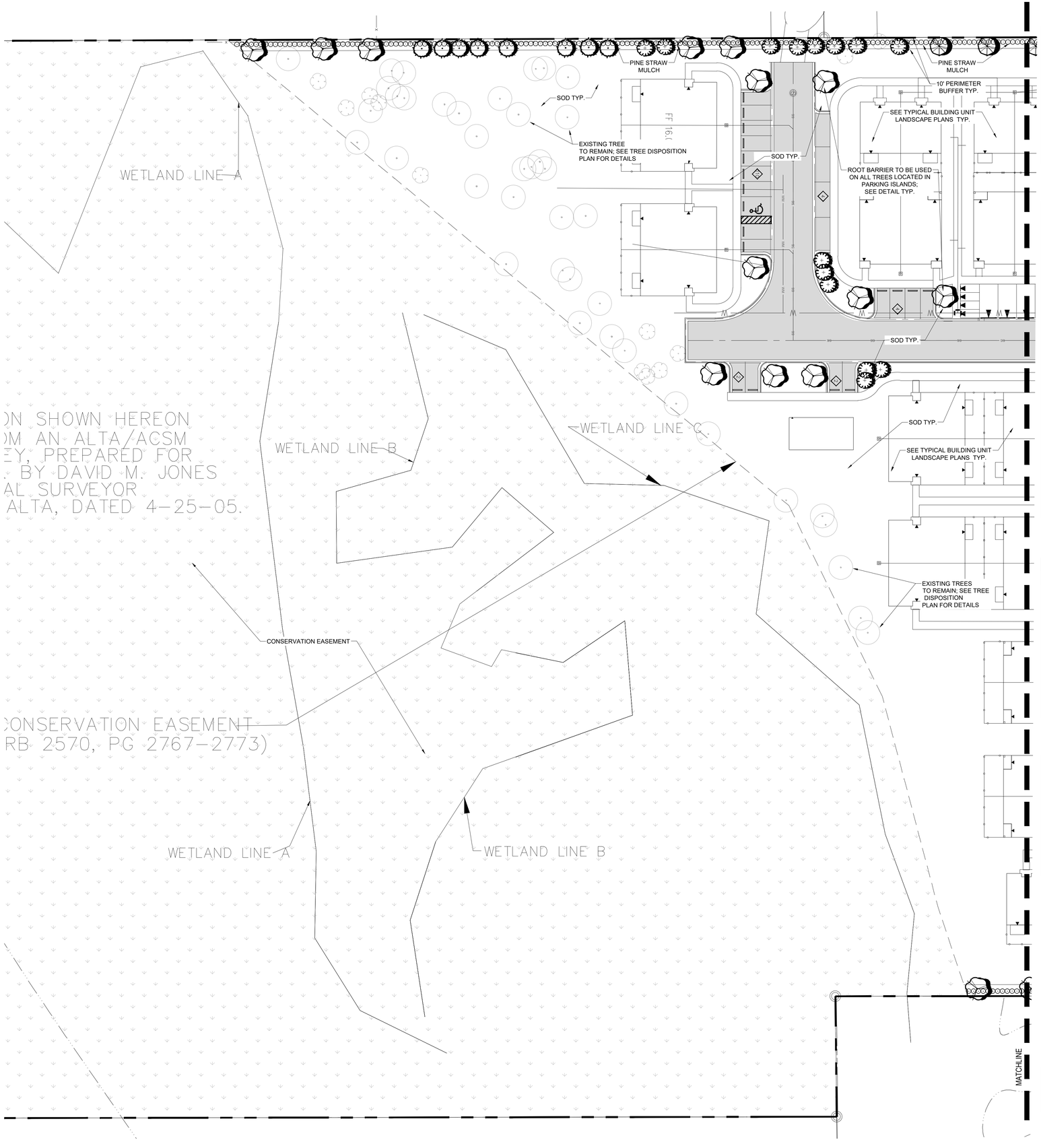
TREES	QTY	BOTANICAL NAME	COMMON NAME
	3	Conocarpus erectus	Green Buttonwood
	8	Pinus elliotti densa	South Florida Slash Pine
	15	Quercus virginiana	Southern Live Oak

EXISTING TREES TO REMAIN	QTY	BOTANICAL NAME	COMMON NAME
	41	Quercus spp	Oak Species
	12	Sabal palmetto	Cabbage Palmetto

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME
	14	Sabal palmetto	Sabal Palm

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME
	182	Clusia guttifera	Small Leaf Clusia

SOD	QTY	BOTANICAL NAME	COMMON NAME
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS

CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1900 SW 27th AVENUE, SUITE 201
FORT LAUDERDALE, FLORIDA 33315
Tel: (772) 220-2100

CERTIFICATE OF AUTHORIZATION NO. 30006000

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Detail Landscape Plan

Revisions

Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 30'

0 15' 30' 60'

LA-3

LA-4 Plant Legend:

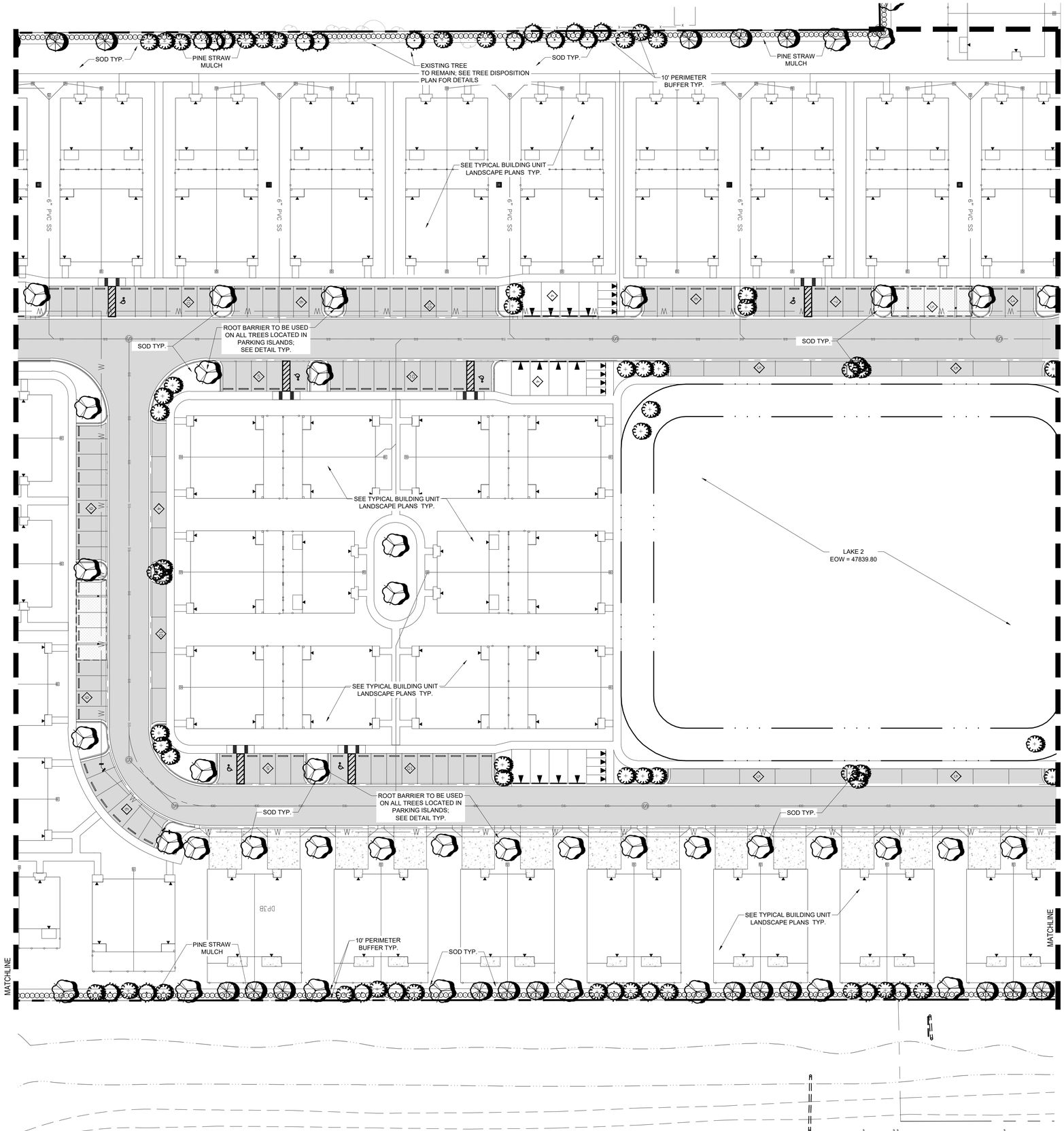
TREES	QTY	BOTANICAL NAME	COMMON NAME
	17	Conocarpus erectus	Green Buttonwood
	20	Pinus elliotti densa	South Florida Slash Pine
	41	Quercus virginiana	Southern Live Oak

EXISTING TREES TO REMAIN	QTY	BOTANICAL NAME	COMMON NAME
	1	Quercus spp	Oak Species
	6	Sabal palmetto	Cabbage Palmetto

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME
	52	Sabal palmetto	Sabal Palm

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME
	399	Clusia guttifera	Small Leaf Clusia

SOD	QTY	BOTANICAL NAME	COMMON NAME
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1900 SW 27th AVENUE, SUITE 201
FORT LAUDERDALE, FLORIDA 33312
Tel: (772) 286-1900

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Detail Landscape Plan

Revisions		
Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

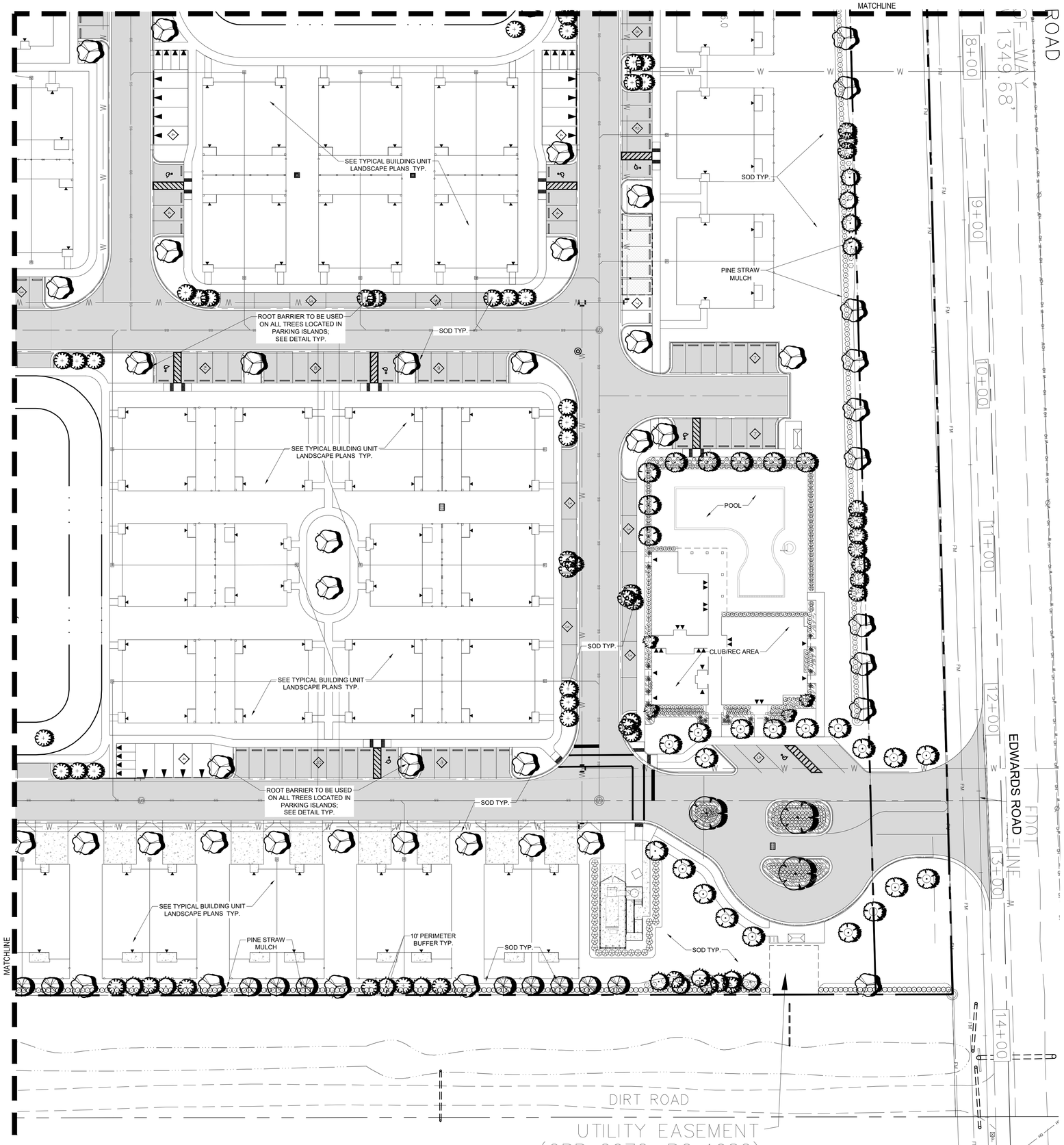
SCALE: 1" = 30'

0 15' 30' 60'

LA-4

LA-5 Plant Legend:

TREES	QTY	BOTANICAL NAME	COMMON NAME
	8	Conocarpus erectus	Green Buttonwood
	14	Pinus elliotti densa	South Florida Slash Pine
	41	Quercus virginiana	Southern Live Oak
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**
	3	Bismarckia nobilis `Silver`	Silver Bismarck Palm
	4	Phoenix roebelenii	Double Pygmy Date Palm
	50	Sabal palmetto	Sabal Palm
	27	Wodyetia bifurcata	Single Foxtail Palm
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**
	19	Alcantarea imperialis	Imperial Bromeliad
	177	Bougainvillea `Helen Johnson`	Dwarf Bougainvillea
	142	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum
	170	Clusia guttifera	Small Leaf Clusia
	37	Clusia guttifera	Small-Leaf Clusia
	80	Codiaeum variegatum `Mammey`	Mammey Croton
	26	Hamelia patens 'Compacta'	Dwarf Firebush
	117	Muhlenbergia capillaris	Pink Muhly Grass
	77	Rondeletia leucophylla	Panama Rose
	76	Schefflera arboricola	Green Schefflera
	15	Serenoa repens `Cinerea`	Silver Saw Palmetto
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**
	422	Carissa macrocarpa `Emerald Blanket`	Emerald Blanket Carissa
SOD/SEED	**QTY**	**BOTANICAL NAME**	**COMMON NAME**
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS

CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1900 SW 17TH STREET, SUITE 201
PORT ST. LUCIE, FLORIDA 34953
561-770-0660

CERTIFICATE OF AUTHORIZATION NO. 28-0000

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Detail Landscape Plan

Revisions		
Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

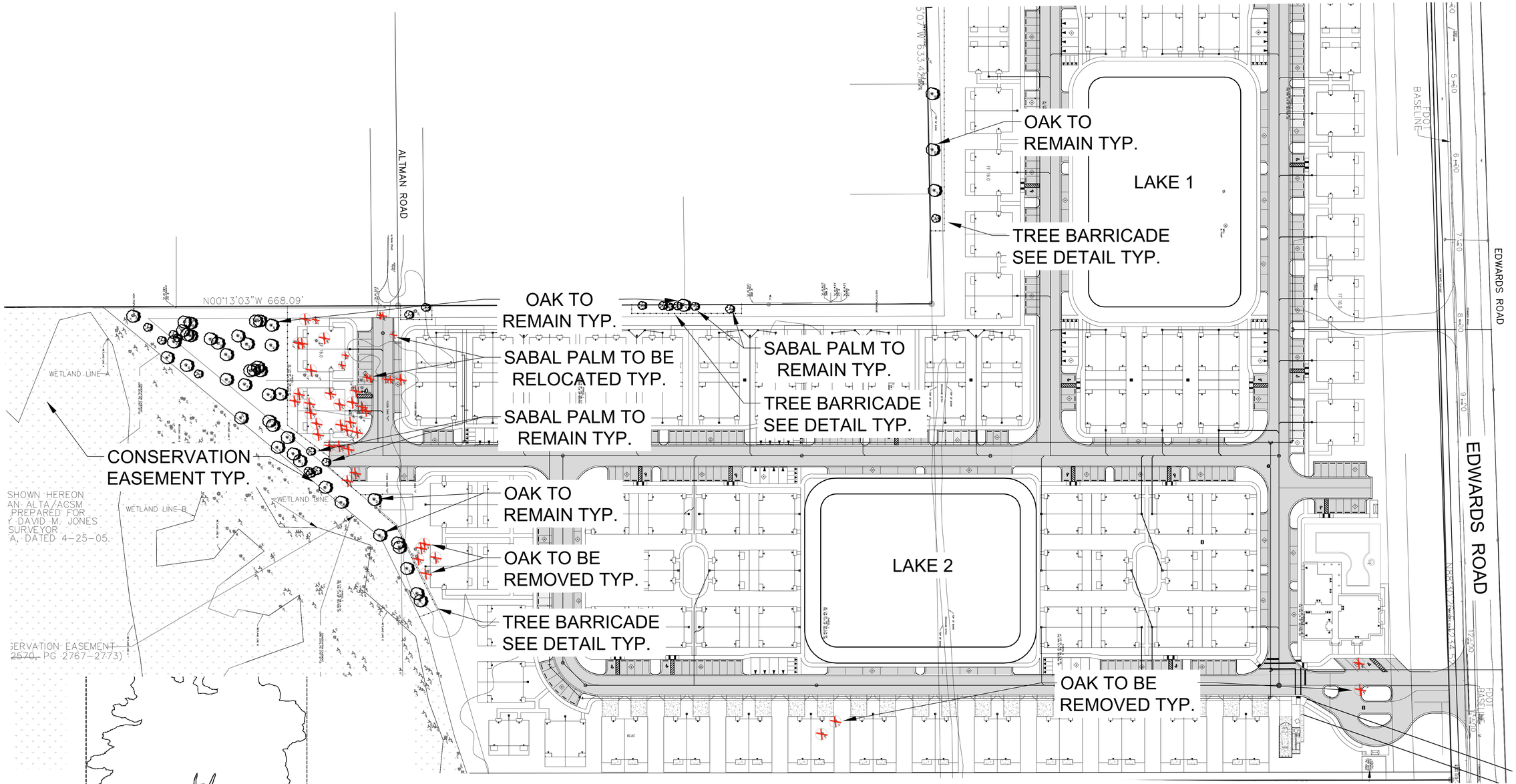
Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

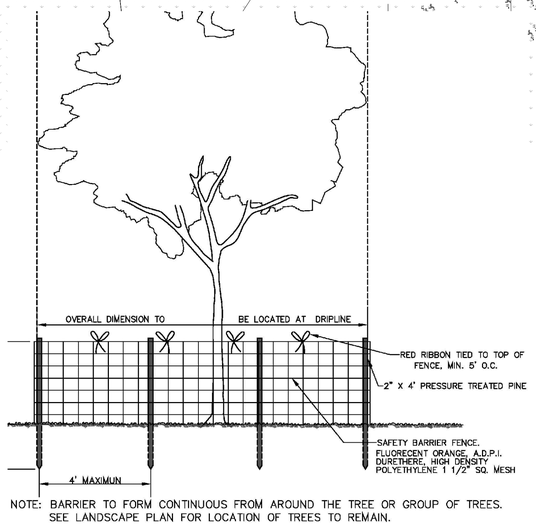
NORTH

SCALE: 1" = 30'

0 15' 30' 60'

LA-5





NOTE: BARRIER TO FORM CONTINUOUS FROM AROUND THE TREE OR GROUP OF TREES. SEE LANDSCAPE PLAN FOR LOCATION OF TREES TO REMAIN.

TREE PROTECTION DETAIL

NOT TO SCALE

PLANT SCHEDULE DISPOSITION

EXISTING TREES TO BE REMOVED	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	NOTES	NATIVE	DBH
	36	Quercus laurifolia	Laurel Oak	Existing to be Removed			Native	14"-55" DBH
	10	Sabal palmetto	Cabbage Palm	Relocated on Site	VARIES 10`-20` CT		Native	

See landscape plans for all Sabal Palm Locations

EXISTING TREES TO REMAIN	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	NOTES	NATIVE	DBH
	47	Quercus spp	Oak Species	Existing to Remain			Native	VARIES 6"-55" DBH
	19	Sabal palmetto	Cabbage Palm	Existing to Remain	10`-18` CT	SP	Native	

TOTAL OAK TREE DBH GREATER THAN 14" TO BE REMOVED = 764" DBH
TOTAL SABAL PALMS TO BE RELOCATED = 10
TOTAL OAK TREE DBH TO BE PRESERVED = 864" DBH
TOTAL SABAL PALMS TO BE PRESERVED = 19
*NO MITIGATION REQUIRED

***See also Tree Survey Provided by Others**

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Tree Location & Disposition Plan

Revisions		
Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 60'

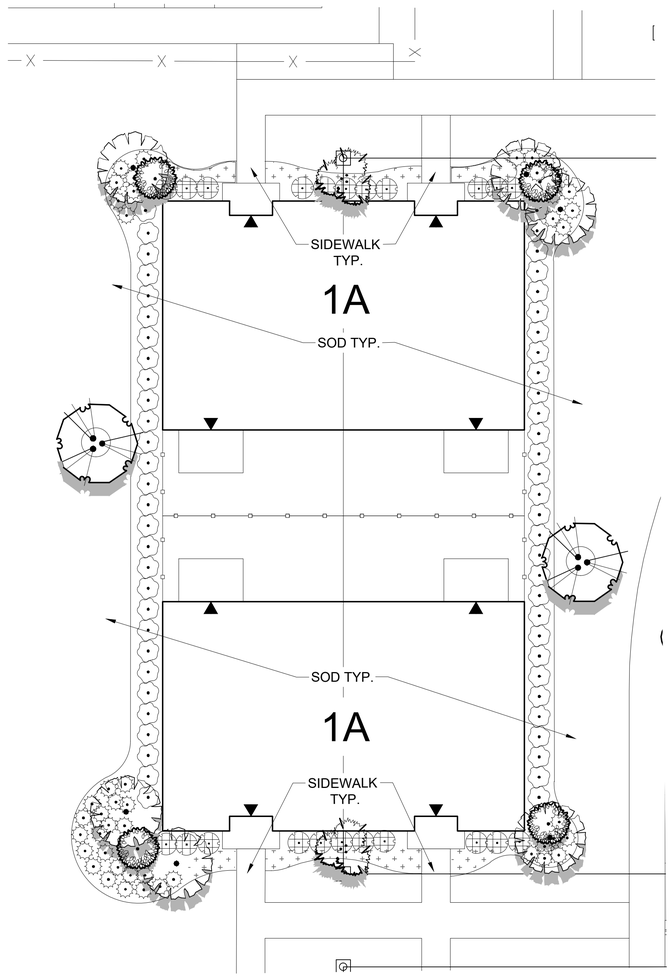
0 30' 60' 120'

LA-6

Unit 1A Plant Schedule:

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	2	Lagerstroemia indica `Muskogee`	Multi-Trunked Muskogee Crape Myrtle	45G	12` HT	6`W	ML, 5` CT	Non-native	
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	2	Phoenix roebelenii	Double Pygmy Date Palm	FG	6`OA	6` SPR	4` CT, SP	Non-native	
	6	Sabal palmetto	Sabal Palm	FG	16`-22` CT, MIX HTS		SLK, HC, SP	Native	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	4	Ilex x attenuata 'Eagleston'	Eagleston Holly	15G	6`HT	3` W	F, SP	Native	1.5" Caliper
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	59	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native	
	46	Muhlenbergia capillaris	Pink Muhly Grass	3G	24" HT	18"W	F	Native	
	22	Rondeletia leucophylla	Panama Rose	3G	24" HT	24"W	F	Non-native	
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	76	Liriope muscari `Super Blue`	Super Blue Liriope	1G	12"HT	12"W	F	Non-native	1
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests		

*PLANT QUANTITIES BASED ON A DOUBLE UNIT LAYOUT



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Building Unit 1A Typical Landscape Plan

Revisions		
Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 10'

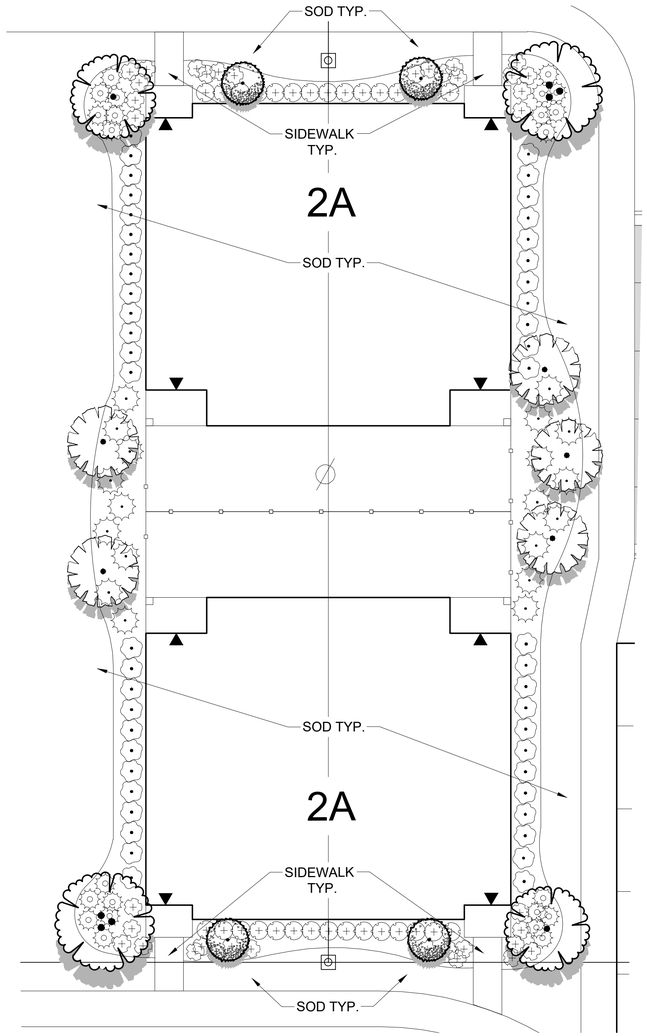
0 5' 10' 20'

LA-7

Unit 2A Plant Schedule:

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	5	Sabal palmetto	Sabal Palm	FG	16`-22` CT, MIX HTS		SLK, HC, SP	Native	
	2	Wodyetia bifurcata	Single Foxtail Palm	FG	6`GW, 10`CT		SGL, FH, SP	Non-native	
	2	Wodyetia bifurcata	Triple Foxtail Palm	FG	6`GW, 10`CT		TRP, FH, SP	Non-native	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	4	Elaeocarpus decipiens	Japanese Blueberry Tree	15G	6-7` OA	4` W	FTB, SP	Non-native	1.5" DBH
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	48	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native	
	38	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT	18"W	F	Non-native	
	23	Pennisetum setaceum `Alba`	White Fountain Grass	3G	24" HT	18"W	F	Non-native	
	30	Schefflera arboricola	Green Schefflera	3G	24" HT	18"W	F	Non-native	
	19	Tripsacum dactyloides	Fakahatchee Grass	3G	30" HT	24"W	F	Native	
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests		

*PLANT QUANTITIES BASED ON A DOUBLE UNIT LAYOUT



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Building Unit 2A Typical Landscape Plan

Revisions

Date	Init.	Description
9.15.21	PG	1st Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

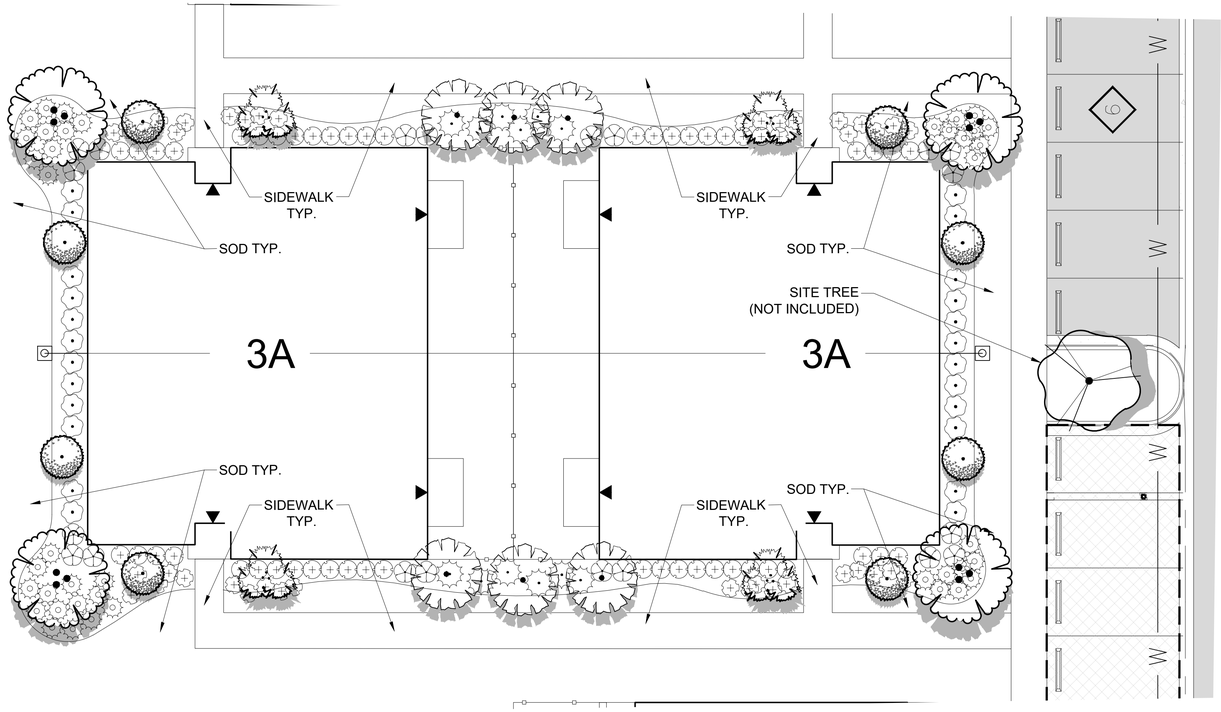
Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 10'

0 5' 10' 20'

LA-8



Unit 3A Plant Schedule:

PALM TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	4	Phoenix roebelenii	Double Pygmy Date Palm	FG	6`OA	6` SPR	4` CT, SP	Non-native	
	6	Sabal palmetto	Sabal Palm	FG	16`-22` CT, MIX HTS		SLK, HC, SP	Native	
	4	Wodyetia bifurcata	Triple Foxtail Palm	FG	6`GW, 10`CT		TRP, FH, SP	Non-native	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	8	Elaeocarpus decipiens	Japanese Blueberry Tree	15G	6-7` OA	4` W	FTB, SP	Non-native	1.5" DBH
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	20	Acalypha wilkesiana 'Louisiana Red'	Louisiana Red Wilkes' Copperleaf	7G	36" HT	24"	FULL	Non-native	
	24	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native	
	40	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT	18"W	F	Non-native	
	41	Pennisetum setaceum `Alba`	White Fountain Grass	3G	24" HT	18"W	F	Non-native	
	51	Schefflera arboricola	Green Schefflera	3G	24" HT	18"W	F	Non-native	
	12	Tripsacum dactyloides	Fakahatchee Grass	3G	30" HT	24"W	F	Native	
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests		

*PLANT QUANTITIES BASED ON A DOUBLE UNIT LAYOUT

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Building Unit 3A Typical Landscape Plan

Revisions

Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

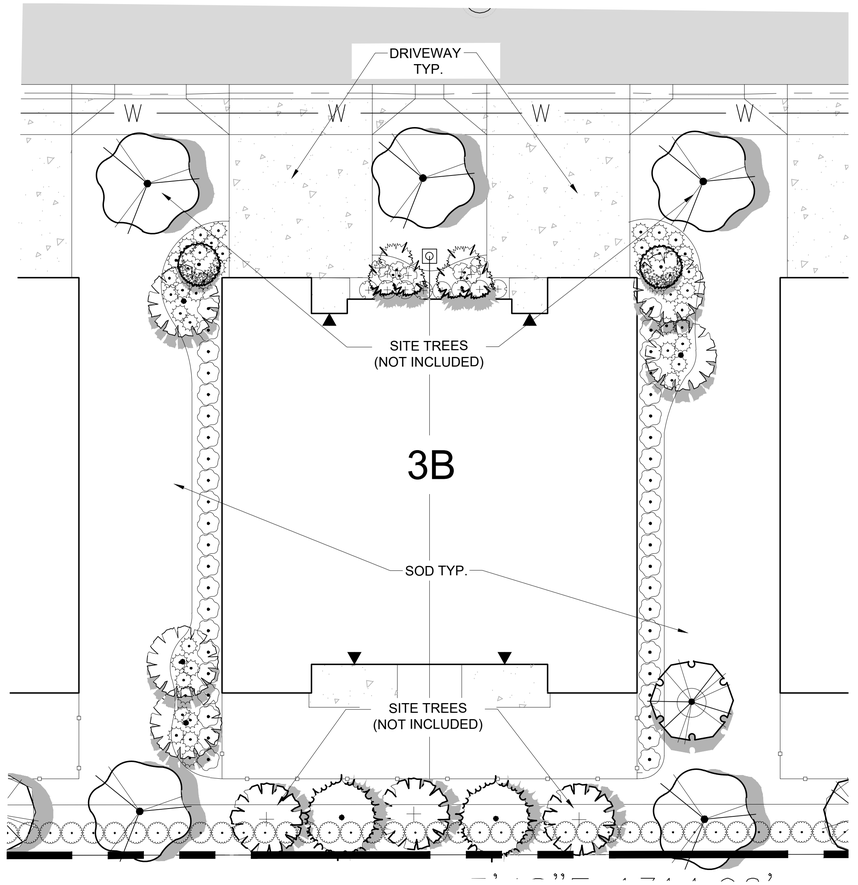
Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 10'

0 5' 10' 20'

LA-9



Unit 3B Plant Schedule:

TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	1	Tabebuia caraiba	Silver Trumpet	45G	12` HT	5`W	5` CT, SP	Non-native	2.5" DBH
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	2	Phoenix roebelenii	Double Pygmy Date Palm	FG	6`OA	6` SPR	4` CT, SP	Non-native	
	5	Sabal palmetto	Sabal Palm	FG	16`-22` CT, MIX HTS		SLK, HC, SP	Native	
UNDERSTORY TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	2	Elaeocarpus decipiens	Japanese Blueberry Tree	15G	6-7` OA	4` W	FTB, SP	Non-native	1.5" DBH
SHRUBS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	44	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native	
	7	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT	18"W	F	Non-native	
	45	Muhlenbergia capillaris	Pink Muhly Grass	3G	24" HT	18"W	F	Native	
	8	Schefflera arboricola	Green Schefflera	3G	24" HT	18"W	F	Non-native	
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	
	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests		

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING

VIVA AT TREASURE COAST EAST

City of Fort Pierce, Florida

Building Unit 3B Typical Landscape Plan

Revisions		
Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By:	PG
Checked By:	PG
Municipal Project:	
Scale:	

NORTH

SCALE: 1" = 10'

0 5' 10' 20'

LA-10

LANDSCAPE SPECIFICATIONS:

PART 1: GENERAL CONDITIONS

1.01 SCOPE:
A. The landscape contract includes the supplying and planting of all trees, shrubs, vines, and ground cover together with all necessary labor, equipment, tools and materials needed for the successful completion, execution and maintenance of the landscape plans.

1.02 AGENCY STANDARDS:
A. Grades and standards of plant materials to be used shall be true to name, size, condition and graded Florida #1 or better as stated in: Grades and Standards of Florida Plant Materials published by the State of Florida Department of Agriculture, Tallahassee, Florida.

1.03 SITE EXAMINATION:
A. The Landscape Contractor shall personally examine the site and fully acquaint him/herself with all of the existing conditions in order that no mis-understanding may afterwards arise as to the character or extent of the work to be performed, and additionally, in order to acquaint him/herself with all precautions to be taken in order to avoid injury to property or persons. No additional compensation will be granted because of any unusual difficulties which may be encountered in the execution or maintenance of any portion of the work.

1.04 ERRORS AND OMISSIONS:
A. The plant list is a part of the drawings and is furnished as a convenience. The plant list indicates the name, size and quantities of specific plant materials as called for and is located on the drawings. The Landscape Contractor is responsible for his/her own quantity count, and any discrepancy between drawings and plant list shall be considered as correct on the drawings.

B. The Landscape Contractor shall not take advantage of errors or omissions in the specifications or contract drawings. Full instruction will be given if such errors are discovered. Upon the discovery of any discrepancies in, or omissions from the drawings or documents, or should the Landscape Contractor be in doubt as to their meaning, the Landscape Architect shall be notified and will determine the actions necessary to each query.

C. If plans and specifications are found to disagree after the contract is awarded, the Landscape Architect shall be the judge as to which was intended.

1.05 EXECUTION OF THE WORK:
A. The Landscape Contractor shall have his labor crews controlled and directed by a Foreman well versed in plant materials, planting methods, reading blueprints, and coordination between job and nursery in order to execute installation correctly and in a timely manner.

B. The Landscape Contractor shall provide a competent English-speaking Foreman on the project at all times, who shall be fully authorized as the Contractor's agent on the work. The Superintendent shall be capable of reading and thoroughly understanding the Plans, Specifications and other Contract Documents. If the Superintendent is deemed incompetent by the Landscape Architect, he (the superintendent) shall be immediately replaced.

C. The Landscape Contractor shall be available for any meetings with the Owner and/or Landscape Architect during implementation of the job. Any additional work or changes required as a result of failure to communicate with the Owner or Landscape Architect during implementation will be the responsibility of the Landscape Contractor.

1.06 PROTECTION OF PUBLIC AND PROPERTY:
A. The Landscape Contractor shall protect all materials and work against injury from any cause and shall provide and maintain all necessary safeguards for the protection of the public. He shall be held responsible for any damage or injury to persons or property which may occur as a result of his fault or negligence in the execution of the work, i.e. damage to underground pipes or cables.

1.07 CHANGES AND EXTRAS:
A. The Contractor shall not start work on any changes or "extras" in the project until a written agreement setting forth the adjusted prices has been executed by the Owner and the Contractor. Any work performed on changes or "extras" prior to execution of a written agreement may or may not be compensated for by the Owner at his discretion.

1.08 GUARANTEE:
A. The Landscape Contractor shall furnish a written guarantee warranting all materials, workmanship and plant materials, except sod, for a period of ONE (1) YEAR from the time of completion and acceptance by the Landscape Architect and Owner. Sod shall be guaranteed to 90 calendar days after acceptance by the Landscape Architect and Owner. All plant material shall be alive and in satisfactory condition and growth for each specific kind of plant at the end of the guarantee period. The guranteeing of plant material shall be construed to mean complete and immediate replacement with plant material of the same variety, type, size, quality and grade as that of the originally specified material. During the guarantee period it shall be the Landscape Contractor's responsibility to immediately replace any dead or unhealthy material as determined by the Landscape Architect. The guarantee will be null and void if plant material is damaged by lightning, hurricane force winds, or any other acts of God, as well as vandalism or lack of proper maintenance.

B. At the end of the specified guarantee period, any plant required under this contract that is dead or not in satisfactory condition, as determined by the Landscape Architect, shall be replaced. The Landscape Contractor shall be responsible for the full replacement cost of plant materials for the first replacement and share subsequent replacement (s) costs equally with the Owner, should the replacement plant fail to survive.

1.09 CARE AND MAINTENANCE:
A. The Landscape Contractor shall be responsible for the care and maintenance of all plant materials and irrigation when applicable until final acceptance by the Owner or Landscape Architect.

B. The Owner agrees to execute the instructions for such care and maintenance.

1.10 SAFETY:
A. It shall be the responsibility of the Landscape Contractor to protect all persons from injury and to avoid property damage. Adequate warning devices shall be placed and maintained during the progress of the work.

B. It shall be the contractor's responsibility to conform to all local, state, and federal safety laws and codes including the Federal Occupational Safety And Health Act (O.S.H.A.) .

1.11 CONTRACTOR QUALIFICATION:
A. The Owner may require the apparent contractor (s) to qualify him/herself to be a responsible entity by furnishing any or all of the following documentary data:
1. A financial statement showing assets and liabilities of the company current to date.
2. A listing of not less than (3) completed projects of similar scope and nature.
3. Permanent name and address of place of business.
4. The number of regular employees of the organization and length of time the organization has been in business under the present name.

1.12 INSURANCE AND BONDING:
A. The contractor (s) shall submit proof of insurance for this job for the time period that the work is done. The minimum amount of insurance shall be $300,000.00 per person and $300,000.00 per aggregate or as required by owner and agreed to in the contract.
The successful bidder shall be required to have this coverage in effect before beginning work on the site.

B. The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

1.13 PERMITS AND CERTIFICATES:
A. All contractors shall secure and pay for all permits and certificates required for his/her class of work.

PART 2: MATERIALS

2.01 PLANT MATERIALS:
A. A complete list of plants is shown on the drawings, including a schedule of quantities, sizes, and such other requirements deemed necessary. In the event discrepancies occur, the specifications on the drawings shall govern.

B. Substitutions: Substitutions of plant materials or changes in size or spacing of materials will be permitted ONLY upon written authorization by the Owner or the Landscape Architect. If plant material is not of sufficient size to meet applicable codes, a letter of variance from the appropriate agency must be obtained by the Contractor prior to issuance of any change order. If material of smaller size is to be accepted, the quantity of material shall be increased, at no additional cost to the Owner, to meet the intent of the drawings.

C. All plant materials shall have a habit of growth that is normal for the species and shall be healthy, vigorous and equal to or exceed the measurements specified in the plant list, which are the minimum acceptable sizes. Plants shall be measured before pruning with branches in normal position. Any necessary pruning shall be done at the time of planting.

D. All plant materials shall be nursery grown, unless otherwise noted, Florida #1 or better and shall comply with all required inspections, grading standards and plant regulations as set forth by the Florida Department of Agriculture's Grades and Standards for Nursery Plants, most current addition and Grades and Standards for Nursery Plants, most current addition.

E. Plants that do not have the normal balance of height and spread typical for the respective plant shall not be acceptable.

F. The Landscape Contractor shall install each plant to display its best side. Adjustments may be required if plants are not installed properly and/or approved by the Landscape Architect at no additional cost to owner.

2.02 INSPECTION
A. The Landscape Architect and Owner may inspect trees and shrubs at place of growth or at site before planting, for compliance with requirements for genus, species, variety, size and quality. The Landscape Architect and Owner retain the right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Rejected plant materials shall be immediately removed from project site.

2.03 PROTECTION OF PLANT MATERIALS:
A. Balled and burlapped plants (B & B) shall be dug with firm natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Balls shall be firmly wrapped with burlap similar materials and bound with cord, rope, or wire mesh. All collected plants shall be balled and burlapped.

B. Plants with broken, damaged or insufficient rootballs will be rejected.

C. All plant material shall be protected from possible bark injury or breakage of branches. All plants transported by open trucks shall be adequately covered to prevent windburn, drying or damage to plants.

D. Plants which cannot be planted immediately on delivery to the site shall be covered with moist soil, mulch or other protection from the drying of wind and sun. All plants shall be watered as necessary by the Landscape Contractor until planted.

2.04 STORAGE:
A. All plant materials shall be stored on the site in designated areas, specified by the Landscape Architect or Owner's agent.

B. No plant material shall be stored longer than seventy-two (72) hours unless approved by by Landscape Architect and/or owner.

C. The Landscape Architect reserves the right to reject any plant materials not in conformance with these specifications.

D. All rejected material shall be immediately removed from the site and replaced with acceptable material at no cost to the Owner.

2.05 PROTECTION DURING PLANTING:
A. Trees moved by winch or crane shall be thoroughly protected from chain marks, girdling or bark slippage by means of burlap, wood battens or other approved methods. Battens shall NOT be attached to the tree with nails.

2.06 PLANTING SOIL:
A. Planting soil for all plantings shall consist of existing native soil and shall be free of debris, roots, clay, stones, plants or other foreign materials which might be a hindrance to planting operations or be detrimental to good growth.

2.07 FERTILIZER:
A. Commercial fertilizer shall comply with the state fertilizer laws. Nitrogen shall not be less than 40% from organic source. Inorganic chemical nitrogen shall not be derived from the sodium form of nitrate. Fertilizers shall be delivered to the site in unopened original containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer that becomes caked or otherwise damaged shall be rejected.

B. Thoroughly mixed 3 lbs. of commercial fertilizer to each cubic yard of planting soil.

C. Tabletized fertilizer shall be Agriform planting tablets 20-10-5 formula, 21 gram or equal. All trees and shrubs shall be fertilized with tabletized fertilizer as follows. While backfilling plant holes, fertilizer tablets shall be equally spaced and placed adjacent to the ball mid-way in depth in accordance with the following rates:

1 gallon container	1 tablet
3 gallon container	2 tablets
5 gallon container	3 tablets
7 gallon	5 tablets

Large tubs, wire baskets, grow bags, and balled and burlapped material shall have 1 tablet for each 1/2 inch of trunk diameter (measured 3 feet from ground) or for each foot of height or spread of larger shrub material.
The Landscape Architect reserves the right to inspect and review the application of fertilizer.

2.08 MULCH:
A. Mulch material shall be clean, dry, free of weeds, seeds and pests, moistened at the time of application to prevent wind displacement. Cypress &/or Red mulch is prohibited.

B. All trees and shrub beds shall receive 3" mulch immediately after planting and thoroughly watered. Apply 2" max on tree & palm rootballs, keep away from tree & palm trunks or as required by local jusidiction.

PART 3: EXECUTION
3.01 DIGGING:
A. The Landscape Contractor shall exercise care in digging and other work so as not to damage existing work, including overhead wires, underground pipes and cables and the pipes and hydrants of watering systems. Should such overhead or underground obstructions be encountered which interfere with planting, the Owner shall be consulted and contractor will adjust the location of plants to clear such obstruction. The Contractor shall be responsible for the immediate repair of any damage caused by his work.

3.02 GRADING:
A. Grading for drainage, swales, etc. to within 4 inches of the finished grade to be provided by others.

B. It shall be the responsibility of the Landscape Contractor to provide the final grading during the course of landscape installation so as to bring sod and planting areas to their proper elevations in relation to walks, paving, drain structures, and other site conditions. The site grading plan must be checked prior to installation of sod to insure that drainage and other conditions will NOT be modified.

3.03 PLANTING:
A. Planting shall take place during favorable weather conditions.

B. The Contractor shall call for utility locates and ascertain the location of all utilities and easements so proper precautions can be taken not to damage or encroach on them.

C. Tree Planting shall be located where it is shown on the plan. No planting holes shall be dug until the proposed locations have been staked on the ground by the Contractor.

D. Excavation of holes shall extend to the required subgrades as specified on the planting diagrams located in the planting plans. Plant pits shall be circular in outline and shall have a profile which conforms to the aforementioned "Tree and Shrub Planting Diagrams".

E. A representative number of planting pits (a minimum of one in every 25 feet throughout the entire site) shall be tested for proper drainage. See Landscape Plan for complete testing methods and requirements.

F. Planting pits shall be excavated to the following dimensions and refilled with a mixture of (1/2) planting soil (1/2) existing native soil];
1 Gallon material (1 gal.): 12" x 12" x 12" min.
3 Gallon material (3 gal.): 20" x 20" x 18" min.
Lerio material (7 gal.): 30" x 30" x 24" min.
Field grown material and trees: 1-1/2 times width of ball and depth of ball plus 12" min.

G. No planting or laying of sod shall be initiated until the area has been cleaned of existing sod or other plant materials, rough grass, weeds, debris, stones etc. and the ground has been brought to an even grade, with positive drainage away from buildings and towards drain inlets and swales and approved by Landscape Architect or owner's rep.

H. Each plant shall be planted in an individual hole as specified for trees, shrubs, and vines.

I. All plants shall be set to ultimate finished grade. No filling will be permitted around trunks or stems. All ropes, wire, stakes, etc., shall be removed from sides and top of the ball and removed from hole before filling in.

J. All flagging ribbon shall be removed from trees and shrubs before planting.

K. Excess excavation (fill) from all holes shall be removed from the site, at no additional expense to Owner.

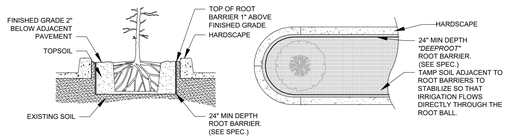
L. All palms shall be backfilled with sand, thoroughly washed in during planting operations and with a shallow saucer depression left at the soil line for future waterings. Saucer areas shall be top-dressed two (2") inches deep with topsoil raked and left in a neat, clean manner.

3.04 PRUNING:
A. Remove dead and broken branches from all plant material. Prune to retain typical growth habit of individual plants with as much height and spread as possible in a manner which will preserve the plant's natural character.

B. Make all cuts with sharp instruments flush with trunk or adjacent branch, in such a manner as to insure elimination of stubs. Cuts made at right angles to line of growth will not be permitted.

C. Trees shall not be poled or topped.

D. Remove all trimmings from site.



SPECIAL APPLICATIONS ROOT BARRIER DETAIL
NOT TO SCALE

NOTES:
1- ROOT BARRIER SHALL BE "DEEPROOT" 24" DEPTH OR APPROVED EQUAL.
2- ROOT BARRIER SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

3.05 GUYING:
A. All trees over six (6') feet in height shall, immediately after setting to proper grade, be guyed with three sets of two strands, No. 12 gauge malleable galvanized iron, in tripod fashion. See Detail.

B. Wires shall not come in direct contact with the tree but shall be covered with an approved protection device at all contact points. Wires shall be fastened in such a manner as to avoid pulling crotches apart.

D. Stake & Brace all treess larger than 12' oa. See detail.
Stakes shall be 2" x 2" lumber of sufficient length to satisfactorily support each tree.

E. Turnbuckles for guying trees shall be galvanized or cadmium plated and shall be of adequate size and strength to properly maintain tight guy wires.

3.06 WATER:
A. Each plant or tree shall be thoroughly watered in after planting. Watering of all newly installed plant materials shall be the responsibility of the Landscape Contractor until final acceptance by the Landscape Architect.

B. See General Notes of Landscape Plan for water source.

3.07 SOD:

A. The Landscape Contractor shall sod all areas indicated on the drawings.

B. It shall be the responsibility of the Landscape Contractor to fine grade all landscape areas, eliminating all bumps, depressions, sticks, stones, and other debris.

C. The sod shall be firm, tough texture, having a compacted growth of grass with good root development. It shall contain no noxious weeds, or any other objectionable vegetation, fungus, insects, or disease. The soil embedded in the sod shall be good clean earth, free from stones and debris.

D. Before being cut and lifted, the sod shall have been mowed at least three times with a lawn mower, with the final mowing not more than seven days before the sod is cut. The sod shall be carefully cut into uniform dimensions.

E. 6-6-6 fertilizer with all trace elements is to be applied at the rate of 40 lbs. per 1,000 sq. ft. prior to laying sod.

F. Solid sod shall be laid with closely abutting, staggered joints with a tamped or rolled, even surface.

G. The finished level of all sod areas after settlement shall be one (1") inch below the top of abutting curbs, walks, paving and wood borders to allow for building turf.

H. If in the opinion of the Landscape Architect, top dressing is necessary after rolling, clean yellow sand will be evenly applied over the entire surface and thoroughly washed in.

3.08 SEEDING:
A. The Landscape Contractor shall remove all vegetation and rocks larger than (1") in diameter from areas to be seeded, scarify the area, then apply fertilizer at a rate of 500 lbs. per acre.

B. Application: Argentine Bahia Grass seed - 200 Pounds per acre mixed with common hulled Bermuda seed - 30 lbs. per acre. All other seed mixtures shall be applied per the manufacturer's instructions.

C. Roll immediately after seeding with a minimum 500 pound roller, then apply straw mulch at the rate of 2,500 pounds per acre.

D. Apply fertilizer at the rate of 150 lbs. per acre 45-60 days after seeding.

3.09 CLEANING UP:
A. The contractor shall at all times keep the premises free from accumulations of waste materials or rubbish caused by his employees or work. He shall leave all paved areas "broom clean" when completed with his work.

3.10 MAINTENANCE:
A. Maintenance shall begin immediately after each plant is installed and shall continue until all planting has been accepted by the Owner or Landscape Architect. Maintenance shall include watering, weeding, removal of dead materials, resetting plants to proper grades or upright positions, spraying, restoration of planting saucer and/or any other necessary operations.

B. Proper protection to lawn areas shall be provided and any damage resulting from planting operations shall be repaired promptly.

C. Replacement of plants during the maintenance period shall be the resposnibility of the Contractor, excluding vandalism or damage on the part of others, lighting, or hurricane force winds, until final acceptance.

D. In the event that weeds or other undesirable vegetation become prevalent, it shall be the Contractor's responsibility to remove them.

E. Trees or other plant material which fall or are blown over during the maintenance period will be reset by the Contractor at no additional expense to the Owner, the only exception being hurricane force winds.

3.11 COMPLETION, INSPECTION AND ACCEPTANCE:
A. Completion of the work shall mean the full and exact compliance and conformity with the provisions expressed or implied in the Drawings and in the Specifications, including the complete removal of all trash, debris, soil or other waste created by the Landscape Contractor.

B. Inspection of work to determine completion of contract, exclusive of the possible replacement of plants, will be made by the Owner and/or Landscape Architect at the conclusion of all planting and at the request of the Landscape Contractor.

C. All plant material shall be alive and in good growing condition for each specified kind of plant at the time of acceptance. The rating of each plant according to Florida Grades and Standards shall be equal to or better than that called for on the plans and in these Specifications at the time of final inspection and acceptance.

D. After inspection, the Landscape Contractor will be notified by the Owner of the acceptance of all plant material and workmanship, exclusive of the possible replacement of plants subject to guarantee.

DRAINAGE TESTING/DRAINAGE CHANNEL REQUIREMENTS

PRIOR TO PLANTING ALL PLANTING PITS SELECTED FOR TESTING SHALL BE TESTED IN THE FOLLOWING MANNER

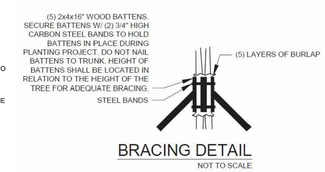
A. DIG EACH PLANTING PIT TO THE MINIMUM SPECIFIED SIZE.

B. FILL PLANTING PIT WITH TWELVE INCHES (12") OF WATER. IF THE WATER LEVEL DROPS FOUR (4") OR MORE WITHIN FOUR (4) HOURS, THE DRAINAGE IS SUFFICIENT AND A DRAINAGE CHANNEL IS NOT REQUIRED IF THE WATER LEVEL DROPS LESS THAN FOUR INCHES (4") WITHIN THE FOUR (4) HOUR PERIOD, A DRAINAGE CHANNEL IS REQUIRED.

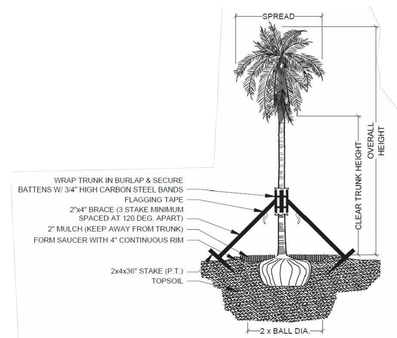
C. WHERE REQUIRED, THE DRAINAGE CHANNEL MUST EXTEND DOWN THROUGH THE NON POROUS SOIL AND INTO POROUS SOIL. (SEE DETAIL)

D. ALL MATERIAL REMOVED FROM THE DRAINAGE CHANNEL SHALL BE DISCARDED.

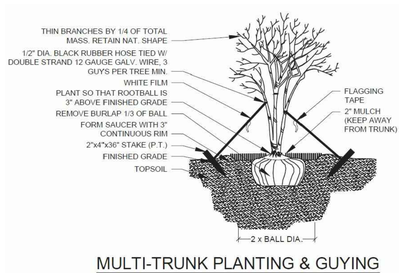
E. WHEN BACKFILLING PLANTING PITS WITH PLANTING MIXTURE, CARE MUST BE TAKEN TO KEEP THE CONSISTENCY OF THE SOIL MIX THE SAME THROUGHOUT THE PLANTING PIT AND DRAINAGE CHANNEL.



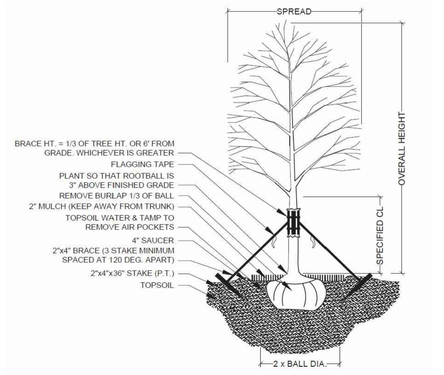
BRACING DETAIL
NOT TO SCALE



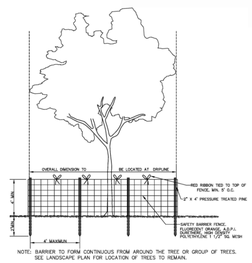
PALM PLANTING - ANGLE STAKE
NOT TO SCALE



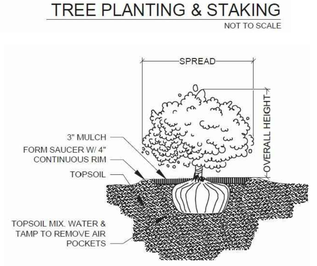
MULTI-TRUNK PLANTING & GUYING
NOT TO SCALE



TREE PLANTING & STAKING
NOT TO SCALE



TREE PROTECTION DETAIL
NOT TO SCALE



SHRUB PLANTING
NOT TO SCALE

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

Brandon White | Owner
772-834-1357 | brandon@las-fl.com
Paul Goulas | Owner
772-631-8400 | paul@las-fl.com
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983

Civil Engineer:

STEPHEN COOPER, P.E. & ASSOCIATES, INC.
CONSULTING ENGINEERS
CIVIL ENGINEERING * SITE PLANNING * ENVIRONMENTAL PERMITTING
1382 SW 12 CT PORT ST. LUCIE, FL 34986
PHONE (772) 878-9001 FAX (772) 336-6624
E-MAIL STEPHEN@STEPHENCOOPERPE.COM

VIVA AT TREASURE COAST EAST
City of Fort Pierce, Florida

Details & Specifications

Revisions

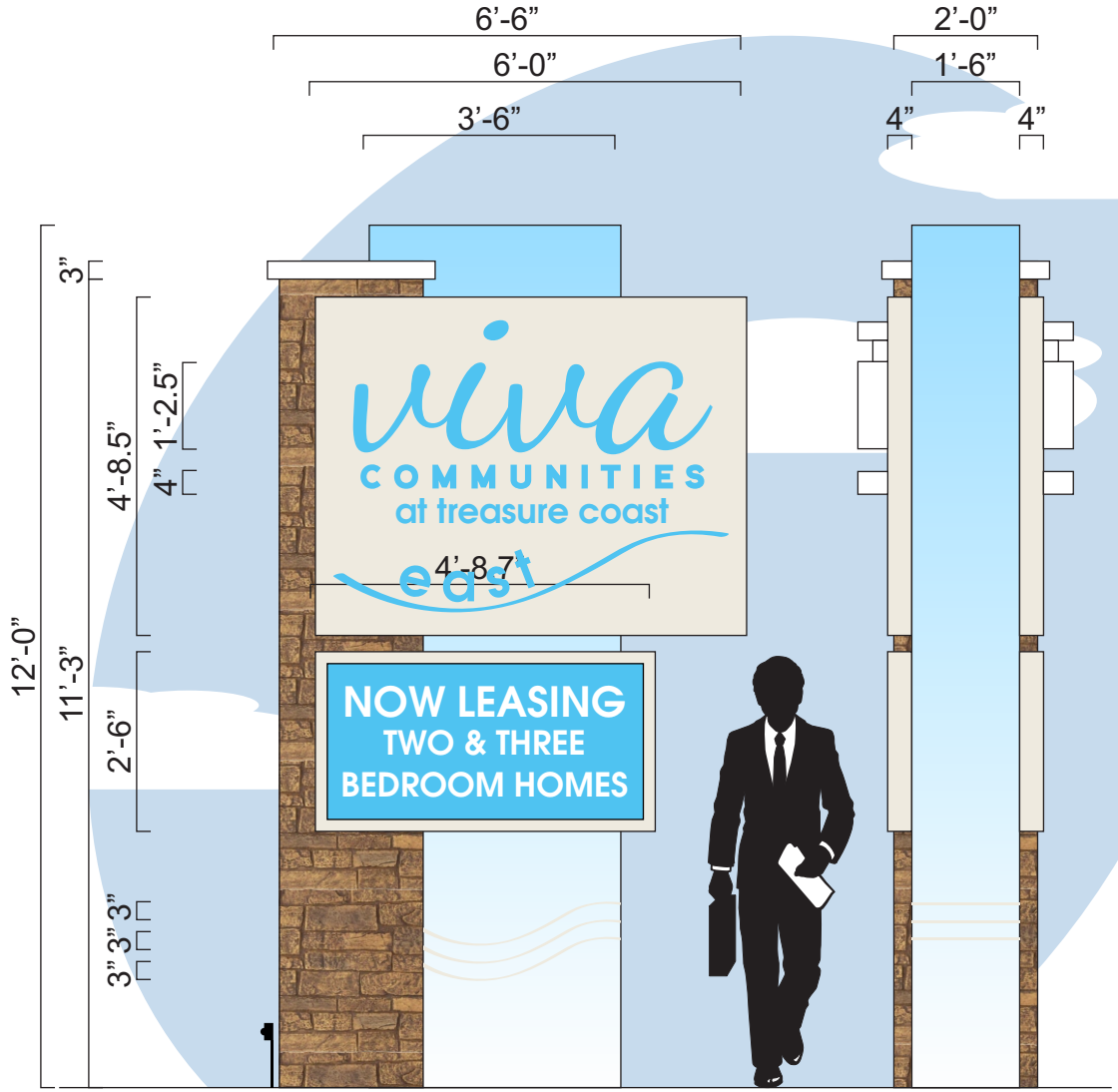
Date	Init.	Description
7.15.23	PG	Submittal

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By: PG
Checked By: PG
Municipal Project:
Scale:

LA-11



MANUFACTURE & INSTALL ONE (1) DOUBLE FACED, ILLUMINATED GROUND SIGN.

MAIN STRUCTURE - ALL ALUMINUM CONSTRUCTION OVER INTERNAL ANGLE FRAME, FINISH TO BE TEXTURED. MAIN ID CABINET TO BE ALL ALUMINUM OVER INTERNAL ANGLE FRAME WITH TEXTURED FINISH.”VIVA COMMUNITES” COPY TO BE FACE ILLUMINATED CHANNEL LETTERS. “AT TREASURE COAST” AND SWOOSH TO BE ROUTED OUT OF FACES AND BACKED WITH .125 FLAT WHITE PLEX, HAVING VINYL APPLIED FIRST SURFACE. DECORATIVE STRIPES TO BE VINYL APPLIED FIRST SURFACE AND MASKED.

LOWER INFORMATIONAL CABINET TO BE ALL ALUMINUM OVER INTERNAL ANGLE FRAME WITH 2” ANGLE FACE RETAINERS. FINISH TO BE TEXTURED. FACES TO BE .187 FLAT WHITE POLYCARBONATE WITH VINYL APPLIED FIRST SURFACE.

COLUMN - ALL ALUMINUM CONSTRUCTION OVER INTERNAL ANGLE FRAME, TO RECEIVE FAUX STONE PANELING. CAP TO BE FABRICATED ALUM WITH TEXTURED FINISH.

TO BE ILLUMINATED USING WHITE (7000k) LED’s.

NOTE: COLORS T.B.D.

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

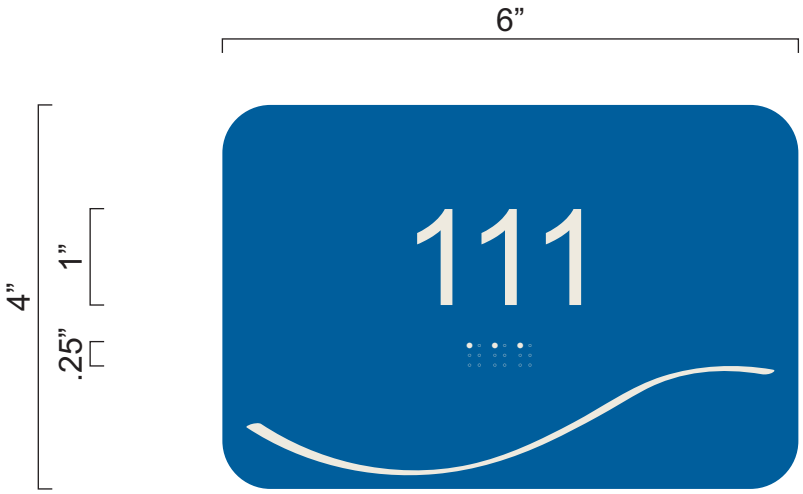
CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION:						PROJECT MANAGER:	DESIGNER:
Ground Sign						Elisha White	MB
COMPANY:	DRAWING NUMBER:	INITIAL DRAWING DATE:	REVISION	REVISION	REVISION		
Viva TCE	22-0118 01 A	2/25/2022					
CONTACT:	PHONE:	E-MAIL:				SCALE: 3/8” = 1’-0”	
ADDRESS:		FILEPATH:				SHEET 1 of 1	
Viva Communities at Treasure Coast East		F:\grfx\V Jobs\Viva Treasure Coast\Fort Pierce, Jenkins Rd\E\22-0118, East Package\Drawings\22-0118 01 A Viva TCE - Ground Sign.cdr					

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



Unit ID Concept

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

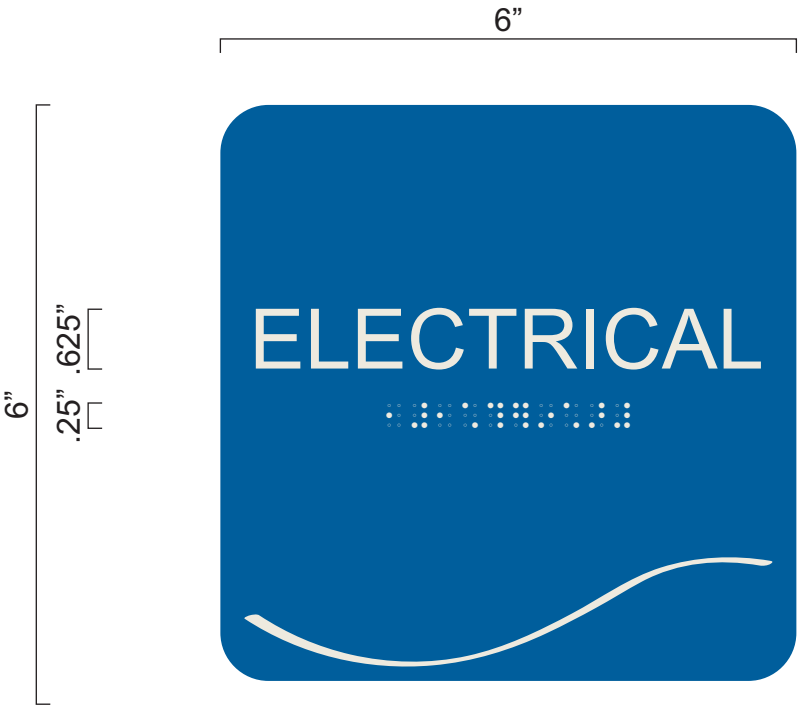
CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION:						PROJECT MANAGER:	DESIGNER:
Unit ID						Elisha White	MB
COMPANY:	DRAWING NUMBER:	INITIAL DRAWING DATE:	REVISION	REVISION	REVISION		
Viva Apts	21-0757 02 A	10/11/2021					
CONTACT:	PHONE:	E-MAIL:				SCALE: 1/2” = 1”	
ADDRESS:		FILEPATH:					
Viva Communities at Treasure Coast East		Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr				SHEET 2 of 12	

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



Room ID Concept

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION: Room ID					PROJECT MANAGER: Elisha White	DESIGNER: MB
COMPANY: Viva Apts	DRAWING NUMBER: 21-0757 03 A	INITIAL DRAWING DATE: 10/11/2021	REVISION	REVISION	REVISION	
CONTACT:	PHONE:	E-MAIL:	SCALE: 1/2” = 1”			
ADDRESS: Viva Communities at Treasure Coast East	FILEPATH: Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr					SHEET 3 of 12

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



Amenities Concept

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

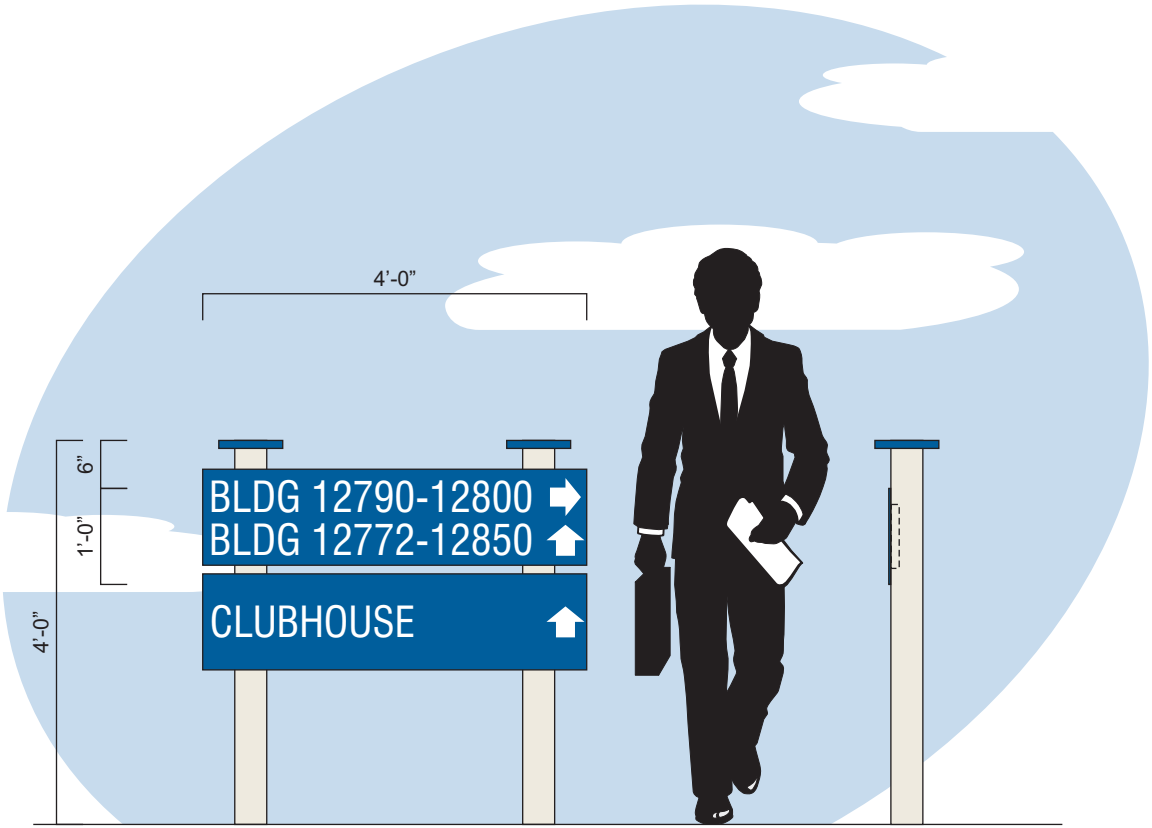
This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

CUSTOMER APPROVAL:

SIGNATURE _____ DATE _____

JOB DESCRIPTION: Amenities					PROJECT MANAGER: Elisha White	DESIGNER: MB
COMPANY: Viva Apts	DRAWING NUMBER: 21-0757 04 A	INITIAL DRAWING DATE: 10/11/2021	REVISION	REVISION	REVISION	
CONTACT:	PHONE:	E-MAIL:	SCALE: 1/2" = 1"			
ADDRESS: Viva Communities at Treasure Coast East	FILEPATH: Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr					SHEET 4 of 12

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



Wayfinding Concept

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

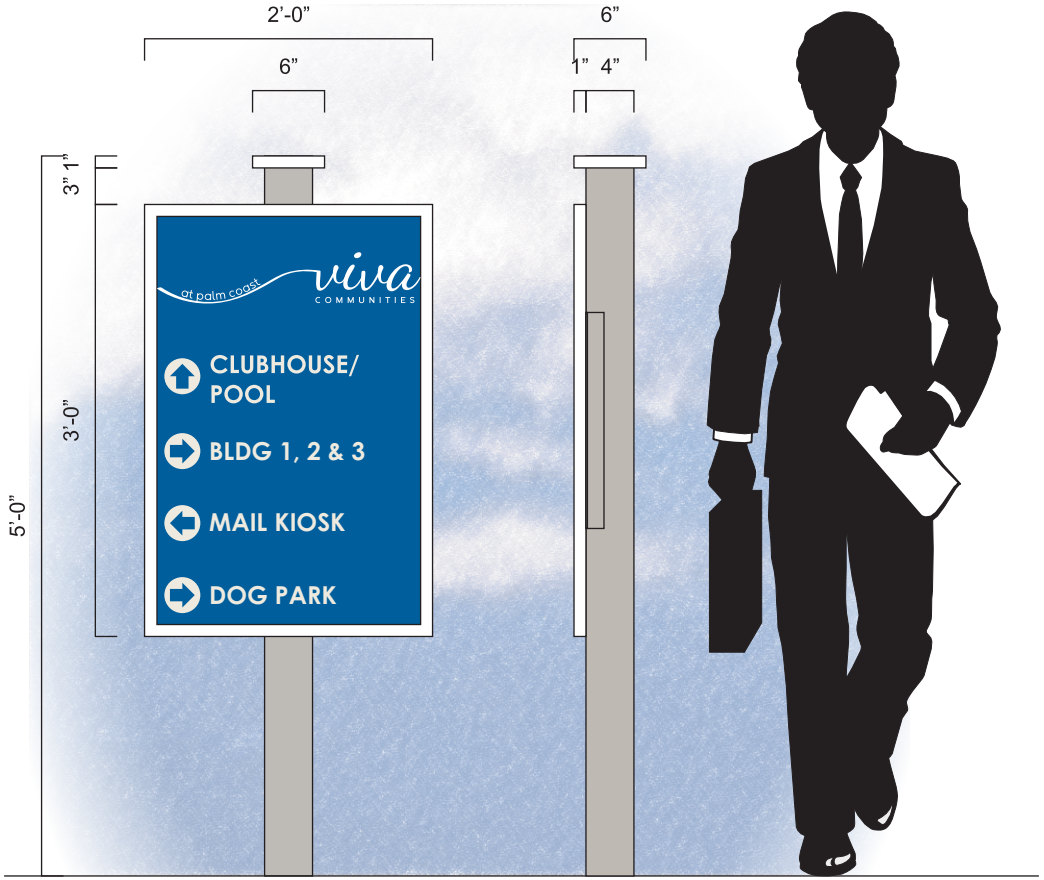
CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION: Wayfinding					PROJECT MANAGER: Elisha White	DESIGNER: MB
COMPANY: Viva Apts	DRAWING NUMBER: 21-0757 05 A	INITIAL DRAWING DATE: 10/11/2021	REVISION	REVISION	REVISION	
CONTACT:	PHONE:	E-MAIL:	SCALE: 1/2" = 1'-0"			
ADDRESS: Viva Communities at Treasure Coast East	FILEPATH: Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr					SHEET 5 of 12

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



Directional Concept

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

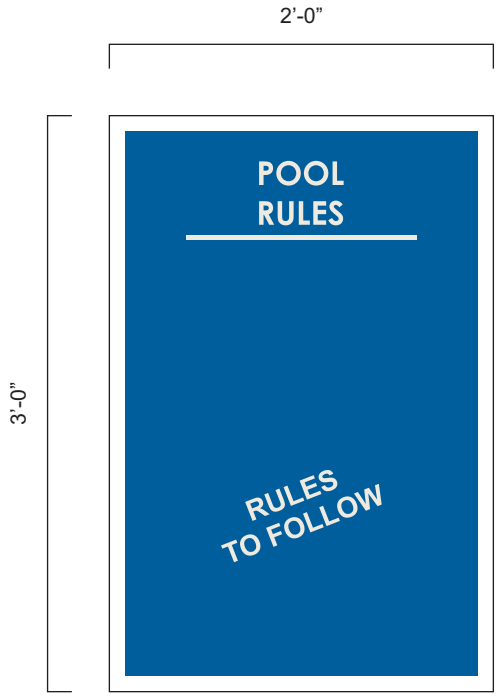
CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION:						PROJECT MANAGER:	DESIGNER:
Directional						Elisha White	MB
COMPANY:	DRAWING NUMBER:	INITIAL DRAWING DATE:	REVISION	REVISION	REVISION		
Viva Apts	21-0757 06 A	10/11/2021					
CONTACT:	PHONE:	E-MAIL:				SCALE: 1/2" = 1'-0"	
ADDRESS: Viva Communities at Treasure Coast East		FILEPATH: Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr					SHEET 6 of 12

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



Rules Concept

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION: Rules					PROJECT MANAGER: Elisha White	DESIGNER: MB
COMPANY: Viva Apts	DRAWING NUMBER: 21-0757 07 A	INITIAL DRAWING DATE: 10/11/2021	REVISION	REVISION	REVISION	
CONTACT:	PHONE:	E-MAIL:	SCALE: 1" = 1'-0"			
ADDRESS: Viva Communities at Treasure Coast East	FILEPATH: Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr		SHEET 7 of 12			

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS

2'-0"

8"

0000

Bldg Address Concept

LEE DESIGNS

3300 PALM AVENUE, FT. MYERS, FL 33901

PHONE: 239.278.4245

FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION:						PROJECT MANAGER:	DESIGNER:
Address						Elisha White	MB
COMPANY:	DRAWING NUMBER:	INITIAL DRAWING DATE:	REVISION	REVISION	REVISION		
Viva Apts	21-0757 08 A	10/11/2021					
CONTACT:	PHONE:	E-MAIL:				SCALE: 1/4" = 1"	
ADDRESS:		FILEPATH:					
Viva Communities at Treasure Coast East		Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr				SHEET 8 of 12	

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS

6”

9”



ICOF Concept

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

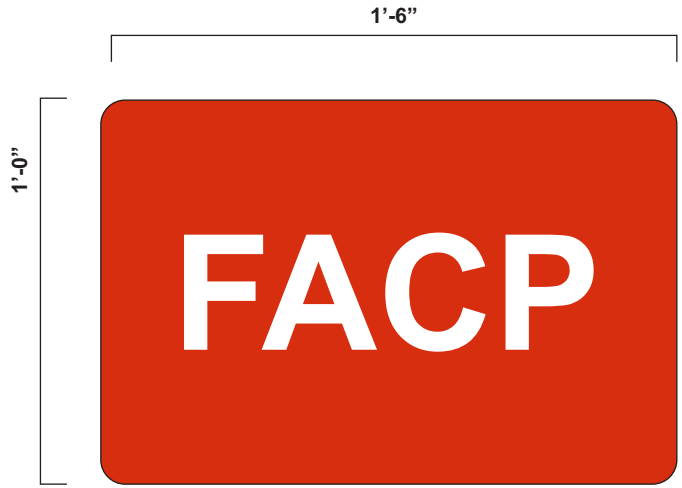
CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION:						PROJECT MANAGER:	DESIGNER:
ICOF						Elisha White	MB
COMPANY:	DRAWING NUMBER:	INITIAL DRAWING DATE:	REVISION	REVISION	REVISION		
Viva Apts	21-0757 09 A	10/11/2021					
CONTACT:	PHONE:	E-MAIL:				SCALE: 1/2” = 1”	
ADDRESS:		FILEPATH:					
Viva Communities at Treasure Coast East		Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr				SHEET 9 of 12	

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



FACP

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

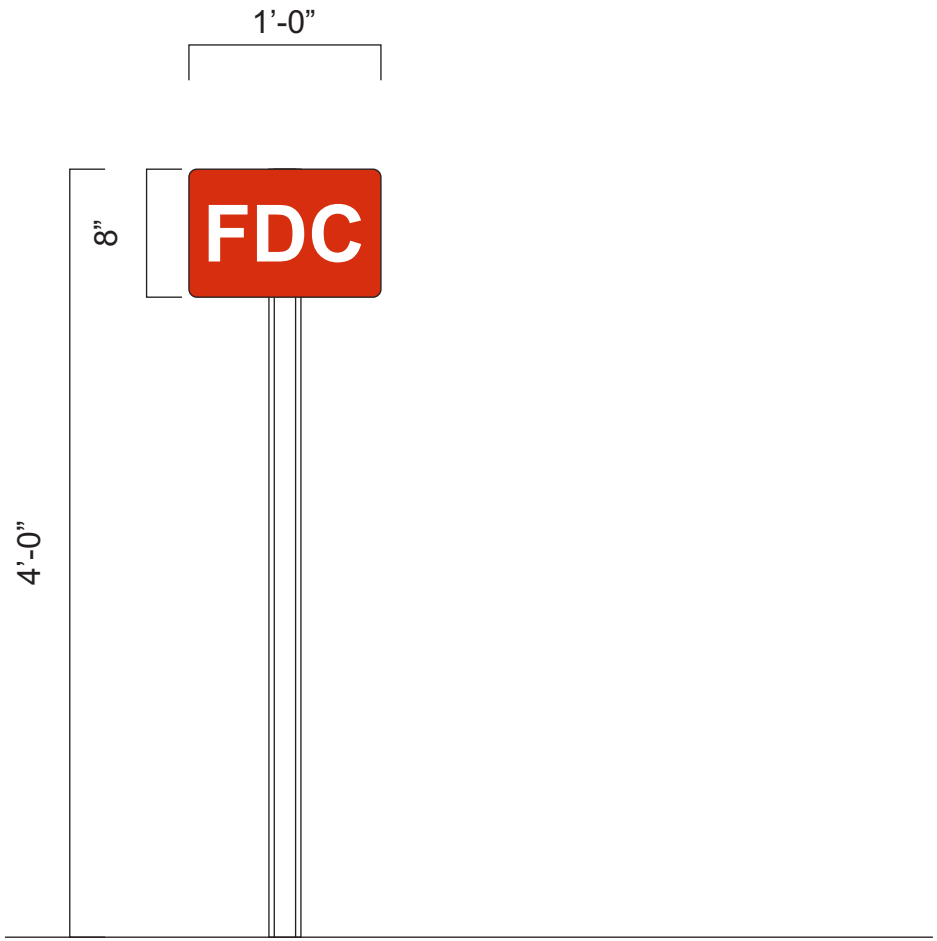
CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION: FACP					PROJECT MANAGER: Elisha White	DESIGNER: MB
COMPANY: Viva Apts	DRAWING NUMBER: 21-0757 10 A	INITIAL DRAWING DATE: 10/11/2021	REVISION	REVISION	REVISION	
CONTACT:	PHONE:	E-MAIL:			SCALE: 1” = 1’-0”	
ADDRESS: Viva Communities at Treasure Coast East		FILEPATH: Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr				SHEET 10 of 12

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



FDC

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

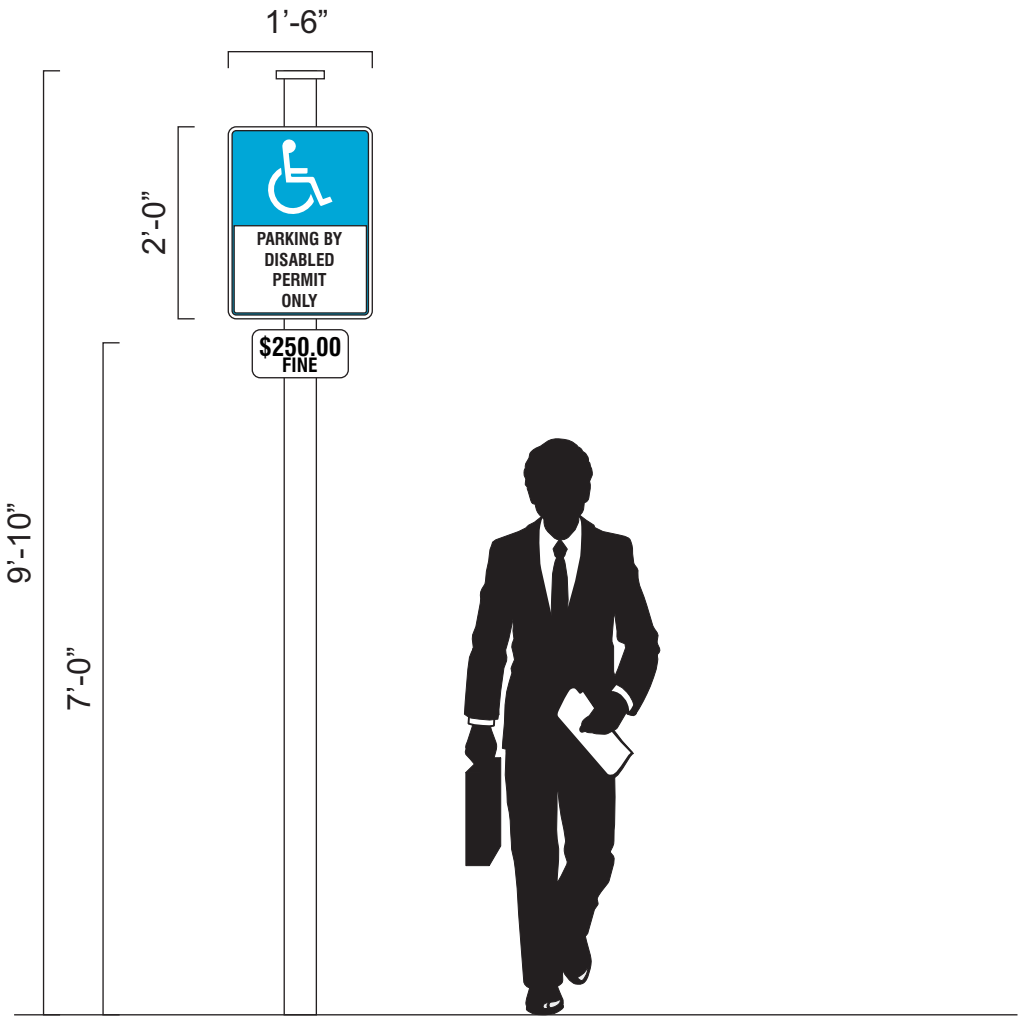
CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION:						PROJECT MANAGER:	DESIGNER:
FDC						Elisha White	MB
COMPANY:	DRAWING NUMBER:	INITIAL DRAWING DATE:	REVISION	REVISION	REVISION		
Viva Apts	21-0757 11 A	10/11/2021					
CONTACT:	PHONE:	E-MAIL:				SCALE: 1” = 1’-0”	
ADDRESS:		FILEPATH:					
Viva Communities at Treasure Coast East		Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr				SHEET 11 of 12	

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



HC Parking

LEE DESIGNS
3300 PALM AVENUE, FT. MYERS, FL 33901
PHONE: 239.278.4245
FAX: 239.278.3912

ALL ELECTRICAL WORK TO BE DONE IN COMPLIANCE WITH NFPA 70-17

ISA MEMBER

UL REGISTERED FIRM REG#: E216325

This sign, including, but not limited to, all plastic or similar components thereof, has been designed in compliance with the 2020 Florida Building Code 7th Edition, 1609 Wind Loads, ASCE/SEI 7-16 Wind Loads, 3107, and NFPA 70-17

CUSTOMER APPROVAL:

SIGNATURE

DATE

JOB DESCRIPTION:						PROJECT MANAGER:	DESIGNER:
HC Parking						Elisha White	MB
COMPANY:	DRAWING NUMBER:	INITIAL DRAWING DATE:	REVISION	REVISION	REVISION		
Viva Apts	21-0757 12 A	10/11/2021					
CONTACT:	PHONE:	E-MAIL:				SCALE: 1” = 1’-0”	
ADDRESS:		FILEPATH:					SHEET 12 of 12
Viva Communities at Treasure Coast East		Z:\grfx\V Jobs\Viva Apartments\Palm Coast, Haven Blvd\Elisha\21-0757, Package\Drawings\21-0757 01 A Viva Palm Coast - Package.cdr					

THIS DESIGN IS THE EXCLUSIVE PROPERTY OF LEE DESIGNS LLC AND IS NOT TO BE USED IN WHOLE OR PART BY ANY OTHER PARTIES WITHOUT WRITTEN PERMISSION BY LEE DESIGNS LLC DIMENSIONS AND COLORS MAY VARY SLIGHTLY DUE TO LIMITATIONS WITH FABRICATION MATERIALS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD, & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

NO.	DATE	ISSUE NOTE

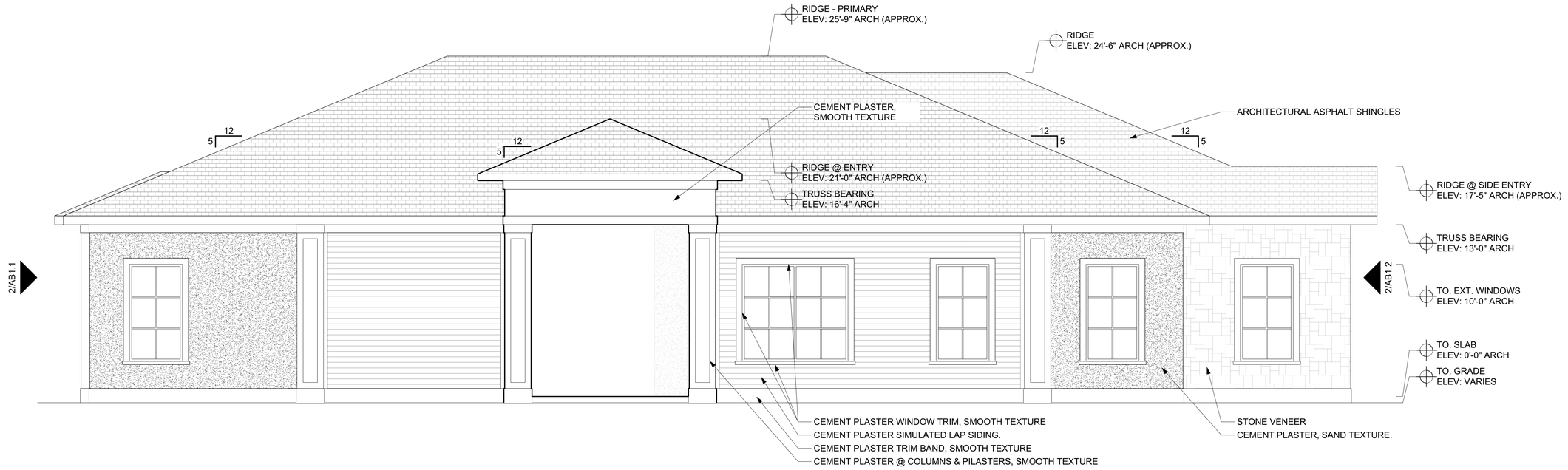
Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By
Project ID	
1032	

Sheet Title

AMENITIES
BUILDING

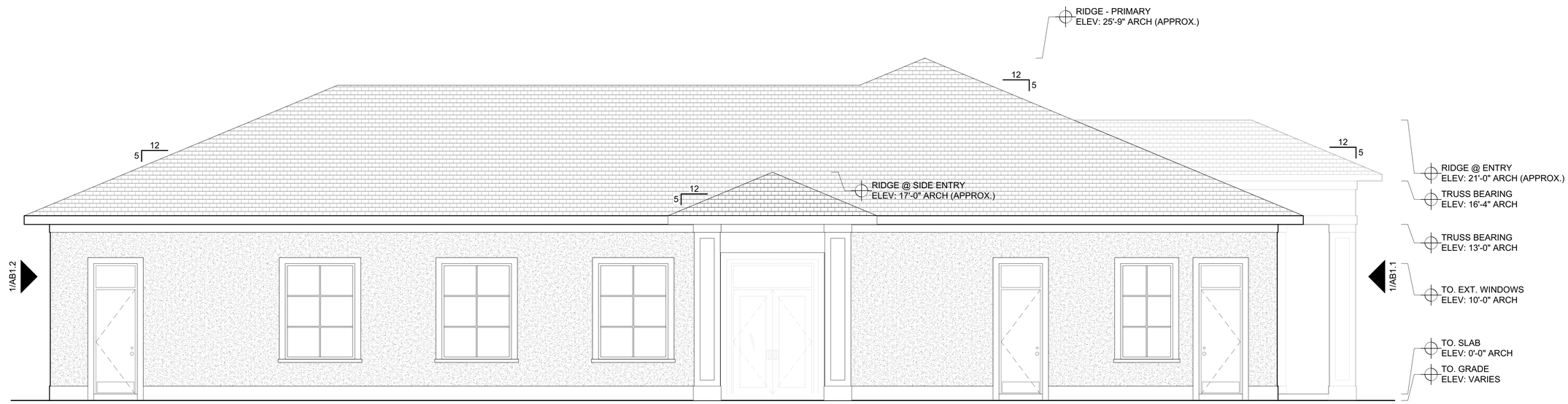
Sheet No.

AB1



1 / AB1 — CLUBHOUSE - FRONT ELEVATION
Scale: 1/4" = 1'-0"

SEE 1/AB1.1 FOR MATERIAL DESGNATIONS



2 / AB1 — CLUBHOUSE - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

NO.	DATE	ISSUE NOTE

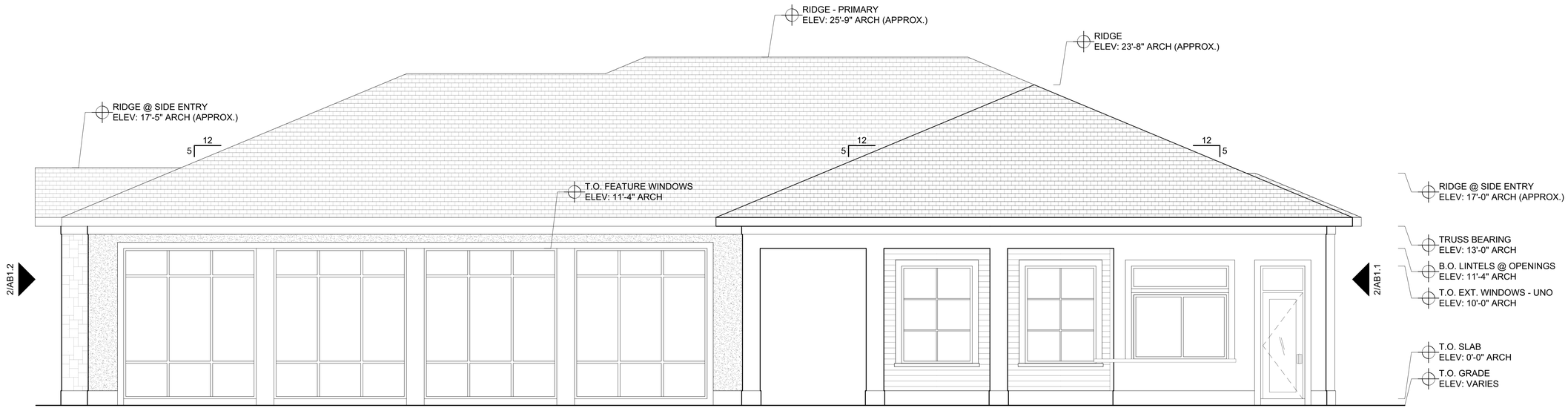
Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

Project ID
1032

Sheet Title
AMENITIES BUILDING

Sheet No.
AB1

SEE 1/AB1.1 FOR MATERIAL DESGNATIONS



1 AB1-2 CLUBHOUSE - REAR ELEVATION
Scale: 1/4" = 1'-0"

SEE 1/AB1.1 FOR MATERIAL DESGNATIONS



2 AB1-2 CLUBHOUSE - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

Project ID
1032

Sheet Title
AMENITIES BUILDING

Sheet No.
AB1-2



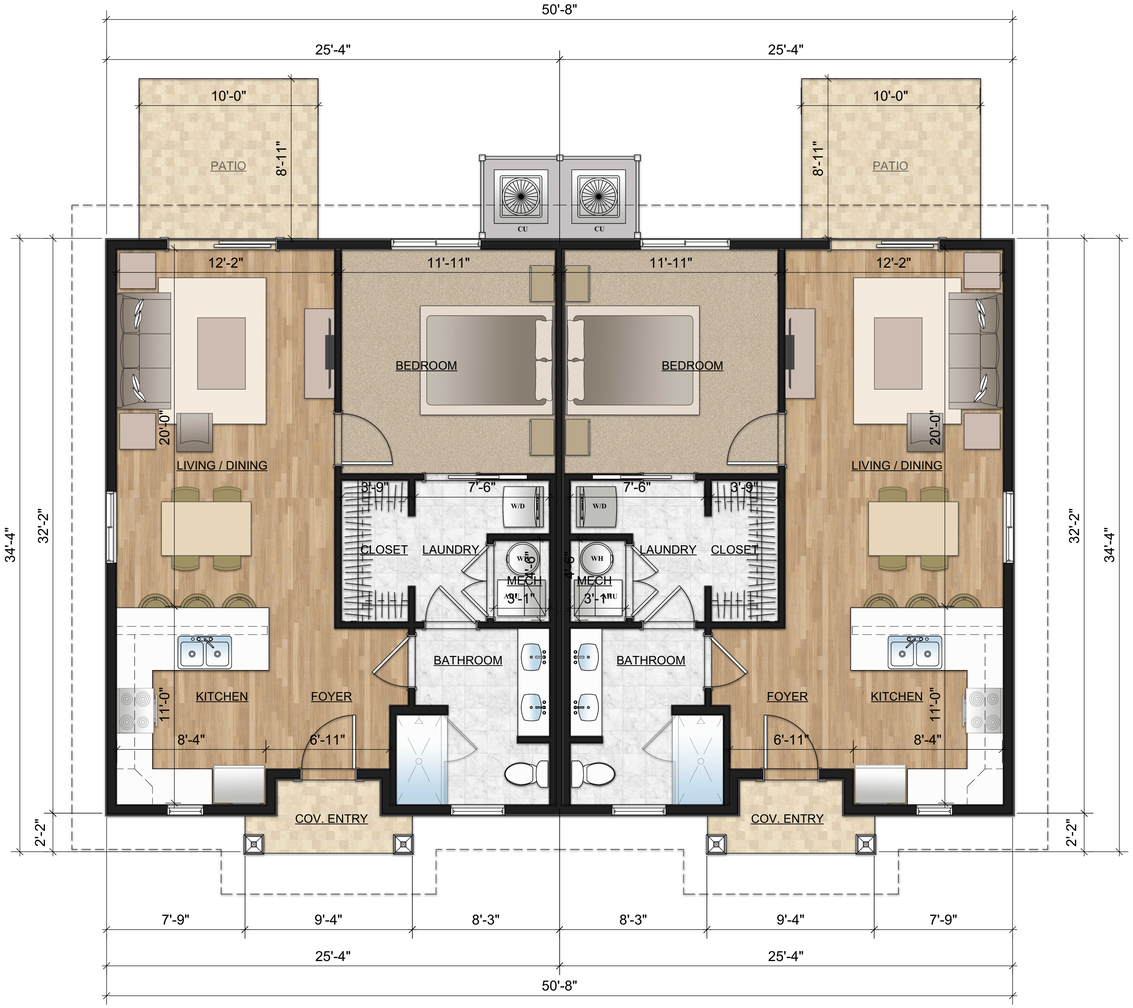
© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD, & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

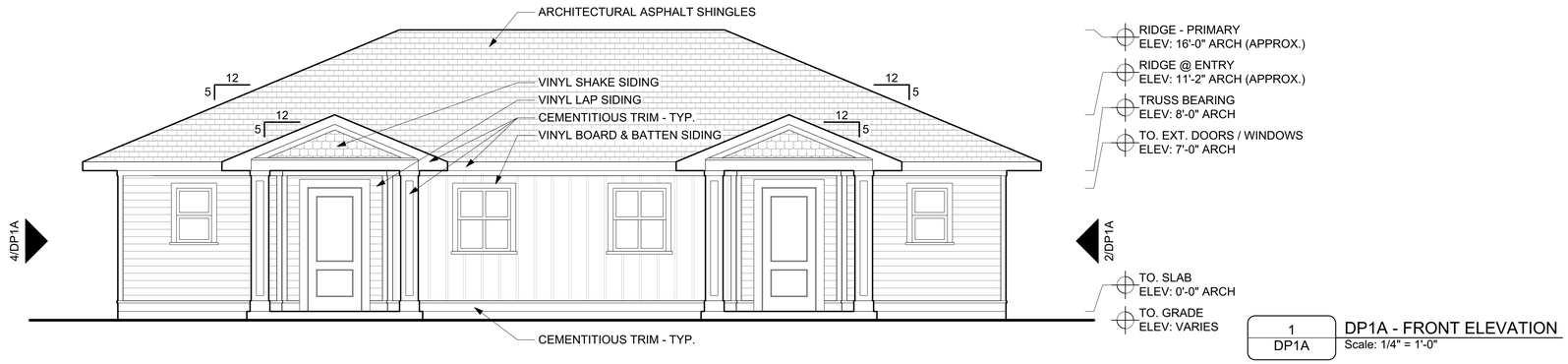
Project ID
1032

Sheet Title

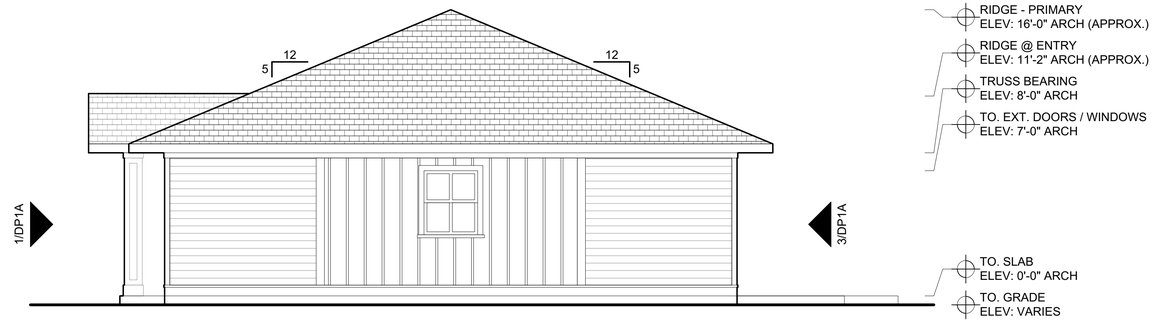
ONE BEDROOM
DUPLEX

Sheet No.

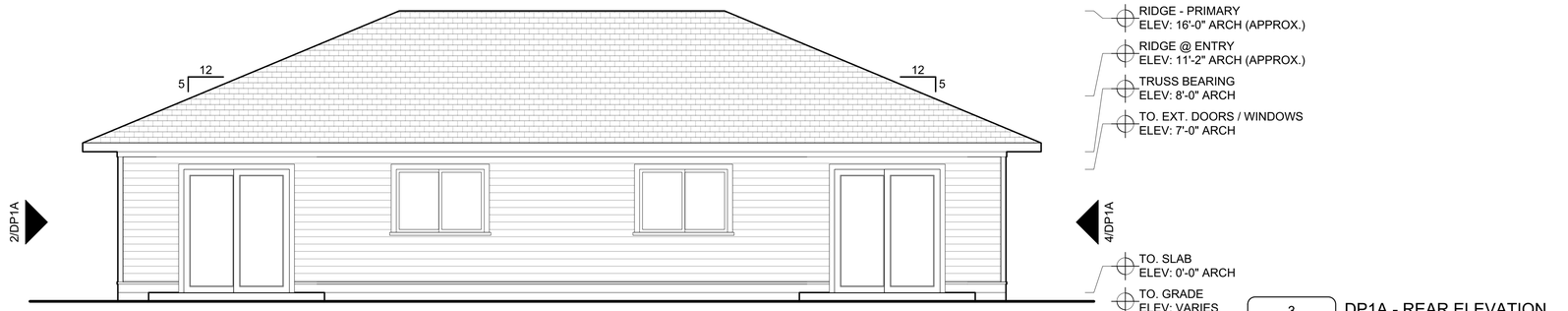
DP1A



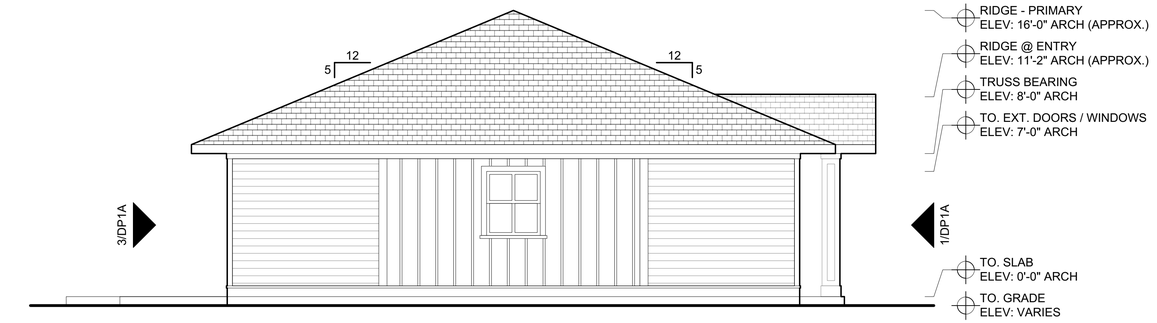
1 DP1A — DP1A - FRONT ELEVATION
Scale: 1/4" = 1'-0"



2 DP1A — DP1A - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"



3 DP1A — DP1A - REAR ELEVATION
Scale: 1/4" = 1'-0"



4 DP1A — DP1A - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer
TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

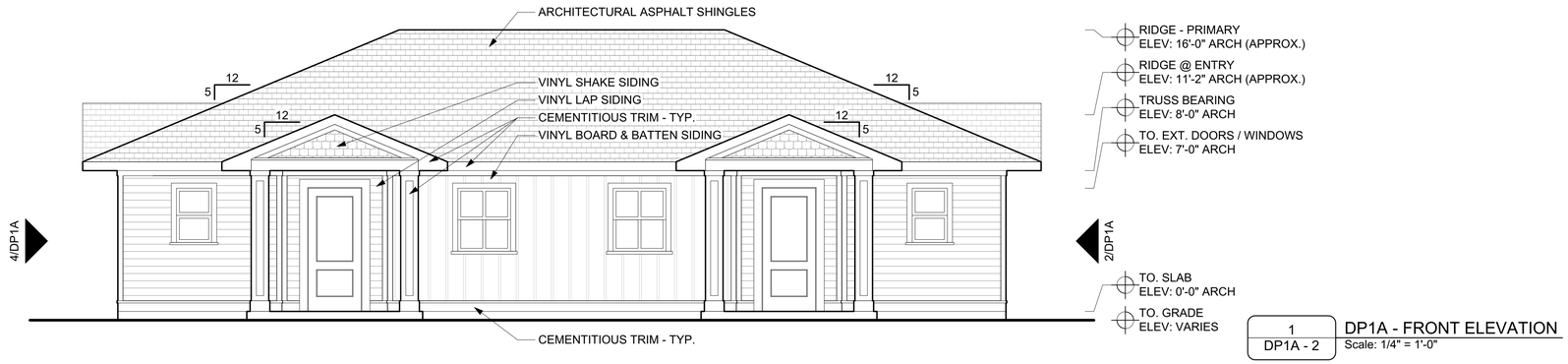
NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

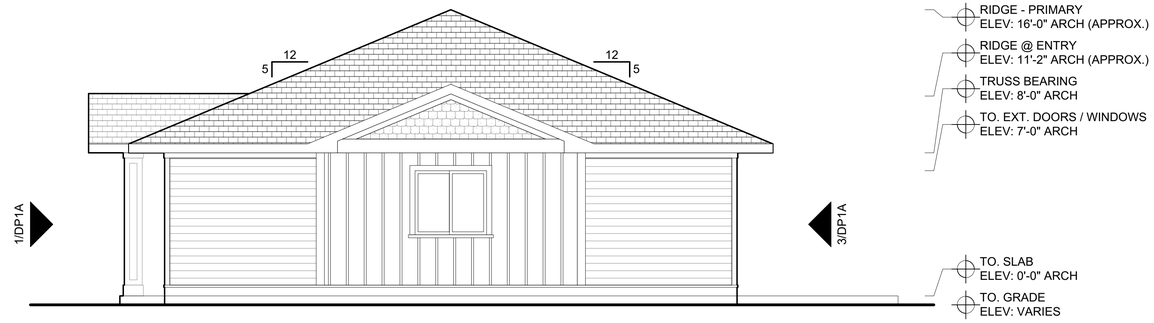
Project ID
1032

Sheet Title
ONE BEDROOM
DUPLEX

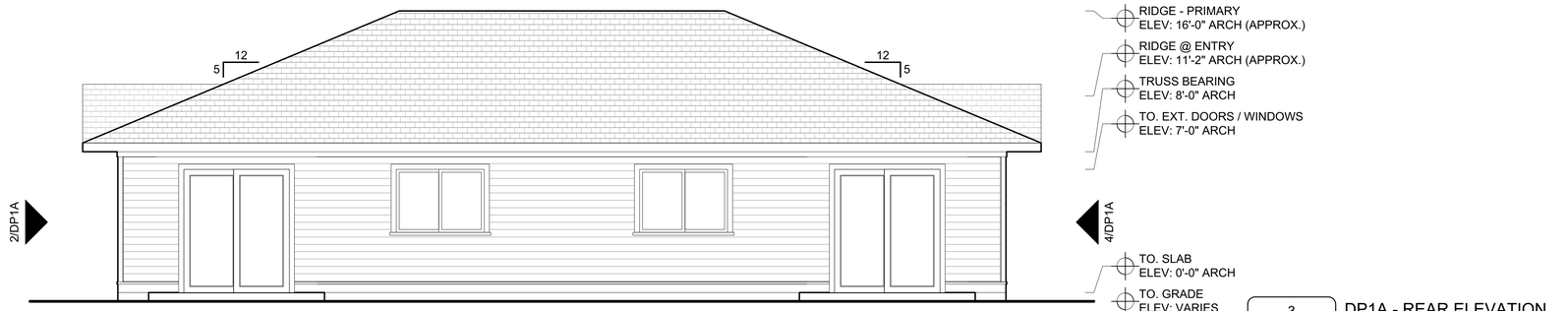
Sheet No.
DP1A



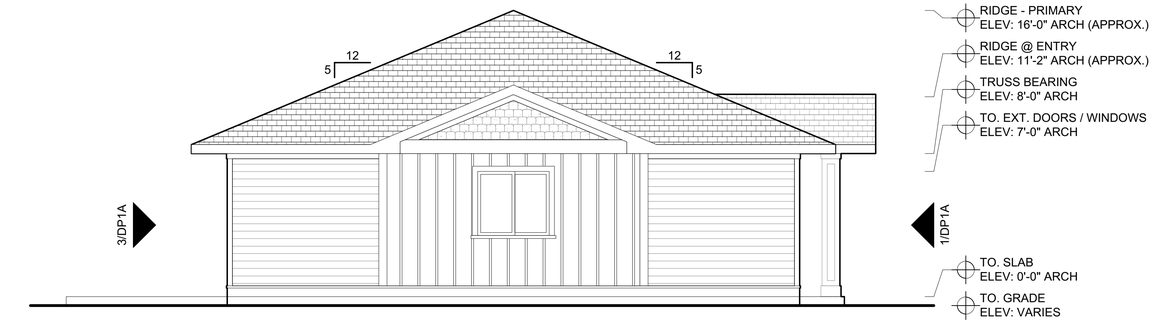
1 / DP1A - 2 DP1A - FRONT ELEVATION
Scale: 1/4" = 1'-0"



2 / DP1A - 2 DP1A - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"



3 / DP1A - 2 DP1A - REAR ELEVATION
Scale: 1/4" = 1'-0"



4 / DP1A - 2 DP1A - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

Project ID
1032

Sheet Title
ONE BEDROOM
DUPLEX - ALT.

Sheet No.
DP1A - 2



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG
DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



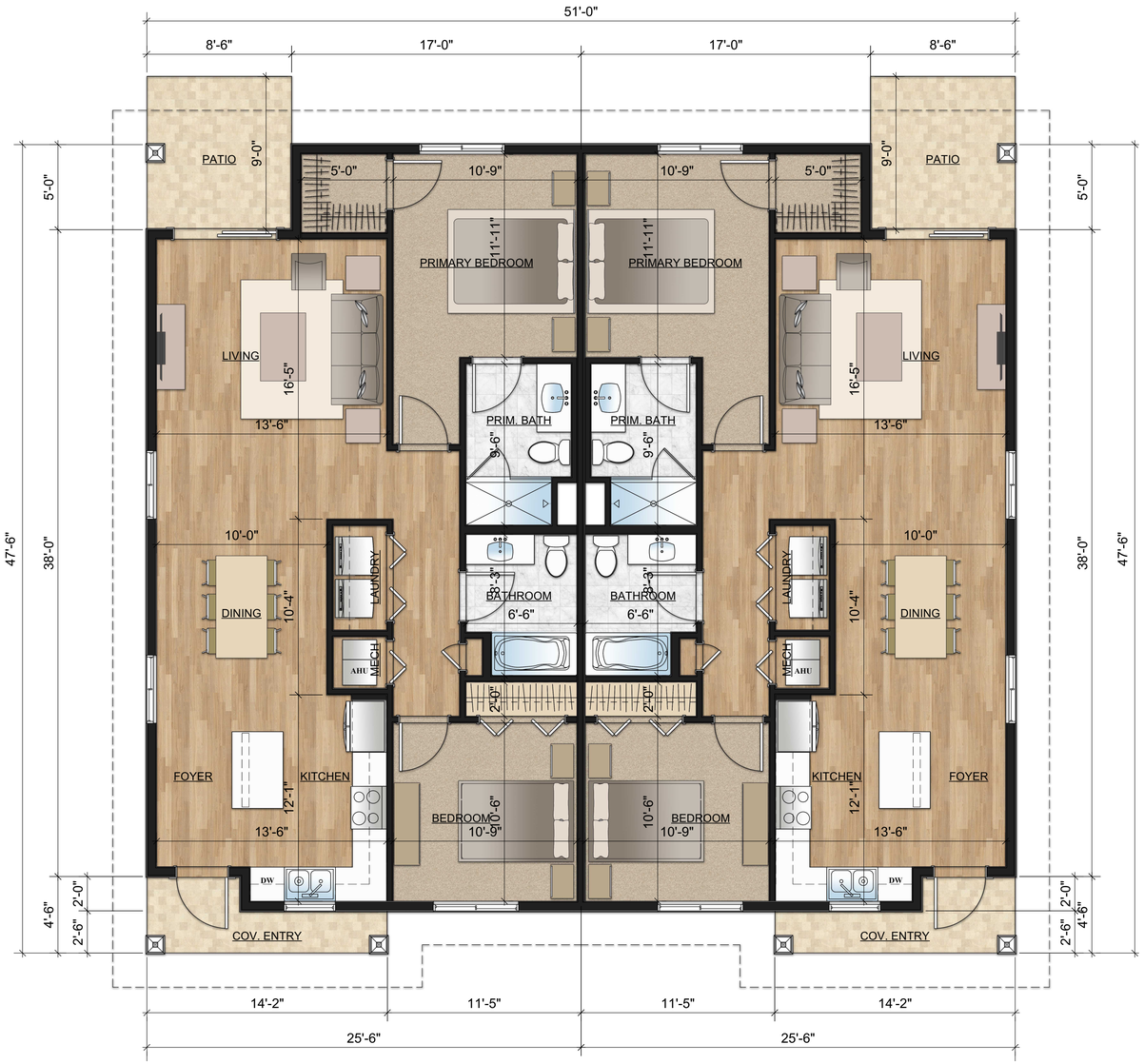
© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



TEG DEVELOPERS

VIVA COMMUNITIES AT TREASURE COAST EAST

EDWARDS RD, & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

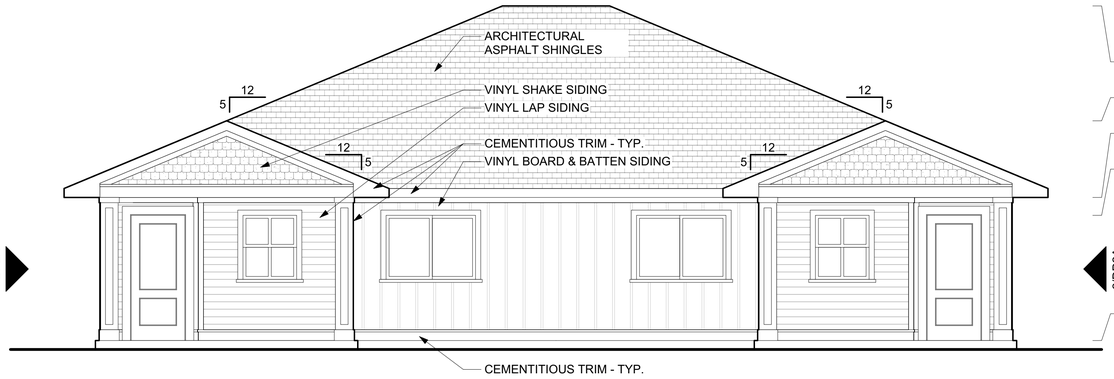
Project ID
1032

Sheet Title

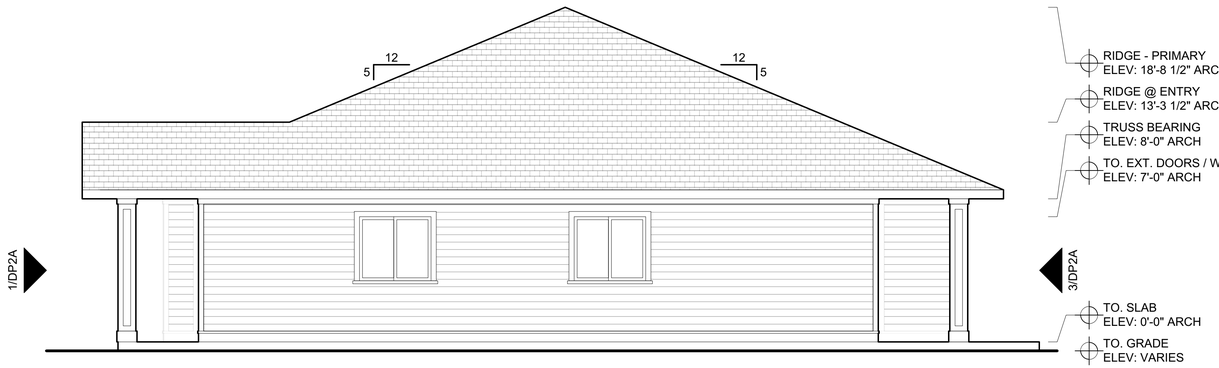
TWO BEDROOM
DUPLEX

Sheet No.

DP2A



1 DP2A — DP2A - FRONT ELEVATION
Scale: 1/4" = 1'-0"



SEE 1/DP2A FOR MATERIAL DESGNATIONS

2 DP2A — DP2A - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"



SEE 1/DP2A FOR MATERIAL DESGNATIONS

3 DP2A — DP2A - REAR ELEVATION
Scale: 1/4" = 1'-0"



SEE 1/DP2A FOR MATERIAL DESGNATIONS

4 DP2A — DP2A - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

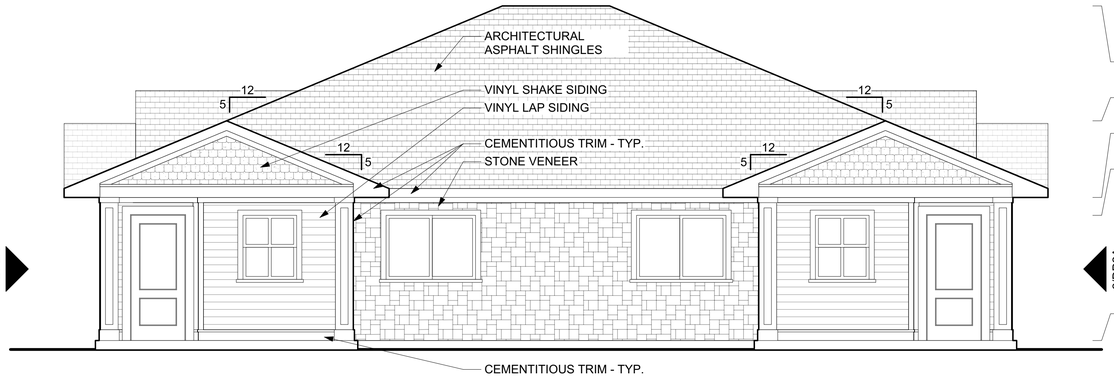
NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

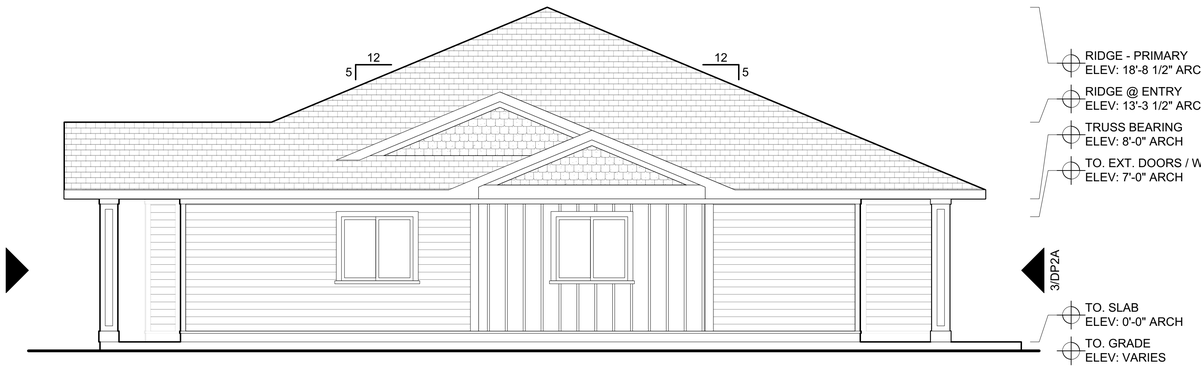
Project ID
1032

Sheet Title
TWO BEDROOM
DUPLEX

Sheet No.
DP2A

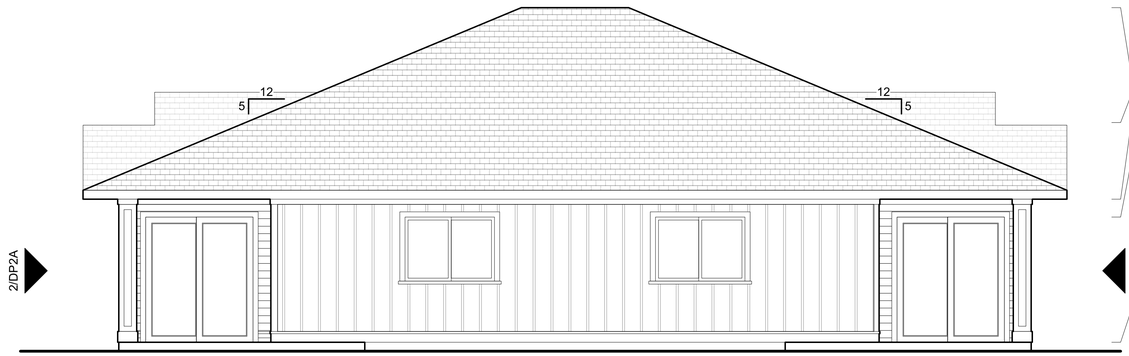


1 / DP2A - 2 — DP2A - FRONT ELEVATION
Scale: 1/4" = 1'-0"



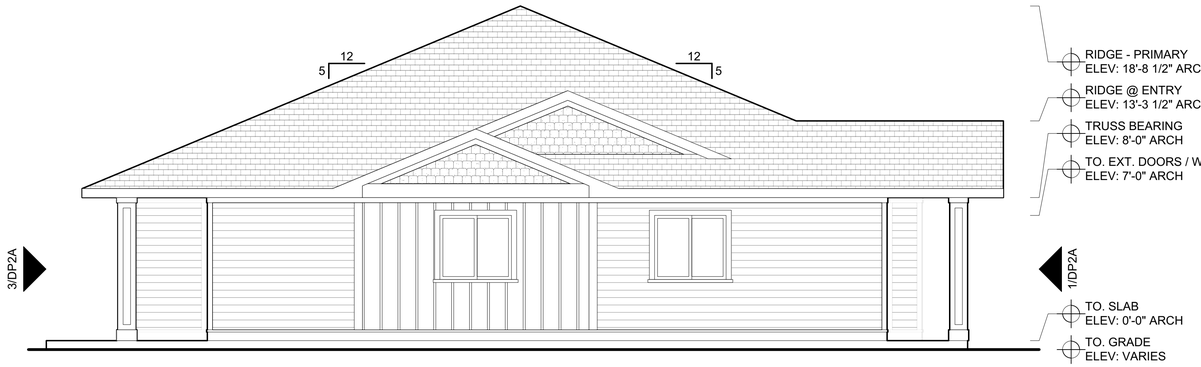
SEE 1/DP2A-ALT 1 FOR MATERIAL DESGNATIONS

2 / DP2A - 2 — DP2A - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"



SEE 1/DP2A-ALT 1 FOR MATERIAL DESGNATIONS

3 / DP2A - 2 — DP2A - REAR ELEVATION
Scale: 1/4" = 1'-0"



SEE 1/DP2A-ALT 1 FOR MATERIAL DESGNATIONS

4 / DP2A - 2 — DP2A - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

Project ID
1032

Sheet Title
TWO BEDROOM
DUPLEX - ALT

Sheet No.
DP2A - 2



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG
DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD, & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

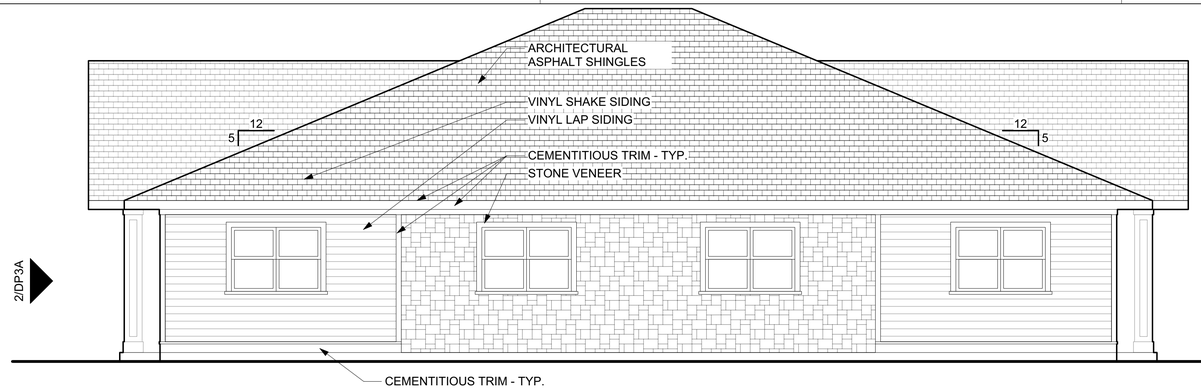
NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

Project ID
1032

Sheet Title
THREE BEDROOM DUPLEX

Sheet No.
DP3A



RIDGE - PRIMARY
ELEV: 19'-2 3/4" ARCH (APPROX.)

RIDGE @ ENTRY
ELEV: 16'-3 3/4" ARCH (APPROX.)

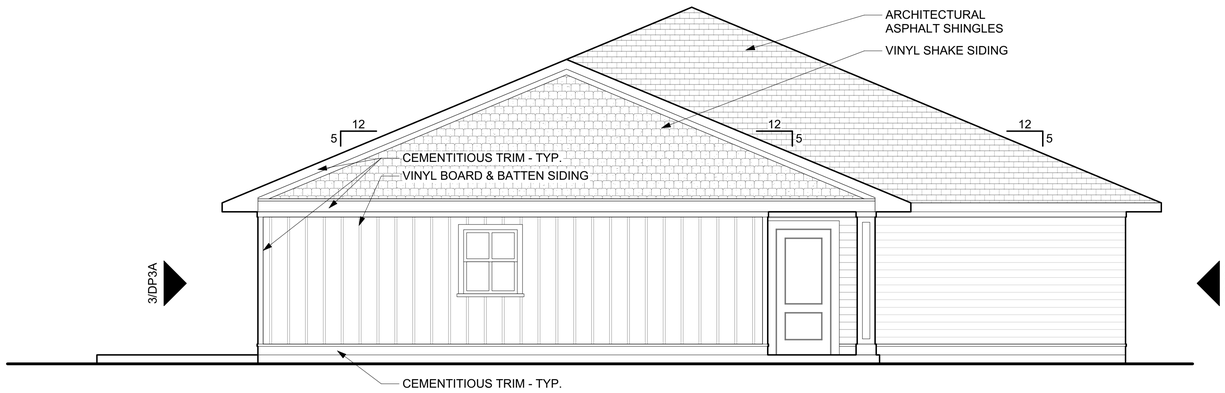
TRUSS BEARING
ELEV: 8'-0" ARCH

TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH

TO. GRADE
ELEV: VARIES

1 DP3A — DP3A - FRONT ELEVATION
Scale: 1/4" = 1'-0"



SEE 1/DP3A FOR MATERIAL DESGNATIONS

RIDGE - PRIMARY
ELEV: 19'-2 3/4" ARCH (APPROX.)

RIDGE @ ENTRY
ELEV: 16'-3 3/4" ARCH (APPROX.)

TRUSS BEARING
ELEV: 8'-0" ARCH

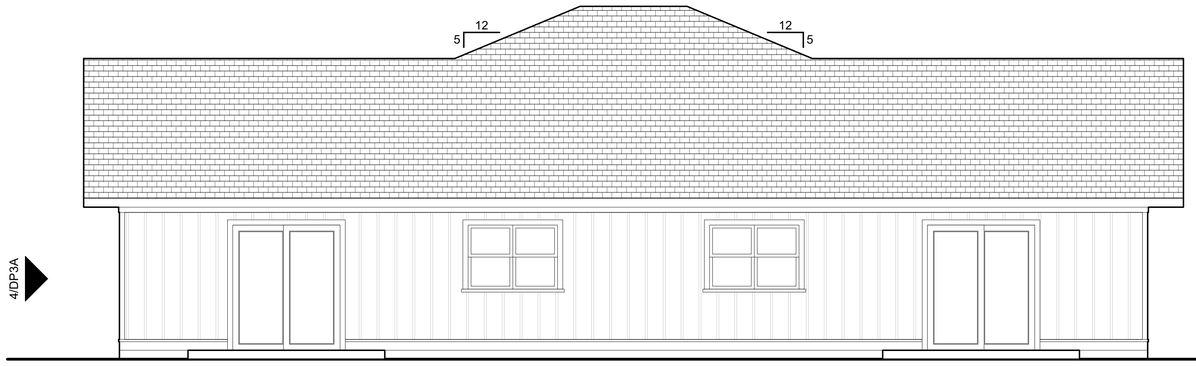
TO. EXT. DOORS
ELEV: 7'-0" ARCH

TO. EXT. WINDOWS
ELEV: 6'-8" ARCH

TO. SLAB
ELEV: 0'-0" ARCH

TO. GRADE
ELEV: VARIES

2 DP3A — DP3A - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"



RIDGE - PRIMARY
ELEV: 19'-2 3/4" ARCH (APPROX.)

RIDGE @ ENTRY
ELEV: 16'-3 3/4" ARCH (APPROX.)

TRUSS BEARING
ELEV: 8'-0" ARCH

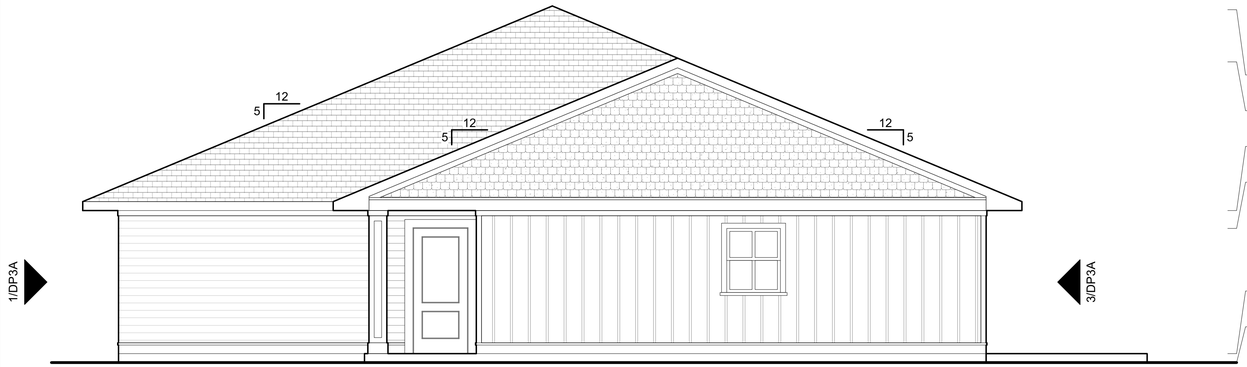
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH

TO. GRADE
ELEV: VARIES

3 DP3A — DP3A - REAR ELEVATION
Scale: 1/4" = 1'-0"

SEE 1&2/DP3A FOR MATERIAL DESGNATIONS



RIDGE - PRIMARY
ELEV: 19'-2 3/4" ARCH (APPROX.)

RIDGE @ ENTRY
ELEV: 16'-3 3/4" ARCH (APPROX.)

TRUSS BEARING
ELEV: 8'-0" ARCH

TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH

TO. GRADE
ELEV: VARIES

4 DP3A — DP3A - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

SEE 1&2/DP3A FOR MATERIAL DESGNATIONS

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

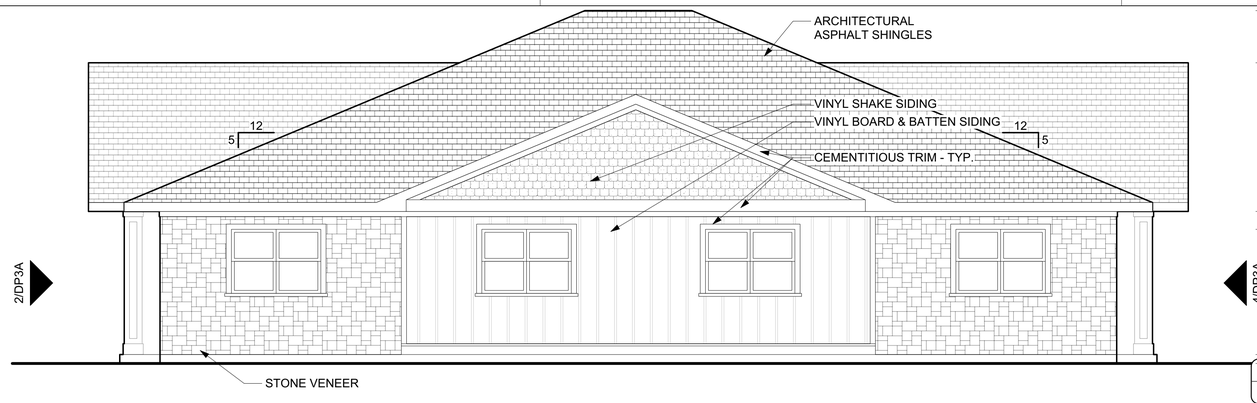
NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

Project ID
1032

Sheet Title
THREE BEDROOM
DUPLEX

Sheet No.
DP3A



RIDGE - PRIMARY
ELEV: 19'-2 3/4" ARCH (APPROX.)

RIDGE @ ENTRY
ELEV: 16'-3 3/4" ARCH (APPROX.)

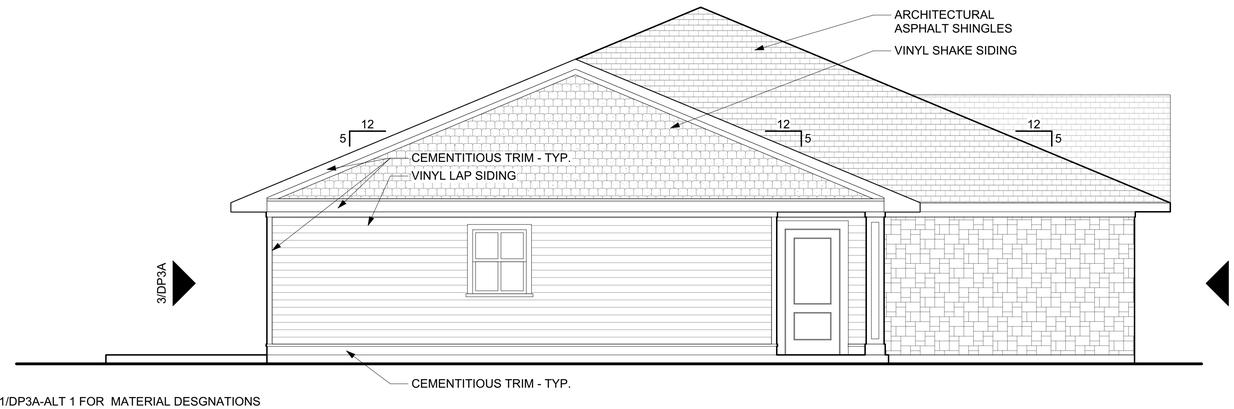
TRUSS BEARING
ELEV: 8'-0" ARCH

TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH

TO. GRADE
ELEV: VARIES

1 / DP3A - 2 — DP3A - FRONT ELEVATION
Scale: 1/4" = 1'-0"



SEE 1/DP3A-ALT 1 FOR MATERIAL DESGNATIONS

RIDGE - PRIMARY
ELEV: 19'-2 3/4" ARCH (APPROX.)

RIDGE @ ENTRY
ELEV: 16'-3 3/4" ARCH (APPROX.)

TRUSS BEARING
ELEV: 8'-0" ARCH

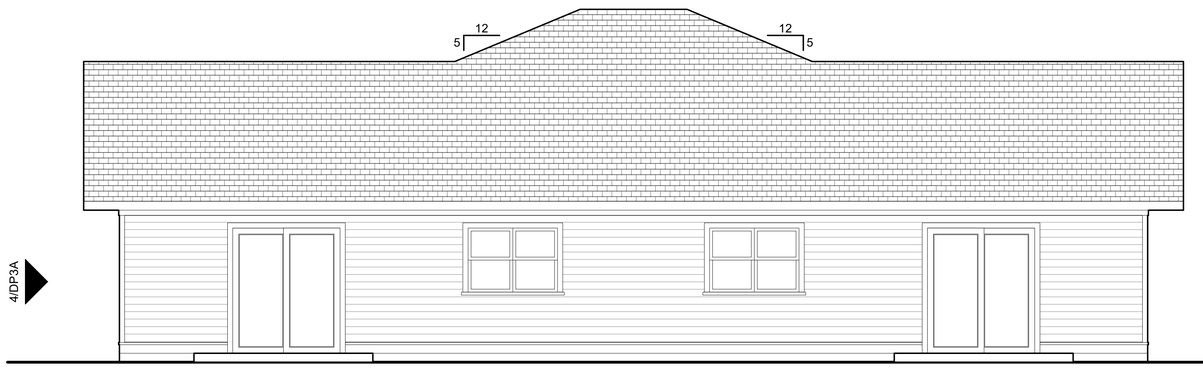
TO. EXT. DOORS
ELEV: 7'-0" ARCH

TO. EXT. WINDOWS
ELEV: 6'-8" ARCH

TO. SLAB
ELEV: 0'-0" ARCH

TO. GRADE
ELEV: VARIES

2 / DP3A - 2 — DP3A - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"



RIDGE - PRIMARY
ELEV: 19'-2 3/4" ARCH (APPROX.)

RIDGE @ ENTRY
ELEV: 16'-3 3/4" ARCH (APPROX.)

TRUSS BEARING
ELEV: 8'-0" ARCH

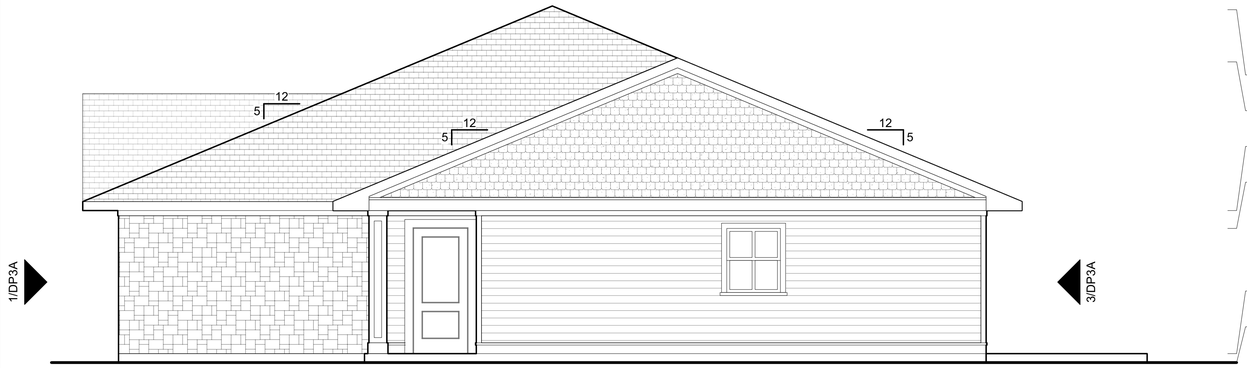
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH

TO. GRADE
ELEV: VARIES

3 / DP3A - 2 — DP3A - REAR ELEVATION
Scale: 1/4" = 1'-0"

SEE 1&2/DP3A-ALT 1 FOR MATERIAL DESGNATIONS



RIDGE - PRIMARY
ELEV: 19'-2 3/4" ARCH (APPROX.)

RIDGE @ ENTRY
ELEV: 16'-3 3/4" ARCH (APPROX.)

TRUSS BEARING
ELEV: 8'-0" ARCH

TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH

TO. GRADE
ELEV: VARIES

4 / DP3A - 2 — DP3A - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

SEE 1&2/DP3A-ALT 1 FOR MATERIAL DESGNATIONS

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

NO.	DATE	ISSUE NOTE

Project Manager: FR
Drawn By: FR / APM
Date:
Reviewed By:
Project ID: 1032

Sheet Title

THREE BEDROOM
DUPLEX - ALT

Sheet No.

DP3A - 2



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG
DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG
DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG
DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



VIVA COMMUNITIES AT TREASURE COAST EAST

EDWARDS RD, & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

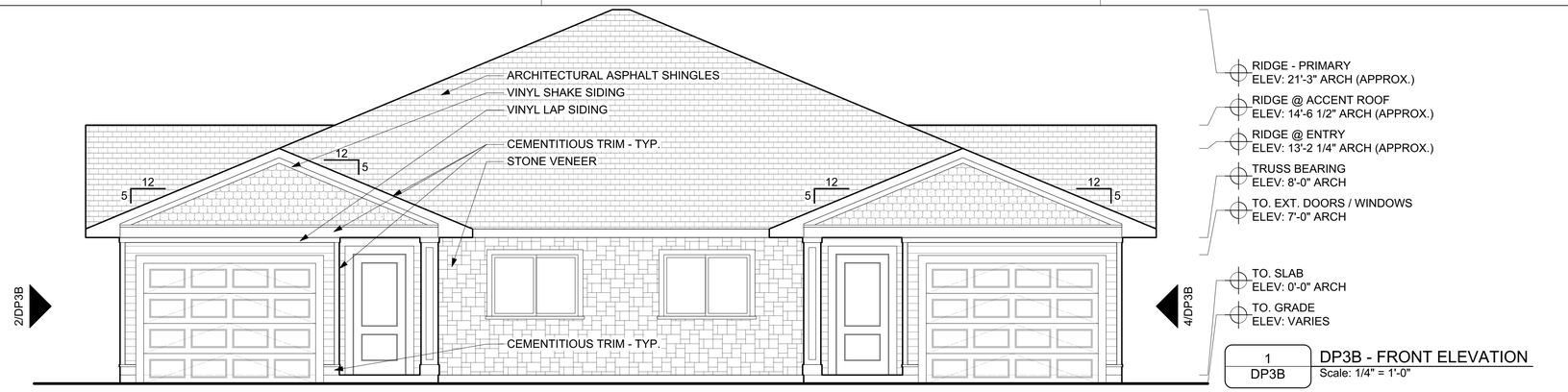
NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

Project ID
1032

Sheet Title
THREE BEDROOM DUPLEX W/ GARAGE

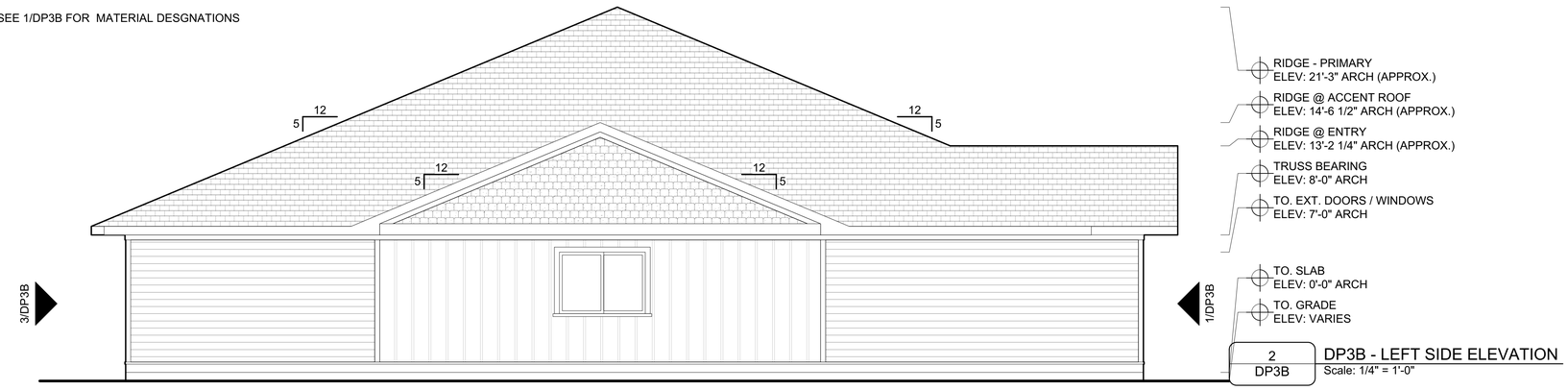
Sheet No.
DP3B



RIDGE - PRIMARY
ELEV: 21'-3" ARCH (APPROX.)
RIDGE @ ACCENT ROOF
ELEV: 14'-6 1/2" ARCH (APPROX.)
RIDGE @ ENTRY
ELEV: 13'-2 1/4" ARCH (APPROX.)
TRUSS BEARING
ELEV: 8'-0" ARCH
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH
TO. SLAB
ELEV: 0'-0" ARCH
TO. GRADE
ELEV: VARIES

1 / DP3B — DP3B - FRONT ELEVATION
Scale: 1/4" = 1'-0"

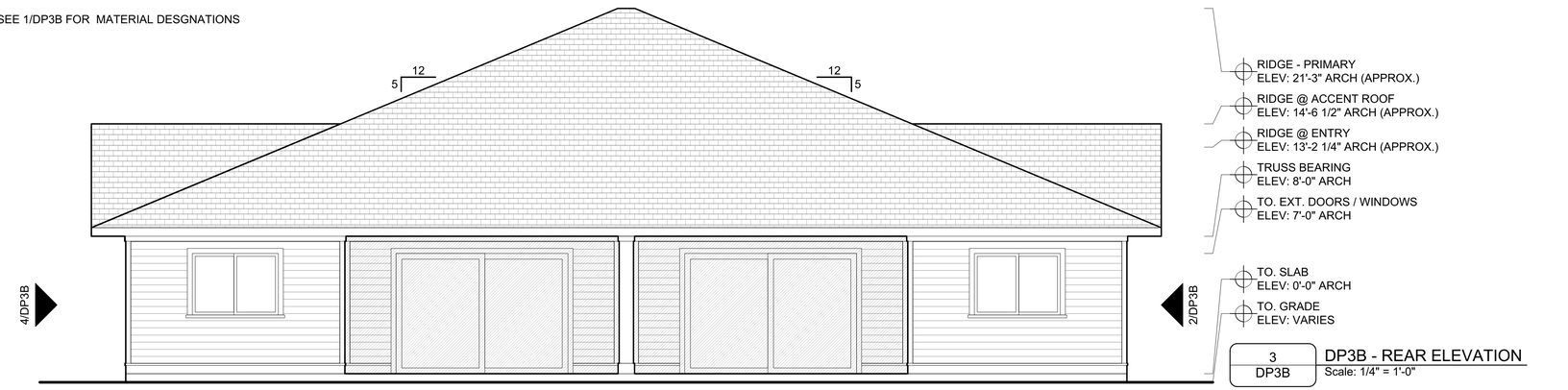
SEE 1/DP3B FOR MATERIAL DESGNATIONS



RIDGE - PRIMARY
ELEV: 21'-3" ARCH (APPROX.)
RIDGE @ ACCENT ROOF
ELEV: 14'-6 1/2" ARCH (APPROX.)
RIDGE @ ENTRY
ELEV: 13'-2 1/4" ARCH (APPROX.)
TRUSS BEARING
ELEV: 8'-0" ARCH
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH
TO. SLAB
ELEV: 0'-0" ARCH
TO. GRADE
ELEV: VARIES

2 / DP3B — DP3B - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"

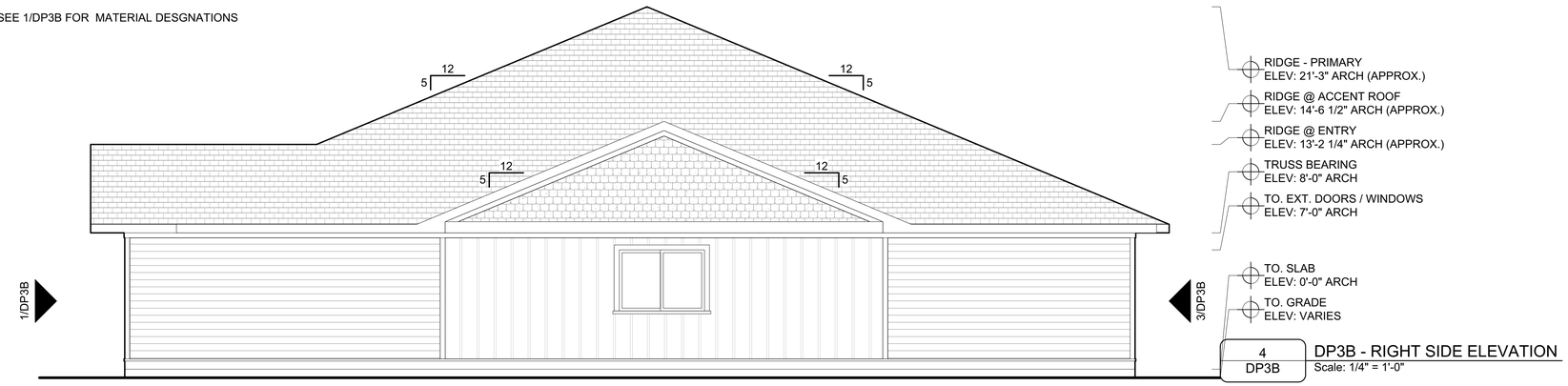
SEE 1/DP3B FOR MATERIAL DESGNATIONS



RIDGE - PRIMARY
ELEV: 21'-3" ARCH (APPROX.)
RIDGE @ ACCENT ROOF
ELEV: 14'-6 1/2" ARCH (APPROX.)
RIDGE @ ENTRY
ELEV: 13'-2 1/4" ARCH (APPROX.)
TRUSS BEARING
ELEV: 8'-0" ARCH
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH
TO. SLAB
ELEV: 0'-0" ARCH
TO. GRADE
ELEV: VARIES

3 / DP3B — DP3B - REAR ELEVATION
Scale: 1/4" = 1'-0"

SEE 1/DP3B FOR MATERIAL DESGNATIONS



RIDGE - PRIMARY
ELEV: 21'-3" ARCH (APPROX.)
RIDGE @ ACCENT ROOF
ELEV: 14'-6 1/2" ARCH (APPROX.)
RIDGE @ ENTRY
ELEV: 13'-2 1/4" ARCH (APPROX.)
TRUSS BEARING
ELEV: 8'-0" ARCH
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH
TO. SLAB
ELEV: 0'-0" ARCH
TO. GRADE
ELEV: VARIES

4 / DP3B — DP3B - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

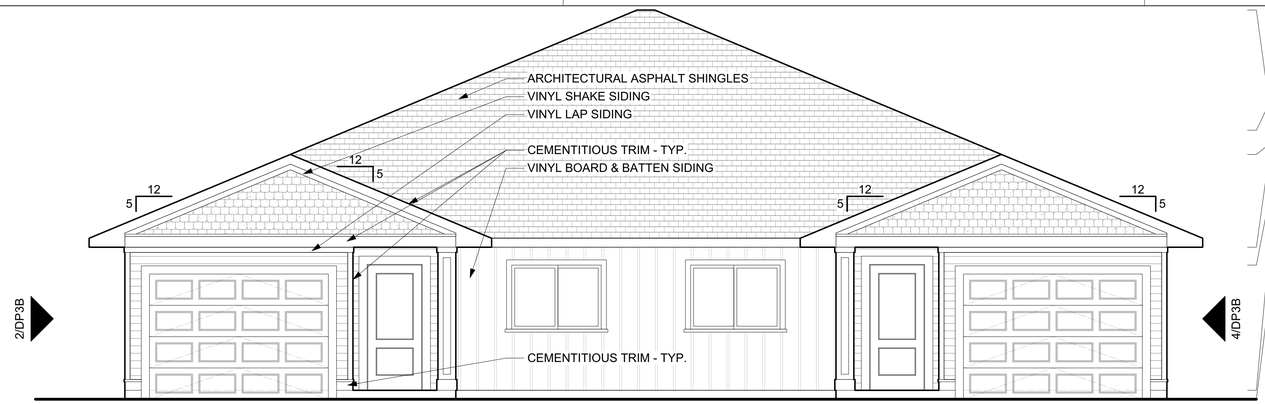
NO.	DATE	ISSUE NOTE

Project Manager	Drawn By
FR	FR / APM
Date	Reviewed By

Project ID
1032

Sheet Title
THREE BEDROOM DUPLEX WITH GARAGE

Sheet No.
DP3B

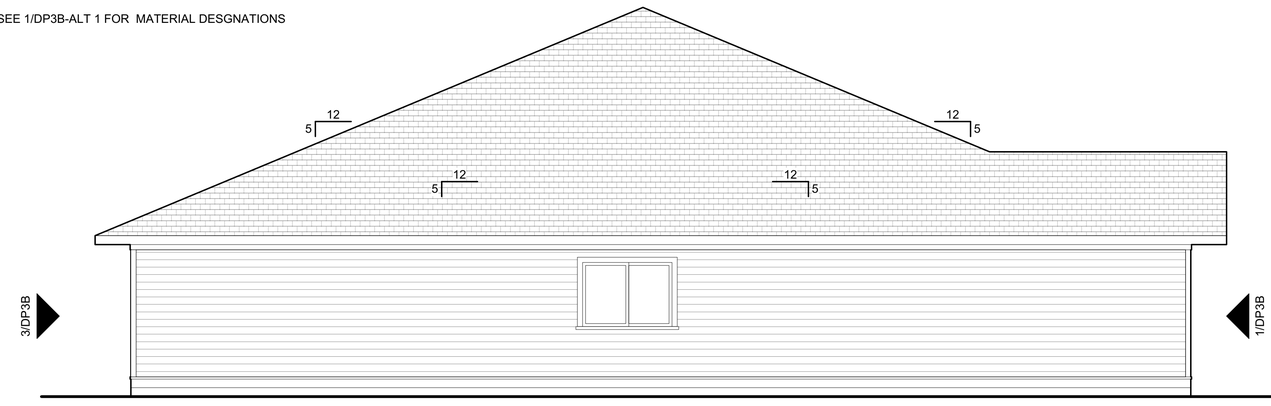


RIDGE - PRIMARY
ELEV: 21'-3" ARCH (APPROX.)
RIDGE @ ACCENT ROOF
ELEV: 14'-6 1/2" ARCH (APPROX.)
RIDGE @ ENTRY
ELEV: 13'-2 1/4" ARCH (APPROX.)
TRUSS BEARING
ELEV: 8'-0" ARCH
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH
TO. GRADE
ELEV: VARIES

1 / DP3B - 2 — DP3B - FRONT ELEVATION
Scale: 1/4" = 1'-0"

SEE 1/DP3B-ALT 1 FOR MATERIAL DESGNATIONS



RIDGE - PRIMARY
ELEV: 21'-3" ARCH (APPROX.)
RIDGE @ ACCENT ROOF
ELEV: 14'-6 1/2" ARCH (APPROX.)
RIDGE @ ENTRY
ELEV: 13'-2 1/4" ARCH (APPROX.)
TRUSS BEARING
ELEV: 8'-0" ARCH
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH
TO. GRADE
ELEV: VARIES

2 / DP3B - 2 — DP3B - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"

SEE 1/DP3B-ALT 1 FOR MATERIAL DESGNATIONS

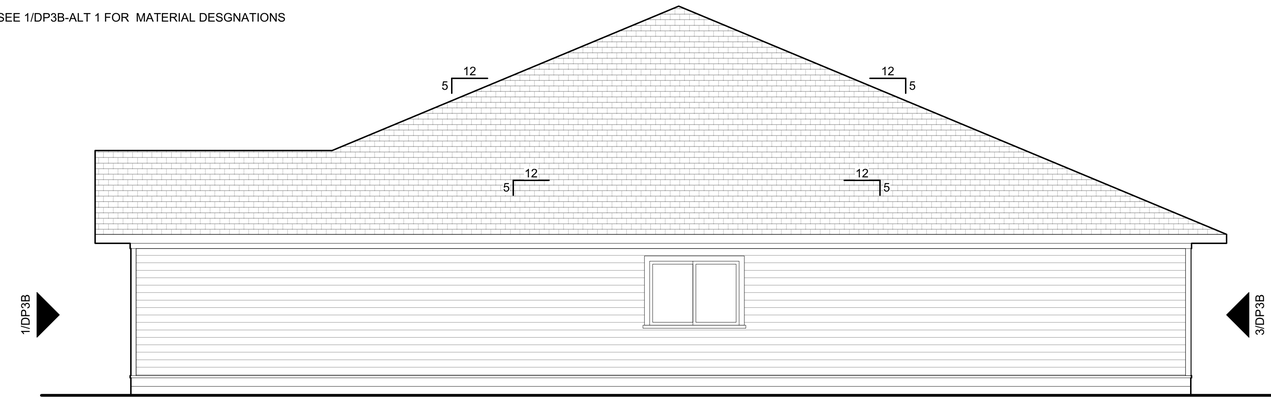


RIDGE - PRIMARY
ELEV: 21'-3" ARCH (APPROX.)
RIDGE @ ACCENT ROOF
ELEV: 14'-6 1/2" ARCH (APPROX.)
RIDGE @ ENTRY
ELEV: 13'-2 1/4" ARCH (APPROX.)
TRUSS BEARING
ELEV: 8'-0" ARCH
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH
TO. GRADE
ELEV: VARIES

3 / DP3B - 2 — DP3B - REAR ELEVATION
Scale: 1/4" = 1'-0"

SEE 1/DP3B-ALT 1 FOR MATERIAL DESGNATIONS



RIDGE - PRIMARY
ELEV: 21'-3" ARCH (APPROX.)
RIDGE @ ACCENT ROOF
ELEV: 14'-6 1/2" ARCH (APPROX.)
RIDGE @ ENTRY
ELEV: 13'-2 1/4" ARCH (APPROX.)
TRUSS BEARING
ELEV: 8'-0" ARCH
TO. EXT. DOORS / WINDOWS
ELEV: 7'-0" ARCH

TO. SLAB
ELEV: 0'-0" ARCH
TO. GRADE
ELEV: VARIES

4 / DP3B - 2 — DP3B - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

TEG DEVELOPERS

VIVA COMMUNITIES
AT TREASURE COAST EAST

EDWARDS RD & JENKINS RD.
FORT PIERCE, FL 34981

Project Title

Developer

TEG DEVELOPERS, LLC
365 ROUTE 59, SUITE 110
AIRMONT, NY 10952

Consultant

REV.	DATE	DESCRIPTION

NO.	DATE	ISSUE NOTE

Project Manager: FR
Drawn By: FR / APM
Date:
Reviewed By:
Project ID: 1032

Sheet Title

THREE BEDROOM
DUPLEX WITH
GARAGE - ALT

Sheet No.

DP3B - 2



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG
DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG
DEVELOPERS



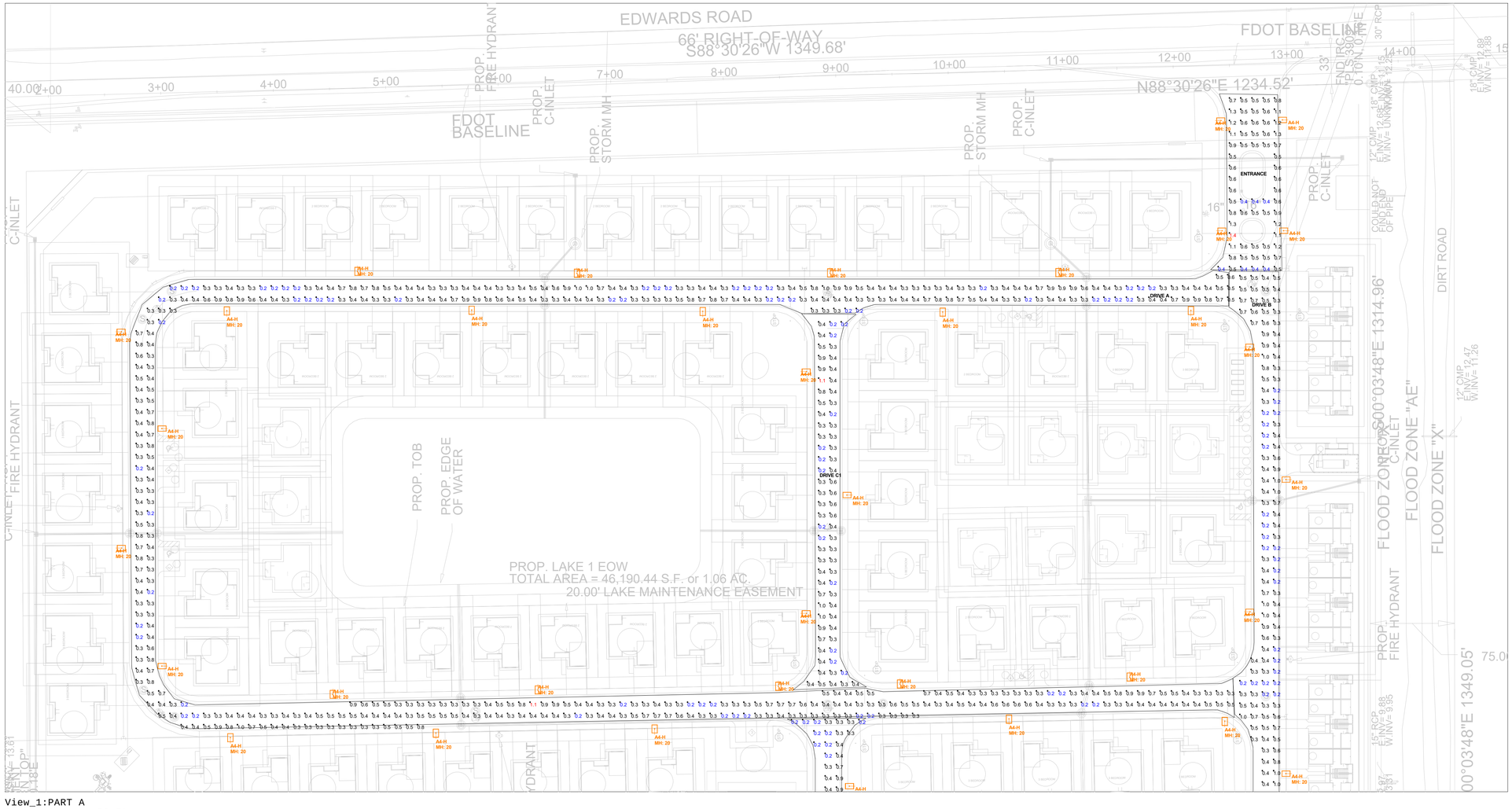
© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Lum. Lumens	LLF	Description	Filename
	50	A4-H	SINGLE	2600	1.000	VSX-II_T4_16LC_5_4K-UNV_CLS	VSX-II_T4_16LC_5_4K-UNV_CLS.ies

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description
DRIVE A	Illuminance	Fc	0.42	1.1	0.2	2.10	5.50	readings taken at grade
DRIVE B	Illuminance	Fc	0.45	1.1	0.2	2.25	5.50	readings taken at grade
DRIVE C1	Illuminance	Fc	0.41	1.1	0.2	2.05	5.50	readings taken at grade
DRIVE C2	Illuminance	Fc	0.37	1.0	0.2	1.85	5.00	readings taken at grade
ENTRANCE	Illuminance	Fc	0.68	1.4	0.4	1.70	3.50	readings taken at grade

TARGETING:
IES: RP-11-17
EXTERIOR RESIDENTIAL ENVIRONMENTS
- 0.1 FC MIN



View_1:PART A
Scale: 1 inch= 50 Ft.

SESCO LIGHTING

Project:
VIVA TREASURE EAST

Disclaimer:
SESCO Lighting, Tampa provides this photometric report for purposes of comparison within the SESCO Lighting, Tampa product line only. The information provided is based upon standardized industry procedures.

This laboratory performance will always differ from that observed in the field due to a great number of variables, both known (installation methods, power quality, lamping, recoverable, and non-recoverable light loss factors, etc.)

In general, SESCO Lighting Tampa considers numerical studies to be predictive in that they cannot characterize the visual performance of any luminaire single or grouped. As such, specification decisions must be thoroughly based upon experience, consultation with the manufacturer and above all, common sense.

NOTES:
1) EXACT MOUNTING DETAILS TO BE DETERMINED BY OTHERS.
2) MOUNTING HEIGHT IS ALWAYS A.F.F. OR A.F.G. UNLESS NOTED
3) CALCULATIONS SHOWN ARE MAINTAINED HORIZONTAL FOOTCANDLES

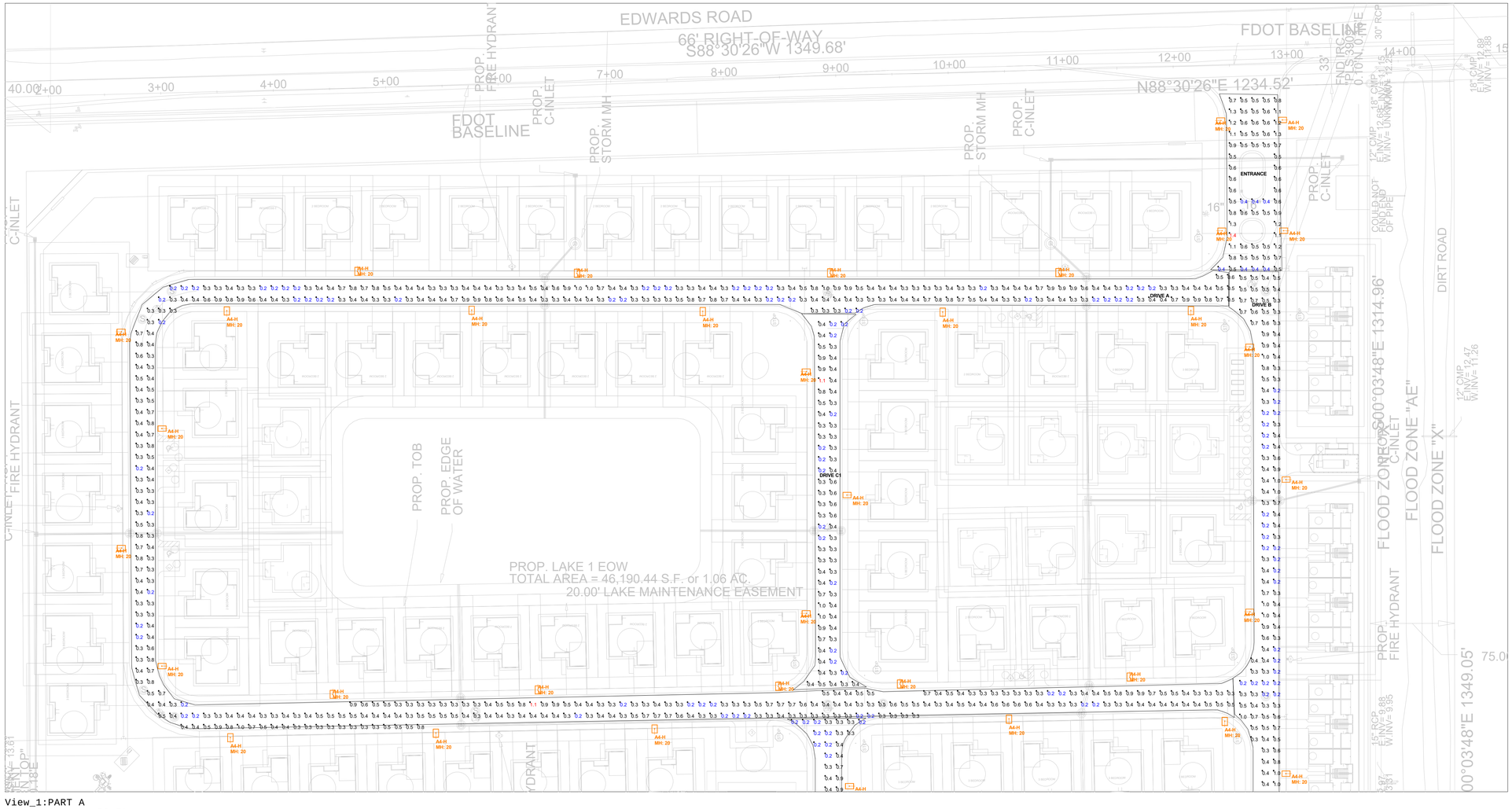
Sales Person: CHERILYN SANTORE
Designed By:S PENNINGTON
Date:2/23/2022
Scale:SEE VIEWPORT

Revisions	#	Date	Comments

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Lum. Lumens	LLF	Description	Filename
	50	A4-H	SINGLE	2600	1.000	VSX-II_T4_16LC_5_4K-UNV_CLS	VSX-II_T4_16LC_5_4K-UNV_CLS.ies

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description
DRIVE A	Illuminance	Fc	0.42	1.1	0.2	2.10	5.50	readings taken at grade
DRIVE B	Illuminance	Fc	0.45	1.1	0.2	2.25	5.50	readings taken at grade
DRIVE C1	Illuminance	Fc	0.41	1.1	0.2	2.05	5.50	readings taken at grade
DRIVE C2	Illuminance	Fc	0.37	1.0	0.2	1.85	5.00	readings taken at grade
ENTRANCE	Illuminance	Fc	0.68	1.4	0.4	1.70	3.50	readings taken at grade

TARGETING:
IES: RP-11-17
EXTERIOR RESIDENTIAL ENVIRONMENTS
- 0.1 FC MIN



View_1:PART A
Scale: 1 inch= 50 Ft.

SESCO LIGHTING

Project:
VIVA TREASURE EAST

Disclaimer:
SESCO Lighting, Tampa provides this photometric report for purposes of comparison within the SESCO Lighting, Tampa product line only. The information provided is based upon standardized industry procedures.

This laboratory performance will always differ from that observed in the field due to a great number of variables, both known (installation methods, power quality, lamping, recoverable, and non-recoverable light loss factors, etc.)

In general, SESCO Lighting Tampa considers numerical studies to be predictive in that they cannot characterize the visual performance of any luminaire single or grouped. As such, specification decisions must be thoroughly based upon experience, consultation with the manufacturer and above all, common sense.

NOTES:
1) EXACT MOUNTING DETAILS TO BE DETERMINED BY OTHERS.
2) MOUNTING HEIGHT IS ALWAYS A.F.F. OR A.F.G. UNLESS NOTED
3) CALCULATIONS SHOWN ARE MAINTAINED HORIZONTAL FOOTCANDLES

Sales Person: CHERILYN SANTORE

Designed By:S PENNINGTON
Date:2/23/2022
Scale:SEE VIEWPORT

Revisions	#	Date	Comments

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	Lum. Lumens	LLF	Description	Filename
	50	A4-H	SINGLE	2600	1.000	VSX-II_T4_16LC_5_4K-UNV_CLS	VSX-II_T4_16LC_5_4K-UNV_CLS.ies

Calculation Summary								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	Description
DRIVE A	Illuminance	Fc	0.42	1.1	0.2	2.10	5.50	readings taken at grade
DRIVE B	Illuminance	Fc	0.45	1.1	0.2	2.25	5.50	readings taken at grade
DRIVE C1	Illuminance	Fc	0.41	1.1	0.2	2.05	5.50	readings taken at grade
DRIVE C2	Illuminance	Fc	0.37	1.0	0.2	1.85	5.00	readings taken at grade
ENTRANCE	Illuminance	Fc	0.68	1.4	0.4	1.70	3.50	readings taken at grade

TARGETING:
IES: RP-11-17
EXTERIOR RESIDENTIAL ENVIRONMENTS
- 0.1 FC MIN



Viva Communities at Treasure East

© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS

© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

SHINGLE: PEWTER GRAY

WINDOW & DOORS: DARK BRONZE

STONE VENEER: PORTLAND MIST

SW 6189
Opaline
Interior / Exterior
Locator Number: 271-C2
STUCCO

SW 0047
Studio Blue Green
Interior / Exterior
HORIZONTAL SIDING

SW 7005
Pure White
Interior / Exterior
Locator Number: 255-C1
TRIM & FASCIA

SW 9675
Westhaven
ACCENT

Amenities Center

Viva at Treasure Coast East



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

SHINGLE:
PEWTER GRAY

WINDOW FRAMES
DARK BRONZE

SW 6189
Opaline
Interior / Exterior
Locator Number: 271-C2
HORIZONTAL SIDING

SW 0047
Studio Blue Green
Interior / Exterior
VERTICAL SIDING

SW 7005
Pure White
Interior / Exterior
Locator Number: 255-C1
TRIM & FASCIA

SW 9675
Westhaven
DOORS

One Bedroom Duplex

Viva at Treasure Coast East



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS

SHINGLE:
PEWTER GRAY

WINDOW FRAMES
DARK BRONZE

SW 6211
Rainwashed
Interior / Exterior
Locator Number: 218-C1
HORIZONTAL SIDING

SW 0047
Studio Blue Green
Interior / Exterior
VERTICAL SIDING

SW 7005
Pure White
Interior / Exterior
Locator Number: 255-C1
TRIM & FASCIA

SW 6215
Rocky River
Interior / Exterior
Locator Number: 218-C6
DOORS

One Bedroom Duplex

Viva at Treasure Coast East



SHINGLE: PEWTER GRAY

WINDOW FRAMES: DARK BRONZE

STONE VENEER: PORTLAND MIST

SW 6213
Halcyon Green
Interior / Exterior
Locator Number: 218-C3
HORIZONTAL SIDING

SW 7671
On the Rocks
Interior / Exterior
Locator Number: 255-C7
VERTICAL SIDING

SW 7005
Pure White
Interior / Exterior
Locator Number: 255-C1
TRIM & FASCIA

SW 7060
Attitude Gray
Interior / Exterior
Locator Number: 237-C5
DOORS

Two Bedroom Duplex

Viva at Treasure Coast East



SHINGLE:
PEWTER GRAY

WINDOW FRAMES:
DARK BRONZE

SW 6189
Opaline
Interior / Exterior
Locator Number: 271-C2

STUCCO

SW 0047
Studio Blue Green
Interior / Exterior

HORIZONTAL SIDING

SW 7005
Pure White
Interior / Exterior
Locator Number: 255-C1

TRIM & FASCIA

SW 9675
Westhaven

DOORS

Two Bedroom Duplex

Viva at Treasure Coast East

© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

SHINGLE: PEWTER GRAY

WINDOW FRAMES: DARK BRONZE

STONE VENEER: PORTLAND MIST

SW 6213
Halcyon Green
Interior / Exterior
Locator Number: 218-C3
HORIZONTAL SIDING

SW 7671
On the Rocks
Interior / Exterior
Locator Number: 255-C7
VERTICAL SIDING

SW 7005
Pure White
Interior / Exterior
Locator Number: 255-C1
TRIM & FASCIA

SW 7060
Attitude Gray
Interior / Exterior
Locator Number: 237-C5
DOORS

Three Bedroom Duplex

Viva at Treasure Coast East



SHINGLE: PEWTER GRAY

WINDOW FRAMES: DARK BRONZE

STONE VENEER: PORTLAND MIST

SW 6211
Rainwashed
Interior / Exterior
Locator Number: 218-C1
HORIZONTAL SIDING

SW 0047
Studio Blue Green
Interior / Exterior
VERTICAL SIDING

SW 7005
Pure White
Interior / Exterior
Locator Number: 255-C1
TRIM & FASCIA

SW 6215
Rocky River
Interior / Exterior
Locator Number: 218-C6
DOORS

Three Bedroom Duplex

Viva at Treasure Coast East



SHINGLE:
PEWTER GRAY

WINDOW FRAMES
DARK BRONZE

SW 6211
Rainwashed
Interior / Exterior
Locator Number: 218-C1

HORIZONTAL SIDING

SW 0047
Studio Blue Green
Interior / Exterior

VERTICAL SIDING

SW 7005
Pure White
Interior / Exterior
Locator Number: 255-C1

TRIM & FASCIA

SW 6215
Rocky River
Interior / Exterior
Locator Number: 218-C6

DOORS

Three Bedroom Duplex

Viva at Treasure Coast East



SHINGLE:
PEWTER GRAY

WINDOW FRAMES
DARK BRONZE

STONE VENEER:
PORTLAND MIST

SW 6189
Opaline
Interior / Exterior
Locator Number: 271-C2
STUCCO

SW 0047
Studio Blue Green
Interior / Exterior
HORIZONTAL SIDING

SW 7005
Pure White
Interior / Exterior
Locator Number: 255-C1
TRIM & FASCIA

SW 9675
Westhaven
DOORS

Three Bedroom Duplex

Viva at Treasure Coast East

Viva Communities at Treasure East



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS

Viva Communities at Treasure East



© TEG Developers, LLC. 2023
Artistic rendering for illustrative purposes only and may not reflect final building, site, or landscape conditions.

TEG DEVELOPERS

CITY OF FORT PIERCE
PLANNING DEPARTMENT

-PROJECT: **VIVA EAST SITE PLAN - 23-07000020**

REVIEWER: **RYAN ALTIZER, SENIOR PLANNER**

DATE: **2/5/2023**

STAFF REPORT

Owner: TEG Mariner Cove, LLC

Applicant: Francarlos Rivera, TEG Developers

Requested Action: Request for review of an application for a Site Plan (Development and Design Review) of a two-hundred and six (206) unit rental community.

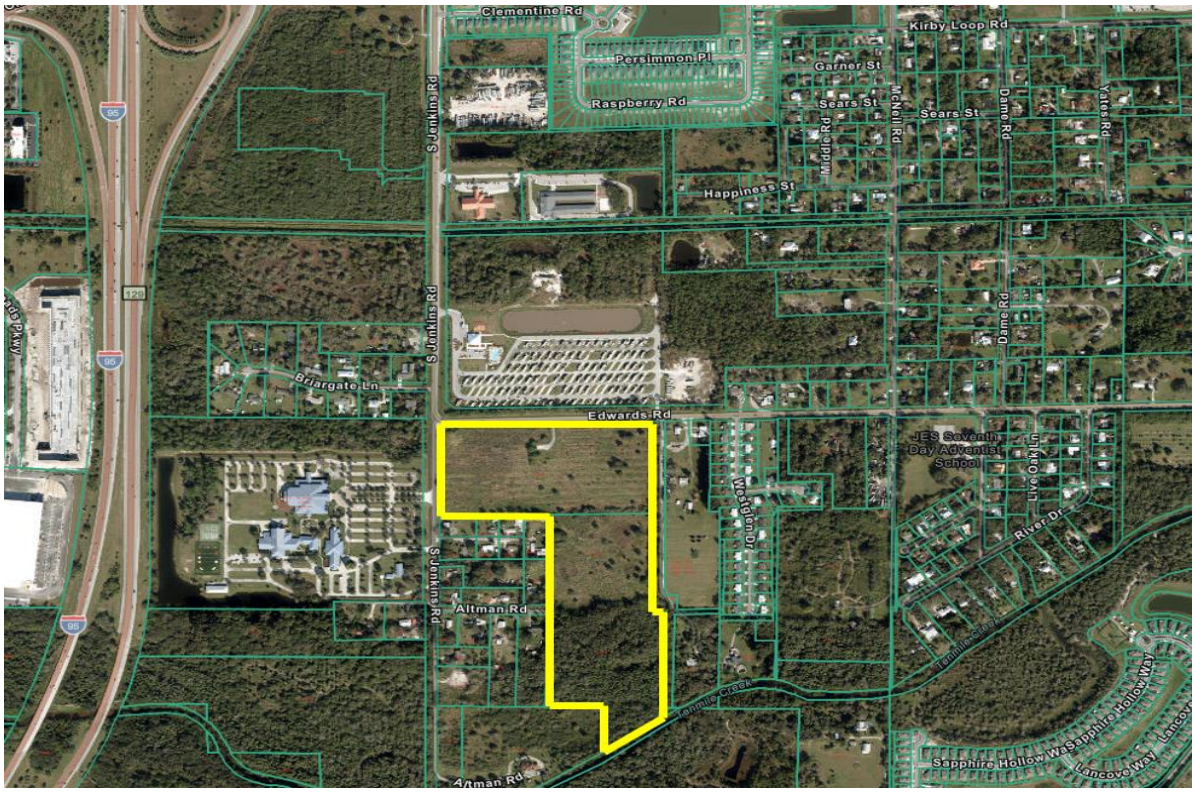
Location: 5315 Edwards Road & 5496 Altman Road

Parcel IDs: 2430-231-0001-000-4 & 2430-234-0001-000-3

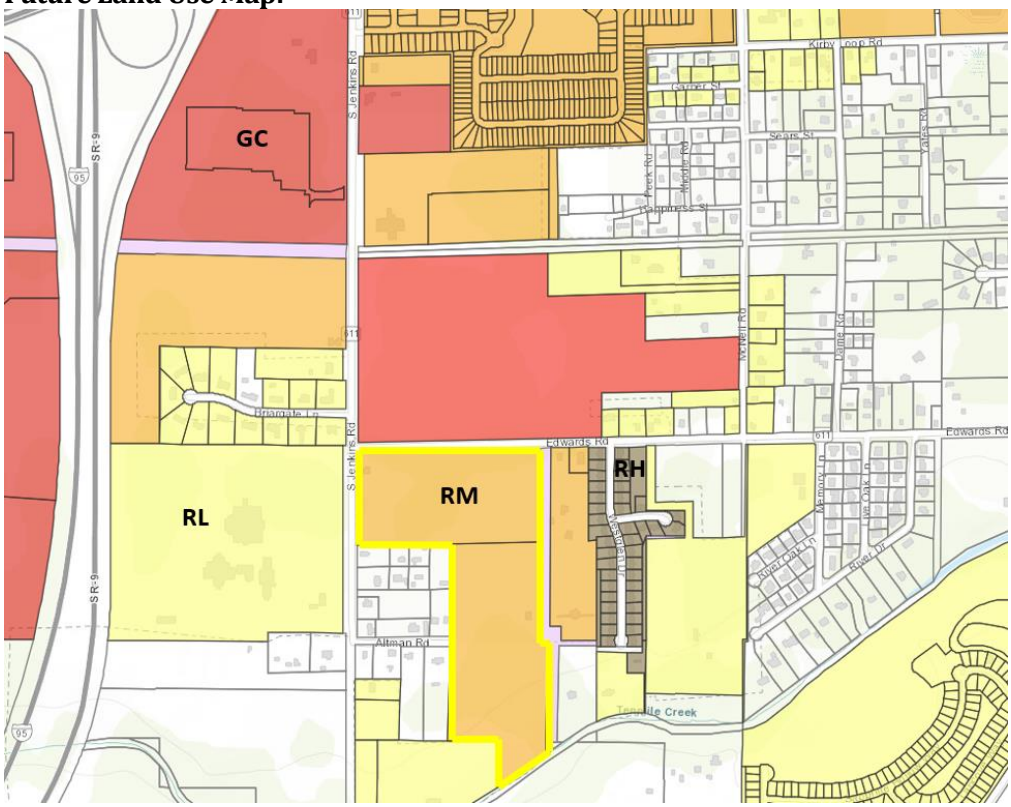
Current Zoning: Medium Density Residential, R-4

Future Land Use: Medium Density Residential, RM

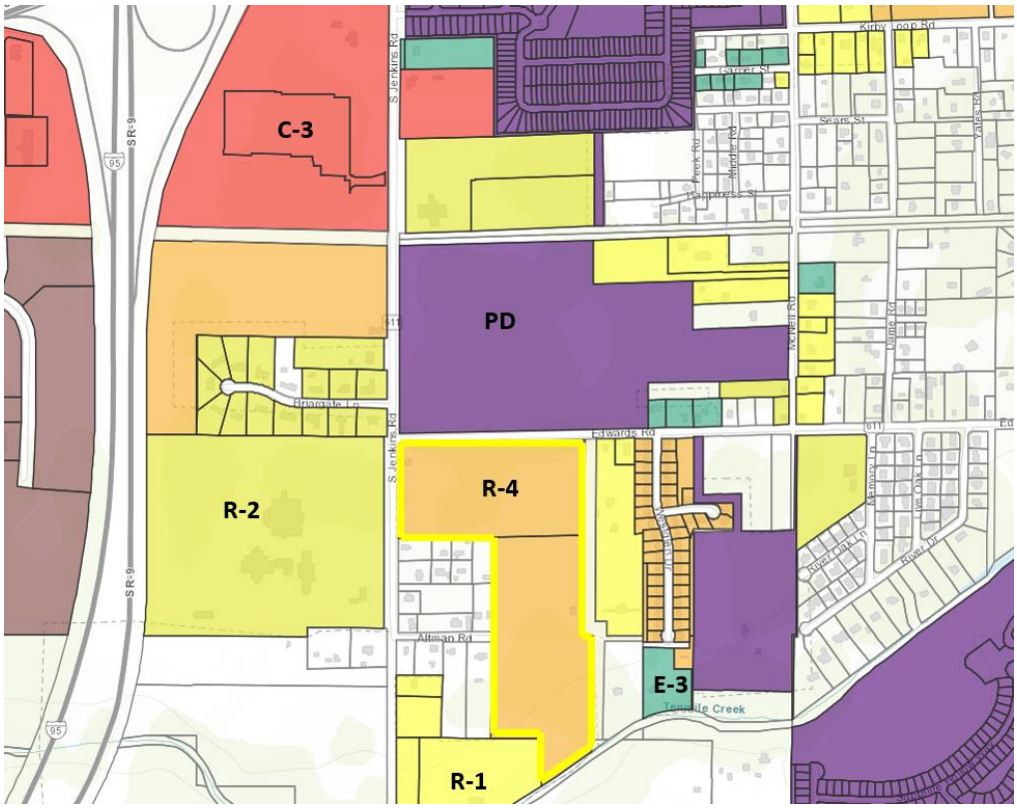
Location Map:



Future Land Use Map:



Zoning Map:



Surrounding Zoning:

North	East	South	West
PD	R-1	R-1	R-2

Site Area: +/- 39.70 acres

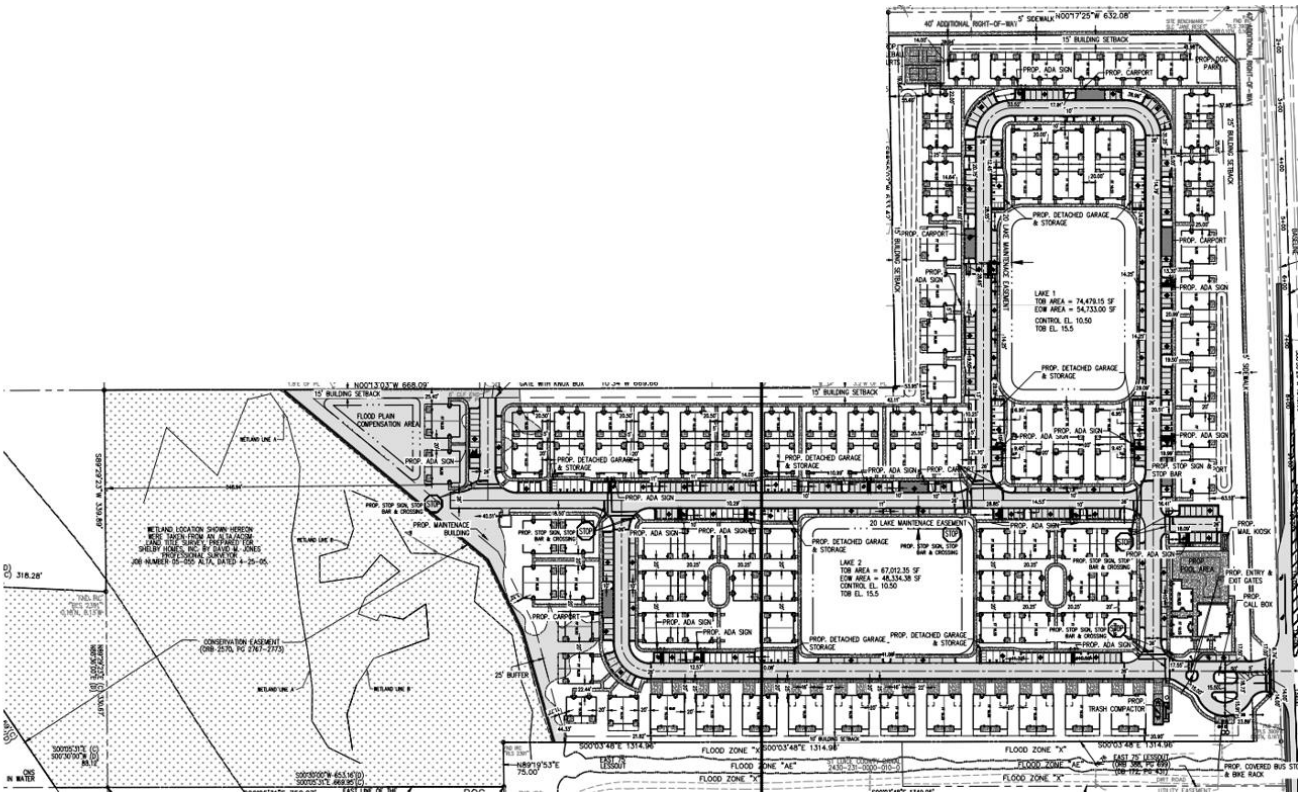
Utilities: Located within the FPUA Service Area

Staff Analysis

Request for review of an application for a Site Plan (Development and Design Review) of a two-hundred and six (206) unit rental community. The community will consist of one-bedroom, two-bedroom and three-bedroom duplexes. Viva East is the sister project to Viva West. Both communities will share access to amenities such as a fitness center, business lodge, community room, catering kitchen, pet spa, outdoor grilling areas and more. Viva East is being proposed at 5315 Edwards Road & 5496 Altman Road.

The Site Plan leaves the 8.20-acre wetlands (2.25 acres are freshwater marsh and 5.95 acres riverine swamp) preserved, providing an additional 2.5 acres of upland ecosystems adjacent to those wetlands as a buffer. The 10.7 acres of wetlands and buffer will be preserved through a conservation easement.

The proposed development is located on a parcel with a Future Land Use of Medium Density Residential (RM) and a Zoning of Medium Density Residential(R-4). The proposed 206 units is far below the allotted 10 units per acre (397 units) the applicant could build in this zoning district.

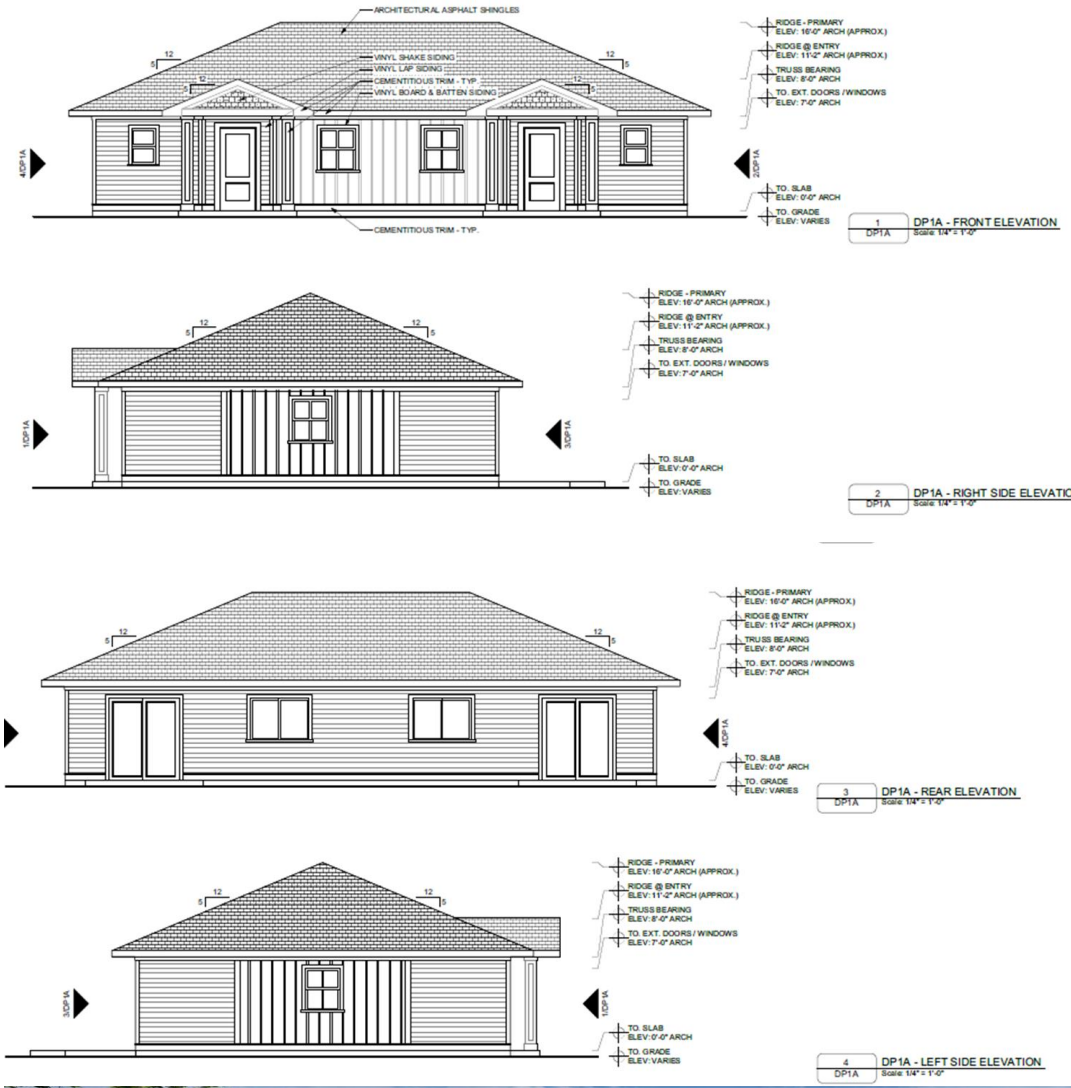




Existing Conditions Design
Currently the land is vacant.

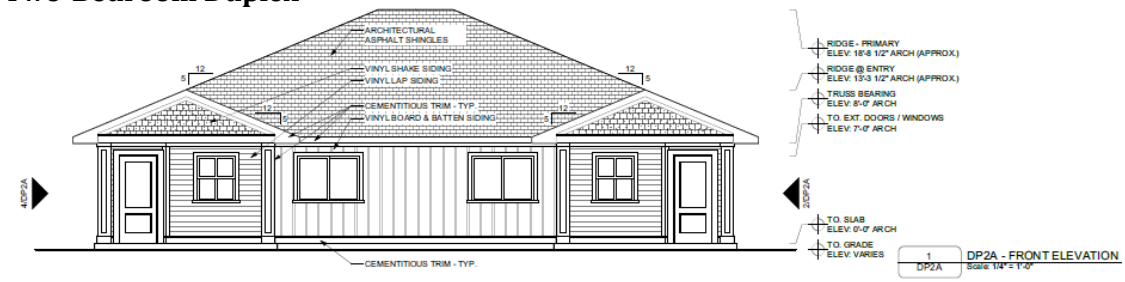
Design
The applicant proposes one-bedroom, two-bedroom and three-bedroom duplexes. The buildings consist of classic horizontal siding walls. The roofs are all 5:12 sloped with gable accents and 24" overhangs. The buildings also consist of horizontal and vertical sidings with stone veneer accents, combined with architectural details like porches and gable accents.

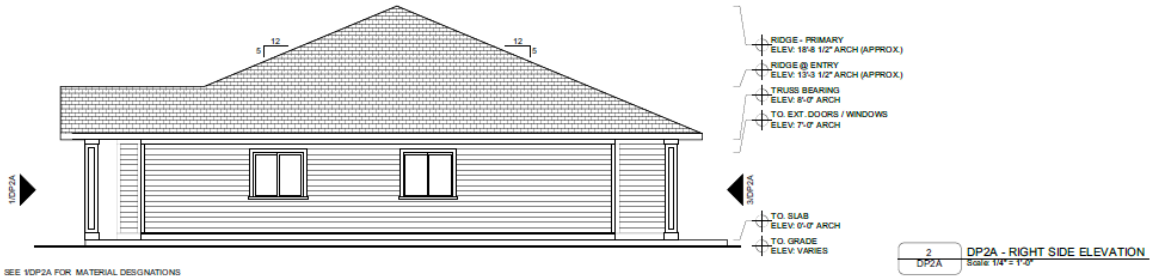
One-Bedroom Duplex



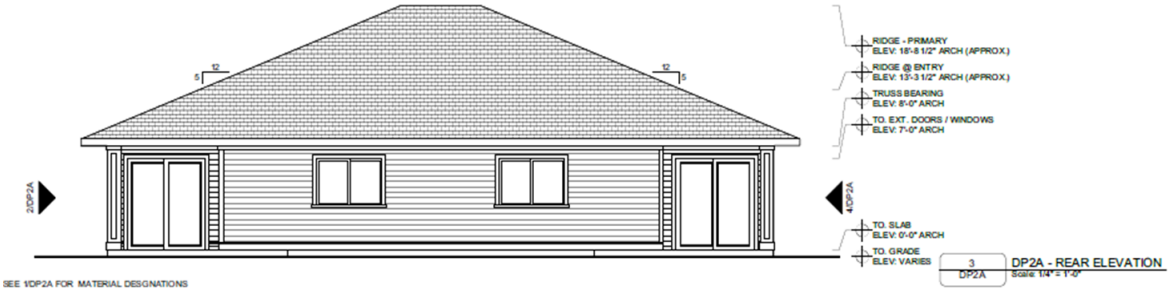


Two-Bedroom Duplex

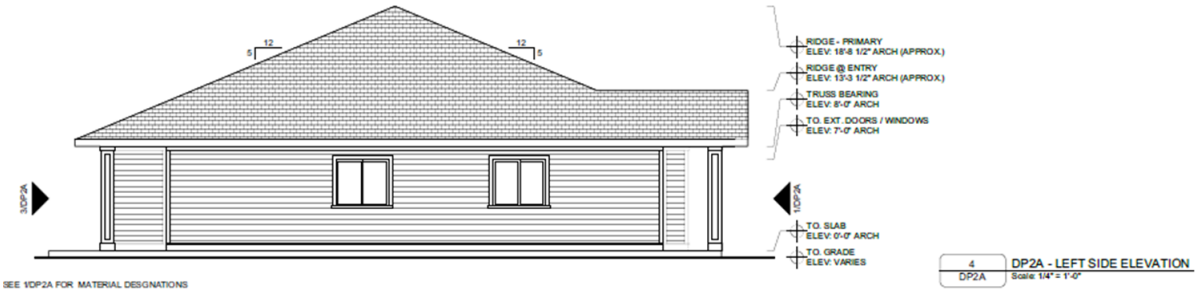




SEE 1/DP2A FOR MATERIAL DESIGNATIONS



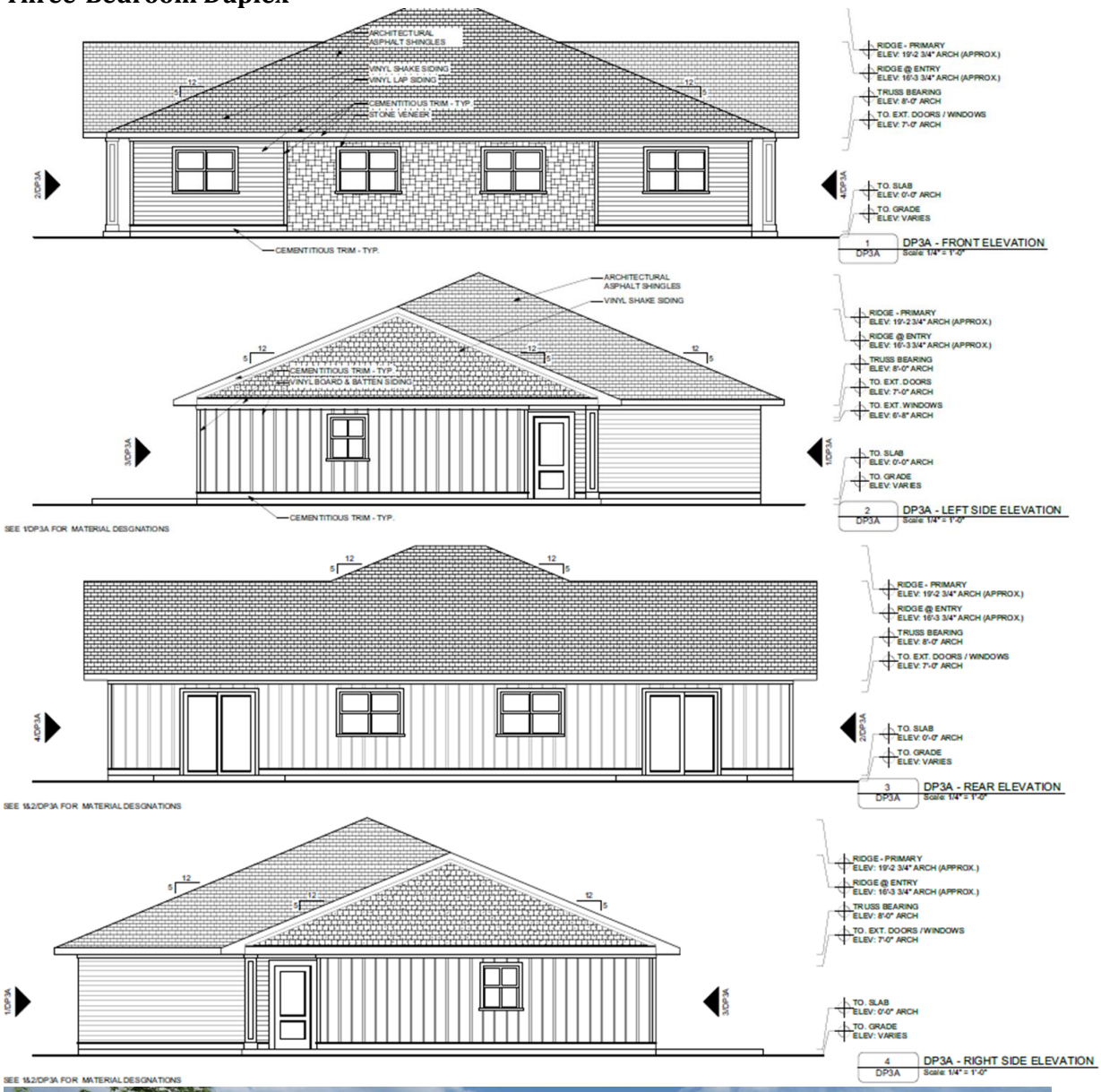
SEE 1/DP2A FOR MATERIAL DESIGNATIONS



SEE 1/DP2A FOR MATERIAL DESIGNATIONS

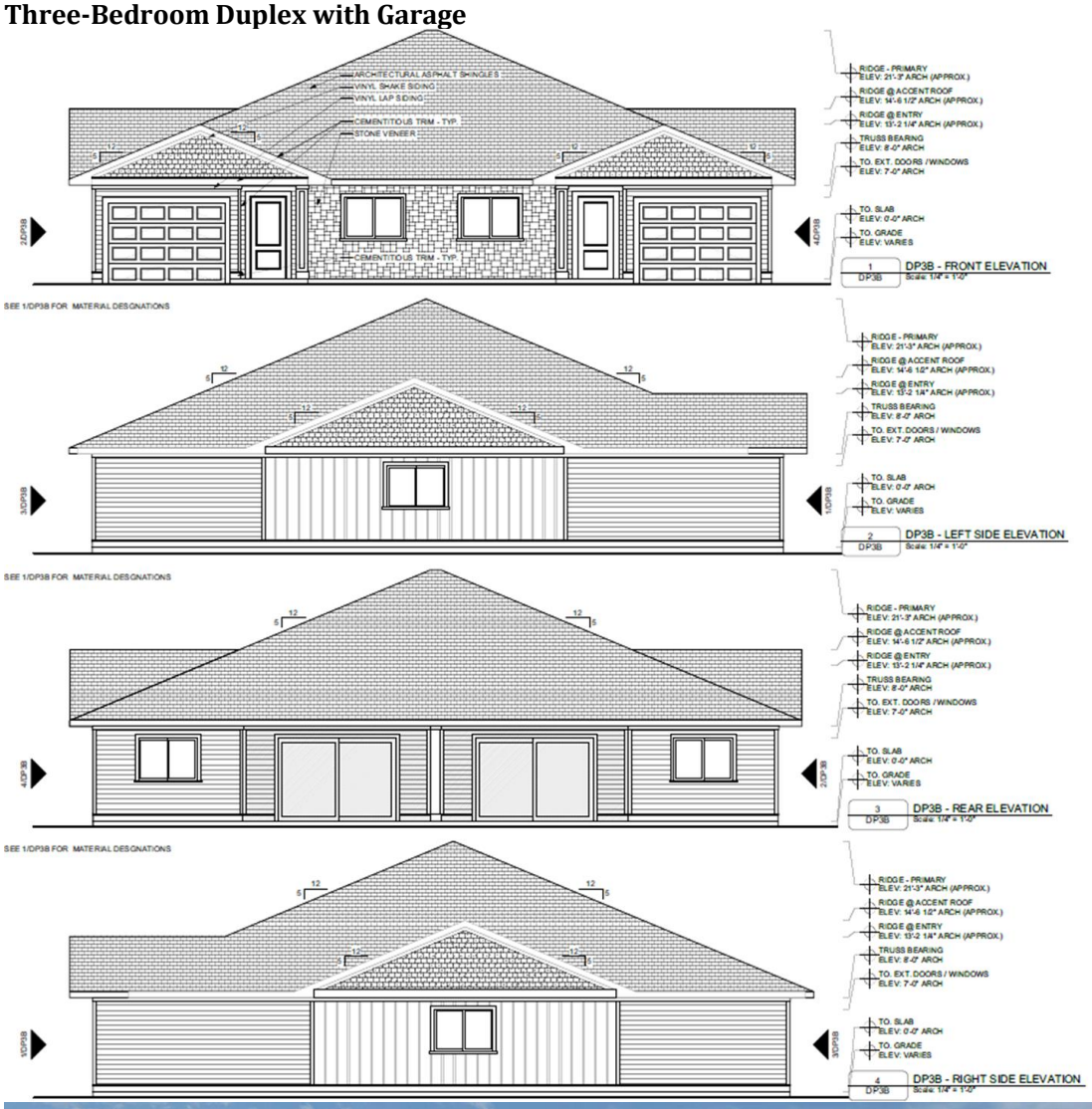


Three-Bedroom Duplex



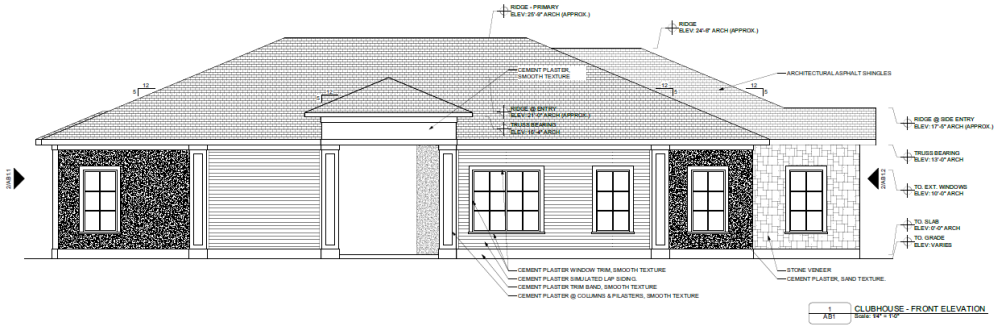


Three-Bedroom Duplex with Garage





Clubhouse

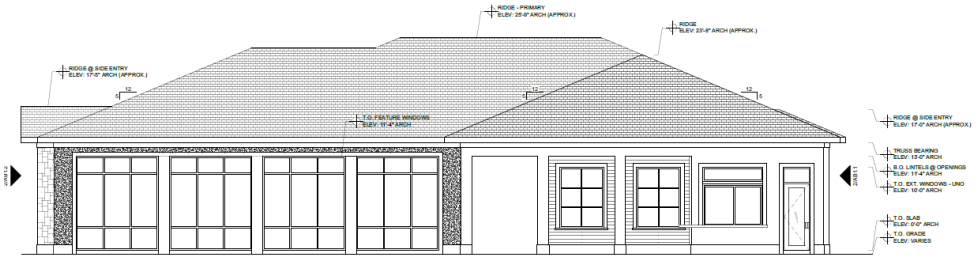


1 AS1 CLUBHOUSE - FRONT ELEVATION
Scale: 1/4" = 1'-0"

SEE 1/AB1.1 FOR MATERIAL DESIGNATIONS



2 AS1 CLUBHOUSE - LEFT SIDE ELEVATION
Scale: 1/4" = 1'-0"



1 AS1-2 CLUBHOUSE - REAR ELEVATION
Scale: 1/4" = 1'-0"

EE 1/AB1.1 FOR MATERIAL DESIGNATIONS



2 AS1-2 CLUBHOUSE - RIGHT SIDE ELEVATION
Scale: 1/4" = 1'-0"

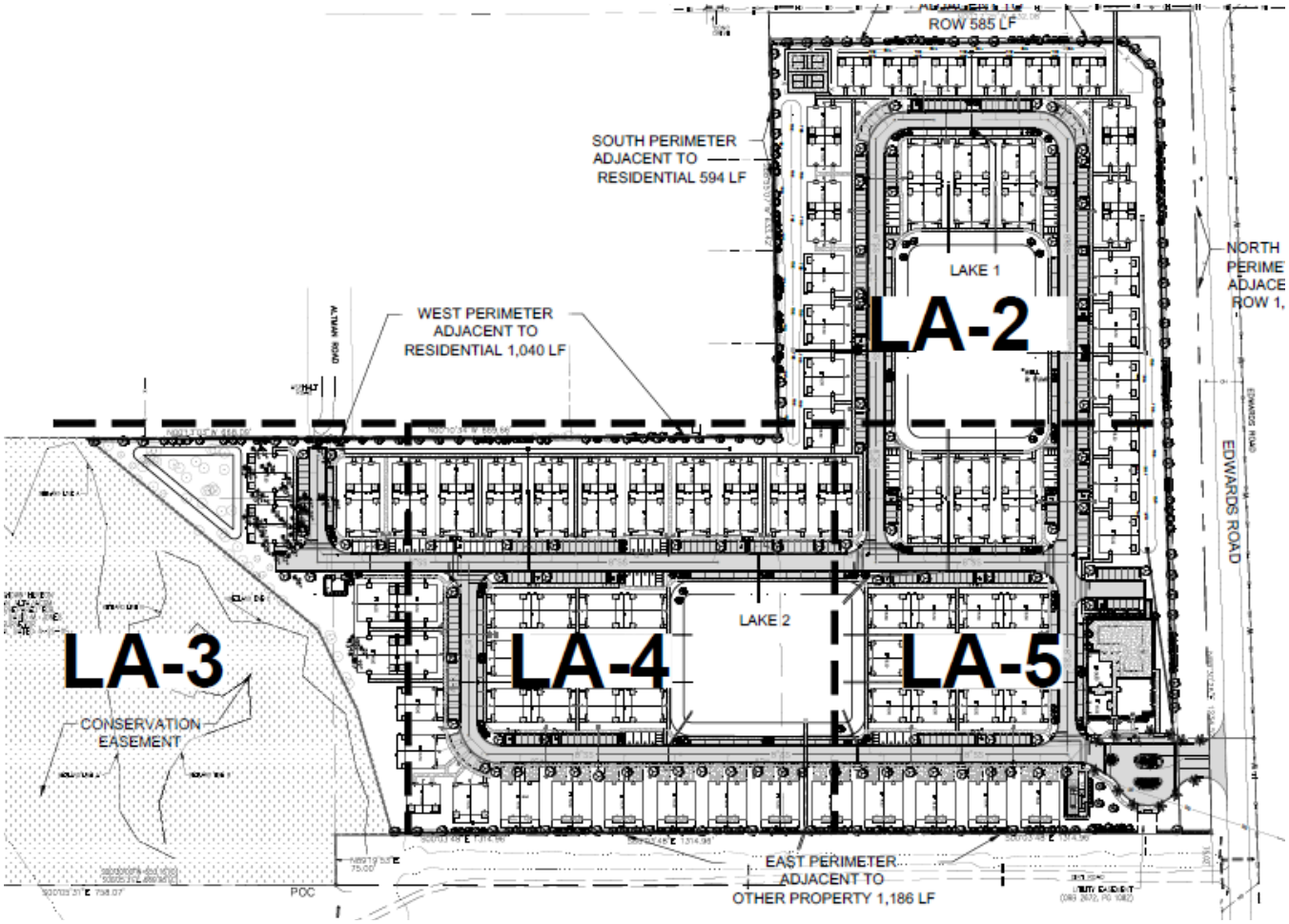




Stormwater Retention & Landscaping

The storm water and conceptual drainage plans were approved by the Engineering Department after multiple reviews.

The landscaping meets Chapter 123 of the code of Ordinances, with the exception that a tree mitigation survey needs to be presented before any site clearing permits are granted. 245 hardwood trees, 216 palms and 2,091 shrubs are being proposed with the development of Viva East.



TREES	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	DBH
	31	Conocarpus erectus	Buttonwood	45G	12' HT	6'W	6'CT, SP	Native	2.5" DBH
	65	Pinus elliotti densa	South Florida Slash Pine	FG	12' HT	5'W	SP	Native	2.5" DBH
	149	Quercus virginiana	Southern Live Oak	45G	12' HT	5'W	6'CT, SP	Native	2.5" DBH
EXISTING TREES TO REMAIN	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**DBH**
	11	Quercus spp	Oak Species	Existing to Remain				Native	VARIES 6"-55"
	9	Sabal palmetto	Cabbage Palmetto	Existing to Remain	10'-18' CT		SP	Native	
PALM TREES	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**	**WIDTH**	**NOTES**	**NATIVE**	**CALIPER**
	16	Roystonea regia	Florida Royal Palm	FG	8' GW, 16' OA		SP	Native	
	* 6	Phoenix roebelenii	Double Pygmy Date Palm	FG	6'OA	6' SPR	4' CT, SP	Non-native	
	*** 186	Sabal palmetto	Sabal Palm	FG	10'-18' CT		SLK, HC, SP	Native	
	8	Wodyetia bifurcata	Single Foxtail Palm	FG	6'GW, 10'CT		SGL, FH, SP	Non-native	

SHRUBS	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT
	* 25	Alcantarea imperialis	Imperial Bromeliad	7G	2` HT
	* 132	Bougainvillea `Helen Johnson`	Dwarf Bougainvillea	3G	18" HT
	520	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT
	944	Clusia guttifera	Small Leaf Clusia	3G	24" HT
	59	Clusia guttifera	Small-Leaf Clusia	7G	48" HT
	* 80	Codiaeum variegatum `Mammey`	Mammey Croton	3G	18" HT
	46	Hamelia patens 'Compacta'	Dwarf Firebush	3G	24" HT
	* 94	Muhlenbergia capillaris	Pink Muhly Grass	3G	24" HT
	* 72	Rondeletia leucophylla	Panama Rose	3G	24" HT
	* 76	Schefflera arboricola	Green Schefflera	3G	24" HT
	* 43	Serenoa repens `Cinerea`	Silver Saw Palmetto	3G	18" HT
GROUND COVERS	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**
	637	Carissa macrocarpa `Emerald Blanket`	Emerald Blanket Carissa	3G	18"HT
SOD	**QTY**	**BOTANICAL NAME**	**COMMON NAME**	**CONTAINER**	**HEIGHT**
	TBD	* * Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD	

Comprehensive Plan

The subject property is designated with a Medium Density Residential, RM, future land use. The designation is intended for parcels that are best suited for multifamily residential uses ranging in density from six and one-half to 12 dwelling units per acre. This category allows small-lot single family units and multifamily dwellings including duplexes, condominiums and townhomes. Limited commercial uses intended to serve the residential uses shall be allowed. Compatible public, quasi-public, and special uses including parks, churches, non-profit clubs, schools and daycare facilities shall also be allowed.

Summary of Technical Review Committee

All affected departments have reviewed the proposed Development Plan with regards to consistency with established ordinances and requirements of the City Code. The Technical Review Committee reviewed this project, and all departments supported the Site Plan (Development and Design Review). The applicant resubmitted this Site Plan multiple times to meet the Engineering Department's requirements. Full findings and comments from review by the corresponding departments, and the responses and plan amendments by the applicant are provided for consideration by the Planning Board.

Staff Recommendation

Staff's recommendation is for the Planning Board to move the proposed Final Plat for approval to City Commission, with the four (4) conditions:

1. A completion certification by a landscape architect, cost estimate, and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.

2. A gopher tortoise survey will be required per State Statute before construction can begin.

3. Addresses will need to be submitted through the Planning Department for all units prior to building permit applications.

4. Prior to the issuance of any site clearing permits, the applicant shall provide a Tree Mitigation Survey and coordinate with the City of Ft. Pierce Arborist for the required mitigation of the City regulated trees proposed to be removed as a result of this site's development/construction activity.

ST. LUCIE COUNTY FLORIDA

PUBLIC WORKS DEPARTMENT
DEVELOPMENT REVIEW COMMITTEE

September 19, 2023

PROJECT: **Viva East - 5315 Edwards Road and 5496 Altman Road**

REF: 23-07000020

TO: Ryan Altizer

FROM: Diana Alzate

Corrections:

1. Jenkins Road is identified on the County's Right-Of-Way Protection Plan. A ROW Dedication is provided. Please contact Saint Lucie County property acquisitions for further information.
2. A 6 FT sidewalk is required along adjacent road Right-of-Ways. The Board of County Commissioners may authorize the applicant to pay a Fee-in-Lieu of construction of the sidewalk.
3. The traffic report will be reviewed by the County's 3rd party consultant at the cost of the applicant.
4. Provide a Truck circulation plan depicting how the school Bus will safely maneuver at the entrance.
5. All setbacks should be measured from the ultimate Right-of-Way line. Parking is being proposed that would require back out movements into the Right-of-Way. This parking shall be relocated elsewhere onsite.

Conditions:

6. A Site Development Permit is required prior to performing site improvement activities.

Fort Pierce Utilities Authority
FPUAnet Communications
500 Boston Avenue (PO Box 3191)
Fort Pierce, FL 34950 (34948)

Dear Developer,

I am writing to you today on behalf of FPUAnet, the City of Fort Pierce's municipal fiber internet service provider. I am reaching out to you to discuss the benefits of choosing FPUAnet for your next development project.

FPUAnet offers a number of advantages over traditional internet providers, including:

- **Scalable to meet growing demands:** FPUAnet's fiber optic network is designed to scale to meet the growing demands of Fort Pierce. This means that you can be confident that your internet connection will be able to handle even the most demanding applications and devices.
- **Gigabit internet throughout the entire service area:** FPUAnet offers gigabit internet speeds throughout its entire service area. This means that you can get the fastest possible internet speeds, no matter where you live in Fort Pierce.
- **High-quality internet to rural and low-income areas:** FPUAnet is committed to providing high-quality internet access to all residents of Fort Pierce, including those in rural and low-income areas. This is important for ensuring that everyone has the opportunity to participate in the digital economy.
- **Faster and more affordable than privately owned ISPs:** FPUAnet's prices are competitive with other internet providers, and in many cases, they are even more affordable. This is because FPUAnet does not have to make a profit, so it can pass on the savings to its customers.

In addition to these advantages, FPUAnet is also committed to providing excellent customer service. Our team of experts is available 24/7 to help you with any questions or problems you may have.

I would be happy to discuss your specific needs in more detail. Please do not hesitate to contact me at peters@fpua.com or 772-466-1600 ext.3311.

Thank you for your time and consideration. I look forward to hearing from you soon.
Sincerely,

Eric Peters
On behalf of FPUAnet

THE SUNRISE CITY
FORT PIERCE
Florida
ENGINEERING
DEPARTMENT

TO : Ryan Altizer, Planning Department

FROM: Selena Griffett, P.E. – Project Engineer

THRU: Tracy Telle, Assistant City Engineer

RE : Viva East Site Plan – 5315 Edwards Rd & 5496 Altman Rd
RESUBMITTAL
TRC No. 23-07000020

DATE : November 29, 2023

This is to advise you that we have completed the review of the following documents as received by this office on November 28, 2023:

- ☐ Development Permit Compliance Review
- ☒ Site Plan
- ☐ Construction Drawings
- ☐ Test Reports & Related Documents
- ☐ Executed Construction Contract
- ☐ Record Drawings
- ☐ Permits

Based on our reviews and appropriate site final inspection, we

- ☐ Recommend
- ☒ Do Not Recommend

- ☐ Variance Approval
- ☒ Site Plan Approval
- ☐ DPCR Approval
- ☐ 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 Engineering Advisory Comments

100 NORTH US 1, FORT PIERCE, FLORIDA 34950 • CITYOFFORTPIERCE.COM • TEL: 772.467.3000 • FAX: 772.460.6847

ENGINEERING COMMENTS:

As required for the Viva West plans, please show sidewalk along Edwards and Jenkins Road in this site plan. Until a fee-in-lieu has been granted and documented, the sidewalk needs to remain on the site plan.

ADVISORY COMMENTS:

1. A South Florida Water Management District (SFWMD) and North St. Lucie River Water Control District (NSLRWCD) permits shall be required prior to DPCR approval.
2. The site has regulated wetlands. All Federal, State and local regulatory permits shall be required prior to DPCR approval.
3. The Environmental Assessment noted gopher tortoise burrows present. An updated Environmental Assessment shall be required prior to any land clearing application or DPCR approval. A Florida Fish and Wildlife permit shall be required prior to any approval if endangered species are determined present on site.
4. A FDEP NOI permit shall be required prior to DPCR approval and land clearing activities.
5. The stormwater management was reviewed conceptually and will be reviewed in depth at the time of DPCR application.
6. St. Lucie County permits will be required for any work within the limits of the Jenkins Road R/W.
7. Show Perimeter Berm. Provide information sufficient to ensure drainage from adjacent parcels is not trapped due to berm.

Technical Review Committee meeting

Sep 21, 2023

Case #: 23-07000020

Planner: City of Ft. Pierce Planning Department

Site Plan

Viva East, 5315 Edwards Rd and 5496 Altman Rd., Fort Pierce, FL

Comments:

Regarding the construction of the proposed multi-family dwelling units, please keep in mind the impact it may have upon the police department with regards to calls for service. While the frequency and exact type of calls cannot be predicted, it should be presumed that calls for service will arise from within this project, once it is completed and occupied by the intended users. Thank you for your attention and consideration.

.

Officer Damian Spotts

Crime Prevention Practitioner

Fort Pierce Police Department.

Fort Pierce Utilities Authority
Water/Wastewater Engineering
1701 South 37th Street
Fort Pierce, FL 34947
772.466.1600 x3402

Technical Review Committee Meeting

TECHNICAL REVIEW PROJECT #: 23-07000020

Site Plan - Viva East - 5315 Edwards Road and 5496 Altman Road

Comments

FPUA W/WW Engineering: Concept approved.

Water and wastewater services are available to serve the subject properties. To connect to these services please submit Utility Plan (2 complete sets) along with a completed plan review and commercial service application to FPUA's Water and Wastewater Engineering department, at 1701 S 37th Street Fort Pierce Florida 34947. Please see the Developer's Responsibilities page on the FPUA website for important steps to guide through the entire process including utility details and permit applications (see link). Details and Specifications can be found at W/WW Engineering Page. For any additional questions please contact Shane Ostrander sostrander@fpua.com.

Note:
There is interest in obtaining a utility easement along the S Jenkins Road corridor for future wastewater conveyance which may be favorable to applicant.

FPUA Electric Engineering: FPUA Electric & Gas Engineering has reviewed the application. **Approved with comments**. The developer will be responsible for providing and installing all on-site conduit, pads, and service conductors along with all costs associated with this project including off-site upgrades necessary to serve the development.

Due to supply chain issues, FPUA makes no guarantees regarding project completion or material availability.

Please contact Kelvin Sandlin for customer requirements and project coordination.

Kelvin Sandlin
Engineering Technician II
Electric & Gas Engineering
Fort Pierce Utilities Authority

(Con't Pg 2)

sandlin@fpua.com
772.466.1600 ext. 6308

Gas service may result in cost savings to the developer through a reduced financial contribution for electric service. Please contact Billy Dupre for gas availability if service is desired.

Billy Dupre
Business Development Representative
Gas Operations
Fort Pierce Utilities Authority
1701 S 37th Street
Fort Pierce FL 34947
E: bdupre@fpua.com
C: 772-216-3498
O: 772-466-1600 X4705
F: 772-468-2413

FPUA Gas: Approved. **NOTE: Natural gas service is available via main extension. Gas service may result in cost savings to the developer through a reduced financial contribution for electric service.**

FPUAnet Fiber: FPUAnet **Approves; i**f client would like **Fiber Internet Service** from FPUAnet Communications, please contact Eric Peters at (772) 468-1697 for **Fiber Internet** requirements if service is desired.

Developer Letter.pdf

THE SUNRISE CITY
FORT PIERCE
Florida
ENGINEERING
DEPARTMENT

TO : Ryan Altizer, Planning Department

FROM: Selena Griffett, P.E. – Project Engineer

THRU : Tracy Telle – Assistant City Engineer

RE : Viva East Site Plan - 5315 Edwards and 5496 Altman
TRC No. 23-07000020

DATE : September 14, 2023

This is to advise you that we have completed the review of the following documents as received by this office on September 7, 2023:

☐ Development Permit Compliance Review ☒ Site Plan

☐ Construction Drawings ☐ Test Reports & Related Documents

☐ Executed Construction Contract ☐ Record Drawings

☐ Permits

Based on our reviews and appropriate site final inspection, we

☐ Recommend ☒ Do Not Recommend

☐ Variance Approval ☒ Site Plan Approval ☐ DPCR Approval ☐ 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 Engineering Comments

100 NORTH US 1, FORT PIERCE, FLORIDA 34950 • CITYOFFORTPIERCE.COM • TEL: 772.467.3000 • FAX: 772.460.6847

1. Review Code Section 125-313(a)(3)c for Site Plan requirements.
2. Provide adequate backup area for the vehicles parked along the east side of the proposed gym building as issues may arise with vehicle stacking entering the development from Edwards Road.
3. Site and Conceptual Drainage plans shall be at a scale not less than one inch equal to 50 feet (Section 125-313).
4. Identify the owner of the canal situated on the east side of the development which will receive stormwater discharges from the project.
5. What does the turning movement shown on the utility plan indicate? It appears the bus will be traveling outside the Edwards Road pavement limits.
6. Coordinate with St. Lucie County for:
   - Access to Edwards Road. (plan refers to "FDOT Base Line"; Edwards Road is a County owned and maintained roadway).
   - Growth rates used in traffic report.
7. No construction activity should take place within the wetland/preserve buffer area.
8. Please show sidewalk along Edwards Road and Jenkins Road. Coordination with St. Lucie County is required.
9. Show Perimeter Berm. Provide information sufficient to ensure drainage from adjacent parcels is not trapped due to berm.
10. All parking spaces shall include bumper rails in accordance with the City of Fort Pierce Code of Ordinance Section 125-315(c)(7) unless the abutting sidewalk is at least 6-inches high.
11. Provide dimensions of roadways throughout the site.
12. Coordinate with St. Lucie County Schools on bus access requirements and bus stop location/configuration.
13. There is no legend on the plan for hatched/shaded areas. Some appear to be concrete (sidewalks/driveways) while other sidewalks are not hatched with concrete pattern; some areas are assumed to be asphalt with different properties for some parking spaces. Please provide legends and typical pavement sections.

ADVISORY COMMENTS:

1. A South Florida Water Management District (SFWMD) permit shall be required prior to DPCR approval.
2. The site has regulated wetlands. All Federal, State and local regulatory permits shall be required prior to DPCR approval.
3. The Environmental Assessment noted gopher tortoise burrows present. An updated Environmental Assessment shall be required prior to any land clearing application or DPCR approval. A Florida Fish and Wildlife permit shall be required prior to any approval if endangered species are determined present on site.
4. A FDEP NOI permit shall be required prior to DPCR approval and land clearing activities.
5. At time of DPCR review and prior to any land clearing activities a Tree Survey shall be required in accordance with Section 123-66.
6. The stormwater management was reviewed conceptually and will be reviewed in depth at the time of DPCR application.

RE: Viva East

Selena Griffett <sgriffett@cityoffortpierce.com>
Wed 1/3/2024 8:57 AM
To:Ryan Altizer <raltizer@cityoffortpierce.com>

1 attachments (282 KB)
SP Memo 11292023.pdf;

Happy New Year Ryan!

Viva East has not been approved per the memo attached.

I would be willing to consider a conditional approval noting that sidewalk is required until a fee-in-lieu has been granted and documented.

Let me know what else you need.

Selena Griffett PE | Project Engineer | City of Fort Pierce
Engineering Department
Phone: 772.467.3780 Cell: 772.519.1081 Fax: 772.460.6847 100 North U.S. 1 Fort Pierce

Website | Facebook | Survey

THE SUNRISE CITY
FORT PIERCE
Florida

From: Ryan Altizer <raltizer@cityoffortpierce.com>
Sent: Wednesday, January 3, 2024 8:53 AM
To: Selena Griffett <sgriffett@cityoffortpierce.com>
Subject: Viva East

Good morning, Selena,

Hope you have had a great New Year. The applicant for Viva East reached out to see if it has received Engineering's approval. Let me know as they are wanting to take their City Commission item off that meeting potentially to wait for Viva East.

Have a great day,

Ryan Altizer| Senior Planner| City of Fort Pierce
Phone: 772.467.3742 100 N. U.S. Highway 1, Fort Pierce, FL 34950
Website | Facebook | Survey

THE SUNRISE CITY
FORT PIERCE
Florida

ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: **(772) 621-3322**
Fax: **(772) 621-3604**

BUREAU OF FIRE PREVENTION

SITE PLAN REVIEW

TO: Site Plan Applicant

SITE PLAN: Viva East TRC

REVIEW DATE: 9/19/2023

PLANNER: RYAN ALTIZER

REVIEWED BY: Captain Andres Elizondo

Site Plan Approved with conditions: _____

Site Plan Requires Re-submittal: ___X____

Site Plan Rejected: _____

The Following Conditions/Revisions Are Necessary:

1. **Please submit a completed application for Development/Site Plan Review (St. Lucie County Fire District Development & Site Plan Review Application). This form is available on-line at https://www.slcfd.com.**
2. **Fire District review fees are due at the time of submittal. An abbreviated fee schedule is included on the application form.**
3. **Please provide an electronic revised copy of the site plan (pdf format).**
4. **Please provide written acknowledgement of the conditions/revisions provided.**
5. **A separate review and permit is required for Underground Fire Mains connected to standpipes or sprinkler systems.**
6. **Fire department access roads provided in accordance with 18.2.3 shall be provided at the start of a project and shall be maintained throughout construction. (NFPA 1**

16.1.4). Surface. Fire department access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with an all-weather driving surface. (NFPA 1.18.2.3.5.2).

7. **Security gates must either be manned 24 hour/day or provide an access control key switch on the control panel to allow for Fire Department entry in an emergency. Security gates must maintain a clear width of 12 feet when open and provide a means to open the gates manually upon loss of power.**

8. **Per the St. Lucie County Fire District Fire Prevention Code Resolution 740-23. At Least 13 feet 6 inches nominal vertical clearance shall be provided and maintained over the full width of all means of access. Including, but not limited to trees, canopies, etc.**

9. **The Fire District reserves the right for future comments at the site plan & building construction phase.**

10. **FD access roads (shall be) are provided such that any portion of an unsprinklered facility or exterior wall is located not more than 150' from FD access roads as measured by an approved route around the exterior of the building or facility. (450' for NFPA 13, 13D, 13R sprinklered protected buildings).**

11. **A fire department access road shall extend to within 50 ft (15 m) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building. NFPA 1.18.2.3.2.1.**

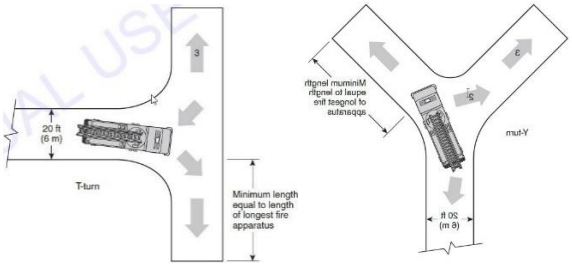
12. **Be advised: Dimensions of largest vehicle are as follows: 38 tons or 77,000 lbs, 47.5 ft. total length, 21.5 ft. wheel base, 10.5 ft. total width, 41.5 degree turning radius.**

13. **Minimum roadway pavement width (two-way traffic) shall be twenty (20) ft. Minimum roadway pavement width (one-way traffic) shall be twelve (12) ft.**

14. **Dead end roadways serving commercial or residential occupancies must include a cul-de-sac when the roadway length exceeds one hundred-fifty (150) feet. "Y" or "T" type turnaround arrangements are permitted.**

ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: **(772) 621-3322**
Fax: **(772) 621-3604**



15. **18.2.3.3 Multiple Access Roads. More than one fire department access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.**

16. **18.2.3.4 Traffic Signal Pre-emption. Where fire department apparatus are equipped with traffic signal pre-emption devices, newly installed traffic signals shall be equipped with traffic signal pre-emption.**

17. **Fire hydrants (shall be) are provided for buildings other than detached one-and-two-family dwellings IAW both of the following 1) The maximum distance to a fire hydrant from the closest point in the building shall not exceed 400 feet. 2) The maximum distance between fire hydrants shall not exceed 500 feet. NFPA 1:18.5.3. Please provide fire flow calculations for hydrants.**

18. **Fire Hydrants (shall be) are provided for detached one- and two-family dwellings IAW both of the following: 1) The maximum distance to a fire hydrant from the closet point on the building shall not exceed 600 feet. 2) The maximum distance between fire hydrants shall not exceed 800 feet. NFPA 1:18.5.2.**

19. **An approved water supply capable of supplying the required fire flow for fire protection (shall be) is identified to all premises upon which facilities, buildings, or portions of buildings which are to be constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1:18.4. See "Needed NFPA Fire Flow Calculator Spreadsheet".**

20. **Per NFPA 1114 Chapter 9, Section 1.3. Prior to the final occupancy of any building, the permitted water supply for fire protection, including fire hydrants and fire suppression systems, shall be installed, tested, and acceptable to the AHJ (SLCFD).**

ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: **(772) 621-3322**
Fax: **(772) 621-3604**

21. **Fire department connections shall be located on the street side of buildings and shall be located and arranged so that hose lines can be readily attached to the inlets without interference from any nearby objects, including buildings, fences, landscaping, or other fire department connections. The locations of connections shall be based upon the access requirements of the fire department.**

22. **The distance allowed between the fire department connection and a fire hydrant shall be no more than one hundred fifty (150) feet as a vehicle travels.**

23. **Minimum Size of Water Mains**
    The minimum size of water mains for supplying water for firefighting purposes shall be six (6) inches. b. The minimum size of water mains supplying hydrants on a dead end main shall be eight (8) inches. c. The maximum number of hydrants located on a dead end main shall be one (1). d. Grid or Tee systems shall be supplied by a minimum of an eight (8) inch looped main. Exceptions may be granted based on the capacity of the water distribution system but in no case shall the main size be less than six (6) inches. e. The minimum size water main(s) shall be determined by the needed fire flow as established by the Fire Marshal and based on the current Insurance Service Office (ISO) requirements.

24. **Two-Way Radio Enhancement Systems/BDAS shall be installed, inspected and operationally tested in accordance with the manufacturer's published requirements, by the local fire department, and comply with the most current edition of the Florida Fire Prevention Code and its incorporated standards and codes. Pre-surveys of radio signal strength shall be submitted to the Fire Marshal in the form of heat signature mapping or a certification document of radio signal strength provided by a licensed engineer.**

25. **Provide the fire district the Pre-Construction Site Checklist Affidavit. This affidavit shall include the pre-construction fire protection plan, pre-construction fire department access roads, and pre-construction on-site credible water supply for your development and or project (the affidavit can be found at http://www.slcfd.com/182/Applications-Permits under fire permits.**

26. **Hydrants shall be located no more than 12ft. from the curb of roadways or from the edge of payment. Clearances of three feet (3 ft.) shall be maintained around the circumference of hydrants. A clear space of not less than five feet (5ft.) shall be provided in front of each hydrant connection having a diameter greater than 2 ½**

inches. The center of hose outlet shall be not less than 18 inches above final grade. (SLCFD Fire Prevention Code Resolution 740-23).

27. **Site Plans submitted in accordance with this Fire Prevention Code shall include the size, layout, and offsite connections for the water distribution system and the location of all existing and proposed fire hydrants within one thousand (1,000) feet of the proposed project.**

Planning Board **6. c.**

Meeting Date: 02/12/2024

Re: Site Plan (Development Review and Design Review) - Regatta Luxury Apartments - 4 Parcels

Submitted For: Kev Freeman, Planning Director, Planning Department

---

Information

SUBJECT:

Site Plan (Development Review and Design Review) - Regatta Luxury Apartments - SE Corner of Graham Road and S. Jenkins Road and approximately 669 feet south of Graham Road
(2418-333-0004-000-0, 2418-333-0003-000-3, 2418-333-0002-000-6, 2418-333-0001-000-9)

SUMMARY:

Request for review of an application for a Site Plan (Development Review and Design Review) to construct a 312-unit multi-family luxury apartments development with a Clubhouse, Barbeque and Pool area, Indoor Gym, Tot Lot, and associated site improvements.

RECOMMENDATION:

The proposed Site Plan (Development and Design Review) applications do not adhere to the requirements of the City Land Development Code and guidelines of the City's Comprehensive Plan. Therefore, Staff recommends **DENIAL**.

The submitted application does not qualify for the City of Fort Pierce Comprehensive Plan Policy 1.1.9 density bonus. Therefore, the Planning Staff is recommending denial of the proposed 312-unit multi-family development with an alternative recommendation to approve the site plan with the allowance for a conventional development of 267 units with the following conditions:

1. A completion certification by a landscape architect, cost estimate and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.
2. Prior to the issuance of any site clearing permits, the applicant shall provide a Tree Mitigation Survey and coordinate with the City of Ft. Pierce Arborist for the required mitigation of the City regulated trees proposed to be removed as a result of this site's development/construction activity.
3. If a monument sign is proposed, please consider installing a landscaped area around the proposed monument sign base which extends a minimum distance of three (3) feet in all directions. Such landscaped area shall be completely covered by ground cover and shrubs, hedges, or similar vegetative materials.
4. A Unity of Title with the St. Lucie County Clerk of Courts and a Parcel Combination with the St. Lucie County Property Appraiser shall be completed prior to the issuance of any Building Permit.

5. After completion of the Unity of Title and Lot Combination, a General Address Request Form for the newly created Parcel ID and for each proposed building and residential unit shall be submitted to the Planning Department.

ALTERNATIVES:

1. Recommend Approval
2. Recommend Modified Approval
3. Recommend Denial

RESPONSIBLE STAFF:

Vennis Gilmore, Assistant Planning Director

COORDINATED WITH:

Technical Review Committee

Fiscal Impact

OTHER INFORMATION:

N/A

Attachments

Staff Report
TRC Comments
Application and Supporting Documents

Form Review

Form Started By: Vennis Gilmore Started On: 02/05/2024 07:36 PM
Final Approval Date: 02/06/2024

CITY OF FORT PIERCE
PLANNING DEPARTMENT

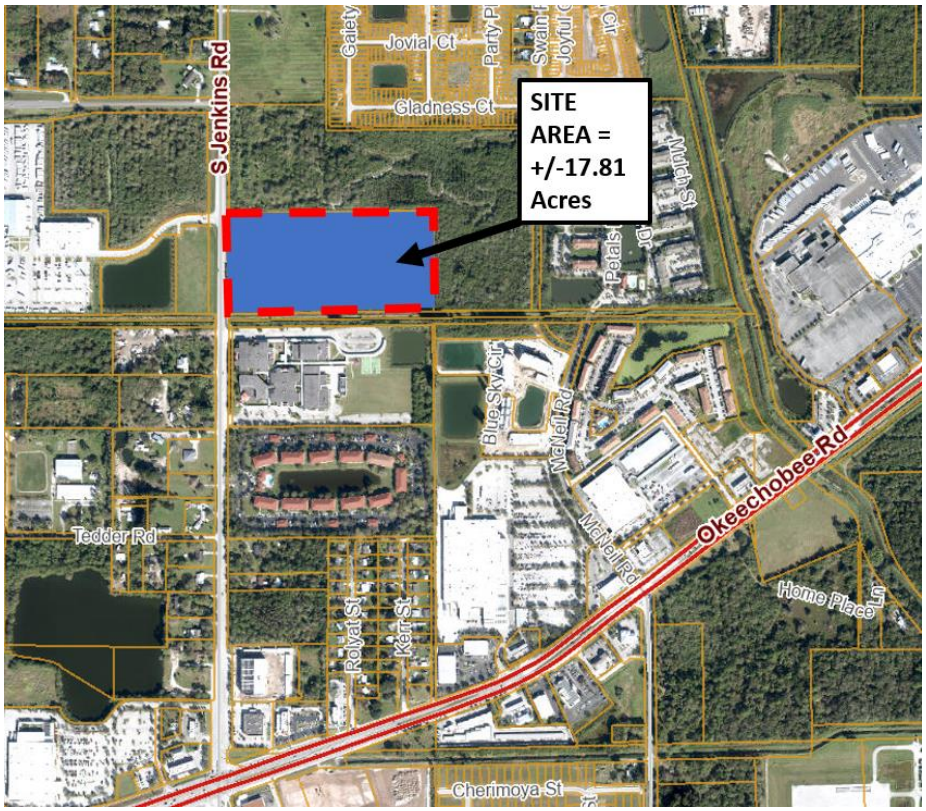
PROJECT: REGATTA LUXURY APARTMENTS – SITE PLAN (DEVELOPMENT REVIEW & DESIGN REVIEW)

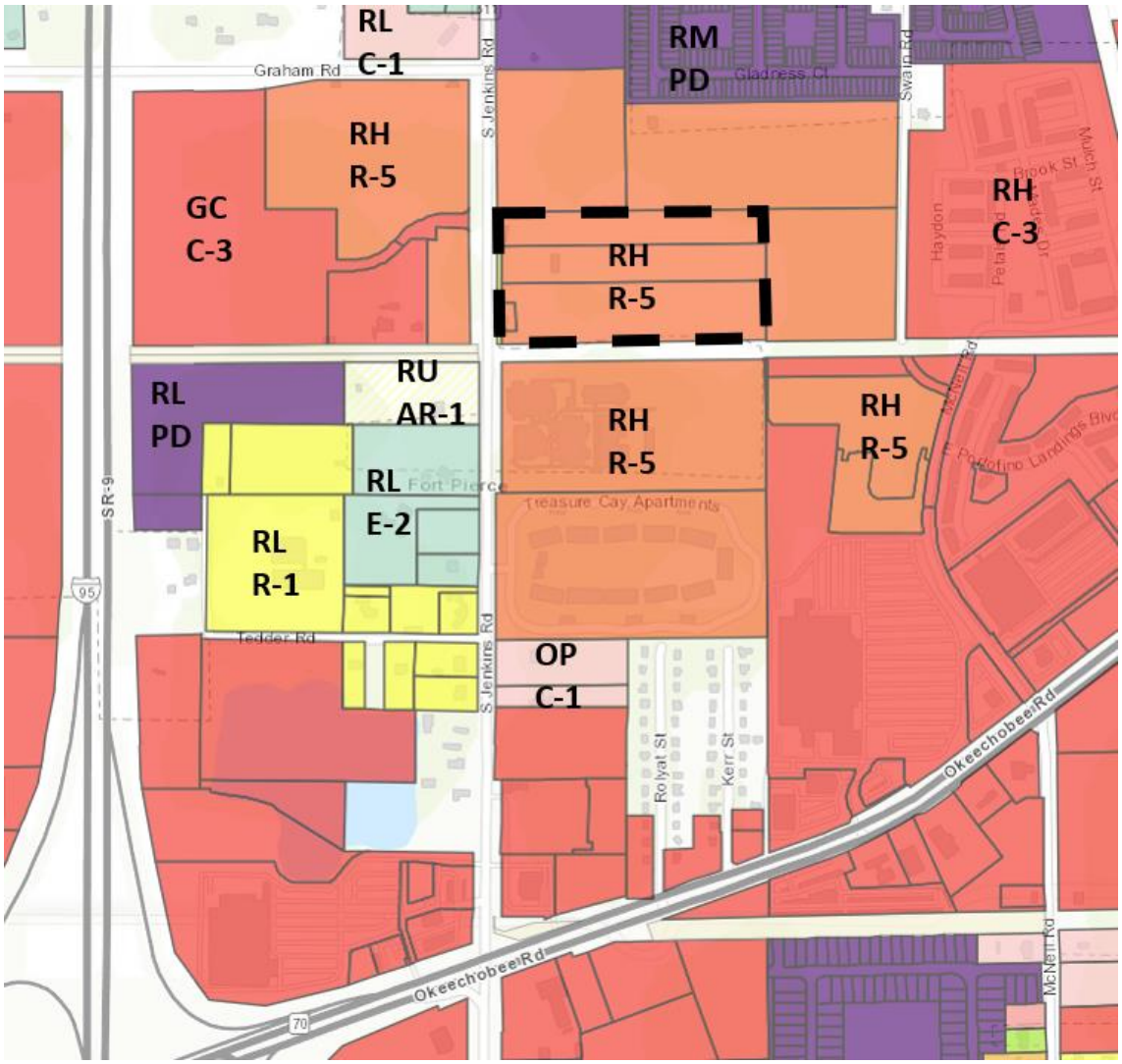
REVIEWER: VENNIS GILMORE, ASSISTANT PLANNING DIRECTOR

DATE: FEBRUARY 12, 2024

STAFF REPORT

Owner:	BGDN LLC
Applicant/Representative:	Leslie Olson, AICP, Principal, District Planning Group
Requested Action:	Site Plan (Development Review & Design Review)
Location:	SE Corner of Graham Rd and S. Jenkins Rd and approximately 669 feet south of Graham Rd
Parcel IDs:	2418-333-0004-000-0, 2418-333-0003-000-3, 2418-333-0002-000-6, 2418-333-0001-000-9
Current Zoning:	R-5, High Density Residential Zone
Future Land Use:	RH, High Density Residential





Surrounding Zoning:

North	East	South	West
R-5	R-5	R-5	R-5/C-3

Site Area: **+/-** 17.81 Acres

Utilities: Located within the FPUA Service Area

Staff Analysis:

Request
Request for review of an application for a Site Plan (Development Review and Design Review) to construct a 312-unit multi-family luxury apartments development with a Clubhouse, Barbeque and Pool area, Indoor Gym, Tot Lot, and associated site improvements.

Project Summary
The proposed development will include 312 apartment units, the new Clubhouse totaling approximately 4,300 square feet, Barbeque and Pool area, Indoor Gym, Tot Lot, new landscaping, drainage improvements, lighting, parking for residents and employees (462 standard spaces + 28 ADA spaces); totaling 490 total parking spaces over the required 468 parking spaces.

The applicant is requesting approval of proposed 312 dwelling units on approximately 18 acres for a density of 17.33 dwelling units per acre based on the following:

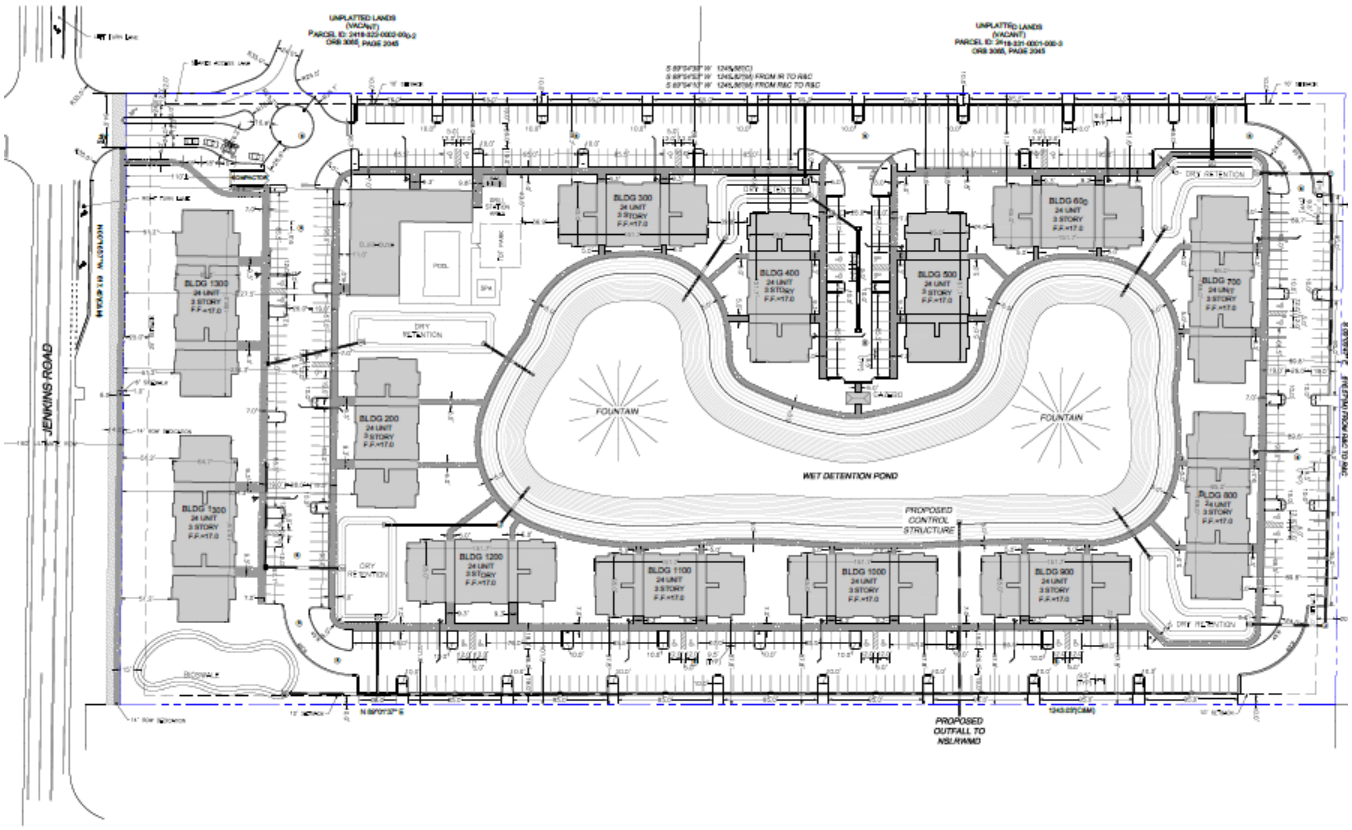
The underlying Future Land Use allows for a density of up to 18 units per acre. The adopted Zoning of High-Density Residential permits up to 15 units per acre for a conventional development before the application of density bonuses provided in the Land Development Ordinances and Comprehensive Plan. The City's Comprehensive Plan, Policy 1.1.9, provides an undefined density bonus for voluntary contributions to needed public infrastructure as follows:

1.1.9 Policy: The City will allow density bonuses if the developer provides or makes contributions above minimum requirements to facilities that provide a public benefit. Such contributions shall include park land dedication or park facilities, infrastructure and transportation facilities, beach access and fishing piers. In establishing the value of the facilities and the appropriate density bonus, the following will be considered:

A. Hard costs—All material and labor costs for the construction of the facility.
B. Soft costs—Fees and costs required for the design of the facility.
C. Land costs—Land to be transferred to the City or other public agency associated with the facility.

An ongoing challenge for the City and County at this location is the lack of sidewalk connectivity between the growing residential developments along the Jenkins Road corridor and the retail, service, office, and other uses located in the area of Okeechobee Road and Jenkins Road. This lack of sidewalk connection further stresses the vehicle Level of Service on Jenkins Road, as there is no safe way to access these nearby uses without a car.

The developer of Regatta Luxury Apartments proposes to construct a sidewalk on their site, connecting to Samuel S. Gaines school to the south, then complete the off-site sidewalk connection gaps on the east side of Jenkins Road between the subject site and Okeechobee Road in exchange for an additional 2.33 units of density. The applicant also states that the proposed development also qualifies for Innovative Residential Development, which would provide for up to an additional 3 units of density, but the applicant and owner/developer has not requested that designation. The developer felt it was more important to the community to construct the sidewalk gaps, and therefore has chosen to request the additional density through Policy 1.1.9 than through Innovative Residential Development. Both the applicant and developer believe this development would qualify for that designation due to the quality of its site design, landscape design and amenities for residents. The project narrative states that the proposed development displays both excellent design and a voluntary contribution of sorely needed sidewalk infrastructure connecting residential and commercial uses through an active transportation sidewalk that will accommodate both pedestrians and cyclists, reducing vehicular burden from Jenkins Road. Alva Stone Group respectfully requests an additional 2.33 units per acres of density for completing the sidewalk gaps between the subject site and the intersection of Okeechobee Road and Jenkins Road on the east site of Jenkins Road. In addition to their own site, a gap of over ¼ mile of sidewalk will be built.



Planning Staff Review

After review of the submitted application, the Planning Staff has determined that the proposed site plan does not qualify for a density increase.

Per City Code Section 125-317. – Sidewalks (b) Applicability:

In order to provide continual access for pedestrians, sidewalks and sidewalk linkages shall be required to be provided by the property owner or permit applicant when one of the following events occur:

(1)
Whenever a permit is issued for the construction of a new duplex, multifamily, commercial, or office structure or use;

(2)
When the valuation of a building permit for construction, additions, and renovations to structures or uses are more than $35,000.00;

(3)
Any expansion of an existing structure or use which results in an expansion of that structure or use in excess of 25 percent of the existing square footage of structure area on a parcel;

(4)
Plans submitted for site plan, conditional use, PUD/PUR, and subdivision review. Plans shall reflect all proposed sidewalk improvements.

(5)
Any substantial change in use on the property.

The subject application relates to the above highlighted subsections. Nonetheless, sidewalks are a requirement for multi-family developments. Therefore, the applicant's determination that providing sidewalk connectivity qualifies for the City of Fort Pierce's Comprehensive Plan Policy 1.1.9 is void. Policy 1.1.9 clearly states "The City will allow density bonuses if the developer provides or makes contributions above minimum requirements to facilities that provide a public benefit. Such contributions shall include park land dedication or park facilities, infrastructure and transportation facilities, beach access and fishing piers." The applicant has not proposed any contributions above the minimum requirements to facilities that provide a public benefit.

The submitted application does not qualify for the City of Fort Pierce Comprehensive Plan Policy 1.1.9 density bonus. Therefore, the Planning Staff is recommending denial of the proposed 312-unit multi-family development with an alternative recommendation to approve the site plan with the allowance for a conventional development of 267 units with the following conditions:

1. A completion certification by a landscape architect, cost estimate and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.
2. Prior to the issuance of any site clearing permits, the applicant shall provide a Tree Mitigation Survey and coordinate with the City of Ft. Pierce Arborist for the required mitigation of the City regulated trees proposed to be removed as a result of this site's development/construction activity.
3. If a monument sign is proposed, please consider installing a landscaped area around the proposed monument sign base which extends a minimum distance of three (3) feet in all directions. Such landscaped area shall be completely covered by ground cover and shrubs, hedges, or similar vegetative materials.
4. A Unity of Title with the St. Lucie County Clerk of Courts and a Parcel Combination with the St. Lucie County Property Appraiser shall be completed prior to the issuance of any Building Permit.
5. After completion of the Unity of Title and Lot Combination, a General Address Request Form for the newly created Parcel ID and for each proposed building and residential unit shall be submitted to the Planning Department.

Existing Conditions
The site is currently vacant land. The subject parcel has a total of approximately 17.81 acres. The site is surrounded by vacant land to the north, west, and east and a educational facility to the south.

Design
One (1) building type is proposed for the residential buildings:
- Type I: 24 units; 36 parking spaces

Unit sizes and mixes for the residential apartment units are noted below:
- 1-bedroom/1-bathroom, 2-bedroom/2-bathroom, and 3-bedroom/2-bathroom
- Average unit size will be 920 square feet

This project intends to create an innovative and compact multifamily development with quality architecture, landscaping and amenities that sets a new standard for the Okeechobee Road corridor, increases property values, and creates an inviting sense of place for its residents. Residential buildings are arranged around a central lake which acts as an amenity for the Project. A walking path constructed around the entire lake with benches for residents to enjoy the lake views and recreate/exercise around the lake enhance this central feature. The entrance drive terminates at the clubhouse for a striking initial experience of the project. Parking and dumpsters are evenly and conveniently distributed throughout the Project. The clubhouse includes a fitness center, kitchen, multipurpose room, restrooms, and a covered area over the pool deck for shade lounging.

A limited number of buildings are visible from Jenkins Rd. to establish an architectural design context for compatibility. The closest built project include:

Samuel Gaines Academy, adjacent to the subject property on the south side,
Treasure Cay Apartments, whose entrance is 1300 feet to the south of the subject project entrance,

Celebration Pointe, with an entrance approximately 2800 feet north of the subject project entrance, and Camping World and Gander Mountain, directly across Jenkins Rd.

Many of these projects are behind more visible features from the road, such as signage, landscaping, and stormwater ponds, so stylistic compatibility with the proposed project would not be discernible from Jenkins Rd. Documentation for our site visit shows little in terms of definable architectural style. Roofing materials range from a Mediterranean barrel tile to the standing seam metal of Florida vernacular to asphalt shingle.

The proposed residential buildings will be three (3) stories in height. The maximum height allowed within the R-5 zoning district is 200 feet above grade and the Project complies with same given that the residential structures are no more than three (3) stories in height. The buildings are designed in a contemporary style that mirrors current trends in many residential projects. The building footprint designs provide horizonal articulation allowing the building mass to be broken up, reducing overall scale, and creating a more visually interesting facade. The fenestration utilizes contemporary features and materials including cantilevered balconies, horizontal railing, stucco siding, banding, metal seam panels for roofs, aluminum bahama shutters, and decorative vinyl louvers. The contemporary color/material palette consists of charcoal gray, honorable blue, high reflective white, lakeside, and crushed ice.





Access & Deliveries

Access will be provided via a new full four 4-lane driveway access from South Jenkins Road. The Project will be gated, and the Applicant has provided two (2) entry drives from the single driveway along South Jenkins Road to allow for stacking before the gates. The Applicant has also provided a means to turn around with a roundabout included for school and transit buses, from the center resident lane as requested by the School District.

Stormwater Retention & Landscaping

Stormwater Retention

Onsite stormwater will be collected via a wet retention system and five dry retention areas, where the required water abatement and attenuation will be provided. The complete plan set includes a preliminary paving and drainage analysis with stormwater retention.

Please see stormwater drainage statement on the conceptual civil plans provided with this submittal.

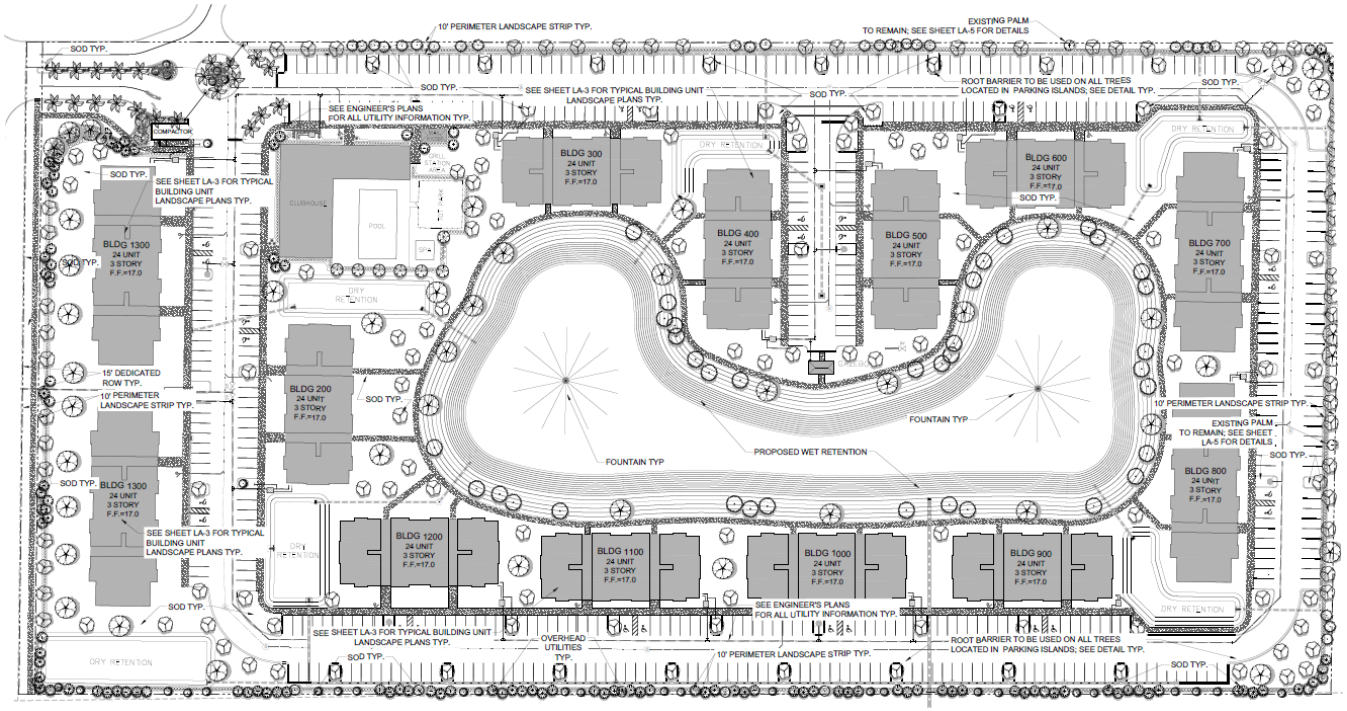
Landscaping

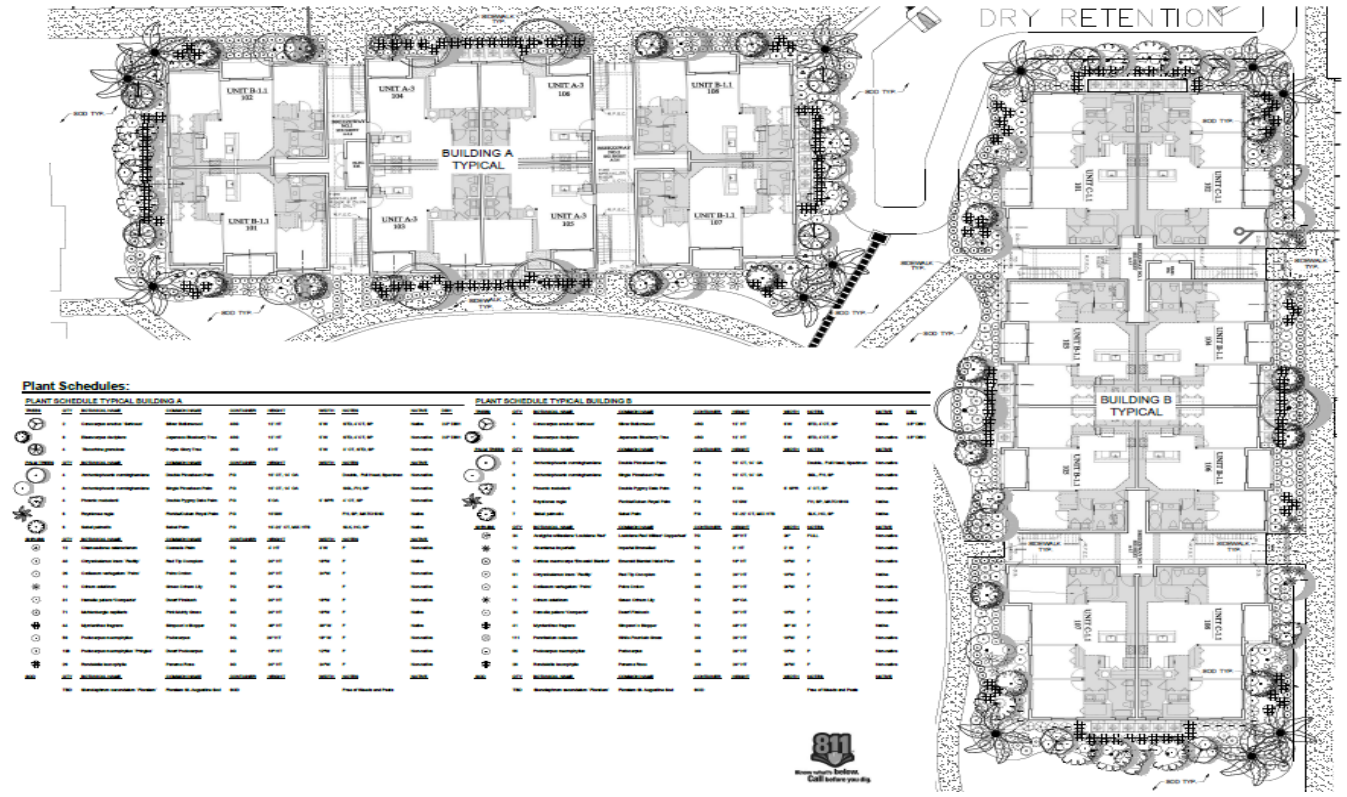
The Applicant is proposing a standard landscape design to meet the minimum landscape requirements of the City Code. The City Code requires 10-foot buffers on all sides. The Applicant has provided the buffers to 10 feet along all sides of the subject property. The Project requires 300 interior and buffer trees, the applicant has provided the required 300 trees total. The project requires 1,258 shrubs, the applicant has exceeded the shrubs requirement and is providing a total of 1,325 shrubs.

All plants shall conform to established nursery grades and standards, to be Florida No. 1 or better, and shall be free of disease and insects at the time of installation. All new landscaping shall be provided with 100% irrigation coverage. The proposed landscape design provides native vegetation and careful placement of trees to provide

shade in open spaces areas and along walkways, foundation landscaping around buildings, screening of utilities, and planting of the lake banks of the retention pond for aesthetics.

The overall landscape plan is provided on Sheet LA-1; detailed landscape plans are provided on Sheet LA-2, planting details for the residential buildings are provided on Sheet LA-3 and the Project plant list is provided on Sheets LA-1 and LA-3.





Plant List
Trees:

33 -	Japanese Blueberry Tree
27 -	South Florida Slash Pine
154 -	Southern Live Oak
36 -	Bald Cypress

Palm Trees:

22 -	Florida/Cuban Royal Palm
121-	Sabal Palm
7 -	Single Foxtail Palm

Shrubs:
1,325 Shrub Varieties

Ground Covers:
St. Augustine

Right-of-way, Sidewalks, & Lighting
Per City Code Section 125-316. – Access Control, the applicant has complied with the provisions of this section by promoting the safety of the motorist, pedestrian, and minimizing traffic congestion.

Per City Code Section 125-317. – Sidewalks, the applicant has provided continual access for pedestrians, safe and efficient sidewalks and sidewalk linkages, and sidewalks with a minimum width of five (5) feet in width. The applicant is providing a six (6) foot sidewalk.

Per City Code Section 125-315. – Off-Street Parking and Loading (j)(1), the applicant has provided a minimum average of one footcandle for all parking areas.

Vehicular circulation has been carefully designed to allow sufficient area for maneuvering by emergency and service vehicles. A substantial pedestrian sidewalk system is provided throughout the Project with a minimum of 5' sidewalks, connections to all parking areas and buildings and trees placed adjacent to walkways wherever possible. The above-referenced 5-foot-wide multi-use path creates a wonderful opportunity for pedestrian and bike activity.

A photometric plan has been provided with this submittal which depicts the proposed exterior lighting within the Project. Pole mounted lights are proposed to provide lighting within the parking areas.

Traffic Impacts
Kimley-Horn (Traffic Consultant for St. Lucie County Planning & Development Services) has reviewed the traffic impact statement (dated December 28, 2023) prepared by O'Rourke Engineering & Planning related to the above-mentioned project. The proposed project consists of 312-multifamily dwelling units and is generally located on the east side of Jenkins Road, south of Graham Road in St. Lucie County.

The total trip generation potential for the proposed development is 2,075 daily trips, 120 AM peak hour trips (29 entering / 91 exiting) and 155 PM peak hour trips (98 entering / 57 exiting). Access to the site will be provided via one full access driveway on Jenkins Road. Based on the expected number of project trips, both ingress northbound right-turn and southbound left-turn lanes are warranted at the project driveway. It should be noted that a signal is warranted at the intersection of Graham Road & Jenkins Road based upon background traffic volumes prior to buildout of the development. The analysis demonstrates that the study area roadways and intersections will operate acceptably upon buildout.

A traffic impact statement is provided with this submittal which concludes that the surrounding roadway network will continue to function at an acceptable level of service in compliance with City Code Section 105-5.

Comprehensive Plan
The subject property is designated with an RH, High Density Residential future land use. The designation is intended for parcels that are best suited for medium to high density multifamily residential uses ranging in density from 12 to 18 dwelling units per acre. This category allows multifamily dwellings including apartments, condominiums, and townhomes. Limited commercial uses intended to serve the residential uses shall be allowed. Compatible public, quasi-public, and special uses including parks, churches, non-profit clubs, schools, and daycare facilities shall also be allowed.

Summary of Technical Review Committee

All affected departments have reviewed the proposed Development Plan with regards to consistency with established ordinances and requirements of the City Code.

Fort Pierce Engineering Department
See attached document.
Fort Pierce Building Department
See attached document.
St. Lucie County Planning Department
See Kimbley-Horn Traffic Impact Review
St. Lucie County PW/Engineering
See Kimbley-Horn Traffic Impact Review & attached document.
Fort Pierce Police Department
See attached document.
City Clerk Office
No comments received.
Code Enforcement
No comments received.
Fort Pierce Utilities Authority
See attached document.
St. Lucie County Fire District
See attached document.
Florida Department of Transportation
No comments received.
St. Lucie County School Board
No comments received.
St. Lucie Transportation Planning Organization
See attached document.

Full findings and comments from review by the corresponding departments, and the responses and plan amendments by the applicant are provided for consideration by the Planning Board.

Staff Recommendation:
The proposed Site Plan (Development and Design Review) applications do not adhere to the requirements of the City Land Development Code and guidelines of the City's Comprehensive Plan. Therefore, Staff recommends **DENIAL**.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

Leslie Olson, AICP, Principal, District Planning Group
130 S Indian River Drive, Ste 202
Fort Pierce, FL 34950

Subject: Regatta Luxury Apartments – Site Plan & Design Review –- Technical Review Committee Comments

City of Fort Pierce Planning Department

1. Per City Code Section 125-317 (b). – Sidewalks (Applicability): In order to provide continual access for pedestrians, sidewalks and sidewalk linkages shall be required to be provided by the property owner or permit applicant when one of the following events occur:

   (1) Whenever a permit is issued for the construction of a new duplex, multifamily, commercial, or office structure or use;

   (2) When the valuation of a building permit for construction, additions, and renovations to structures or uses are more than $35,000.00;

   (3) Any expansion of an existing structure or use which results in an expansion of that structure or use in excess of 25 percent of the existing square footage of structure area on a parcel;

   (4) Plans submitted for site plan, conditional use, PUD/PUR, and subdivision review. Plans shall reflect all proposed sidewalk improvements.

   (5) Any substantial change in use on the property.

   Please install a sidewalk along the South Jenkins Road corridor.

2. A completion certification by a landscape architect, cost estimate and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.

3. Prior to the issuance of any site clearing permits, the applicant shall provide a Tree Mitigation Survey and coordinate with the City of Ft. Pierce Arborist for the required mitigation of the City regulated trees proposed to be removed as a result of this site's development/construction activity.

4. If a ground sign is proposed, please consider installing a landscaped area around the proposed monument sign base which extends a minimum distance of three (3) feet in all directions. Such landscaped areas shall be completely covered by ground cover and shrubs, hedges, or similar vegetative materials. **The ground sign can be submitted separately during the DPCR process.**

5. **Please provide car stacking information on the site plan for vehicles entering the gated community.**

6. **Please submit a general address request form for the main parcel address. An additional general address request form will be required for individual apartment addresses.**

7. **Please address all outstanding comments and resubmit them with revisions for review.**

THE SUNRISE CITY
FORT PIERCE
Florida
ENGINEERING
DEPARTMENT

TO : Vennis Gilmore, Assistant Planning Director

FROM : Tracy Telle, Assistant City Engineer

RE : Regatta Luxury Apartments – 2144, 2152, & 2190 Jenkins Road
TRC No. 23-07000022

DATE : January 10, 2024

This is to advise you that we have completed the review of the following documents as received by this office on January 10, 2023:

- [x] Site Plan Application
- [ ] Test Reports & Related Documents
- [ ] Record Drawings
- [ ] Clearances from all applicable Local, State and Federal Agencies
- [ ] Construction Drawings
- [ ] Executed Construction Contract
- [ ] Permits from applicable Local, State & Federal Agencies

Based on our reviews and appropriate site final inspection, we

- [x] Recommend
- [ ] Do Not Recommend

- [x] Site Plan Approval
- [ ] 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 comments

100 NORTH US 1, FORT PIERCE, FLORIDA 34950 • CITYOFFORTPIERCE.COM • TEL: 772.467.3000 • FAX: 772.460.6847

ENGINEERING ADVISORY COMMENTS:

1. A 20' R/W donation was provided by the previous developer of the site (Summerwind Townhomes). The applicant shall confirm with St. Lucie County on whether this contribution suffices or if additional right-of-way is warranted. In addition, right-of-way improvements may be deemed necessary by St. Lucie County.
2. The project is comprised of four parcels. Prior to issuance of DPCR approval the applicant shall provide proof of the unification of the four parcels.

100 NORTH US 1, FORT PIERCE, FLORIDA 34950 • CITYOFFORTPIERCE.COM • TEL: 772.467.3000 • FAX: 772.460.6847

THE SUNRISE CITY
FORT PIERCE
BUILDING DEPARTMENT Florida

BUILDING DEPARTMENT
TECHNICAL REVIEW COMMITTEE (TRC)
COMMENT FORM

Meeting Date: 9.21.23
Property Address: Site Plan - Regatta Luxury Apartments - 2144, 2152, and 2190 S. Jenkins Road

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 the submission of comments upon completion of the official plan review.

☑ 2. Pre-construction meeting with the City's Building Department is requested.

☑ 3. All new construction or alterations shall meet the requirements of the Florida Building Code 7th Edition.

☑ 4. Building Permit required.

☑ 5. Signed and sealed construction drawings required.

☐ 6. Must meet the following Accessibility requirements:

- ☐ Accessible route
- ☐ Handicapped parking spaces
- ☐ Means of egress

☐ 7. Change of Use required

- ☐ Shall include a signed and sealed Life Safety Plan
- ☐ Shall include a signed and sealed comprehensive drawing, detailing how the building and elements will comply with the Florida Building Code requirements.

MEP

☐ 8. Property exists in Special Flood Hazard Area. All Federal and State requirements shall be addressed.

☐ 9. Flood Development Permit required.

☐ 10. Final plat and approved parcel ID's required to submit or DPCR and building permit review.

☐ 11. Open permits, requiring attention exist.

☑ 12. Shall meet the Fire Prevention Code:

- ☐ Sprinkler system is required.
- ☐ Smoke alarm system is required.

☑ 15. Other

Additional Comments/Requirements:

* FBC code cycle change 12/31/23

Building Official's or Representative's Signature _____ Date: 9/19/23

THE SUNRISE CITY
FORT PIERCE
POLICE DEPARTMENT
"In Honor We Serve"
Florida

Technical Review Committee meeting

Sep 21, 2023

Case #: 23-41200010

Planner: City of Ft. Pierce Planning Department

Site Plan

Regatta Luxury Apartments, 2144, 2152 and 2190 South Jenkins Rd., Fort Pierce, FL

Comments:

Regarding the construction of the proposed multi-family dwelling units, please keep in mind the impact it may have upon the police department with regards to calls for service. While the frequency and exact type of calls cannot be predicted, it should be presumed that calls for service will arise from within this project, once it is completed and occupied by the intended users. Thank you for your attention and consideration.

.

Officer Damian Spotts

Crime Prevention Practitioner

Fort Pierce Police Department.

Fort Pierce Utilities Authority
Water/Wastewater Engineering
1701 South 37th Street
Fort Pierce, FL 34947
772.466.1600 x3402

Technical Review Committee Meeting

TECHNICAL REVIEW PROJECT #: 23-07000022

Site Plan - Regatta Luxury Apartments - 2144, 2152, and 2190 S. Jenkins Road

Comments

FPUA W/WW Engineering: Approved as noted,

FPUA has Water and sewer available to serve this site. Please submit 3 complete sets of utility construction plans along with a completed plan review application to the Water and Wastewater Engineering Department for review, at 1701 S 37th Street Fort Pierce Florida. For more information please contact John Biggs at 772 466 1600 ext. 3474.



FPUA Electric Engineering: FPUA Electric & Gas Engineering has reviewed the application. **Approved with comments**. The developer will be responsible for providing and installing all on-site conduit, pads, and service conductors along with all costs associated with this project including off-site upgrades necessary to serve the development.

Due to supply chain issues, FPUA makes no guarantees regarding project completion or material availability.

Please contact Kelvin Sandlin for customer requirements and project coordination.

Kelvin Sandlin
Engineering Technician II
Electric & Gas Engineering
Fort Pierce Utilities Authority
sandlin@fpua.com
772.466.1600 ext. 6308

(Con't Pg 2)

Gas service may result in cost savings to the developer through a reduced financial contribution for electric service. Please contact Billy Dupre for gas availability if service is desired.

Billy Dupre
Business Development Representative
Gas Operations
Fort Pierce Utilities Authority
1701 S 37th Street
Fort Pierce FL 34947
E: bdupre@fpua.com
C: 772-216-3498
O: 772-466-1600 X4705
F: 772-468-2413

FPUA Gas: Approved. **NOTE: Natural gas service is available via main extension. Gas service may result in cost savings to the developer through a reduced financial contribution for electric service.**

FPUAnet Fiber: FPUAnet **Approves; if** client would like **Fiber Internet Service** from FPUAnet Communications, please contact Eric Peters at (772) 468-1697 for **Fiber Internet** requirements if service is desired.



Fort Pierce Utilities Authority
FPUAnet Communications
500 Boston Avenue (PO Box 3191)
Fort Pierce, FL 34950 (34948)

Dear Developer,

I am writing to you today on behalf of FPUAnet, the City of Fort Pierce's municipal fiber internet service provider. I am reaching out to you to discuss the benefits of choosing FPUAnet for your next development project.

FPUAnet offers a number of advantages over traditional internet providers, including:

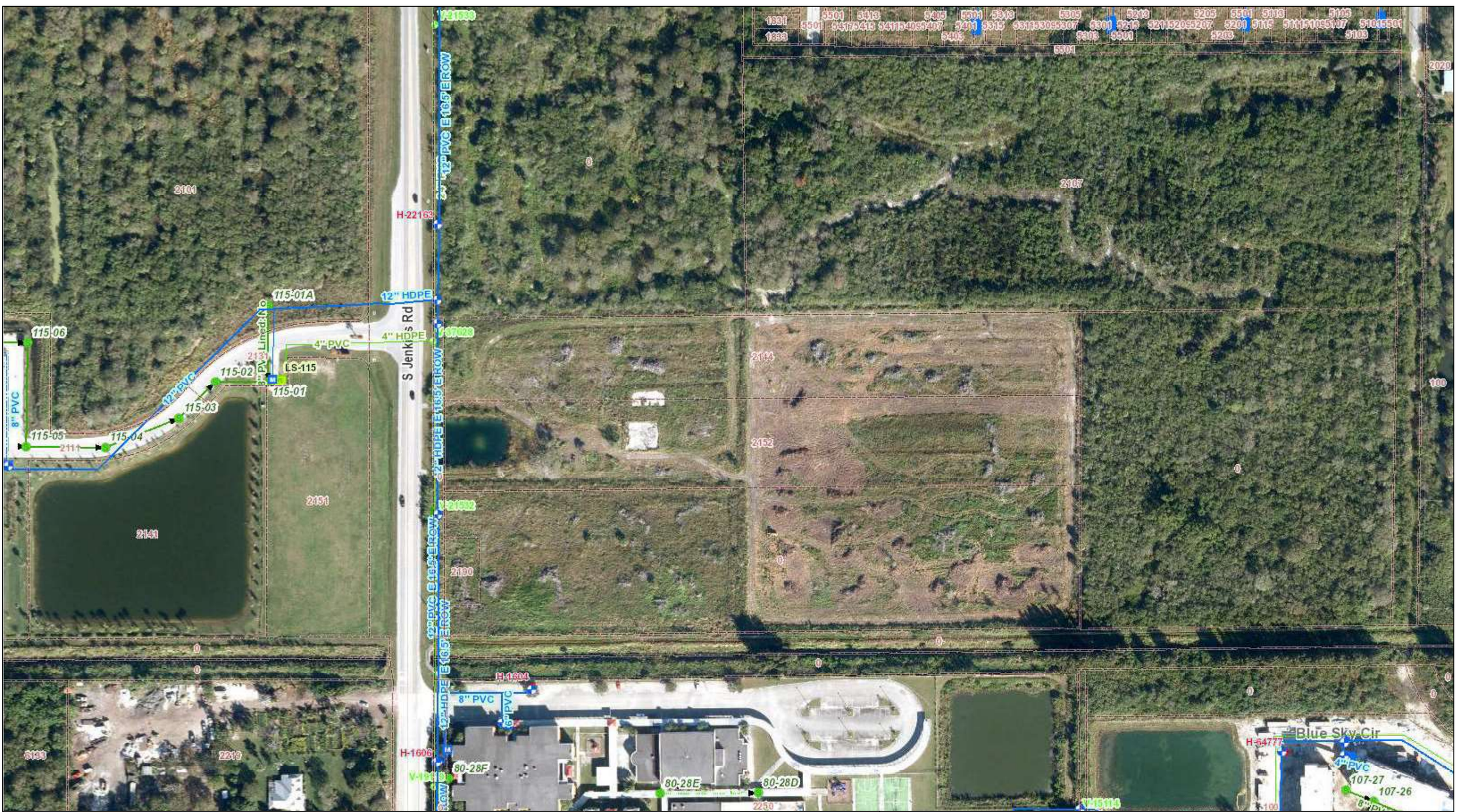
- **Scalable to meet growing demands:** FPUAnet's fiber optic network is designed to scale to meet the growing demands of Fort Pierce. This means that you can be confident that your internet connection will be able to handle even the most demanding applications and devices.
- **Gigabit internet throughout the entire service area:** FPUAnet offers gigabit internet speeds throughout its entire service area. This means that you can get the fastest possible internet speeds, no matter where you live in Fort Pierce.
- **High-quality internet to rural and low-income areas:** FPUAnet is committed to providing high-quality internet access to all residents of Fort Pierce, including those in rural and low-income areas. This is important for ensuring that everyone has the opportunity to participate in the digital economy.
- **Faster and more affordable than privately owned ISPs:** FPUAnet's prices are competitive with other internet providers, and in many cases, they are even more affordable. This is because FPUAnet does not have to make a profit, so it can pass on the savings to its customers.

In addition to these advantages, FPUAnet is also committed to providing excellent customer service. Our team of experts is available 24/7 to help you with any questions or problems you may have.

I would be happy to discuss your specific needs in more detail. Please do not hesitate to contact me at peters@fpua.com or 772-466-1600 ext.3311.

Thank you for your time and consideration. I look forward to hearing from you soon.
Sincerely,

Eric Peters
On behalf of FPUAnet



Legend

- Electric Primary Wire
- Transmission Wire
- Gas Main
- Fiber Optic Cable
- Potable Water Main
- Raw Water Main
- Wastewater Force Main
- WW Gravity Main
- Pole
- Fuse

Transformers

- Overhead
- Pad Mount

Valves

- Gas
- Water
- Raw Water
- Waste Water
- Fire Hydrant
- Well
- PS Lift Station

Disclaimer:

The data contained herein is offered "as is", with no claim or warranty as to its accuracy or completeness. The data is for reference only and should not be considered to be of survey precision. Due to formatting restrictions, the information provided in the map may not be represented in the legend.

811 Know what's below. Call before you dig.

Date: 9/13/2023

FPUA COMMUNITY PROUD

N

1 inch = 188 feet

FPUA Web Map

Created By:
Name

(772) 466-1600
FAX (772) 461-1938

September 19, 2023

PROJECT: **Regatta Luxury Apartments - 2144, 2152, and 2190 S. Jenkins Road**

REF: 23-07000022

TO: Vennis Gilmore

FROM: Diana Alzate

Correction:

1. The proposed driveway connection conflicts with the Camping World Driveway across Jenkins Road. The driveway shall align with the driveway opposite Jenkins Road.
2. South Jenkins Road is identified on the County's Right-Of-Way Protection Plan. A ROW Dedication will be required along South Jenkins Road to meet the ultimate Right-of-Way of 160 feet.
3. Provide an updated survey in accordance with statutes and regulations. Clarify the location, width, and name(s) of all adjacent streets, canals, or other rights-of-way. The statement "varies" does not satisfy width requirements.
4. Dimension the driveway width, radius of return, and setback from side property lines and adjacent driveways. Section 7.05.06 of the Land Development Code includes minimum setback requirements for driveways. The proposed driveway exceeds maximum width requirements per County land development codes.
5. A review of the traffic analysis by the County's third-party consultant will be required at the cost of the applicant.
6. The traffic analysis indicates that a south bound left turn lane is required for the site but is not shown on the plans. A north bound right turn lane shall be provided as well.
7. Identify on the Site Plan where the stormwater outfall will be located.
8. A 6 FT sidewalk is required along the adjacent road Right-of-way.
9. Gated access shall comply with section 7.10.15 of the Land Development Code. If the site is fenced with gated access, provide dimensions demonstrating that Right-of-Way setback, queuing spaces, and turn-a-round comply with this code section.

Conditions:

1. A Site Development Permit is required before performing site improvement activities.

2. A Road Improvement Agreement and appropriate bond will be required for all permanent improvements within the Right-of-Way.

ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: **(772) 621-3322**
Fax: **(772) 621-3604**

BUREAU OF FIRE PREVENTION

SITE PLAN REVIEW

TO: Site Plan Applicant

SITE PLAN: Regatta Luxury Apartments TRC

REVIEW DATE: 9/19/2023

PLANNER: VENNIS GILMORE

REVIEWED BY: Captain Andres Elizondo

Site Plan Approved with conditions: _____

Site Plan Requires Re-submittal: ___X____

Site Plan Rejected: _____

The Following Conditions/Revisions Are Necessary:

1. **Please submit a completed application for Development/Site Plan Review (St. Lucie County Fire District Development & Site Plan Review Application). This form is available on-line at https://www.slcfd.com.**
2. **Fire District review fees are due at the time of submittal. An abbreviated fee schedule is included on the application form.**
3. **Please provide an electronic revised copy of the site plan (pdf format).**
4. **Please provide written acknowledgement of the conditions/revisions provided.**
5. **A separate review and permit is required for Underground Fire Mains connected to standpipes or sprinkler systems.**
6. **Fire department access roads provided in accordance with 18.2.3 shall be provided at the start of a project and shall be maintained throughout construction. (NFPA 1**

ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: (772) 621-3322
Fax: (772) 621-3604

16.1.4). Surface. Fire department access roads shall be designed and maintained to support the imposed loads of fire apparatus and shall be provided with an all-weather driving surface. (NFPA 1.18.2.3.5.2).

7. **Security gates must either be manned 24 hour/day or provide an access control key switch on the control panel to allow for Fire Department entry in an emergency. Security gates must maintain a clear width of 12 feet when open and provide a means to open the gates manually upon loss of power.**

8. **Per the St. Lucie County Fire District Fire Prevention Code Resolution 740-23. At Least 13 feet 6 inches nominal vertical clearance shall be provided and maintained over the full width of all means of access. Including, but not limited to trees, canopies, etc.**

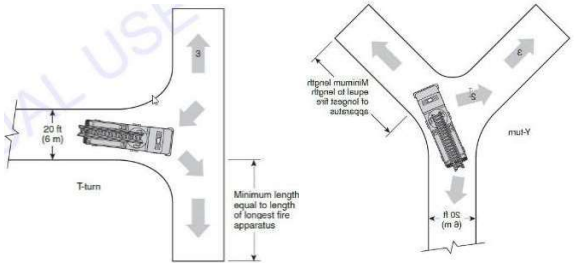
9. **The Fire District reserves the right for future comments at the site plan & building construction phase.**

10. **FD access roads (shall be) are provided such that any portion of an unsprinklered facility or exterior wall is located not more than 150' from FD access roads as measured by an approved route around the exterior of the building or facility. (450' for NFPA 13, 13D, 13R sprinklered protected buildings).**

11. **Be advised: Dimensions of largest vehicle are as follows: 38 tons or 77,000 lbs, 47.5 ft. total length, 21.5 ft. wheel base, 10.5 ft. total width, 41.5 degree turning radius.**

12. **Minimum roadway pavement width (two-way traffic) shall be twenty (20) ft. Minimum roadway pavement width (one-way traffic) shall be twelve (12) ft.**

13. **Dead end roadways serving commercial or residential occupancies must include a cul-de-sac when the roadway length exceeds one hundred-fifty (150) feet. "Y" or "T" type turnaround arrangements are permitted.**



ST. LUCIE COUNTY FIRE DISTRICT
Community Risk Reduction Division
Office of the Fire Marshal

Telephone: **(772) 621-3322**
Fax: **(772) 621-3604**

14. **18.2.3.3 Multiple Access Roads. More than one fire department access road shall be provided when it is determined by the AHJ that access by a single road could be impaired by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access.**

15. **18.2.3.4 Traffic Signal Pre-emption. Where fire department apparatus are equipped with traffic signal pre-emption devices, newly installed traffic signals shall be equipped with traffic signal pre-emption.**

16. **Fire hydrants (shall be) are provided for buildings other than detached one-and-two-family dwellings IAW both of the following 1) The maximum distance to a fire hydrant from the closest point in the building shall not exceed 400 feet. 2) The maximum distance between fire hydrants shall not exceed 500 feet. NFPA 1:18.5.3. Please provide fire flow calculations for hydrants.**

17. **An approved water supply capable of supplying the required fire flow for fire protection (shall be) is identified to all premises upon which facilities, buildings, or portions of buildings which are to be constructed or moved into the jurisdiction. The approved water supply shall be in accordance with NFPA 1:18.4. See "Needed NFPA Fire Flow Calculator Spreadsheet".**

18. **Per NFPA 1114 Chapter 9, Section 1.3. Prior to the final occupancy of any building, the permitted water supply for fire protection, including fire hydrants and fire suppression systems, shall be installed, tested, and acceptable to the AHJ (SLCFD).**

19. **Fire department connections shall be located on the street side of buildings and shall be located and arranged so that hose lines can be readily attached to the inlets without interference from any nearby objects, including buildings, fences, landscaping, or other fire department connections. The locations of connections shall be based upon the access requirements of the fire department.**

20. **The distance allowed between the fire department connection and a fire hydrant shall be no more than one hundred fifty (150) feet as a vehicle travels.**

21. **Minimum Size of Water Mains**
    The minimum size of water mains for supplying water for firefighting purposes shall be six (6) inches. b. The minimum size of water mains supplying hydrants on a dead end main shall be eight (8) inches. c. The maximum number of hydrants located on a dead end main shall be one (1). d. Grid or Tee systems shall be supplied

by a minimum of an eight (8) inch looped main. Exceptions may be granted based on the capacity of the water distribution system but in no case shall the main size be less than six (6) inches. e. The minimum size water main(s) shall be determined by the needed fire flow as established by the Fire Marshal and based on the current Insurance Service Office (ISO) requirements.

22. **Two-Way Radio Enhancement Systems/BDAS shall be installed, inspected and operationally tested in accordance with the manufacturer's published requirements, by the local fire department, and comply with the most current edition of the Florida Fire Prevention Code and its incorporated standards and codes. Pre-surveys of radio signal strength shall be submitted to the Fire Marshal in the form of heat signature mapping or a certification document of radio signal strength provided by a licensed engineer.**

23. **Provide the fire district the Pre-Construction Site Checklist Affidavit. This affidavit shall include the pre-construction fire protection plan, pre-construction fire department access roads, and pre-construction on-site credible water supply for your development and or project (the affidavit can be found at http://www.slcfd.com/182/Applications-Permits under fire permits.**

24. **Hydrants shall be located no more than 12ft. from the curb of roadways or from the edge of payment. Clearances of three feet (3 ft.) shall be maintained around the circumference of hydrants. A clear space of not less than five feet (5ft.) shall be provided in front of each hydrant connection having a diameter greater than 2 ½ inches. The center of hose outlet shall be not less than 18 inches above final grade. (SLCFD Fire Prevention Code Resolution 740-23).**

25. **Site Plans submitted in accordance with this Fire Prevention Code shall include the size, layout, and offsite connections for the water distribution system and the location of all existing and proposed fire hydrants within one thousand (1,000) feet of the proposed project.**

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, Florida 34953
772-462-1593 www.stlucietpo.org

January 10, 2024 **VIA EMAIL**

Mr. Vennis Gilmore, Senior Planner
City of Fort Pierce
100 North U.S. Highway 1
Fort Pierce, Florida 34950

RE: Potential Transportation Impact Review (PTIR)
Regatta Apartments (3rd Resubmittal)
2144,2152,2190 S. Jenkins Road
Fort Pierce, Florida

Dear Mr. Gilmore:

As the Federal and State-designated agency responsible for transportation planning for the City of Fort Pierce, City of Port St. Lucie, St. Lucie Village, and St. Lucie County, the St. Lucie Transportation Planning Organization (St. Lucie TPO) has completed a PTIR regarding the above-referenced proposed development. The proposed development consists of 13 buildings, 312 dwelling units on an 18-acre property that is currently vacant. Based on the review, the following comment is provided:

- **Historical Growth Rate:** The Traffic Impact Study for the proposed development utilizes 1.1 percent for the historical growth rate. However, the St. Lucie TPO has adopted the BEBR high growth rate for the historical growth rate which reflects the actual annual growth rate in the County since 1995. Therefore, 2.55 percent should be utilized for the historical growth rate in the Traffic Impact Study.

Please contact me should any additional information or clarification be required with regard to this PTIR.

Sincerely,

Stephanie M. Torres

Stephanie Torres
Bicycle-Pedestrian Program Manager

Kimley»Horn

To: Kori Benton, AICP
Planning Manager
St. Lucie County Planning and Development Services

From: Alex Memering, P.E. ARM
Kimley-Horn and Associates, Inc.

Alex Campano, E.I. ADC
Kimley-Horn and Associates, Inc.

Date: December 28, 2023

Re: **Regatta Luxury Apartments**
Final Review of Traffic Impact Analysis

Kimley-Horn has reviewed the traffic impact statement (revised December 21, 2023) prepared by O'Rourke Engineering & Planning related to the above-mentioned project. The proposed project consists of 312 multifamily dwelling units and is generally located on the east side of Jenkins Road, south of Graham Road in St. Lucie County.

The total trip generation potential for the proposed development is 2,075 daily trips, 120 AM peak hour trips (29 entering / 91 exiting) and 155 PM peak hour trips (98 entering / 57 exiting). Access to the site will be provided via one full access driveway on Jenkins Road. Based on the expected number of project trips, both ingress northbound right-turn and southbound left-turn lanes are warranted at the project driveway. It should be noted that a signal is warranted at the intersection of Graham Road & Jenkins Road based upon background traffic volumes prior to buildout of the development. We have no further comments for the applicant.

Thank you for the opportunity to assist St. Lucie County in reviewing this project. Please contact us if you have any questions or need additional information.

DocuSign Envelope ID: DA4F66A8-47C4-4714-98C4-77FCEA54734D

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

DEVELOPMENT REVIEW

Property Information

Property address or Location: 2144, 2152, 2190 S Jenkins Rd.

Parcel ID #(s): 2418-333-0004-000-0; 2418-333-0003-000-3; 2418-333-0002-000-6; 2418-333-0001-0

Project description: Regatta Luxury Apartments

Application Type

■ Site Plan ☐ Conditional Use w/New Construction ☐ Conceptual Development Plan

☐ Minor Amendment ☐ Major Amendment

Site Information

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

Residential: Proposed Units: 312 Proposed Sq. Ft.:_____ Site Acreage: 18

BGDN LLC	Leslie Olson, AICP, Principal, District F
Property Owner(s)	**Applicant/Representative, Title, Company**
1820 Avenue K	130 S Indian River Drive Ste 202
Street Address	Street Address
Brooklyn NY 11230	Fort Pierce FL 34950
City State Zip	City State Zip
(917) 208-8343	772.742.8649
Phone Number	Phone Number
Murray@parkstoneproperties.com	leslie@districtplanninggroup.com
Email Address	Email Address

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

DocuSigned by:
Murray Puderbeutel
21722EFB34C7492...
Property Owner(s) Signature(s)

APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS

CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM

For more information, please refer to the website:

https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi

DocuSign Envelope ID: DA4F66A8-47C4-4714-98C4-77FCEA54734D

General Information

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



Site Plan submittal requirements:

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

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

DocuSign Envelope ID: DA4F66A8-47C4-4714-98C4-77FCEA54734D

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

DESIGN REVIEW

Property Information

Property address or Location: 2144, 2152, 2190 S Jenkins Rd.

Parcel ID #(s): 2418-333-0004-000-0; 2418-333-0003-000-3; 2418-333-0002-000-6; 2418-333-0001-000-9

Project description: Regatta Luxury Apartments

BGDN LLC	Leslie Olson, AICP, Principal, District Planning Group
Property Owner(s)	**Applicant/Representative, Title, Company**
1820 Avenue K	130 S Indian River Drive Ste 202
Street Address	Street Address
Brooklyn NY 11230	Fort Pierce FL 34950
City State Zip	City State Zip
(917) 208-8343	772.742.8649
Phone Number	Phone Number
Murray@parkstoneproperties.com	leslie@districtplanninggroup.com
Email Address	Email Address

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

DocuSigned by:
Murray Puderbeutel
21722EFB34C7492...

Property Owner(s) Signature(s)

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

DocuSign Envelope ID: DA4F66A8-47C4-4714-98C4-77FCEA54734D

Design Review Application Checklist
(City Code of Ordinances 125-314)

Submittal for Administrative Approval

a. A survey (1" = 30' minimum scale) of property lines, existing topography and the location of trees meeting the tree protection regulations of section 123-66, location of bordering streets and, if applicable, wetlands and beaches.
b. A site analysis study to include a discussion of specimen trees and other natural vegetation, access, significant topography, wetlands, buffers, setbacks, views, orientation, the surrounding built environment, and other site features that may influence design elements.
c. A draft written narrative describing the design intent of the project, its goals, and objectives and how it reflects the site analysis study results.
d. Context photographs of neighboring uses and architectural styles.
e. Photographs and/or drawings of architectural buildings or objects that serve as a precedent for the proposed building design. Models should be taken from local exemplary buildings, either existing or demolished. Documentation of such buildings is available in the city's planning department.
f. Photographs of all existing structures located on the property. If existing structures on the property are more than fifty (50) years of age, documentation of these structures with data from the Florida Master Site File form is also required.
g. Conceptual site plan (to scale) showing proposed location of all buildings, structures, parking areas, signs and landscaping.
h. Landscape plan, at the same scale as the site plan. The planning director or designee may request enlarged plans of detailed planting areas. Planting schedule with sizes of proposed plantings must be included.
i. Accurate color rendering of proposed signs showing dimensions, type of lettering, materials and actual color samples that demonstrates cohesiveness with the project design.
j. Exterior elevations showing architectural character, external architectural features, and streetscape of the proposed development, including materials, colors, shadow lines and landscaping. The street elevation shall encompass the entire proposed project and generally identify the major elements of the adjacent two (2) properties on either side of the site. If the adjacent properties are vacant or underutilized, a diagram shall be provided that identifies the mass and form that is allowable under current zoning. If the street elevation must be drawn at such a scale as to render architectural details of the building unreadable, drawings of individual buildings at a larger scale should be provided as well.
k. Design review concurrent with conceptual development plan procedure according to subsection 125-313 is also available.

Submittal for Board Approval

a. A written narrative describing how the project conforms to administrative approval and design review guidelines of this section.
b. A final site plan meeting the requirements of section 125-313.
c. A final site lighting plan that meets the requirements of subsection 125-313(d)(8).
d. A final landscape plan that meets the requirements of articles II and III of chapter 123.
e. Final floor plans and elevation drawings (1/8" = 1'-0" minimum scale), as detailed under administrative approval, showing exterior building materials and colors with architectural sections and details to adequately describe the project.
f. A color board (11"x17" maximum) containing actual color samples of all exterior finishes, keyed to the elevations, and indicating the manufacturer's name and color designation.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT
Florida

CONCURRENCY
CAPACITY ANALYSIS

I. Site Data:

	Existing Use	Future Land Use	Zoning
North	Vacant/Approved Multifamily	RH Residential High	R-5 High Density Residential Zone
South	K-8 Public School	RH Residential High	R-5 High Density Residential Zone
East	Vacant/Approved Multifamily	RH Residential High	R-5 High Density Residential Zone
West	Camping World RV Sales	GC General Commercial	C-3 General Commercial Zone

	Future Land Use	Zoning Classification	Maximum Intensity Residential: Dwelling Units per Acre Other: Square Footage	Total Acreage	Flood Zone
Current	RH Residential High	R-5 High Density Residential Zone	324 units	18	X
****Proposed**	RH Residential High	R-5 High Density Residential Zone	312 units	18	N/A

II. Public Facilities Information:

A. Potable Water:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.125 gallons per day per square foot
Demand Analysis	Maximum 82,240
Current Zoning/FLU	Total gallons per day 82,240
**Proposed Zoning/FLU	Total gallons per day 81,120
**Change in Demand	Total gallons per day -1,120

B. Wastewater:	
Average Use	Residential: 100 gallons per day per person (du x 2.6= persons x 100 gpd = demand) Other: 0.1 gallons per day per square foot
Demand Analysis	Maximum 82,240
Current Zoning/FLU	Total gallons per day 82,240
**Proposed Zoning/FLU	Total gallons per day 81,120
**Change in Demand	Total gallons per day -1,120

C. Parks and Recreation (Residential Classifications Only): 45,038: proposed
(Du x 2.6 = persons + 44,227 = population /LOS)

Park Type	LOS	Existing Population Park Demand	Proposed Population Park Demand	Change in Demand
Regional	20 acres per 1,000 people		45,038/1,000*20	
Urban District	5 acres per 1,000 people		45,038/1,000*5	
Community	2.5 acres per 1,000 people		45,038/1,000*2.5	
Neighborhood	1.36 acres per 1,000 people		45,038/1,000*1.36	

D. Public Schools (Residential Classifications Only):
Single Family: (du x 0.405 = students/70% K-8/30% High)
Multi-family: (du x 0.207 = students/70% K-8/30% High) 67 Current/65 Proposed

	K-8	High
School Name		
City		
Distance		
Current Zoning/FLU Enrollment Demand	47	20
****Proposed Zoning/FLU Enrollment Demand**	45	20
****Change in Demand**		

E. Solid Waste: Residential (2 yard serves 15 units, 4 yard serves 30 units, 6 yard serves 45 units, 8 yard serves 60 units)

Demand Analysis	Maximum
Current Zoning/FLU	44 Yds
****Proposed Zoning/FLU**	
***Change in Demand**	

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

Impact	Stormwater capacity will meet all state and local requirements

III. Transportation Analysis: *Complete ITE Trip Generation Form (Attached)*

G. Transportation Analysis: Complete ITE Trip Generation Data Form Most recent ITE Code for use; HCM Roadway Capacity		
	AADT	**AM/PM Peak Hour Trips**
Demand Analysis	Maximum	Maximum
Current Zoning/FLU	2,075 project projection	120/155 project projection
****Proposed Zoning/FLU**		
***Change in Demand**	Trips	Trips
Impact to Capacity		

IV. Project Description

PHASING					
Is this project (phase) part of a larger project? ☐ Yes ☑ No					
If yes, enumerate each phase, the number of units or square footage in each phase and beginning/completion date.					
Total Project: Residential Units: Single Family: Multifamily:					
Non-residential (square footage):					
Mixed-use (describe use):					
(If this is a single phase project, name it Phase I – Total)					

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

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

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

B. 1. Does this application involve demolition or re-use of any structure(s)? ☐ Yes ☑ No
If yes, what is the size of the structure(s) to be demolished or re-used? _____
2. What is the current use of the structure to be demolished or re-used? _____
3. Are you claiming trip credits for the demolition or re-use of a structure(s) at the site? ☐ Yes ☑ No
If yes, provide estimates of credits for each previous use at the site. (Attach sheet with calculations)

C. Exemptions Requested:

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

Location Map



7/4/2023, 7:21:59 PM

Image

Red: Band_1

Green: Band_2

Blue: Band_3

Override 1

1:18,056

0 0.13 0.25 0.5 mi

0 0.2 0.4 0.8 km

Sources: Esri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Esri Community Maps Contributors, FDEP, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, US Census Bureau, USDA | St. Lucie County Property Appraiser's Office | GPI Geospatial, Inc. | Sanborn, FDOR | U.S. Fish and Wildlife Service, Coastal Barrier

JOSEPH E. SMITH, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
FILE # 3624394 OR BOOK 3320 PAGE 2396, Recorded 08/31/2011 at 03:27 PM

IN THE CIRCUIT COURT, 19th JUDICIAL CIRCUIT, IN AND FOR ST. LUCIE, COUNTY, FLORIDA

CASE NO.: 07-CA-002997
DIVISION: Bryan

BDGN, LLC,
a New York limited liability company,

Plaintiff,

vs.

GROUP THREE DEVELOPMENT, LLC,
a Florida limited liability company;
KEVIN McCOY, an individual;
LISA McCOY, an individual;
KEITH McCOY, an individual;
CARLA McCOY, an individual; and
JOHN S. McCOY, an individual;

Defendants.
_____/

2011 AUG 19 PM 12:48
ST. LUCIE COUNTY
CLERK OF CIRCUIT COURT

This Amended Certificate of Title is being filed to correct scrivener's error in Legal Description and Plaintiff's name which was incorrectly referenced in that certain Certificate of Title filed on May 19, 2011 in OR Book 3295, page 459 in the Public Records of St. Lucie County, Florida.

AMENDED CERTIFICATE OF TITLE

Original recorded in OR Book 3295 Pg 459

The undersigned Clerk of the Court certifies that he executed and filed a Certificate of Sale in this action on May 10, 2011 for the property described herein and that no objections to the sale have been filed within the time allowed for filing objections. The following parcels in St. Lucie County, Florida:

I. **The North ½ of the North ½ of the South ½ of the Southwest ¼ of the Southwest ¼ of Section 18, Township 35 South, Range 40 East, less the West 60 feet for road right of way purposes, all lying in St. Lucie County, Florida.**

(Folio #2418-333-0001-000/9)
a/k/a 2144 South Jenkins Road, Ft. Pierce, Florida

II. **The South ½ of the North ½ of the South ½ of the Southwest ¼ of the Southwest ¼ of Section 18, Township 35 South, Range 40 East, St. Lucie County, Florida. Less the West 60 feet thereof.**

(Folio #2418-333-0002-000/6)
a/k/a 2152 South Jenkins Road, Ft. Pierce, Florida

III. **Parcel 1:**
From the Southwest corner of Section 18, Township 35 South, Range 40 East, run Northerly along the West line of said Section 104.83 feet to a point of beginning; from said point of beginning continue Northerly along said section line a distance of 132 feet to a point; thence with an angle of 90° run East 25 feet to a pipe; thence continue East 100 feet to a pipe; thence at 90° run South 132 feet to a pipe; thence at 90° run Westerly 100 feet to a stove bolt in Drive; thence continue Westerly 25 feet to a point of beginning; excepting therefrom all rights of way for public roads. Said land lying in and being a part of St. Lucie County, Florida.

(Folio #2418-333-0003-000/3)

Parcel 2:
All of the South ½ of the South ½ of Southwest ¼ of the Southwest ¼ of Section 18, Township 35 South, Range 40 East, excepting therefrom all rights of way for public roads and drainage canals, and also, less and excepting that part thereof particularly described as follows: From the Southwest corner of said section, township and range run Northerly along the West line of said Section 104.83 feet to a point of beginning; from said point of beginning continue Northerly along said section line a distance of 132 feet to a point; thence with an angle of 90° run East 25 feet to a pipe; thence continue East 100 feet to a pipe; thence at 90° run South 132 feet to a pipe; thence at 90° run Westerly 100 feet to a stove bolt in Drive; thence continue Westerly 25 feet to a point of beginning.

(Folio #2418-333-0004-000/0)

were sold to the Plaintiff, BGDN, LLC, whose address is c/o Jonathan S. Feldman, Esq., 200 South Biscayne Boulevard, Suite 3000, Miami, Florida 33131.

WITNESS MY HAND AND THE SEAL OF THIS COURT on August 19, 2011.

Joseph E. Smith
Clerk of the Circuit Court

By: _____
As Deputy Clerk

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

Property Identification

Site Address: 2144 S JENKINS RD
Sec/Town/Range: 18/35S/40E
Parcel ID: 2418-333-0001-000-9
Jurisdiction: Fort Pierce

Use Type: 0000
Account #: 27286
Map ID: 24/18S
Zoning: Medium Den

Ownership

BGDN LLC
1820 Avenue K
Brooklyn, NY 11230



Legal Description

18 35 40 N 1/2 OF N 1/2 OF S 1/2 OF SW 1/4 OF SW 1/4-LESS W 60 FT FOR RD R/W- (4.73 AC) (OR 3295-459: 3320-2396)

Current Values

Just/Market Value:	$338,200
Assessed Value:	$117,276
Exemptions:	$0
Taxable Value:	$117,276

Property taxes are subject to change upon change of ownership.

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

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

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	4.73
Land Size (SF):	206,039

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Aug 19, 2011	3320 / 2396	0311	CertTtle	BDGN LLC	$0
May 16, 2011	3295 / 0459	0311	CertTtle	Group Three Development LLC	$100,000
Sep 5, 2006	2678 / 1940	XX02	WD	Holtkamp Rose M	$850,000
Sep 1, 1985	0478 / 2489	XX01	CV		$0

Building Information (1 of 1)

Finished Area: 0 SF

Gross Sketched Area: 0 SF

Exterior Data

View:	Roof Cover:	Roof Structure:
Building Type:	Year Built: N/A	Frame:
Grade:	Effective Year: N/A	Primary Wall:
Story Height:	No. Units: 0	Secondary Wall:

Interior Data

Bedrooms: 0	Electric:	Primary Int Wall:
Full Baths: 0	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Heat Fuel:	Primary Floors:
A/C %: 0%	Heated %: N/A%	Sprinkled %: 0%



Image or Sketch unavailable for display

Sketch Area Legend

Sub Area Description Area Fin. Area Perimeter

Special Features and Yard Items

Type	Qty	Units	Year Blt

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$338,200
Just/Market:	$338,200
Ag Credit:	$0
Save Our Homes or 10% Cap:	$220,924
Assessed:	$117,276
Exemption(s):	$0
Taxable:	$117,276

Current Year Exemption Value Breakdown

Tax Year	Grant Year	Code	Description	Amount

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2009	0041	1	Fort Pierce Stormwater Charge	$69.00
2013	0054	4.73	North St. Lucie Water Management District	$108.79

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

Historical Values

Year	Just/Market	Assessed	Exemptions	Taxable
2022	$338,200	$117,276	$0	$117,276
2021	$233,700	$106,615	$0	$106,615
2020	$147,600	$96,923	$0	$96,923

Permits

Number	Issue Date	Description	Amount	Fee
BP09-1494	Sep 15, 2009	Demolition	$0	$130

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

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
© Copyright 2023 Saint Lucie County Property Appraiser. All rights reserved.

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

Property Identification

Site Address: 2152 S JENKINS RD
Sec/Town/Range: 18/35S/40E
Parcel ID: 2418-333-0002-000-6
Jurisdiction: Fort Pierce

Use Type: 0000
Account #: 27287
Map ID: 24/18S
Zoning: Medium Den

Ownership

BGDN LLC
1820 Avenue K
Brooklyn, NY 11230



Legal Description

18 35 40 S 1/2 OF N 1/2 OF S 1/2 OF SW 1/4 OF SW 1/4-LESS W 60 FT FOR RD R/W- (4.73 AC)(OR 3295-459: 3320-2396)

Current Values

Just/Market Value:	$338,200
Assessed Value:	$117,276
Exemptions:	$0
Taxable Value:	$117,276

Property taxes are subject to change upon change of ownership.

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

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

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	4.73
Land Size (SF):	206,039

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Aug 19, 2011	3320 / 2396	0311	CertTtle	BDGN LLC	$0
May 16, 2011	3295 / 0459	0311	CertTtle	Group Three Development LLC	$100,000
Aug 22, 2006	2645 / 1725	XX00	WD	Marcelin Claudine	$825,000
Sep 30, 1999	1254 / 2673	XX00	WD	Zimmer Norman H	$154,857
Apr 15, 1996	1010 / 0614	XX00	WD	Baumker Jr Andrew J	$117,200
Mar 30, 1989	0639 / 1633	XX01	QC	Katherine E Baumker	$50,000
Feb 1, 1977	0263 / 2600	XX01	CV		$0

Building Information (1 of 1)

Finished Area: 0 SF

Gross Sketched Area: 0 SF

Exterior Data

View:	Roof Cover:	Roof Structure:
Building Type:	Year Built: N/A	Frame:
Grade:	Effective Year: N/A	Primary Wall:
Story Height:	No. Units: 0	Secondary Wall:

Interior Data

Bedrooms: 0	Electric:	Primary Int Wall:
Full Baths: 0	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Heat Fuel:	Primary Floors:
A/C %: 0%	Heated %: N/A%	Sprinkled %: 0%



Sketch Area Legend

Sub Area Description Area Fin. Area Perimeter

Special Features and Yard Items

Type	Qty	Units	Year Blt

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$338,200
Just/Market:	$338,200
Ag Credit:	$0
Save Our Homes or 10% Cap:	$220,924
Assessed:	$117,276
Exemption(s):	$0
Taxable:	$117,276

Current Year Exemption Value Breakdown

Tax Year	Grant Year	Code	Description	Amount

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2009	0041	1	Fort Pierce Stormwater Charge	$69.00
2013	0054	4.73	North St. Lucie Water Management District	$108.79

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

Historical Values

Year	Just/Market	Assessed	Exemptions	Taxable
2022	$338,200	$117,276	$0	$117,276
2021	$233,700	$106,615	$0	$106,615
2020	$147,600	$96,923	$0	$96,923

Permits

Number	Issue Date	Description	Amount	Fee
BP09-2393	Dec 21, 2009	Demolition	$0	$275

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

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
© Copyright 2023 Saint Lucie County Property Appraiser. All rights reserved.

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

Property Identification

Site Address: S JENKINS RD
Sec/Town/Range: 18/35S/40E
Parcel ID: 2418-333-0003-000-3
Jurisdiction: Fort Pierce

Use Type: 0000
Account #: 27288
Map ID: 24/18S
Zoning: Medium Den

Ownership

BGDN LLC
1820 Avenue K
Brooklyn, NY 11230



Legal Description

18 35 40 S 1/2 OF S 1/2 OF SW 1/4 OF SW 1/4-LESS W 60 FT FOR RD R/W AND LESS N 132 FT OF S 194.33 FT OF W 85 FT- (8.15 AC)(OR 3295-459: 3320-2396)

Current Values

Just/Market Value:	$483,900
Assessed Value:	$202,133
Exemptions:	$0
Taxable Value:	$202,133

Property taxes are subject to change upon change of ownership.

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

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

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	8.15
Land Size (SF):	355,014

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Aug 19, 2011	3320 / 2396	0311	CertTtle	BDGN LLC	$0
May 16, 2011	3295 / 0457	0311	CertTtle	Group Three Development LLC	$100,000
Aug 1, 2006	2678 / 1763	XX02	WD	Nelson-York Patsy	$863,000
Dec 1, 1986	0525 / 0663	XX01	CV		$0
Jun 1, 1978	0288 / 2611	XX01	CV		$0

Building Information (1 of 1)

Finished Area: 0 SF

Gross Sketched Area: 0 SF

Exterior Data

View:	Roof Cover:	Roof Structure:
Building Type:	Year Built: N/A	Frame:
Grade:	Effective Year: N/A	Primary Wall:
Story Height:	No. Units: 0	Secondary Wall:

Interior Data

Bedrooms: 0	Electric:	Primary Int Wall:
Full Baths: 0	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Heat Fuel:	Primary Floors:
A/C %: 0%	Heated %: N/A%	Sprinkled %: 0%



Sketch Area Legend

Sub Area Description Area Fin. Area Perimeter

Special Features and Yard Items

Type	Qty	Units	Year Blt

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$483,900
Just/Market:	$483,900
Ag Credit:	$0
Save Our Homes or 10% Cap:	$281,767
Assessed:	$202,133
Exemption(s):	$0
Taxable:	$202,133

Current Year Exemption Value Breakdown

Tax Year	Grant Year	Code	Description	Amount

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2009	0041	12.6	Fort Pierce Stormwater Charge	$869.40
2013	0054	8.15	North St. Lucie Water Management District	$187.45

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

Historical Values

Year	Just/Market	Assessed	Exemptions	Taxable
2022	$483,900	$202,133	$0	$202,133
2021	$334,300	$183,758	$0	$183,758
2020	$206,100	$167,053	$0	$167,053

Permits

Number	Issue Date	Description	Amount	Fee

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

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
© Copyright 2023 Saint Lucie County Property Appraiser. All rights reserved.

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

Property Identification

Site Address: 2190 S Jenkins RD
Sec/Town/Range: 18/35S/40E
Parcel ID: 2418-333-0004-000-0
Jurisdiction: Fort Pierce

Use Type: 0000
Account #: 135903
Map ID: 24/18S
Zoning: Medium Den

Ownership

BGDN LLC
1820 Avenue K
Brooklyn, NY 11230



Legal Description

18 35 40 FROM SW COR OF SD SEC RUN NLY ALG W LI OF SD SEC 104.68 FT TO POB,TH CONT NLY ALG SD W LI 132 FT,TH E 125 FT,TH S 132 FT,TH WLY 125 FT-LESS 60 FT FOR RD R/W (0.20 AC)(OR 3295-459: 3320-2396)

Current Values

Just/Market Value:	$21,000
Assessed Value:	$7,085
Exemptions:	$0
Taxable Value:	$7,085

Property taxes are subject to change upon change of ownership.

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

Total Areas

Finished/Under Air (SF):	0
Gross Sketched Area (SF):	0
Land Size (acres):	0.2
Land Size (SF):	8,580

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

Building Design Wind Speed

Occupancy Category	I	II	III
Speed	140	150	160

Sources/links:

Sale History

Date	Book/Page	Sale Code	Deed	Grantor	Price
Aug 19, 2011	3320 / 2396	0311	CertTtle	BDGN LLC	$0
May 16, 2011	3295 / 0459	0311	CertTtle	Group Three Development LLC	$100,000
Aug 1, 2006	2678 / 1763	XX02	WD	Nelson-York Patsy	$863,000
Jan 7, 1994	0879 / 0276	XX01	WD	Nelson Patsy	$100

Building Information (1 of 1)

Finished Area: 0 SF

Gross Sketched Area: 0 SF

Exterior Data

View:	Roof Cover:	Roof Structure:
Building Type:	Year Built: N/A	Frame:
Grade:	Effective Year: N/A	Primary Wall:
Story Height:	No. Units: 0	Secondary Wall:

Interior Data

Bedrooms: 0	Electric:	Primary Int Wall:
Full Baths: 0	Heat Type:	Avg Hgt/Floor: 0
Half Baths: 0	Heat Fuel:	Primary Floors:
A/C %: 0%	Heated %: N/A%	Sprinkled %: 0%



Sketch Area Legend

Sub Area Description Area Fin. Area Perimeter

Special Features and Yard Items

Type	Qty	Units	Year Blt

Current Year Values

Current Values Breakdown

Building:	$0
Land:	$21,000
Just/Market:	$21,000
Ag Credit:	$0
Save Our Homes or 10% Cap:	$13,915
Assessed:	$7,085
Exemption(s):	$0
Taxable:	$7,085

Current Year Exemption Value Breakdown

Tax Year	Grant Year	Code	Description	Amount

Current Year Special Assessment Breakdown

Start Year	AssessCode	Units	Description	Amount
2009	0041	1	Fort Pierce Stormwater Charge	$69.00
2013	0054	0.19697	North St. Lucie Water Management District	$25.00

This does not necessarily represent the total Special Assessements that could be charged against this property. The total amount charged for special assessments is reflected on the most current tax statement and information is available with the SLC Tax Collector's Office.

Historical Values

Year	Just/Market	Assessed	Exemptions	Taxable
2022	$21,000	$7,085	$0	$7,085
2021	$10,500	$6,441	$0	$6,441
2020	$10,500	$5,856	$0	$5,856

Permits

Number	Issue Date	Description	Amount	Fee
BP09-1495	Sep 15, 2009	Demolition	$0	$130

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

All information is believed to be correct at this time, but is subject to change and is provided without any warranty.
© Copyright 2023 Saint Lucie County Property Appraiser. All rights reserved.

DISTRICT PLANNING GROUP

Project & Design Review Narrative

Regatta Luxury Apartments

South Jenkins Road

August 25, 2023

Summary

Alva Stone Group proposes a 312-unit luxury apartment complex within walking distance of a K-8 school, retail, service centers, job opportunities, and in close proximity to interchanges accessing the State's Intermodal System: I-95 and the Florida Turnpike. The community will primarily appeal to young professionals working in the Treasure Coast and the surrounding region. The project's average unit size will be 920 SF, varying in floorplans of 1 Bed/1 Bath, 2Bed/2Bath and 3 Beds/2 Baths, with an emphasis on spacious open floor plans and study/work areas. Interior amenities will include energy saving features, ceramic flooring (no carpet) and stainless-steel appliances. Architectural design of the project is influenced by coastal typologies and will differentiate the community from typical inventory in the existing Fort Pierce rental market. Amenities will include a clubhouse with spacious common areas, children's playground, full indoor gym, BBQ and pool area with a view to the community lake & fountain. A walking trail around the lake will activate the common open space and encourage social connections.

Site

The site (Parcel IDs 2418-333-0004-000-0; 2418-333-0003-000-3; 2418-333-0002-000-6; and 2418-333-0001-000-9) is 18 acres of previously fallow agricultural land.



Site Details

	PARCEL 1 2418-333-0004-000-0	PARCEL 2 2418-333-0003-000-3	PARCEL 3 2418-333-0002-000-6	PARCEL 4 2418-333-0001-000-9
ACREAGE	.2	8.15	4.73	4.73
ADDRESS	2190 S Jenkins Road	S Jenkins Road	2152 S. Jenkins Road	2144 S. Jenkins Road
JURISDICTION	City of Fort Pierce	City of Fort Pierce	City of Fort Pierce	City of Fort Pierce
ZONING	R-5 High Density Residential	R-5 High Density Residential	R-5 High Density Residential	R-5 High Density Residential
FUTURE LAND USE	RH High Density Residential	RH High Density Residential	RH High Density Residential	RH High Density Residential

Adjacent Properties

The property faces Jenkins Road to the west and is adjacent to a mix of entitled multifamily, public school and commercial uses.

	FLU	ZONING	USE
NORTH	RH	R-5	Approved multifamily
SOUTH	RH	R-5	K-8 Public School
EAST	RH	R-5	Approved Multifamily
WEST	GC	C-3	Commercial Use

Project Details

Density

This project proposes 312 dwelling units on 18 acres for a density of 17.33 dwelling units per acre. The underlying Future Land Use allows for a density of up to 18 units per acre. The adopted Zoning of High Density Residential permits up to 15 units per acre for a conventional development before the application of density bonuses provided in the Land Development Ordinances and Comprehensive Plan. The City's Comprehensive Plan, Policy 1.1.9, provides an undefined density bonus for voluntary contributions to needed public infrastructure as follows:

1.1.9 Policy: The City will allow density bonuses if the developer provides or makes contributions above minimum requirements to facilities that provide a public benefit. Such contributions shall include park land dedication or park facilities, infrastructure and transportation facilities, beach access and fishing piers. In establishing the value of the facilities and the appropriate density bonus, the following will be considered:

A. Hard costs–All material and labor costs for the construction of the facility.

B. Soft costs–Fees and costs required for the design of the facility.

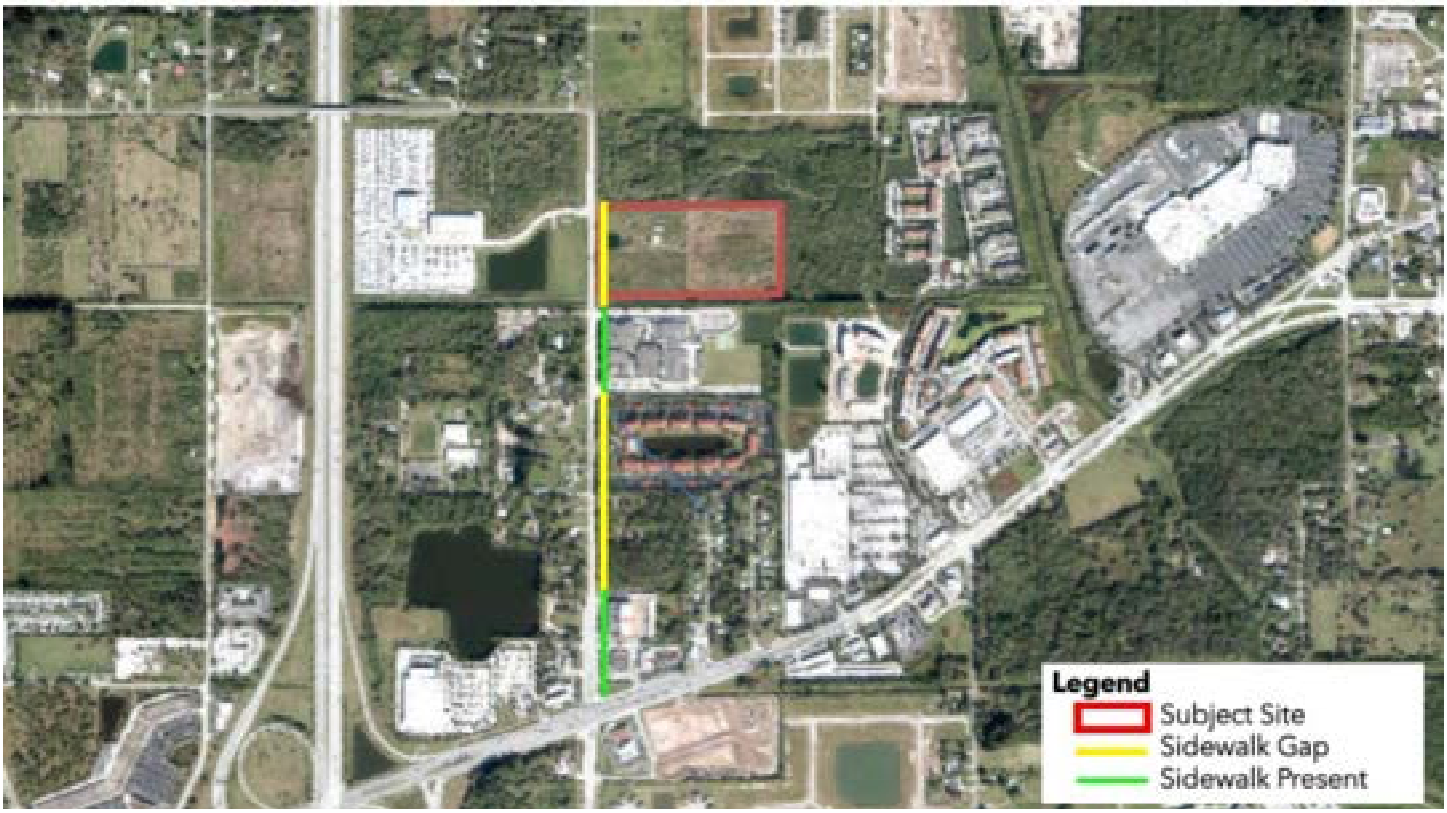
C. Land costs–Land to be transferred to the City or other public agency associated with the facility.

An ongoing challenge for the City and County at this location is the lack of sidewalk connectivity between the growing residential developments along the Jenkins Road corridor and the retail, service, office and other uses located in the area of Okeechobee Road and Jenkins Road. This lack of sidewalk connection further stresses the vehicle Level of Service on Jenkins Road, as there is no safe way to access these nearby uses without a car.

The developer of Regatta Luxury Apartments proposes to construct a sidewalk on their site, connecting to Samuel S Gaines school to the south, then complete the off-site sidewalk connection gaps on the east side of Jenkins Road between the subject site and Okeechobee Road in exchange for an additional 2.33 units of density.

This development also qualifies for Innovative Residential Development, which would provide for up to an additional 3 units of density, but the applicant has not requested that designation. The developer felt it was more

important to the community to construct the sidewalk gaps, and therefore has chosen to request the additional density through Policy 1.1.9 than through Innovative Residential Development. Nonetheless, we believe this development would qualify for that designation due to the quality of its site design, landscape design and amenities for residents. This project proposes both excellent design and a voluntary contribution of sorely needed sidewalk infrastructure connecting residential and commercial uses through an active transportation sidewalk that will accommodate both pedestrians and cyclists, reducing vehicular burden from Jenkins Road. Alva Stone Group respectfully requests an additional 2.33 units per acres of density for completing the sidewalk gaps between the subject site and the intersection of Okeechobee Road and Jenkins Road on the east site of Jenkins Road. In addition to their own site, a gap of over ¼ mile of sidewalk will be built.



Development Program

The Project involves a multifamily apartment complex consisting of 312 dwelling units ranging from one (1) to three (3) bedrooms in 13 buildings. Each building will be three (3) stories. A clubhouse, pool area and other amenities listed below are also proposed.

Site Design

Site Analysis & Design Intent

This project intends to create an innovative and compact multifamily development with quality architecture, landscaping and amenities that sets a new standard for the Okeechobee Road corridor, increases property values and creates an inviting sense of place for its residents. Residential buildings are arranged around a central lake which acts as an amenity for the Project. A walking path constructed around the entire lake with benches for residents to enjoy the lake views and recreate/exercise around the lake enhance this central feature. The entrance drive terminates at the clubhouse for a striking initial experience of the project. Parking and dumpsters are evenly

(772) 742-8649 • 130 South Indian River Drive, Suite 202 • Fort Pierce, FL 34950
www.DistrictPlanningGroup.com

and conveniently distributed throughout the Project. The clubhouse includes a fitness center, kitchen, multipurpose room, restrooms and a covered area over the pool deck for shade lounging.

Design Compatibility

A limited number of buildings are visible from Jenkins Rd. to establish an architectural design context for compatibility. The closest built project include:

Samuel Gaines Academy, adjacent to the subject property on the south side,
Treasure Cay Apartments, whose entrance is 1300 feet to the south of the subject project entrance,
Celebration Pointe, with an entrance approximately 2800 feet north of the subject project entrance, and
Camping World and Gander Mountain, directly across Jenkins Rd.

Many of these projects are behind more visible features from the road, such as signage, landscaping and stormwater ponds, so stylistic compatibility with the proposed project would not be discernible from Jenkins Rd. Documentation for our site visit shows little in terms of definable architectural style. Roofing materials range from a Mediterranean barrel tile to the standing seam metal of Florida vernacular to asphalt shingle.

Traffic Impact

Included with this submittal is a traffic impact analysis for the Project (the "TIA"). The TIA concludes that:

(1) the roadway links are sufficient to accommodate the Project traffic in the AM and PM peak hours;

Site Lighting, Stormwater & Utilities

The complete plan set includes a preliminary paving and drainage analysis, stormwater retention, and lighting and utilities plans and details.

CLOSING

The Applicant respectfully requests the City's consideration and approval of the Regatta Luxury Apartment's application based on the justification provided herein.

(772) 742-8649 • 130 South Indian River Drive, Suite 202 • Fort Pierce, FL 34950
www.DistrictPlanningGroup.com

Architecture

The architecture and palette reflect elements of traditional Florida vernacular with stylistic updates informed by coastal contemporary design.

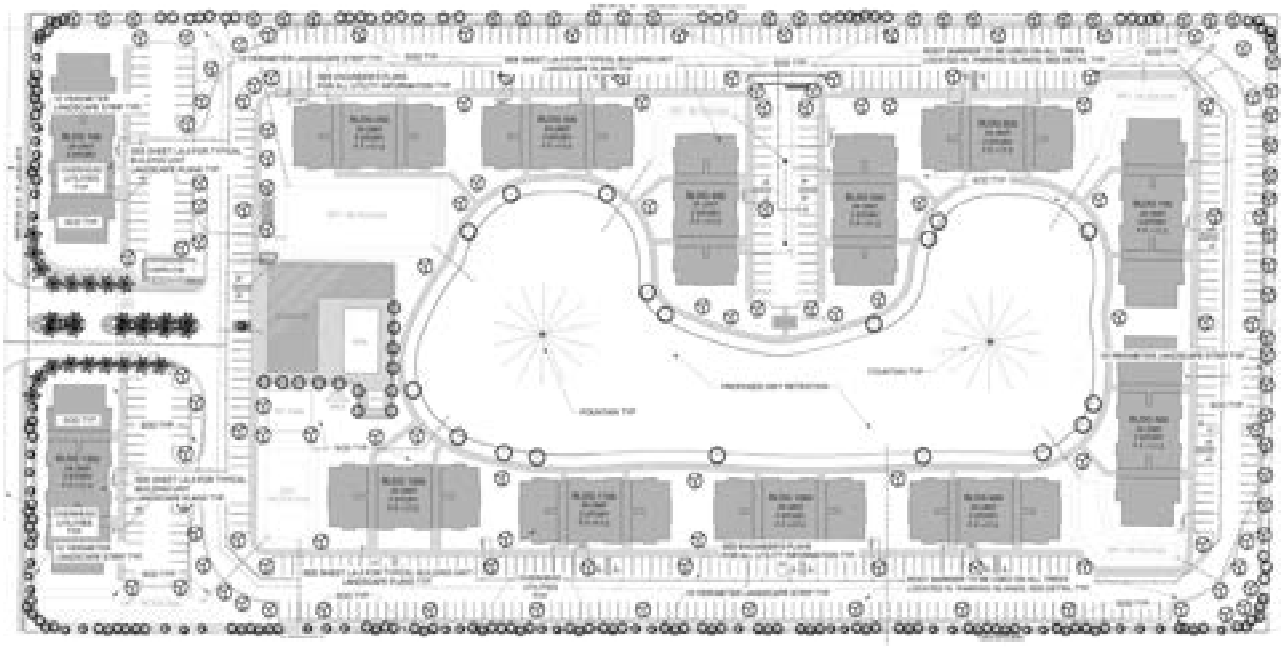


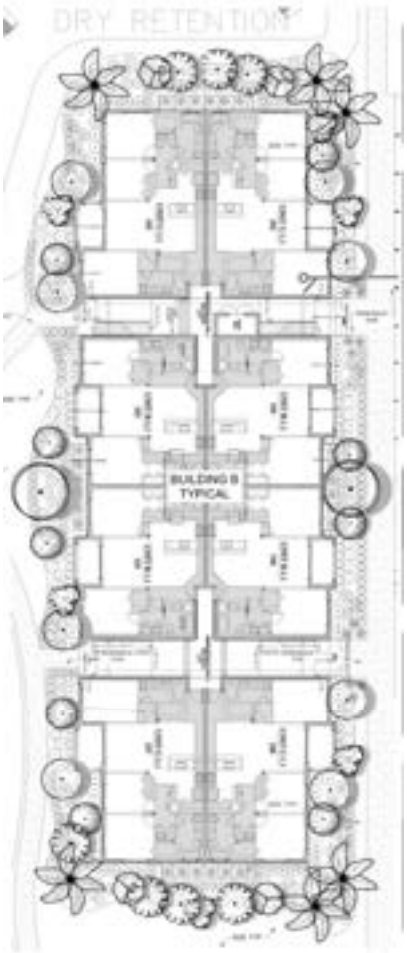


1 Roofing: Metal Seam Panels / Color: Charcoal Grey
2 Fascia & Brackets: Wood / Color: High Reflective White_SW 7757
3 Stucco Bands: Stucco / Color: High Reflective White_SW 7757
4 Bahama Shutters: Aluminum / Color: Honorable Blue_SW 6811
5 Decorative Louvers: Vinyl / Color: Honorable Blue_SW 6811
6 Exterior Walls: Stucco / Color: Crushed Ice_SW 7647
7 Siding: Stucco / Color: Lakeside_SW 9683

(772) 742-8649 • 130 South Indian River Drive, Suite 202 • Fort Pierce, FL 34950
www.DistrictPlanningGroup.com

Site and Landscape Plan





The landscape plan illustrates a lush entry feature with a view terminating at the generous clubhouse amenity. The landscape detail with embedded floor plan demonstrates the views available from each unit and the connections from building entrances to site pathways.

(772) 742-8649 • 130 South Indian River Drive, Suite 202 • Fort Pierce, FL 34950
www.DistrictPlanningGroup.com

Context Photos





Camping World





Samuel Gaines Academy





Treasure Cay Apartments

(772) 742-8649 • 130 South Indian River Drive, Suite 202 • Fort Pierce, FL 34950
www.DistrictPlanningGroup.com





Celebration Pointe





Nearby homes

(772) 742-8649 • 130 South Indian River Drive, Suite 202 • Fort Pierce, FL 34950
www.DistrictPlanningGroup.com

LEGEND

- ● DENOTES SET 5/8" IRON ROD & CAP LB #4288
- Δ DENOTES CENTERLINE
- (DESC) DENOTES PLAT DATA
- (DESC) DENOTES CALCULATED FROM FIELD MEASUREMENTS
- (DESC) DENOTES DEED DATA
- (DESC) DENOTES BASED ON FIELD MEASURED DATA
- TOB DENOTES TOP OF BANK
- TYP. DENOTES TYPICAL
- PAD. DENOTES PLANE
- L.B. DENOTES LICENSED BUSINESS
- O.H.U. DENOTES OVERHEAD UTILITIES
- P.B. DENOTES PLAT BOOK
- PG DENOTES PAGE
- T & TT DENOTES TAN. AND TN. TAB
- U.E. DENOTES UTILITY EASEMENT
- P.L.S. DENOTES PROFESSIONAL LAND SURVEYOR
- I.P. DENOTES IRON PIPE
- I.R. DENOTES IRON ROD
- C.M. DENOTES CONCRETE MONUMENT
- CONC. DENOTES CONCRETE
- R & C DENOTES 5/8" IRON ROD & CAP
- Δ DENOTES CENTRAL ANGLE
- R DENOTES RADIUS
- L DENOTES ARC LENGTH
- O.R. DENOTES OFFICIAL RECORDS BOOK
- + DENOTES PLUS OR MINUS

- ⊙ DENOTES MANHOLE
- ⊙ DENOTES SEPTIC TANK
- ⊙ DENOTES WELL
- ⊙ DENOTES CULVERT
- ⊙ DENOTES CORRUGATED METAL PIPE
- R.C.P. DENOTES REINFORCED CONCRETE PIPE
- No. ID DENOTES I.D. IDENTIFICATION NUMBER
- P.R.M. DENOTES PERMANENT REFERENCE MONUMENT
- P.C.P. DENOTES PERMANENT CONTROL POINT
- P.C.P. DENOTES PERMANENT CONTROL POINT
- ⊕ DENOTES SET 4"x4" CONCRETE MONUMENT (PRM LB 4288)
- ⊙ DENOTES WOOD POWER POLE
- ⊙ DENOTES WELL
- ⊙ DENOTES SANITARY MANHOLE
- ⊙ DENOTES CATCH BASIN
- ⊙ DENOTES WATER VALVE
- ⊙ DENOTES FIRE HYDRANT
- ⊙ DENOTES CONCRETE POWER POLE
- ⊙ DENOTES GUY WIRE
- ⊙ DENOTES WATER METER
- ⊙ DENOTES ELECTRIC METER
- U.S.C.&G.S. DENOTES UNITED STATES COASTAL AND GEODETIC

CERTIFICATIONS:

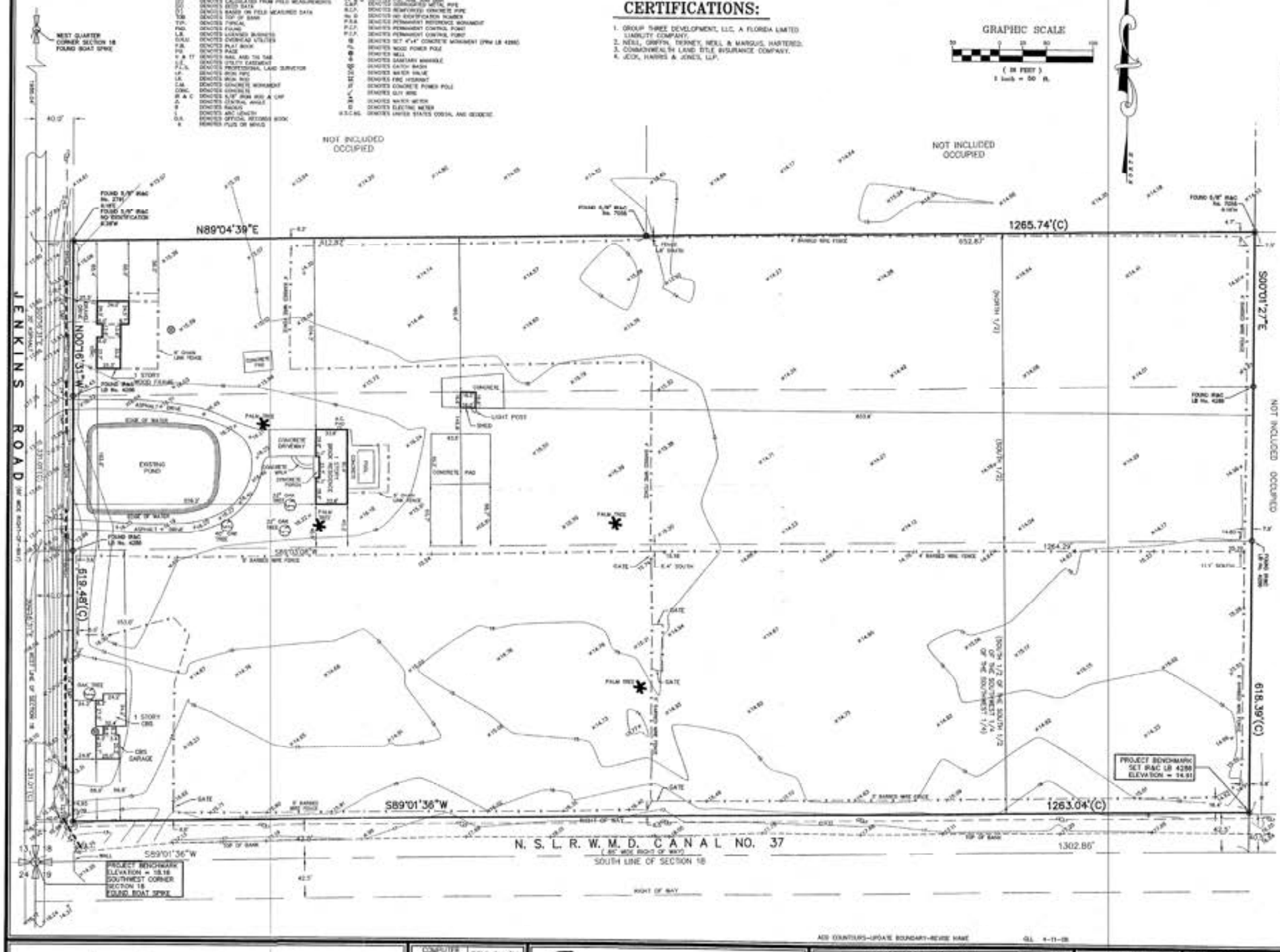
1. GROUP THREE DEVELOPMENT, LLC, A FLORIDA LIMITED LIABILITY COMPANY,
2. NEILL, GRIFFIN, TERNEY, NEILL & MARQUIS, HARTERED,
3. COMMONWEALTH LAND TITLE INSURANCE COMPANY,
4. JEOR, HARRIS & JONES, LLP,

GRAPHIC SCALE

50 0 50 100

(IN FEET)

1 inch = 50 ft.



NOT TO SCALE

SECTION BREAKDOWN

NOTES:

1) NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.
2) LANDS SHOWN HEREON WERE NOT ABSTRACTED BY THIS OFFICE FOR RIGHT-OF-WAYS, RESERVATIONS, AGREEMENTS, AND EASEMENTS OF RECORD. SUCH INFORMATION SHOULD BE OBTAINED AND CONFIRMED BY OTHERS THROUGH APPROPRIATE TITLE VERIFICATION.
3) DESCRIPTION SHOWN HEREON PROVIDED BY THE CLIENT AND/OR THEIR AGENT.
4) UNDERGROUND FOUNDATIONS AND IMPROVEMENTS WERE NOT LOCATED.
5) THE LAST DATE OF FIELD WORK WAS DECEMBER 08, 2005.
6) BEARINGS SHOWN HEREON ARE BASED ON THE WEST LINE OF SECTION 18 WHICH BEARS N 00°16'39" WEST.
7) EXISTING POND CONTAINS 6.31 ACRES MORE OR LESS.
PARCEL EXCLUDING POND CONTAINS 17.66 ACRES MORE OR LESS.
TOTAL PARCEL CONTAINS 17.97 ACRES MORE OR LESS.
8) PARCEL LIES IN ZONE "X" PER F.I.R.M. 12111C0317 F EFFECTIVE DATE OF AUGUST 18, 1992.
9) ELEVATIONS SHOWN HEREON ARE BASED ON D. O. T. CONCRETE MONUMENT
No. I-95 - 85 - 434 WITH A PUBLISHED ELEVATION OF 46.195 FEET N.G.V.D. 1929.
10) THERE ARE NO SUBMERGED LANDS OR LINES BELOW THE MEAN HIGH WATER LINE LOCATED ON SUBJECT PROPERTY.

DESCRIPTION

BEING THE NORTH 1/2 OF THE NORTH 1/2 OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 SECTION 18, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS THE WEST 40 FEET FOR ROAD RIGHT OF WAY ALL LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

TOGETHER WITH:

THE SOUTH 1/2 OF THE NORTH 1/2 OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 SECTION 18, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS THE WEST 40 FEET FOR ROAD RIGHT OF WAY ALL LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA.

TOGETHER WITH:

ALL OF THE S 1/2 OF S 1/2 OF SW 1/4 OF SW 1/4 OF SECTION 18, TOWNSHIP 35 SOUTH, RANGE 40 EAST, EXCEPTING THEREFROM ALL RIGHTS OF WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

ADD CONTOURS-UPDATE BOUNDARY-REVISE NAME GLL 4-11-08

MICHAEL T. ONEIL, P.Sm. FLORIDA CERTIFICATE NO. 5556

4-11-2008
SIGNATURE DATE

COMPUTER FILE REF.	FIELD BK./PG.
05-121.MAP2	

CULPEPPER & TERPENING, INC.
CERTIFICATION No. LB 4288

CONSULTING ENGINEERS & LAND SURVEYORS
2980 SOUTH 25th STREET
FORT PIERCE, FLORIDA 34981
(772)-464-3537

- REVISIONS -	BY	DATE
UPDATED NOTES AND RESCALE SURVEY	R.D.	3-27-08
UPDATED ACREAGE AND ADD CERTIFICATIONS	R.D.	3-13-08
UPDATED BOUNDARY SURVEY	R.D.	1-11-06
UPDATED TREE SURVEY	R.D.	1-10-06
ADD TOPOGRAPHIC SURVEY AND TREES	R.D.	12-8-05
UPDATED BOUNDARY SURVEY	R.D.	12-8-05

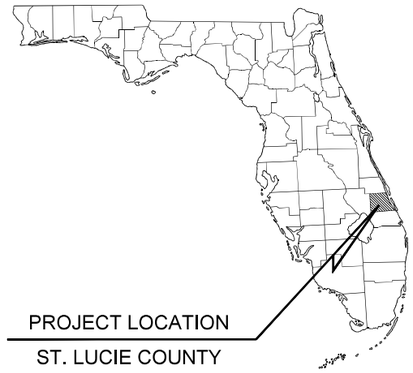
	BY	DATE
FIELD		
CALCS	P.K.	7-15-05
DRAWN	R.D.	8-4-05
DETAILED		
CHECKED		
APPROVED		

BOUNDARY & TOPOGRAPHIC SURVEY

PREPARED FOR:

SUMMERWIND TOWNHOMES AT FORT PIERCE

DATE: 08-04-2005
HORZ. SCALE: 1" = 50'
VERT. SCALE: N/A
JOB No. 05-121
SHEET 1 OF 1



CONSTRUCTION PLANS

FOR

REGATTA APARTMENTS

LOCATED AT

2152 SOUTH JENKINS ROAD
FORT PIERCE, FL 34947
SECTION 18, TOWNSHIP 35S, RANGE 40E

PROJECT LOCATION



LOCATION MAP
1"=1000'

LEGAL DESCRIPTION

BEING THE NORTH 1/2 OF THE NORTH 1/2 OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 SECTION 18, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS THE WEST 60 FEET FOR THE ROAD RIGHT OF WAY ALL LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA

TOGETHER WITH:

THE SOUTH 1/2 OF THE NORTH 1/2 OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE 1/4 SECTION 18, TOWNSHIP 35 SOUTH, RANGE 40 EAST, LESS THE WEST 60 FEET FOR ROAD RIGHT OF WAY ALL LYING AND BEING IN ST. LUCIE COUNTY, FLORIDA

TOGETHER WITH:

ALL OF THE SOUTH 1/2 OF THE SOUTH 1/2 OF THE SOUTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 18, TOWNSHIP 35 SOUTH, RANGE 40 EAST, EXCEPTING THEREFROM ALL RIGHTS OF WAY FOR PUBLIC ROADS AND DRAINAGE CANALS.

TOGETHER WITH:

18 35 40 FROM SW COR OF SD SEC RUN NLY ALG W LI OF SD SEC 104.68 FT TO POB,TH CONT NLY ALG SD W LI 132 FT,TH E 125 FT,TH S 132 FT,TH WLY 125 FT-LESS 60 FT FOR RD R/W (0.20 AC)(OR 3295-459; 3320-2396)

SHEET INDEX	
Sheet Number	Sheet Title
C-1	COVER SHEET
C-2	EXISTING CON. & DEMO
C-3	SITE PLAN
C-4	PGD PLAN
C-4a	ROW
C-5	UTILITIES PLAN
C-6	FPUA DETAILS
C-7	FPUA DETAILS (2)
C-8	NOTES
C-9	DETAILS
C-10	LIGHTING PLAN

PROJECT TEAM

OWNER/DEVELOPER
PEDRO QUIJADA
ALVA STONE GROUP
591 EVERNIA STREET, #1603
WEST PALM BEACH, FL 33401
(954) 850-0618
PEDRO@ALVASTONEGROUP.COM

CIVIL ENGINEER
BLAINE BERGSTRESSER, P.E.
KMA ENGINEERING AND SURVEYING, LLC
2345 14TH AVENUE, SUITE 3
VERO BEACH, FLORIDA 32960
(772) 569-5505
BLAINEB@KMAFL.COM

LANDSCAPE ARCHITECT
PAUL GOULAS, RLA
LANDSCAPE ARCHITECTURAL SVCS., LLC
1708 SE JOY HAVEN STREET
PORT ST. LUCIE, FL 34983
(772) 631-8400
PAUL@LAS-FL.COM

SURVEYOR
KMA ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL AVE 2
FT. PIERCE, FLORIDA 34946
(772) 569-5505
SURVEY@KMAFL.COM

PERMITTING AGENCIES

FORT PIERCE UTILITY AUTHORITY
SHANE OSTRANDER
1701 S. 37TH STREET
FORT PIERCE, FL 34984
SOTRANDER@FPUA.COM
772-466-1600

NORTH ST LUCIE RIVER WATER CONTROL DISTRICT
PATRICIA KUTA
14666 ORANGE AVENUE
FORT PIERCE, FL 34945
NSLRWCD@BELLSOUTH.NET
772-461-5050

CITY OF FORT PIERCE
CESAR FLORES
100 NORTH US 1
FORT PIERCE, FL 34950
CFLORES@CITYOFFORTPIERCE.COM
772-467-3730

KMA
ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL 2 AVE.
FT. PIERCE, FL 34946
PHONE: (772) 569-5505
FBPE C.O.A. # 33705

REVISIONS:
BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
REGATTA APARTMENTS
2152 SOUTH JENKINS ROAD
FT. PIERCE, FL 34947

CLIENT:
ALVA STONE GROUP, LLC
591 EVERNIA STREET
WEST PALM BEACH, FL 33401

STATE OF FLORIDA LICENSE NO. 84598 PROFESSIONAL ENGINEER BLAINE ROBERT BERGSTRESSER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, it's free, it's the law.
www.callsunshine.com

PROJECT No.:	23-1011
DRAWN BY:	CRW
CHECKED BY:	BRB
DATE:	08/23/2023

SHEET TITLE:
COVER SHEET

SHEET NUMBER:
C-1

GRAPHIC SCALE

50 0 50 100 150

SCALE: (1 Inch = 50 Feet)

North

UNPLATTED LANDS
(VACANT)
PARCEL ID: 2418-322-0002-000-2
ORB 3065, PAGE 2045

S 89°04'39" W 1245.68'(C)
S 89°04'53" W 1245.82'(M) FROM IR TO R&C
S 89°04'10" W 1245.86'(M) FROM R&C TO R&C

UNPLATTED LANDS
(VACANT)
PARCEL ID: 2418-331-0001-000-3
ORB 3065, PAGE 2045

JENKINS ROAD
(146' R/W
ASPHALT
WIDTH VARIES)

N 00°15'43" W 617.45'(C&M)

86.00'
40.00'
20.00'

FLOOD ZONE "AE" EL= 16
FLOOD ZONE "X"

PARCEL 1
N 1/2 OF THE N 1/2 OF THE S 1/2 OF THE SW 1/4 OF THE SW 1/4
EXCEPTION NO.6 OR BOOK 2328 PAGE 1501
EXCEPTION NO.7 OR BOOK 2625, PAGE 1118
PARCEL ID: 2418-333-0001-000-9

PARCEL 2
S 1/2 OF THE N 1/2 OF THE S 1/2 OF THE SW 1/4 OF THE SW 1/4
EXCEPTION NO.6 OR BOOK 2328 PAGE 1501
PARCEL ID: 2418-333-0002-000-6

PARCEL 3
ALL OF THE S 1/2 OF
THE S 1/2 OF THE SW 1/4 OF THE SW 1/4
EXCEPTION NO.8 OR BOOK 879 PAGE 276
PARCEL ID: 2418-333-0003-000-3

S 00°01'46" E 616.39'(C)
S 00°00'59" E 616.31'(M) FROM IR TO R&C
S 00°00'47" E 616.57'(M) FROM R&C TO R&C

UNPLATTED LANDS
(VACANT)
PARCEL ID: 2418-343-0001-000-0
ORB 3065, PAGE 2045

N 89°01'37" E 1263.03'(C&M)

N.S.L.R.W.M.D. CANAL NO 37
(85' R/W)
PARCEL ID: 2418-333-0005-000-7

93
16.55
pk

94
16.49
pktob 5647 trov ad

16.56

NAVD 1988
ALL ELEVATIONS DEPICTED
HEREON REFERENCE NAVD 1988

KMA
ENGINEERING & SURVEYING, LLC
300 INDUSTRIAL 2 AVE
FT. PIERCE, FL 34946
PHONE: (772) 569-5505
FSPE C.O.A. # 31705

REVISIONS

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
REGATTA APARTMENTS
2152 SOUTH JENKINS ROAD
FT. PIERCE, FL 34947

CLIENT:
ALVA STONE GROUP, LLC
591 EVERNIA STREET
WEST PALM BEACH, FL 33401

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

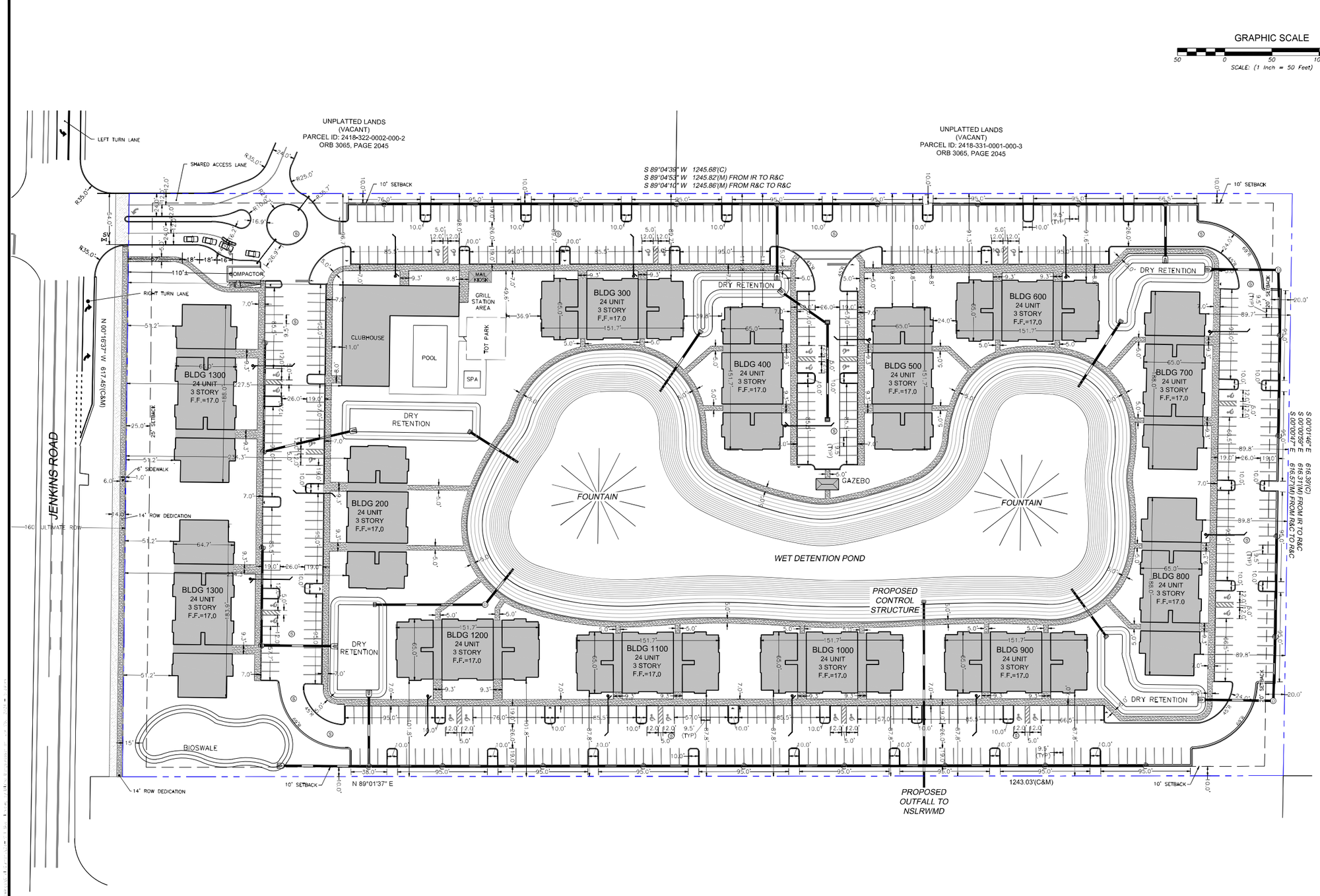
BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

PROJECT No.:	23-1011
DRAWN BY:	CRW
CHECKED BY:	BRB
DATE:	08/23/2023

SHEET TITLE:
EXISTING CON. & DEMO

SHEET NUMBER:
C-2



SITE DATA

OWNER: BGDN LLC, 1820 AVENUE K, BROOKLYN, NY 11230

ENGINEER: BLAINE BERGSTRESSER P.E., KMA ENGINEERING & SURVEYING LLC, 3001 INDUSTRIAL AVENUE 2, FT. PIERCE FL. 34946

SURVEYOR: WILLIAM HAYHURST P.S.M., KMA ENGINEERING & SURVEYING LLC, 3001 INDUSTRIAL AVENUE 2, FT. PIERCE FL. 34946

PROPOSED USE: 312 UNIT MULTI-FAMILY APARTMENTS w/ 4,300 SF CLUBHOUSE

SITE ADDRESS: 2152 SOUTH JENKINS ROAD, FT. PIERCE, FL. 34947

PARCEL ID(S): 2418-333-0001-000-9, 2418-333-0002-000-6, 2418-333-0003-000-3

ZONING: R-5 HIGH DENSITY RESIDENTIAL

DENSITY
- ALLOWED: MAX. 15 UNITS/AC.
- PROPOSED: 312 UNITS / 17.96 AC = 17.4 UNITS/AC

SIDE YARDS:
- FRONT: 25'
- SIDE: 10'
- CORNER LOT SIDE: 15'
- REAR: 20'

SITE AREAS:

GROSS SITE	782,493 SF	(17.96 AC)
BUILDING FOOTPRINTS	124,615 SF	
PAVEMENT & CURBING	210,728 SF	
SIDEWALKS & PATIOS	45,785 SF	
TOTAL IMPERVIOUS AREA	381,128 SF	
OPEN SPACE	279,220 SF	
STORMWATER LAKE @ C.E.	122,145 SF	

PARKING:

REQUIRED: MULTI-FAMILY
1.5 SPACES PER UNIT
312 UNITS x 1.5 = 468 REQUIRED SPACES

CLUBHOUSE
1 SPACE PER 200 SF
4300 SF / 200 = 22 REQUIRED SPACES

TOTAL REQUIRED = 490 PARKING SPACES
ADA PARKING REQUIRED = 9 of 490 SPACES

PROPOSED: 28 ADA PARKING SPACES PROVIDED
462 STANDARD PARKING SPACES PROVIDED

490 TOTAL SPACES PROVIDED

ROW DEDICATION

NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988

KMA
ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL 2 AVE
FT. PIERCE, FL 34946
PHONE: (772) 569-5505
FSPE C.O.A. # 33705

REVISIONS
BY: DATE: COMMENT

NOT FOR CONSTRUCTION

PROJECT:
REGATTA APARTMENTS
2152 SOUTH JENKINS ROAD
FT. PIERCE, FL 34947

CLIENT:
ALVA STONE GROUP, LLC
591 EVERNIA STREET
WEST PALM BEACH, FL 33401

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

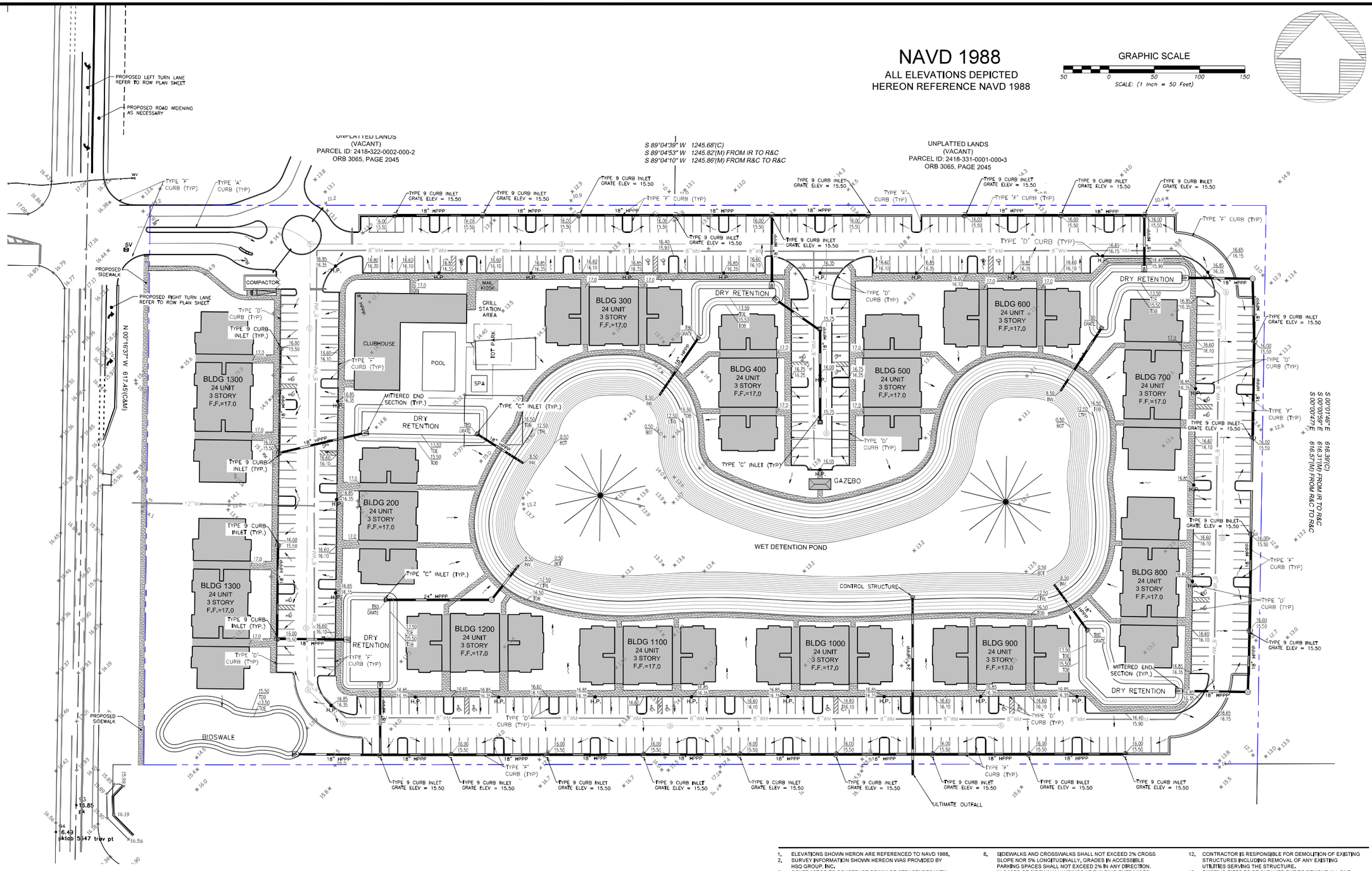
BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

PROJECT No.:	23-1011
DRAWN BY:	CRW
CHECKED BY:	BRB
DATE:	08/23/2023

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
C-3



LEGEND

- TYPE "F" CURB AND GUTTER
- TYPE "D CURB
- PERIMETER BERM
- HEAVY DUTY ASPHALT PAVEMENT
- STANDARD DUTY ASPHALT PAVEMENT
- SIDEWALK

DRAINAGE LEGEND

- PROPOSED STORM INLET
- PROPOSED MITERED END SECTION
- PROPOSED DRAINAGE PIPE
- PROPOSED DIRECTION OF SURFACE WATER RUNOFF
- PROPOSED SURFACE ELEVATION
- EXISTING CONTOUR
- PROPOSED PRESERVE AREA SIGN

1. ELEVATIONS SHOWN HERON ARE REFERENCED TO NAVD 1988.
2. SURVEY INFORMATION SHOWN HEREON WAS PROVIDED BY HSQ GROUP, INC.
3. CONTRACTOR TO CONSTRUCT DRAINAGE STRUCTURES WITH USF GRATES, RIMS AND COVERS AS CALLED OUT OR APPROVED EQUAL. SHOP DRAWINGS ARE TO BE PROVIDED TO ENGINEER FOR APPROVAL PRIOR TO ANY CONSTRUCTION.
4. CONTRACTOR TO REFER TO FDOT DESIGN STANDARD (AND NOT LIMITED TO) INDEX'S 200, 201, 210, 211, 214, 232 & 233 FOR MANHOLE, INLET AND GRATE SPECIFICATIONS.
5. ALL DRAINAGE STRUCTURES SHALL BE CONSTRUCTED WITH (4) SIDED BEARING HEAVY DUTY H-20 RATED TRAFFIC RIMS AND GRATES.
6. CONTRACTOR TO VERIFY ALL EXISTING UTILITY RINGS AND COVERS ON SITE ARE HEAVY DUTY TRAFFIC RATED. CONTRACTOR TO REPLACE DEFICIENT RINGS AND COVERS WITH HEAVY DUTY TRAFFIC RATED RINGS AND COVERS. CONTRACTOR TO ADJUST RIM ELEVATIONS OF ANY UTILITIES THAT CHANGE IN ELEVATION DURING CONSTRUCTION.
7. ALL CLEAN-OUT COVERS SHOULD BE RATED FOR HEAVY DUTY TRAFFIC.
8. SIDEWALKS AND CROSSWALKS SHALL NOT EXCEED 2% CROSS SLOPE NOR 5% LONGITUDINALLY, GRADES IN ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION. IN CASES OF SIDEWALK LANDINGS AT BUILDING ENTRANCES, GRADES SHALL NOT EXCEED 2% IN ANY DIRECTION. ACCESSIBLE CURB RAMPS SHALL NOT EXCEED 6' IN LENGTH AND 1:12 SLOPE. LANDINGS AT CHANGES IN DIRECTION SHALL BE MINIMUM 60"x60" AND SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION.
9. ROOF DRAIN CONNECTIONS TO DRAINAGE PIPE SHALL BE AS FOLLOWS:
   - A. FOR ADS N-12 CORRUGATED POLYETHYLENE DRAINAGE PIPE USE ADS DUAL WALL FABRICATED REDUCING SADDLE TEE 4"-24" DIAMETER.
   - B. FOR RCP DRAINAGE PIPE MAKE CONNECTION PER FDOT INDEX 280,CONCRETE COLLAR FOR JOINING MAINLINE PIPE AND STUB PIPE DETAIL.
   - C. NOTIFY CONSULTANT FOR CONNECTION METHOD TO STEEL PIPE.
10. ALL DRAINAGE PIPE JOINTS SHALL BE FILTER FABRIC WRAPPED PER FDOT INDEX #280, ALL DRAINAGE PIPE JOINTS NEED TO BE FILTER FABRIC WRAPPED REGARDLESS OF MATERIAL.
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
12. CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE.
13. EXISTING PIPES TO BE CLEANED OUT TO REMOVE ALL SILT AND DEBRIS.
14. PRECAST STRUCTURES MAY BE USED AT CONTRACTORS OPTION.
15. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
16. ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS, MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
17. ALL CATCH BASINS WITHIN PROPOSED TRAFFIC AREAS SHALL HAVE BICYCLE PROOF GRATES.
18. CONTRACTOR TO FLUSH AND VACUUM ENTIRE ON-SITE STORM WATER SYSTEM UPON COMPLETION OF PROPOSED WORK.
19. MINIMUM DRAINAGE PIPE SHALL BE 15 INCHES PER CITY OF FORT PIERCE LAND DEVELOPMENT ORDINANCE SEC 119-3 DESIGN STANDARDS; STORMWATER MANAGEMENT; APPROVALS.

KMA
ENGINEERING & SURVEYING, LLC
300 I INDUSTRIAL 2 AVE
FT. PIERCE, FL 34946
PHONE: (772) 569-5505
FSPE C.O.A. # 31705

REVISIONS
BY: DATE: COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
REGATTA APARTMENTS
2152 SOUTH JENKINS ROAD
FT. PIERCE, FL 34947

CLIENT:
ALVA STONE GROUP, LLC
591 EVERNIA STREET
WEST PALM BEACH, FL 33401

LICENSE
BLAINE ROBERT BERGSTRESSER
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

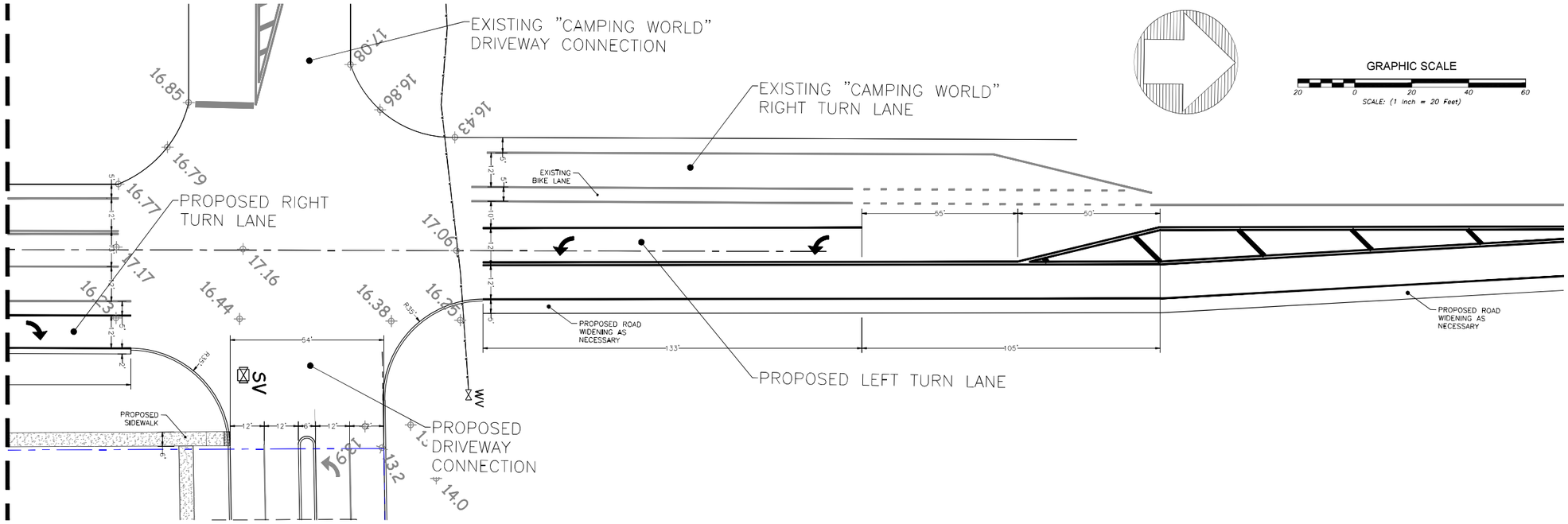
BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

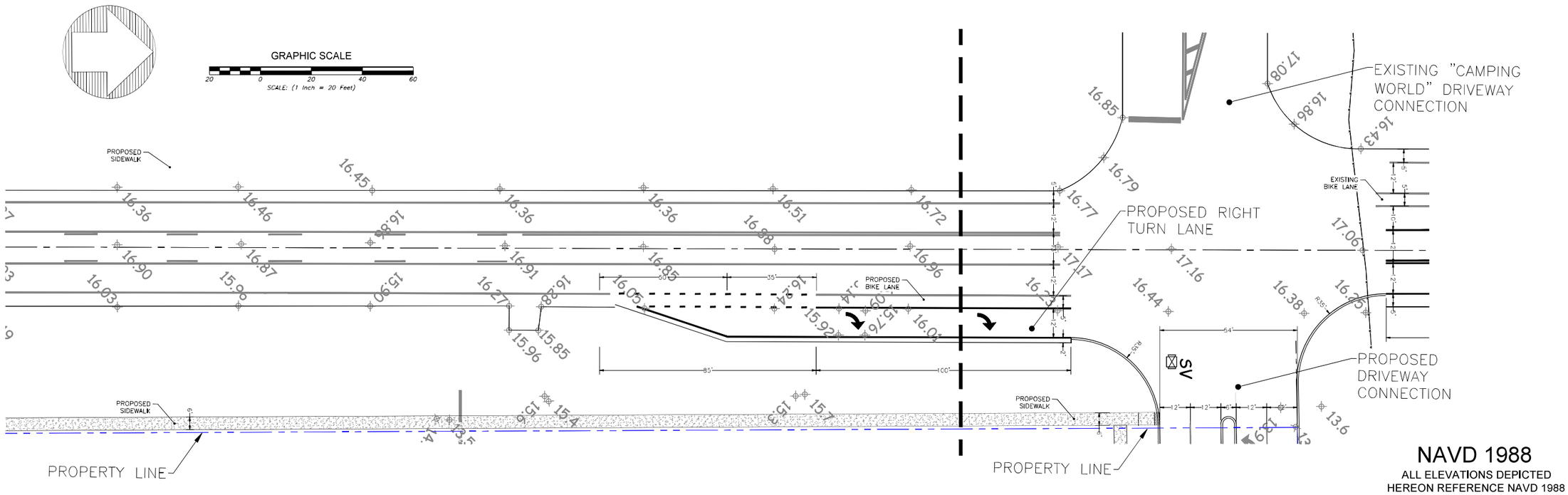
811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

PROJECT No.: 23-1011
DRAWN BY: CRW
CHECKED BY: BRB
DATE: 08/23/2023

SHEET TITLE:
PGD PLAN

SHEET NUMBER:
C-4





NAVD 1988
ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988

KMA
ENGINEERING & SURVEYING, LLC
300 INDUSTRIAL 2 AVE
FT. PIERCE, FL 34946
PHONE: (772) 569-5505
FSPE C.O.A. # 31705

REVISIONS
BY: DATE: COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
REGATTA APARTMENTS
2152 SOUTH JENKINS ROAD
FT. PIERCE, FL 34947

CLIENT:
ALVA STONE GROUP, LLC
591 EVERNIA STREET
WEST PALM BEACH, FL 33401

LICENSE
BLAINE ROBERT BERGSTRESSER
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast. It's free. It's the law.
www.callsunshine.com

PROJECT No.: 23-1011
DRAWN BY: CRW
CHECKED BY: BKB
DATE: 08/23/2023

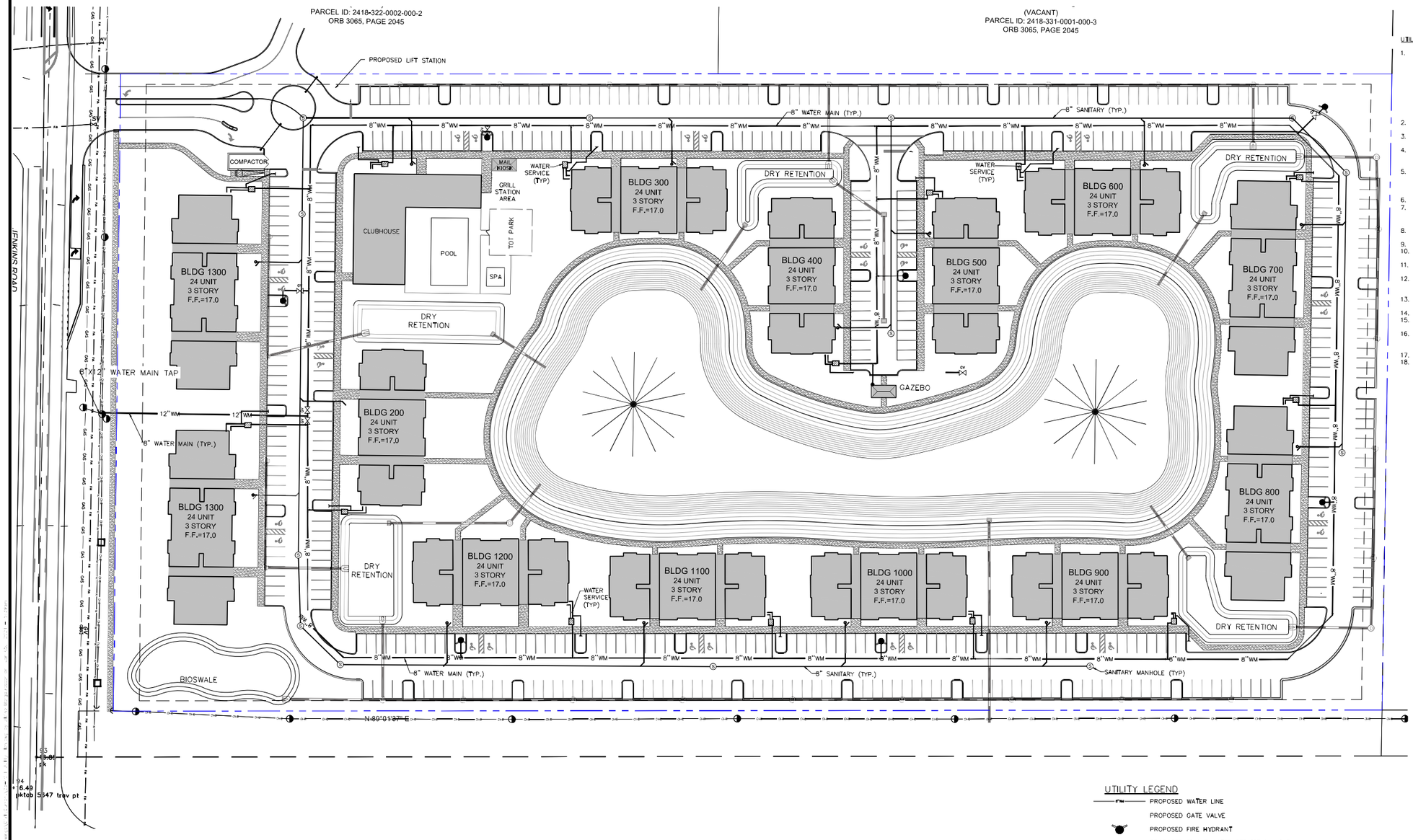
SHEET TITLE:
ROW

SHEET NUMBER:
C-4a

GRAPHIC SCALE

50 0 50 100 150

SCALE: (1 Inch = 50 Feet)

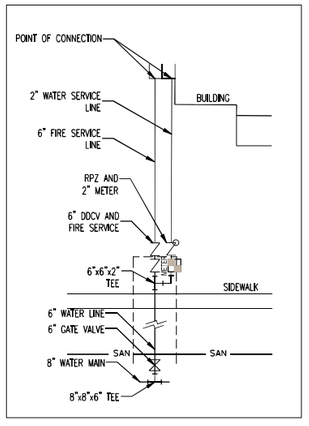


UTILITY NOTES:

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPREITE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
3. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
4. SANITARY SEWER PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON THE PLANS:
   8" PVC SDR26 PER ASTM D 3034 DEPTHS LESS THAN 15'
5. WATER LINES SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED ON PLANS:
   6" AND LARGER, PVC C-900 PER ASTM D 2241 CLASS 200 UNDER ROADS, OTHERWISE CLASS 150
6. MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
7. ALL UTILITIES SHOULD BE KEPT TEN (10') APART (PARALLEL) OR WHEN CROSSING 18" VERTICAL CLEARANCE (OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE).
8. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 36" COVER ON ALL WATERLINES AND FORCEMAINS.
9. CROSSINGS AND CONFLICTS MUST BE PER FPUA SPECIFICATIONS.
10. LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
11. ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 COMPRESSION STRENGTH AT 3000 P.S.I.
12. CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
13. ALL WATER MAIN INSTALLATIONS SHALL COMPLY WITH THE COLOR CODING REQUIREMENTS OF CHAPTER 62-555.320 FAC.
14. VALVES ARE NOT TO BE PLACED IN CURBS, SIDEWALKS, OR DRIVEWAYS.
15. ALL MANHOLES SHALL BE ADJUSTED TO FINAL GRADE PRIOR TO BEGINNING PAVING.
16. DRIVEWAY APRON IS SHOWN FOR REFERENCE ONLY. DRIVEWAYS ARE TO BE CONSTRUCTED AND PERMITTED AS PART OF THE BUILDING PERMIT PROCESS.
17. TRACER WIRE MUST BE INSTALLED PER FPUA SPEC./OPL.
18. THE PROPERTY OWNER, CONTRACTOR,AND AUTHORIZED REPRESENTATIVES SHALL PROVIDE PICK UP, REMOVAL, AND DISPOSAL OF LITTER WITHIN THE PROPERTY LIMITS AND SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE AREA FORM THE EDGE OF PAVEMENT TO THE PROPERTY LINE.

UTILITY LEGEND

- PROPOSED WATER LINE
- PROPOSED GATE VALVE
- PROPOSED FIRE HYDRANT
- PROPOSED SINGLE WATER SERVICE (1" LINE W/ 5/8" METER UNLESS OTHERWISE NOTED)
- PROPOSED DOUBLE WATER SERVICE (1.5" LINE W/ (2) 5/8" METERS UNLESS OTHERWISE NOTED)
- PROPOSED SINGLE SEWER SERVICE W/ CO
- PROPOSED DOUBLE SEWER SERVICE W/ CO
- PROPOSED SANITARY MANHOLE
- ss — PROPOSED SANITARY SEWER
- PROPOSED WATER CAP
- PROPOSED TEE



TYPICAL WATER SERVICE CONNECTIONS

N.T.S.

NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988

KMA
ENGINEERING & SURVEYING, LLC
300 INDUSTRIAL 2 AVE
FT. PIERCE, FL 34946
PHONE: (772) 569-5505
FISPE C.O.A. # 33705

REVISIONS

BY:	DATE:	COMMENT

NOT FOR CONSTRUCTION

PROJECT:
REGATTA APARTMENTS
2152 SOUTH JENKINS ROAD
FT. PIERCE, FL 34947

CLIENT:
ALVA STONE GROUP, LLC
591 EVERNIA STREET
WEST PALM BEACH, FL 33401

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

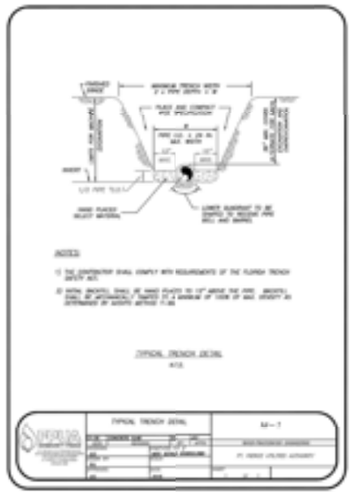
BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, it's free, it's the law.
www.callsunshine.com

PROJECT No.:	23-1011
DRAWN BY:	CRW
CHECKED BY:	BRB
DATE:	08/23/2003

SHEET TITLE:
UTILITIES PLAN

SHEET NUMBER:
C-5

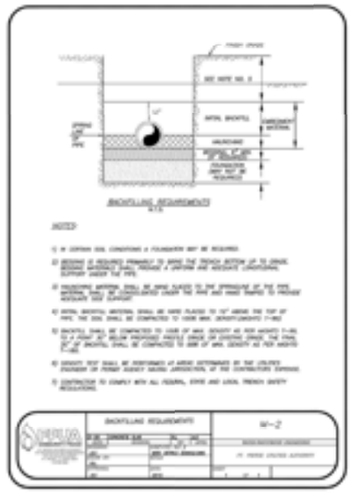


TYPICAL TRENCH DETAIL

NOTES:

1. THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.
2. BEDDING MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE PIPE. BACKFILL MATERIAL SHALL BE MECHANICALLY COMPACTED TO A MINIMUM OF 100% OF MAX. DENSITY AS DETERMINED BY ASTM METHOD T-180.

TYPICAL TRENCH DETAIL	M-1

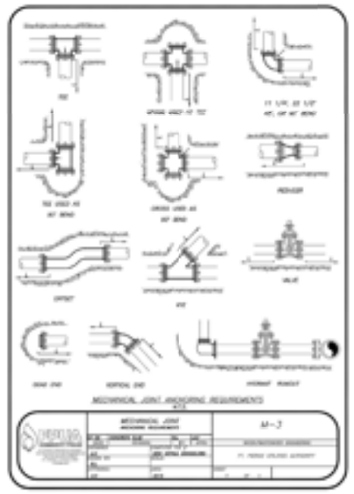


BACKFILLING REQUIREMENTS

NOTES:

1. IN CERTAIN SOIL CONDITIONS A FOUNDATION MAY BE REQUIRED.
2. BEDDING AS REQUIRED MANUALLY TO BRING THE TRENCH BOTTOM UP TO GRADE. MATERIAL SHALL BE COMPACTED TO PROVIDE A UNIFORM AND ADEQUATE LONGITUDINAL SUPPORT UNDER THE PIPE.
3. FOUNDATION MATERIAL SHALL BE HAND PLACED TO THE SPRINGLINE OF THE PIPE. MATERIAL SHALL BE COMPACTED/GRADED UNDER THE HAUNCHES TO PROVIDE MAXIMUM SIDE SUPPORT.
4. INITIAL BACKFILL MATERIAL SHALL BE HAND PLACED TO 12" ABOVE THE TOP OF PIPE. THE SOIL SHALL BE COMPACTED TO 100% MIN. (DENSITY=DENSITY T-180)
5. BACKFILL SHALL BE COMPACTED TO 100% OF MAX. DENSITY AS PER METHOD T-180 UP TO 2 FEET ABOVE PROPOSED FINISH GRADE OR EXISTING GRADE. ONCE THE TOTAL 2' OF BACKFILL SHALL BE COMPACTED TO 98% OF MAX. DENSITY AS PER METH.
6. DENSITY TEST SHALL BE PERFORMED AT AREAS DETERMINED BY THE UTILITY ENGINEER OR PIERCE DISTRICT MATERIAL LABORATORY, AT THE CONTRACTORS EXPENSE.
7. CONTRACTOR TO COMPLY WITH ALL FEDERAL, STATE AND LOCAL TRENCH SAFETY REGULATIONS.

BACKFILLING REQUIREMENTS	M-2



MECHANICAL JOINT ANCHORING REQUIREMENTS

MECHANICAL JOINT ANCHORING REQUIREMENTS	M-3



MECHANICAL JOINT RESTRAINT NOTES

NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DETERMINATION OF REQUIRED LENGTH OF ALL RESTRAINED JOINTS UPON THE PROJECT WHEN USE OF PIPE MATERIALS OTHER THAN DUCTILE IRON PIPE ARE PROPOSED. THE CONTRACTOR SHALL USE DESIGN CONDITIONS AND DESIGN PARAMETERS AS SET FORTH AND A SAFETY FACTOR OF NOT LESS THAN 2 (TWO) AS SHOWN IN EXHIBIT "C" OF THE AWWA C-600 STANDARD. A COMPLETE SET OF SUCH TYPICAL DETAILS AND CALCULATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW BEFORE THE PROJECT SHALL BE SUBMITTED. NO WORK SHALL BE PERFORMED ON THE PROJECT SHALL BE SUBMITTED. NO WORK SHALL BE PERFORMED ON THE PROJECT UNTIL SUCH DETAILS AND CALCULATIONS HAVE BEEN APPROVED BY THE ENGINEER AND THE UTILITY AUTHORITY.
2. REQUIRED RESTRAINED LENGTH (EACH SIDE OF FITTING) SHALL NOT EXTEND PAST THE CENTERLINE OF ADJACENT BENDS OR FITTINGS THAT ARE NOT LOCATED WITHIN THE CALCULATED RESTRAINT LENGTH (L) OF THE BEND OR FITTING IN QUESTION.
3. EVERY JOINT OF FITTING MUST BE RESTRAINED OR WITH SOME OF THE BEND AND TEE TEES ALONG THE MAIN RUN.

MECHANICAL JOINT RESTRAINT NOTES	M-4



UTILITY CROSSING DETAIL

NOTE:

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

UTILITY CROSSING DETAIL	M-5



TYPICAL GATE VALVE & VALVE BOX DETAIL

NOTES:

1. BLUE REFLECTIVE PAVEMENT MARKER SHALL BE PLACED ON THE ROAD SURFACE AND LOCATED WITH THE VALVE BOX COVER ACROSS THE PAVEMENT EDGE.
2. FOR WATER AND WASTEWATER VALVES INSTALLED IN PAVED AREAS, CONCRETE COLLAR SHALL BE USED AS SHOWN ON DETAIL. CONCRETE SHALL BE MINIMUM 3000 PSI AND EXTEND TO MINIMUM DEPTH OF 6" BELOW BASE.
3. DO NOT BE USED AS BRACING ONLY IF A VALVE BOX IS NOT INSTALLED DIRECTLY OVER THE VALVE. VALVE BOX SHALL BE USED IN ANY CIRCUMSTANCES.

TYPICAL GATE VALVE & VALVE BOX DETAIL	M-6



TRACE WIRE DETAIL

NOTES:

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

TRACE WIRE DETAIL	M-11



NOTES:

1. WHERE DIRECTIONAL DRILLING CROSSES EXISTING PIPE, LOCATE AND VERIFY DEPTH AND SIZE OF EXISTING UTILITY. CONTACT UTILITY OWNER TO VERIFY AND SPECIFY ANY SPECIAL REQUIREMENTS.
2. PIPE MATERIAL SPECIFICATIONS:
   - MANUFACTURER – CONTRACTOR ASSUMES CHOICE
   - PART NUMBER – CP606-XXX-BLU / CP606-XXX-YLW / CP606-XXX-ORG
   - PART NUMBER DESCRIPTION – 12 GAUGE, HDPE JACKET WITH 7 STRANDED COPPER CONDUCTORS, EPEC / DYNA SEAL HIGH STRENGTH-HARD DRAWN / 115KSI BREAKING LOAD STRENGTH – XXX (MIN. LENGTH IN FEET)

DIRECTIONAL BORE	M-10



FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. WATER MAINS SHALL BE DUCTILE IRON CONFORMING TO ANSI/AWWA C-151/A21.51, CLASS 350 MIN., CEMENT LINED AND SEAL COATED.
3. WATER MAINS SHALL BE INSTALLED AND COMPACTED IN ACCORDANCE WITH CITY, COUNTY, AND STATE CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT DENSITY TESTS AS REQUIRED BY THE CITY ENGINEER AND THE CITY, COUNTY, AND/OR STATE ROAD WHERE PAVED. THESE TESTS SHALL VERIFY THE COMPACTION OF 100% OR OTHER COMPACTION REQUIREMENTS SHALL NOT BE LESS THAN THE MINIMUM REQUIRED BY THE APPROPRIATE RESPONSIBLE AGENCY.
4. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE UTILITY ENGINEER AND CITY/COUNTY/STATE ENGINEERING OR AGENCY.
5. THE CONTRACTOR SHALL NOTIFY UTILITY ENGINEERING AND CITY/COUNTY/STATE ENGINEERING OR AGENCY PRIOR TO COMMENCING CONSTRUCTION.
6. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE OWNER(S), THE CONTRACTOR, UTILITY AND CITY/COUNTY/STATE ENGINEER SHALL BE MANDATORY PRIOR TO COMMENCEMENT OF CONSTRUCTION.
7. TRAFFIC CONTROL, WARNING DEVICES, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND MANUALS WHERE APPLICABLE.
8. MINIMUM COVER SHALL BE 36 INCHES EXCEPT AS APPROVED BY THE UTILITIES ENGINEER AND CITY/COUNTY/STATE ENGINEERING. PIPES WITH COVER LESS THAN 24 INCHES SHALL BE CONSTRUCTED OF DUCTILE IRON OR PVC PIPE.
9. DISTURBED AREAS SHALL BE RESTORED IN CONFORMANCE WITH THE APPLICABLE GOVERNING AGENCY REQUIREMENTS.
10. EXISTING UTILITIES AND DRAINAGE SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION AND PROTECTED BY THE CONTRACTOR.
11. WATER MAINS SHALL BE TESTED AND DISINFECTED IN ACCORDANCE WITH THE APPLICABLE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND AWWA C-651 FOR DISINFECTION.

WATER DISTRIBUTION NOTES	C-1



FORT PIERCE UTILITIES AUTHORITY
WATER DISTRIBUTION NOTES
CONTINUED

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EXISTING UTILITIES AND DRAINAGE.
13. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER INCLUDING LOCATIONS OF VALVES, FITTINGS, SERVICE CONNECTIONS, ELEVATIONS, AND REVISED VALVES, AND ANY OTHER DEPARTMENT DETERMINED REQUIREMENT TO LOCATE STUBS CONSTRUCTED UNDER THIS PROJECT, AS REQUIRED BY THE UTILITIES ENGINEER.
14. THE CONTRACTOR SHALL TAP EXISTING LINES UNDER THE SUPERVISION OF THE FORT PIERCE UTILITIES AUTHORITY ONLY AFTER TESTING AND DISINFECTION HAS BEEN COMPLETED AND APPROVED ON THE PERTINENT WATER MAIN SYSTEM.
15. WATER MAIN VALVES SHALL BE INSTALLED AT THE END OF EACH LINE TERMINATED AT A FUTURE EXTENSION AND WITH SUFFICIENT NUMBER IN THE SYSTEM SO THAT NO MORE THAN 5 HYDRANTS SHALL BE OUT OF SERVICE AT ONE TIME BECAUSE OF CLOSED VALVES. VALVES SHALL BE LOCATED AT STREET CORNERS WHERE POSSIBLE.
16. CONTRACT THAT SHALL BE PLACED APPROXIMATELY TEN FEET AWAY FROM GATE VALVES, AT HYDRANT TEE CONNECTIONS STUBS AND CLOSE POINT SHALL BE MARKED WITH TRACING CONDUCTOR.
17. MECHANICAL RESTRAINTS TO BE USED ON ALL FITTINGS AND PLACED IN ACCORDANCE WITH MANUFACTURING DETAILS AND AWWA C-600 STANDARDS AND FPUA REQUIREMENTS.
18. ALL WORK SHALL BE TESTED AT A MINIMUM OF 150 PSI. TESTING METHODS SHALL CONFORM TO AWWA C-600, 4.2 OR MINIMUM CUP.
    - MAIN SIZE
    - 4" LEAKAGE X GPH
    - 6" LEAKAGE X GPH
    - 8" TYPE DIAMETER IN INCHES
    - 12" SEATING PRESSURE IN PSI
19. PRIOR TO ANY FINAL ACCEPTANCE, ALL MARKER 2" OR 3" GAS VENT LOCATED ALONG 4" OR 6" WATER MAIN SHALL TAKE THE DEPTH LOCATION OF THE LINE WHERE SHALL BE PLACED IN THE JOINT OF NEW LINE. CONTRACTOR SHALL BE TURNED UP 2" OF SIZE AND EXTENDED TO THAT ELEVATION AND A FULL SIZE PLUGS SHALL BE ACCOMPLISHED. ALONG WITH GAS VENT FOR THE PLACED, WHERE GAS VENT SHALL BE PLACED IN BRANCH LINES AT THE HIGHEST POINT OF THE LINE, THE CONTRACTOR SHALL BE REQUIRED FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE OR CIRCUITOUS, WHERE THE SPECIAL CONNECTION CONSIST OF A MECHANICAL JOINT RESTRAINT, SHALL BE INSTALLED. WHERE WATER CONNECTION IS MADE TO AN EXISTING MAIN, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE SHUT OFF OF THE WATER MAIN AND THE WATER MAIN SHALL BE DISINFECTED FROM THE POINT OF CONNECTION TO THE NEXT VALVE IN THE SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF THE CHLORINATED WATER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING TEMPORARY CONNECTIONS, IF IT IS NOT BETWEEN BOTH THE VALVES, ALL WATER IN THE WATER MAIN BEING PLACED IN SERVICE AT THE SAME TIME. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF THE CHLORINATED WATER AT THE DIRECTION OF ALL ORDINANCES.
20. WHERE A WATER MAIN IS TO BE INSTALLED BELOW A STORM SEWER PIPE, A MINIMUM OF 6 INCHES OF VERTICAL CLEARANCE BETWEEN PIPES SHALL BE CONSTRUCTED OF 18" IS THE CROSSING, AND SHALL BE MECHANICALLY RESTRAINED WITHIN 20' FEET OF THE CROSSING.
21. CONTRACTOR SHALL COMPLY WITH FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WATER DISTRIBUTION NOTES	C-1



FORT PIERCE UTILITIES AUTHORITY WASTEWATER CONSTRUCTION NOTES

1. ALL CONSTRUCTION MATERIAL, INSTALLATION AND TESTING SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF THE FORT PIERCE UTILITIES AUTHORITY.
2. GRAVITY SEWER MAIN SHALL BE PVC/DUCTILE CONFORMING TO ASTM D-3034 SDR 35 OR ASTM F-679 AND SHALL CONFORM TO ASTM D 3212.
3. THE MINIMUM SLOPE SHALL BE AS SHOWN ON THE PLANS AND SHALL BE CONSTRUCTED TO PROVIDE A FULL AND SUITABLE VELOCITY AND FLOW.
4. WASTEWATER LINES SHALL BE INSTALLED AND COMPACTED IN ACCORDANCE WITH FPUA DESIGN AND CONSTRUCTION STANDARDS. THE CONTRACTOR SHALL SUBMIT DENSITY TESTS AS REQUIRED BY THE UTILITIES ENGINEER.
5. A 10 MINIMUM SLOPE SHALL BE MAINTAINED ON ALL SANITARY SERVICE LATERALS.
6. THE CONTRACTOR SHALL FURNISH RECORD DRAWING INFORMATION TO THE ENGINEER CONSISTING OF MAIN SIZES, LOCATIONS OF SERVICE TEE WYES, DIAMETER OF SERVICE LOCATION OF ANY FITTINGS, TYPES, AND ANY DEPTH ELEVATIONS OF ALL MANHOLES AND ANY OTHER PERTINENT INFORMATION NECESSARY TO LOCATE STUBS CONSTRUCTED UNDER THIS PROJECT.
7. INSPECTION OF TEST AND PRESTRESSED TO TEST PERPENDICULAR DEFLECTIONS BETWEEN MANHOLE AND SEWER MAINS AT A MINIMUM.
8. WASTEWATER FORCE MAINS, WASTEWATER COLLECTION LINES, AND STORM SEWERS SHALL CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE OUTSIDE OF BOTH PIPES SHALL BE MAINTAINED. WHERE THE SEWER MAIN CROSSES ABOVE A WATER MAIN, THE CROSSING SHALL BE ARRANGED SO THAT NO JOINT IN THE SEWER MAIN IS CLOSER THAN 3 FEET TO THE CENTERLINE OF THE WATER MAIN. THE CROSSING SHALL BE ACCOMPLISHED USING 18 FEET LENGTHS OF PIPE AND WITH THE WATER MAIN CENTERED ON THE SEWER PIPE SO THAT THE JOINTS WILL BE AS FAR AS POSSIBLE FROM THE POINT OF CROSSING. WHERE A WATER MAIN CROSSES UNDER A SEWER MAIN, THE CROSSING SHALL BE ARRANGED SO THAT NO JOINT IN THE SEWER MAIN IS CLOSER THAN 3 FEET TO THE CENTERLINE OF THE WATER MAIN. THE CROSSING SHALL BE ACCOMPLISHED USING 18 FEET LENGTHS OF PIPE AND WITH THE WATER MAIN CENTERED ON THE SEWER PIPE SO THAT THE JOINTS WILL BE AS FAR AS POSSIBLE FROM THE POINT OF CROSSING. WHERE A WATER MAIN CROSSES UNDER A SEWER MAIN, THE CROSSING SHALL BE ARRANGED SO THAT NO JOINT IN THE SEWER MAIN IS CLOSER THAN 3 FEET TO THE CENTERLINE OF THE WATER MAIN. THE CROSSING SHALL BE ACCOMPLISHED USING 18 FEET LENGTHS OF PIPE AND WITH THE WATER MAIN CENTERED ON THE SEWER PIPE SO THAT THE JOINTS WILL BE AS FAR AS POSSIBLE FROM THE POINT OF CROSSING.
9. A PRE-CONSTRUCTION CONFERENCE BETWEEN THE CONTRACTOR, THE CONSTRUCTION, AND UTILITY DEPARTMENT SHALL BE MANDATORY PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
10. NO FIELD CHANGES OR DEVIATIONS FROM THE DESIGN SHALL BE MADE WITHOUT PRIOR APPROVAL OF THE UTILITIES ENGINEER.
11. TRAFFIC CONTROL, WARNINGS, ETC. SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS AND MANUALS.
12. THE CONTRACTOR SHALL NOTIFY FORT PIERCE UTILITIES AUTHORITY 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
13. MINIMUM COVER SHALL BE AS NOTED ON PLANS. CONFORMING TO AWWA C-600.
14. WASTEWATER FORCE MAIN SHALL BE GREEN IN COLOR.
15. FITTINGS SHALL BE DUCTILE IRON, CONFORMING TO AWWA/ANSI C-153/A21.53 AND SHALL BE PRESSURE RATED 350 PSI.
16. WASTEWATER FORCE MAIN SHALL BE MARKED AT THE USE OF CONTINUOUS 12 GAUGE THHN COPPER TRACER WIRE. CONTINUITY OF THE TRACER WIRE SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY BREAKS IN THE TRACER WIRE AT NO ADDITIONAL COST TO THE OWNER.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL EXCESS MATERIAL AND DEBRIS RESULTING FROM CONSTRUCTION OPERATIONS IN ACCORDANCE WITH FPUA SPECIFICATIONS.
18. EACH SERVICE LATERAL WILL BE MARKED WITH A LOCATOR BALL AS MANUFACTURED BY ALL CORPORATIONS, OR APPROVED EQUAL AS REQUIRED BY FPUA ENGINEER.
19. ALL MANHOLES SHALL HAVE SEWER MAIN CLEARLY INSTALLED AS REQUIRED BY FPUA ENGINEER
20. THE CONTRACTOR SHALL COMPLY WITH THE FLORIDA TRENCH SAFETY ACT REQUIREMENTS.

WASTEWATER CONSTRUCTION NOTES FPUA REQUIREMENTS	C-2 CONSTRUCTION NOTES



STANDARD SEPARATION STATEMENT FOR
WATER / SEWER CONFLICTS

1. WHENEVER STORM, FORCE MAINS, AND STORM SEWERS SHALL CROSS UNDER WATER MAINS WHENEVER POSSIBLE. A MINIMUM VERTICAL DISTANCE OF 12 INCHES BETWEEN THE OUTSIDE OF BOTH PIPES SHALL BE MAINTAINED. WHERE THE SEWER MAIN CROSSES ABOVE A WATER MAIN, THE CROSSING SHALL BE ARRANGED SO THAT NO JOINT IN THE SEWER MAIN IS CLOSER THAN 3 FEET TO THE CENTERLINE OF THE WATER MAIN. THE CROSSING SHALL BE ACCOMPLISHED USING 18 FEET LENGTHS OF PIPE AND WITH THE WATER MAIN CENTERED ON THE SEWER PIPE SO THAT THE JOINTS WILL BE AS FAR AS POSSIBLE FROM THE POINT OF CROSSING. WHERE A WATER MAIN CROSSES UNDER A SEWER MAIN, THE CROSSING SHALL BE ARRANGED SO THAT NO JOINT IN THE SEWER MAIN IS CLOSER THAN 3 FEET TO THE CENTERLINE OF THE WATER MAIN. THE CROSSING SHALL BE ACCOMPLISHED USING 18 FEET LENGTHS OF PIPE AND WITH THE WATER MAIN CENTERED ON THE SEWER PIPE SO THAT THE JOINTS WILL BE AS FAR AS POSSIBLE FROM THE POINT OF CROSSING.
2. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
3. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
4. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
5. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
6. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
7. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
8. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
9. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
10. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
11. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
12. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
13. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
14. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
15. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
16. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
17. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
18. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
19. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
20. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
21. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
22. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
23. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
24. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
25. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
26. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
27. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
28. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
29. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
30. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
31. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
32. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
33. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
34. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
35. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
36. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
37. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
38. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
39. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
40. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
41. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
42. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
43. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
44. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
45. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
46. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
47. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
48. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
49. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
50. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
51. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
52. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
53. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
54. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
55. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
56. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
57. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
58. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
59. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
60. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
61. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
62. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
63. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
64. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
65. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
66. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
67. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
68. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
69. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
70. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
71. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
72. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
73. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
74. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
75. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
76. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
77. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
78. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
79. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
80. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
81. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
82. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
83. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
84. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
85. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
86. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
87. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
88. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
89. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
90. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
91. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
92. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
93. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
94. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
95. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
96. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
97. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
98. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
99. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.
100. ALL SEWER MAINS SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE OR PVC PIPE.

STANDARD SEPARATION STATEMENT FOR WATER/SEWER CONFLICT	C-3

KMA
ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL 2 AVE.
FT. PIERCE, FL 34946
PHONE: (772) 595-6505
FBPE C.O.A. # 32705

REVISIONS:

BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
REGATTA APARTMENTS
2152 SOUTH JENKINS ROAD
FT. PIERCE, FL 34947

CLIENT:
ALVA STONE GROUP, LLC
591 EVERNIA STREET
WEST PALM BEACH, FL 33401

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

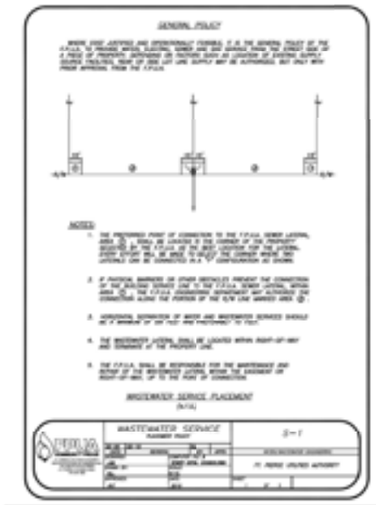
BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

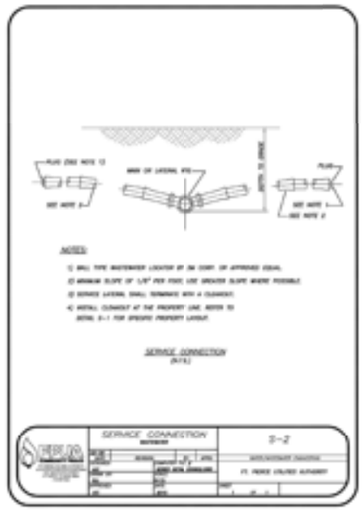
811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, it's free, it's the law.
www.callsunshine.com

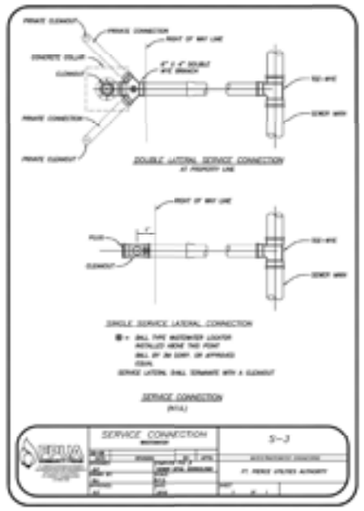
PROJECT No.:	23-1011
DRAWN BY:	CRW
CHECKED BY:	BRB
DATE:	08/23/2023

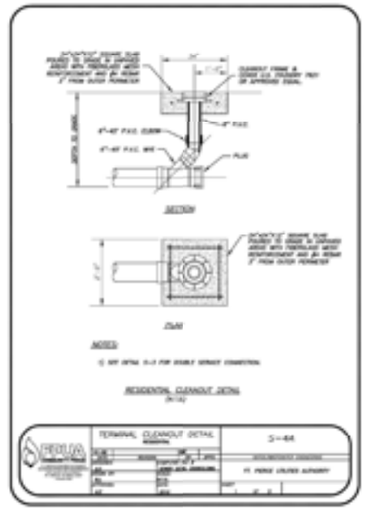
SHEET TITLE:
FPUA DETAILS

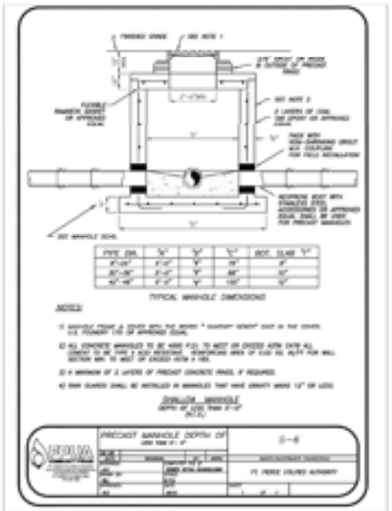
SHEET NUMBER:
C-6

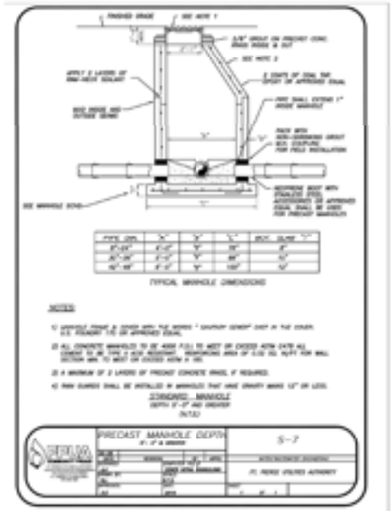


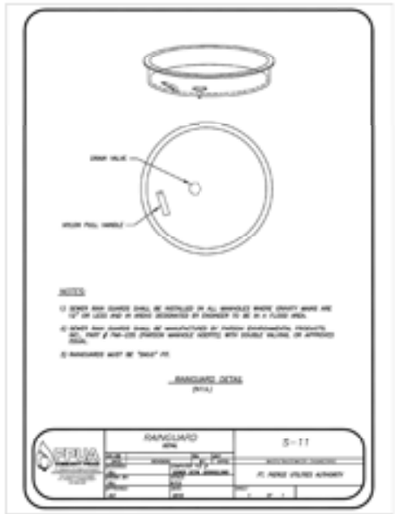


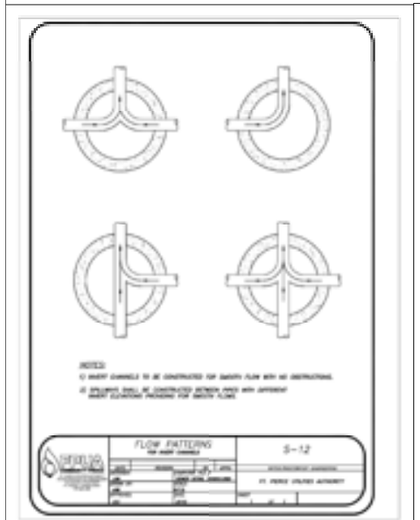


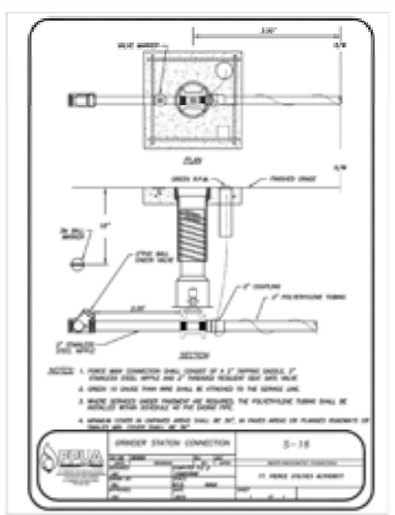


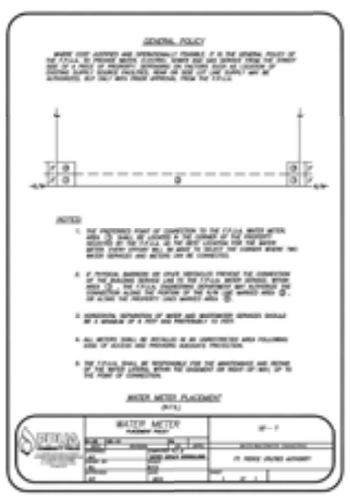


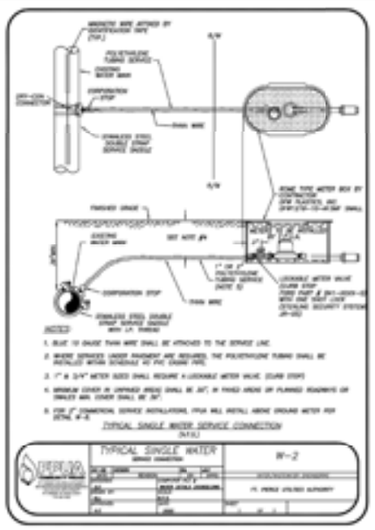


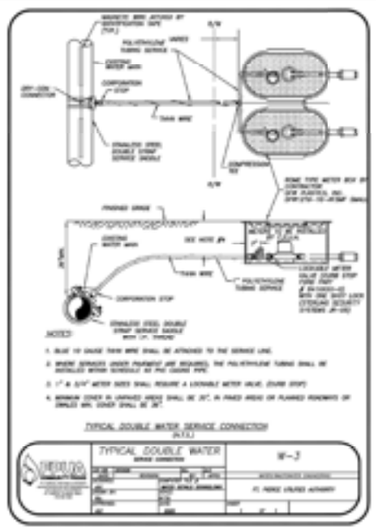


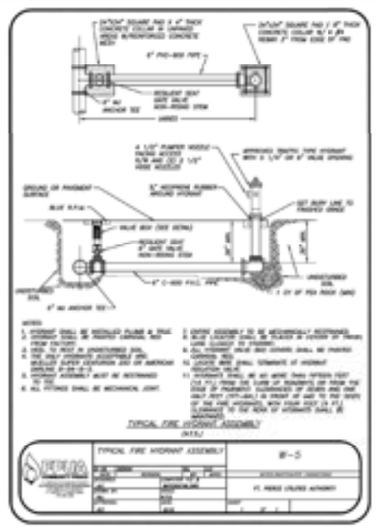


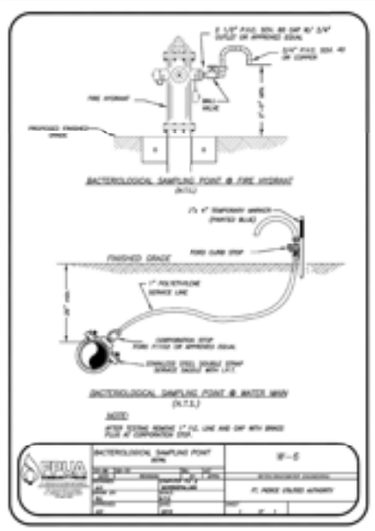












KMA
ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL 2 AVE
FT. PIERCE, FL 34946
PHONE: (772) 595-6505
FB/PE C.O.A. # 33705

REVISIONS:
BY: DATE: COMMENT:

NOT FOR CONSTRUCTION

PROJECT:
REGATTA APARTMENTS
2152 SOUTH JENKINS ROAD
FT. PIERCE, FL 34947

CLIENT:
ALVA STONE GROUP, LLC
591 EVERNIA STREET
WEST PALM BEACH, FL 33401

LICENSE
BLAINE ROBERT BERGSTRESSER
NO. 84598
STATE OF FLORIDA
PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, It's free, It's the law.
www.callsunshine.com

PROJECT No.: 23-1011
DRAWN BY: CRW
CHECKED BY: BRB
DATE: 08/23/2023

SHEET TITLE:
FPUA DETAILS (2)

SHEET NUMBER:
C-7

GENERAL

1. THE CONTRACTOR AND SUBCONTRACTORS SHALL OBTAIN A COPY OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION) AND BECOME FAMILIAR WITH THE CONTENTS PRIOR TO COMMENCING WORK, AND, UNLESS OTHERWISE NOTED, ALL WORK SHALL CONFORM AS APPLICABLE TO THESE STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ALL MATERIAL AND LABOR TO CONSTRUCT THE FACILITY AS SHOWN AND DESCRIBED IN THE CONSTRUCTION DOCUMENTS IN ACCORDANCE WITH THE APPROPRIATE APPROVING AUTHORITIES, SPECIFICATIONS AND REQUIREMENTS. CONTRACTOR SHALL CLEAR AND GRUB ALL AREAS UNLESS OTHERWISE INDICATED, REMOVING TREES, STUMPS, ROOTS, MUCK, EXISTING PAVEMENT AND ALL OTHER DELETERIOUS MATERIAL.
3. EXISTING UTILITIES SHOWN ARE LOCATED ACCORDING TO THE INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF THE TOPOGRAPHIC SURVEY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR THE ENGINEER. GUARANTEE IS NOT MADE THAT ALL EXISTING UNDERGROUND UTILITIES ARE SHOWN OR THAT THE LOCATION OF THOSE SHOWN ARE ENTIRELY ACCURATE. FINDING THE ACTUAL LOCATION OF ANY EXISTING UTILITIES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE DONE BEFORE HE COMMENCES ANY WORK IN THE VICINITY. FURTHERMORE, THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES. THE OWNER OR ENGINEER WILL ASSUME NO LIABILITY FOR ANY DAMAGES SUSTAINED OR COST INCURRED BECAUSE OF THE OPERATIONS IN THE VICINITY OF EXISTING UTILITIES OR STRUCTURES, NOR FOR TEMPORARY BRACING AND SHORING OF SAME. IF IT IS NECESSARY TO SHORE, BRACE, SWING OR RELOCATE A UTILITY, THE UTILITY COMPANY OR DEPARTMENT AFFECTED SHALL BE CONTACTED AND THEIR PERMISSION OBTAINED REGARDING THE METHOD TO USE FOR SUCH WORK.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE VARIOUS UTILITY COMPANIES WHICH MAY HAVE BURIED OR AERIAL UTILITIES WITHIN OR NEAR THE CONSTRUCTION AREA BEFORE COMMENCING WORK. THE CONTRACTOR SHALL PROVIDE 48 HOURS MINIMUM NOTICE TO ALL UTILITY COMPANIES PRIOR TO BEGINNING CONSTRUCTION. A LIST OF THE UTILITY COMPANIES WHICH THE CONTRACTOR MUST CALL BEFORE COMMENCING WORK IS PROVIDED ON THE COVER SHEET OF THESE CONSTRUCTION PLANS. THIS LIST SERVES AS A GUIDE ONLY AND IS NOT INTENDED TO LIMIT THE UTILITY COMPANIES WHICH THE CONTRACTOR MAY WISH TO NOTIFY.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL REQUIRED CONSTRUCTION PERMITS AND BONDS IF REQUIRED PRIOR TO CONSTRUCTION.
6. THE CONTRACTOR SHALL HAVE AVAILABLE AT THE JOB SITE AT ALL TIMES ONE COPY OF THE CONSTRUCTION DOCUMENTS INCLUDING PLANS, SPECIFICATIONS, AND SPECIAL CONDITIONS AND COPIES OF ANY REQUIRED CONSTRUCTION PERMITS.
7. ANY DISCREPANCIES ON THE DRAWINGS SHALL BE IMMEDIATELY BROUGHT TO THE ATTENTION OF THE OWNER AND ENGINEER BEFORE COMMENCING WORK. NO FIELD CHANGES OR DEVIATIONS FROM DESIGN ARE TO BE MADE WITHOUT PRIOR APPROVAL OF THE OWNER AND NOTIFICATION TO THE ENGINEER.
8. ALL COPIES OF COMPACTION, CONCRETE AND OTHER REQUIRED TEST RESULTS ARE TO BE SENT TO THE OWNER AND DESIGN ENGINEER OF RECORD DIRECTLY FROM THE TESTING AGENCY.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUBMITTING TO THE ENGINEER A CERTIFIED RECORD SURVEY SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA DEPICTING THE ACTUAL FIELD LOCATION OF ALL CONSTRUCTED IMPROVEMENTS THAT ARE REQUIRED BY THE JURISDICTIONAL AGENCIES FOR THE CERTIFICATION PROCESS. ALL SURVEY COSTS WILL BE THE CONTRACTORS RESPONSIBILITY.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DOCUMENTING AND MAINTAINING AS-BUILT INFORMATION WHICH SHALL BE RECORDED AS CONSTRUCTION PROGRESSES OR AT THE COMPLETION OF APPROPRIATE CONSTRUCTION INTERVALS AND SHALL BE RESPONSIBLE FOR PROVIDING AS-BUILT DRAWINGS TO THE OWNER FOR THE PURPOSE OF CERTIFICATION TO JURISDICTIONAL AGENCIES AS REQUIRED. ALL AS-BUILT DATA SHALL BE COLLECTED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR WHOSE SERVICES ARE ENGAGED BY THE CONTRACTOR.
11. ANY WELLS DISCOVERED ON SITE THAT WILL HAVE NO USE MUST BE PLUGGED BY A LICENSED WELL DRILLING CONTRACTOR IN A MANNER APPROVED BY ALL JURISDICTIONAL AGENCIES. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ANY WELL ABANDONMENT PERMITS REQUIRED.
12. ANY WELL DISCOVERED DURING EARTH MOVING OR EXCAVATION SHALL BE REPORTED TO THE APPROPRIATE JURISDICTIONAL AGENCIES WITHIN 24 HOURS AFTER DISCOVERY IS MADE.
13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS DO NOT CONFLICT WITH ANY KNOWN EXISTING OR OTHER PROPOSED IMPROVEMENTS. IF ANY CONFLICTS ARE DISCOVERED, THE CONTRACTOR SHALL NOTIFY THE OWNER PRIOR TO INSTALLATION OF ANY PORTION OF THE SITE WORK THAT WOULD BE AFFECTED. FAILURE TO NOTIFY OWNER OF AN IDENTIFIABLE CONFLICT PRIOR TO PROCEEDING WITH INSTALLATION RELIEVES OWNER OF ANY OBLIGATION TO PAY FOR A RELATED CHANGE ORDER.

EROSION CONTROL

1. THE STORM WATER POLLUTION PREVENTION PLAN ("SWPPP") IS COMPRISED OF THE EROSION CONTROL PLAN, THE STANDARD DETAILS, THE PLAN NARRATIVE, ATTACHMENTS INCLUDED IN SPECIFICATIONS OF THE SWPPP, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
2. 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.
3. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
4. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. THE CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY THE PERMITTING AGENCY OR OWNER.
5. EROSION CONTROL PLAN MUST CLEARLY DELINEATE ALL STATE WATERS. PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
6. THE CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
7. CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND 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.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. 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.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DUST CONTROL ON SITE. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
11. 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 STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
12. ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THE PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
13. STABILIZATION PRACTICES SHOULD BE INITIATED AS SOON AS PRACTICAL, BUT IN NO CASE MORE THAN 7 DAYS WHERE CONSTRUCTION HAS TEMPORARILY CEASED.
14. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRED IN THESE AREAS. REFER TO SECTION 981 OF THE STANDARD SPECIFICATIONS FOR SEEDING AND MAINTENANCE REQUIREMENTS.
15. 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.
16. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED AS SOON AS POSSIBLE.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING SEDIMENT IN THE DETENTION POND AND ANY SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
18. ON-SITE & OFF SITE 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 EROSION CONTROL PLAN AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
19. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
20. DUE TO 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.
21. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY, THIS INCLUDES BACK FILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

POTABLE WATER AND SANITARY SEWER SYSTEM

1. THE CONTRACTOR SHALL CONSTRUCT GRAVITY SEWER LATERALS, MANHOLES GRAVITY SEWER LINES AND DOMESTIC WATER AND FIRE PROTECTION SYSTEM AS SHOWN ON THESE PLANS. THE CONTRACTOR SHALL FURNISH ALL NECESSARY MATERIALS, EQUIPMENT, MACHINERY, TOOLS, MEANS OF TRANSPORTATION AND LABOR NECESSARY TO COMPLETE THE WORK IN FULL AND COMPLETE ACCORDANCE WITH THE SHOWN, DESCRIBED AND REASONABLY INTENDED REQUIREMENTS OF THE CONTRACT DOCUMENTS AND JURISDICTIONAL AGENCY REQUIREMENTS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
2. ALL EXISTING UNDERGROUND UTILITY LOCATIONS SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS FOR UTILITY LOCATION AND COORDINATION IN ACCORDANCE WITH THE NOTES CONTAINED IN THE GENERAL CONSTRUCTION SECTION OF THIS SHEET.
3. THE CONTRACTOR SHALL RESTORE ALL DISTURBED VEGETATION IN KIND, UNLESS SHOWN OTHERWISE.
4. DEFLECTION OF PIPE JOINTS AND CURVATURE OF PIPE SHALL NOT EXCEED THE MANUFACTURER'S SPECIFICATIONS. SECURELY CLOSE ALL OPEN ENDS OF PIPE AND FITTINGS WITH A WATERTIGHT PLUG WHEN WORK IS NOT IN PROGRESS. THE INTERIOR OF ALL PIPES SHALL BE CLEAN AND JOINT SURFACES WIPED CLEAN AND DRY AFTER THE PIPE HAS BEEN LOWERED INTO THE TRENCH. VALVES SHALL BE PLUMB AND LOCATED ACCORDING TO THE PLANS.
5. ALL PHASES OF INSTALLATION, INCLUDING UNLOADING, TRENCHING, LAYING AND BACK FILLING, SHALL BE DONE IN A FIRST CLASS WORKMANLIKE MANNER. ALL PIPE AND FITTINGS SHALL BE CAREFULLY STORED FOLLOWING MANUFACTURER'S RECOMMENDATIONS. CARE SHALL BE TAKEN TO AVOID DAMAGE TO THE COATING OR LINING IN ANY D.I. PIPE FITTINGS. ANY PIPE OR FITTING WHICH IS DAMAGED OR WHICH HAS FLAWS OR IMPERFECTIONS WHICH, IN THE OPINION OF THE ENGINEER OR OWNER, RENDERS IT UNFIT FOR USE, SHALL NOT BE USED. ANY PIPE NOT SATISFACTORY FOR USE SHALL BE CLEARLY MARKED AND IMMEDIATELY REMOVED FROM THE JOB SITE, AND SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
6. WATER FOR FIRE FIGHTING SHALL BE AVAILABLE FOR USE PRIOR TO COMBUSTIBLES BEING BROUGHT ON SITE.
7. ALL UTILITY AND STORM DRAIN TRENCHES LOCATED UNDER AREAS TO RECEIVE PAVING SHALL BE COMPLETELY BACK FILLED IN ACCORDANCE WITH THE GOVERNING JURISDICTIONAL AGENCY'S SPECIFICATIONS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
8. UNDERGROUND LINES SHALL BE SURVEYED BY A STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR PRIOR TO BACK FILLING.
9. CONTRACTOR SHALL PERFORM, AT HIS OWN EXPENSE, ANY AND ALL TESTS REQUIRED BY THE SPECIFICATIONS AND/OR ANY AGENCY HAVING JURISDICTION. THESE TESTS MAY INCLUDE, BUT MAY NOT BE LIMITED TO, INFILTRATION AND EXFILTRATION, TELEVISION INSPECTION AND A MANDREL TEST ON GRAVITY SEWER. A COPY OF THE TEST RESULTS SHALL BE PROVIDED TO THE UTILITY PROVIDER, OWNER AND JURISDICTIONAL AGENCY AS REQUIRED.

MAINTENANCE

ALL MEASURES STATED ON THE 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 SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED AND RESEEDED AS NEEDED. FOR MAINTENANCE REQUIREMENTS REFER TO SECTION 981 OF THE OF THE FLORIDA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (LATEST EDITION).
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 PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
6. OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED TO 55 CUBIC YARDS / ACRE.
7. ALL MAINTENANCE OPERATIONS SHALL BE DONE IN A TIMELY MANNER BUT IN NO CASE LATER THAN 2 CALENDAR DAYS FOLLOWING THE INSPECTION.

STORM DRAINAGE SYSTEM

1. STANDARD INDEXES REFER TO THE 2021/2022 EDITION OF F.D.O.T. "STANDARD PLANS FOR ROADWAY CONSTRUCTION"
2. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON PLANS.
3. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO CENTER OF DRAINAGE STRUCTURES, WITH THE EXCEPTION OF MITERED END AND FLARED END SECTIONS, WHICH ARE NOT INCLUDED IN LENGTHS.
4. ALL DRAINAGE STRUCTURE GRATES AND COVERS, EITHER EXISTING OR PROPOSED SHALL BE TRAFFIC RATED FOR H-20 LOADINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY UPGRADES TO EXISTING DRAINAGE STRUCTURES.
5. CONSTRUCTION OF THE ENTIRE STORMWATER MANAGEMENT SYSTEM SHOWN ON THE PLANS MUST BE COMPLETE AND ALL DISTURBED AREAS STABILIZED IN ACCORDANCE WITH THE PERMITTED PLANS AND CONDITIONS PRIOR TO ANY OF THE FOLLOWING: ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY FOR ANY LOT; INITIATION OF INTENDED USE OF THE INFRASTRUCTURE; OR TRANSFER OF RESPONSIBILITY FOR MAINTENANCE OF THE SYSTEM TO A LOCAL GOVERNMENT OR OTHER RESPONSIBLE ENTITY.
6. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER JURISDICTION REGULATIONS (MANUFACTURER'S RECOMMENDATIONS SHALL BE UTILITIZED IF MORE STRINGENT).
7. STORM WATER PIPES, STRUCTURES, MINIMUM COVER AND INSTALLATION PROCEDURES TO BE IN ACCORDANCE WITH SOUTH FLORIDA WATER MANAGEMENT DISTRICT STANDARDS.

PAVING/GRADING TESTING AND INSPECTION

1. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE SOILS REPORT. UPON COMPLETION OF WORK THE SOILS ENGINEER WILL SUBMIT CERTIFICATIONS TO THE OWNER AND OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.
2. A QUALIFIED TESTING LABORATORY SHALL PERFORM ALL TESTING NECESSARY TO ASSURE COMPLIANCE OF THE IN-PLACE MATERIALS AS REQUIRED BY THESE PLANS AND GEOTECHNICAL REPORT, THE VARIOUS AGENCIES AND PERMIT CONDITIONS. SHOULD ANY RETESTING BE REQUIRED DUE TO THE FAILURE OF ANY TESTS TO MEET THESE REQUIREMENTS, THE CONTRACTOR WILL BEAR ALL COSTS OF SAID RETESTING.

DRAINAGE SYSTEM TESTING AND INSPECTION

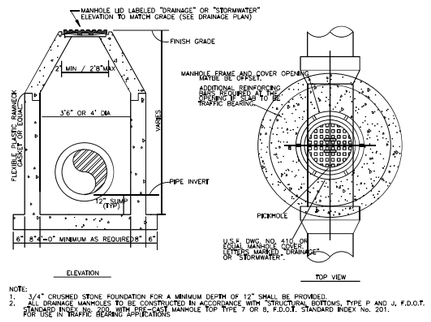
1. THE STORM DRAINAGE PIPING SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. CONTRACTOR TO NOTIFY THE ENGINEER 2 FULL BUSINESS DAYS IN ADVANCE TO SCHEDULE INSPECTION.
2. THE CONTRACTOR SHALL MAINTAIN AND PROTECT FROM MUD, DIRT, DEBRIS, ETC. THE STORM DRAINAGE SYSTEM UNTIL FINAL ACCEPTANCE OF THE PROJECT. THE STORM SYSTEM WILL BE REINSPECTED BY THE OWNER'S ENGINEER PRIOR TO APPROVAL FOR CERTIFICATE OF OCCUPANCY PURPOSES. THE CONTRACTOR MAY BE REQUIRED TO RECLEAN PIPES AND INLETS AT THE CONTRACTORS EXPENSE AND PRIOR TO FINAL ACCEPTANCE.

PAVING, GRADING AND DRAINAGE

1. ALL PAVING, CONSTRUCTION, MATERIALS, AND WORKMANSHIP WITHIN COUNTY'S RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH LOCAL OR COUNTY SPECIFICATIONS AND STANDARDS (LATEST EDITION) OR FDOT SPECIFICATIONS AND STANDARDS (LATEST EDITION) IF NOT COVERED BY LOCAL OR COUNTY REGULATIONS.
2. ALL UNPAVED AREAS IN EXISTING RIGHTS-OF-WAY DISTURBED BY CONSTRUCTION SHALL BE REGRADED AND SODDED.
3. TRAFFIC CONTROL ON ALL FDOT, LOCAL AND COUNTY RIGHTS-OF-WAY SHALL MEET THE REQUIREMENTS OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (U.S. DOT/FHA) AND THE REQUIREMENTS OF THE STATE AND ANY LOCAL AGENCY HAVING JURISDICTION. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
4. THE CONTRACTOR SHALL GRADE THE SITE TO THE ELEVATIONS INDICATED AND SHALL REGRADE WASHOUTS WHERE THEY OCCUR AFTER EVERY RAINFALL UNTIL A GRASS STAND IS WELL ESTABLISHED OR ADEQUATE STABILIZATION OCCURS.
5. ALL OPEN AREAS WITHIN THE PROJECT SITE SHALL BE SODDED UNLESS INDICATED OTHERWISE ON THE LANDSCAPE PLAN.
6. ALL AREAS INDICATED AS PAVEMENT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE TYPICAL PAVEMENT SECTIONS AS INDICATED ON THE DRAWINGS.
7. WHERE EXISTING PAVEMENT IS INDICATED TO BE REMOVED AND REPLACED, THE CONTRACTOR SHALL SAW CUT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND REPLACE THE PAVEMENT WITH THE SAME TYPE AND DEPTH OF MATERIAL AS EXISTING OR AS INDICATED.
8. WHERE NEW PAVEMENT MEETS THE EXISTING PAVEMENT, THE CONTRACTOR SHALL SAW CUT THE EXISTING PAVEMENT A MINIMUM 2" DEEP FOR A SMOOTH AND STRAIGHT JOINT AND MATCH THE EXISTING PAVEMENT ELEVATION WITH THE PROPOSED PAVEMENT UNLESS OTHERWISE INDICATED.
9. THE CONTRACTOR SHALL INSTALL FILTER FABRIC OVER ALL DRAINAGE STRUCTURES FOR THE DURATION OF CONSTRUCTION AND UNTIL ACCEPTANCE OF THE PROJECT BY THE OWNER. ALL DRAINAGE STRUCTURES SHALL BE CLEANED OF DEBRIS AS REQUIRED DURING AND AT THE END OF CONSTRUCTION TO PROVIDE POSITIVE DRAINAGE FLOWS.
10. IF DEWATERING IS REQUIRED, THE CONTRACTOR SHALL OBTAIN ANY APPLICABLE REQUIRED PERMITS. THE CONTRACTOR IS TO COORDINATE WITH THE OWNER AND THE DESIGN ENGINEER PRIOR TO ANY EXCAVATION.
11. STRIP TOPSOIL AND ORGANIC MATTER FROM ALL AREAS OF THE SITE AS REQUIRED. IN SOME CASES TOPSOIL MAY BE STOCKPILED ON SITE FOR PLACEMENT WITHIN LANDSCAPED AREAS BUT ONLY AS DIRECTED BY THE OWNER.
12. FIELD DENSITY TESTS SHALL BE TAKEN AT INTERVALS IN ACCORDANCE WITH THE LOCAL JURISDICTIONAL AGENCY OR TO FDOT STANDARDS. IN THE EVENT THAT THE CONTRACT DOCUMENTS AND THE JURISDICTIONAL AGENCY REQUIREMENTS ARE NOT IN AGREEMENT, THE MOST STRINGENT SHALL GOVERN.
13. ALL SLOPES AND AREAS DISTURBED BY CONSTRUCTION SHALL BE GRADED AS PER PLANS. THE AREAS SHALL THEN BE SODDED OR SEEDED AS SPECIFIED IN THE PLANS, FERTILIZED, MULCHED, WATERED AND MAINTAINED UNTIL HARDY GRASS GROWTH IS ESTABLISHED IN ALL AREAS. ANY AREAS DISTURBED FOR ANY REASON PRIOR TO FINAL ACCEPTANCE OF THE JOB SHALL BE CORRECTED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL EARTHEN AREAS WILL BE SODDED OR SEEDED AND MULCHED AS SHOWN ON THE LANDSCAPING PLAN.
14. ALL CUT OR FILL SLOPES SHALL BE 4 (HORIZONTAL) :1 (VERTICAL) OR FLATTER UNLESS OTHERWISE SHOWN.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTROL OF DUST AND DIRT RISING AND SCATTERING IN THE AIR DURING CONSTRUCTION AND SHALL PROVIDE WATER SPRINKLING OR OTHER SUITABLE METHODS OF CONTROL. THE CONTRACTOR SHALL COMPLY WITH ALL GOVERNING REGULATIONS PERTAINING TO ENVIRONMENTAL PROTECTION.
16. THE CONTRACTOR SHALL TAKE ALL REQUIRED MEASURES TO CONTROL TURBIDITY, INCLUDING BUT NOT LIMITED TO THE INSTALLATION OF TURBIDITY BARRIERS AT ALL LOCATIONS WHERE THE POSSIBILITY OF TRANSFERRING SUSPENDED SOLIDS INTO THE RECEIVING WATER BODY EXISTS DUE TO THE PROPOSED WORK. TURBIDITY BARRIERS MUST BE MAINTAINED IN EFFECTIVE CONDITION AT ALL LOCATIONS UNTIL CONSTRUCTION IS COMPLETED AND DISTURBED SOIL AREAS ARE STABILIZED. THEREAFTER, THE CONTRACTOR MUST REMOVE THE BARRIERS. AT NO TIME SHALL THERE BE ANY OFF-SITE DISCHARGE WHICH VIOLATES THE WATER QUALITY STANDARDS IN CHAPTER 17-302, FLORIDA ADMINISTRATIVE CODE.
17. SOD, WHERE CALLED FOR, MUST BE INSTALLED AND MAINTAINED ON EXPOSED SLOPES WITHIN 48 HOURS OF COMPLETING FINAL GRADING, AND AT ANY OTHER TIME AS NECESSARY, TO PREVENT EROSION, SEDIMENTATION OR TURBID DISCHARGES.
18. THE CONTRACTOR MUST REVIEW AND MAINTAIN A COPY OF THE ENVIRONMENTAL RESOURCE PERMIT COMPLETE WITH ALL CONDITIONS, ATTACHMENTS, EXHIBITS, AND PERMIT MODIFICATIONS IN GOOD CONDITION AT THE CONSTRUCTION SITE. THE COMPLETE PERMIT MUST BE AVAILABLE FOR REVIEW UPON REQUEST BY WATER MANAGEMENT DISTRICT REPRESENTATIVES.
19. THE CONTRACTOR SHALL ENSURE THAT ISLAND PLANTING AREAS AND OTHER PLANTING AREAS ARE NOT COMPACTED AND DO NOT CONTAIN ROAD BASE MATERIALS. THE CONTRACTOR SHALL ALSO EXCAVATE AND REMOVE ALL UNDESIRABLE MATERIAL FROM ALL AREAS ON THE SITE TO BE PLANTED AND PROPERLY DISPOSED OF IN A LEGAL MANNER.
20. THE CONTRACTOR SHALL INSTALL ALL UNDERGROUND STORM WATER PIPING PER MANUFACTURER'S RECOMMENDATIONS.

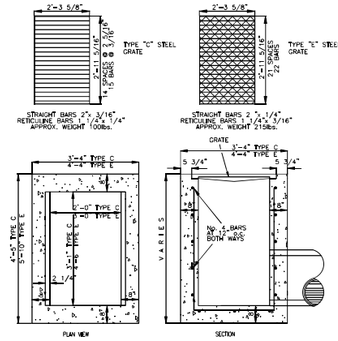
DEMOLITION

1. CONTRACTOR SHALL SUBMIT DEMOLITION SCHEDULE TO OWNER PRIOR TO PROCEEDING WITH DEMOLITION ACTIVITIES.
2. EXTENT OF SITE CLEARING IS SHOWN ON DRAWINGS.
3. CONTRACTOR SHALL CONDUCT SITE DEMOLITION OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, WALKS, AND OTHER ADJACENT OCCUPIED OR USED FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS OR OTHER OCCUPIED OR USED FACILITIES WITHOUT PERMISSION FROM AUTHORITIES HAVING JURISDICTION.
4. CONTRACTOR SHALL PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS INDICATED ON PLAN "EXISTING TO REMAIN".
5. CONTRACTOR SHALL RESTORE DAMAGED IMPROVEMENTS TO THEIR ORIGINAL CONDITION, AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
6. CONTRACTOR SHALL REMOVE WASTE MATERIALS AND UNSUITABLE AND EXCESS TOPSOIL FROM PROPERTY AND DISPOSE OF OFF-SITE IN A LEGAL MANNER.
7. CONTRACTOR SHALL DEMOLISH AND COMPLETELY REMOVE FROM SITE MATERIAL INDICATED ON PLAN OR NOTES "TO BE REMOVED".
8. CONTRACTOR SHALL PROTECT STRUCTURES, UTILITIES, SIDEWALKS, PAVEMENTS, AND OTHER FACILITIES FROM DAMAGE CAUSED BY SETTLEMENT, LATERAL MOVEMENT, UNDERMINING, WASHOUT AND OTHER HAZARDS CREATED BY THE DEMOLITION OPERATION
9. ALL MATERIAL REMOVED FROM THIS SITE BY THE CONTRACTOR SHALL BE DISPOSED OF BY THE CONTRACTOR IN A LEGAL MANNER.
10. REFER TO THE TOPOGRAPHIC SURVEY FOR ADDITIONAL DETAILS OF EXISTING STRUCTURES, ETC., LOCATED WITHIN THE PROJECT SITE. UNLESS OTHERWISE NOTED, ALL EXISTING BUILDINGS, STRUCTURES, SLABS, CONCRETE, ASPHALT, DEBRIS PILES, SIGNS, AND ALL APPURTENANCES ARE TO BE REMOVED FROM THE SITE BY THE CONTRACTOR AND PROPERLY DISPOSED OF IN A LEGAL MANNER AS PART OF THIS CONTRACT. SOME ITEMS TO BE REMOVED MAY NOT BE DEPICTED ON THE TOPOGRAPHIC SURVEY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VISIT THE SITE AND DETERMINE THE FULL EXTENT OF ITEMS TO BE REMOVED. IF ANY ITEMS ARE IN QUESTION, THE CONTRACTOR SHALL CONTACT THE OWNER PRIOR TO REMOVAL OF SAID ITEMS.
11. THE CONTRAC

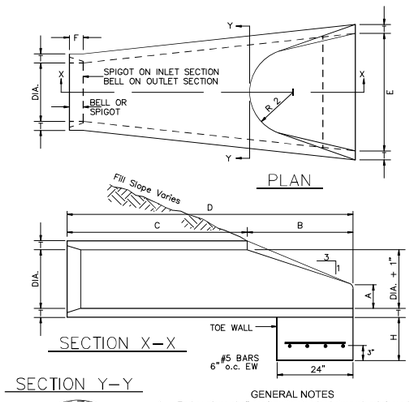


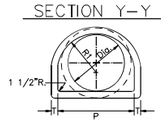
NOTE:
1. 3/4" CRUSHED STONE FOUNDATION FOR A MINIMUM DEPTH OF 12" SHALL BE PROVIDED.
2. ALL DRAINAGE MANHOLES TO BE CONSTRUCTED IN ACCORDANCE WITH "STRUCTURAL BOTTOMS, TYPE P AND J, F.D.O.T. STANDARD INDEX No. 200, WITH PRE-CAST MANHOLE TOP TYPE 7 OR 8, F.D.O.T. STANDARD INDEX No. 201. FOR USE IN TRAFFIC BEARING APPLICATIONS

DRAINAGE JUNCTION BOX
N.T.S.



TYPE 'C' & 'E' INLETS
N.T.S.

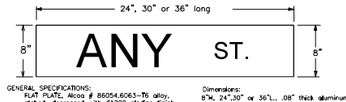




GENERAL NOTES
1. End sections shall conform to standard strength reinforced concrete pipe of like diameter as per Standard Specifications.
2. Joint between end section & pipe culvert to be made by reinforced concrete collar or cold adhesive preformed plastic casket.
3. End sections to be used only when specified on the plans or at locations as directed by the Engineer.
4. Toe wall to be constructed when shown on the plans or designated by the Engineer.

DIA.	T	BELL OF SPIGOT	A	B	C	D	E	P	R 1	R 2	F	H	WEIGHT (LBS.)
15"	2 1/4"	2"	6"	2'-3"	3'-10"	6'-1"	2'-6"	24 5/16	12 1/2"	11"	3 1/2"	24"	740
18"	2 1/2"	2 1/2"	9"	2'-3"	3'-10"	6'-1"	3'-0"	29"	15 1/2"	12"	4"	24"	990
24"	3"	2 1/2"	9 1/2"	3'-6"	2'-6"	6'-2"	4'-0"	33 3/16"	16 1/8"	14"	4 1/2"	24"	1520

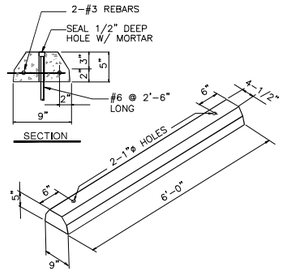
FLARED END SECTION DETAILS & NOTES
N.T.S.



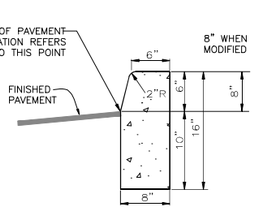
GENERAL SPECIFICATIONS:
FLAT PLATE, Alcoa # 86054,6063-T6 alloy, etched, degreased with #1200 alkaline finish with #2277 green Scotchlite background or equal.
Dimensions: 8"H, 24",30" or 36"L, .08" thick aluminum
Scotchlite (silver) or equal.
The street name must be on both sides of the sign plate.

NOTE: CR510 & US-1 STREET SIGN SHALL BE VARRIED TO 12" HIGH W/ 8" LETTERS

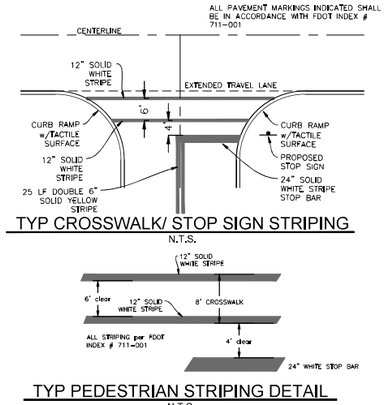
STREET SIGN DETAIL
N.T.S.



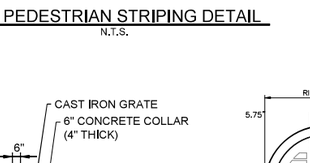
PRECAST CONCRETE WHEEL STOP DETAIL
N.T.S.



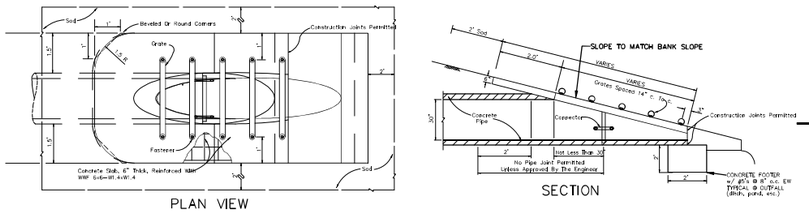
TYPE 'D' CURB
N.T.S.



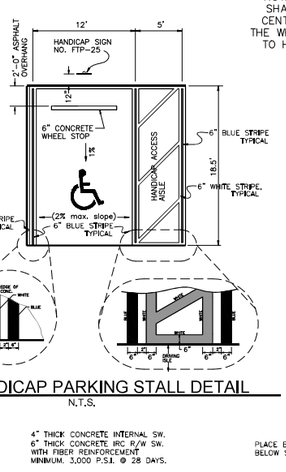
TYP CROSSWALK/ STOP SIGN STRIPING
N.T.S.



TYP PEDESTRIAN STRIPING DETAIL
N.T.S.

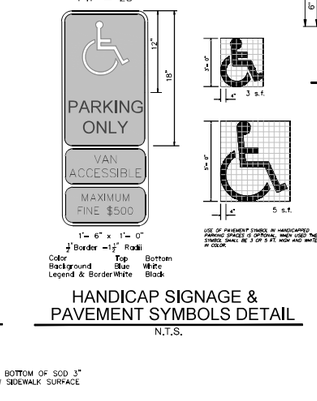


MITERED END SECTION (M.E.S.) DETAILS
N.T.S.

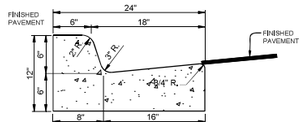


HANDICAP PARKING STALL DETAIL
N.T.S.

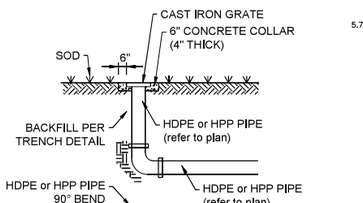
NOTE: PARKING STALL WIDTHS SHALL BE DIMENSIONED FROM CENTERLINE TO CENTERLINE OF THE WHITE STRIPES. THIS APPLIES TO HANDICAP PARKING STALLS ALSO.



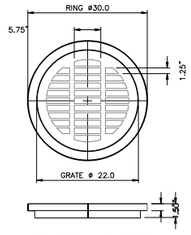
HANDICAP SIGNAGE & PAVEMENT SYMBOLS DETAIL
N.T.S.

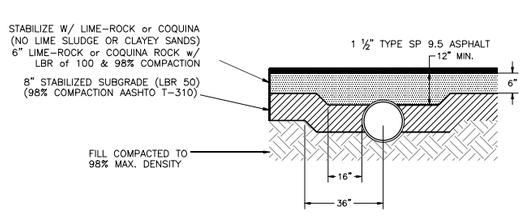


TYPE 'F' CURB
N.T.S.

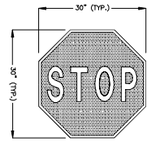


TYPICAL YARD DRAIN DETAIL
N.T.S.





TYPICAL ASPHALTIC CONCRETE PAVING OVER DRAINAGE PIPES
N.T.S.



R1-1
N.T.S.



W11-2
N.T.S.



W16-7PL
N.T.S.



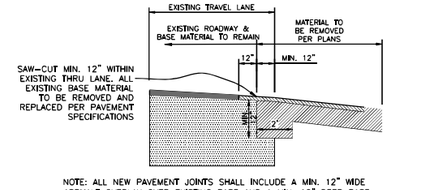
R2-1
N.T.S.

SIDEWALK DETAIL
N.T.S.

SIDEWALK NOTES:
1. ALL MATERIALS AND CONSTRUCTION PROCEDURES SHALL BE IN ACCORDANCE WITH THE "SUGGESTED SPECIFICATIONS FOR CONCRETE AREAS" PREPARED BY THE PORTLAND CEMENT ASSOCIATION.
2. CONTROL JOINTS SHALL BE CONSTRUCTED AT A MAXIMUM OF 8-FEET.
3. AT LEAST THREE (3) COMPRESSIVE STRENGTH CYLINDER SAMPLES SHALL BE TAKEN FOR EACH 10,000 SQUARE FEET OF PAVEMENT OR FIVE (5) PER JOB, WHICHEVER IS GREATER. SLUMP SHALL BE 2 TO 4 INCHES (AASHTO T-119). COMPRESSIVE STRENGTH SHALL BE REPORTED AT 7, 14, AND 28 DAYS.
4. CONSTRUCT UPON FIRM, STABILIZED GROUND, COMPACTED TO 95% MAXIMUM DRY DENSITY.
5. SURFACE WITH BROOM FINISH.
6. SIDEWALK LOCATION AND DETAILS PER FDOT INDEX #310, LATEST EDITION.

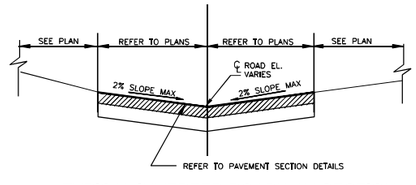


TYPICAL BUILDING GRADING
N.T.S.

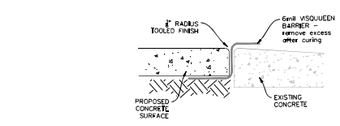


NOTE: ALL NEW PAVEMENT JOINTS SHALL INCLUDE A MIN. 12" WIDE ASPHALT OVERLAY OVER EXISTING BASE AND A MIN. 12" DEEP BASE FOR THE FIRST 2 FEET OF NEW CONSTRUCTION.

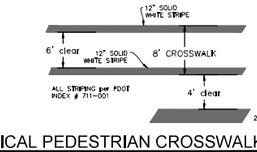
SAW CUT DETAIL
N.T.S.



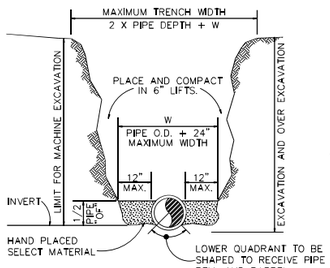
TYPICAL INVERTED ROADWAY SECTION
N.T.S.



CONCRETE BUTT JOINT DETAILS
N.T.S.

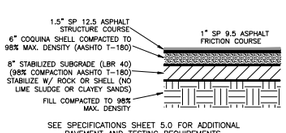


TYPICAL PEDESTRIAN CROSSWALK STRIPING
N.T.S.



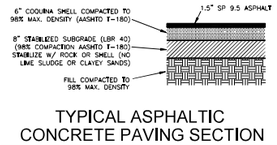
NOTES:
1) THE CONTRACTOR SHALL COMPLY WITH REQUIREMENTS OF THE FLORIDA TRENCH SAFETY ACT.
2) BACKFILL TO 12" MAXIMUM LAYERS OR OTHER APPROVED METHOD TO ACHIEVE 98% COMPACTION UNDER PAVED SURFACES AND 95% COMPACTION UNDER OTHER SURFACES AS ESTABLISHED BY A.A.S.H.T.O. METHOD T-180.

TYPICAL TRENCH DETAIL
N.T.S.

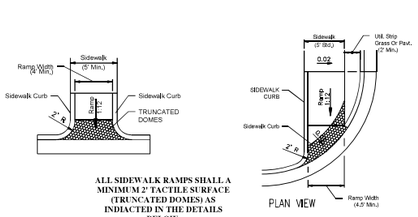


SEE SPECIFICATIONS SHEET 5.0 FOR ADDITIONAL PAVEMENT AND TESTING REQUIREMENTS.

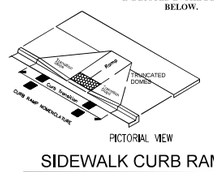
ASPHALTIC CONCRETE PAVING SECTION (within the FDOT Right-of-Way)
N.T.S.



TYPICAL ASPHALTIC CONCRETE PAVING SECTION
N.T.S.



ALL SIDEWALK RAMPS SHALL A MINIMUM 2' TACTILE SURFACE (TRUNCATED DOMES) AS INDIACTED IN THE DETAILS BELOW.



NOTE: FOR ADDITIONAL INFORMATION ON SIDEWALK & CURB CONSTRUCTION, SEE DETAILS THIS SHEET.

SIDEWALK CURB RAMP DETAIL FDOT CR-E
N.T.S.

NAVD 1988
ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988. THE CONVERSION FACTOR TO NGVD 1929 IS +1.496'

NOT FOR CONSTRUCTION

REVISIONS:

BY:	DATE:	COMMENT:

PROJECT:
REGATTA APARTMENTS
2152 SOUTH JENKINS ROAD
FT. PIERCE, FL 34947

CLIENT:
ALVA STONE GROUP, LLC
591 EVERNIA STREET
WEST PALM BEACH, FL 33401

KMA
ENGINEERING & SURVEYING, LLC
3001 INDUSTRIAL 2 AVE.
FT. PIERCE, FL 34946
PHONE: (772) 569-6605
FB/PE C.O.A. # 33705

BLAINE ROBERT BERGSTRESSER LICENSE NO. 84598 STATE OF FLORIDA PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, it's free, it's the law.
www.callsunshine.com

PROJECT No. 23-1011
DRAWN BY: CRW
CHECKED BY: BRB
DATE: 08/23/2023

SHEET TITLE:
DETAILS

SHEET NUMBER:
C-9

Schedule							
Symbol	Label	QTY	Manufacturer	Catalog	Lamp Output	LLF	Input Power
	SLA	2	Lithonia Lighting	DSX0 LED P5 40K 80CRI TFTM MVOLT RPA NLTAIR2 PIRHN DDBXD : MOUNTED @ 25'AFG ROUND TAPERED ALUMINUM DIRECT BURIAL POLE	11337	1	90.12
	SLB	1	Lithonia Lighting	DSX0 LED P5 40K 80CRI T5W MVOLT RPA NLTAIR2 PIRHN DDBXD : MOUNTED @ 25'AFG ROUND TAPERED ALUMINUM DIRECT BURIAL POLE	11772	1	90.12
	SLB2	4	Lithonia Lighting	DSX0 LED P5 40K 80CRI T5W MVOLT RPA NLTAIR2 PIRHN DDBXD : MOUNTED @ 25'AFG ROUND TAPERED ALUMINUM DIRECT BURIAL POLE	11772	1	180.24
	SLC	25	Lithonia Lighting	DSX0 LED P5 40K 80CRI BLC4 MVOLT RPA NLTAIR2 PIRHN DDBXD : MOUNTED @ 25'AFG ROUND TAPERED ALUMINUM DIRECT BURIAL POLE	8334	1	90.12

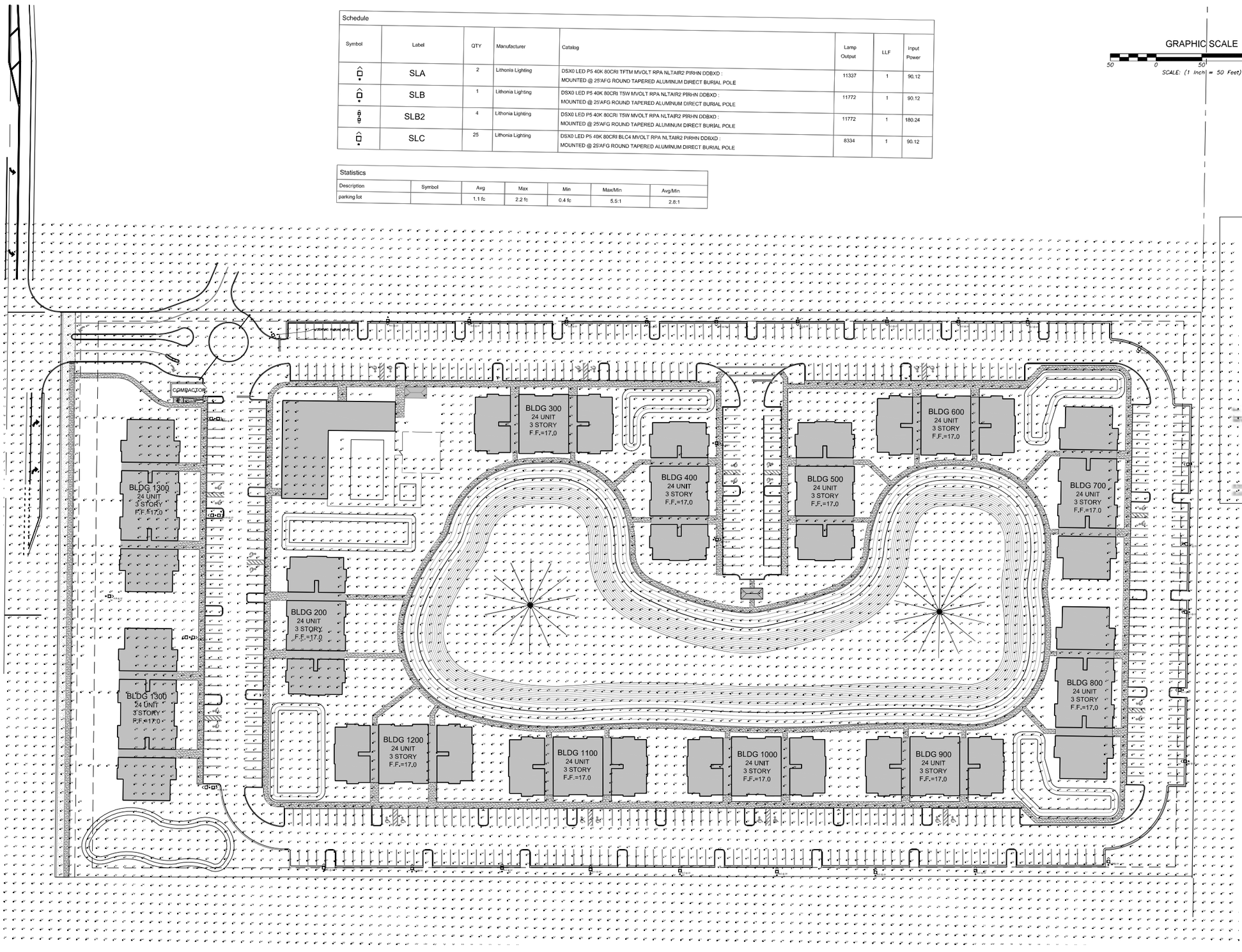
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
parking lot		1.1 fc	2.2 fc	0.4 fc	5.5:1	2.8:1

GRAPHIC SCALE

50 0 50 100 150

SCALE: (1 Inch) = 50 Feet)

North





NAVD 1988

ALL ELEVATIONS DEPICTED HEREON REFERENCE NAVD 1988

KMA
ENGINEERING & SURVEYING, LLC
300 INDUSTRIAL 2 AVE
FT. PIERCE, FL 34946
PHONE: (772) 569-5505
FSPE C.O.A. # 33705

REVISIONS		
BY:	DATE:	COMMENT:

NOT FOR CONSTRUCTION

PROJECT:

REGATTA APARTMENTS

2152 SOUTH JENKINS ROAD

FT. PIERCE, FL 34947

CLIENT:

ALVA STONE GROUP, LLC

591 EVERNIA STREET

WEST PALM BEACH, FL 33401

LICENSE NO. 84598 STATE OF FLORIDA BLAINE ROBERT BERGSTRESSER PROFESSIONAL ENGINEER

BLAINE BERGSTRESSER, P.E.
FLORIDA LICENSE No. 84598
09/16/2022

811 KNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG
It's fast, It's free, It's the law.
www.callsunshine.com

PROJECT No.:	23-1011
DRAWN BY:	CRW
CHECKED BY:	BRB
DATE:	08/23/2023

SHEET TITLE:

LIGHTING PLAN

SHEET NUMBER:

C-10



TYPICAL BUILDING ELEVATION

General Notes

No.	Revision/Issue	Date

Firm Name and Address

Project Name and Address
Regatta
2190 S Jenkins Rd
Fort Pierce FL 34947

Project: Regatta	Sheet: 03
Date: 8-15-23	
Scale: As Noted	



1 Roofing: Metal Seam Panels / Color: Charcoal Gray

2 Facia & Brackets: Wood / Color: High Reflective White_SW 7757

3 Stucco Bands: Stucco / Color: High Reflective White_SW 7757

4 Bahama Shutters: Aluminum / Color: Honorable Blue_SW 6811

5 Decorative Louvers: Vinyl / Color: Honorable Blue_SW 6811

6 Exterior Walls: Stucco / Color: Crushed Ice_SW 7647

7 Siding: Stucco / Color: Lakeside_SW 9683

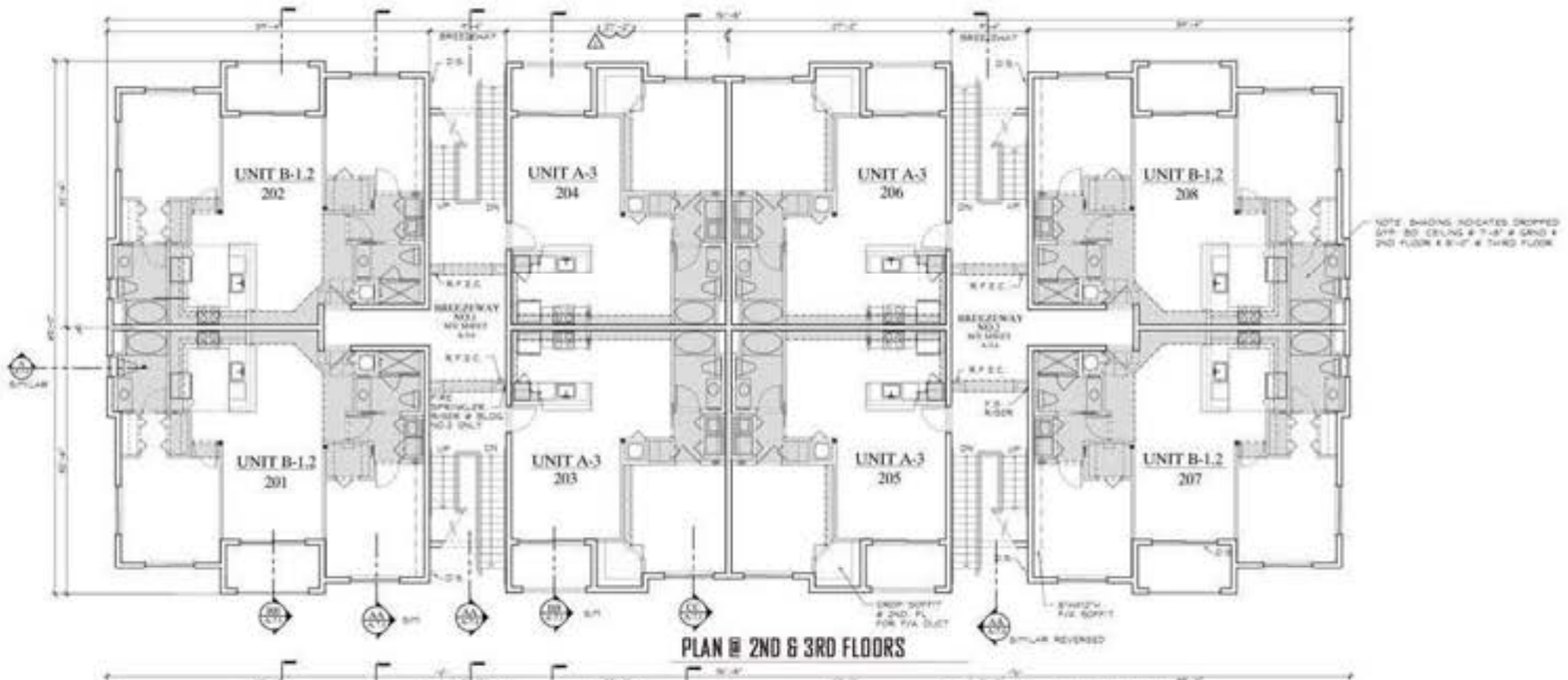
General Notes

COLOR BOARD

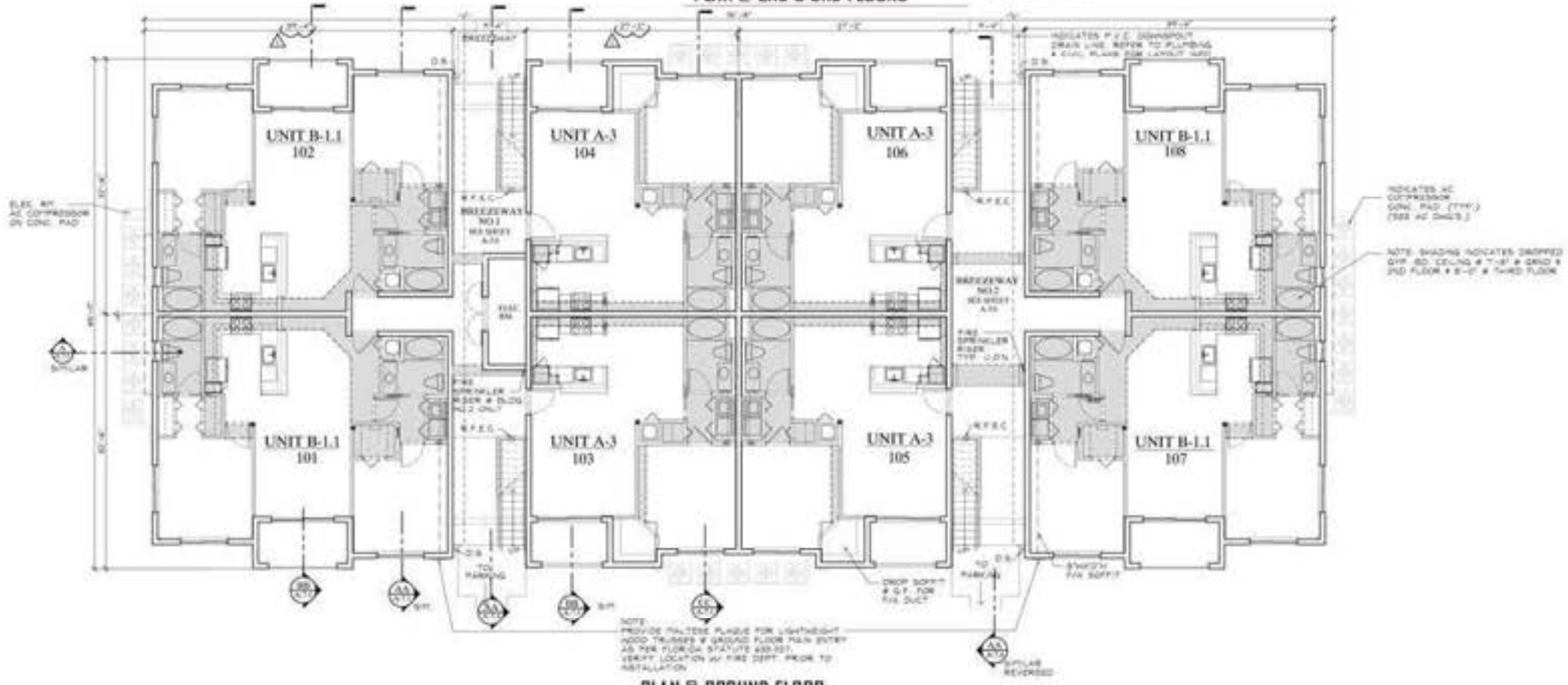
No.	Revision/Issue	Date

Regatta
2190 S Jenkins Rd
Fort Pierce FL 34947

Project: Regatta	Sheet: 04
Date: 8-15-23	
Scale: As Noted	



PLAN @ 2ND & 3RD FLOORS



NOTE:
PROVIDE TAMPER PLUGS FOR LIGHTWEIGHT WOOD TRUSSES @ GROUND FLOOR MAIN ENTRY AS PER FLORIDA STATUTE 633.101. VERIFY LOCATION W/ FIRE DEPT. PRIOR TO INSTALLATION

PLAN @ GROUND FLOOR

General Notes

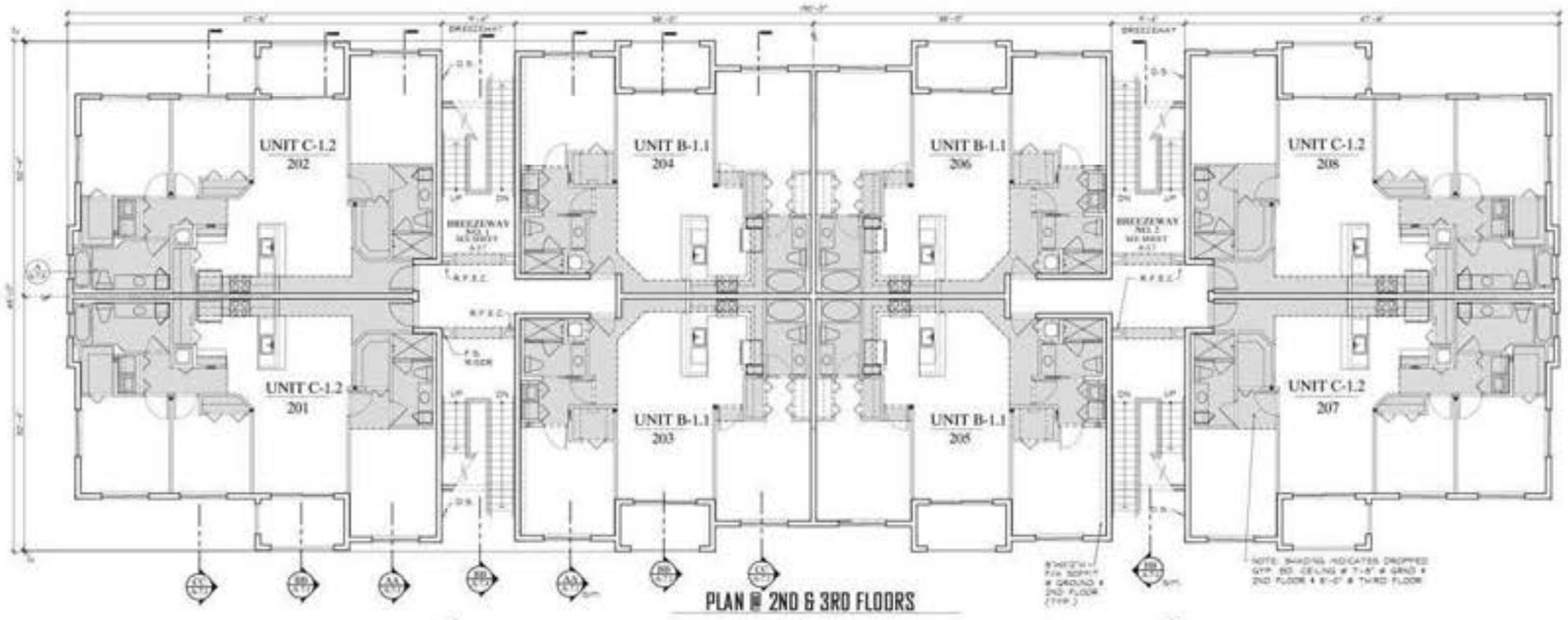
TYPE A BUILDING - FLOORPLAN

No.	Revision/Issue	Date

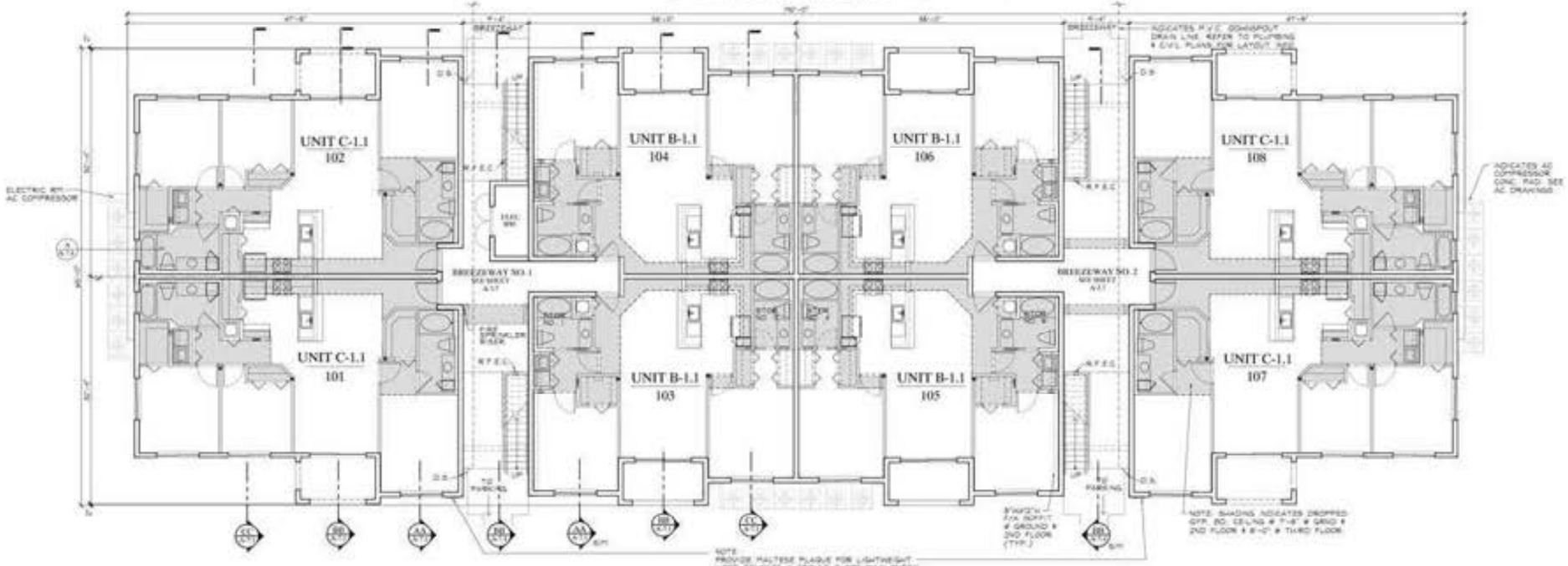
Firm Name and Address

Project Name and Address
Regatta
2190 S Jenkins Rd
Fort Pierce FL 34947

Project: Regatta	Sheet: 01
Date: 8-15-23	
Scale: As Noted	



PLAN @ 2ND & 3RD FLOORS



PLAN @ GROUND FLOOR

General Notes

TYPE B BUILDING - FLOORPLAN

No.	Revision/Issue	Date

Firm Name and Address

Project Name and Address
Regatta
2190 S Jenkins Rd
Fort Pierce FL 34947

Project: Regatta	Sheet: 02
Date: 8-15-23	
Scale: As Noted	

ENVIRONMENTAL ASSESSMENT

On the

Regatta Project Site
South Jenkins Road, Fort Pierce, Florida
±17.81 Acres

Parcel No.'s 2418-333-0001-000-9, 2418-333-0002-000-6,
2418-333-0003-000-3, & 2418-333-0004-000-0

Conducted for:

Mr. Pedro Quijada
Alva Stone Group, LLC
591 Evernia Street
West Palm Beach, Florida 33401

Conducted by:

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

August 15, 2023

ATLANTIC ENVIRONMENTAL
ENVIRONMENTAL PERMITTING & MITIGATION
657 Montreal Avenue • Melbourne, FL 32935
ph 321.676.1505 • fax 321.676.1730

August 15, 2023

Mr. Pedro Quijada
Alva Stone Group, LLC
591 Evernia Street
West Palm Beach, FL 33401

Re: Environmental Assessment
Regatta Project Site
South Jenkins Road, Fort Pierce, Florida
Parcel No.'s 2418-333-0001-000-9, 2418-333-0002-000-6, 2418-333-0003-000-3, & 2418-333-0004-000-0
Atlantic Environmental File No. 23631

Dear Mr. Quijada:

Atlantic Environmental of Florida, LLC (Atlantic Environmental) has completed an environmental assessment and feasibility study of the above-referenced property, an approximately 17.81-acre tract of land located on the east side of South Jenkins Road in Fort Pierce, St. Lucie County, Florida (Figures 1 and 2). The field assessment of this tract, hereinafter referred to as "the Property", occurred on August 14, 2023. This study is intended to assess any reasonably ascertainable environmental issues that might influence the developability of the subject property. Following are the results of our study.

Topography and Soils

Figure 3 shows the USGS Topographical Map for the Property and surrounding areas. According to this map, the Property is relatively flat. The U.S. Department of Agriculture's Natural Resources Conservation Service (NRCS) map for St. Lucie County (Figure 4) depicts one soil type underlying the Property. Following is a description of the mapped soil type as it occurs in a natural environment.

Winder loamy sand (55)
The Winder, drained and bedded component makes up 67 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 14 inches during June, July, August, September, and October. This soil does not meet hydric criteria.

The Winder, hydric component makes up 15 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on marine terraces on coastal plains. The parent material consists of sandy and loamy marine deposits. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 6 inches during June, July, August, September, October, November. This soil meets hydric criteria.

Past agricultural activity within the Property appears to have altered some of the characteristics

possessed by the underlying soils. However, for the most part, the soil description above appears relatively accurate.

Vegetation and Community Types

Different combinations of natural and human-influenced factors, such as surface elevation, hydrology, vegetative species and structure, soil characteristics, and degree and type of historical disturbance, will give rise to a variety of distinct ecological systems and functions, known as communities and land uses. The Florida Land Use, Cover, and Forms Classification System (FLUCFCS) organizes most of the major categories of communities and land uses into particular descriptions, each corresponding to a different code number. Using our field observations and the FLUCFCS system as a guideline, Atlantic Environmental has identified the on-site communities as they currently exist on the Property. Figure 5 depicts the code numbers of the on-site FLUCFCS categories, specifically, Open Land (FLUCFCS Code Number 190), Streams and Waterways (510), and Reservoirs less than 10 acres (534).

Following is a description of these classifications, as they exist on the Property, along with an assessment of the jurisdictional wetland status based on the rules and regulations of the South Florida Water Management District (SFWMD) and the U.S. Army Corps of Engineers (USACE). In December 2020, the Florida Department of Environmental Protection (FDEP) took over a significant portion of the Section 404 federal permitting from USACE. The jurisdictional status of FDEP will also be referenced below.

Open Land (190)
The vast majority (±17.81 acres) of the Property supports Open Land that previously supported several structures that no longer exist other than the slabs. The beds and furrows of the past agricultural usage are still evident throughout a majority of the Property, and the vegetation within the beds is dominated by earleaf acacia, cogongrass, lantana, rosary pea, guineagrass, broomsedge, cowpea, St. Augustine grass, wax myrtle, Brazilian pepper, saltbush, torpedograss, bahiagrass, sedges, and dog fennel. The higher elevated areas will be claimed as uplands by the regulatory agencies while some of the shallow furrows may be claimed as surface waters by SFWMD. No mitigation for impacts to these furrows should be required but the acreages will need to be accounted for throughout the permitting process.

Streams and Waterways (510)
Besides the numerous relic furrows throughout the Property that may be claimed as surface waters, there is a larger ditch found within the central portion of the Property. FDEP should not assert federal jurisdiction over this ditch while SFWMD will claim it as surface waters and therefore will require a permit for proposed impacts. Mitigation should not be required for impacts to the on-site surface waters.

Reservoirs less than 10 acres (534)
A small, manmade pond is located along the western extent of the Property that totals approximately 0.28 acres. Any impacts to this pond will require permits from SFWMD. Due to its small size, no mitigation will be required for impacts. Lastly, FDEP should not claim jurisdiction over this surface water.

Protected Wildlife Species

A preliminary survey for listed species and suitable listed species habitats was completed on the Property. This survey resulted in the determination that the Property may provide suboptimal habitat for a variety of wading birds.

Wading Birds

Wading birds, including little blue herons, tricolored herons, sandhill cranes, and wood storks, depend on freshwater marshes and shorelines for foraging and typically roost in forested wetland systems. It is possible that any or all of these birds use the on-site wetlands from time to time on an opportunistic foraging basis. However, the preliminary survey did not indicate that any of the above listed protected wading bird species are using the Property in a way that is significantly dependent upon on-site habitat. No nests of any of the listed species were observed on the Property, and no signs of these species were noted. The potential opportunistic usage should not trip a threshold to require compensatory mitigation for any of these species.

Surface Waters

As mentioned above, there are several surface waters on the Property that may require permitting through SFWMD. No mitigation should be required for surface water impacts.

Conclusions

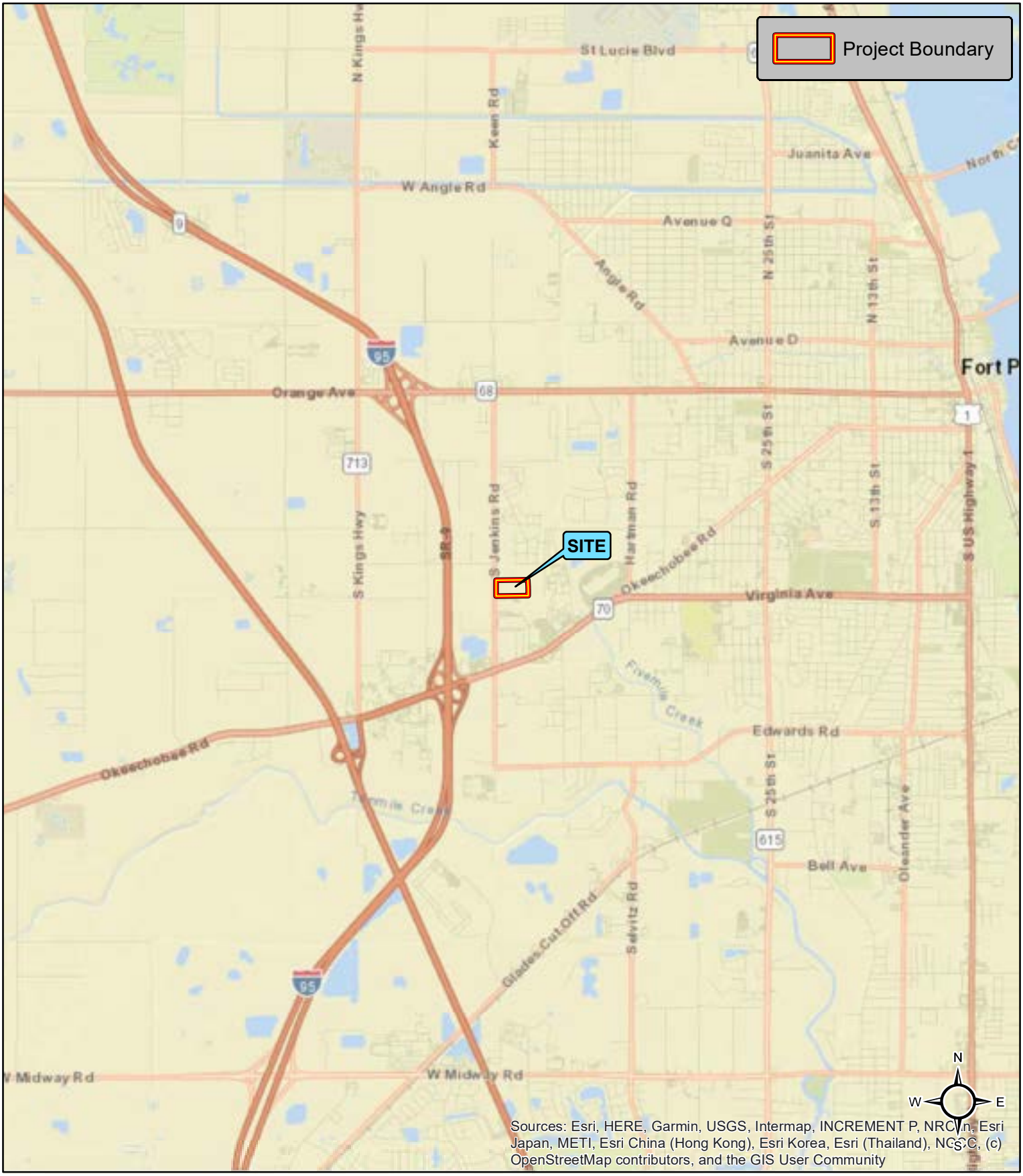
Atlantic Environmental determined that the Property contains ±17.53 acres of uplands and ±0.28 acres of surface waters (in addition to the acreage of the on-site furrows that are included in the upland acreage above for the purposes of this report). The on-site surface waters will require permits from SFWMD for impacts. FDEP should not claim the surface waters as federally jurisdictional.

Should you have any questions or need additional information, please do not hesitate to contact our office. We look forward to working further with you on this project.

Sincerely,

David G. Purkerson, MS, PWS
Vice President/Biologist

Jon H. Shepherd, MS, PWS
President/Ecologist



Project: Regatta

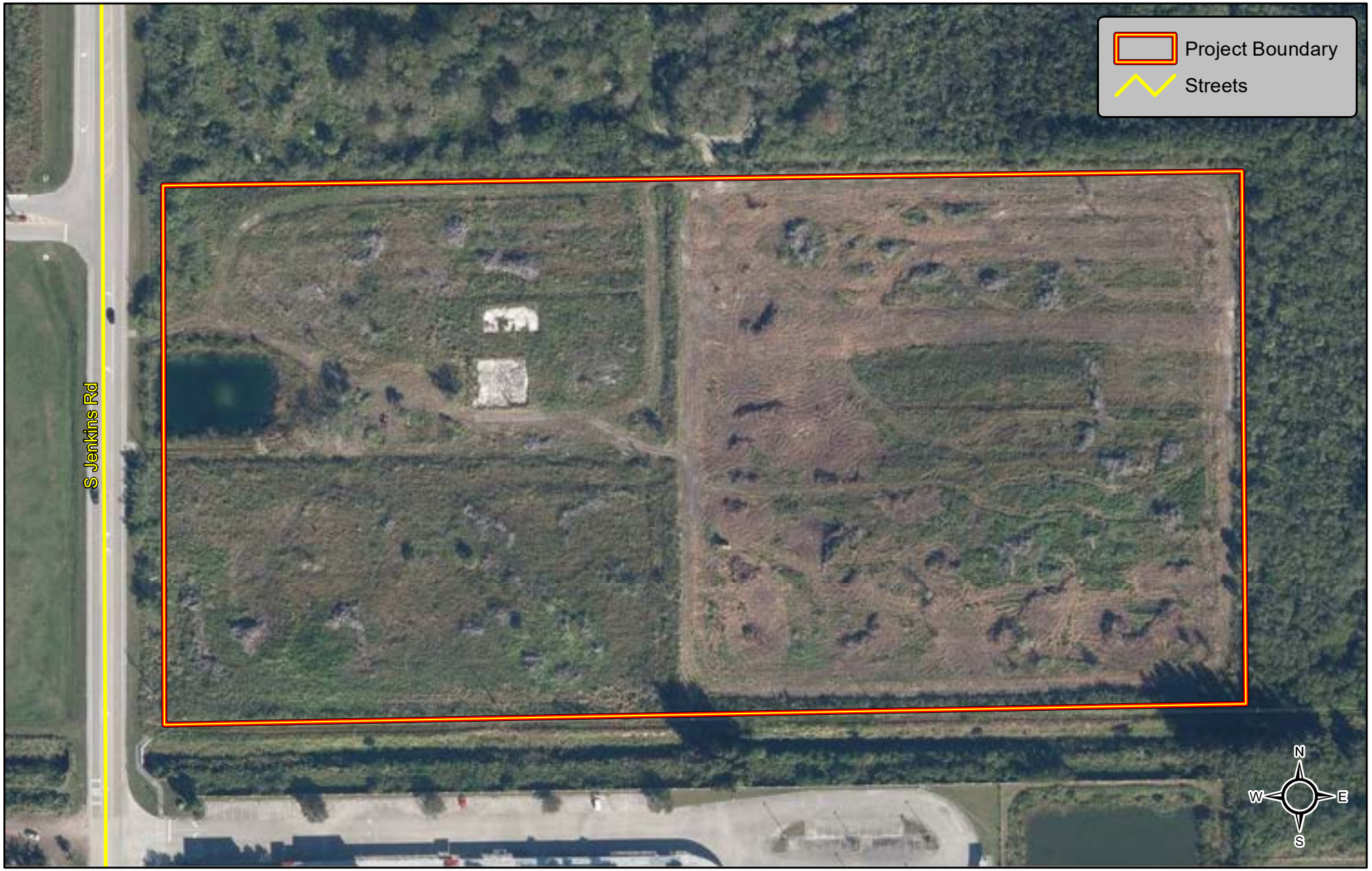
Figure 1: Location Map

0 0.5 1 2 Miles

St Lucie County, Florida

ATLANTIC ENVIRONMENTAL
ENVIRONMENTAL PERMITTING & MITIGATION

AE Proj #: 23631



Project: Regatta

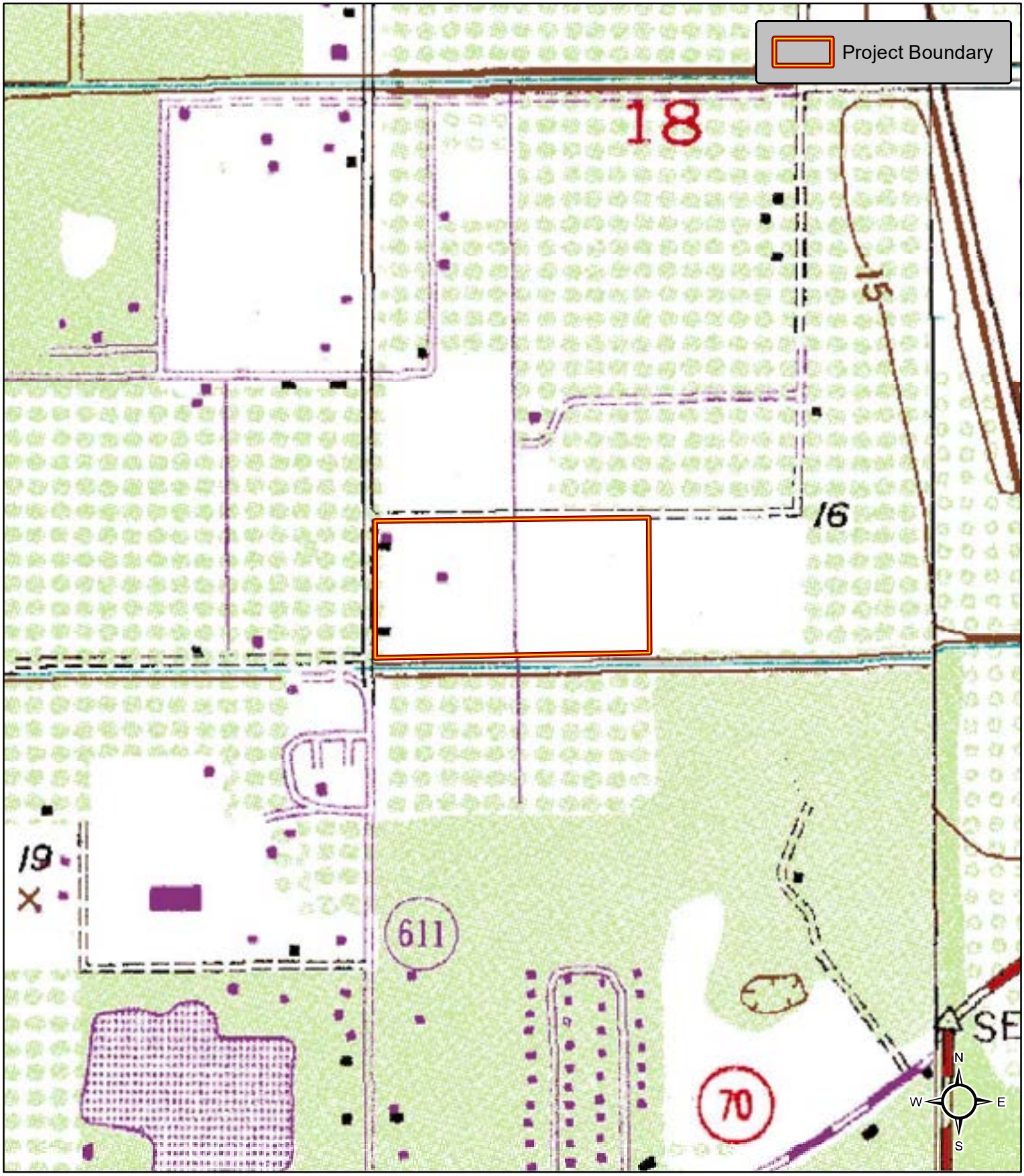
Figure 2: Aerial Map

0 100 200 400 Feet

2023 Aerial, St Lucie County, Florida

ATLANTIC ENVIRONMENTAL
ENVIRONMENTAL PERMITTING & MITIGATION

AE Proj #: 23631



Project: Regatta

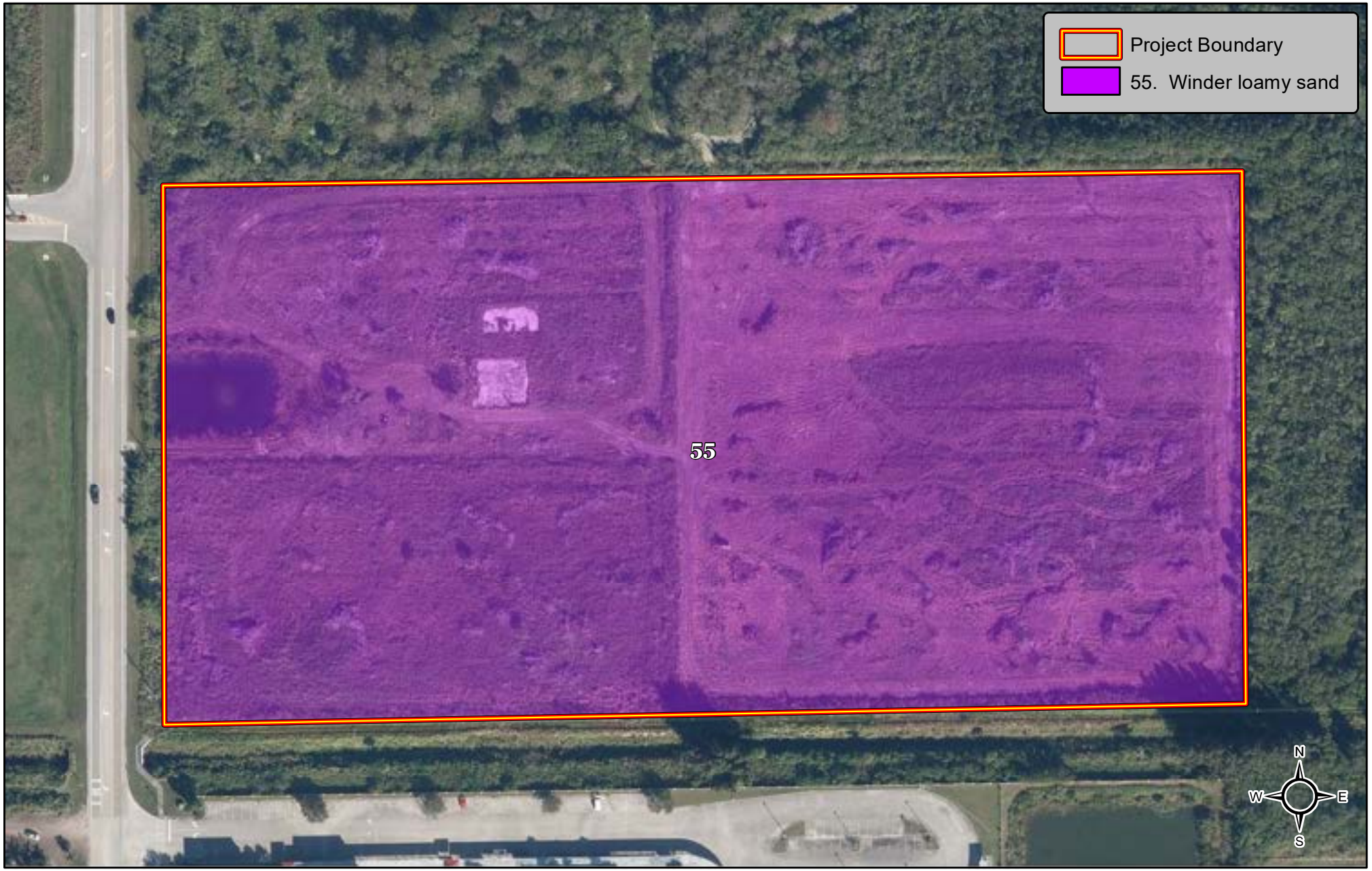
Figure 3: USGS Topo Map

0 500 1,000 2,000 Feet

Fort Pierce NW Quadrangle, St Lucie County, Florida

ATLANTIC ENVIRONMENTAL
ENVIRONMENTAL PERMITTING & MITIGATION

AE Proj #: 23631



Project: Regatta

Figure 4: NRCS Soils Map

0 100 200 400 Feet

2023 Aerial, St Lucie County, Florida

ATLANTIC ENVIRONMENTAL
ENVIRONMENTAL PERMITTING & MITIGATION

AE Proj #: 23631



Project: Regatta

Figure 5: Land Use (FLUCFCS) Map

0 100 200 400 Feet

2023 Aerial, St Lucie County, Florida

ATLANTIC ENVIRONMENTAL
ENVIRONMENTAL PERMITTING & MITIGATION

AE Proj #: 23631

O'ROURKE
ENGINEERING & PLANNING

TRAFFIC ANALYSIS

FOR

Regatta

Prepared for:

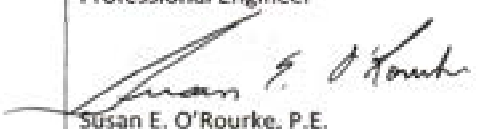
Mr. Pedro Quijada
Alva Stone Group
591 Evernia St
West Palm Beach, FL 33401

Prepared by:

O'Rourke Engineering & Planning
3725 SE Ocean Blvd. Suite 201
Stuart, Florida 34996
772-781-7918

August 11, 2023
Revised October 31, 2023

SR23071.0

Prepared by: O'Rourke Engineering & Planning Certificate of Authorization: #26869 3725 SE Ocean Blvd. Suite 201 Stuart, Florida 34996 772-781-7918	Professional Engineer  Susan E. O'Rourke, P.E. Date signed and sealed: 10/31/2023 License #: 42684

O'ROURKE
ENGINEERING & PLANNING

August 11, 2023

Mr. Pedro Quijada
Alva Stone Group
591 Evernia St
West Palm Beach, FL 33401

Re: Regatta

Dear Mr. Quijada:

O'Rourke Engineering & Planning has completed the analysis of the proposed development located on Jenkins Road in St. Lucie County, Florida. The steps in the analysis and the ensuing results are presented herein.

It has been a pleasure working with you. If you have any questions or comments, please give me a call.

Respectfully submitted,

O'Rourke Engineering & Planning

Susan E. O'Rourke, P.E.
Registered Civil Engineer

3725 SE Ocean Blvd. | Suite 201 | Stuart, FL 34996 | 772-781-7918 | Susan@ORERtech

TABLE OF CONTENTS

INTRODUCTION	1
PROJECT DESCRIPTION	1
EXISTING CONDITIONS	3
PROJECT TRAFFIC	3
PROJECT DISTRIBUTION/ ASSIGNMENT/ IMPACT	5
LINK ANALYSIS / REVIEW	5
INTERSECTION ANALYSIS	9
DRIVEWAY ANALYSIS	9
CONCLUSION	12

TABLES

TABLE 1: Project Trip Generation - Proposed	4
TABLE 2: Project Percent Assignment	7
TABLE 3: Link Analysis	8
TABLE 4: Intersection Results	10

FIGURES

FIGURE 1: Project Location	2
FIGURE 2: Project Traffic Assignment	6
FIGURE 3: Driveway Volumes	11

APPENDICES

APPENDIX A: Site Plan
APPENDIX B: St. Lucie County 2023 Level of Service Report
APPENDIX C: Other Project Data/Growth Rate
APPENDIX D: Arterial Analysis Data
APPENDIX E: Intersection Analysis Data
APPENDIX F: Driveway Data & Analysis

INTRODUCTION

O'Rourke Engineering & Planning was retained to prepare a traffic analysis for the proposed development consisting of 312 multi-family dwelling units located on Jenkins Road in Ft. Pierce, St. Lucie County, Florida. The purpose of this report is to determine the project's impact on the surrounding roadway system.

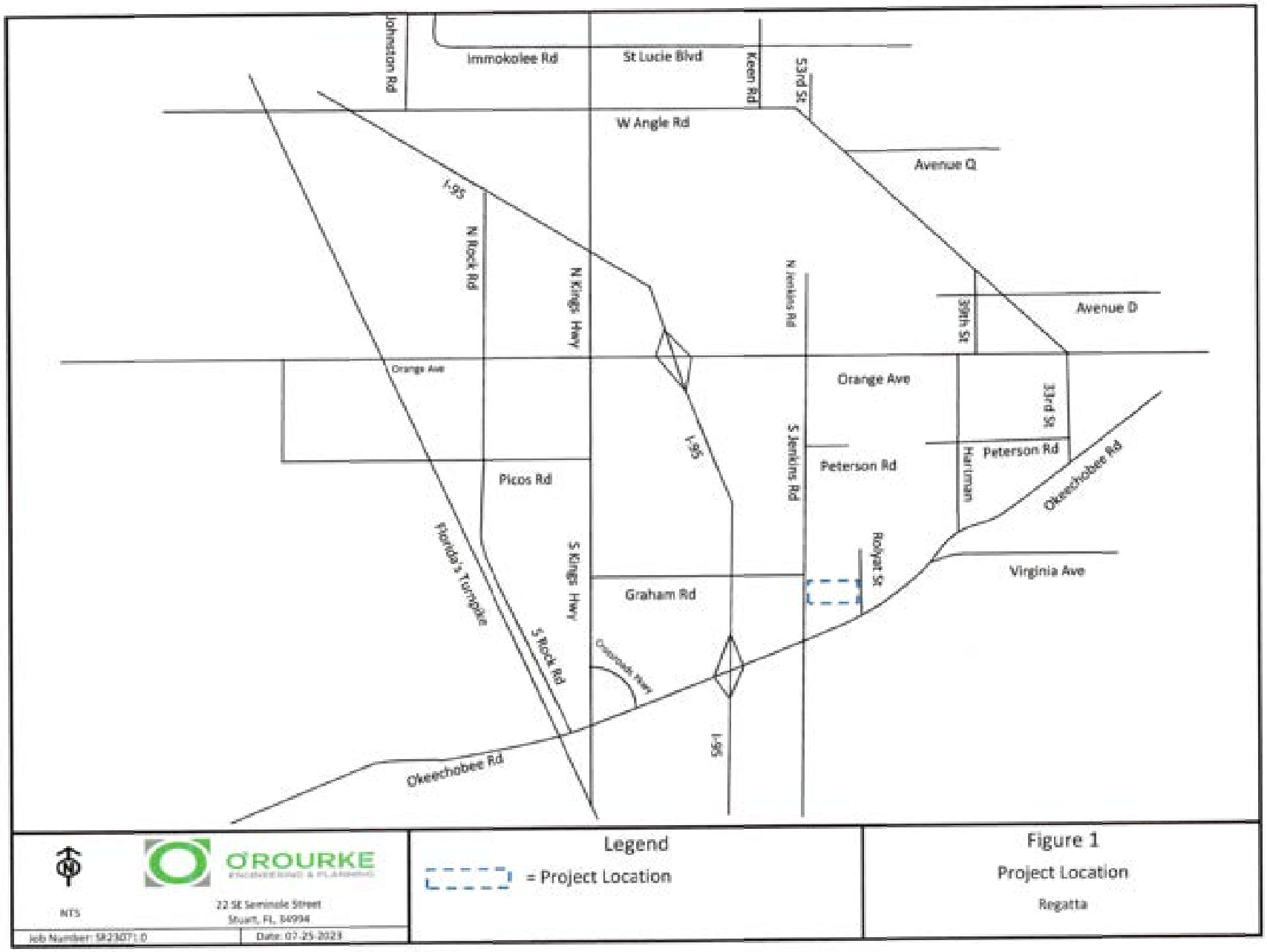
In order to make the determination that the project complies with County Concurrency Guidelines, the following analytical steps were taken:

- summary of the project
- summary of existing lane geometries
- summary of the existing traffic volumes
- assessment of project traffic
- determination of impact area
- summary of buildout cumulative traffic volumes
- summary of levels of service with the project traffic added

Each of these steps is outlined herein.

PROJECT DESCRIPTION

The proposed development will consist of 312 multi-family dwelling units. The project is located southeast of the intersection of Graham Road and Jenkins Road. The location is shown in **Figure 1**.


Johnston Rd
Immokolee Rd
St Lucie Blvd
Keen Rd
53rd St
W Angle Rd
Avenue Q
I-95
N Rock Rd
N Kings Hwy
N Jenkins Rd
39th St
Avenue D
Orange Ave
Orange Ave
31st St
S Jenkins Rd
Peterson Rd
Peterson Rd
Harriman
Okeechobee Rd
Picos Rd
I-95
Florida's Turnpike
S Kings Hwy
Roblyat St
Virginia Ave
Graham Rd
S Rock Rd
Okeechobee Rd
I-95
NTS
O'ROURKE
ENGINEERING & PLANNING
22 SE Seminole Street
Stuart, FL, 34994
Job Number: SR2307:1.0
Date: 07-25-2023
Legend
= Project Location
Figure 1
Project Location
Regatta

EXISTING CONDITIONS

The study area is defined as the roadways upon which the project has an impact of 3% of the level of service capacity of the roadway and 1% on the adjacent link. Once the project traffic was assigned, the study area was refined based on the impact percentages.

The study area roadways were defined in terms of existing lane geometrics and existing traffic volumes.

Existing/Proposed Lane Geometrics and Traffic Control

The study area was reviewed to determine the existing number and type of lanes, and the traffic control along the roadway. Each roadway is described below.

- Okeechobee Road is a multi-lane divided arterial roadway with an east/west alignment. It is four-lane divided west of Kings Highway and east of Virginia Avenue. It is six-lane divided from Rolyat Street to Virginia Avenue and from Kings Highway to I-95. There is an eight-lane divided section from east of I-95 to Rolyat Street. There are numerous extended turn lanes and freeway auxiliary lanes.
- Kings Highway is a two-lane arterial with a north/south alignment and is under construction in portions and included in the 5-year TIP to be widened to a four-lane divided roadway.
- Graham Road is a 2 lane arterial roadway with an E/W alignment.
- Jenkins Road is a 2 lane arterial roadway with a N/S alignment.

Existing Traffic Volumes/ Service Volume

Traffic volumes were obtained from the St. Lucie County TPO and FDOT. The count data along with the number of lanes and the associated peak hour/peak direction service volumes will be summarized in the upcoming sections of the report. Sources of the data are included in **Appendix B.**

PROJECT TRAFFIC

To estimate future traffic generated by the development, the ITE Trip Generation, 11th Edition trip rates for Multi-Family Housing – Low Rise (Land Use Code 220) was applied to estimate the trips generated by the proposed development. These calculations are shown in **Tables 1a, 1b, and 1c.**

As shown, the project will generate 2,075 new daily trips. There will be 120 AM peak hour trips with 29 entering the project and 91 trips exiting the project. The project will generate 155 new PM peak hour trips. There will be 98 trips entering the project and 57 trips exiting the project in the PM peak hour.

Table 1 - Trip Generation

Table 1a: Daily

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Net New Trips		
					In	Out	In	Out	Total
Multifamily Housing (Low-Rise)	220	312	DU	T = 6.41(X) + 75.31	50%	50%	1,038	1,037	2,075
TOTALS							**1,038**	**1,037**	**2,075**

Source: ITE 11th Edition Trip Generation Rates

Table 1b: AM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Net New Trips		
					In	Out	In	Out	Total
Multifamily Housing (Low-Rise)	220	312	DU	T = 0.31(X) + 22.85	24%	76%	29	91	120
TOTALS							**29**	**91**	**120**

Source: ITE 11th Edition Trip Generation Rates

Table 1c: PM Peak Hour

Land Use	ITE Code	Intensity	Units	Trip Generation Rate	Directional Split		Net New Trips		
					In	Out	In	Out	Total
Multifamily Housing (Low-Rise)	220	312	DU	T = 0.43(X) + 20.55	63%	37%	98	57	155
TOTALS							**98**	**57**	**155**

Source: ITE 11th Edition Trip Generation Rates

PROJECT DISTRIBUTION/ ASSIGNMENT/IMPACT

The project traffic was distributed by general geographic direction and then assigned to the roadway network.

Distribution/ Assignment – This general distribution led to an assignment of trips based on the anticipated ultimate destinations and the roadway paths used to reach those destinations. The project assignment is shown in **Figure 2.**

Impact – Tables 2a and 2b summarize the project impact as a percent of service volume capacity. Significant is defined as 1% or more on an adjacent link and 3% or more on all other links. As shown, the project is significant on Jenkins Road between Okeechobee Boulevard and Orange Avenue.

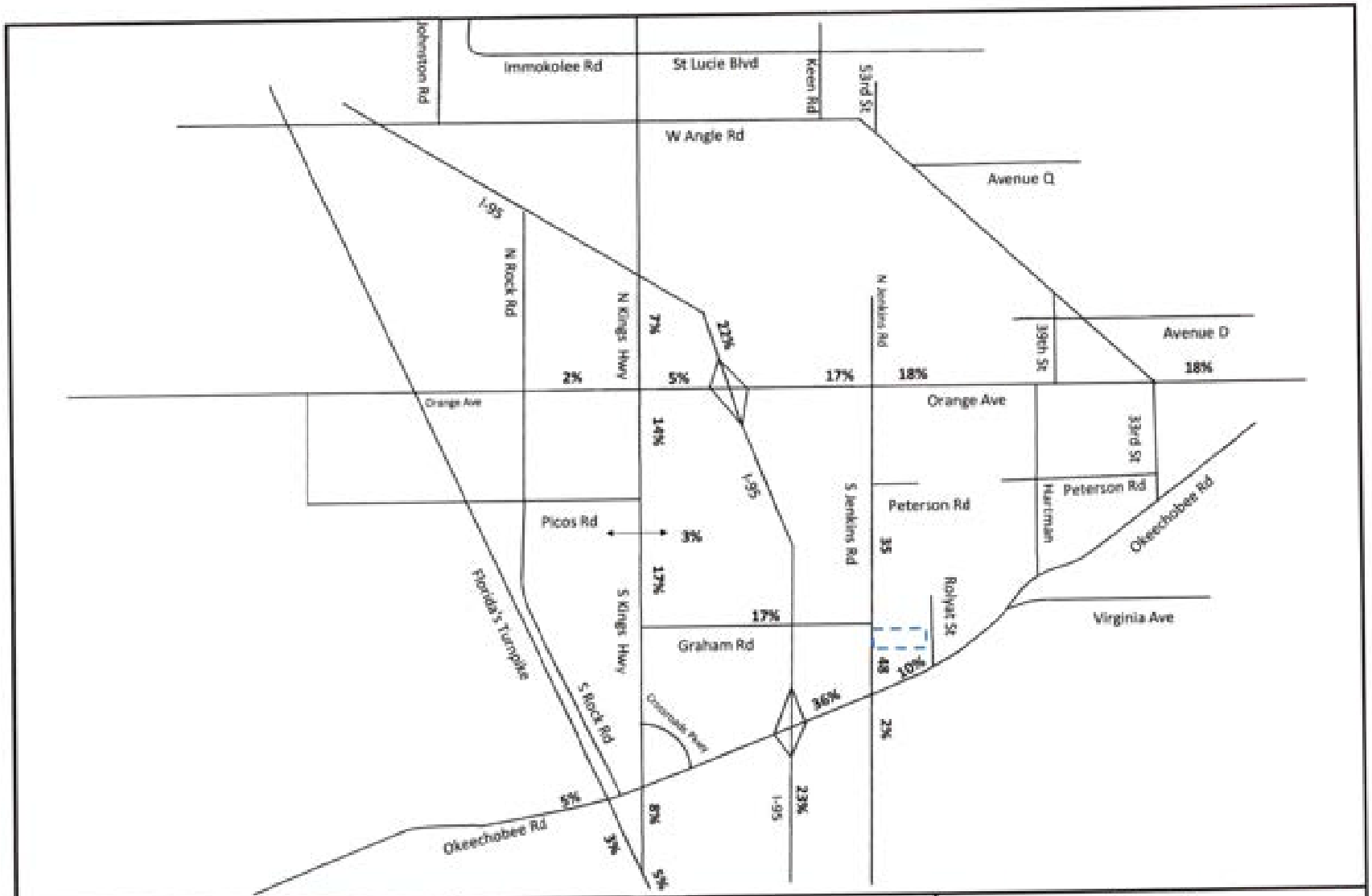
LINK ANALYSIS / REVIEW

Links where the project was significant were analyzed further to ensure they will meet concurrency. A project buildout of 2026 was used in the analysis. A growth rate of 1.1% was calculated for Jenkins Road. The greater of 1.1% growth or 1% plus traffic from other projects in the area were used to determine the 2026 background without project traffic. Other project data includes committed traffic from Kings Hwy Commerce Park, Sunnyland, Drawdy Angle Road, KRE, Stonemont, Creekside, Orange 95, Bent Creek, Celebration Pointe, Hillpointe Residential, Whispering Oaks, Viva at Treasure Coast, Project Hunt, 7/11 Angle Road, Jenkins Waypoint, and Project Hurricane. Project traffic was then added to determine the 2026 Future Total traffic.

Details of the background traffic are included in **Appendix C.**

Table 3a and 3b summarize the results of the link analysis. Jenkins Road is projected to exceed the theoretical capacity. Therefore, a detailed analysis of this road was performed. As shown, the detailed analysis demonstrates that this roadway will operate at acceptable levels of service at project buildout.

The detailed analysis is included in **Appendix D.**



NTS

O'ROURKE ENGINEERING & PLANNING

22 SE Seminole Street
Stuart, FL 34994

Job Number: SR23071.0

Date: 07-25-2023

Legend

= Project Location

Figure 2

Percent Assignment

Regatta

TABLE 2a - Project Percent Impact - AM Peak Hour

Segment	From	To	Lanes	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	Peak Hour Service Capacity	Project Volume Peak Direction	% Project of Capacity- Peak Hour	Project Percent Assignment
Jenkins Rd	Okeechobee Rd	Project Driveway	2L	NB	IN	YES	920	44	4.57%	48%
	Okeechobee Rd	Project Driveway	2L	SB	OUT	YES	920	44	4.78%	48%
	Project Driveway	Graham Rd	2L	NB	OUT	YES	920	47	5.11%	52%
	Project Driveway	Graham Rd	2L	SB	IN	YES	920	15	1.63%	52%
	Graham Rd	Peterson Rd	2L	SB	OUT	YES	630	32	5.08%	35%
	Graham Rd	Peterson Rd	2L	SB	IN	NO	630	10	1.59%	35%
	Peterson Rd	Orange Ave	2L	NB	OUT	YES	920	32	3.48%	35%
	Peterson Rd	Orange Ave	2L	SB	IN	NO	920	10	1.09%	35%
Orange Ave	Campbell Rd	Kings Hwy	2L	EB	IN	NO	1,070	1	0.09%	2%
	Campbell Rd	Kings Hwy	2L	WB	OUT	NO	1,070	2	0.19%	2%
	Kings Hwy	I-95	4LD	EB	IN	NO	2,100	1	0.05%	5%
	Kings Hwy	I-95	4LD	WB	OUT	NO	2,100	5	0.24%	5%
	I-95	Jenkins Rd	4LD	EB	IN	NO	2,100	5	0.24%	13%
	I-95	Jenkins Rd	4LD	WB	OUT	NO	2,100	15	0.71%	13%
	Jenkins Rd	Hartman Rd	4LD	EB	OUT	NO	2,100	16	0.76%	18%
	Jenkins Rd	Hartman Rd	4LD	WB	IN	NO	2,100	5	0.24%	18%
	Hartman	Jungle Rd	4LD	EB	OUT	NO	2,100	16	0.76%	18%
	Hartman	Jungle Rd	4LD	WB	IN	NO	2,100	5	0.24%	18%
Kings Hwy	Okeechobee Rd	Crossroads Pkwy	4LD	NB	IN	NO	2,000	4	0.20%	13%
	Okeechobee Rd	Crossroads Pkwy	4LD	SB	OUT	NO	2,000	12	0.60%	13%
	Crossroads Pkwy	Graham Rd	4LD	NB	IN	NO	2,000	4	0.20%	13%
	Crossroads Pkwy	Graham Rd	4LD	NB	OUT	NO	2,000	12	0.60%	13%
	Graham Rd	Penn Rd	4LD	NB	OUT	NO	2,000	15	0.75%	17%
	Graham Rd	Penn Rd	4LD	NB	IN	NO	2,000	5	0.25%	17%
	Penn Rd	Orange Ave	4LD	NB	OUT	NO	2,000	13	0.65%	14%
	Penn Rd	Orange Ave	4LD	SB	IN	NO	2,000	4	0.20%	14%
	Orange Ave	I-95 Overpass	4LD	SB	OUT	NO	2,000	6	0.30%	7%
	Orange Ave	I-95 Overpass	4LD	SB	IN	NO	2,000	2	0.10%	7%
	I-95 Overpass	Jungle Rd	2L	NB	OUT	NO	920	6	0.65%	7%
	I-95 Overpass	Jungle Rd	2L	SB	IN	NO	920	2	0.22%	7%
Okeechobee Rd	Florida's Turnpike	Kings Hwy	4LD	EB	IN	NO	2,100	1	0.05%	5%
	Florida's Turnpike	Kings Hwy	4LD	WB	OUT	NO	2,100	5	0.24%	5%
	I-95	Jenkins Rd	6LD	EB	IN	NO	4,240	7	0.17%	23%
	I-95	Jenkins Rd	6LD	WB	OUT	NO	4,240	21	0.50%	23%
	Jenkins Rd	Micheil Rd	6LD	EB	OUT	NO	4,040	9	0.22%	10%
	Jenkins Rd	Micheil Rd	6LD	WB	IN	NO	4,040	3	0.07%	10%
I-95	Midway Rd	Okeechobee Rd	6LD	NB	IN	NO	5,500	7	0.13%	23%
	Midway Rd	Okeechobee Rd	6LD	SB	OUT	NO	5,500	21	0.38%	23%
	Orange Ave	Indrio Rd	6LD	NB	OUT	NO	7,320	20	0.27%	22%
	Orange Ave	Indrio Rd	6LD	SB	IN	NO	7,320	6	0.08%	22%

(1) St. Lucie County 2023 Traffic Counts and LOS Report

IN: 29
OUT: 91

TABLE 2b - Project Percent Impact - PM Peak Hour

Segment	From	To	Lanes	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	Peak Hour Service Capacity	Project Volume Peak Direction	% Project of Capacity- Peak Hour	Project Percent Assignment
Jenkins Rd	Okeechobee Rd	Project Driveway	2L	NB	IN	YES	920	47	5.11%	48%
	Okeechobee Rd	Project Driveway	2L	SB	OUT	YES	920	27	2.93%	48%
	Project Driveway	Graham Rd	2L	NB	OUT	YES	920	30	3.26%	52%
	Project Driveway	Graham Rd	2L	SB	IN	YES	920	51	5.54%	52%
	Graham Rd	Peterson Rd	2L	NB	OUT	YES	630	20	3.17%	35%
	Graham Rd	Peterson Rd	2L	SB	IN	YES	630	34	5.40%	35%
	Peterson Rd	Orange Ave	2L	NB	OUT	NO	920	20	2.17%	35%
	Peterson Rd	Orange Ave	2L	SB	IN	YES	920	34	3.70%	35%
Orange Ave	Campbell Rd	Kings Hwy	2L	EB	IN	NO	1,070	2	0.19%	2%
	Campbell Rd	Kings Hwy	2L	WB	OUT	NO	1,070	1	0.09%	2%
	Kings Hwy	I-95	4LD	EB	IN	NO	2,100	5	0.24%	5%
	Kings Hwy	I-95	4LD	WB	OUT	NO	2,100	3	0.14%	5%
	I-95	Jenkins Rd	4LD	EB	IN	NO	2,100	13	0.62%	13%
	I-95	Jenkins Rd	4LD	WB	OUT	NO	2,100	10	0.48%	13%
	Jenkins Rd	Hartman Rd	4LD	EB	OUT	NO	2,100	10	0.48%	18%
	Jenkins Rd	Hartman Rd	4LD	WB	IN	NO	2,100	18	0.86%	18%
	Hartman	Jungle Rd	4LD	EB	OUT	NO	2,100	10	0.48%	18%
	Hartman	Jungle Rd	4LD	WB	IN	NO	2,100	18	0.86%	18%
Kings Hwy	Okeechobee Rd	Crossroads Pkwy	4LD	NB	IN	NO	2,000	11	0.55%	13%
	Okeechobee Rd	Crossroads Pkwy	4LD	SB	OUT	NO	2,000	7	0.35%	13%
	Crossroads Pkwy	Graham Rd	4LD	NB	IN	NO	2,000	11	0.55%	13%
	Crossroads Pkwy	Graham Rd	4LD	SB	OUT	NO	2,000	7	0.35%	13%
	Graham Rd	Penn Rd	4LD	NB	OUT	NO	2,000	10	0.50%	17%
	Graham Rd	Penn Rd	4LD	SB	IN	NO	2,000	17	0.85%	17%
	Penn Rd	Orange Ave	4LD	NB	OUT	NO	2,000	8	0.40%	14%
	Penn Rd	Orange Ave	4LD	SB	IN	NO	2,000	14	0.70%	14%
	Orange Ave	I-95 Overpass	4LD	SB	OUT	NO	2,000	4	0.20%	7%
	Orange Ave	I-95 Overpass	4LD	SB	IN	NO	2,000	7	0.35%	7%
	I-95 Overpass	Jungle Rd	2L	NB	OUT	NO	920	4	0.43%	7%
	I-95 Overpass	Jungle Rd	2L	SB	IN	NO	920	7	0.76%	7%
Okeechobee Rd	Florida's Turnpike	Kings Hwy	4LD	EB	IN	NO	2,100	5	0.24%	5%
	Florida's Turnpike	Kings Hwy	4LD	WB	OUT	NO	2,100	3	0.14%	5%
	I-95	Jenkins Rd	6LD	EB	IN	NO	4,240	28	0.66%	23%
	I-95	Jenkins Rd	6LD	WB	OUT	NO	4,240	13	0.31%	23%
	Jenkins Rd	Micheil Rd	6LD	EB	OUT	NO	4,040	6	0.15%	10%
	Jenkins Rd	Micheil Rd	6LD	WB	IN	NO	4,040	10	0.25%	10%
I-95	Midway Rd	Okeechobee Rd	6LD	NB	IN	NO	5,500	23	0.42%	23%
	Midway Rd	Okeechobee Rd	6LD	SB	OUT	NO	5,500	13	0.24%	23%
	Orange Ave	Indrio Rd	6LD	NB	OUT	NO	7,320	13	0.18%	22%
	Orange Ave	Indrio Rd	6LD	SB	IN	NO	7,320	22	0.30%	22%

(1) St. Lucie County 2023 Traffic Counts and LOS Report

IN: 98
OUT: 57

TABLE 3a - Link Analysis - AM Peak Hour

Segment	From	To	Direction	IN/OUT	Greater than 3% (3% on Adjacent Links)	D Factor (1)	2023 Peak Hour Volumes (From 2023 TPO)	2023 Directional Peak Hour Volumes	Growth Rate (2)	2026 Peak Hour Volumes w/ Growth Factor	2026 Peak Hour w/ 1% Growth	AM Peak Hour Committed Projects Directional	2026 1% Growth + Committed Peak Direction	Higher of Growth Rate or 1% + Committed	Peak Hour Service Capacity (3+C)	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity- Peak Hour	Does Project Meet Concurrency ?	Project Percent Assignment
Jenkins Rd	Okeechobee Rd	Project Driveway	NB	IN	YES	0.103	567	567	1.10%	586	584	291	775	775	920	14	789	1.52%	YES	48%
	Okeechobee Rd	Project Driveway	SB	OUT	YES	0.397	567	571	1.10%	590	585	254	599	599	920	44	643	4.78%	YES	48%
	Project Driveway	Graham Rd	NB	OUT	YES	0.603	567	567	1.10%	586	584	291	775	775	920	47	822	5.11%	YES	52%
	Project Driveway	Graham Rd	SB	IN	YES	0.397	567	571	1.10%	590	585	254	599	599	920	15	614	1.63%	YES	52%
	Graham Rd	Peterson Rd	NB	OUT	YES	0.423	567	416	1.10%	430	428	250	687	687	930	32	719	3.08%	YES [2]	36%
	Graham Rd	Peterson Rd	SB	IN	NO	0.577	567	567	1.10%	586	584	162	749	749	930	10	759	1.08%	YES [2]	35%
	Peterson Rd	Orange Ave	NB	OUT	YES	0.539	567	567	1.10%	586	584	352	936	936	930	32	968	3.44%	YES [3]	35%
	Peterson Rd	Orange Ave	SB	IN	NO	0.461	567	485	1.10%	501	500	171	671	671	930	10	681	1.08%	YES	35%

Note: TPO Provides Peak Direction, off-peak derived from D Factor

(1) FDOT 2022 Annual Average Daily Traffic Report

(2) Growth rate calculated from St Lucie County Traffic Counts and Level of Service Reports

(3) 2026 and Committed Project trips cause the roadway to exceed service capacity

IN: 28
OUT 95
Years Grown: 3

TABLE 3b - Link Analysis - PM Peak Hour

Segment	From	To	Direction	IN/OUT	Greater than 3% (3% on Adjacent Links)	D Factor (1)		2023 Peak Hour Volumes (From 2023 TPO)	Growth Rate (2)	2026 Peak Hour Volumes w/ Growth Factor	2026 Peak Hour w/ 1% Growth	PM Peak Hour Committed Projects Directional	2026 1% Growth + Committed Peak Direction	Higher of Growth Rate or 1% + Committed	Peak Hour Service Capacity (3+C)	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity- Peak Hour	Does Project Meet Concurrency ?	Project Percent Assignment
Jenkins Rd	Okeechobee Rd	Project Driveway	NB	IN	YES	0.495	574	563	1.10%	581	580	349	829	829	920	47	876	5.11%	YES	48%
	Okeechobee Rd	Project Driveway	SB	OUT	YES	0.505	574	574	1.10%	593	591	237	828	828	920	21	849	2.28%	YES	48%
	Project Driveway	Graham Rd	NB	OUT	YES	0.495	574	563	1.10%	581	580	249	829	829	920	10	839	1.09%	YES	52%
	Project Driveway	Graham Rd	SB	IN	YES	0.505	574	574	1.10%	593	591	237	828	828	920	51	879	5.54%	YES	52%
	Graham Rd	Peterson Rd	NB	OUT	YES	0.590	574	574	1.10%	593	591	251	822	822	930	20	842	2.17%	YES [2]	35%
	Graham Rd	Peterson Rd	SB	IN	YES	0.410	574	509	1.10%	526	524	289	813	813	930	34	847	5.80%	YES [2]	35%
	Peterson Rd	Orange Ave	NB	OUT	NO	0.437	574	446	1.10%	460	459	265	724	724	930	20	744	2.17%	YES	35%
	Peterson Rd	Orange Ave	SB	IN	YES	0.563	574	574	1.10%	593	591	279	870	870	930	34	1004	3.70%	YES [3]	35%

Note: TPO Provides Peak Direction, off-peak derived from D Factor

(1) FDOT 2022 Annual Average Daily Traffic Report

(2) Growth rate calculated from St Lucie County Traffic Counts and Level of Service Reports

(3) 2026 and Committed Project trips cause the roadway to exceed service capacity

IN: 98
OUT: 47
Years Grown: 3

INTERSECTION ANALYSIS

Three intersections were analyzed for Existing, Background without Project, and Future Total with Project scenarios for both the AM and PM peak hours. The three intersections analyzed include Jenkins Road & Graham Road, Jenkins Road & Orange Avenue, and Jenkins Road & Okeechobee Boulevard. The intersections of Jenkins Road & Orange Avenue and Jenkins Road & Okeechobee Boulevard will continue to operate at an acceptable level of service of D or better at project build out.

The intersection of Jenkins Road & Graham Road is projected to operate at a LOS F in the Background and Future Total scenarios. The Jenkins Waypoint project is committed to constructing the westbound approach and a northbound right-turn lane at this intersection. The addition of an eastbound left-turn lane will decrease the delays at the intersection, but it will continue to operate at a LOS F at project buildout with the additional lane. A signal warrant analysis was performed at this intersection. It is not projected to meet the 100% threshold for the 8-hour or 4-hour warrants at project buildout. It is recommended to continue monitoring the signal warrant thresholds as developments come online in the area of the project. As this is a Background failure without the addition of project traffic, it is not the projects responsibility to construct the additional eastbound left-turn lane.

Table 4 summarizes the delay and LOS.

The intersection data is included in **Appendix E.**

DRIVEWAY ANALYSIS

The project will have a single driveway that will be a full access driveway located on Jenkins Road. **Figure 3** shows the driveway volumes for the AM and PM peak hours. The driveway was analyzed using HCS. The analysis shows the driveway will operate at LOS D for the westbound movement in the AM peak hour and a LOS C in the PM peak hour.

The need for turn lanes at the project driveway were analyzed. The need for a left-turn lane was analyzed using NCHRP 457 with a left-turn percentage of 9% of the advancing volume and an approaching volume of 570 and an opposing volume of 625, a southbound left-turn lane is warranted at the project driveway. NCHRP 457 was used to evaluate the need for a right-turn lane. With an approaching volume of 625 and a right-turn volume of 47, a northbound right-turn lane is warranted.

With a posted speed limit of 45 MPH, the required deceleration length for the turn lanes is 240'. The southbound left-turn lane has a queue of less than 1 vehicle in the AM and PM peak hours. Therefore, a queue of 1 vehicle was added to the southbound left-turn lane for a total length of 265'. The northbound right-turn lane does not have a queue. Therefore, a total length of 240' is proposed for the northbound right-turn lane.

The driveway data and analyses are included in **Appendix F.**

Table 4: Intersection Level of Service

Intersection	Period	Existing		2026 w/o Project		2026 w/o Project With Improvements		2026 w/Project		2026 w/Project With Improvements	
		Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
Jenkins Road & Graham Road	AM	18.3	C	105.9 / 61.9	F / F	43.2 / 43.9	E / E	219.7 / 99.5	F / E	60.0 / 99.5	F / F
	PM	16	C	297.3 / 75.5	F / E	97.9 / 75.5	F / E	420.7 / 115.2	F / F	126.9 / 115.2	F / F
Jenkins Road & Okeechobee Road	AM	42.2	D	59.7	D	N/A	-	55	D	N/A	-
	PM	39.2	D	51.8	D	N/A	-	52.2	D	N/A	-
Orange Avenue & Jenkins Avenue	AM	18.5	B	22.4	C	N/A	-	22.6	C	N/A	-
	PM	19.3	B	24.6	C	N/A	-	25.3	C	N/A	-

Note: XX / XX = Eastbound / Westbound Approaches



	IN	OUT
AM	29	91
PM	98	57

NTS

O'ROURKE ENGINEERING & PLANNING

22 SE Seminole Street
Stuart, FL 34994

Job Number: SR23071.0 | 6/13/2022

Legend

= Project Location

XX (XX) = AM (PM)

Figure 3

Driveway Volumes

Regatta

CONCLUSION

With 120 net new AM peak hour trips and 155 net new PM peak hour trips, all links and intersections operate at acceptable levels of service with the existing roadway network with the exception of the intersection of Jenkins Road & Graham Road.

An eastbound left-turn lane is recommended for the interim conditions until the intersection meets the warrants for signalization. As this is a background failure without project traffic, the eastbound left-turn lane is not the responsibility of the project. The intersection should continue to be monitored for a signal warrant as developments in the area are completed.

A southbound left turn lane and a northbound right-turn lane on Jenkins Road at the Project Driveway are recommended.

Therefore, the project meets the requirements for concurrency.

APPENDIX A

SITE PLAN

NAVD 1988

ALVA STONE GROUP, LLC

REGATTA APARTMENTS

C-4

KMA

APPENDIX B

ST. LUCIE COUNTY 2023 LEVEL OF SERVICE REPORT

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
GATLIN BLVD	E OF I-95 to SAVAGE BLVD	49,323	3,170	2,408	C	0.76	2,408	C	0.76
GATLIN BLVD	SAVAGE BLVD to ROSSER BLVD	49,323	3,170	2,408	C	0.76	2,408	C	0.76
GATLIN BLVD	ROSSER BLVD to SAVONA BLVD	49,323	3,170	2,408	C	0.76	2,408	C	0.76
GATLIN BLVD	SAVONA BLVD to PORT ST LUCIE BLVD	49,323	3,170	2,408	C	0.76	2,408	C	0.76
GEORGIA AVE	25TH ST to OKEECHOBEE RD	4,000	600	233	C	0.39	223	C	0.37
GEORGIA AVE	OKEECHOBEE RD to 17TH ST	4,000	750	233	C	0.31	223	C	0.30
GEORGIA AVE	17TH ST to 13TH ST	5,400	600	275	C	0.46	277	C	0.46
GEORGIA AVE	13TH ST to 7TH ST	2,500	600	152	C	0.25	170	C	0.28
GEORGIA AVE	7TH ST to US 1	2,200	600	121	C	0.20	131	C	0.22
GILSON RD	MARTIN C.L. to BECKER RD	11,039	710	925	F	1.30	957	F	1.35
GILSON RD	BECKER RD to LAKERIDGE DR	11,039	540	925	F	1.71	957	F	1.77
GLADES CUT-OFF RD	RANGE LINE RD to RESERVE BLVD	2,894	1,070	182	B	0.17	192	B	0.18
GLADES CUT-OFF RD	RESERVE BLVD to COMMERCE CENTER DR	5,748	1,070	452	C	0.42	526	C	0.49
GLADES CUT-OFF RD	CARLTON RD to RANGE LINE RD	2,894	390	182	B	0.47	192	B	0.49
GLADES CUT-OFF RD	COMMERCE CENTER DR to MIDWAY RD	3,331	920	162	C	0.18	162	C	0.18
GLADES CUT-OFF RD	MIDWAY RD to JENKINS RD	10,787	790	647	D	0.82	665	D	0.87
GLADES CUT-OFF RD	JENKINS RD to SELVITZ RD	5,900	830	351	C	0.42	326	C	0.39
GRAHAM RD	KINGS HWY to JENKINS RD	2,686	630	170	C	0.27	170	C	0.27
GREEN RIVER PKWY	MARTIN C.L. to CHARLESTON DR	5,780	1,070	401	C	0.38	364	B	0.34
GREEN RIVER PKWY	CHARLESTON DR to MELALEUCA BLVD	5,780	1,070	401	C	0.38	364	B	0.34
GREEN RIVER PKWY	MELALEUCA BLVD to WALTON RD	5,780	1,070	401	C	0.38	364	B	0.34
HARTMAN RD	OKEECHOBEE RD to PETERSON RD	6,204	750	296	C	0.40	289	C	0.39
HARTMAN RD	PETERSON RD to DELAWARE AVE	6,204	540	296	D	0.55	289	D	0.54
HARTMAN RD	DELAWARE AVE to ORANGE AVE	6,204	790	296	C	0.38	289	C	0.37
HEADER CANAL RD	OKEECHOBEE RD to ORANGE AVE	598	670	50	B	0.08	60	B	0.09
HILLMOOR DR	US 1 to LENNARD RD	7,100	790	394	D	0.50	373	C	0.47
I-95	GATLIN BLVD to ST LUCIE WEST BLVD	87,285	5,500	5,058	D	0.92	5,058	D	0.92
I-95	ST LUCIE WEST BLVD to MIDWAY RD	70,410	5,500	4,080	C	0.74	4,080	C	0.74
I-95	MIDWAY RD to OKEECHOBEE RD	81,706	5,500	4,734	D	0.86	4,734	D	0.86

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

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
I-95	OKEECHOBEE RD to ORANGE AVE	69,903	7,320	3,439	B	0.47	3,439	B	0.47
I-95	ORANGE AVE to INDRIO RD	52,086	7,320	3,018	B	0.41	3,018	B	0.41
INDIAN RIVER DR	CITRUS AVE to ORANGE AVE	5,559	750	276	C	0.37	276	C	0.37
INDIAN RIVER DR	ORANGE AVE to AVENUE A	6,098	750	302	C	0.40	302	C	0.40
INDIAN RIVER DR	AVENUE D to SEAWAY DR	6,293	790	312	C	0.40	312	C	0.40
INDIAN RIVER DR	AVENUE A to AVENUE D	6,293	540	312	D	0.58	312	D	0.58
INDRIO RD	PRIVATE RD to I-95 W RAMP	1,130	1,080	56	B	0.05	56	B	0.05
INDRIO RD	I-95 W RAMP to I-95 E RAMP	1,130	3,240	56	B	0.02	56	B	0.02
INDRIO RD	I-95 E RAMP to KOBLEGARD RD	11,474	3,240	560	B	0.17	560	B	0.17
INDRIO RD	KOBLEGARD RD to JOHNSTON RD	11,474	700	560	C	0.80	560	C	0.80
INDRIO RD	JOHNSTON RD to EMERSON AVE	11,474	880	560	C	0.64	560	C	0.64
INDRIO RD	EMERSON RD to SEMINOLE RD	10,743	920	524	C	0.57	524	C	0.57
INDRIO RD	SEMINOLE RD to KINGS HWY	10,743	790	524	D	0.66	524	D	0.66
INDRIO RD	KINGS HWY to SLASH PINE TRL	6,500	790	411	D	0.52	404	D	0.51
INDRIO RD	SLASH PINE TRL to US 1	6,500	920	411	C	0.45	404	C	0.44
INDRIO RD	US 1 to OLD DIXIE HWY	1,246	750	108	C	0.14	114	C	0.15
JENKINS RD	EDWARDS RD to OKEECHOBEE RD	10,375	880	488	C	0.56	535	C	0.61
JENKINS RD	OKEECHOBEE RD to GRAHAM RD	10,849	920	567	C	0.62	574	C	0.62
JENKINS RD	GRAHAM RD to PETERSON RD	10,849	630	567	C	0.90	574	C	0.91
JENKINS RD	PETERSON RD to ORANGE AVE	10,849	920	567	C	0.62	574	C	0.62
JENNINGS RD	US 1 to LENNARD RD	5,465	2,100	285	C	0.14	273	C	0.13
JOHNSTON RD	ANGLE RD to L20	2,909	1,070	228	B	0.21	200	B	0.19
JOHNSTON RD	L20 to MEADOWOOD DR	2,604	1,070	172	B	0.16	163	B	0.15
JOHNSTON RD	MEADOWOOD DR to OLD JOHNSTON RD	2,604	1,070	172	B	0.16	163	B	0.15
JOHNSTON RD	OLD JOHNSTON RD to INDRIO RD	2,604	1,070	172	B	0.16	163	B	0.15
JOHNSTON RD	INDRIO RD to RUSSOS RD	10,000	1,070	580	C	0.54	547	C	0.51
JOHNSTON RD	RUSSOS RD to INDIAN RIVER C.L.	10,000	1,070	580	C	0.54	547	C	0.51
JUANITA AVE	53RD ST to 25TH ST	1,972	750	126	C	0.17	103	C	0.14
JUANITA AVE	25TH ST to US 1	3,749	750	191	C	0.26	209	C	0.28

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

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
KEEN RD	ANGLE RD to JUANITA AVE	3,200	630	234	C	0.37	253	C	0.40
KEEN RD	JUANITA AVE to ST LUCIE BLVD	3,200	630	234	C	0.37	253	C	0.40
KINGS HWY	OKEECHOBEE RD to CROSSROADS PKWY	9,383	880	472	C	0.54	472	C	0.54
KINGS HWY	CROSSROADS PKWY to GRAHAM RD	9,383	700	472	C	0.67	472	C	0.67
KINGS HWY	GRAHAM RD to PICOS RD	7,181	700	361	C	0.52	361	C	0.52
KINGS HWY	PICOS RD to ORANGE AVE	7,181	880	361	C	0.41	361	C	0.41
KINGS HWY	ORANGE AVE to ANGLE RD	15,247	920	767	C	0.83	767	C	0.83
KINGS HWY	ANGLE RD to ST LUCIE BLVD	11,202	880	547	C	0.62	547	C	0.62
KINGS HWY	ST LUCIE BLVD to INDRIO RD	13,787	880	673	C	0.77	673	C	0.77
KIRBY LOOP RD	EDWARDS RD to 35TH ST	2,581	630	150	C	0.24	139	C	0.22
KITTERMAN RD	OLEANDER AVE to US 1	2,600	750	167	C	0.22	136	C	0.18
KITTERMAN RD	US 1 to LENNARD EXT	2,095	750	123	C	0.16	128	C	0.17
LENNARD RD	US 1 to MARIPOSA AVE	20,570	1,710	1,234	D	0.72	1,170	D	0.68
LENNARD RD	MARIPOSA AVE to MELALEUCA BLVD	20,570	1,710	1,234	D	0.72	1,170	D	0.68
LENNARD RD	MELALEUCA BLVD to JENNINGS RD	20,570	1,630	1,234	D	0.76	1,170	D	0.72
LENNARD RD	JENNINGS RD to HILLMOOR DR	20,570	1,710	1,234	D	0.72	1,170	D	0.68
LENNARD RD	HILLMOOR DR to TIFFANY AVE	20,570	1,710	1,234	D	0.72	1,170	D	0.68
LENNARD RD	TIFFANY AVE to WALTON RD	7,365	1,710	403	C	0.24	389	C	0.23
LENNARD RD	WALTON RD to S OF SAVANNA CLUB BLVD	3,748	790	259	C	0.33	246	C	0.31
LYNGATE DR	VETERANS MEMORIAL PKWY to MORNINGSIDE BLVD	9,700	920	612	C	0.67	553	C	0.60
LYNGATE DR	MORNINGSIDE BLVD to US 1	9,700	920	612	C	0.67	553	C	0.60
MARIPOSA AVE	LENNARD RD to HALLAHAN ST	7,300	880	568	C	0.65	541	C	0.62
MCCARTY RD	WILLIAMS RD to MIDWAY RD	364	540	27	C	0.05	25	C	0.05
MCCARTY RD	MIDWAY RD to OKEECHOBEE RD	431	540	37	C	0.07	37	C	0.07
MCNEIL RD	OKEECHOBEE RD to KIRBY LOOP RD	4,900	790	307	C	0.39	298	C	0.38
MCNEIL RD	KIRBY LOOP RD to EDWARDS RD	4,900	540	307	D	0.57	298	D	0.55
MELALEUCA BLVD	LENNARD RD to GREEN RIVER PKWY	10,710	920	630	C	0.69	601	C	0.65
MIDWAY RD	EAST TORINO PKWY to MILNER DR	25,000	880	1,245	F	1.42	1,298	F	1.48
MIDWAY RD	MILNER DR to W OF SELVITZ RD	25,000	790	1,245	F	1.58	1,298	F	1.64

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

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

Traffic Counts and Level of Service Report
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
OKEECHOBEE RD	FLORIDA'S TURNPIKE to KINGS HWY	9,733	2,100	490	C	0.23	490	C	0.23
OKEECHOBEE RD	KINGS HWY to CROSSROADS PKWY	23,734	4,240	1,195	C	0.28	1,195	C	0.28
OKEECHOBEE RD	CROSSROADS PKWY to I-95	26,375	4,240	1,327	C	0.31	1,327	C	0.31
OKEECHOBEE RD	I-95 to JENKINS RD	32,142	4,240	1,569	C	0.37	1,569	C	0.37
OKEECHOBEE RD	JENKINS RD to MCNEIL RD	32,142	4,040	1,569	C	0.39	1,569	C	0.39
OKEECHOBEE RD	MCNEIL RD to VIRGINIA AVE	31,230	3,170	1,524	C	0.48	1,524	C	0.48
OKEECHOBEE RD	VIRGINIA AVE to HARTMAN RD	15,500	2,100	802	C	0.38	791	C	0.38
OKEECHOBEE RD	HARTMAN RD to 35TH ST	15,500	1,630	802	D	0.49	791	D	0.49
OKEECHOBEE RD	35TH ST to 33RD ST	16,500	1,630	859	D	0.53	822	D	0.50
OKEECHOBEE RD	33RD ST to 25TH ST	16,500	1,630	859	D	0.53	822	D	0.50
OKEECHOBEE RD	25TH ST to GEORGIA AVE	12,000	1,630	695	C	0.43	616	C	0.38
OKEECHOBEE RD	GEORGIA AVE to DELAWARE AVE	12,000	1,710	695	C	0.41	616	C	0.36
OLD DIXIE HWY	US 1 to SR A1A NORTH	830	790	129	C	0.16	123	C	0.16
OLD DIXIE HWY	SR A1A NORTH to ST LUCIE BLVD	1,753	750	82	C	0.11	82	C	0.11
OLD DIXIE HWY	ST LUCIE BLVD to INDRIO RD	2,125	790	172	C	0.22	126	C	0.16
OLD DIXIE HWY	INDRIO RD to INDIAN RIVER C.L.	1,340	870	63	C	0.07	63	C	0.07
OLEANDER AVE	BEACH AVE to KITTERMAN RD	2,970	540	172	C	0.32	194	C	0.36
OLEANDER AVE	KITTERMAN RD to MIDWAY RD	6,162	750	358	C	0.48	358	C	0.48
OLEANDER AVE	MIDWAY RD to WEATHERBEE RD	6,400	750	362	C	0.48	365	C	0.49
OLEANDER AVE	WEATHERBEE RD to BELL AVE	6,400	540	362	D	0.67	365	D	0.68
OLEANDER AVE	BELL AVE to FARMER'S MARKET RD	12,703	540	613	F	1.14	581	F	1.08
OLEANDER AVE	FARMER'S MARKET RD to EDWARDS RD	12,703	750	613	D	0.82	581	D	0.78
OLEANDER AVE	EDWARDS RD to WISTERIA AVE	9,907	750	601	D	0.80	500	D	0.67
OLEANDER AVE	WISTERIA AVE to GARDENIA AVE	9,907	540	601	F	1.11	500	D	0.93
OLEANDER AVE	GARDENIA AVE to VIRGINIA AVE	9,907	790	601	D	0.76	500	D	0.63
OLEANDER AVE	VIRGINIA AVE to SUNRISE BLVD	5,500	600	309	D	0.52	320	D	0.53
ORANGE AVE	OKEECHOBEE C.L. to SNEED RD	5,195	670	303	C	0.45	289	C	0.43
ORANGE AVE	SNEED RD to HEADER CANAL RD	5,195	670	303	C	0.45	289	C	0.43
ORANGE AVE	HEADER CANAL RD to SHINN RD	5,195	670	303	C	0.45	289	C	0.43

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

St. Lucie Transportation Planning Organization

Coco Vista Centre
466 SW Port St. Lucie Blvd, Suite 111
Port St. Lucie, FL 34953
772-462-1593 www.stlucietpo.org

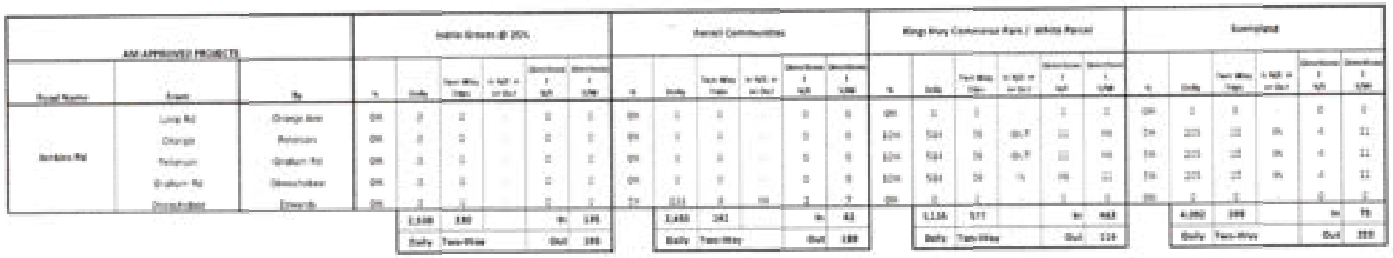
Traffic Counts and Level of Service Report
2023

Roadway Name	Location	AADT	Pk Hr Service Capacity	AM Pk Hr Pk Dir			PM Pk Hr Pk Dir		
				Volume	LOS	V/C	Volume	LOS	V/C
ORANGE AVE	SHINN RD to CAMPBELL RD	2,957	1,070	142	B	0.13	142	B	0.13
ORANGE AVE	CAMPBELL RD to KINGS HWY	2,957	1,070	142	B	0.13	142	B	0.13
ORANGE AVE	KINGS HWY to I-95	18,080	2,100	910	C	0.43	910	C	0.43
ORANGE AVE	I-95 to JENKINS RD	14,693	2,100	717	C	0.34	717	C	0.34
ORANGE AVE	JENKINS RD to HARTMAN RD	16,898	2,100	825	C	0.39	825	C	0.39
ORANGE AVE	HARTMAN RD to ANGLE RD	16,898	2,100	825	C	0.39	825	C	0.39
ORANGE AVE	ANGLE RD to 25TH ST	9,547	1,710		B			B	
ORANGE AVE	25TH ST to 17TH ST	13,554	1,630	661	C	0.41	661	C	0.41
ORANGE AVE	17TH ST to 13TH ST	13,554	1,710	661	C	0.39	661	C	0.39
ORANGE AVE	13TH ST to 10TH ST	13,554	750	661	D	0.88	661	D	0.88
ORANGE AVE	10TH ST to 7TH ST	9,873	600	482	D	0.80	482	D	0.80
ORANGE AVE	7TH ST to US 1	7,622	600	372	D	0.62	372	D	0.62
ORANGE AVE	US 1 to 2ND ST	4,209	600	209	C	0.35	209	C	0.35
ORANGE AVE	2ND ST to INDIAN RIVER DR	4,209	750	209	C	0.28	209	C	0.28
PARR DR	PORT ST LUCIE BLVD to DARWIN BLVD	2,283	700	177	C	0.25	153	C	0.22
PARR DR	DARWIN BLVD to TULIP BLVD	2,100	540	184	C	0.34	140	C	0.26
PARR DR	SAVONA BLVD to PORT ST LUCIE BLVD	2,283	700	177	C	0.25	153	C	0.22
PARR DR	ROSSER BLVD to SAVONA BLVD	2,283	630	177	C	0.28	153	C	0.24
PEACOCK BLVD	CALIFORNIA BLVD to CASHMERE BLVD	5,417	630	343	C	0.54	381	C	0.61
PEACOCK BLVD	UNIVERSITY BLVD to CALIFORNIA BLVD	11,327	920	778	C	0.85	637	C	0.69
PEACOCK BLVD	ST LUCIE WEST BLVD to UNIVERSITY BLVD	15,129	2,100	699	C	0.33	699	C	0.33
PETERSON RD	BENT CREEK DR to HARTMAN RD	2,195	540	163	C	0.30	150	C	0.28
PICOS RD	CAMPBELL RD to KINGS HWY	1,300	540	87	C	0.16	87	C	0.16
PORT ST LUCIE BLVD	MARTIN C.L. to BECKER RD	16,735	920	774	C	0.84	774	C	0.84
PORT ST LUCIE BLVD	BECKER RD to PAAR DR	16,735	920	774	C	0.84	774	C	0.84
PORT ST LUCIE BLVD	PAAR DR to TULIP BLVD	16,735	700	774	F	1.11	774	F	1.11
PORT ST LUCIE BLVD	TULIP BLVD to DARWIN BLVD	16,735	920	774	C	0.84	774	C	0.84
PORT ST LUCIE BLVD	DARWIN BLVD to GATLIN BLVD	34,500	3,020	1,765	C	0.58	1,744	C	0.58
PORT ST LUCIE BLVD	GATLIN BLVD to DEL RIO BLVD	44,000	3,170	2,481	C	0.78	2,389	C	0.75

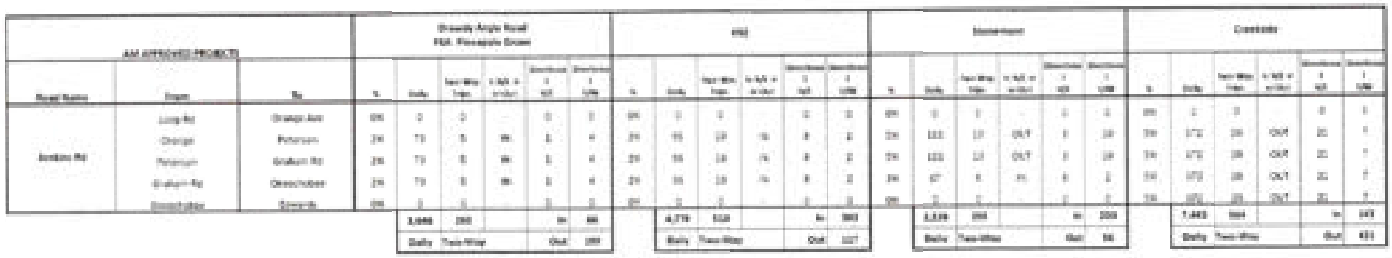
* Volumes shown were adjusted using FDOT Seasonal Factors
* AADT = Annual Average Daily Traffic

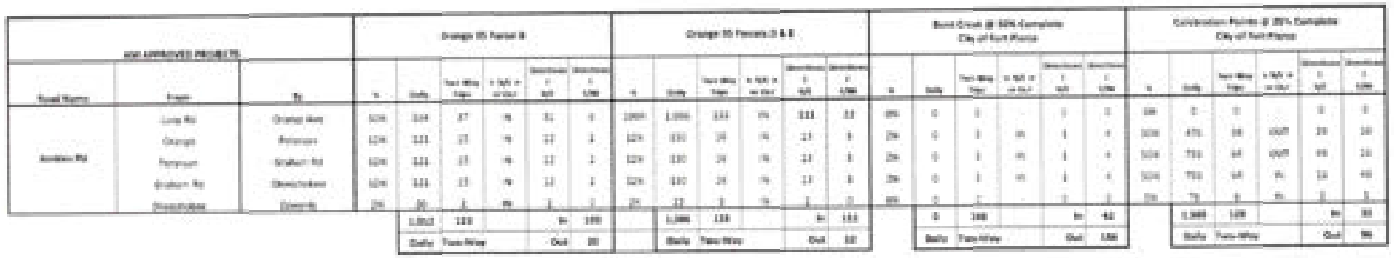
APPENDIX C

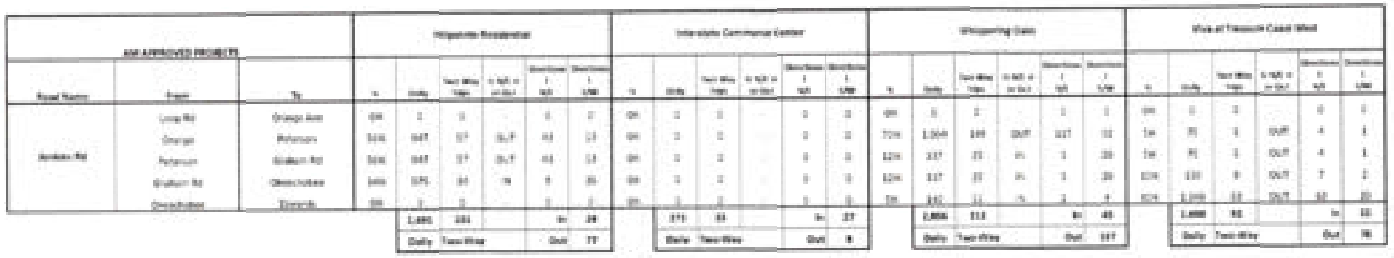
OTHER PROJECT DATA/GROWTH RATE

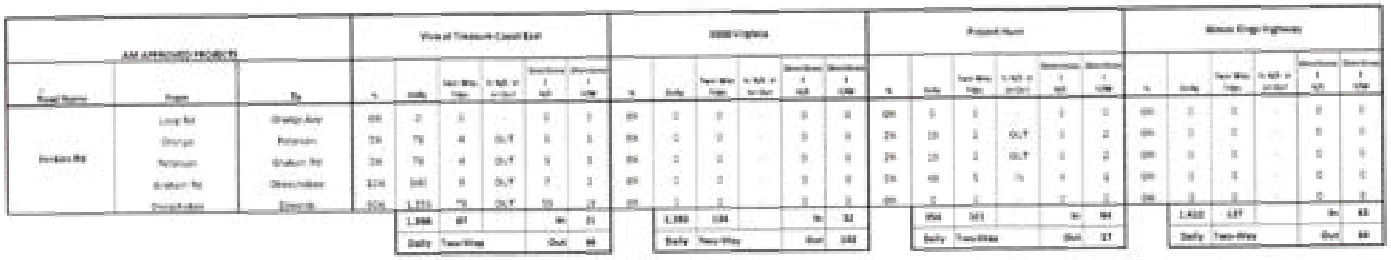


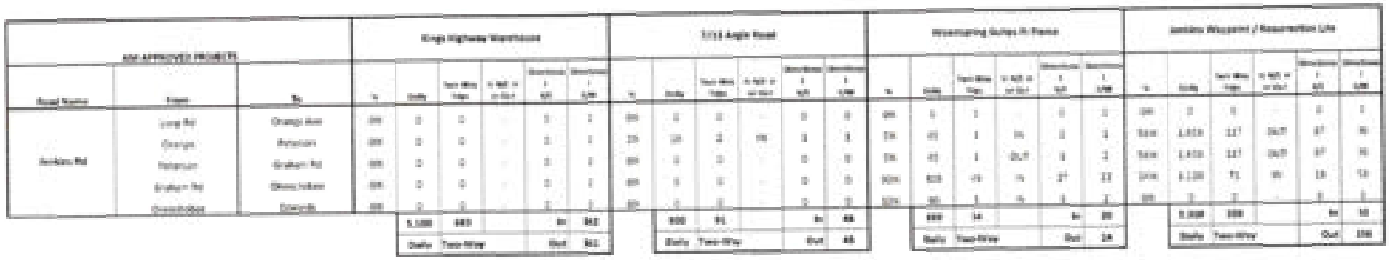
C-1

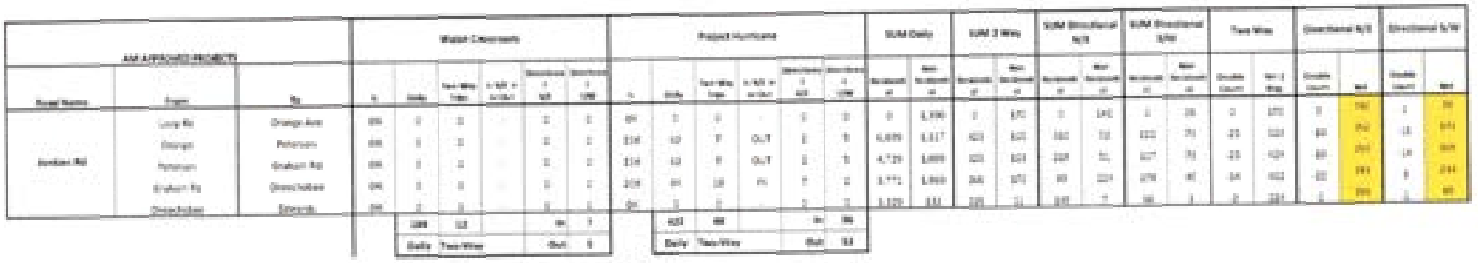


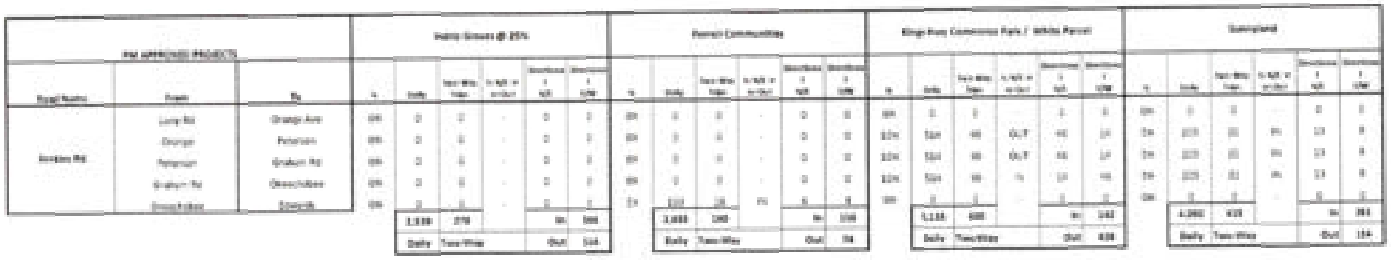


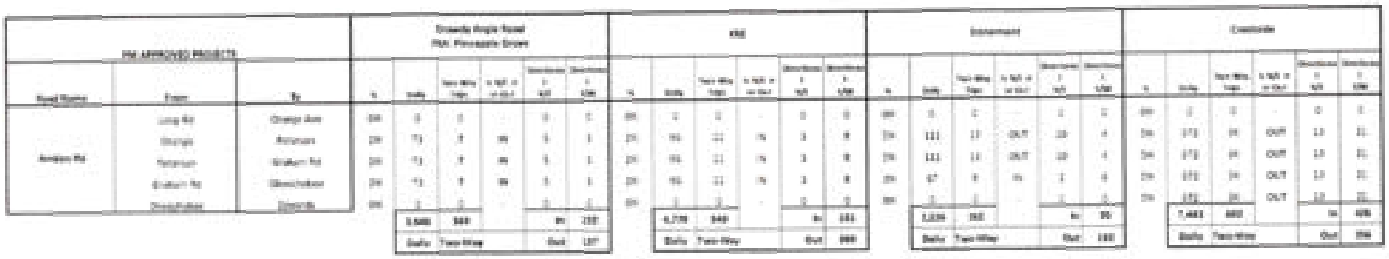


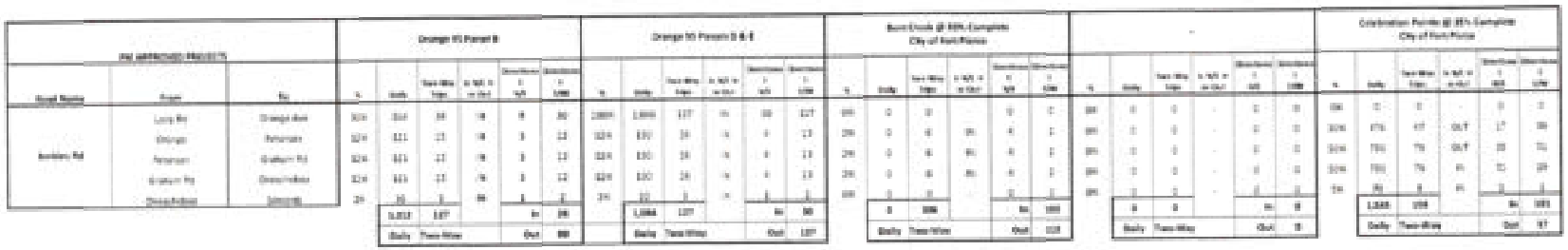


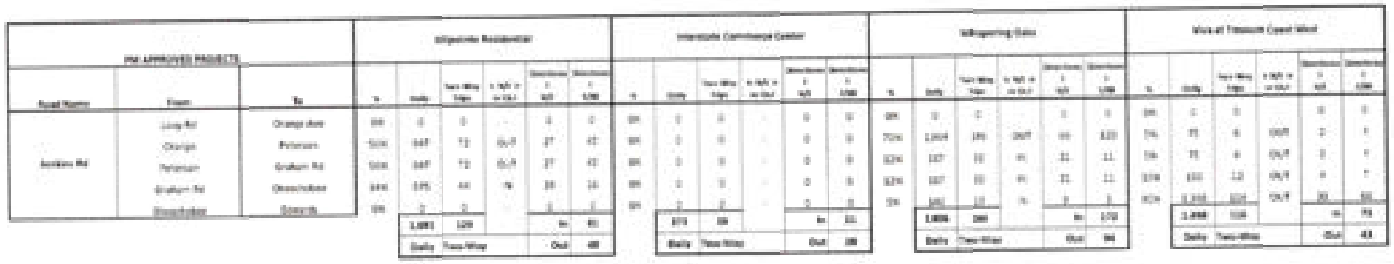


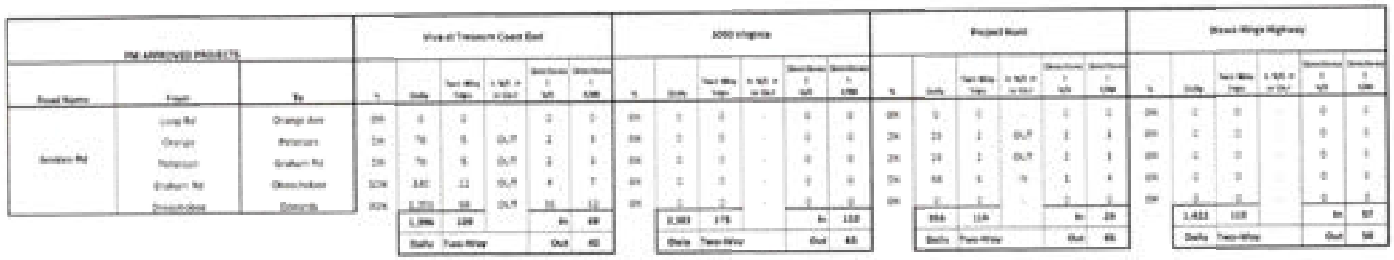


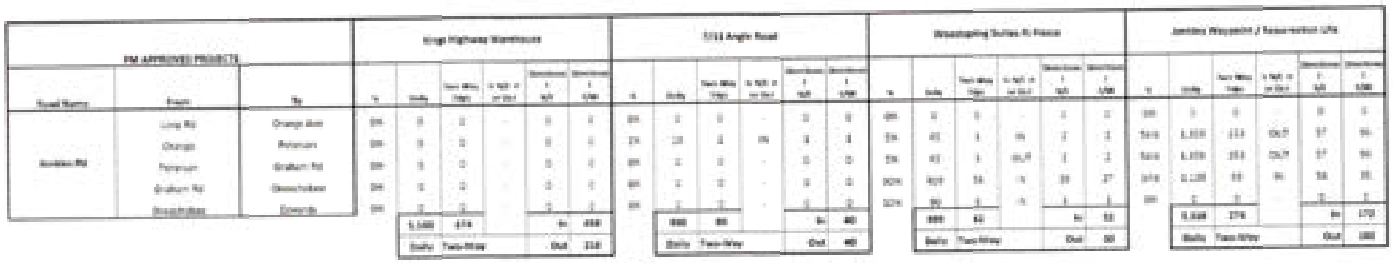


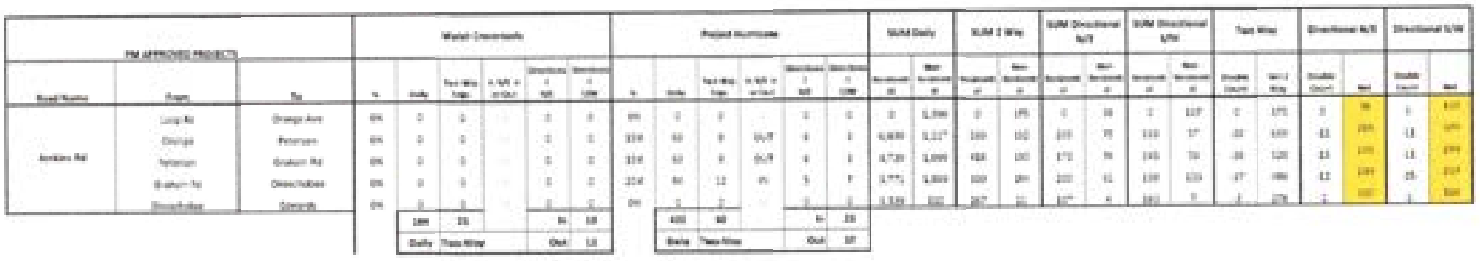












FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2022 HISTORICAL AADT REPORT

COUNTY: 94 - ST.LUCIE

SITE: 0273 - CR 611/JENKINS RD - N. OF SR 70/OKEECHOBEE RD (COUNTY 131)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2022	8600 T	N 4300	S 4300	9.00	51.40	5.00
2021	8600 S	N 4300	S 4300	9.00	50.90	7.20
2020	8800 F	N 4400	S 4400	9.00	51.30	31.50
2019	9200 C	N 4600	S 4600	9.00	51.00	7.80
2018	10000 V	N 4400	S 5600	9.00	51.30	5.80
2017	9900 R	N 4400	S 5500	9.00	50.90	10.00
2016	9700 T	N 4300	S 5400	9.00	50.90	6.20
2015	9600 S	N 4300	S 5300	9.00	51.00	41.80
2014	9600 F	N 4300	S 5300	9.00	50.80	49.50
2013	9600 C	N 4300	S 5300	9.00	50.80	11.90
2012	7100 S	N 3600	S 3500	9.00	56.80	4.80
2011	7100 F	N 3600	S 3500	9.00	57.20	4.80
2010	7100 C	N 3600	S 3500	10.32	55.40	4.80
2009	8500 C	N 4200	S 4300	10.27	57.35	10.70
2008	9100 C	N 4500	S 4600	10.45	58.06	6.60

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

Historical Growth Rate Calculation

Segment	From	To	2020 AADT	2023 AADT	3 Year Historical Growth Rate
Jenkins Rd	Graham Rd	Okeechobee Rd	10,500	10,849	1.10%

*Source St Lucie County Traffic Counts and Level of Service Reports

AM Peak Hour - D Factor Calculation

Segment	Location	Time	Direction		D Factor
			N/E	S/W	
Jenkins Road	South of Orange	7:15-8:15	187	160	0.539
	North of Graham	8:00-9:00	159	217	0.577
	South of Graham	8:00-9:00	217	330	0.603

Source: TMC Counts

PM Peak Hour - D Factor Calculation

Segment	Location	Time	Direction		D Factor
			N/E	S/W	
Jenkins Road	South of Orange	4:30-5:30	223	287	0.563
	North of Graham	4:15-5:15	287	254	0.530
	South of Graham	4:15-5:15	355	362	0.505

Source: TMC Counts

APPENDIX D

ARTERIAL ANALYSIS

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	James Kemp	**Arterial Name**	Jenkins Road	**Study Period**	Dir Hr Demand Vol
Date Prepared	7/27/2023 4:56:07 PM	**From**	Okeechobee Rd	**Modal Analysis**	Auto Only
Agency	O'Rourke Engineering	**To**	Orange Ave	**Program**	ARTPLAN 2012
Area Type	Other Urbanized	**Peak Direction**	Northbound	**Version Date**	12/12/2012
Arterial Class	1				
File Name	C:\Users\admin\Documents\Projects\St. Lucie\Regatta\10.19.23\Artplan\C6 - Jenkins Rd - AM - NB - 10.31.23.xap				
User Notes	AM Peak Hour - Northbound				

Arterial Data

K	0.09	**PHF**	0.97	**Control Type**	FullyActuated
D	0.565	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
Orange Ave	150	0.32	3	1	33	33	Yes	ProtPerm	1	300	0.12	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Orange Ave)	10560	15000	968	1	45	50	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Orange Ave)	339	1053	1.007	67.65	E	#	32.31	B

Arterial Length	2.0114	Weighted g/C	0.32	FFS Delay	80.10	Threshold Delay	0.00	Auto Speed	32.31	Auto LOS	B

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	**	1000	***	***	***
2	120	1920	***	***	***
3	190	2900	***	***	***
4	250	3880	***	***	***
*	**	1000	***	***	***
Lanes	**Hourly Volume In Both Directions**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A
Lanes	**Annual Average Daily Traffic**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (les) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	James Kemp	**Arterial Name**	Jenkins Road	**Study Period**	**Dir Hr Demand Vol**
Date Prepared	7/27/2023 4:56:07 PM	**From**	Orange Ave	**Modal Analysis**	Auto Only
Agency	O'Rourke Engineering	**To**	Okeechobee Rd	**Program**	ARTPLAN 2012
Area Type	Other Urbanized	**Peak Direction**	Southbound	**Version Date**	12/12/2012
Arterial Class	1				
File Name	C:\Users\admin\Documents\Projects\St. Lucie\Regatta\10.19.23\Artplan\C6 - Jenkins Rd - AM - SB - 10.31.23.xap				
User Notes	AM Peak Hour - Southbound				

Arterial Data

K	0.09	**PHF**	0.96	**Control Type**	FullyActuated
D	0.565	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
Okeechobee Rd	150	0.25	3	2	20	40	Yes	Protected	2	470	0.12	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Okeechobee Rd)	10560	8600	759	1	45	50	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Okeechobee Rd)	316	1732	0.730	54.96	D	0.20	34.80	B

Arterial Length	2.0114	Weighted g/C	0.25	FFS Delay	64.05	Threshold Delay	0.00	Auto Speed	34.80	Auto LOS	B

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	**	560	***	***	***
2	**	1100	***	***	***
3	**	1640	***	***	***
4	**	2200	***	***	***
*	**	1060	1100	***	***
Lanes	**Hourly Volume In Both Directions**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A
Lanes	**Annual Average Daily Traffic**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	James Kemp	**Arterial Name**	Jenkins Road	**Study Period**	Dir Hr Demand Vol
Date Prepared	7/27/2023 4:56:07 PM	**From**	Okeechobee Rd	**Modal Analysis**	Auto Only
Agency	O'Rourke Engineering	**To**	Orange Ave	**Program**	ARTPLAN 2012
Area Type	Other Urbanized	**Peak Direction**	Northbound	**Version Date**	12/12/2012
Arterial Class	1				
File Name	C:\Users\admin\Documents\Projects\St. Lucie\Regatta\10.19.23\Artplan\C6 - Jenkins Rd - PM - NB - 10.31.23.xap				
User Notes	PM Peak Hour - Northbound				

Arterial Data

K	0.09	**PHF**	0.95	**Control Type**	FullyActuated
D	0.565	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
Orange Ave	150	0.35	3	1	35	30	Yes	ProtPerm	1	235	0.15	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Orange Ave)	10560	8600	876	1	45	50	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Orange Ave)	323	1115	0.827	50.91	D	#	35.15	B

Arterial Length	2.0114	Weighted g/C	0.35	FFS Delay	62.03	Threshold Delay	0.00	Auto Speed	35.15	Auto LOS	B

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	190	1100	1140	***	***
2	390	2200	***	***	***
3	620	3340	***	***	***
4	830	4460	***	***	***
*	190	1100	1140	***	***
Lanes	**Hourly Volume In Both Directions**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A
Lanes	**Annual Average Daily Traffic**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (Ies) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

ARTPLAN 2012 Conceptual Planning Analysis

Project Information

Analyst	James Kemp	**Arterial Name**	Jenkins Road	**Study Period**	**Dir Hr Demand Vol**
Date Prepared	7/27/2023 4:56:07 PM	**From**	Orange Ave	**Modal Analysis**	Auto Only
Agency	O'Rourke Engineering	**To**	Okeechobee Rd	**Program**	ARTPLAN 2012
Area Type	Other Urbanized	**Peak Direction**	Southbound	**Version Date**	12/12/2012
Arterial Class	1				
File Name	C:\Users\admin\Documents\Projects\St. Lucie\Regatta\10.19.23\Artplan\C6 - Jenkins Rd - PM - SB - 10.31.23.xap				
User Notes	PM Peak Hour - Southbound				

Arterial Data

K	0.09	**PHF**	0.99	**Control Type**	FullyActuated
D	0.565	**% Heavy Vehicles**	2	**Base Sat. Flow Rate**	1950

Automobile Intersection Data

Cross Street	Cycle Length	Thru g/C	Arr. Type	INT # Dir.Lanes	% Left Turns	% Right Turns	Left Turn Lanes	Left Turn Phasing	# Left Turn Lanes	LT Storage Length	Left g/C	Right Turn Lanes
Okeechobee Rd	150	0.35	3	2	36	28	Yes	Protected	2	470	0.15	Yes

Automobile Segment Data

Segment #	Length	AADT	Hourly Vol.	SEG # Dir.Lanes	Posted Speed	Free Flow Speed	Median Type	On-Street Parking	Parking Activity
1 (to Okeechobee Rd)	10560	9600	1004	1	45	50	None	No	N/A

Automobile LOS

Segment #	Thru Mvmt Flow Rate	Adj. Sat. Flow Rate	v/c	Control Delay	Int. Approach LOS	Queue Ratio	Speed (mph)	Segment LOS
1 (to Okeechobee Rd)	365	2245	0.053	32.30	C	0.65	38.30	B

Arterial Length	2.0114	Weighted g/C	0.35	FFS Delay	45.06	Threshold Delay	0.00	Auto Speed	38.30	Auto LOS	B

Automobile Service Volumes

Note: The maximum normally acceptable directional service volume for LOS E in Florida for this facility type and area type is 1000 veh/h/ln.

	A	B	C	D	E
Lanes	**Hourly Volume In Peak Direction**				
1	210	1180	***	***	***
2	420	2300	***	***	***
3	660	3460	***	***	***
4	890	4640	***	***	***
*	290	1780	2300	***	***
Lanes	**Hourly Volume In Both Directions**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A
Lanes	**Annual Average Daily Traffic**				
2	N/A	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A	N/A
8	N/A	N/A	N/A	N/A	N/A
*	N/A	N/A	N/A	N/A	N/A

*** Service Volumes for the specific facility being analyzed, based on # of lanes from the intersection and segment data screens.**
**** Cannot be achieved based on input data provided.**
***** Not applicable for that level of service letter grade. See generalized tables notes for more details.**
 # Under the given conditions, left turn lane storage is highly likely to overflow. The number of directional thru lanes should be reduced accordingly.
Facility weighted g/C exceeds normally acceptable upper range (0.5); verify that g/C inputs are correct.
Intersection capacity (les) are exceeded for the full hour; an operational level analysis tool is more appropriate for this situation.

APPENDIX E

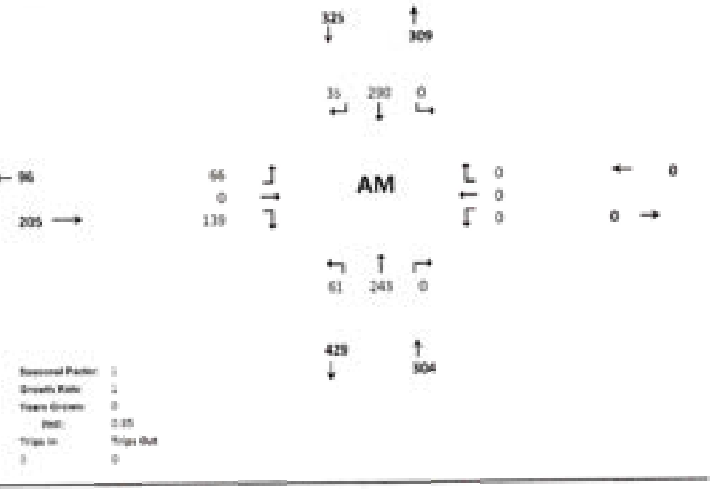
INTERSECTION ANALYSIS

TURNING MOVEMENT VOLUME COUNTS

N/S STREET: Jenkins Road
E/W STREET: Graham Rd
CONTROL: TWSC
FILENAME:
COUNT DATE: 5/9/2023
DAY: Wednesday
CITY: [illegible]
REPORT DATE: 7/26/2023
ANALYSIS YEAR: 2023
Existing

15 Min Period	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
7:00-7:15	12	40	0	0	51	9	7	0	17	0	0	0	136	759
7:15-7:30	19	69	0	0	69	7	10	0	31	0	0	0	194	834
7:30-7:45	23	70	0	0	87	8	22	0	42	0	0	0	244	900
7:45-8:00	13	75	0	0	66	10	22	0	36	0	0	0	222	775
8:00-8:15	8	49	0	0	71	9	6	0	28	0	0	0	171	644
8:15-8:30	13	57	0	0	57	7	7	0	32	0	0	0	173	
8:30-8:45	12	40	0	0	43	3	10	0	41	0	0	0	149	
8:45-9:00	13	59	0	0	81	7	7	0	30	0	0	0	197	
ANALYSIS HOUR VOLUMES:	7:15AM TO 8:15AM													
Volumes	61	243	0	0	290	33	66	0	139	0	0	0	834	
Season Factor	61	243	0	0	290	33	66	0	139	0	0	0	834	
Growth	61	243	0	0	290	33	66	0	139	0	0	0	834	
In/Out	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	61	243	0	0	290	33	66	0	139	0	0	0	834	

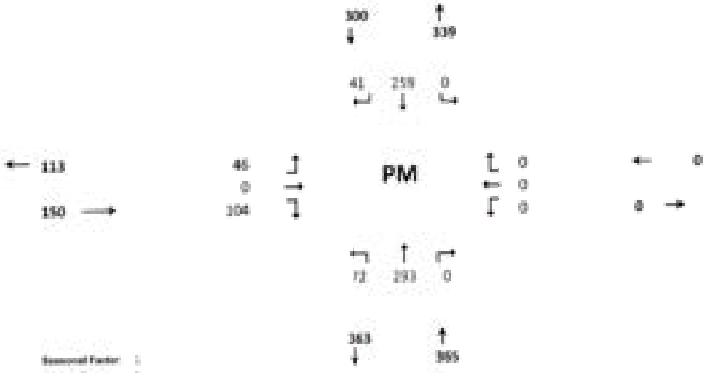
Seasonal Factor: 1
Growth Rate: 1
Years Grown: 0
PHF: 0.85
Trips In: Trips Out
0 0



Jenkins & Graham
Existing

15 Min Period Totals	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
4:00-4:15	20	81	0	0	82	6	14	0	14	0	0	0	218	811
4:15-4:30	27	71	0	0	62	14	22	0	14	0	0	0	210	824
4:30-4:45	16	69	0	0	64	10	11	0	30	0	0	0	199	778
4:45-5:00	19	71	0	0	51	11	9	0	29	0	0	0	189	774
5:00-5:15	23	77	0	0	61	14	17	0	24	0	0	0	216	792
5:15-5:30	19	55	0	0	57	17	8	0	22	0	0	0	178	
5:30-5:45	19	64	0	0	62	9	14	0	21	0	0	0	179	
5:45-6:00	19	60	0	0	41	7	8	0	14	0	0	0	127	
PEAK HOUR VOLUMES:	4:00PM TO 5:00PM													
Volumes	73	293	0	0	259	41	46	0	104	0	0	0	813	
Season Factor	73	293	0	0	259	41	46	0	104	0	0	0	813	
Growth	73	293	0	0	259	41	46	0	104	0	0	0	813	
In/Out	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	73	293	0	0	259	41	46	0	104	0	0	0	813	

Seasonal Factor: 1
Growth Rate: 1
Years Grown: 0
PHF: 0.85
Trips In: Trips Out



E-1

HCS Two-Way Stop-Control Report

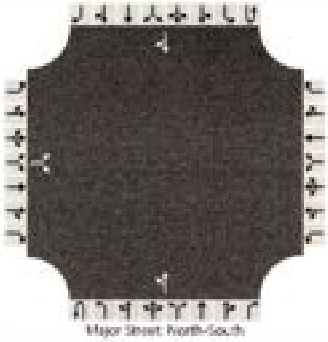
General Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	7/26/2023
Analysis Year	2022
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	Graham & Jenkins
Jurisdiction	St. Lucie
East/West Street	Graham Road
North/South Street	Jenkins Ave
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		66		139						61	243				290	35
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			241							72						
Capacity, c (veh/h)			508							1171						
v/c Ratio			0.47							0.06						
95% Queue Length, Q_{95} (veh)			2.5							0.2						
Control Delay (s/veh)			18.3							8.3	0.6					
Level of Service (LOS)			C							A	A					
Approach Delay (s/veh)		18.3								2.1						
Approach LOS		C								A						

Copyright © 2023 University of Florida. All Rights Reserved.

HCS™ TWSC Version 2023
C6 - Jenkins & Graham - Existing - AM.xtw

Generated: 8/10/2023 4:10:54 PM

HCS Two-Way Stop-Control Report

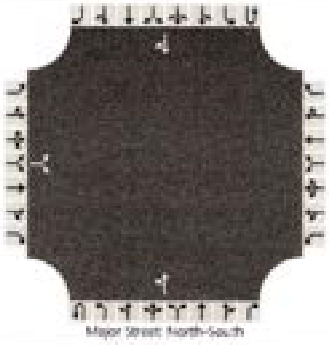
General Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	7/26/2023
Analysis Year	2022
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Existing

Site Information

Intersection	Graham & Jenkins
Jurisdiction	St. Lucie
East/West Street	Graham Road
North/South Street	Jenkins Ave
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	0	0	0	0	1	0	0	0	1	0
Configuration			LR							LT						TR
Volume (veh/h)		46		104						72	293				259	41
Percent Heavy Vehicles (%)		3		3						3						
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2						4.1						
Critical Headway (sec)		6.43		6.23						4.13						
Base Follow-Up Headway (sec)		3.5		3.3						2.2						
Follow-Up Headway (sec)		3.53		3.33						2.23						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			176							85						
Capacity, c (veh/h)			504							1200						
v/c Ratio			0.35							0.07						
95% Queue Length, Q_{95} (veh)			1.6							0.2						
Control Delay (s/veh)			16.0							8.2	0.7					
Level of Service (LOS)			C							A	A					
Approach Delay (s/veh)		16.0								2.2						
Approach LOS		C								A						

Copyright © 2023 University of Florida. All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

N/S STREET:	[illegible]	EW STREET:	[illegible]
FILENAME:			
COUNT DATE:	[illegible]	DAY:	[illegible]
REPORT DATE:	[illegible]	ANALYSIS YEAR:	[illegible]

	Northbound			Southbound			Eastbound			Westbound				
[illegible] Period	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	TOTAL	ONE HOUR SUM
[illegible]	42	42	0	0	32	0	7	0	37	0	0	0	120	701
[illegible]	39	44	0	0	69	7	19	0	33	0	0	0	191	631
[illegible]	32	72	0	0	93	9	32	0	42	0	0	0	281	722
[illegible]	31	75	0	0	84	11	37	0	56	0	0	0	333	775
[illegible]	5	48	0	0	73	9	5	0	29	0	0	0	171	684
[illegible]	31	53	0	0	54	7	7	0	32	0	0	0	170	
[illegible]	35	45	0	0	63	5	10	0	18	0	0	0	170	
[illegible]	31	51	0	0	91	7	7	0	21	0	0	0	181	

AM PEAK HOUR IS FROM:			7:15AM TO 8:15AM											
Volumes	42	211	0	0	198	16	44	0	139	0	0	0	651	
Heavy Factor	10	7.1	0	0	7.6	13	11	0	7.9	0	0	0	8.4	
Growth	84	234	0	0	303	17	59	0	145	0	0	0	847	
AVDUR	-	-	-	-	-	-	-	-	-	-	-	-	-	
Percentage	5%	5%	5%	2%	5%	2%	5%	5%	5%	5%	5%	5%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	84	234	0	0	303	17	59	0	145	0	0	0	847	

Other Projects														
%	6%	5%	5%	5%	5%	6%	6%	5%	6%	5%	5%	5%		
AVDUR	0	-	-	-	-	0	0.0*	-	0.0*	-	-	-		
Volume	1	0	0	0	0	1	1	0	0	0	0	0	0	
%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%		
AVDUR	-	0.0	-	-	0.0*	-	-	-	-	-	-	-		
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	
%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%		
AVDUR	-	0.0	-	-	0.0*	-	-	-	-	-	-	-		
Volume	0	1	0	0	1	0	0	0	0	0	0	0	0	
%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%		
AVDUR	-	0.0	-	-	0.0*	-	-	-	-	-	-	-		
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	
%	10%	10%	5%	5%	10%	5%	5%	5%	10%	5%	5%	5%		
AVDUR	0.0*	0.0*	-	-	0.0	-	-	-	0.0	-	-	-		
Volume	1	1	0	0	1	0	0	0	1	0	0	0	0	
%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%		
AVDUR	-	-	-	-	-	0.0	0.0*	-	-	-	-	-		
Volume	0	0	0	0	0	0	0	0	0

HCS Two-Way Stop-Control Report

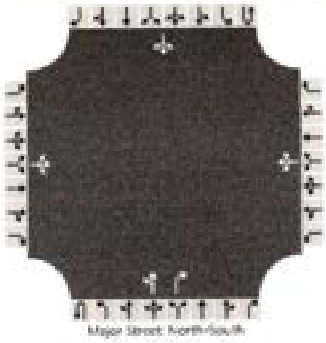
General Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	7/26/2023
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Background without Project

Site Information

Intersection	Graham & Jenkins
Jurisdiction	St. Lucie
East/West Street	Graham Road
North/South Street	Jenkins Ave
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	1	0	0	1	0
Configuration			LTR				LTR			LT		R			LTR	
Volume (veh/h)		77	3	148		32	5	33		77	370	0		17	444	65
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

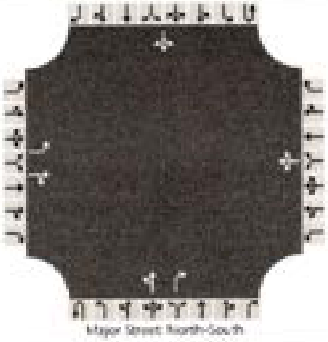
Flow Rate, v (veh/h)			268				82			91				20		
Capacity, c (veh/h)			241				140			973				1119		
v/c Ratio			1.11				0.59			0.09				0.02		
95% Queue Length, Q_{95} (veh)			11.9				3.0			0.3				0.1		
Control Delay (s/veh)			135.9				61.9			9.1	0.7			8.3	0.2	0.2
Level of Service (LOS)			F				F			A	A			A	A	A
Approach Delay (s/veh)	135.9				61.9				2.1				0.5			
Approach LOS	F				F				A				A			

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	James Kemp	Intersection	Graham & Jenkins
Agency/Co.	O'Rourke Engineering	Jurisdiction	St. Lucie
Date Performed	7/26/2023	East/West Street	Graham Road
Analysis Year	2026	North/South Street	Jenkins Ave
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Background without Project + Improvements		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		0	1	0	0	0	1	1	0	0	1	0
Configuration		L		TR			LTR			LT		R			LTR	
Volume (veh/h)		77	3	148		32	5	33		77	370	0		17	444	65
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

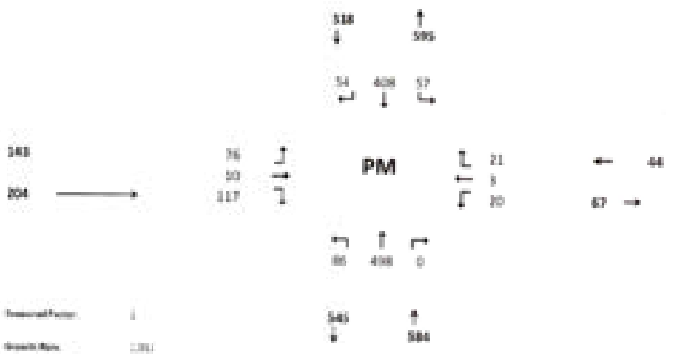
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		91		178			82			91				20		
Capacity, c (veh/h)		119		502			140			973				1119		
v/c Ratio		0.76		0.35			0.59			0.09				0.02		
95% Queue Length, Q_{95} (veh)		4.3		1.6			3.0			0.3				0.1		
Control Delay (s/veh)		96.3		16.0			61.9			9.1	0.7			8.3	0.2	0.2
Level of Service (LOS)		F		C			F			A	A			A	A	A
Approach Delay (s/veh)	43.2				61.9				2.1				0.5			
Approach LOS	E				F				A				A			

Copyright © 2023 University of Florida. All Rights Reserved.

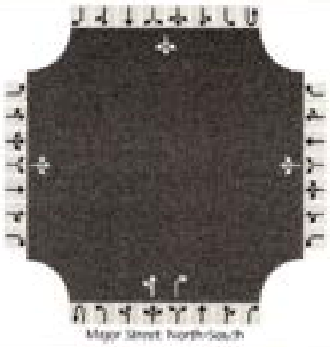
TURNING MOVEMENT VOLUME COUNTS



HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	James Kemp	Intersection	Graham & Jenkins
Agency/Co.	O'Rourke Engineering	Jurisdiction	St. Lucie
Date Performed	7/26/2023	East/West Street	Graham Road
Analysis Year	2026	North/South Street	Jenkins Ave
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Background without Project		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	1	0	0	1	0
Configuration			LTR				LTR			LT		R			LTR	
Volume (veh/h)		76	10	117		20	3	21		86	498	0		57	408	54
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)			239				52			101				67		
Capacity, c (veh/h)			162				99			1020				984		
v/c Ratio			1.48				0.52			0.10				0.07		
95% Queue Length, Q_{95} (veh)			15.5				2.3			0.3				0.2		
Control Delay (s/veh)			297.3				75.5			8.9	0.8			8.9	0.9	0.9
Level of Service (LOS)			F				F			A	A			A	A	A
Approach Delay (s/veh)		297.3				75.5				2.0				1.8		
Approach LOS		F				F				A				A		

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

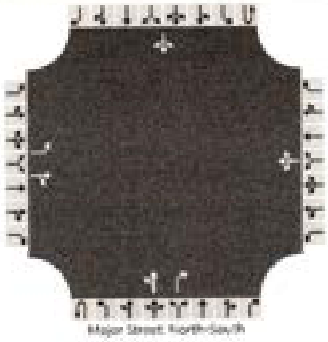
General Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	7/26/2023
Analysis Year	2026
Time Analyzed	PM Peak Hour
Intersection Orientation	North-South
Project Description	Background without Project + Improvements

Site Information

Intersection	Graham & Jenkins
Jurisdiction	St. Lucie
East/West Street	Graham Road
North/South Street	Jenkins Ave
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		0	1	0	0	0	1	1	0	0	1	0
Configuration		L		TR			LTR			LT		R			LTR	
Volume (veh/h)		76	10	117		20	3	21		86	498	0		57	408	54
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

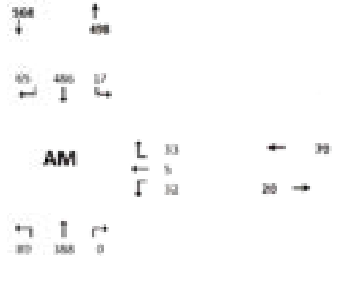
Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		89		149			52			101				67		
Capacity, c (veh/h)		80		419			99			1020				984		
v/c Ratio		1.12		0.36			0.52			0.10				0.07		
95% Queue Length, Q_{95} (veh)		6.4		1.6			2.3			0.3				0.2		
Control Delay (s/veh)		230.8		18.3			75.5			8.9	0.8			8.9	0.9	0.9
Level of Service (LOS)		F		C			F			A	A			A	A	A
Approach Delay (s/veh)		97.9				75.5				2.0				1.8		
Approach LOS		F				F				A				A		

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS



HCS Two-Way Stop-Control Report

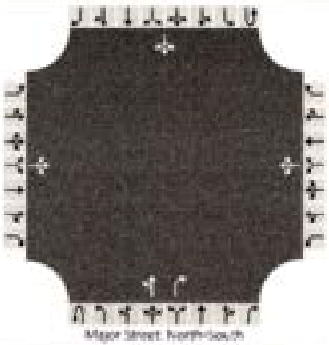
General Information

Analyst	James Kemp
Agency/Co.	O'Rourke Engineering
Date Performed	7/26/2023
Analysis Year	2026
Time Analyzed	AM Peak Hour
Intersection Orientation	North-South
Project Description	Future Total with Project

Site Information

Intersection	Graham & Jenkins
Jurisdiction	St. Lucie
East/West Street	Graham Road
North/South Street	Jenkins Ave
Peak Hour Factor	0.85
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	1	0	0	1	0
Configuration			LTR				LTR			LT		R			LTR	
Volume (veh/h)		77	3	158		32	5	33		89	388	0		17	486	65
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

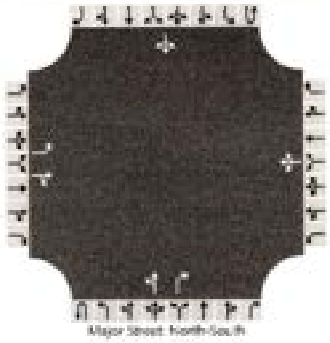
Flow Rate, v (veh/h)			280				82			105				20		
Capacity, c (veh/h)			211				110			933				1099		
v/c Ratio			1.32				0.75			0.11				0.02		
95% Queue Length, Q_{95} (veh)			15.4				4.1			0.4				0.1		
Control Delay (s/veh)			219.7				99.5			9.3	0.8			8.3	0.2	0.2
Level of Service (LOS)			F				F			A	A			A	A	A
Approach Delay (s/veh)		219.7				99.5				2.4				0.5		
Approach LOS		F				F				A				A		

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	James Kemp	Intersection	Graham & Jenkins
Agency/Co.	O'Rourke Engineering	Jurisdiction	St. Lucie
Date Performed	7/26/2023	East/West Street	Graham Road
Analysis Year	2026	North/South Street	Jenkins Ave
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Future Total with Project + Improvements		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		0	1	0	0	0	1	1	0	0	1	0
Configuration		L		TR			LTR			LT		R			LTR	
Volume (veh/h)		77	3	158		32	5	33		89	388	0		17	486	65
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		91		189			82			105				20		
Capacity, c (veh/h)		98		469			110			933				1099		
v/c Ratio		0.92		0.40			0.75			0.11				0.02		
95% Queue Length, Q_{95} (veh)		5.4		1.9			4.1			0.4				0.1		
Control Delay (s/veh)		148.3		17.8			99.5			9.3	0.8			8.3	0.2	0.2
Level of Service (LOS)		F		C			F			A	A			A	A	A
Approach Delay (s/veh)		60.0				99.5				2.4				0.5		
Approach LOS		F				F				A				A		

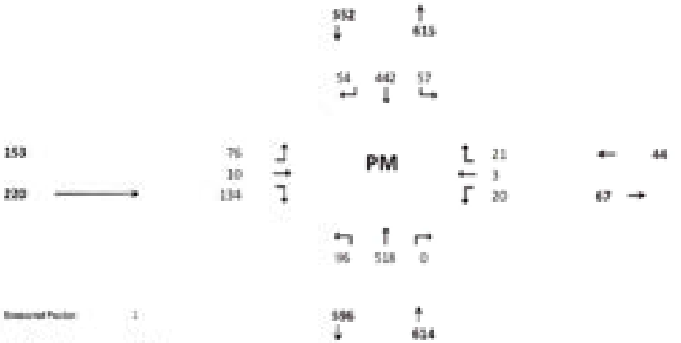
Copyright © 2023 University of Florida. All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

Jenkins & Graham
Future Total

	Northbound			Southbound			Eastbound			Westbound				
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	ONE HOUR PEAK
6:00-6:15	20	81	0	0	62	6	16	0	34	0	0	0	219	915
6:15-6:30	17	73	0	0	57	11	10	0	14	0	0	0	182	914
6:30-6:45	26	68	0	0	64	10	11	0	30	0	0	0	209	788
6:45-7:00	19	70	0	0	71	11	9	0	26	0	0	0	206	716
7:00-7:15	28	77	0	0	91	14	12	0	24	0	0	0	246	743
7:15-7:30	17	71	0	0	77	11	9	0	31	0	0	0	216	
7:30-7:45	23	77	0	0	82	9	14	0	21	0	0	0	226	
7:45-8:00	28	85	0	0	91	7	9	0	17	0	0	0	237	
PEAK HOUR VOLUMES			4:00PM TO 5:00PM											
volume	73	293	0	0	259	41	46	0	104	0	0	0	816	
Season Factor	73	293	0	0	259	41	46	0	104	0	0	0	816	
Grow th	73	308	0	0	272	43	48	0	109	0	0	0	951	
PCE	DUT	DUT	-	-	3%	-	-	-	51	-	-	-		
Percentage	17%	70%	0%	0%	85%	2%	0%	0%	17%	0%	0%	0%		
PROJECT	18	77	0	0	74	8	7	0	17	0	0	0	91	
Total	91	370	0	0	333	51	58	0	126	0	0	0	916	

Other Peopole																		
%	1%	0%	0%	0%	0%	0%	0%	0%	1%	0%	0%	0%						
PCE	0%	-	-	-	-	0%	DUT	-	DUT	-	-	-						
volume	0	0	0	0	0	0	0	0	0	0	0	0	1	Project Point			18	17
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PCE	-	0	-	-	DUT	-	-	-	-	-	-	-						
volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Mt Loring Dale			172	169
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PCE	-	0	-	-	DUT	-	-	-	-	-	-	-						
volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Joint Cover			173	133
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PCE	-	0	-	-	DUT	-	-	-	-	-	-	-						
volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Wilson Pkwy			17	16
%	12%	100%	0%	0%	94%	0%	0%	0%	82%	0%	0%	0%						
PCE	DUT	DUT	-	-	0%	-	-	-	0%	-	-	-						
volume	8	41	0	0	41	0	0	0	0	0	0	0	127	Willpointe Residential			41	44
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PCE	-	-	-	-	-	0%	DUT	-	-	-	-	-						
volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Kings Highway Commerce Park			111	111
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PCE	-	-	-	-	-	-	-	-	-	-	-	-						
volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Brent Crossroads			19	21
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PCE	-	-	-	-	-	0%	DUT	-	-	-	-	-						
volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Project Purpose			10	17
%	0%	100%	0%	0%	50%	0%	0%	0%	0%	0%	0%	0%						
PCE	-	0	-	-	DUT	-	-	-	-	-	-	-						
volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Destination Point			100	97
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
PCE	-	0	-	-	DUT	-	-	-	-	-	-	-						
volume	0	0	0	0	0	0	0	0	0	0	0	0	0	Summum			96	102
%	0%	13%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%						
PCE	-	0	-	-	DUT	-	-	-	-	-	-	-						
volume	0	1	0	0	12	0	0	0	0	0	0	0	13	Orange St Parcel A			16	16
%	1%	30%	0%	100%	0%	0%	0%	0%	0%	100%	0%	100%						
PCE	DUT	DUT	-	0	-	-	-	0%	-	DUT	DUT	DUT						
volume	0	22	0	17	0	0	0	0	0	20	0	15	129	Athletic Viewpoint			123	19
Subtotal	11	27.7	0	17	111	11	28	42	15	22	3	21	351					
Total	90	11.8	0	17	442	54	76	42	154	22	3	21	1,202					



Seasonal Factor 1

Growth Rate 1.05%
Years Growth +
PHF 0.85
Edge In Edge Out
ID 17

E-13

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	James Kemp	Intersection	Graham & Jenkins
Agency/Co.	O'Rourke Engineering	Jurisdiction	St. Lucie
Date Performed	7/26/2023	East/West Street	Graham Road
Analysis Year	2026	North/South Street	Jenkins Ave
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Future Total with Project		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	10	1	2	3	4U	4	5	6
Number of Lanes		0	1	0		0	1	0	0	0	1	1	0	0	1	0
Configuration			LTR				LTR			LT		R			LTR	
Volume (veh/h)		76	10	134		20	3	21		96	518	0		57	442	54
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized										No						
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

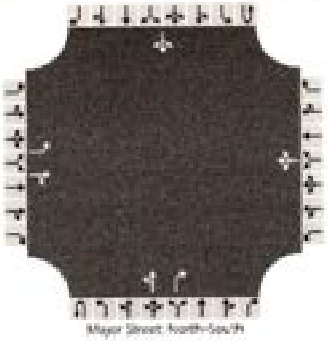
Flow Rate, v (veh/h)			259				52			113				67		
Capacity, c (veh/h)			147				78			986				964		
v/c Ratio			1.76				0.66			0.11				0.07		
95% Queue Length, Q_{95} (veh)			19.1				3.1			0.4				0.2		
Control Delay (s/veh)			420.7				115.2			9.1	0.9			9.0	0.9	0.9
Level of Service (LOS)			F				F			A	A			A	A	A
Approach Delay (s/veh)	420.7				115.2				2.2				1.8			
Approach LOS	F				F				A				A			

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	James Kemp	Intersection	Graham & Jenkins
Agency/Co.	O'Rourke Engineering	Jurisdiction	St. Lucie
Date Performed	7/26/2023	East/West Street	Graham Road
Analysis Year	2026	North/South Street	Jenkins Ave
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.85
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Future Total with Project + Improvements		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	1	0		0	1	0	0	0	1	1	0	0	1	0
Configuration		L		TR			LTR			LT		R			LTR	
Volume (veh/h)		76	10	134		20	3	21		96	518	0		57	442	54
Percent Heavy Vehicles (%)		3	3	3		3	3	3		3				3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized									No							
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1	6.5	6.2		7.1	6.5	6.2		4.1				4.1		
Critical Headway (sec)		7.13	6.53	6.23		7.13	6.53	6.23		4.13				4.13		
Base Follow-Up Headway (sec)		3.5	4.0	3.3		3.5	4.0	3.3		2.2				2.2		
Follow-Up Headway (sec)		3.53	4.03	3.33		3.53	4.03	3.33		2.23				2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		89		169			52			113				67		
Capacity, c (veh/h)		67		398			78			986				964		
v/c Ratio		1.33		0.43			0.66			0.11				0.07		
95% Queue Length, Q_{95} (veh)		7.4		2.1			3.1			0.4				0.2		
Control Delay (s/veh)		328.3		20.6			115.2			9.1	0.9			9.0	0.9	0.9
Level of Service (LOS)		F		C			F			A	A			A	A	A
Approach Delay (s/veh)	126.9				115.2				2.2				1.8			
Approach LOS	F				F				A				A			

Copyright © 2023 University of Florida. All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

N/S STREET: Jenkins Ave **E/W STREET:** Okeechobee Rd **CONTROL:** Signalized

FILENAME:

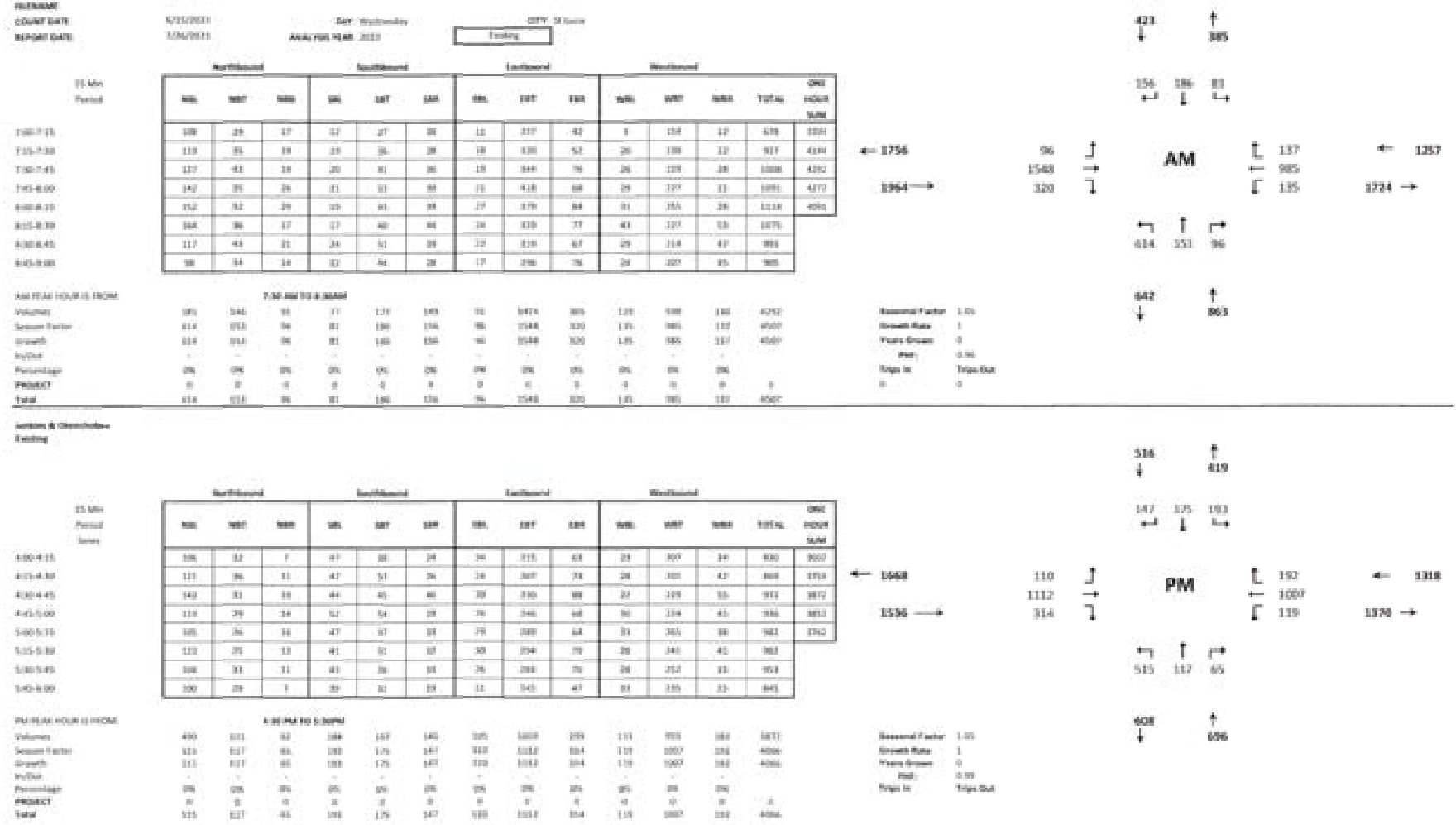
COUNT DATE: 5/31/2023 **DAY:** Wednesday **CITY:** Al Sante

REPORT DATE: 7/06/2023 **ANALYSIS YEAR:** 2023 Existing

15 Min Period	Northbound NBL	Northbound NBT	Northbound NBR	Southbound SBL	Southbound SBT	Southbound SBR	Eastbound EBL	Eastbound EBT	Eastbound EBR	Westbound WBL	Westbound WBT	Westbound WBR	TOTAL	ONE HOUR SUM
7:00-7:15	108	29	17	12	27	10	11	217	42	9	154	12	639	1334
7:15-7:30	113	35	19	23	36	28	18	220	52	26	159	12	917	4134
7:30-7:45	127	43	19	20	41	36	19	244	76	26	129	28	1008	4291
7:45-8:00	142	35	26	21	51	38	21	418	68	29	127	11	1091	4277
8:00-8:15	152	52	29	19	41	33	27	379	84	31	255	28	1118	4091
8:15-8:30	164	36	17	17	40	44	24	333	77	41	127	53	1075	
8:30-8:45	117	43	21	24	51	33	22	319	67	29	214	47	991	
8:45-9:00	98	54	14	22	54	28	17	296	76	24	207	85	965	
AM PEAK HOUR IS FROM:			7:30 AM TO 8:30AM											
Volumes	581	146	91	77	177	143	91	1473	301	135	598	140	4252	
Season Factor	614	153	96	81	186	150	96	1548	320	135	985	137	4507	
Growth	614	153	96	81	186	150	96	1548	320	135	985	137	4507	
In/Out	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	614	153	96	81	186	150	96	1548	320	135	985	137	4507	

Jenkins & Okeechobee
Existing

15 Min Period	Northbound NBL	Northbound NBT	Northbound NBR	Southbound SBL	Southbound SBT	Southbound SBR	Eastbound EBL	Eastbound EBT	Eastbound EBR	Westbound WBL	Westbound WBT	Westbound WBR	TOTAL	ONE HOUR SUM
4:00-4:15	106	32	7	47	38	24	34	315	63	23	307	34	830	3602
4:15-4:30	121	36	11	47	51	36	24	307	73	28	301	47	869	3759
4:30-4:45	142	31	13	44	45	46	39	336	88	22	329	55	973	3872
4:45-5:00	113	29	14	52	54	33	26	346	68	30	334	43	936	3811
5:00-5:15	105	26	16	47	37	33	29	289	64	31	365	38	983	3762
5:15-5:30	123	25	13	41	31	37	30	294	79	28	341	41	983	
5:30-5:45	108	33	11	41	36	33	26	288	70	28	252	33	953	
5:45-6:00	100	29	7	39	32	29	11	243	47	31	155	23	845	
PM PEAK HOUR IS FROM:			4:30 PM TO 5:30PM											
Volumes	490	121	52	184	167	140	105	1269	259	113	959	183	3872	
Season Factor	515	127	55	193	175	147	110	1332	314	119	1007	192	4086	
Growth	515	127	55	193	175	147	110	1332	314	119	1007	192	4086	
In/Out	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	515	127	55	193	175	147	110	1332	314	119	1007	192	4086	



Seasonal Factor: 1.05
Growth Rate: 1
Years Grown: 0
PHF: 0.95
Trips In / Trips Out: 0 / 0

Seasonal Factor: 1.05
Growth Rate: 1
Years Grown: 0
PHF: 0.95
Trips In / Trips Out:

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

Districtwide Signal Retiming-St. Lucie County

FM 230017-3-32-01

Local Controller Settings

Okeechobee Road and Jenkins Road	Prepared By: ESJ	Date: 6/16/2008	Location: FP 4-05

FDOT DISTRICT 4 - CRITERIA

MIN GREEN (Through) = INITIAL + PASSAGE = 15 sec (may be reduced to 10 sec for low volume movements)

MIN GREEN (Left Turn) = INITIAL + PASSAGE = 10 sec

WALK (sec)	Coord Phase	Side Street	Ped Walk Speed (fps)
City of Fort Pierce	7	8	4.0 / 3.5
City of Port St. Lucie	7	7	3.5
St. Lucie County	7	7	3.5

Vehicle clearance intervals will not be programmed to be shorter than existing values.

Speed (mph)	Through Movement Yellow (sec)	Permissive Left Yellow (sec)	Protected Left Yellow (sec)	All Red (sec)
15	3.0	3.5	3.5	1.0
20	3.3	3.5	3.5	1.0
25	4.0	4.0	4.0	1.0
30	4.0	4.0	4.0	1.0
35	4.3	4.3	4.3	1.0
40	4.7	4.7	4.7	1.0
45	5.0	5.0	5.0	2.0
50	5.4	5.4	5.4	2.0
55	5.8	5.8	5.8	2.0
Ped Clearance	Ped Clear = D / Vp where: D = Ped Exposure Distance from Curb to Curb (ft) Vp = Pedestrian crossing speed (fps)			

CALCULATIONS

North-South Roadway	Jenkins Road	East-West Roadway	Okeechobee Road

Walking Speed (fps)	Input	Yellow			Red
3.5	Approach	Through	Permissive	Protected	All
Walking Direction	Speed (mph)	Movement (sec)	Left (sec)	Left (sec)	Red (sec)
Northbound	45	4.3	4.3	4.3	1.0
Southbound	45	4.3	4.3	4.3	1.0
Eastbound	45	4.3	4.3	4.3	1.0
Westbound	45	4.3	4.3	4.3	1.0

Pedestrian Clearance Interval

Direction/ Crossing	Northbound East Approach	Southbound West Approach	Eastbound South Approach	Westbound North Approach
Distance (ft)	123	118	128	78
Ped Clearance (sec)	35	34	37	22

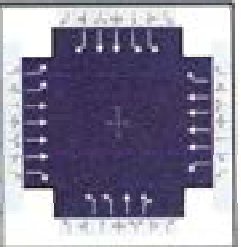
PROPOSED LOCAL CONTROLLER SETTINGS

MOVEMENT	1	2	3	4	5	6	7	8
DIRECTION	EBL	WB	SBL	NB	WBL	EB	NBL	SB
LEFT TURN PROT	Protected	Permissive	Protected	Permissive	Protected	Permissive	Protected	Permissive
INITIAL	7.0	12.0	6.0	11.0	7.0	12.0	6.0	11.0
PASSAGE	3.0	3.0	4.0	4.0	3.0	3.0	4.0	4.0
YELLOW	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3
RED CLEARANCE	2.0	2.0	2.5	2.5	2.0	2.0	2.5	2.5
MAX GREEN 1	20	60	30	40	20	60	25	40
MAX GREEN 2	25	60	30	45	25	60	25	45
WALK	0	7	0	5	0	7	0	5
PED CLEARANCE	0	37	0	35	0	37	0	34
MIN PHASE TIME	14	66	13	53	14	66	13	62

Intersection Timings: FP4 Implemented

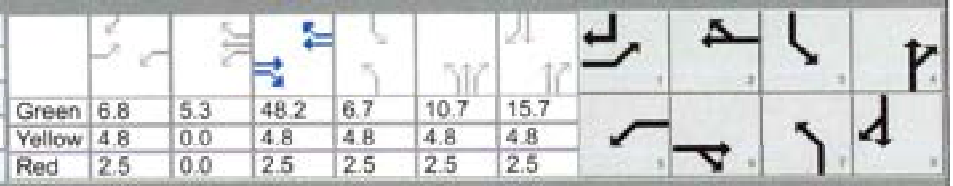
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 27, 2023	Area Type	Other
Jurisdiction	St. Lucie	Time Period	AM Peak Hour	PHF	0.96
Urban Street	Okeechobee Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee & Jenkins - Existing - AM.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	96	1548	320	135	985	137	614	153	96	81	186	156

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	6.8	5.3	48.2	6.7	10.7	15.7	
Yellow	4.8	0.0	4.8	4.8	4.8	4.8	
Red	2.5	0.0	2.5	2.5	2.5	2.5	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	14.1	55.5	19.4	60.8	32.0	41.1	14.0	23.0
Change Period, (Y+R c), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (MAH), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (g s), s	5.6		11.9		25.4	9.9	5.0	14.1
Green Extension Time (g e), s	0.3	0.0	0.3	0.0	0.0	2.3	0.2	1.7
Phase Call Probability	0.97		0.99		1.00	1.00	0.95	1.00
Max Out Probability	0.00		0.01		1.00	0.00	0.00	0.14

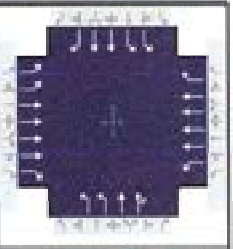
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	100	1613	333	141	1026	143	640	134	126	84	194	163
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1725	1610	1810	1725	1610	1757	1900	1662	1757	1809	1610
Queue Service Time (g s), s	3.6	24.9	21.3	9.9	13.4	7.4	23.4	7.3	7.9	3.0	6.5	12.1
Cycle Queue Clearance Time (g c), s	3.6	24.9	21.3	9.9	13.4	7.4	23.4	7.3	7.9	3.0	6.5	12.1
Green Ratio (g/C)	0.05	0.37	0.37	0.09	0.41	0.41	0.19	0.26	0.26	0.05	0.12	0.17
Capacity (c), veh/h	184	2561	598	169	2842	663	668	494	432	180	438	279
Volume-to-Capacity Ratio (X)	0.543	0.630	0.558	0.834	0.361	0.215	0.958	0.271	0.291	0.468	0.442	0.582
Back of Queue (Q), ft/ln (95 th percentile)	73.8	388.7	337.5	214	230	130.5	452.5	152	143.7	61.9	131.6	213.2
Back of Queue (Q), veh/ln (95 th percentile)	3.0	15.5	13.5	8.6	9.2	5.2	18.1	6.1	5.7	2.5	5.3	8.5
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d 1), s/veh	60.1	33.5	32.4	58.0	26.4	24.7	52.1	38.3	38.5	59.9	53.1	49.4
Incremental Delay (d 2), s/veh	2.5	1.2	3.7	10.2	0.4	0.7	24.8	0.3	0.4	1.9	0.7	1.9
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	62.6	34.7	36.2	68.1	26.8	25.4	76.9	38.6	38.9	61.8	53.8	51.3
Level of Service (LOS)	E	C	D	E	C	C	E	D	D	E	D	D
Approach Delay, s/veh / LOS	36.3	D		31.1	C		65.9	E		54.4	D	
Intersection Delay, s/veh / LOS	42.2						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.44	B	2.58	C	2.97	C	3.09	C
Bicycle LOS Score / LOS	1.33	A	1.03	A	1.23	A	0.85	A

Copyright © 2023 University of Florida, All Rights Reserved.

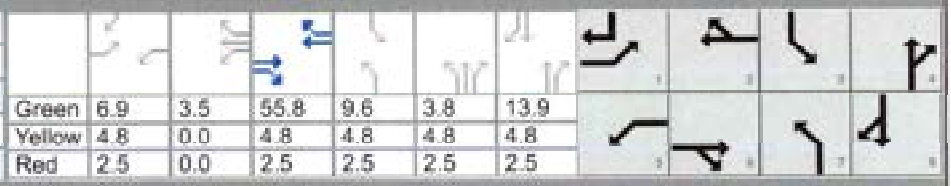
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 27, 2023	Area Type	Other
Jurisdiction	St. Lucie	Time Period	PM Peak Hour	PHF	0.99
Urban Street	Okeechobee Road	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee & Jenkins - Existing - PM.xus		
Project Description	Existing				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	110	1112	314	119	1007	192	515	117	65	193	175	147

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	6.9	3.5		55.8	9.6	3.8	13.9					
Yellow	4.8	0.0		4.8	4.8	4.8	4.8					
Red	2.5	0.0		2.5	2.5	2.5	2.5					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	14.2	63.1	17.7	66.6	28.0	32.4	16.9	21.2
Change Period, (Y+R c), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (MAH), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (g s), s	6.0		10.5		21.0	7.9	9.1	13.1
Green Extension Time (g e), s	0.3	0.0	0.0	0.0	0.0	1.8	0.5	0.9
Phase Call Probability	0.98		0.99		1.00	1.00	1.00	1.00
Max Out Probability	0.00		1.00		1.00	0.00	0.00	0.80

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	111	1123	317	120	1017	194	520	94	90	195	177	148
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1725	1610	1810	1725	1610	1757	1900	1679	1757	1809	1610
Queue Service Time (g s), s	4.0	14.4	18.2	8.5	12.2	9.7	19.0	5.5	5.9	7.1	6.0	11.1
Cycle Queue Clearance Time (g c), s	4.0	14.4	18.2	8.5	12.2	9.7	19.0	5.5	5.9	7.1	6.0	11.1
Green Ratio (g/C)	0.05	0.43	0.43	0.08	0.46	0.46	0.16	0.19	0.19	0.07	0.11	0.16
Capacity (c), veh/h	186	2960	691	145	3147	734	560	366	324	259	388	258
Volume-to-Capacity Ratio (X)	0.598	0.380	0.459	0.830	0.323	0.264	0.930	0.256	0.278	0.753	0.455	0.576
Back of Queue (Q), ft/ln (95 th percentile)	82.7	243.5	288.6	214.2	211.7	167.6	376.5	115.5	111.3	146	122	200.2
Back of Queue (Q), veh/ln (95 th percentile)	3.3	9.7	11.5	8.6	8.5	6.7	15.1	4.6	4.5	5.8	4.9	8.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d 1), s/veh	60.2	25.3	26.4	58.9	22.6	21.9	53.9	44.6	44.7	59.0	54.5	50.5
Incremental Delay (d 2), s/veh	3.1	0.4	2.2	27.5	0.3	0.9	22.2	0.4	0.5	4.4	0.8	2.0
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	63.3	25.7	28.6	86.4	22.8	22.7	76.2	44.9	45.2	63.4	55.3	52.5
Level of Service (LOS)	E	C	C	F	C	C	E	D	D	E	E	D
Approach Delay, s/veh / LOS	29.0	C		28.6	C		68.0	E		57.6	E	
Intersection Delay, s/veh / LOS	39.2						D					

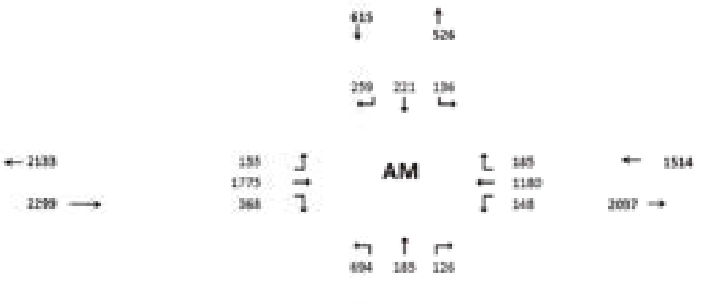
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.57	C	2.97	C	3.09	C
Bicycle LOS Score / LOS	1.13	A	1.04	A	1.07	A	0.92	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

N/S STREET: [illegible]
E/W STREET: [illegible]
CONTROL: Signalized
PUBLISHED:
COUNT DATE: 5/21/2019
DAY: Wednesday
CITY: Bryan
REPORT DATE: 5/24/2019
ANALYSIS YEAR: 2019
Background

15 Min Period	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
7:00-7:15	198	10	17	13	37	10	11	337	41	9	194	11	978	1734
7:15-7:30	119	10	19	12	39	18	18	310	31	21	259	11	817	4144
7:30-7:45	127	41	19	17	41	10	13	344	79	21	224	19	1018	4034
7:45-8:00	140	19	20	11	30	11	11	418	68	11	187	11	1361	4077
8:00-8:15	151	11	18	14	40	16	17	370	86	11	259	19	1218	4134
8:15-8:30	144	16	17	17	30	44	24	311	77	41	127	11	1373	
8:30-8:45	119	41	21	14	31	11	21	314	47	21	214	47	997	
8:45-9:00	98	19	14	11	44	18	17	204	71	14	217	41	919	



AM PEAK HOUR (6 MEDS)
7:00 AM TO 8:00AM

Volumes	595	140	61	77	177	146	61	1454	115	111	838	131	4061
Season Factor	1.14	1.11	1.1	1.1	1.09	1.09	1.1	1.048	1.11	1.11	1.08	1.11	4057
Growth	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.063	1.03	1.03	1.033	1.03	4063
HPDU	-	-	-	-	-	-	-	-	-	-	-	-	
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
PROJECT	1	1	1	1	1	1	1	1	1	1	1	1	
Total	613	158	68	83	201	163	68	1561	132	141	1,733	145	4063

Seasonal Factor: 1.10
Growth Rate: 1.03
Future Growth: 3
PHF: 0.89
Trips In: 0
Trips Out: 0

Other Projects														Project Name	Trips In	Trips Out
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
HPDU	-	-	-	-	-	-	-	DUT	-	-	N	-		Wingspan Drive	64	147
Volume	1	0	0	0	0	0	0	11	0	0	1	0	13			
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
HPDU	-	-	-	-	-	-	-	DUT	-	-	N	-		Sunnyland		
Volume	1	0	0	0	0	0	0	11	0	0	4	0	16		31	111
%	0%	0%	0%	0%	0%	0%	0%	0.0%	0%	0%	0.0%	0%				
HPDU	-	-	-	-	-	-	-	DUT	-	-	N	-		Project Hum		
Volume	1	0	0	0	0	0	0	2	0	1	0	0	4		14	17
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
HPDU	-	-	-	-	-	-	-	DUT	-	-	N	-		444		
Volume	1	0	0	0	0	0	0	9	0	0	11	0	20		103	117
%	0%	0.0%	0%	0.0%	0.0%	0.0%	0.0%	0%	0%	0%	0%	0.0%				
HPDU	-	N	-	DUT	DUT	DUT	N	-	-	-	-	N		Whispering Oaks		
Volume	1	0	0	17	17	33	0	0	0	0	0	0	67		44	107
%	0%	0%	0%	0%	0%	0%	0%	0.0%	0%	0%	0.0%	0%				
HPDU	-	-	-	-	-	-	-	N	-	-	DUT	-		Bent Creek		
Volume	1	0	0	0	0	0	0	4	0	1	28	0	33		41	139
%	0%	0%	0%	0%	0%	0%	0%	0.0%	0%	0%	0.0%	0%				
HPDU	N	-	-	-	-	N	DUT	DUT	DUT	-	N	-		Crescent		
Volume	7	0	0	0	0	7	21	125	21	1	43	0	225		143	411
%	0%	0.0%	0%	0.0%	0.0%	0.0%	0.0%	0%	0%	0%	0%	0.0%				
HPDU	-	N	-	DUT	DUT	DUT	N	-	-	-	-	N		Whispering Oaks		
Volume	1	0	0	11	0	11	11	0	0	0	0	11	44		31	24
%	0%	0%	0%	0%	0%	0%	0%	0.0%	0%	0%	0.0%	0%				
HPDU	-	-	-	-	-	-	-	DUT	-	-	N	-		Kings Highway Commerce Park		
Volume	0	0	0	0	0	0	0	9	0	0	31	0	40		361	81
%	0%	0%	0%	0.0%	0%	0.0%	0.0%	0%	0%	0%	0%	0.0%				
HPDU	-	-	-	DUT	-	DUT	N	-	-	-	-	N		Jerome Blagsom / Hinkle		
Volume	1	0	0	17	0	41	11	0	0	0	1	0	71		24	171
%	0%	0%	0%	0%	0%	0%	0%	0.0%	0%	0%	0.0%	0%				
HPDU	-	-	-	-	-	-	-	DUT	-	-	N	-		Project Hurricane		
Volume	1	0	0	0	0	0	0	0	0	1	14	0	16		39	12
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
HPDU	-	N	-	DUT	DUT	DUT	N	-	-	-	-	N		Combination Hum		
Volume	1	1	0	0	0	0	1	0	0	1	1	0	11		11	44
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
HPDU	-	-	-	-	-	-	-	DUT	-	-	N	-		Bonanza		
Volume	1	0	0	0	0	0	0	0	0	1	11	0	11		107	11
%	0%	0%	0%	0.0%	0%	0%	0%	0%	0%	0%	0%	0.0%				
HPDU	-	N	-	DUT	DUT	-	-	-	-	-	-	N		Orange-ish Fence (L1-L4)		
Volume	1	4	1	4	1	0	0	0	0	1	1	11	31		214	44
%	0.0%	0.0%	0.0%	0%	0.0%	0%	0%	0%	0.0%	0.0%	0%	0%				
HPDU	DUT	DUT	DUT	-	N	-	-	-	N	N	-	-		Riviera Treasure Coast Gas / Mart		
Volume	14	14	11	0	4	0	0	0	17	1	0	0	111		41	114

Subtotal	41	17	17	72	24	47	47	180	38	4	99	43	784
Total	654	185	124	155	221	246	151	1751	158	148	1,188	188	4811

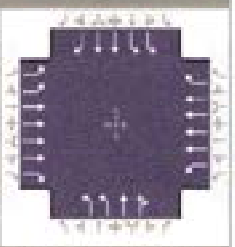
E-19

US - TMC - Jerome - Dixie/Hinkle (SB)

6/13/2019

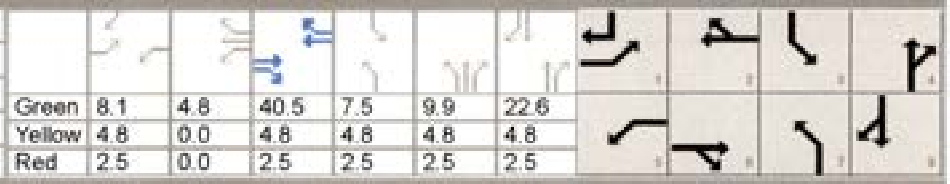
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 27, 2023	Area Type	Other
Jurisdiction	St. Lucie	Time Period	AM Peak Hour	PHF	0.96
Urban Street	Okeechobee Road	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee Jenkins - Background - AM.xus		
Project Description	Background without Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	155	1775	368	148	1180	185	694	185	126	136	221	259

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	8.1	4.8	40.5	7.5	9.9	22.6	
Yellow	4.8	0.0	4.8	4.8	4.8	4.8	
Red	2.5	0.0	2.5	2.5	2.5	2.5	

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	15.4	47.8	20.2	52.6	32.0	47.1	14.8	29.9
Change Period, ($Y+R_c$), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (g_s), s	7.9		12.9		26.7	11.4	7.1	22.0
Green Extension Time (g_e), s	0.3	0.0	0.1	0.0	0.0	3.2	0.4	0.7
Phase Call Probability	1.00		1.00		1.00	1.00	0.99	1.00
Max Out Probability	0.08		1.00		1.00	0.00	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	161	1849	383	154	1229	193	723	169	155	142	230	270
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1725	1610	1810	1725	1610	1757	1900	1649	1757	1809	1610
Queue Service Time (g_s), s	5.9	32.7	28.0	10.9	18.3	11.5	24.7	8.8	9.4	5.1	7.3	20.0
Cycle Queue Clearance Time (g_c), s	5.9	32.7	28.0	10.9	18.3	11.5	24.7	8.8	9.4	5.1	7.3	20.0
Green Ratio (g/C)	0.06	0.31	0.31	0.10	0.35	0.35	0.19	0.31	0.31	0.06	0.17	0.24
Capacity (c), veh/h	220	2152	502	180	2407	562	668	582	505	203	630	381
Volume-to-Capacity Ratio (X)	0.735	0.859	0.763	0.857	0.511	0.343	1.083	0.290	0.308	0.696	0.366	0.708
Back of Queue (Q), ft/ln (95 th percentile)	121.7	507.7	447.5	256.2	302.7	203.8	590.2	180.6	168.1	106.5	146.7	327.6
Back of Queue (Q), veh/ln (95 th percentile)	4.9	20.3	17.9	10.2	12.1	8.2	23.6	7.2	6.7	4.3	5.9	13.1
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	59.9	42.0	40.4	57.6	33.5	31.3	52.7	34.3	34.5	60.1	47.4	45.5
Incremental Delay (d_2), s/veh	4.7	4.7	10.5	25.9	0.8	1.7	59.4	0.3	0.3	4.3	0.4	5.6
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.6	46.8	50.9	83.5	34.3	33.0	112.0	34.6	34.9	64.4	47.7	51.1
Level of Service (LOS)	E	D	D	F	C	C	F	C	C	E	D	D
Approach Delay, s/veh / LOS	48.7	D		39.0	D		88.1	F		52.8	D	
Intersection Delay, s/veh / LOS	53.7						D					

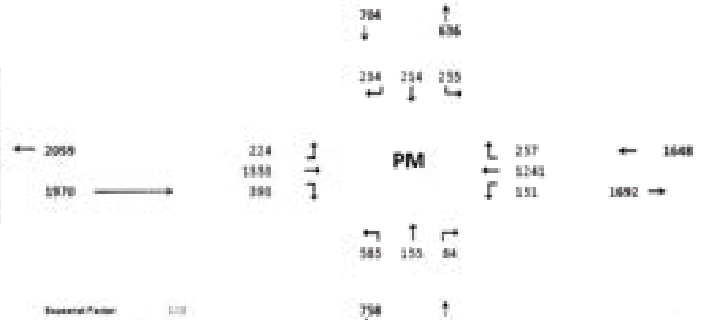
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.58	C	2.96	C	3.09	C
Bicycle LOS Score / LOS	1.48	A	1.14	A	1.35	A	1.02	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

Jamboree & Chapman/Main
Background

15-Min Period (ending)	Northbound NBL	Northbound NBT	Northbound NBR	Southbound SBL	Southbound SBT	Southbound SBR	Eastbound EBL	Eastbound EBT	Eastbound EBR	Westbound WBL	Westbound WBT	Westbound WBR	TOTAL	ONE HOUR SUM
4:00-4:15	134	32	7	47	18	24	34	223	43	23	227	34	861	3617
4:15-4:30	111	30	11	47	33	29	28	217	73	28	201	42	851	3759
4:30-4:45	148	31	13	44	43	44	23	211	88	32	233	33	971	3874
4:45-5:00	114	20	14	51	34	33	31	249	68	31	224	45	934	3855
5:00-5:15	129	29	14	47	37	33	26	228	56	33	203	28	861	3742
5:15-5:30	123	35	23	41	31	33	32	244	79	28	242	43	954	
5:30-5:45	134	33	13	43	36	33	23	234	70	28	253	23	971	
5:45-6:00	120	29	7	34	31	23	31	247	47	33	233	23	887	



Peak Hour 4:00 PM TO 5:00PM														
Volumes	491	111	45	184	137	141	110	1156	286	113	959	183	3871	
Season Factor	113	127	93	143	179	147	110	1112	114	113	1107	161	4099	
Growth to 2022	113	127	93	143	179	147	110	1112	114	113	1107	161	4099	
Growth to 2035 (2035)	131	147	97	144	180	151	114	1148	115	113	1107	168	4256	
+/Out	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%		
PROJECT	1	1	1	1	1	1	1	1	1	1	1	1	1	
Total	131	147	97	144	180	151	114	1148	115	113	1107	168	4256	

Seasonal Factor 1.10
Growth rate to 2022 1.039
Years Known to 2035 4
Growth Rate 1.15
Years Grown 3
PHF 1.00
Trips In **Trips Out**

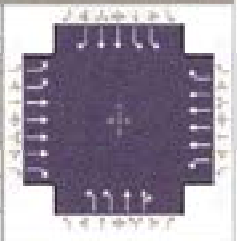
Other Projects

%	1%	1%	1%	1%	1%	1%	1%	5%	1%	1%	1%	1.1%		Prospective Growth	215	137
+/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-				
Volume	1	1	1	1	1	1	1	7	1	1	11	1	31			
%	1%	1%	1%	1%	1%	1%	1%	5%	1%	1%	1%	1%		Summerhill	251	164
+/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-				
Volume	1	1	1	1	1	1	1	8	1	1	11	1	31			
%	1%	1%	1%	1%	1%	1%	1%	1.1%	1%	1%	1.1%	1%		Project Hunt	18	17
+/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-				
Volume	1	1	1	1	1	1	1	9	1	1	1	1	9			
%	1%	1%	1%	1%	1%	1%	1%	5%	1%	1%	1%	1%		MD	115	78
+/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-				
Volume	1	1	1	1	1	1	1	39	1	1	8	1	33			
%	1%	1%	1%	1.1%	1.1%	2.2%	2.2%	1%	1%	1%	1%	1.1%		Whispering Oaks	178	44
+/Out	-	IN	-	OUT	OUT	OUT	IN	-	-	-	-	IN				
Volume	1	17	1	6	6	22	18	1	1	1	1	17	111			
%	1%	1%	1%	1%	1%	1%	1%	1.1%	1%	1%	1.1%	1%		Bent Creek	119	111
+/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-				
Volume	1	1	1	1	1	1	1	11	1	1	11	1	44			
%	1%	1%	1%	1%	1%	1%	1%	11%	1%	1%	1.1%	1%		Creekside	439	129
+/Out	IN	-	-	-	-	IN	OUT	OUT	OUT	-	IN	-				
Volume	11	1	1	1	1	11	11	77	11	1	118	1	171			
%	1%	1%	1%	4.4%	1.1%	4.4%	4.4%	1%	1%	1%	1%	4.4%		Mendocino Suites	11	91
+/Out	-	IN	-	OUT	OUT	OUT	IN	-	-	-	-	IN				
Volume	1	5	1	11	3	11	11	1	1	1	1	11	58			
%	1%	1%	1%	1%	1%	1%	1%	1.1%	1%	1%	1.1%	1%		Kings Highway Commerce Park	215	115
+/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-				
Volume	1	1	1	1	1	1	1	17	1	1	11	1	41			
%	1%	1%	1%	1.1%	1%	2.2%	2.2%	1%	1%	1%	1%	1.1%		Jericho Assessment Facility	130	137
+/Out	-	-	-	OUT	-	OUT	IN	-	-	-	-	IN				
Volume	1	1	1	11	1	21	66	1	1	1	1	18	88			
%	1%	1%	1%	1%	1%	1%	1%	4.5%	1%	1%	4.5%	1%		Project Hunt Lane	21	17
+/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-				
Volume	1	1	1	1	1	1	1	13	1	1	1	1	24			
%	1%	2%	1%	1%	2%	2%	2%	1%	1%	1%	1%	1%		Celebration Point	110	17
+/Out	-	IN	-	OUT	OUT	OUT	IN	-	-	-	-	IN				
Volume	1	3	1	1	3	1	3	1	1	1	1	1	23			
%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%		Somersville	71	136
+/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-				
Volume	1	1	1	1	1	1	1	11	1	1	11	1	31			
%	1%	2%	1%	1.1%	2%	2%	2%	1%	1%	1%	1%	1.1%		Orange Lift Fence & C.B.S.	88	129
+/Out	-	IN	-	OUT	OUT	-	-	-	-	-	-	IN				
Volume	1	3	1	11	3	1	1	1	1	1	1	1	31			
%	4.3%	1%	2.2%	1%	1.1%	1%	1%	1%	4.3%	2.2%	1%	1%		Blue at Treasure Coast Elem / Area	245	81
+/Out	OUT	OUT	OUT	-	IN	-	-	-	IN	IN	-	-				
Volume	11	1	11	1	11	1	1	1	11	11	1	1	111			

Subtotal	11	11	11	11	11	11	111	111	11	11	111	11	111
Total	111	111	11	111	111	111	111	1111	111	111	1111	111	1111

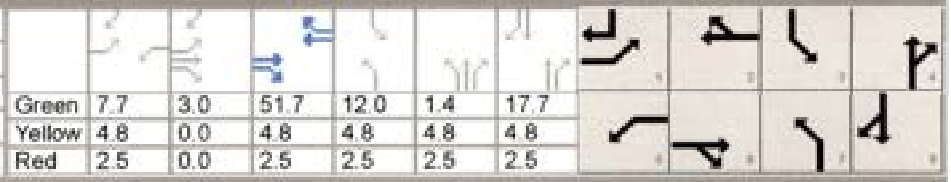
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 27, 2023	Area Type	Other
Jurisdiction	St. Lucie	Time Period	PM Peak Hour	PHF	0.99
Urban Street	Okeechobee Road	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee Jenkins - Background - PM.xus		
Project Description	Background without Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	224	1353	393	151	1241	257	585	155	84	255	214	234

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



Green	7.7	3.0		51.7	12.0	1.4	17.7					
Yellow	4.8	0.0		4.8	4.8	4.8	4.8					
Red	2.5	0.0		2.5	2.5	2.5	2.5					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	18.0	62.0	15.0	59.0	28.0	33.7	19.3	25.0
Change Period, (*Y+R_c*), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (*MAH*), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (*g_s*), s	10.2		9.7		22.7	9.8	11.3	19.5
Green Extension Time (*g_e*), s	0.5	0.0	0.0	0.0	0.0	2.4	0.7	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.08		1.00		1.00	0.02	0.02	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	226	1367	397	153	1254	260	591	124	117	258	216	236
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1757	1725	1610	1810	1725	1610	1757	1900	1681	1757	1809	1610
Queue Service Time (*g_s*), s	8.2	18.6	24.6	7.7	17.4	15.0	20.7	7.2	7.8	9.3	7.1	17.5
Cycle Queue Clearance Time (*g_c*), s	8.2	18.6	24.6	7.7	17.4	15.0	20.7	7.2	7.8	9.3	7.1	17.5
Green Ratio (*g/C*)	0.08	0.42	0.42	0.06	0.40	0.40	0.16	0.20	0.20	0.09	0.14	0.22
Capacity (*c*), veh/h	289	2904	678	107	2745	641	560	386	342	324	493	352
Volume-to-Capacity Ratio (*X*)	0.783	0.471	0.586	1.423	0.457	0.405	1.056	0.321	0.344	0.795	0.439	0.672
Back of Queue (*Q*), ft/ln (95 th percentile)	169.5	299.9	374.5	434.7	285.7	249.2	488	152.8	145.8	191.3	144.7	293.7
Back of Queue (*Q*), veh/ln (95 th percentile)	6.8	12.0	15.0	17.4	11.4	10.0	19.5	6.1	5.8	7.7	5.8	11.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (*d₁*), s/veh	58.5	27.2	28.9	61.2	28.8	28.1	54.7	44.2	44.4	57.8	51.6	46.5
Incremental Delay (*d₂*), s/veh	4.6	0.5	3.7	236.0	0.5	1.9	53.7	0.5	0.6	4.4	0.6	4.9
Initial Queue Delay (*d₃*), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	63.2	27.7	32.6	297.1	29.4	30.0	108.3	44.6	45.0	62.2	52.2	51.5
Level of Service (LOS)	E	C	C	F	C	C	F	D	D	E	D	D
Approach Delay, s/veh / LOS	32.7	C		54.0	D		89.9	F		55.6	E	
Intersection Delay, s/veh / LOS	51.8						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.58	C	2.97	C	3.09	C
Bicycle LOS Score / LOS	1.31	A	1.17	A	1.17	A	1.07	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

	Northbound			Southbound			Eastbound			Westbound						
15 MIN Period	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	PEAK HOUR VOLUMES
7:00-7:15	116	29	57	14	37	11	11	137	41	1	134	12	635	3554
7:15-7:30	104	31	54	19	34	18	18	121	52	11	159	13	627	4144
7:30-7:45	117	41	54	20	41	16	10	144	75	15	224	18	1025	4265
7:45-8:00	142	31	69	15	31	13	11	418	88	19	227	11	1091	4277
8:00-8:15	151	31	69	19	41	16	17	179	86	11	201	28	1118	4161
8:15-8:30	164	34	71	17	41	44	14	153	77	44	167	31	1133	
8:30-8:45	117	41	32	24	31	19	11	114	87	19	214	47	881	
8:45-9:00	98	34	24	12	44	18	17	108	75	24	217	33	855	

AM PEAK HOUR FACTOR			7:30 AM TO 8:30AM													
Volume	581	146	41	77	157	146	61	1404	619	129	808	130	4261			
Peak Hour Factor	414	731	64	81	889	729	64	1948	921	729	880	729	4847			
Growth	813	730	68	83	941	765	68	1969	863	540	1113	140	8441			
HV(%)	-	7%	-	22.7	22.7	22.7	7%	-	-	-	-	7%				
Percentage	0%	0%	0%	1.0%	0%	0%	0%	7%	0%	1%	0%	1%				
PROJECT	1	1	1	4	1	13	11	1	1	1	1	1	38			
TRIP	813	730	68	83	941	765	570	1969	863	540	1113	140	8441			

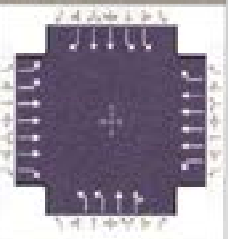
PHF	0.64
Seasonal Factor	1.15
Growth Rate	1.03
Years Grown	3
Trips In	Trips Out
38	95

Other Projects															
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		Project Name	
HV(%)	-	-	-	-	-	-	-	0.0%	-	-	6%	-		Pineapple Grove	Trips In 91
Volume	0	0	0	0	0	0	0	11	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	-	-	-	-	-	-	0.0%	-	-	6%	-		Sunnyland	71
Volume	0	0	0	0	0	0	0	11	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	-	-	-	-	-	-	0.0%	-	-	6%	-		Pocket Hunt	76
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	-	-	-	-	-	-	0.0%	-	-	6%	-		650	850
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	0%	-	0.0%	0.0%	0.0%	0%	-	-	-	-	0%		Whispering Oaks	40
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	-	-	-	-	-	-	0%	-	-	0.0%	-		Kent Creek	42
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	0%	-	-	-	-	0%	0.0%	0.0%	0.0%	-	0%	-		Creekside	140
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	0%	-	0.0%	0.0%	0.0%	0%	-	-	-	-	0%		Woodspring Suites	0
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	-	-	-	-	-	-	0.0%	-	-	0.0%	-		Kings Highway Commercial Park	0
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	-	-	0.0%	-	0.0%	0%	-	-	-	-	0%		Jennie Wade Villa / Whittier	54
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	-	-	-	-	-	-	0.0%	-	-	0.0%	-		Project number name	0
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	0%	-	0.0%	0.0%	0.0%	0%	-	-	-	-	0%		Celebration Farms	0
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	-	-	0.0%	-	0.0%	0%	-	-	-	-	0%		Kelmscott	147
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	-	-	-	0.0%	-	0.0%	0%	-	-	-	-	0%		Orange Hill Parcel B, C & D	214
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
HV(%)	0.0%	0.0%	0.0%	-	0%	-	-	-	0%	0%	-	-		Villa at Treasure Coast Lot 7 Whitt	41
Volume	0	0	0	0	0	0	0	0	0	0	0	0	0		

Subtotal	81	27	17	41	31	131	47	181	38	6	199	11	38
Total	894	130	101	148	111	141	199	1775	909	148	1181	118	4711

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 27, 2023	Area Type	Other
Jurisdiction	St. Lucie	Time Period	AM Peak Hour	PHF	0.96
Urban Street	Okeechobee Road	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee Jenkins - Future Total - AM.xus		
Project Description	Future Total with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	166	1775	368	148	1180	192	694	185	126	145	222	291

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	8.5	4.4	39.5	7.9	9.5	23.7	
Yellow	4.8	0.0	4.8	4.8	4.8	4.8	
Red	2.5	0.0	2.5	2.5	2.5	2.5	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	15.8	46.8	20.2	51.2	32.0	47.8	15.2	31.0
Change Period, (Y+R$_c$), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (MAH), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (g$_s$), s	8.3		12.9		26.7	11.3	7.5	24.7
Green Extension Time (g$_e$), s	0.3	0.0	0.0	0.0	0.0	3.4	0.5	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.30		1.00		1.00	0.00	0.00	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	173	1849	383	154	1229	200	723	169	155	151	231	303
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1725	1610	1810	1725	1610	1757	1900	1649	1757	1809	1610
Queue Service Time (g$_s$), s	6.3	33.1	28.3	10.9	18.7	12.2	24.7	8.7	9.3	5.5	7.3	22.7
Cycle Queue Clearance Time (g$_c$), s	6.3	33.1	28.3	10.9	18.7	12.2	24.7	8.7	9.3	5.5	7.3	22.7
Green Ratio (g/C)	0.07	0.30	0.30	0.10	0.34	0.34	0.19	0.31	0.31	0.06	0.18	0.25
Capacity (c), veh/h	231	2097	489	179	2329	543	668	592	514	214	660	399
Volume-to-Capacity Ratio (X)	0.750	0.882	0.783	0.859	0.528	0.368	1.083	0.285	0.303	0.707	0.351	0.759
Back of Queue (Q), ft/ln (95 th percentile)	130.5	517.1	456.3	261.8	308.3	214.7	590.2	179.1	166.7	113.4	145.6	371
Back of Queue (Q), veh/ln (95 th percentile)	5.2	20.7	18.3	10.5	12.3	8.6	23.6	7.2	6.7	4.5	5.8	14.8
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d$_1$), s/veh	59.7	43.0	41.3	57.7	34.7	32.6	52.7	33.8	34.0	59.9	46.4	45.3
Incremental Delay (d$_2$), s/veh	4.8	5.8	11.9	29.3	0.9	1.9	59.4	0.3	0.3	4.2	0.3	8.2
Initial Queue Delay (d$_3$), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.5	48.8	53.2	86.9	35.6	34.5	112.0	34.1	34.3	64.2	46.7	53.5
Level of Service (LOS)	E	D	D	F	D	C	F	C	C	E	D	D
Approach Delay, s/veh / LOS	50.6	D		40.4	D		87.9	F		53.6	D	
Intersection Delay, s/veh / LOS	55.0						D					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.45	B	2.59	C	2.96	C	3.09	C
Bicycle LOS Score / LOS	1.48	A	1.14	A	1.35	A	1.05	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

Jenkins & Chesshire
Future Total

	Northbound			Southbound			Eastbound			Westbound				
15 Min Period Starts	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	106	32	7	47	58	24	58	215	61	21	207	54	830	3667
4:15-4:30	123	36	11	47	53	35	24	207	71	39	201	62	869	3799
4:30-4:45	147	31	19	44	43	46	30	230	88	32	229	55	972	3873
4:45-5:00	119	29	14	52	54	29	26	246	68	30	219	45	936	3853
5:00-5:15	105	26	26	47	37	31	29	289	64	31	265	58	982	3742
5:15-5:30	121	25	31	41	31	32	30	256	79	29	241	45	982	
5:30-5:45	104	33	31	43	36	31	26	289	70	29	210	33	955	
5:45-6:00	100	29	7	39	31	21	31	245	47	31	235	25	845	

PM PEAK HOUR IS FROM 4:30 PM TO 5:30PM

Volumes	490	111	62	184	167	140	105	1058	299	111	958	183	3872
Season Factor	915	217	93	193	175	147	110	1112	314	116	1007	192	4066
Growth	550	139	67	199	163	155	114	1146	325	122	1037	198	4289
In/Out	-	IN	-	OUT	OUT	OUT	IN	-	-	-	IN	-	
Percentage	0%	0%	0%	10%	1%	56%	56%	0%	0%	0%	0%	10%	
PROJECT	0	1	0	4	1	21	15	0	0	0	0	19	61
Total	550	112	67	205	162	112	189	1146	325	122	1037	208	4243

Other Projects

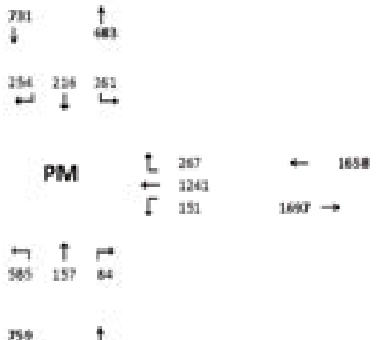
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		
Volume	0	0	0	0	0	0	0	7	0	0	12	0	19	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		
Volume	0	0	0	0	0	0	0	8	0	0	13	0	21	
%	0%	0%	0%	0%	0%	0%	0%	10%	0%	0%	10%	0%		
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		
Volume	0	0	0	0	0	0	0	6	0	0	7	0	8	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		
Volume	0	0	0	0	0	0	0	17	0	0	0	0	17	
%	0%	10%	0%	10%	10%	11%	11%	0%	0%	0%	0%	10%		
In/Out	-	IN	-	OUT	OUT	OUT	IN	-	-	-	-	IN		
Volume	0	17	0	9	9	20	36	0	0	0	0	17	109	
%	0%	0%	0%	0%	0%	0%	0%	15%	0%	0%	15%	0%		
In/Out	-	-	-	-	-	-	-	IN	-	-	OUT	-		
Volume	0	0	0	0	0	0	0	29	0	0	37	0	86	
%	0%	0%	0%	0%	0%	0%	0%	30%	0%	0%	30%	0%		
In/Out	IN	-	-	-	-	IN	OUT	OUT	OUT	-	IN	-		
Volume	21	0	0	0	0	21	13	77	11	0	128	0	271	
%	0%	10%	0%	40%	10%	40%	40%	0%	0%	0%	0%	40%		
In/Out	-	IN	-	OUT	OUT	OUT	IN	-	-	-	-	IN		
Volume	0	7	0	11	3	17	13	0	0	0	0	21	58	
%	0%	0%	0%	0%	6%	0%	0%	10%	0%	0%	10%	0%		
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		
Volume	0	0	0	0	0	0	0	17	0	0	12	0	49	
%	0%	0%	0%	10%	0%	10%	10%	0%	0%	0%	0%	10%		
In/Out	-	-	-	OUT	-	OUT	IN	-	-	-	-	IN		
Volume	0	6	0	11	0	26	44	0	0	0	0	12	98	
%	0%	0%	0%	0%	0%	0%	0%	40%	0%	0%	40%	0%		
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		
Volume	0	0	0	0	0	0	0	15	0	0	9	0	24	
%	0%	5%	0%	5%	5%	5%	5%	0%	0%	0%	0%	5%		
In/Out	-	IN	-	OUT	OUT	OUT	IN	-	-	-	-	IN		
Volume	0	5	0	5	5	5	5	0	0	0	0	5	34	
%	0%	0%	0%	0%	0%	0%	0%	5%	0%	0%	5%	0%		
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		
Volume	0	0	0	0	0	0	0	10	0	0	0	0	11	
%	0%	2%	0%	10%	2%	0%	0%	0%	0%	0%	0%	10%		
In/Out	-	IN	-	OUT	OUT	-	-	-	-	-	-	IN		
Volume	0	1	0	11	4	0	0	0	0	0	0	6	52	
%	40%	10%	10%	0%	10%	0%	0%	0%	40%	10%	0%	0%		
In/Out	OUT	OUT	OUT	-	IN	-	-	-	IN	IN	-	-		
Volume	33	8	12	0	14	0	0	0	57	19	0	0	158	

Subtotal	55	37	17	62	35	103	146	207	70	20	203	69	804
Total	585	157	84	262	214	254	259	1353	393	151	1241	267	4965

Seasonal Factor 1.05
Growth Rate 1.03
Years Grown 1
Peak 0.95
Trips In Trips Out
98 57

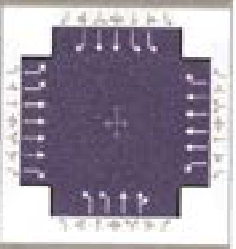
	Trips In	Trips Out
Pineapple Grove	111	137
Sunniland	264	134
Project Point	19	17
Hill	158	189
Whispering Oaks	173	96
Bent Creek	199	113
Creekside	436	256
Woodspring Suites	13	50
Ridge Highway Commerce Park	123	173
Jenkins Viewpoint / Hillside	182	107
Project Hurricane	23	37
Celebration Point	100	37
Marketplace	31	332
Orange Hill Parcel 1, 2 & 3	58	109
Shoal Treasure Coast East / West	147	85

PM



HCS Signalized Intersection Results Summary

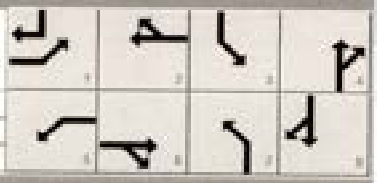
General Information				Intersection Information	
Agency	O'Rourke Engineering and Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 27, 2023	Area Type	Other
Jurisdiction	St. Lucie	Time Period	PM Peak Hour	PHF	0.99
Urban Street	Okeechobee Road	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Okeechobee & Jenkins	File Name	C5 - Okeechobee Jenkins - Future Total - PM.xus		
Project Description	Future Total with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	259	1353	393	151	1241	267	585	157	84	261	216	254

Signal Information			
Cycle, s	130.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	No	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	7.7	4.3		50.4	12.2	1.2	17.7					
Yellow	4.8	0.0		4.8	4.8	4.8	4.8					
Red	2.5	0.0		2.5	2.5	2.5	2.5					



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	2.0	3.0	2.0	3.0	2.0	4.0	2.0	3.0
Phase Duration, s	19.3	62.0	15.0	57.7	28.0	33.5	19.5	25.0
Change Period, (Y+R c), s	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3
Max Allow Headway (MAH), s	4.0	0.0	4.0	0.0	4.0	4.1	4.0	4.1
Queue Clearance Time (g s), s	11.5		9.7		22.7	9.9	11.6	19.7
Green Extension Time (g e), s	0.5	0.0	0.0	0.0	0.0	2.5	0.7	0.0
Phase Call Probability	1.00		1.00		1.00	1.00	1.00	1.00
Max Out Probability	0.22		1.00		1.00	0.03	0.03	1.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	262	1367	397	153	1254	270	591	125	118	264	218	257
Adjusted Saturation Flow Rate (s), veh/h/ln	1757	1725	1610	1810	1725	1610	1757	1900	1683	1757	1809	1610
Queue Service Time (g s), s	9.5	18.6	24.6	7.7	17.7	16.0	20.7	7.3	7.9	9.6	7.2	17.7
Cycle Queue Clearance Time (g c), s	9.5	18.6	24.6	7.7	17.7	16.0	20.7	7.3	7.9	9.6	7.2	17.7
Green Ratio (g/C)	0.09	0.42	0.42	0.06	0.39	0.39	0.16	0.20	0.20	0.09	0.14	0.23
Capacity (c), veh/h	324	2904	678	107	2675	624	560	383	339	330	493	368
Volume-to-Capacity Ratio (X)	0.807	0.471	0.586	1.423	0.469	0.432	1.056	0.327	0.349	0.798	0.443	0.697
Back of Queue (Q), ft/ln (95 th percentile)	196.3	299.9	374.5	434.7	290.4	263.2	488	154.8	147.5	194.5	148.1	315.8
Back of Queue (Q), veh/ln (95 th percentile)	7.9	12.0	15.0	17.4	11.6	10.5	19.5	6.2	5.9	7.8	5.8	12.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d 1), s/veh	57.9	27.2	28.9	61.2	29.8	29.3	54.7	44.4	44.6	57.7	51.6	46.0
Incremental Delay (d 2), s/veh	6.3	0.5	3.7	236.0	0.6	2.2	53.7	0.5	0.6	4.4	0.6	5.7
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	64.1	27.7	32.6	297.1	30.4	31.4	108.3	44.9	45.2	62.1	52.2	51.7
Level of Service (LOS)	E	C	C	F	C	C	F	D	D	E	D	D
Approach Delay, s/veh / LOS	33.4	C		54.8	D		89.9	F		55.6	E	
Intersection Delay, s/veh / LOS	52.2						D					

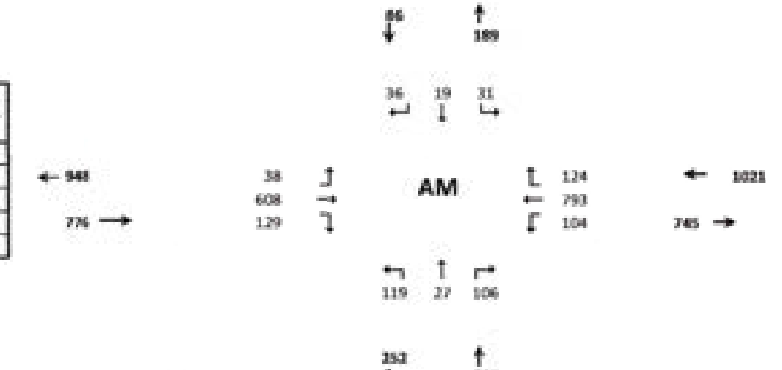
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.43	B	2.58	C	2.97	C	3.09	C
Bicycle LOS Score / LOS	1.32	A	1.18	A	1.18	A	1.10	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

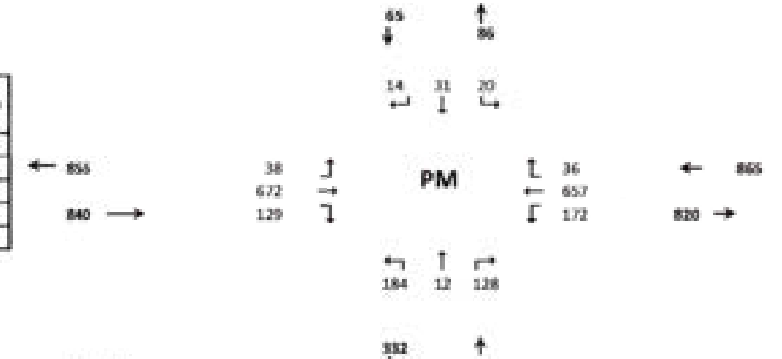
N/S STREET: Walden Ave
E/W STREET: Orange Ave
CONTROL: Signalized
FILENAME:
COUNT DATE: 8/16/2023
DAY: Wednesday
CITY: St Louis
REPORT DATE: 8/17/2023
ANALYSIS YEAR: 2023
Existing

15 Min Period	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
7:00-7:15	18	3	20	7	3	6	8	131	11	55	140	15	379	1896
7:15-7:30	24	6	17	6	3	5	4	131	21	20	208	15	470	1999
7:30-7:45	30	4	20	8	2	5	10	155	30	22	213	19	536	2053
7:45-8:00	28	8	25	6	5	8	10	139	23	10	212	19	504	1902
8:00-8:15	29	5	20	6	4	8	8	142	29	27	167	17	460	1813
8:15-8:30	23	8	25	8	7	12	4	138	20	20	136	42	447	
8:30-8:45	19	4	24	4	5	6	9	111	20	24	110	20	409	
8:45-9:00	21	9	21	8	2	8	10	104	20	17	147	25	423	
AM PEAK HOUR IS FROM:			7:30 AM TO 8:30AM											
Volumes	112	15	100	29	18	24	26	574	122	98	748	117	2013	
Season Factor	109	17	106	31	19	26	28	608	129	104	793	124	2134	
Growth	109	17	106	31	19	26	28	608	129	104	793	124	2134	
In/Out	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	109	17	106	31	19	26	28	608	129	104	793	124	2134	



Walden & I-55 NB
Existing

15 Min Period Totals	Northbound NBL	NBT	NBR	Southbound SBL	SBT	SBR	Eastbound EBL	EBT	EBR	Westbound WBL	WBT	WBR	TOTAL	ONE HOUR SUM
4:00-4:15	22	4	26	4	3	4	3	131	21	28	116	6	370	1745
4:15-4:30	25	2	25	5	6	8	6	152	27	28	109	8	401	1891
4:30-4:45	28	7	26	2	4	2	6	175	32	31	166	4	475	1959
4:45-5:00	24	2	36	4	8	4	8	160	33	54	148	8	489	1935
5:00-5:15	52	5	30	4	4	5	8	153	22	40	175	9	528	1909
5:15-5:30	44	7	26	6	8	2	10	152	23	28	150	9	470	
5:30-5:45	54	2	29	5	9	2	10	169	24	27	147	8	496	
5:45-6:00	45	2	25	8	8	3	8	145	27	29	138	5	463	
PM PEAK HOUR IS FROM:			4:45 PM TO 5:45PM											
Volumes	174	15	121	19	29	11	36	634	113	162	620	34	1967	
Season Factor	184	12	128	20	31	14	38	672	129	172	657	36	2094	
Growth	184	12	128	20	31	14	38	672	129	172	657	36	2094	
In/Out	-	-	-	-	-	-	-	-	-	-	-	-		
Percentage	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
PROJECT	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total	184	12	128	20	31	14	38	672	129	172	657	36	2094	



St. Lucie County

ECONOLITE

00032 - ORANGE AVE @ JENKINS RD - Econolite Type - Cobalt

Controller Timing Plan (MM) 2-1

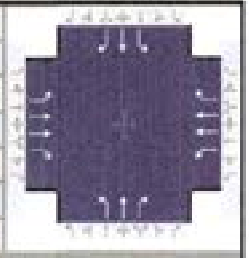
8 - in use 1-8

Plan 1 - ""

Phase	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Direction	E-L	W-T	S-L	N-T	W-L	E-T	N-L	S-T	N	N	N	N	N	N	N	N
Min Green	7	11	7	12	7	11	6	12	5	5	5	5	5	5	5	5
Bk Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CS Min Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Delay Green	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk	0	7	0	7	0	7	0	7	0	10	0	10	0	10	0	10
Walk2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Walk Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear	0	17	0	27	0	15	0	26	0	16	0	16	0	16	0	16
Ped Clear 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped Clear Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ped CO	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vehicle Ext	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Ext 2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max1	12	45	12	18	12	45	12	18	35	35	35	35	35	35	35	35
Max2	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40	40
Max3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DYM Max	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dym Step	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Yellow	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Red Max	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Red Revert	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Act B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sec/Act	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Max Int	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Time B4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cars Wt	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
STPTDuc	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TTReduc	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Min Gap	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

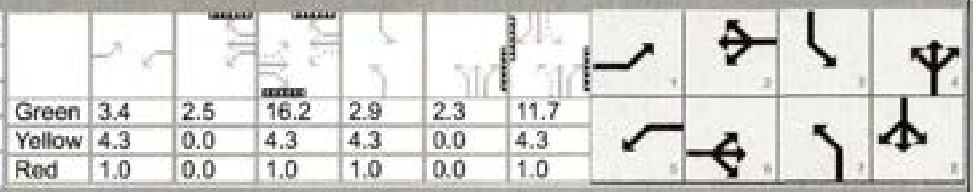
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	May 30, 2023	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	AM Peak Hour	PHF	0.97
Urban Street	Orange Avenue	Analysis Year	2023	Analysis Period	1> 7:00
Intersection	Orange & Jenkins	File Name	C6 - Orange Jenkins - Existing - AM.xus		
Project Description	2023				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	38	608	129	104	793	124	119	27	106	31	19	36

Signal Information			
Cycle, s	60.1	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



	EB		WB			NB			SB		
Green	3.4	2.5	16.2	2.9	2.3	11.7					
Yellow	4.3	0.0	4.3	4.3	0.0	4.3					
Red	1.0	0.0	1.0	1.0	0.0	1.0					

Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	8.7	21.5	11.1	23.9	10.5	19.4	8.2	17.0
Change Period, ($Y+R_c$), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	3.2	3.0	3.2
Queue Clearance Time (g_s), s	2.9	11.4	4.4	14.4	5.2	5.4	2.8	3.2
Green Extension Time (g_e), s	0.0	4.3	0.1	4.2	0.1	0.3	0.0	0.3
Phase Call Probability	0.48	1.00	0.83	1.00	0.87	0.99	0.41	0.98
Max Out Probability	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00

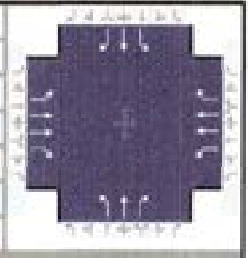
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	39	627	133	107	818	128	123	28	109	32	20	37
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1781	1585	1781	1781	1585	1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s	0.9	9.4	4.0	2.4	12.4	3.6	3.2	0.7	3.4	0.8	0.5	1.2
Cycle Queue Clearance Time (g_c), s	0.9	9.4	4.0	2.4	12.4	3.6	3.2	0.7	3.4	0.8	0.5	1.2
Green Ratio (*g/C*)	0.32	0.27	0.27	0.37	0.31	0.31	0.28	0.23	0.23	0.24	0.19	0.19
Capacity (*c*), veh/h	267	957	426	383	1103	491	534	437	370	467	365	309
Volume-to-Capacity Ratio (*X*)	0.147	0.655	0.312	0.280	0.741	0.260	0.230	0.064	0.295	0.068	0.054	0.120
Back of Queue (*Q*), ft/ln (95 th percentile)	14.4	151.8	58.1	37.3	194.9	51.1	51.2	12.1	50.2	13.6	9	17.4
Back of Queue (*Q*), veh/ln (95 th percentile)	0.6	6.0	2.3	1.5	7.7	2.0	2.0	0.5	2.0	0.5	0.4	0.7
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	15.3	19.5	17.6	13.7	18.6	15.6	16.7	17.9	19.0	17.5	19.7	20.0
Incremental Delay (d_2), s/veh	0.1	0.3	0.2	0.1	0.4	0.1	0.1	0.0	0.2	0.0	0.0	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	15.4	19.8	17.7	13.9	19.0	15.7	16.7	18.0	19.1	17.6	19.7	20.0
Level of Service (LOS)	B	B	B	B	B	B	B	B	B	B	B	C
Approach Delay, s/veh / LOS	19.2	B		18.1	B		17.9	B		19.1	B	
Intersection Delay, s/veh / LOS	18.5						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.10	B	2.10	B	2.43	B	2.43	B
Bicycle LOS Score / LOS	1.15	A	1.36	A	0.92	A	0.63	A

Copyright © 2023 University of Florida, All Rights Reserved.

HCS Signalized Intersection Results Summary

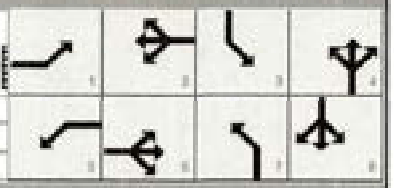
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	May 30, 2023	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Orange Avenue	Analysis Year	2023	Analysis Period	1> 4:00
Intersection	Orange & Jenkins	File Name	C6 - Orange Jenkins - Existing - PM.xus		
Project Description	2023				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	38	672	129	172	657	36	184	12	128	20	31	14

Signal Information			
Cycle, s	64.4	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	3.6	3.1	17.5	2.2	5.0	11.7	
Yellow	4.3	0.0	4.3	4.3	0.0	4.3	
Red	1.0	0.0	1.0	1.0	0.0	1.0	



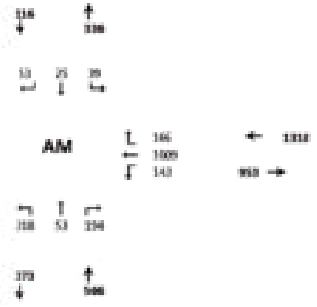
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	8.9	22.8	12.0	25.9	12.5	22.1	7.5	17.0
Change Period, ($Y+R_c$), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	3.2	3.0	3.2
Queue Clearance Time (g_s), s	3.0	13.6	6.5	12.5	7.3	6.4	2.6	2.9
Green Extension Time (g_e), s	0.0	3.8	0.1	3.8	0.1	0.3	0.0	0.3
Phase Call Probability	0.51	1.00	0.96	1.00	0.97	1.00	0.31	0.98
Max Out Probability	0.00	0.00	0.07	0.00	0.17	0.00	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	40	707	136	181	692	38	194	13	135	21	33	15
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1781	1585	1781	1781	1585	1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s	1.0	11.6	4.4	4.5	10.5	1.1	5.3	0.3	4.4	0.6	0.9	0.5
Cycle Queue Clearance Time (g_c), s	1.0	11.6	4.4	4.5	10.5	1.1	5.3	0.3	4.4	0.6	0.9	0.5
Green Ratio (*g/C*)	0.33	0.27	0.27	0.38	0.32	0.32	0.32	0.26	0.26	0.22	0.18	0.18
Capacity (*c*), veh/h	305	966	430	365	1140	508	543	488	413	428	341	289
Volume-to-Capacity Ratio (*X*)	0.131	0.732	0.316	0.495	0.606	0.075	0.357	0.026	0.326	0.049	0.096	0.051
Back of Queue (*Q*), ft/ln (95 th percentile)	16.1	193.4	65	71.5	170	15.4	85.9	5.7	65.9	10.2	17	7.6
Back of Queue (*Q*), veh/ln (95 th percentile)	0.6	7.6	2.6	2.8	6.7	0.6	3.4	0.2	2.6	0.4	0.7	0.3
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	15.6	21.3	18.7	15.3	18.5	15.2	16.7	17.7	19.2	20.0	21.9	21.7
Incremental Delay (d_2), s/veh	0.1	0.4	0.2	0.4	0.2	0.0	0.1	0.0	0.2	0.0	0.0	0.0
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	15.7	21.7	18.8	15.7	18.7	15.3	16.8	17.7	19.4	20.0	21.9	21.7
Level of Service (LOS)	B	C	B	B	B	B	B	B	B	C	C	C
Approach Delay, s/veh / LOS	21.0	C		17.9	B		17.9	B		21.3	C	
Intersection Delay, s/veh / LOS	19.3						B					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.10	B	2.10	B	2.43	B	2.43	B
Bicycle LOS Score / LOS	1.22	A	1.24	A	1.05	A	0.60	A

Copyright © 2023 University of Florida, All Rights Reserved.

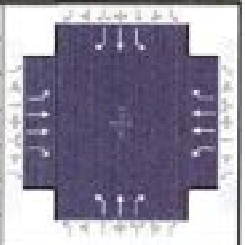
TURNING MOVEMENT VOLUME COUNTS



E-31

HCS Signalized Intersection Results Summary

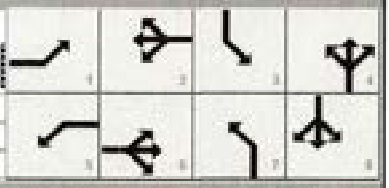
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 26, 2023	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	AM Peak Hour	PHF	0.97
Urban Street	Orange Avenue	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Orange & Jenkins	File Name	C6 - Orange Jenkins - Without Project AM.xus		
Project Description	Background Without Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	117	719	206	143	1009	166	318	53	194	39	25	53

Signal Information			
Cycle, s	80.1	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.5	0.2	28.6	4.1	2.6	11.6	
Yellow	4.3	0.0	4.3	4.3	4.3	4.3	
Red	1.0	0.0	1.0	1.0	1.0	1.0	



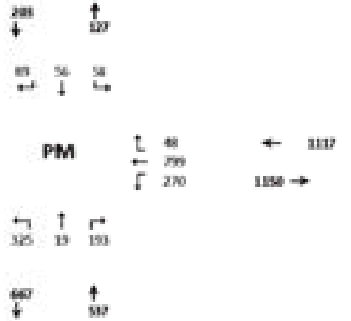
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	11.8	33.9	12.0	34.2	17.3	24.7	9.4	16.9
Change Period, ($Y+R_c$), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Max Allow Headway (MAH), s	3.0	3.0	3.0	3.0	3.0	3.2	3.0	3.2
Queue Clearance Time (g_s), s	5.3	15.5	6.0	23.2	14.0	10.8	3.5	4.4
Green Extension Time (g_e), s	0.1	5.9	0.1	5.7	0.0	0.4	0.0	0.1
Phase Call Probability	0.93	1.00	0.96	1.00	1.00	1.00	0.59	1.00
Max Out Probability	0.01	0.02	0.03	0.06	1.00	0.05	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	121	741	212	147	1040	171	328	55	200	40	26	55
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1781	1585	1781	1781	1585	1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s	3.3	13.5	8.0	4.0	21.2	6.2	12.0	1.8	8.8	1.5	1.0	2.4
Cycle Queue Clearance Time (g_c), s	3.3	13.5	8.0	4.0	21.2	6.2	12.0	1.8	8.8	1.5	1.0	2.4
Green Ratio (g/C)	0.44	0.36	0.36	0.44	0.36	0.36	0.32	0.24	0.24	0.20	0.14	0.14
Capacity (c), veh/h	273	1272	566	375	1282	571	540	453	384	377	270	229
Volume-to-Capacity Ratio (X)	0.441	0.583	0.375	0.393	0.811	0.300	0.607	0.120	0.520	0.107	0.095	0.239
Back of Queue (Q), ft/ln (95 th percentile)	54.1	221.9	121.1	66.2	319.6	94.2	215.5	34.5	142	27.1	18.7	40.5
Back of Queue (Q), veh/ln (95 th percentile)	2.1	8.7	4.8	2.6	12.6	3.7	8.5	1.4	5.6	1.1	0.7	1.6
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	17.7	20.9	19.1	15.1	23.2	18.4	22.9	23.7	26.3	26.5	29.7	30.4
Incremental Delay (d_2), s/veh	0.4	0.2	0.2	0.2	0.7	0.1	1.4	0.0	0.6	0.0	0.1	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	18.2	21.1	19.3	15.3	23.9	18.5	24.3	23.7	26.9	26.5	29.8	30.6
Level of Service (LOS)	B	C	B	B	C	B	C	C	C	C	C	C
Approach Delay, s/veh / LOS	20.4	C		22.3	C		25.2	C		29.1	C	
Intersection Delay, s/veh / LOS	22.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.10	B	2.10	B	2.44	B	2.45	B
Bicycle LOS Score / LOS	1.37	A	1.61	B	1.45	A	0.69	A

Copyright © 2023 University of Florida, All Rights Reserved.

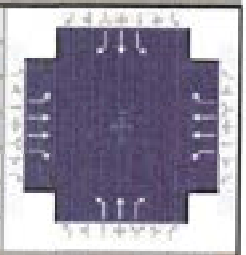
TURNING MOVEMENT VOLUME COUNTS



15 Min Period Starts	Northbound			Southbound			Eastbound			Westbound				

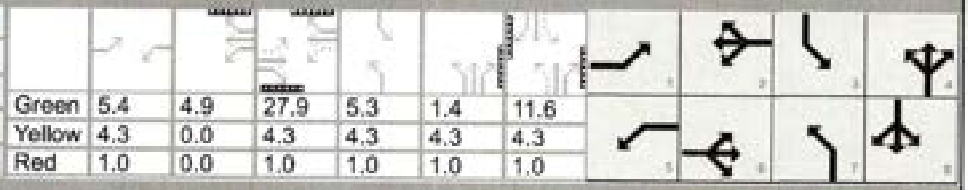
HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 26, 2023	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Orange Avenue	Analysis Year	2026	Analysis Period	1> 4:00
Intersection	Orange & Jenkins	File Name	C6 - Orange Jenkins - Without Project PM.xus		
Project Description	Background without Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	60	900	341	270	799	48	325	19	193	58	56	89

Signal Information			
Cycle, s	83.0	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On



	EB			WB			NB			SB		
Green	5.4	4.9		27.9	5.3	1.4	11.6					
Yellow	4.3	0.0		4.3	4.3	4.3	4.3					
Red	1.0	0.0		1.0	1.0	1.0	1.0					

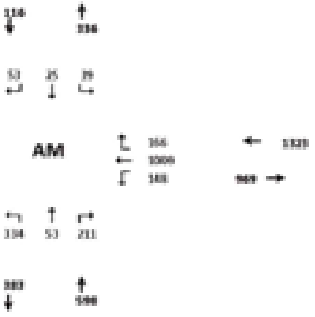
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	10.7	33.2	15.6	38.1	17.3	23.7	10.6	16.9
Change Period, (Y+R c), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Max Allow Headway (MAH), s	3.0	3.0	3.0	3.0	3.0	3.2	3.0	3.2
Queue Clearance Time (g s), s	3.8	22.0	10.2	17.5	14.0	11.5	4.3	6.5
Green Extension Time (g e), s	0.0	5.9	0.1	6.0	0.0	0.5	0.0	0.2
Phase Call Probability	0.77	1.00	1.00	1.00	1.00	1.00	0.76	1.00
Max Out Probability	0.00	0.05	1.00	0.03	1.00	0.10	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	63	947	359	284	841	51	342	20	203	61	59	94
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1781	1585	1781	1781	1585	1781	1870	1585	1781	1870	1585
Queue Service Time (g s), s	1.8	20.0	16.1	8.2	15.5	1.7	12.0	0.7	9.5	2.3	2.3	4.5
Cycle Queue Clearance Time (g c), s	1.8	20.0	16.1	8.2	15.5	1.7	12.0	0.7	9.5	2.3	2.3	4.5
Green Ratio (g/C)	0.40	0.34	0.34	0.48	0.40	0.40	0.31	0.22	0.22	0.20	0.14	0.14
Capacity (c), veh/h	322	1195	532	364	1407	626	495	414	350	395	262	222
Volume-to-Capacity Ratio (X)	0.196	0.792	0.675	0.781	0.598	0.081	0.691	0.048	0.580	0.154	0.225	0.421
Back of Queue (Q), ft/ln (95 th percentile)	31.1	309.7	238.4	165.5	245.7	24.9	244.1	13.4	160.5	43	45.7	75.2
Back of Queue (Q), veh/ln (95 th percentile)	1.2	12.2	9.4	6.5	9.7	1.0	9.6	0.5	6.3	1.7	1.8	3.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d 1), s/veh	16.5	25.0	23.7	17.8	19.9	15.7	25.2	25.5	28.9	27.2	31.7	32.6
Incremental Delay (d 2), s/veh	0.1	0.5	0.6	7.6	0.2	0.0	3.4	0.0	1.6	0.1	0.2	0.5
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.6	25.4	24.2	25.5	20.0	15.7	28.6	25.5	30.5	27.3	31.8	33.1
Level of Service (LOS)	B	C	C	C	C	B	C	C	C	C	C	C
Approach Delay, s/veh / LOS	24.7	C		21.2	C		29.2	C		31.1	C	
Intersection Delay, s/veh / LOS	24.6						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.10	B	2.10	B	2.44	B	2.45	B
Bicycle LOS Score / LOS	1.62	B	1.46	A	1.42	A	0.84	A

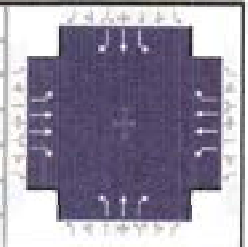
Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS



HCS Signalized Intersection Results Summary

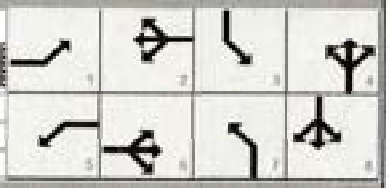
General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 26, 2023	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	AM Peak Hour	PHF	0.97
Urban Street	Orange Avenue	Analysis Year	2026	Analysis Period	1> 7:00
Intersection	Orange & Jenkins	File Name	C6 - Orange Jenkins - With Project AM.xus		
Project Description	Future Total with Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	117	719	211	148	1009	166	334	53	211	39	25	53

Signal Information			
Cycle, s	80.1	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	6.5	0.2	28.6	4.1	2.6	11.5	
Yellow	4.3	0.0	4.3	4.3	4.3	4.3	
Red	1.0	0.0	1.0	1.0	1.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	11.8	33.9	12.1	34.2	17.3	24.7	9.4	16.8
Change Period, ($Y+R_c$), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Max Allow Headway (*MAH*), s	3.0	3.0	3.0	3.0	3.0	3.2	3.0	3.2
Queue Clearance Time (g_s), s	5.3	15.5	6.2	23.2	14.0	11.7	3.5	4.4
Green Extension Time (g_e), s	0.1	6.0	0.1	5.7	0.0	0.4	0.0	0.1
Phase Call Probability	0.93	1.00	0.97	1.00	1.00	1.00	0.59	1.00
Max Out Probability	0.01	0.02	0.04	0.06	1.00	0.10	0.00	0.00

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (*v*), veh/h	121	741	218	153	1040	171	344	55	218	40	26	55
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1781	1781	1585	1781	1781	1585	1781	1870	1585	1781	1870	1585
Queue Service Time (g_s), s	3.3	13.5	8.2	4.2	21.2	6.2	12.0	1.8	9.7	1.5	1.0	2.4
Cycle Queue Clearance Time (g_c), s	3.3	13.5	8.2	4.2	21.2	6.2	12.0	1.8	9.7	1.5	1.0	2.4
Green Ratio (*g/C*)	0.44	0.36	0.36	0.44	0.36	0.36	0.32	0.24	0.24	0.20	0.14	0.14
Capacity (*c*), veh/h	274	1272	566	376	1283	571	540	453	384	376	269	228
Volume-to-Capacity Ratio (*X*)	0.441	0.583	0.384	0.406	0.811	0.300	0.638	0.121	0.567	0.107	0.096	0.239
Back of Queue (*Q*), ft/ln (95 th percentile)	54	221.9	124.6	68.5	319.5	94.2	228	34.5	159.4	27.1	18.7	40.5
Back of Queue (*Q*), veh/ln (95 th percentile)	2.1	8.7	4.9	2.7	12.6	3.7	9.0	1.4	6.3	1.1	0.7	1.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d_1), s/veh	17.7	20.9	19.2	15.1	23.2	18.4	23.4	23.7	26.7	26.5	29.8	30.4
Incremental Delay (d_2), s/veh	0.4	0.2	0.2	0.3	0.7	0.1	1.9	0.0	1.2	0.0	0.1	0.2
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	18.2	21.1	19.3	15.4	23.9	18.5	25.3	23.7	27.9	26.6	29.8	30.6
Level of Service (LOS)	B	C	B	B	C	B	C	C	C	C	C	C
Approach Delay, s/veh / LOS	20.4	C		22.2	C		26.1	C		29.1	C	
Intersection Delay, s/veh / LOS	22.6						C					

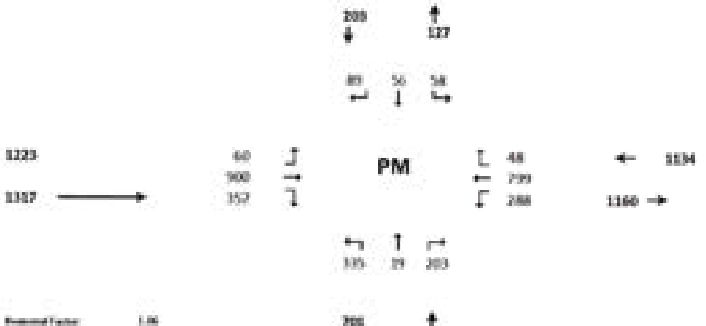
Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.10	B	2.10	B	2.44	B	2.45	B
Bicycle LOS Score / LOS	1.38	A	1.61	B	1.50	B	0.69	A

Copyright © 2023 University of Florida, All Rights Reserved.

TURNING MOVEMENT VOLUME COUNTS

Jenkins & Orange Ave
Future Total

15 Min Period Starts	Northbound			Southbound			Eastbound			Westbound				ONE HOUR SUM
	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	TOTAL	
4:00-4:15	22	4	26	4	3	4	5	120	21	28	116	6	379	1381
4:15-4:30	25	2	22	5	6	4	4	152	27	29	128	6	401	1486
4:30-4:45	28	2	26	2	4	2	6	171	33	31	106	4	415	1564
4:45-5:00	28	2	26	3	8	4	8	160	33	34	148	8	460	1595
5:00-5:15	32	5	30	5	5	5	8	152	32	40	135	9	529	1579
5:15-5:30	48	2	26	6	8	2	10	152	23	38	150	9	476	
5:30-5:45	34	2	29	5	9	2	10	160	24	27	142	8	456	
5:45-6:00	45	2	25	8	8	3	8	140	27	29	138	5	440	



PM PEAK HOUR & FROM 4:45PM TO 5:45PM

Volumes	114	11	121	19	29	17	36	634	122	142	620	34	1575
Volume Factor	594	12	128	20	31	14	38	671	129	132	657	36	2994
Growth	590	12	132	21	32	14	39	692	133	137	677	37	3317
In/Out	OUT	-	OUT	-	-	-	-	-	IN	IN	-	-	
Percentage	17%	0%	18%	0%	0%	0%	0%	0%	17%	18%	0%	0%	
PROJECT	13	0	13	0	0	0	0	0	17	13	0	0	54
Total	700	12	140	21	32	14	39	692	150	150	677	37	3371

Seasonal Factor: 1.06
Growth Rate: 1.01
Years Grown: 3
PHF: 0.95
Trips In: Trips Out
IN: 17

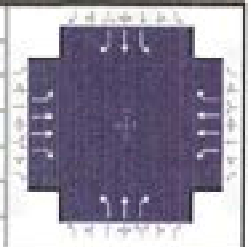
Other Projects

%	21%	0%	0%	0%	0%	0%	0%	0%	3%	0%	0%	0%			
In/Out	IN	-	-	-	-	-	-	OUT	OUT	-	IN	-		Pineapple Grove	Trips In: 213	Trips Out: 137
PROJECT	5	0	0	0	0	0	0	11	3	0	13	0	37			
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
In/Out	IN	-	-	-	-	-	-	OUT	OUT	-	IN	-		Stoneheart		
Volume	23	0	0	0	0	0	0	23	0	0	33	0	56		293	734
%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%				
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		Project Nari		
Volume	0	0	0	0	0	0	0	10	0	0	0	0	10		79	57
%	21%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
In/Out	IN	-	-	-	-	-	-	OUT	OUT	-	IN	-		101		
Volume	3	0	0	0	0	0	0	23	0	0	32	0	54		111	389
%	100%	0%	100%	0%	0%	0%	0%	0%	100%	100%	0%	0%				
In/Out	OUT	-	OUT	-	-	-	-	-	IN	IN	-	-		Whispering Oaks		
Volume	16	0	9	0	0	0	0	0	100	77	0	0	202		177	94
%	0%	0%	2%	0%	0%	0%	0%	20%	0%	0%	20%	0%				
In/Out	-	-	IN	-	-	-	-	IN	-	OUT	OUT	-		Red Creek		
Volume	0	0	4	0	0	0	0	39	0	3	21	0	67		101	111
%	100%	0%	0%	0%	0%	0%	0%	100%	100%	0%	100%	0%				
In/Out	IN	-	-	-	-	-	-	OUT	OUT	-	IN	-		Mesa Rings		
Volume	5	0	0	0	0	0	0	6	6	0	6	0	23		57	58
%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		Rigo Highway Warehouse		
Volume	0	0	0	0	0	0	0	14	0	0	14	0	27		468	226
%	0%	0%	0%	0%	0%	0%	0%	100%	0%	0%	100%	0%				
In/Out	-	-	-	-	-	-	-	OUT	-	-	IN	-		Rigo Highway Commerce Park		
Volume	0	0	0	0	0	0	0	67	0	0	13	0	87		115	171
%	25%	0%	25%	0%	0%	0%	0%	0%	25%	25%	0%	0%				
In/Out	OUT	-	OUT	-	-	-	-	-	IN	IN	-	-		Jenkins Magnolia / Hillside		
Volume	22	0	22	0	0	0	0	0	86	56	0	0	192		187	107
%	0%	0%	25%	0%	0%	0%	0%	0%	0%	25%	0%	0%				
In/Out	-	-	OUT	-	-	-	-	-	-	IN	-	-		Project Heritage		
Volume	0	0	4	0	0	0	0	0	0	3	0	0	9		21	17
%	25%	0%	5%	0%	0%	0%	0%	0%	25%	5%	0%	0%				
In/Out	OUT	-	OUT	-	-	-	-	-	IN	IN	-	-		Celebration Point		
Volume	14	0	3	0	0	0	0	0	25	5	0	0	47		149	17
%	5%	0%	0%	0%	0%	0%	0%	50%	5%	0%	50%	0%				
In/Out	IN	-	-	-	-	-	-	OUT	OUT	-	IN	-		Stoneheart		
Volume	3	0	0	0	0	0	0	29	30	0	7	0	69		91	192
%	0%	12%	0%	50%	12%	0%	0%	0%	0%	0%	0%	50%				
In/Out	-	IN	-	OUT	OUT	-	-	-	-	-	-	IN		Orange Pk Parcel 8		
Volume	0	1	0	10	12	0	0	0	0	0	0	5	38		28	94
%	0%	0%	5%	0%	0%	0%	0%	0%	0%	5%	0%	0%				
In/Out	-	-	OUT	-	-	-	-	-	-	IN	-	-		Vine at Treasure Coast Int. / West		
Volume	0	0	4	0	0	0	0	0	0	7	0	0	11		162	83
%	0%	12%	0%	50%	12%	75%	50%	0%	0%	0%	0%	50%				
In/Out	-	IN	-	OUT	OUT	OUT	IN	-	-	-	-	IN		Orange Pk Parcels 5 & 7		
Volume	0	4	0	19	12	75	25	0	0	0	0	5	137		91	227
%	0%	0%	5%	0%	0%	0%	0%	0%	0%	5%	0%	0%				
In/Out	-	-	OUT	-	-	-	-	-	-	IN	-	-		Woodsprings Suites		
Volume	0	0	2	0	0	0	0	0	0	2	0	0	3		32	33

Subtotal	345	7	71	37	25	25	21	357	114	111	122	33	1851
Total	335	19	203	58	56	89	44	988	257	288	799	88	3312

HCS Signalized Intersection Results Summary

General Information				Intersection Information	
Agency	O'Rourke Engineering & Planning			Duration, h	0.250
Analyst	James Kemp	Analysis Date	Jul 26, 2023	Area Type	Other
Jurisdiction	St. Lucie County	Time Period	PM Peak Hour	PHF	0.95
Urban Street	Orange Avenue	Analysis Year	2026	Analysis Period	1> 4:00
Intersection	Orange & Jenkins	File Name	C6 - Orange Jenkins - With Project PM.xus		
Project Description	2025 With Project				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (v), veh/h	60	900	357	288	799	48	335	19	203	58	56	89

Signal Information			
Cycle, s	83.8	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Fixed	Simult. Gap N/S	On

Green	5.4	0.2	28.1	5.3	1.4	11.6	
Yellow	4.3	4.3	4.3	4.3	4.3	4.3	
Red	1.0	1.0	1.0	1.0	1.0	1.0	



Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	7	4	3	8
Case Number	1.1	3.0	1.1	3.0	1.1	3.0	1.1	3.0
Phase Duration, s	10.7	33.4	16.2	38.9	17.3	23.6	10.6	16.9
Change Period, (Y+R c), s	5.3	5.3	5.3	5.3	5.3	5.3	5.3	5.3
Max Allow Headway (MAH), s	3.0	3.0	3.0	3.0	3.0	3.2	3.0	3.2
Queue Clearance Time (g s), s	3.8	22.2	10.8	17.5	14.0	12.2	4.4	6.5
Green Extension Time (g e), s	0.0	5.9	0.1	6.1	0.0	0.4	0.0	0.2
Phase Call Probability	0.77	1.00	1.00	1.00	1.00	1.00	0.76	1.00
Max Out Probability	0.00	0.06	1.00	0.03	1.00	0.16	0.00	0.00

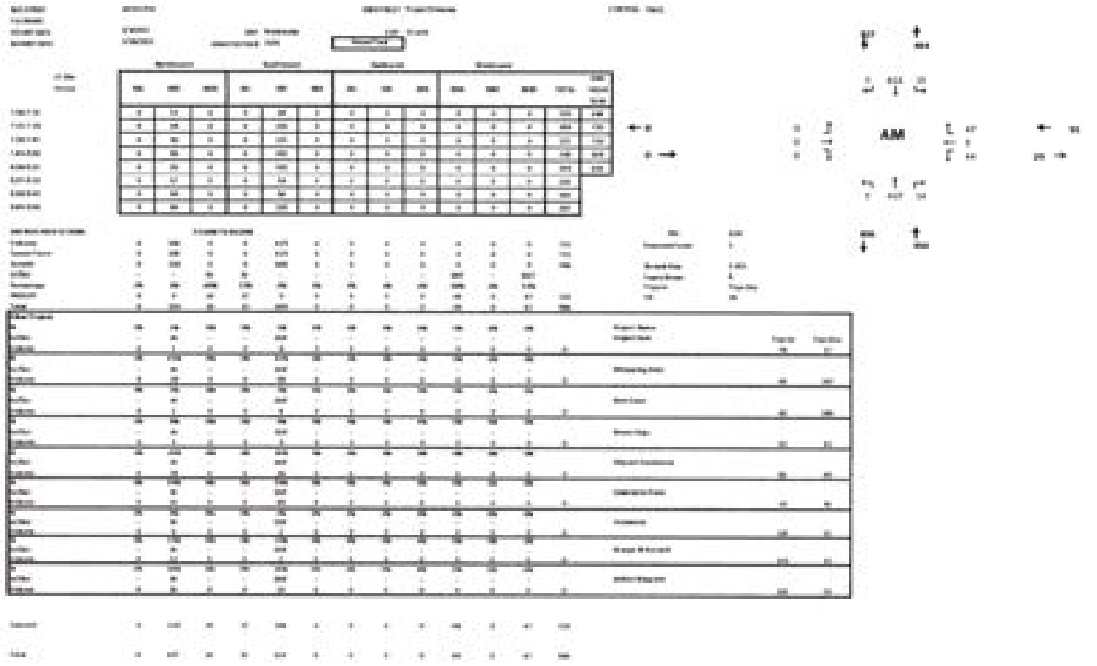
Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	7	4	14	3	8	18
Adjusted Flow Rate (v), veh/h	63	947	376	303	841	51	353	20	214	61	59	94
Adjusted Saturation Flow Rate (s), veh/h/ln	1781	1781	1585	1781	1781	1585	1781	1870	1585	1781	1870	1585
Queue Service Time (g s), s	1.8	20.2	17.3	8.8	15.5	1.7	12.0	0.7	10.2	2.4	2.3	4.5
Cycle Queue Clearance Time (g c), s	1.8	20.2	17.3	8.8	15.5	1.7	12.0	0.7	10.2	2.4	2.3	4.5
Green Ratio (g/C)	0.40	0.34	0.34	0.49	0.40	0.40	0.31	0.22	0.22	0.20	0.14	0.14
Capacity (c), veh/h	326	1195	532	373	1427	635	490	409	346	392	259	220
Volume-to-Capacity Ratio (X)	0.194	0.793	0.707	0.813	0.589	0.080	0.720	0.049	0.617	0.156	0.227	0.426
Back of Queue (Q), ft/ln (95 th percentile)	31.5	313.1	253.1	188.5	246	24.9	258.4	13.6	176	43.6	46.4	76.3
Back of Queue (Q), veh/ln (95 th percentile)	1.2	12.3	10.0	7.4	9.7	1.0	10.2	0.5	6.9	1.7	1.8	3.0
Queue Storage Ratio (RQ) (95 th percentile)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d 1), s/veh	16.6	25.2	24.2	17.9	19.7	15.5	26.1	25.9	29.6	27.6	32.1	33.0
Incremental Delay (d 2), s/veh	0.1	0.5	0.7	10.5	0.1	0.0	4.4	0.0	2.4	0.1	0.2	0.5
Initial Queue Delay (d 3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (d), s/veh	16.7	25.7	24.9	28.4	19.8	15.6	30.5	25.9	32.0	27.7	32.3	33.5
Level of Service (LOS)	B	C	C	C	B	B	C	C	C	C	C	C
Approach Delay, s/veh / LOS	25.0	C		21.8	C		30.9	C		31.5	C	
Intersection Delay, s/veh / LOS	25.3						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS	2.11	B	2.10	B	2.44	B	2.45	B
Bicycle LOS Score / LOS	1.63	B	1.47	A	1.46	A	0.84	A

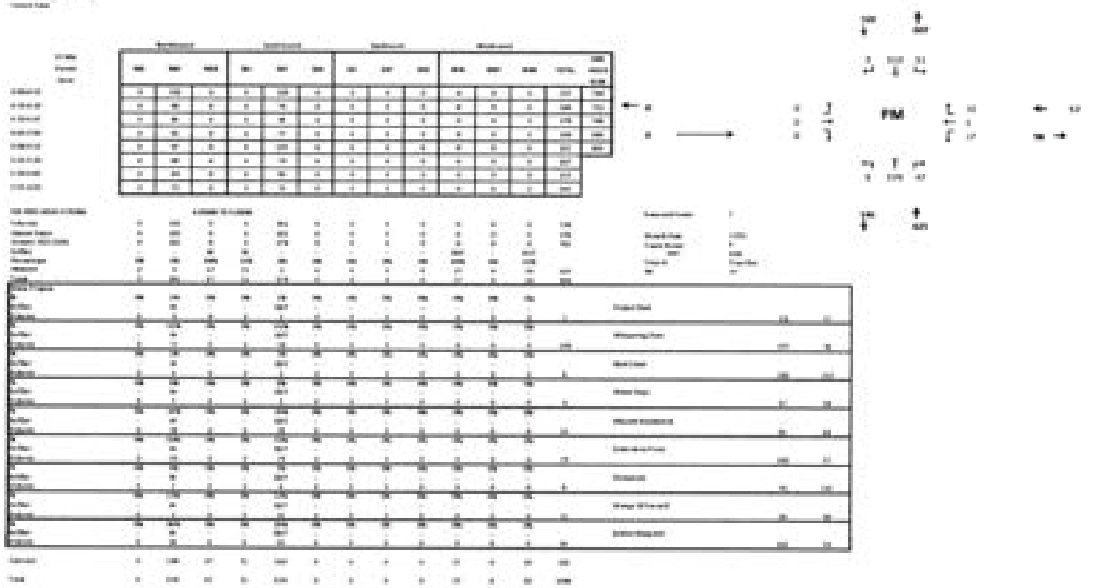
Copyright © 2023 University of Florida, All Rights Reserved.

APPENDIX F

DRIVEWAY ANALYSIS



AM

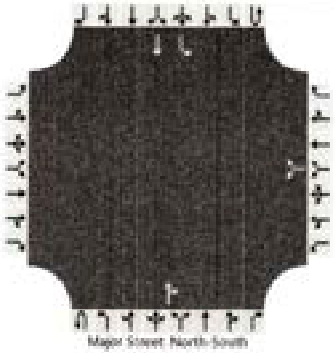


PM

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	James Kemp	Intersection	Jenkins Rd & Project Driveway
Agency/Co.	O'Rourke Engineering	Jurisdiction	St. Lucie
Date Performed	7/27/2023	East/West Street	Project Driveway
Analysis Year	2026	North/South Street	Jenkins Road
Time Analyzed	AM Peak Hour	Peak Hour Factor	0.84
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Future Total with Project		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						44		47			437	14		15	612	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

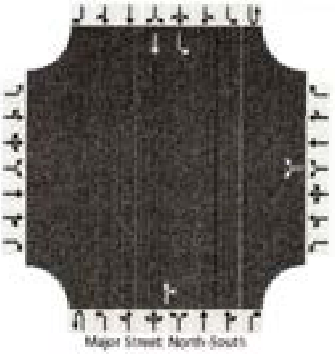
Flow Rate, v (veh/h)							108							18		
Capacity, c (veh/h)							271							1026		
v/c Ratio							0.40							0.02		
95% Queue Length, Q_{95} (veh)							1.8							0.1		
Control Delay (s/veh)							26.9							8.6		
Level of Service (LOS)							D							A		
Approach Delay (s/veh)						26.9								0.2		
Approach LOS						D								A		

Copyright © 2023 University of Florida. All Rights Reserved.

HCS Two-Way Stop-Control Report

General Information		Site Information	
Analyst	James Kemp	Intersection	Jenkins Rd & Project Driveway
Agency/Co.	O'Rourke Engineering	Jurisdiction	St. Lucie
Date Performed	7/27/2023	East/West Street	Project Driveway
Analysis Year	2026	North/South Street	Jenkins Road
Time Analyzed	PM Peak Hour	Peak Hour Factor	0.94
Intersection Orientation	North-South	Analysis Time Period (hrs)	0.25
Project Description	Future Total with Project		

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		0	0	0		0	1	0	0	0	1	0	0	1	1	0
Configuration							LR					TR		L	T	
Volume (veh/h)						27		30			578	47		51	519	
Percent Heavy Vehicles (%)						3		3						3		
Proportion Time Blocked																
Percent Grade (%)						0										
Right Turn Channelized																
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)						7.1		6.2						4.1		
Critical Headway (sec)						6.43		6.23						4.13		
Base Follow-Up Headway (sec)						3.5		3.3						2.2		
Follow-Up Headway (sec)						3.53		3.33						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)							61							54		
Capacity, c (veh/h)							253							920		
v/c Ratio							0.24							0.06		
95% Queue Length, Q_{95} (veh)							0.9							0.2		
Control Delay (s/veh)							23.7							9.2		
Level of Service (LOS)							C							A		
Approach Delay (s/veh)						23.7							0.8			
Approach LOS						C							A			

Copyright © 2023 University of Florida. All Rights Reserved.

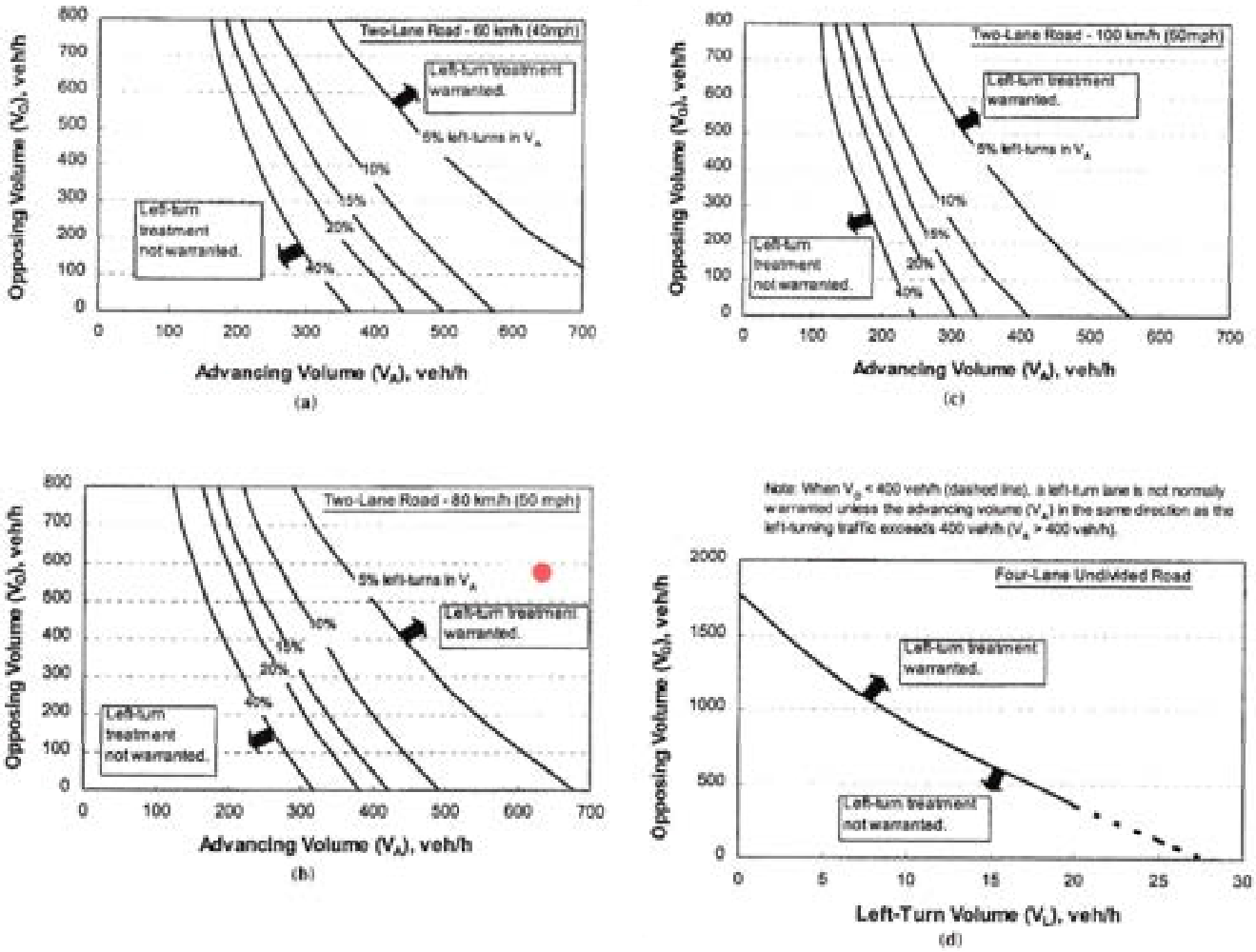


Figure 2-5. Guideline for determining the need for a major-road left-turn bay at a two-way stop-controlled intersection.

Application. The guidance stated in the preceding section defines the conditions that may justify the provision of a left-turn bay. Application of this guidance requires two types of data:

1. Major-road turn movement volume for the peak hour of the average day and
2. Major-road 85th percentile speed (posted speed can be substituted if data are unavailable).

Use of Figure 2-5 requires determination of the opposing volume, the advancing volume, and the operating speed. The opposing volume should include only the right-turn and through movements on the approach across from (and heading in the opposite direction of) the subject major-road approach. The advancing volume should include the left-turn, right-turn, and through movements on the subject approach. The operating speed can be estimated as the 85th percentile speed. If the operating speed does not coincide with 60, 80, or 100 km/h (i.e., 40, 50, or 60 mph), then interpolation can be used or, as a more conservative approach, the operating speed can be rounded up to the nearest speed for which a figure is provided.

In application, Figure 2-5 is used once for each major-road approach to the intersection. The appropriate trend line is identified on the basis of the percentage of left-turns on the subject major-road approach. If the advancing and opposing volume combination intersects above or to the right of this trend line, a left-turn bay should be considered for the subject approach. If a bay is included at the intersection, it should be long enough to store left-turn vehicles 99.5 percent of the time (i.e., the bay should not overflow more than 0.5 percent of the time). Techniques for estimating this storage length are provided in the section, Increase the Length of the Turn Bay.

Add a Right-Turn Bay on the Major Road

Introduction. Provision of a right-turn bay on the major road to a two-way stop-controlled intersection can signifi-

cantly improve operations and safety at the intersection. A right-turn bay effectively separates those vehicles that are slowing or stopped to turn from those vehicles in the through traffic lanes. This separation minimizes turn-related collisions (e.g., angle, rear-end, and same-direction-sideswipe) and eliminates unnecessary delay to through vehicles.

One disadvantage of adding a bay to the major-road approach is that it may require reallocating the existing pavement or widening of the approach cross section. Sometimes the pavement width needed for the additional lane is available within the existing roadway cross section. However, in downtown settings this reallocation may require the removal of some curb parking stalls and can affect adjacent business significantly. Occasionally, the cross section must be widened to provide for the turn bay. If the needed width can be provided within the available right-of-way, the cost may be limited to that of construction. However, if additional right-of-way is needed, the costs of acquiring this property in urban settings can be high.

Guidance. Hasan and Stokes (*22*) developed guidelines for determining when to provide a right-turn bay on the major road of a two-way stop-controlled intersection. These guidelines were based on an evaluation of the operating and collision costs associated with the right-turn maneuver relative to the cost of constructing a right-turn bay. The operating costs included those of road-user fuel and delay. Separate guidelines were developed for two-lane and four-lane roadways. These guidelines are shown in Figure 2-6.

Application. The guidance described in the preceding section defines conditions that may justify the provision of a right-turn bay. Application of this guidance requires two types of data:

1. Major-road turn movement volume for the peak hour of the average day and
2. Major-road 85th percentile speed (posted speed can be substituted if data are unavailable).

Figure 2-6 should be consulted once for each major-road approach. If the combination of major-road approach volume and right-turn volume intersects above or to the right of the trend line corresponding to the major-road operating speed, then a right-turn bay is a viable alternative.

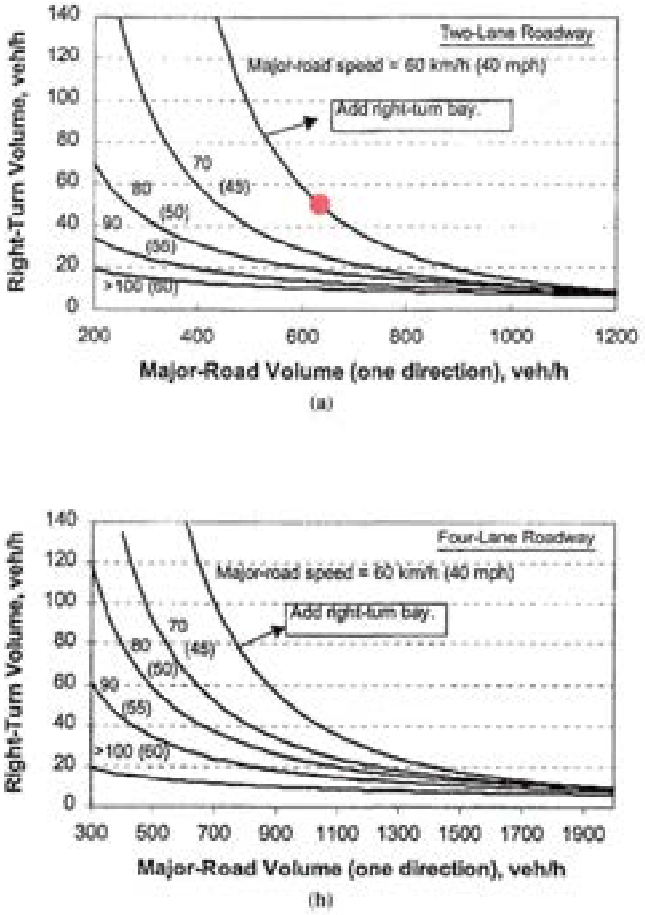


Figure 2-6. Guideline for determining the need for a major-road right-turn bay at a two-way stop-controlled intersection.

Increase Length of Turn Bay

Introduction. Turn bay length can affect the safety and operation of the intersection approach significantly. This effect becomes more negative as the frequency with which vehicles exceed the available storage increases. Also, for unstopped approaches, this effect becomes more negative as more of the turning vehicle's deceleration occurs in the through lane, prior to the bay. The need to provide adequate storage length, deceleration length, or both is dependent on the type of approach control used and whether the vehicle is turning left or right. Table 2-13 identifies the appropriate bay

TABLE 2-13 Turn-bay length components at unsignalized intersections

Approach Control	Length Components	
	Left-Turn Bay	Right-Turn Bay
Unstopped	Storage Length + Deceleration Length	Deceleration Length
Stopped	Storage Length	Storage Length

TABLE 3a - Link Analysis - AM Peak Hour

Segment	From	To	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	D Factor (1)	2023 Peak Hour Volumes (From 2023 TPO)	2023 Directional Peak Hour Volumes	Growth Rate (2)	2026 Peak Hour Volumes w/ Growth Factor	2026 Peak Hour w/ 1% Growth	AM Peak Hour Committed Projects Directional	2026 1% Growth + Committed Peak Direction	Higher of Growth Rate or 1% + Commited	Resultant Growth Rate	Peak Hour Service Capacity (E+C)	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity-Peak Hour	Does Project Meet Concurrency ?	Project Percent Assignment
Jenkins Rd	Okeechobee Rd	Project Driveway	NB	IN	**YES**	0.603	567	567	1.10%	586	584	191	775	775	10.99%	920	14	789	1.52%	YES	48%
	Okeechobee Rd	Project Driveway	SB	OUT	**YES**	0.397	567	373	1.10%	386	385	214	599	599	17.05%	920	44	643	4.78%	YES	48%
	Project Driveway	Graham Rd	NB	OUT	**YES**	0.603	567	567	1.10%	586	584	191	775	775	10.99%	920	47	822	5.11%	YES	52%
	Project Driveway	Graham Rd	SB	IN	**YES**	0.397	567	373	1.10%	386	385	214	599	599	17.05%	920	15	614	1.63%	YES	52%
	Graham Rd	Peterson Rd	NB	OUT	**YES**	0.423	567	416	1.10%	430	428	259	687	687	18.25%	630	32	719	5.08%	YES(3)	35%
	Graham Rd	Peterson Rd	SB	IN	NO	0.577	567	567	1.10%	586	584	165	749	749	9.73%	630	10	759	1.59%	YES(3)	35%
	Peterson Rd	Orange Ave	NB	OUT	**YES**	0.539	567	567	1.10%	586	584	352	936	936	18.19%	920	32	968	3.48%	YES(3)	35%
	Peterson Rd	Orange Ave	SB	IN	NO	0.461	567	485	1.10%	501	500	171	671	671	11.41%	920	10	681	1.09%	YES	35%

Note: TPO Provides Peak Direction, off-peak derived from D Factor

(1) FDOT 2022 Annual Average Daily Traffic Report

(2) Growth rate calculated from St Lucie County Traffic Counts and Level of Service Reports

(3) 2026 and Commited Project trips cause the roadway to exceed service capacity

IN: 29

OUT: 91

Years Grown: 3

TABLE 3b - Link Analysis - PM Peak Hour

Segment	From	To	Direction	IN/OUT	Greater than 3% (1% on Adjacent Links)	D Factor (1)	2023 Peak Hour Volumes (From 2023 TPO)	2023 Peak Hour Volumes (From 2023 TPO)	Growth Rate (2)	2026 Peak Hour Volumes w/ Growth Factor	2026 Peak Hour w/ 1% Growth	PM Peak Hour Committed Projects Directional	2026 1% Growth + Committed Peak Direction	Higher of Growth(1) Rate or 1% + Commited	Resultant Growth Rate	Peak Hour Service Capacity (E+C)	Project Volume Peak Direction	Total Traffic (Peak Direction)	% Project of Capacity-Peak Hour	Does Project Meet Concurrency ?	Project Percent Assignment
Jenkins Rd	Okeechobee Rd	Project Driveway	NB	IN	**YES**	0.495	574	563	1.10%	581	580	249	829	829	13.78%	920	47	876	5.11%	YES	48%
	Okeechobee Rd	Project Driveway	SB	OUT	**YES**	0.505	574	574	1.10%	593	591	237	828	828	13.01%	920	27	855	2.93%	YES	48%
	Project Driveway	Graham Rd	NB	OUT	**YES**	0.495	574	563	1.10%	581	580	249	829	829	13.78%	920	30	859	3.26%	YES	52%
	Project Driveway	Graham Rd	SB	IN	**YES**	0.505	574	574	1.10%	593	591	237	828	828	13.01%	920	51	879	5.54%	YES	52%
	Graham Rd	Peterson Rd	NB	OUT	**YES**	0.530	574	574	1.10%	593	591	231	822	822	12.73%	630	20	842	3.17%	YES(3)	35%
	Graham Rd	Peterson Rd	SB	IN	**YES**	0.470	574	509	1.10%	526	524	289	813	813	16.91%	630	34	847	5.40%	YES(3)	35%
	Peterson Rd	Orange Ave	NB	OUT	NO	0.437	574	446	1.10%	460	459	265	724	724	17.57%	920	20	744	2.17%	YES	35%
	Peterson Rd	Orange Ave	SB	IN	**YES**	0.563	574	574	1.10%	593	591	379	970	970	19.13%	920	34	1004	3.70%	YES(3)	35%

Note: TPO Provides Peak Direction, off-peak derived from D Factor

(1) FDOT 2022 Annual Average Daily Traffic Report

(2) Growth rate calculated from St Lucie County Traffic Counts and Level of Service Reports

(3) 2026 and Commited Project trips cause the roadway to exceed service capacity

IN: 98

OUT: 57

Years Grown: 3

Planning Board **6. d.**

Meeting Date: 02/12/2024

Re: Major Site Plan Amendment (Development Review) - Ocean Village Pickleball Amenity - 2400 S. Ocean Dr.

Submitted For: Kev Freeman, Planning Director, Planning Department

---

Information

SUBJECT:

Major Site Plan Amendment - Ocean Village Pickleball Amenity - 2400 S. Ocean Drive

SUMMARY:

The proposed development will include a 5-court Pickleball Amenity for the Ocean Village Residential Development and associated site improvements. The courts will consist of asphalt surfacing with 12-foot tall fencing, and surrounding buffer landscaping.

On September 7, 2021, the City Commission of the City of Fort Pierce approved a Site Plan (Development Review and Design Review) to construct a 6,426 square foot clubhouse with racquet courts. Following sound studies by the Property Owner's Association (POA), the decision was made to design five (5) Pickleball Courts in a different area in order to make every effort to minimize potential noise impacts to the closest residents. This Major Site Plan application is the result of that reconsidered design and siting based on a sound study by an acoustic specialist, PSM LLC Pickleball Sound Mitigation, which is included in this Major Site Plan submittal as background and support for the Major Site Plan at the request of Staff. This Pickleball amenity has been designed to meet and exceed the City of Fort Pierce Code of Ordinances Sound Level Limitations (Section 26-40) for Residential Uses. While Section 26-40 sets a residential threshold of 60dB between the hours of 7:00 am and 11:00 pm, it was the POA's direction to the acoustic specialist to design the courts to not exceed 50dB at the units nearest the proposed courts. The proposed site plan, landscaping and court buffering materials meet that higher standard, as discussed in the sound study by PSM LLC.

Ocean Village is a 40.02-acre gated planned community with approximately 3,500 feet of beach frontage consisting of condominiums and single-family homes. Ocean Village offers 24-hour security, a Par-3 9-hole executive golf course, tennis courts, heated swimming pools, a jacuzzi, sauna, fitness center, card room, and a library with WI-FI. The proposed clubhouse replaced the existing approximately 3,455-square foot clubhouse and proposed to provide a new court covering. The proposed site improvements included the removal of the existing building and asphalt, as well as the construction of the new 6,426 square foot clubhouse with modifications to parking, lighting, and water and sewer to serve the new building.

The proposed pickleball courts total approximately 9,990 square feet. Per City Code Section 125-313. – Major and Minor Site Plan Application (b); a nonresidential or mixed-use development over 4,000 square feet in area is considered a Major Site Plan. Therefore, this site plan amendment application qualifies as a Major Site Plan Amendment.

RECOMMENDATION:

The proposed Major Site Plan Amendment (Development) application adheres to the requirements of the City Land Development Code and guidelines of the City's Comprehensive Plan. Therefore, Staff recommends **APPROVAL** of the requested application.

ALTERNATIVES:

1. Recommend Modified Approval.
2. Recommend Disapproval.

RESPONSIBLE STAFF:

Vennis Gilmore, Assistant Planning Director

COORDINATED WITH:

Technical Review Committee

Fiscal Impact

OTHER INFORMATION:

N/A

Attachments

Staff Report
TRC Comments
Application and Supporting Documents

Form Review

Form Started By: Vennis Gilmore Started On: 02/05/2024 08:00 PM
Final Approval Date: 02/07/2024

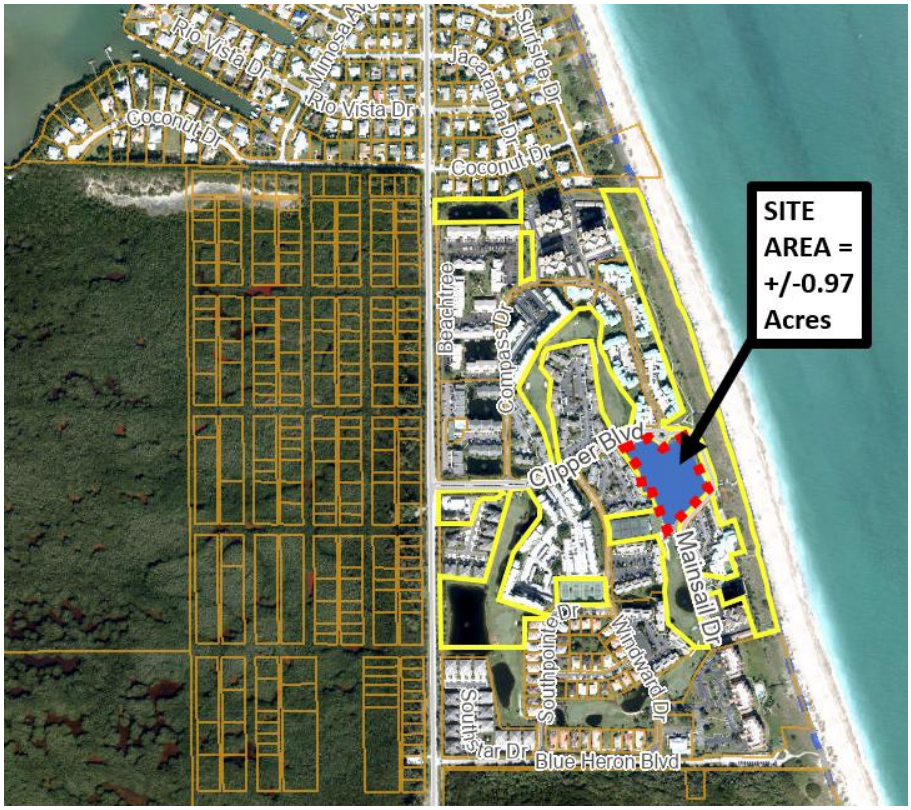
CITY OF FORT PIERCE
PLANNING DEPARTMENT

PROJECT: OCEAN VILLAGE PICKLEBALL AMENITY – MAJOR SITE PLAN AMENDMENT (DEVELOPMENT REVIEW)
REVIEWER: VENNIS GILMORE, ASSISTANT PLANNING DIRECTOR

DATE: FEBRUARY 12, 2024

STAFF REPORT

Owner:	Ocean Village POA
Applicant/Representative:	Leslie Olson, AICP, Principal, District Planning Group
Requested Action:	Major Site Plan (Development Review)
Location:	2400 South Ocean Drive
Parcel IDs:	2507-321-0001-000-5
Current Zoning:	R-4A, Hutchinson Island Medium Density Residential Zone
Future Land Use:	HIR, Hutchinson Island Residential





Surrounding Zoning:

North	East	South	West
R-1	Atlantic Ocean	OS-2	Conservation Land

Site Area:
+/- 0.97 Acres

Utilities: Located within the FPUA Service Area

Staff Analysis:

Request
Request for review of an application for a Major Site Plan Amendment (Development Review) to construct a 5-court Pickleball Amenity for the Ocean Village Residential Development and associated site improvements.

Project Summary
The proposed development will include a 5-court Pickleball Amenity for the Ocean Village Residential Development and associated site improvements. The courts will consist of asphalt surfacing with 12-foot-tall fencing, and surrounding buffer landscaping. The applicant submits that as the courts are to be utilized by residents only that additional paring is not required. However, if the courts are to be utilized by non-residents, then the consideration of an appropriate parking ratio should be applied.

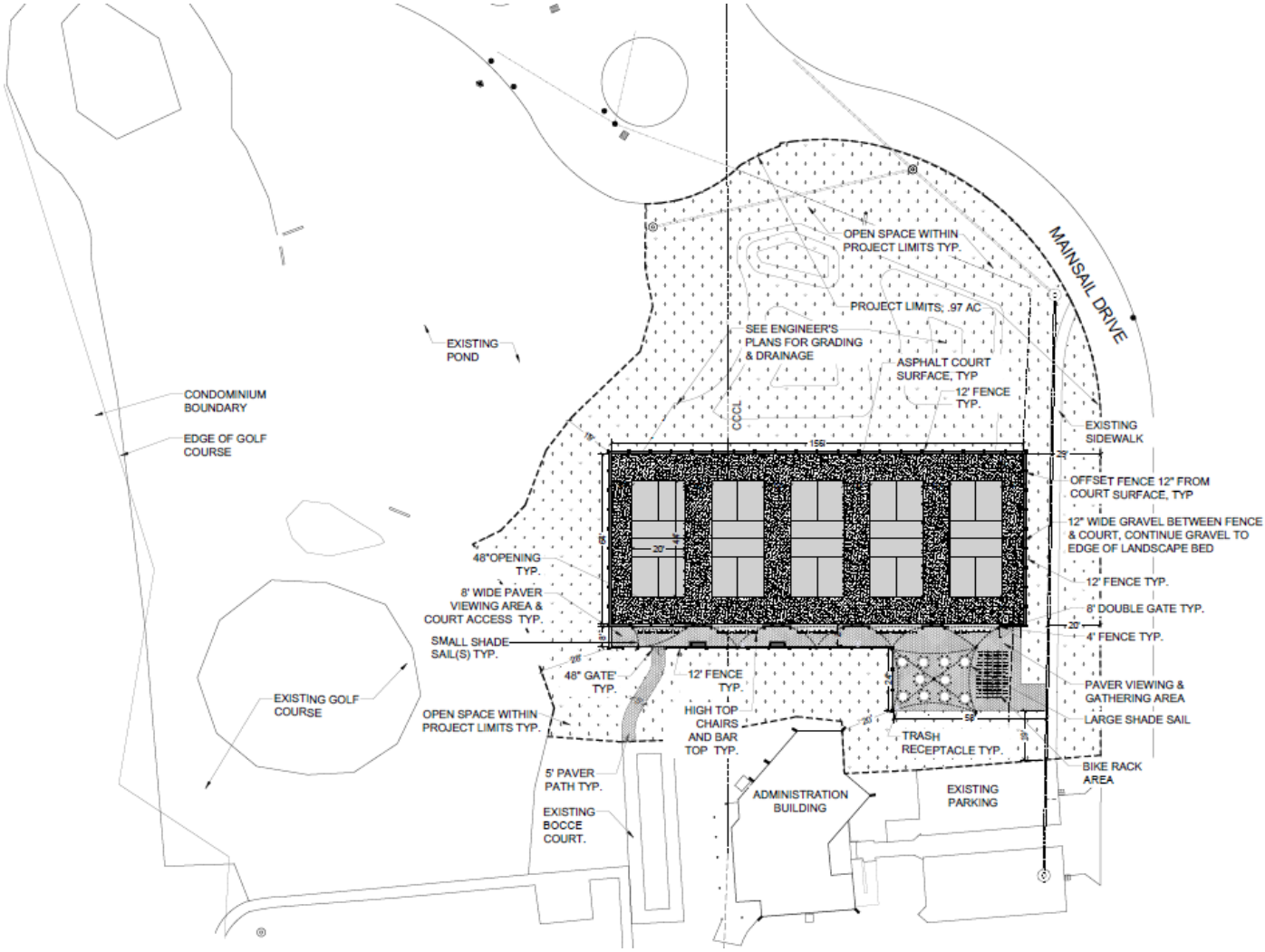
On September 7, 2021, the City Commission of the City of Fort Pierce approved a Site Plan (Development Review and Design Review) to construct a 6,426 square foot clubhouse with racquet courts. Following sound studies by the Property Owner's Association (POA), the decision was made to design five (5) Pickleball Courts in a different area in order to make every effort to minimize potential noise impacts to the closest residents. This Major Site Plan application is the result of that reconsidered design and siting based on a sound study by an acoustic specialist, PSM LLC Pickleball Sound Mitigation, which is included in this Major Site Plan submittal as background and support for the Major Site Plan at the request of Staff. This Pickleball amenity has been designed to meet and exceed the City of Fort Pierce Code of Ordinances Sound Level Limitations (Section 26-40) for Residential Uses. While Section 26-40 sets a residential threshold of 60dB between the hours of 7:00 am and 11:00 pm, it was the POA's direction to the acoustic specialist to design the courts to not exceed 50dB at the units nearest the proposed courts. The proposed site plan, landscaping and court buffering materials meet that higher standard, as discussed in the sound study by PSM LLC.

Ocean Village is a 40.02-acre gated planned community with approximately 3,500 feet of beach frontage consisting of condominiums and single-family homes. Ocean Village offers 24-hour security, a Par-3 9-hole executive golf course, tennis courts, heated swimming pools, a jacuzzi, sauna, fitness center, card room, and a library with WI-FI. The proposed clubhouse replaced the existing approximately 3,455-square foot clubhouse and proposed to provide a new court covering. The proposed site improvements included the removal of the existing building and asphalt, as well as the construction of the new 6,426 square foot clubhouse with modifications to parking, lighting, and water and sewer to serve the new building.

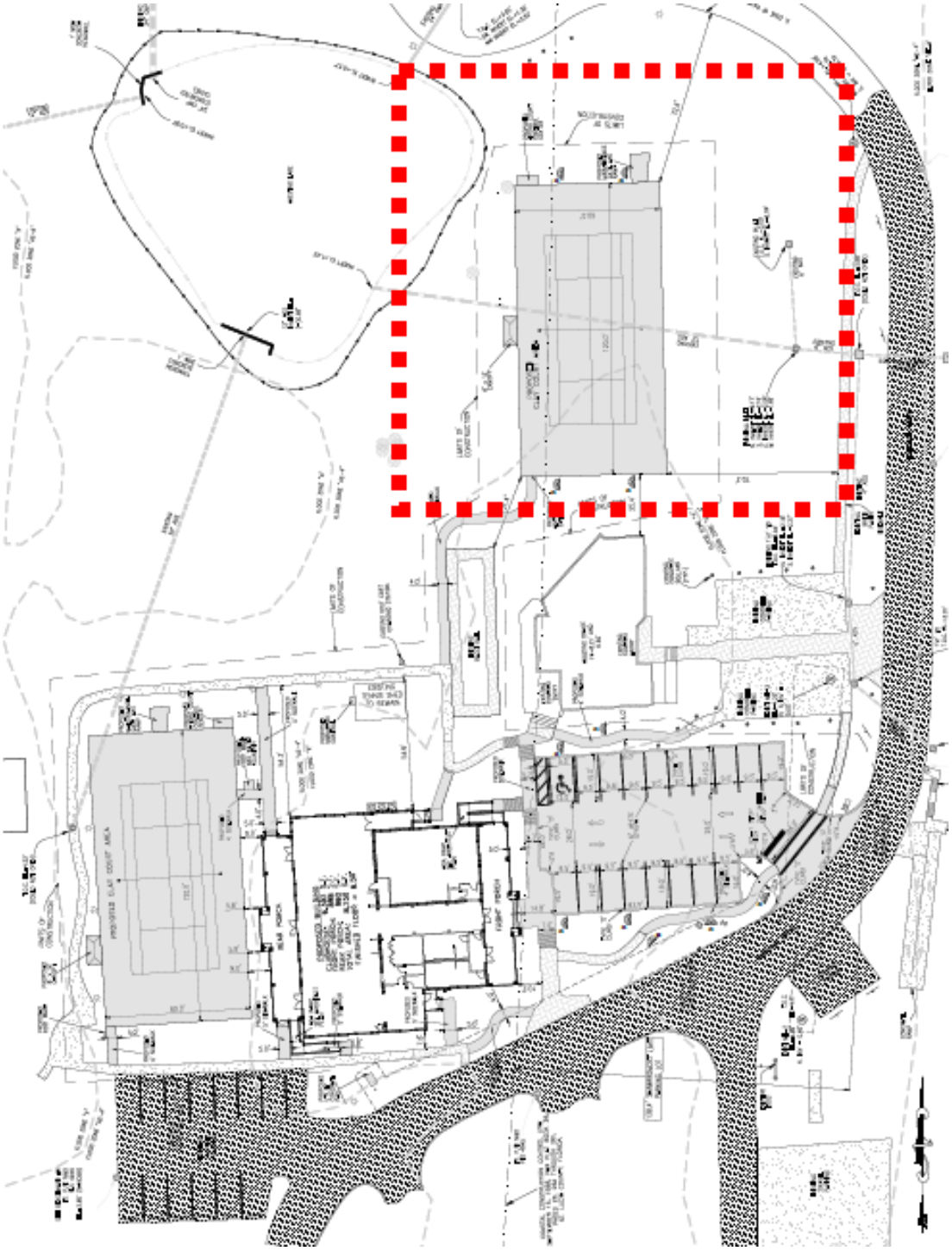
The proposed pickleball courts total approximately 9,990 square feet. Per City Code Section 125-313. – Major and Minor Site Plan Application (b); a nonresidential or mixed-use development over 4,000 square feet in area is considered a Major Site Plan. Therefore, this site plan amendment application qualifies as a Major Site Plan Amendment.

Staff have received several objections from residents which express concern over the type of noise and disturbance generated by activities generated by Pickleball. The City has initiated a comprehensive review of the existing noise ordinance through a consultant, who has been advised of the complaints and issues raised.

Proposed Major Site Plan Amendment



Original Approved Major Site Plan



Existing Conditions

The site is currently vacant land. The subject parcel has a total of approximately 0.97 acres. The site is surrounded by vacant land to the north, west, and east and an administration building to the south.

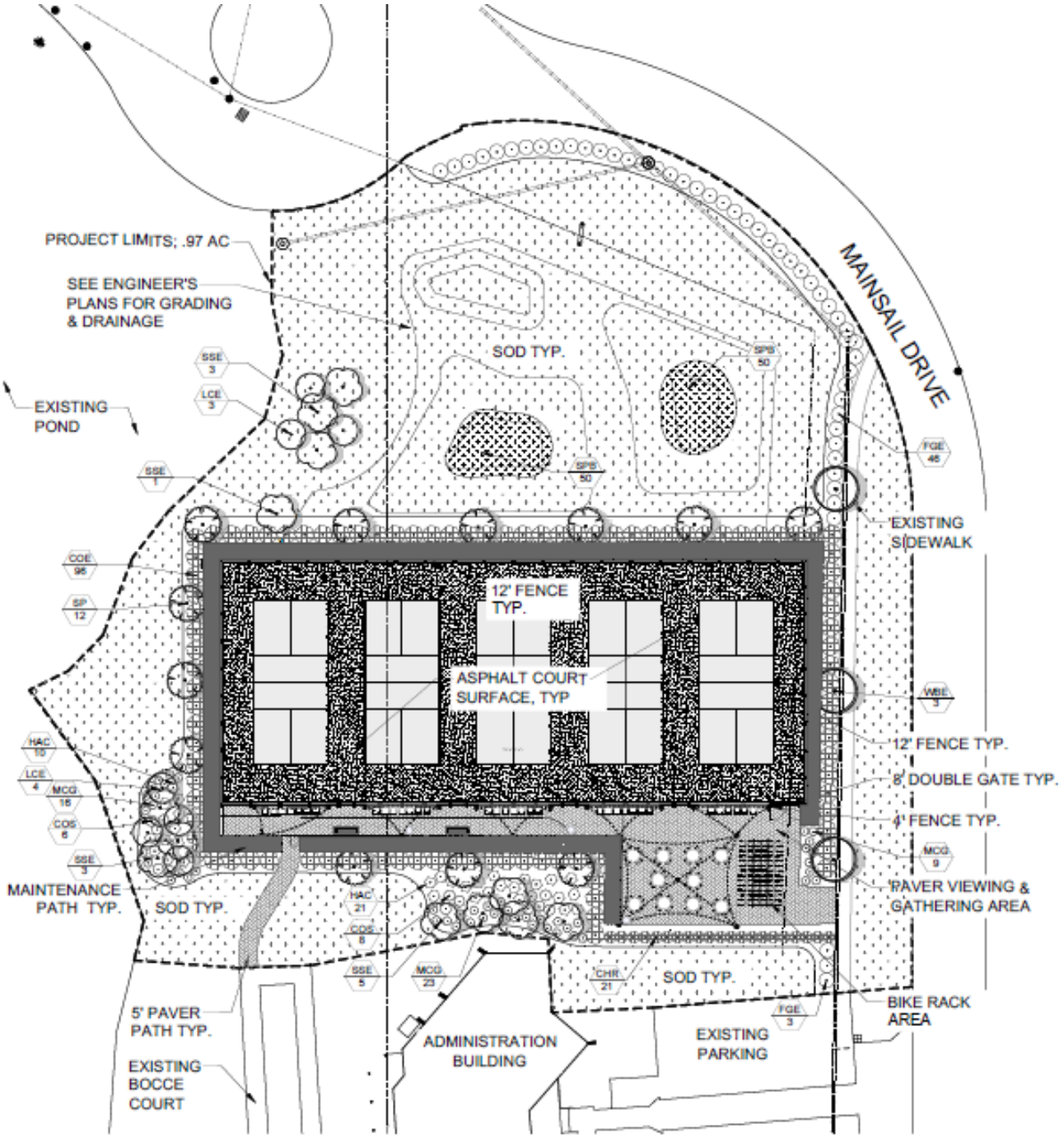
Stormwater Retention & Landscaping
Stormwater Retention

Please see stormwater drainage plan on the conceptual civil plans provided with this submittal.

Landscaping

All plants shall conform to established nursery grades and standards, to be Florida No. 1 or better, and shall be free of disease and insects at the time of installation. All new landscaping shall be provided with 100% irrigation coverage.

The overall landscape plan is provided on Sheet LA-1; detailed landscape plans are provided on Sheet LA-1, and the Project plant list is provided on Sheet1 LA-1.



Plant List

Trees to remain:

7 - Chinese Fan Palm
12- Cabbage Palmetto
3 - Foxtail Palm

New Palm Trees:

12- Sabal Palmetto

Shrubs to remain:
49 Green Island Ficus

New Shrubs:
210 Shrub Varieties

Ground Covers:
St. Augustine
Sand Cordgrass

The proposed landscaping meets City Code requirements.

Comprehensive Plan
The subject property is designated with an HIR, Hutchinson Island Residential future land use. The designation is intended for parcels that are best suited for residential development on Hutchinson Island. This future land use category allows single-family detached and attached units, duplexes and multifamily residences at densities ranging up to eight dwelling units per acre. Limited public uses and commercial uses that are compatible with the surrounding development shall also be allowed. The previous "Medium Density Residential Hutchinson Island (Rmhi)" has been renamed.

Summary of Technical Review Committee

All affected departments have reviewed the proposed Development Plan with regards to consistency with established ordinances and requirements of the City Code.

Fort Pierce Engineering Department
See attached document.
Fort Pierce Building Department
See attached document.
St. Lucie County Planning Department
No comments received.
St. Lucie County PW/Engineering
No comments received.
Fort Pierce Police Department
No comments received.
City Clerk Office
No comments received.
Code Enforcement
No comments received.
Fort Pierce Utilities Authority
See attached document.
St. Lucie County Fire District
No comments received.
Florida Department of Transportation
No comments received.

St. Lucie County School Board
No comments received.
St. Lucie Transportation Planning Organization
No comments received.

Full findings and comments from review by the corresponding departments, and the responses and plan amendments by the applicant are provided for consideration by the Planning Board.

Staff Recommendation:
The proposed Major Site Plan Amendment (Development) application adheres to the requirements of the City Land Development Code and guidelines of the City's Comprehensive Plan. Therefore, Staff recommends **APPROVAL** of the requested application with the following conditions:

1. All activities at the pickleball courts shall comply with the City's Noise regulations at all times.
2. Should the use of the courts hereby approved be extended to non-residents then prior to such use an appropriate parking study shall be submitted to the Planning Department for assessment of an appropriate parking ratio. Should the parking analysis prove the requirement, then additional parking shall be permitted and built prior to non-residents being granted access.
3. The noise attenuation panels, and associated support fencing shall be maintained and remain in place at all times that the courts are in use.

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

Leslie Olson, AICP
District Planning Group
130 South Indian River Drive, Suite 202
Fort Pierce, FL 34950

Project#: 23-07000026

Subject: Ocean Village Pickleball Courts – Major Site Plan – Parcel ID: 2507-321-0001-000-5 –- Technical Review Committee Comments for December 21, 2023 TRC Meeting

City of Fort Pierce Planning Department

1. A certified letter of completion by a landscape architect, cost estimate, and landscape bond pursuant to City Code 123-6 shall be required before the Final Certificate of Occupancy is approved for the site.
2. Prior to the issuance of any site clearing permits, the applicant shall provide a Tree Mitigation Survey with calculations and coordinate with the City of Ft. Pierce Arborist for the required mitigation of the City regulated trees proposed to be removed as a result of this site's development/construction activity.
3. Per City Code Section 26-40; Limit hours of operation for the Pickleball Courts to Monday through Saturday 7am-11pm, and Sunday 7am-1pm.
4. Adhere to the recommendations of the Pickleball Sound Analysis Report completed by PSM LLC for Pickleball Sound Mitigation prior to issuance of Final Certificate of Occupancy.
5. Adhere to the following Sound Mitigation recommendations:

- Install 14 ft high mass-loaded vinyl barriers along the west side of the proposed courts, 15 ft along the north and a 12 ft high absorbing barrier along the south side and enforce the use of quieter paddles. ***These steps will reduce frequent pickleball sound levels to or below 50 dBA outside of local residences on all floors of the buildings.***
- Diagonal corners for the fencing in three locations, ***which will enhance fence strength and reduce sound reflections.***
- The sound barriers along the north and west fence should not have gates or any openings that would permit sound to pass unobstructed. ***The fences do not need to have chain link material above the 10 ft height, if that assists in building the fencing. The south fence shields the building from pickleball sound, and it avoids reflecting sound to the north because of its absorbing characteristics but it can have one or two gates for entry into the playing area.***
- The use of paddles and tournament approved paddles that meet the requirements of PSM LLC Pickleball Sound Mitigation firm's latest Blue List of Recommended Paddles listed below:

THE PICKLEBALL PADDLE BLUE LIST

PICKLEBALL SOUND MITIGATION LLC

www.pickleballsound.com

Updated: November 4, 2023

Paddle Vendor	Paddle Model Name	Notes
CRBN	1 and 1x	
CRBN	2	
Diadem	Vice	1
Diadem	Warrior	
E6	16s	
Electrum	E Pro II	
Focus	Silencer	
Franklin	Pro Series 16 mm	
Gamma	Obsidian 16	
Gearbox	CX11	
Gearbox	CX14	
Gearbox	GX5 and GX6	
Joola	Ben Johns 16 mm	
Joola	Simone Jardim 16 mm	
Joola	Radius	
Master Athletics	Q1	1
One More	Vibe	
One More	Pro Custom	
Pickleball Rocks	The Dude	
Pickleball Rocks	Pink Widow	
Pro Drive	DRIVE	
Pro Kennex	Pro Speed	
Pro Kennex	Ovation	
Pro Pickleball	Infinity Widebody 16 MM	
Selkirk	Amped Epic	
Selkirk	Vanguard Invikta	
TMPR	Tantrum and TC-16	
Versix	Pro XL	
Wild Monkeys	Grizzly	
Wowlly	Surge XL	
Wolfe	Bite	

Note 1: Two of the above paddles are not USA Pickleball tournament approved

- ½ inch thick polyethylene, Nomex or aluminum core and fiberglass, graphite or composite face paddles are not permitted on these courts, since those models tend to be loud and to

have a pitch above 1,000 Hz. This includes paddle models such as the Onix Z5, the Engage Encore, the Pro-lite Champion and the Paddletek Element and other models.

LANDSCAPING CHECKLIST - Ocean Village Pickle Ball Courts (Major Site Plan)

		COMPLY	COMMENT
123-36	SINGLE AND TWO FAMILY	NO	
Single-family and two-family dwelling that have less than 4,000 square feet of interior floor area			
(1)	Slab on Grade go to 123-36(2)	-	
	36" High Shrub or Hedge Landscape skirt around building or Stone Wall.	-	
(2)	Minimum 4 trees location and maintenance.	-	
(3)	Grass and or landscaping for groundcover (comply with 124-37)	-	
(4)	Adjacent ROW sodded and trees planted	-	
123-36	GENERAL	GUIDE	<<<<LINK
Does not apply to 123-36			
(1)	PLANT MATERIALS - Florida No. 1 - Grades and Standards for Nursery Plants Part 1 and Part 2, Department of Agriculture		
a	TREES	-	
a.1	Trees 12ft high DBH 2.5" at 4.5 ft. Palms 10ft clear trunk		
a.2	15ft spread and 15ft high at maturity	-	
a.3	50% non-Palm	YES	
a.4	Root system barrier if close to ROW etc.	YES	
a.5	Trees not permitted: Melaleuca, leucadendron (punk tree), Schinus terebinthifolius (Brazilian pepper) and Casuarina sbp. (Australian pine)	-	
	Invasive - Category 1 not permitted	INVASIVE	<<<<LINK
b	SHRUBS AND HEDGES	YES	
	Minimum 24 inches high and form a 36" hich continous screen		
	Fence /Planting screen minimum 6ft high if Abuting Residential	YES	
c	GROUND COVERS	YES	
	in lieu of grass - finished appearance within 3 months		
d	GRASS	YES	
	Permanent Lawn standard		
e	EXISTING PLANT MATERIAL	YES	
	Credit if incorporated		
(2)	LANDSCAPED AREAS	-	
	Each area should have at least one tree, shrub, grownd cover.		
(3)	LANDSCAPE STRIPS	-	
a.	6 ft wide if lot is <10,000 sq.ft. 10 ft wide if >10,000 sq.ft.		
b.	One tree for each 300 sq.ft of required landscape area - remainder covered with grass, groundcover or other as approved.	-	
(5)	OTHER PROPERTY	-	
	Between ROW and Buildings covered with grass or other gound cover as approved		
(6)	VEHICULAR USE, BUILDING, RETENTION/DETENTION adjacent to other property	-	
a.	Vehicular Use abuting property but not ROW - 10 ft wide.		
b.	If (6)a required then one tree per 200 sq.ft of required, grass ground cover or other approved.	-	
(7)	INTERIOR VEHICLE USE AREAS (urban design options	-	
a.	Lot area > 4,000 sq.ft. 1 sq.ft. Landscaping to every 15 sq.ft. of vehicular use area (1:15). (Exception I-1 & I-2 @ 1:30) Minimum 100 ft x 10 ft		
b.	One tree for each 100 sq.ft of required landscape area - remainder covered with grass, groundcover or other as approved.	-	
c.	Existing Tree Preservation credit - Also refer to Code	-	
	DBH @ 4.5 ft above ground >12"=500 sq.ft. 6"-12"=400 sq.ft. 3"- 6"= 100sq.ft		
(8)	Adjacent to Street ROW	-	
	Department determines planting of shade trees in ROW.		
	Palms may be required for driveway entrances - clear vision	-	
(9)	OTHER AREAS - When C-1, C-2, C-3, C-4, C-5, I-1, or I-2 zone abuts a lot in an E-1, R-1, R-2, R-3, R-4, R-5, OS-1, or OS-2	YES	
	Site obscuring fence/planted material - noise/visual buffer solid or planted standards.		
(10)	SCREENING OF REFUSE COLLECTION AREAS	-	
	Screening & Gates		
(11)	INSTALLATION STATEMENT	YES	
(12)	MAINTENANCE STATEMENT	YES	

THE SUNRISE CITY
FORT PIERCE
Florida
ENGINEERING
DEPARTMENT

To : Vennis Gilmore, Assistant Planning Director

From : Tracy Telle, Assistant City Engineer TST

Re : Ocean Village Pickleball Courts Site Plan – 2400 S. Ocean Drive
TRC No. 23-07000026

Date : December 12, 2023

This is to advise you that we have completed the review of the following documents as received by this office on December 7, 2023:

- [x] Site Plan Application
- [ ] Test Reports & Related Documents
- [ ] Record Drawings
- [ ] Clearances from all applicable Local, State and Federal Agencies
- [ ] Construction Drawings
- [ ] Executed Construction Contract
- [ ] Permits from applicable Local, State & Federal Agencies

Based on our reviews and appropriate site final inspection, we

- [x] Recommend
- [ ] Do Not Recommend

- [x] Site Plan Approval
- [ ] 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.

- [x] See attached for advisory comments

100 NORTH US 1, FORT PIERCE, FLORIDA 34950 • CITYOFFORTPIERCE.COM • TEL: 772.467.3000 • FAX: 772.460.6847

ENGINEERING ADVISORY COMMENTS:

1. The drainage plan was reviewed conceptually, and a thorough review of the plan will be conducted at time of Site Work Permit application.
2. Required permitting for the project may include South Florida Water Management District and Florida Department of Environmental Protection (NPDES Permit and CCCL General Permit).

100 NORTH US 1, FORT PIERCE, FLORIDA 34950 • CITYOFFORTPIERCE.COM • TEL: 772.467.3000 • FAX: 772.460.6847

THE SUNRISE CITY
FORT PIERCE
BUILDING DEPARTMENT Florida

BUILDING DEPARTMENT
TECHNICAL REVIEW COMMITTEE (TRC)
COMMENT FORM

Meeting Date: 12.21.23
Property Address: Major Site Plan Amendment - Ocean Village Pickleball Courts - 2400 S. Ocean Drive

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 the submission of comments upon completion of the official plan review.

☐ 2. Pre-construction meeting with the City's Building Department is requested.

☑ 3. All new construction or alterations shall meet the requirements of the Florida Building Code 7th Edition.

☑ 4. Building Permit required.

☑ 5. Signed and sealed construction drawings required.

☑ 6. Must meet the following Accessibility requirements:

- ☑ Accessible route
- ☑ Handicapped parking spaces
- ☑ Means of egress

☐ 7. Change of Use required

- ☐ Shall include a signed and sealed Life Safety Plan
- ☐ Shall include a signed and sealed comprehensive drawing, detailing how the building and elements will comply with the Florida Building Code requirements.

MEP

☐ 8. Property exists in Special Flood Hazard Area. All Federal and State requirements shall be addressed.

☐ 9. Flood Development Permit required.

☐ 10. Final plat and approved parcel ID's required to submit or DPCR and building permit review.

☐ 11. Open permits, requiring attention exist.

☐ 12. Shall meet the Fire Prevention Code:

- ☐ Sprinkler system is required.
- ☐ Smoke alarm system is required.

☐ 15. Other

Additional Comments/Requirements:

Building Official's or Representative's Signature _____ Date: 12/19/23

Fort Pierce Utilities Authority
Water/Wastewater Engineering
1701 South 37th Street
Fort Pierce, FL 34947
772.466.1600 x3402

Technical Review Committee Meeting

TECHNICAL REVIEW PROJECT: # 23-07000026

Major Site Plan Amendment - Ocean Village Pickleball Courts - 2400 S. Ocean Drive

Comments

FPUA W/WW Engineering: Approved.

FPUA Electric Engineering: Electric and Gas Engineering has reviewed the application. **Approved.**

Please contact Sal Scimeca for project coordination.

Sal Scimeca
Engineering Technician III
Electric & Gas Engineering
Fort Pierce Utilities Authority
<sscimeca@fpua.com>
772.466.1600 ext. 6957

FPUA Gas: N/A

FPUAnet Fiber: N/A

THE SUNRISE CITY
FORT PIERCE
PLANNING DEPARTMENT Florida

DEVELOPMENT REVIEW

Property Information

Property address or Location 2400 South Ocean Drive

Parcel ID #(s) 2507-321-0001-000-5

Project description Development of 5-Court Pickleball amenity for Ocean Village

Application Type

☒ Site Plan ☐ Conditional Use w/New Construction ☐ Conceptual Development Plan

☐ Minor Amendment ☐ Major Amendment

Site Information

Non-Residential: Proposed Sq. Ft.: 9,990 Site Acreage: .97

Residential: Proposed Units: _____ Proposed Sq. Ft.: _____ Site Acreage: _____

Ocean Village POA	Leslie Olson, AICP, District Planning Group
Property Owner(s)	**Applicant/Representative, Title, Company**
2400 South Ocean Drive	130 South Indian River Drive Suite 202
Street Address	Street Address
Fort Pierce FL 34949	Fort Pierce FL 34950
City State Zip	City State Zip
772.439.0300	(772) 882-5811
Phone Number	Phone Number
maney.gale@frsresidential.com	leslie@districtplanninggroup.com
Email Address	Email Address

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

Eric C DeBack, President OV POA

Property Owner(s) Signature(s)

APPOINTMENTS ARE REQUIRED FOR APPLICATION SUBMITTALS

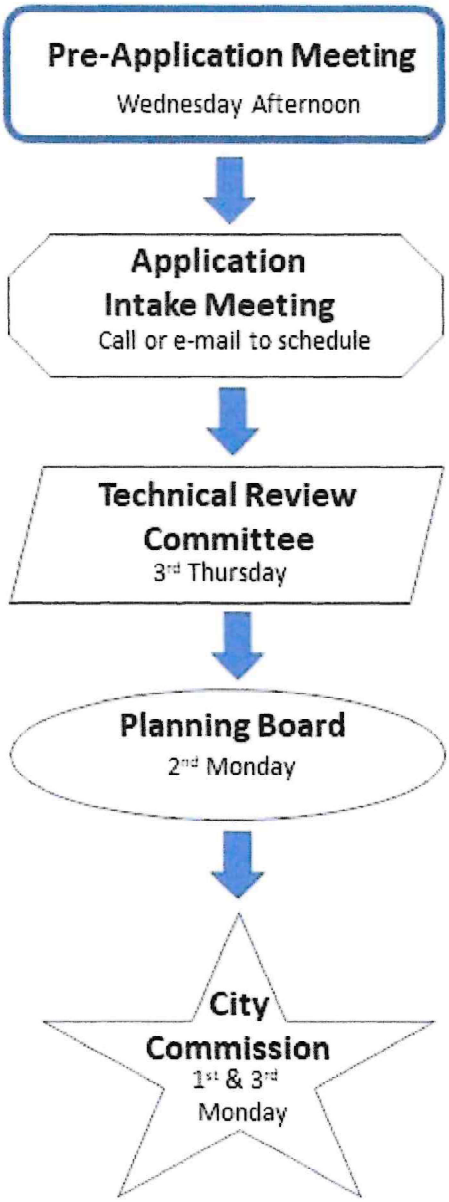
CALL 772.467.3737 OR E-MAIL PLANNING_DL@CITYOFFORTPIERCE.COM

For more information, please refer to the website:

https://www.cityoffortpierce.com/971/Application-Submittal-for-Technical-Revi

General Information

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



Site Plan submittal requirements:

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

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

DISTRICT PLANNING GROUP

Ocean Village 5-Court Pickleball Amenity
Major Site Plan
Detailed Project Narrative

Ocean Village's most recent community upgrade, the Mayor's Gold Hammer award-winning Clubhouse and amenity center site plan, included a pickleball amenity in a slightly different location. But following sound studies by the Property Owner's Association (POA), the decision was made to design five (5) Pickleball Courts in a different area in order to make every effort to minimize potential noise impacts to the closest residents.

This Major Site Plan application is the result of that reconsidered design and siting based on a sound study by an acoustic specialist, PSM LLC Pickleball Sound Mitigation, which is included in this Major Site Plan submittal as background and support for the Major Site Plan at the request of Staff.

This Pickleball amenity has been designed to meet and exceed the City of Fort Pierce Code of Ordinances Sound Level Limitations (Section 26-40) for Residential Uses. While Section 26-40 sets a residential threshold of 60dB between the hours of 7:00 am and 11:00 pm, it was the POA's direction to the acoustic specialist to design the courts to not exceed 50dB at the units nearest the proposed courts. The proposed site plan, landscaping and court buffering materials meet that higher standard, as discussed in the sound study by PSM LLC.

The Pickleball amenity includes:

- Five (5) Pickleball Courts
- Seating for 75 residents to watch or wait for open courts
- Shade sails to mitigate heat in the seating areas
- Bike Parking
- Landscaping to screen the fenced courts from view of residential units
- No lighting, as evening play will not be permitted
- Stormwater upgrades to address the new, impervious court area and paver seating area

Florida Department of Environmental Protection staff, Jason M. Spanier, Office of Resilience and Coastal Protection, visited the site on September 25, 2023 and determined a CCCL Permit will not be necessary for this alteration within the CCCL.

DRAWING INDEX:

LA-1: LANDSCAPE PLAN & PLANT SCHEDULE

LA-2: LANDSCAPE DETAILS & SPECIFICATIONS

General Landscape Notes:

1. All plants shall conform to established nursery grades and standards, to be Florida No. 1 or better, and shall be free of disease and insects at the time of installation.
2. Trees shall be a minimum of twelve (12) feet in height and have a caliper of (2.5) inches at four and one-half (4 1/2) feet above the ground when installed.
3. All required trees, except palms, shall have a minimum of five (5) feet of clear trunk and a minimum five (5) foot canopy spread at the time of planting.
4. All palm trees shall have a minimum clear trunk of ten (10) feet when installed. Three palm trees are equal to one shade tree having a mature canopy spread of fifteen (15) feet.
5. Shrubs shall be a minimum of twenty-four (24) inches in height above grade immediately after planting.
6. Groundcovers, other than grass, shall be planted in a manner as to present a finished appearance and reasonably complete coverage within four (4) months after planting.
7. Turf grass shall be installed using solid sod and shall be either Floratam sod, or approved Paspalum equal.
8. All landscape areas other than sod will be provided a mulch cover of at least three (3) inches. Cypress mulch shall not be used.
9. All existing native vegetation found on the site and is not in direct conflict with the proposed buildings or parking areas shall be left undisturbed. A suitable protective barrier, constructed of metal, wood, safety fencing, or other durable material, will be placed around the staked out locations of existing native vegetation.
10. No fill materials, construction materials, concrete, paint, chemicals, or other foreign materials shall be stored, deposited, or disposed of within any areas that have been staked or fenced off as being undisturbed native vegetation areas.
11. Existing understory shall be maintained in areas of undisturbed native vegetation.
12. All Category 1 exotic plant species will be eradicated from the site.
13. Conspicuous, durable barricades will be erected around each individual tree or areas of vegetation that are to be preserved. In the event that any protective barricades are removed or altered and land clearing or construction work is being conducted on the site, all work at the site will be stopped until the barriers are restored and any necessary corrective actions taken to repair or replant any vegetation removed or damaged as a result of these encroachments.
14. Irrigation to conform to all local and State regulations with regard to water consumption.
15. All new landscaping shall be provided with an automated irrigation system with rain sensor to provide 100% coverage through the establishment period, not less than 1-year.

811 Know what's below. Call before you dig.

Plant Schedule:

SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
* EXISTING TREES TO REMAIN									
	LCE	7	Livistona chinensis	Chinese Fan Palm	Existing to Remain	8`OA			Non-native
	SSE	12	Sabal palmetto	Cabbage Palmetto	Existing to Remain	15`-22` OA, MIX HTS			Native
	WBE	3	Wodyetia bifurcata	Foxtail Palm	Existing to Remain	16`OA			Non-native
PALM TREES									
	SP	12	Sabal palmetto	Sabal Palm	FG	16` CT, 20` OA		SLK, SP	Native
SHRUBS									
	CHR	21	Chrysobalanus icaco `Redtip`	Red Tip Cocoplum	3G	24" HT	18"W	F	Native
	COE	96	Conocarpus erectus	Green Buttonwood	25G	6`HT	4`W	F	Native
	COS	14	Conocarpus erectus sericeus	Silver Buttonwood	7G	4` HT	3`W	F	Native
	HAC	31	Hamilia patens `Calusa`	Dwarf Firebush	3G	24" HT	18"W	F	Native
	MCG	48	Muhlenbergia capillaris	Pink Muhly	3G	24" HT	12"W	F	
EXISTING SHRUBS TO REMAIN									
	FGE	49	Ficus microcarpa 'Green Island'	Green Island Ficus	Existing to Remain	4` OA			Non-native
SYMBOL	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
GRASSES									
	SPB	100	Spartina bakeri	Sand Cordgrass	1G	18" HT		F	Native
** SOD									
	SOD	TBD	Stenotaphrum secundatum `Floratam`	Floratam St. Augustine Sod	SOD			Free of Weeds and Pests	

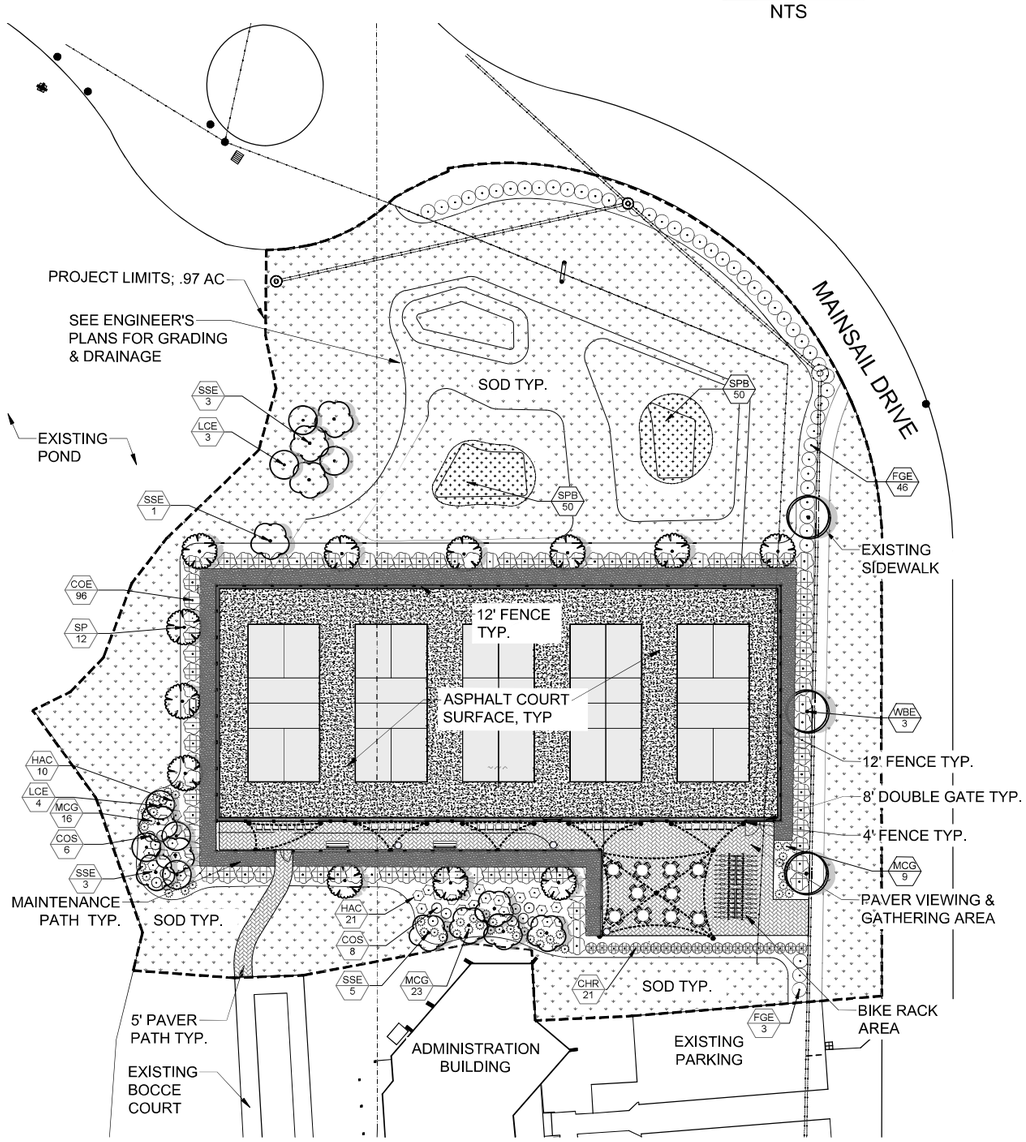
*SEE TREE PROTECTION DETAIL ON SHEET LA-2 FOR ALL TREES TO REMAIN; NO TREES ARE TO REMOVED FROM THE PROJECT SCOPE LIMITS

**MAY BE SUBSTITUTED WITH PASPALUM SPECIES

PROJECT LOCATION



SITE MAP
NTS



Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983
(772) 631-8400 | Paul@las-fl.com

Applicant:

Ocean Village POA

OCEAN VILLAGE PICKLEBALL COURTS

Fort Pierce, FL

Landscape Plan

Revisions		
Date	Init.	Description
11.14.23	PG	Landscape Plan

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By: PG
Checked By: PG
Municipal Project:
Scale:

NORTH

SCALE: 1" = 20'

0 10' 20' 40'

LA-1

LANDSCAPE SPECIFICATIONS:

PART 1: GENERAL CONDITIONS

1.01 SCOPE:
A. The landscape contract includes the supplying and planting of all trees, shrubs, vines, and ground cover together with all necessary labor, equipment, tools and materials needed for the successful completion, execution and maintenance of the landscape plans.

1.02 AGENCY STANDARDS:
A. Grades and standards of plant materials to be used shall be true to name, size, condition and graded Florida #1 or better as stated in: Grades and Standards of Florida Plant Materials published by the State of Florida Department of Agriculture, Tallahassee, Florida.

1.03 SITE EXAMINATION:
A. The Landscape Contractor shall personally examine the site and fully acquaint him/herself with all of the existing conditions in order that no mis-understanding may afterwards arise as to the character or extent of the work to be performed, and additionally, in order to acquaint him/herself with all precautions to be taken in order to avoid injury to property or persons. No additional compensation will be granted because of any unusual difficulties which may be encountered in the execution or maintenance of any portion of the work.

1.04 ERRORS AND OMISSIONS:
A. The plant list is a part of the drawings and is furnished as a convenience. The plant list indicates the name, size and quantities of specific plant materials as called for and is located on the drawings. The Landscape Contractor is responsible for his/her own quantity count, and any discrepancy between drawings and plant list shall be considered as correct on the drawings.

B. The Landscape Contractor shall not take advantage of errors or omissions in the specifications or contract drawings. Full instruction will be given if such errors are discovered. Upon the discovery of any discrepancies in, or omissions from the drawings or documents, or should the Landscape Contractor be in doubt as to their meaning, the Landscape Architect shall be notified and will determine the actions necessary to each query.

C. If plans and specifications are found to disagree after the contract is awarded, the Landscape Architect shall be the judge as to which was intended.

1.05 EXECUTION OF THE WORK:
A. The Landscape Contractor shall have his labor crews controlled and directed by a Foreman well-versed in plant materials, planting methods, reading blueprints, and coordination between job and nursery in order to execute installation correctly and in a timely manner.

B. The Landscape Contractor shall provide a competent English-speaking Foreman on the project at all times, who shall be fully authorized as the Contractor's agent on the work. The Superintendent shall be capable of reading and thoroughly understanding the Plans, Specifications and other Contract Documents. If the Superintendent is deemed incompetent by the Landscape Architect, he (the superintendent) shall be immediately replaced.

C. The Landscape Contractor shall be available for any meetings with the Owner and/or Landscape Architect during implementation of the job. Any additional work or changes required as a result of failure to communicate with the Owner or Landscape Architect during implementation will be the responsibility of the Landscape Contractor.

1.06 PROTECTION OF PUBLIC AND PROPERTY:
A. The Landscape Contractor shall protect all materials and work against injury from any cause and shall provide and maintain all necessary safeguards for the protection of the public. He shall be held responsible for any damage or injury to persons or property which may occur as a result of his fault or negligence in the execution of the work, i.e, damage to underground pipes or cables.

1.07 CHANGES AND EXTRAS:
A. The Contractor shall not start work on any changes or "extras" in the project until a written agreement setting forth the adjusted prices has been executed by the Owner and the Contractor. Any work performed on changes or "extras" prior to execution of a written agreement may or may not be compensated for by the Owner at his discretion.

1.08 GUARANTEE:
A. The Landscape Contractor shall furnish a written guarantee warranting all materials, workmanship and plant materials, except sod, for a period of ONE (1) YEAR from the time of completion and acceptance by the Landscape Architect and Owner. Sod shall be guaranteed to 90 calendar days after acceptance by the Landscape Architect and Owner. All plant material shall be alive and in satisfactory condition and growth for each specific kind of plant at the end of the guarantee period. The guranteeing of plant material shall be construed to mean complete and immediate replacement with plant material of the same variety, type, size, quality and grade as that of the originally specified material. During the guarantee period it shall be the Landscape Contractor's responsibility to immediately replace any dead or unhealthy material as determined by the Landscape Architect. The guarantee will be null and void if plant material is damaged by lightning, hurricane force winds, or any other acts of God, as well as vandalism or lack of proper maintenance.

B. At the end of the specified guarantee period, any plant required under this contract that is dead or not in satisfactory condition, as determined by the Landscape Architect, shall be replaced. The Landscape Contractor shall be responsible for the full replacement cost of plant materials for the first replacement and share subsequent replacement (s) costs equally with the Owner, should the replacement plant fail to survive.

1.09 CARE AND MAINTENANCE:
A. The Landscape Contractor shall be responsible for the care and maintenance of all plant materials and irrigation when applicable until final acceptance by the Owner or Landscape Architect.

B. The Owner agrees to execute the instructions for such care and maintenance.

1.10 SAFETY:
A. It shall be the responsibility of the Landscape Contractor to protect all persons from injury and to avoid property damage. Adequate warning devices shall be placed and maintained during the progress of the work.

B. It shall be the contractor's responsibility to conform to all local, state, and federal safety laws and codes including the Federal Occupational Safety And Health Act (O.S.H.A.) .

1.11 CONTRACTOR QUALIFICATION:
A. The Owner may require the apparent contractor (s) to qualify him/herself to be a responsible entity by furnishing any or all of the following documentary data:
1. A financial statement showing assets and liabilities of the company current to date.
2. A listing of not less than (3) completed projects of similar scope and nature.
3. Permanent name and address of place of business.
4. The number of regular employees of the organization and length of time the organization has been in business under the present name.

1.12 INSURANCE AND BONDING:
A. The contractor (s) shall submit proof of insurance for this job for the time period that the work is done. The minimum amount of insurance shall be $300,000,00 per person and $300,000,00 per aggregate or as required by owner and agreed to in the contract.
The successful bidder shall be required to have this coverage in effect before beginning work on the site.

B. The Owner shall have the right to require the Contractor to furnish bonds covering faithful performance of the Contract and payment obligations arising thereunder as stipulated in bidding requirements or specifically required in the Contract Documents on the date of execution of the Contract.

1.13 PERMITS AND CERTIFICATES:
A. All contractors shall secure and pay for all permits and certificates required for his/her class of work.

PART 2: MATERIALS

2.01 PLANT MATERIALS:
A. A complete list of plants is shown on the drawings, including a schedule of quantities, sizes, and such other requirements deemed necessary. In the event discrepancies occur, the specifications on the drawings shall govern.

B. Substitutions: Substitutions of plant materials or changes in size or spacing of materials will be permitted ONLY upon written authorization by the Owner or the Landscape Architect. If plant material is not of sufficient size to meet applicable codes, a letter of variance from the appropriate agency must be obtained by the Contractor prior to issuance of any change order. If material of smaller size is to be accepted, the quantity of material shall be increased, at no additional cost to the Owner, to meet the intent of the drawings.

C. All plant materials shall have a habit of growth that is normal for the species and shall be healthy, vigorous and equal to or exceed the measurements specified in the plant list, which are the minimum acceptable sizes. Plants shall be measured before pruning with branches in normal position. Any necessary pruning shall be done at the time of planting.

D. All plant materials shall be nursery grown, unless otherwise noted, Florida #1 or better and shall comply with all required inspections, grading standards and plant regulations as set forth by the Florida Department of Agriculture's Grades and Standards for Nursery Plants, most current addition and Grades and Standards for Nursery Plants, most current addition.

E. Plants that do not have the normal balance of height and spread typical for the respective plant shall not be acceptable.

F. The Landscape Contractor shall install each plant to display its best side. Adjustments may be required if plants are not installed properly and/or approved by the Landscape Architect at no additional cost to owner.

2.02 INSPECTION
A. The Landscape Architect and Owner may inspect trees and shrubs at place of growth or at site before planting, for compliance with requirements for genus, species, variety, size and quality. The Landscape Architect and Owner retain the right to further inspect trees and shrubs for size and condition of balls and root systems, insects, injuries and latent defects, and to reject unsatisfactory or defective material at any time during progress of work. Rejected plant materials shall be immediately removed from project site.

2.03 PROTECTION OF PLANT MATERIALS:
A. Balled and burlapped plants (B & B) shall be dug with firm natural balls of earth of sufficient diameter and depth to encompass the fibrous and feeding root system necessary for full recovery of the plant. Balls shall be firmly wrapped with burlap similar materials and bound with cord, rope, or wire mesh. All collected plants shall be balled and burlapped.

B. Plants with broken, damaged or insufficient rootballs will be rejected.

C. All plant material shall be protected from possible bark injury or breakage of branches. All plants transported by open trucks shall be adequately covered to prevent windburn, drying or damage to plants.

D. Plants which cannot be planted immediately on delivery to the site shall be covered with moist soil, mulch or other protection from the drying of wind and sun. All plants shall be watered as necessary by the Landscape Contractor until planted.

2.04 STORAGE:
A. All plant materials shall be stored on the site in designated areas, specified by the Landscape Architect or Owner's agent.

B. No plant material shall be stored longer than seventy-two (72) hours unless approved by by Landscape Architect and/or owner.

C. The Landscape Architect reserves the right to reject any plant materials not in conformance with these specifications.

D. All rejected material shall be immediately removed from the site and replaced with acceptable material at no cost to the Owner.

2.05 PROTECTION DURING PLANTING:
A. Trees moved by winch or crane shall be thoroughly protected from chain marks, girdling or bark slippage by means of burlap, wood battens or other approved methods. Battens shall NOT be attached to the tree with nails.

2.06 PLANTING SOIL:
A. Planting soil for all plantings shall consist of existing native soil and shall be free of debris, roots, clay, stones, plants or other foreign materials which might be a hindrance to planting operations or be detrimental to good growth.

2.07 FERTILIZER:
A. Commercial fertilizer shall comply with the state fertilizer laws. Nitrogen shall not be less than 40% from organic source. Inorganic chemical nitrogen shall not be derived from the sodium form of nitrate. Fertilizers shall be delivered to the site in unopened original containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer that becomes caked or otherwise damaged shall be rejected.

B. Thoroughly mixed 3 lbs. of commercial fertilizer to each cubic yard of planting soil.

C. Tabletized fertilizer shall be Agriform planting tablets 20-10-5 formula, 21 gram or equal. All trees and shrubs shall be fertilized with tabletized fertilizer as follows. While backfilling plant holes, fertilizer tablets shall be equally spaced and placed adjacent to the ball mid-way in depth in accordance with the following rates:

1 gallon container	1 tablet
3 gallon container	2 tablets
5 gallon container	3 tablets
7 gallon	5 tablets

Large tubs, wire baskets, grow bags, and balled and burlapped material shall have 1 tablet for each 1/2 inch of trunk diameter (measured 3 feet from ground) or for each foot of height or spread of larger shrub material.
The Landscape Architect reserves the right to inspect and review the application of fertilizer.

2.08 MULCH:
A. Mulch material shall be clean, dry, free of weeds, seeds and pests, moistened at the time of application to prevent wind displacement. Cypress &/or Red mulch is prohibited.

B. All trees and shrub beds shall receive 3" mulch immediately after planting and thoroughly watered. Apply 2" max on tree & palm rootballs, keep away from tree & palm trunks or as required by local jurisdiction.

PART 3: EXECUTION
3.01 DIGGING:
A. The Landscape Contractor shall exercise care in digging and other work so as not to damage existing work, including overhead wires, underground pipes and cables and the pipes and hydrants of watering systems. Should such overhead or underground obstructions be encountered which interfere with planting, the Owner shall be consulted and contractor will adjust the location of plants to clear such obstruction. The Contractor shall be responsible for the immediate repair of any damage caused by his work.

3.02 GRADING:
A. Grading for drainage, swales, etc. to within 4 inches of the finished grade to be provided by others.

B. It shall be the responsibility of the Landscape Contractor to provide the final grading during the course of landscape installation so as to bring sod and planting areas to their proper elevations in relation to walks, paving, drain structures, and other site conditions. The site grading plan must be checked prior to installation of sod to insure that drainage and other conditions will NOT be modified.

3.03 PLANTING:
A. Planting shall take place during favorable weather conditions.

B. The Contractor shall call for utility locates and ascertain the location of all utilities and easements so proper precautions can be taken not to damage or encroach on them.

C. Tree Planting shall be located where it is shown on the plan. No planting holes shall be dug until the proposed locations have been staked on the ground by the Contractor.

D. Excavation of holes shall extend to the required subgrades as specified on the planting diagrams located in the planting plans. Plant pits shall be circular in outline and shall have a profile which conforms to the aforementioned "Tree and Shrub Planting Diagrams".

E. A representative number of planting pits (a minimum of one in every 25 feet throughout the entire site) shall be tested for proper drainage. See Landscape Plan for complete testing methods and requirements.

F. Planting pits shall be excavated to the following dimensions and refilled with a mixture of (1/2) planting soil (1/2) existing native soil.
1 Gallon material (1 gal.): 12" x 12" x 12" min.
3 Gallon material (3 gal.): 20" x 20" x 18" min.
Lerio material (7 gal.): 30" x 30" x 24" min.
Field grown material and trees: 1-1/2 times width of ball and depth of ball plus 12" min.

G. No planting or laying of sod shall be initiated until the area has been cleaned of existing sod or other plant materials, rough grass, weeds, debris, stones etc, and the ground has been brought to an even grade, with positive drainage away from buildings and towards drain inlets and swales and approved by Landscape Architect or owner's rep.

H. Each plant shall be planted in an individual hole as specified for trees, shrubs, and vines.

I. All plants shall be set to ultimate finished grade. No filling will be permitted around trunks or stems. All ropes, wire, stakes, etc., shall be removed from sides and top of the ball and removed from hole before filling in.

J. All flagging ribbon shall be removed from trees and shrubs before planting.

K. Excess excavation (fill) from all holes shall be removed from the site, at no additional expense to Owner.

L. All palms shall be backfilled with sand, thoroughly washed in during planting operations and with a shallow saucer depression left at the soil line for future waterings. Saucer areas shall be top-dressed two (2") inches deep with topsoil raked and left in a neat, clean manner.

3.04 PRUNING:
A. Remove dead and broken branches from all plant material. Prune to retain typical growth habit of individual plants with as much height and spread as possible in a manner which will preserve the plant's natural character.

B. Make all cuts with sharp instruments flush with trunk or adjacent branch, in such a manner as to insure elimination of stubs. Cuts made at right angles to line of growth will not be permitted.

C. Trees shall not be poled or topped.

D. Remove all trimmings from site.

3.05 GUYING:
A. All trees over six (6') feet in height shall, immediately after setting to proper grade, be guyed with three sets of two strands, No. 12 gauge malleable galvanized iron, in tripod fashion. See Detail.

B. Wires shall not come in direct contact with the tree but shall be covered with an approved protection device at all contact points. Wires shall be fastened in such a manner as to avoid pulling crotches apart.

D. Stake & Brace all trees larger than 12' oa. See detail.
Stakes shall be 2" x 2" lumber of sufficient length to satisfactorily support each tree.

E. Turnbuckles for guying trees shall be galvanized or cadmium plated and shall be of adequate size and strength to properly maintain tight guy wires.

3.06 WATER:
A. Each plant or tree shall be thoroughly watered in after planting. Watering of all newly installed plant materials shall be the responsibility of the Landscape Contractor until final acceptance by the Landscape Architect.

B. See General Notes of Landscape Plan for water source.

3.07 SOD:

A. The Landscape Contractor shall sod all areas indicated on the drawings.

B. It shall be the responsibility of the Landscape Contractor to fine grade all landscape areas, eliminating all bumps, depressions, sticks, stones, and other debris.

C. The sod shall be firm, tough texture, having a compacted growth of grass with good root development. It shall contain no noxious weeds, or any other objectionable vegetation, fungus, insects, or disease. The soil embedded in the sod shall be good clean earth, free from stones and debris.

D. Before being cut and lifted, the sod shall have been mowed at least three times with a lawn mower, with the final mowing not more than seven days before the sod is cut. The sod shall be carefully cut into uniform dimensions.

E. 6-6-6 fertilizer with all trace elements is to be applied at the rate of 40 lbs. per 1,000 sq. ft. prior to laying sod.

F. Solid sod shall be laid with closely abutting, staggered joints with a tamped or rolled, even surface.

G. The finished level of all sod areas after settlement shall be one (1") inch below the top of abutting curbs,
walks, paving and wood borders to allow for building turf.

H. If in the opinion of the Landscape Architect, top dressing is necessary after rolling, clean yellow sand will be evenly applied over the entire surface and thoroughly washed in.

3.08 SEEDING:
A. The Landscape Contractor shall remove all vegetation and rocks larger than (1") in diameter from areas to be seeded, scarify the area, then apply fertilizer at a rate of 500 lbs. per acre.

B. Application: Argentine Bahia Grass seed - 200 Pounds per acre mixed with common hulled Bermuda seed - 30 lbs. per acre. All other seed mixtures shall be applied per the manufacturer's instructions.

C. Roll immediately after seeding with a minimum 500 pound roller, then apply straw mulch at the rate of 2,500 pounds per acre.

D. Apply fertilizer at the rate of 150 lbs. per acre 45-60 days after seeding.

3.09 CLEANING UP:
A. The contractor shall at all times keep the premises free from accumulations of waste materials or rubbish caused by his employees or work. He shall leave all paved areas "broom clean" when completed with his work.

3.10 MAINTENANCE:
A. Maintenance shall begin immediately after each plant is installed and shall continue until all planting has been accepted by the Owner or Landscape Architect. Maintenance shall include watering, weeding, removal of dead materials, resetting plants to proper grades or upright positions, spraying, restoration of planting saucer and/or any other necessary operations.

B. Proper protection to lawn areas shall be provided and any damage resulting from planting operations shall be repaired promptly.

C. Replacement of plants during the maintenance period shall be the responsibility of the Contractor, excluding vandalism or damage on the part of others, lighting, or hurricane force winds, until final acceptance.

D. In the event that weeds or other undesirable vegetation become prevalent, it shall be the Contractor's responsibility to remove them.

E. Trees or other plant material which fall or are blown over during the maintenance period will be reset by the Contractor at no additional expense to the Owner, the only exception being hurricane force winds.

3.11 COMPLETION, INSPECTION AND ACCEPTANCE:
A. Completion of the work shall mean the full and exact compliance and conformity with the provisions expressed or implied in the Drawings and in the Specifications, including the complete removal of all trash, debris, soil or other waste created by the Landscape Contractor.

B. Inspection of work to determine completion of contract, exclusive of the possible replacement of plants, will be made by the Owner and/or Landscape Architect at the conclusion of all planting and at the request of the Landscape Contractor.

C. All plant material shall be alive and in good growing condition for each specified kind of plant at the time of acceptance. The rating of each plant according to Florida Grades and Standards shall be equal to or better than that called for on the plans and in these Specifications at the time of final inspection and acceptance.

D. After inspection, the Landscape Contractor will be notified by the Owner of the acceptance of all plant material and workmanship, exclusive of the possible replacement of plants subject to guarantee.

DRAINAGE TESTING/DRAINAGE CHANNEL REQUIREMENTS

PRIOR TO PLANTING ALL PLANTING PITS SELECTED FOR TESTING SHALL BE TESTED IN THE FOLLOWING MANNER

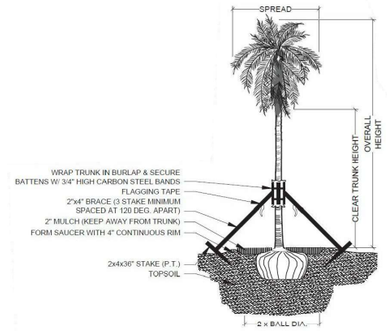
A. DIG EACH PLANTING PIT TO THE MINIMUM SPECIFIED SIZE.

B. FILL PLANTING PIT WITH TWELVE INCHES (12") OF WATER. IF THE WATER LEVEL DROPS FOUR (4") OR MORE WITHIN FOUR (4) HOURS, THE DRAINAGE IS SUFFICIENT AND A DRAINAGE CHANNEL IS NOT REQUIRED IF THE WATER LEVEL DROPS LESS THAN FOUR INCHES (4") WITHIN THE FOUR (4) HOUR PERIOD, A DRAINAGE CHANNEL IS REQUIRED.

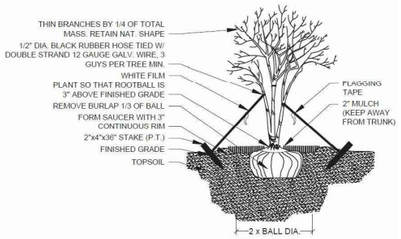
C. WHERE REQUIRED, THE DRAINAGE CHANNEL MUST EXTEND DOWN THROUGH THE NON POROUS SOIL AND INTO POROUS SOIL. (SEE DETAIL)

D. ALL MATERIAL REMOVED FROM THE DRAINAGE CHANNEL SHALL BE DISCARDED.

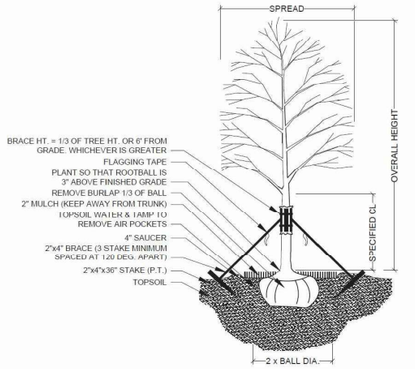
E. WHEN BACKFILLING PLANTING PITS WITH PLANTING MIXTURE, CARE MUST BE TAKEN TO KEEP THE CONSISTENCY OF THE SOIL MIX THE SAME THROUGHOUT THE PLANTING PIT AND DRAINAGE CHANNEL.



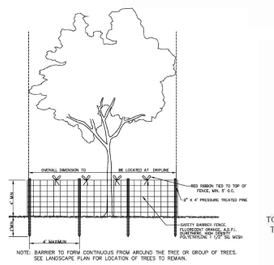
PALM PLANTING - ANGLE STAKE
NOT TO SCALE



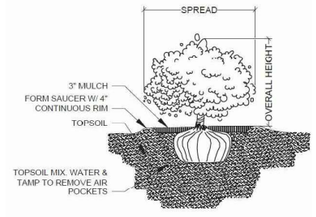
MULTI-TRUNK PLANTING & GUYING
NOT TO SCALE



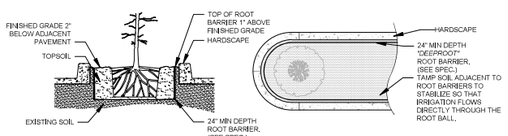
TREE PLANTING & STAKING
NOT TO SCALE



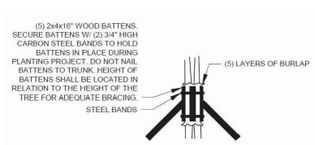
TREE PROTECTION DETAIL
NOT TO SCALE



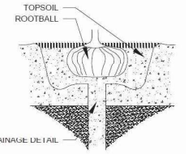
SHRUB PLANTING
NOT TO SCALE



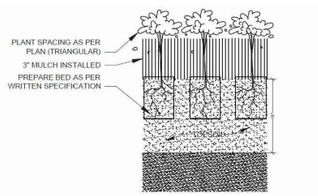
SPECIAL APPLICATIONS ROOT BARRIER DETAIL
NOTES:
1- ROOT BARRIER SHALL BE "DEEPROOT" 24" DEPTH OR APPROVED EQUAL.
2- ROOT BARRIER SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.
NOT TO SCALE



BRACING DETAIL
NOT TO SCALE



DRAINAGE TESTING DETAIL
NOT TO SCALE



GROUNDCOVER PLANTING DETAIL
NOT TO SCALE

Project Team
Landscape Architect:
LANDSCAPE ARCHITECTURAL SERVICES, LLC
1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983
(772) 631-8400 | Paul@las-fl.com
Applicant:
Ocean Village
POA

OCEAN VILLAGE PICKLEBALL COURTS
Fort Pierce, FL

Landscape Details & Specifications

Revisions

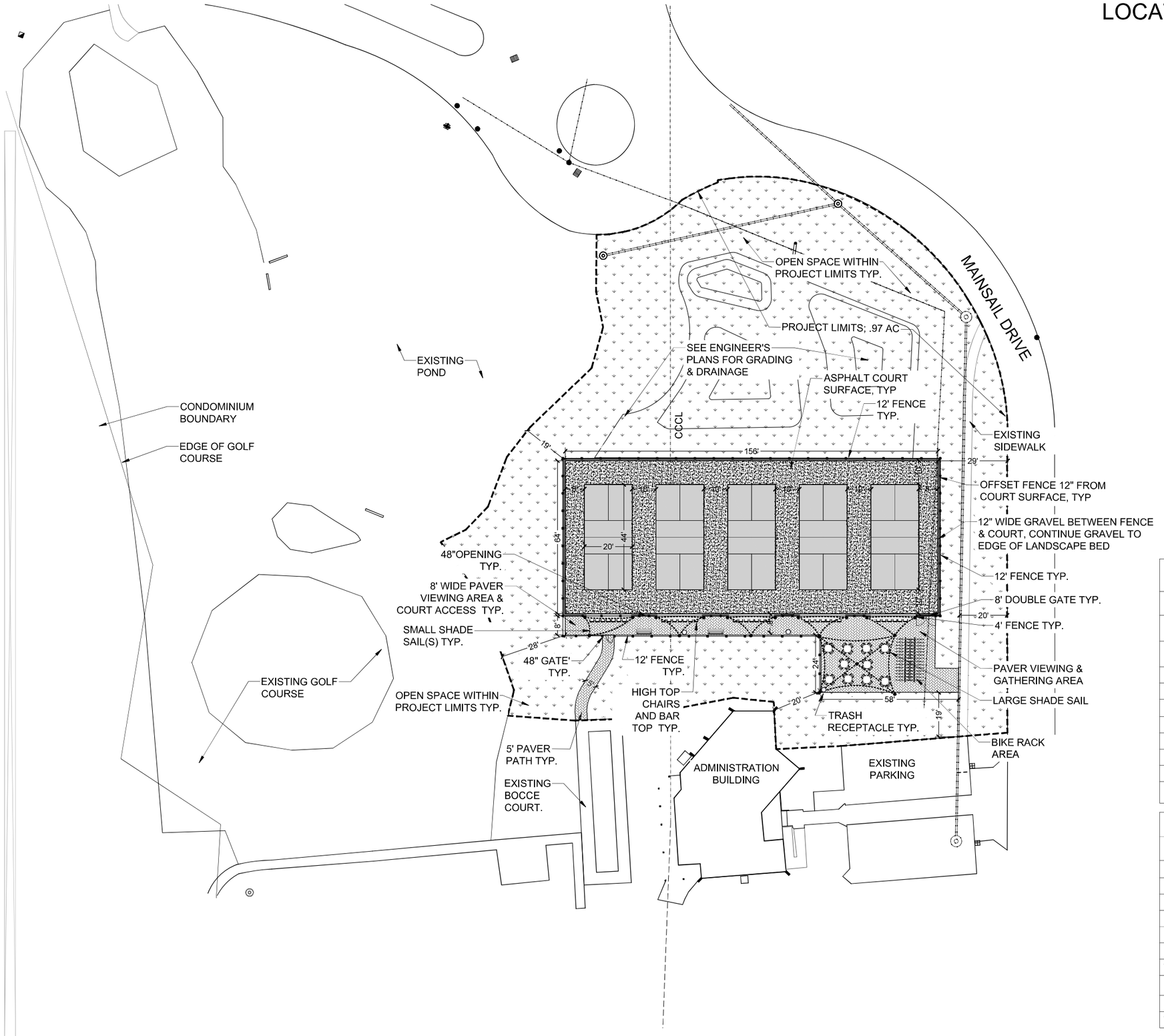
Date	Init.	Description
11.14.23	PG	Landscape Plan

REGISTERED LANDSCAPE ARCHITECT
PAUL A. GOULAS
LA 6666807
STATE OF FLORIDA

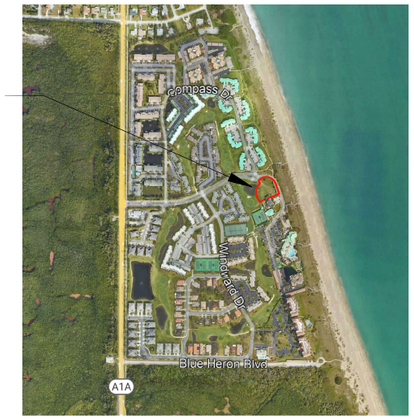
PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By: PG
Checked By: PG
Municipal Project:
Scale:

LA-2



PROJECT LOCATION



SITE MAP

NTS

LEGAL DESCRIPTION

PORTION OF 7 35 41 GOVT LOT 3–LESS THAT PART ASSD IN SURFSIDE–UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FT AS IN OR 237–127 AND LESS THAT PART ASSD IN CATAMARAN I+ AND GOVT LOT 4– LESS A1A R/W– AND GOVT LOT 5 – LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE I AND LESS OCEAN HOUSE AS IN OR 592–2012 AND LESS AS IN OR 592–2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1658–2205 AND LESS THAT PART GOVT LOT 4 MPOAF/FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO S R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.63 FT,TH N 89 47 03 E 179.03 FT,TH N 15 51 52 E 89.56 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC W,R OF 22 FT,TH NWLY ALG ARC 31.90 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 38 20 W 253.53 FT TO POB (40.02 AC) (OR 1955–808, 815)

PROJECT DESCRIPTION: OCEAN VILLAGE POA PLANS TO ADD A PICKLEBALL FACILITY TO AN EXISTING AMENITY TRACT, THE WORK WILL CONSIST OF FIVE (5) PICKLEBALL COURTS, FENCING, ACOUSTICAL BLOCKING MATERIAL, LANDSCAPING, SEATING AREAS, BIKE RACKS, AND SHADE SAILS. ACOUSTICAL STUDIES HAVE BEEN PERFORMED IN MULTIPLE LOCATIONS WITHIN THE DEVELOPMENT IN AN EFFORT TO MINIMIZE NOISE IMPACTS TO NON-PLAYING RESIDENTS. THIS SITE HAS BEEN FOUND TO BE THE LEAST IMPACTFUL, AND WILL BE DESIGNED TO BE IN COMPLIANCE WITH ALL CITY OF FORT PIERCE NOISE ORDINANCE REQUIREMENTS. PROPOSED CONSTRUCTION WILL BE TAKING PLACE IN PART, EASTWARD OF THE COASTAL CONSTRUCTION CONTROL LINE.

WATER/SEWER: N/A

DRAINAGE: SEE DETAIL GRADING & DRAINAGE PLANS BY CIVIL ENGINEER

TRAFFIC : N/A

SOLID WASTE: THREE (3) TRASH RECEPTACLES WILL BE PROVIDED IN THE VIEWING AREA

SITE DATA	
OWNER:	Ocean Village POA
OWNER ADDRESS:	2400 Ocean Drive City of Fort Pierce, Florida 34949
SITE ADDRESS	2400 Ocean Drive City of Fort Pierce, Florida 34949
PARCEL ID:	PARCEL 1 2507–321–0001–000–5
JURISDICTION:	CITY OF FORT PIERCE
SEC/TOWN/RANGE:	7/35S/41E
PANEL NO.:	0813
FLOOD ZONE:	AE
ZONING:	R4–A
FUTURE LANDUSE:	HIR
LOT SIZE:	42,290 SF; .97 AC.

SITE AREA			
AREAS	S.F.	ACERS	PERCENTAGE
TOTAL SITE AREA	42,076 S.F.	.97 AC	100%
IMPERVIOUS AREAS			
PROPOSED ASPHALT COURT AREA	9,990 S.F.	0.23 A.C.	24.00%
PROPOSED PAVER VIEWING AREA	2,485 S.F.	0.06 A.C.	6.00%
PROPOSE PAVER WALKS	192 S.F.	0.004 A.C.	0.50%
EXISTING CONCRETE WALK	676 S.F.	0.015 A.C.	2.00%
TOTAL IMPERVIOUS AREA	13,343 S.F.	0.31 A.C.	32.00%
PERVIOUS AREAS			
LANDSCAPE AREA	28,733 S.F.	0.65 A.C.	68.00%
TOTAL PERVIOUS AREA	28,733 S.F.	0.65 A.C.	68.00%

Project Team

Landscape Architect:

LANDSCAPE ARCHITECTURAL SERVICES, LLC

1708 SE Joy Haven Street
Port St. Lucie, Fl. 34983
(772) 631-8400 | Paul@las-fl.com

Applicant:

Ocean Village POA

OCEAN VILLAGE PICKLEBALL COURTS

Fort Pierce, FL

Site Plan

Revisions

Date	Init.	Description
11.14.23	PG	Site Plan

REGISTERED LANDSCAPE ARCHITECT PAUL A. GOULAS LA 6666807 STATE OF FLORIDA

PAUL GOULAS, RLA
FLORIDA REG. # LA6666807

Drawn By: PG
Checked By: PG
Municipal Project:
Scale:

NORTH

SCALE: 1" = 20'

0 10' 20' 40'

SP-1

CONSTRUCTION PLANS FOR

OCEAN VILLAGE PICKLEBALL COURT

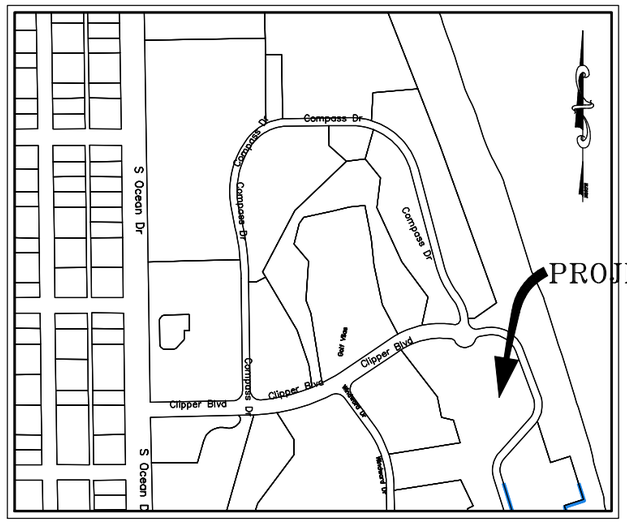
IN

SECTION 07, TOWNSHIP 35 SOUTH, RANGE 41 EAST

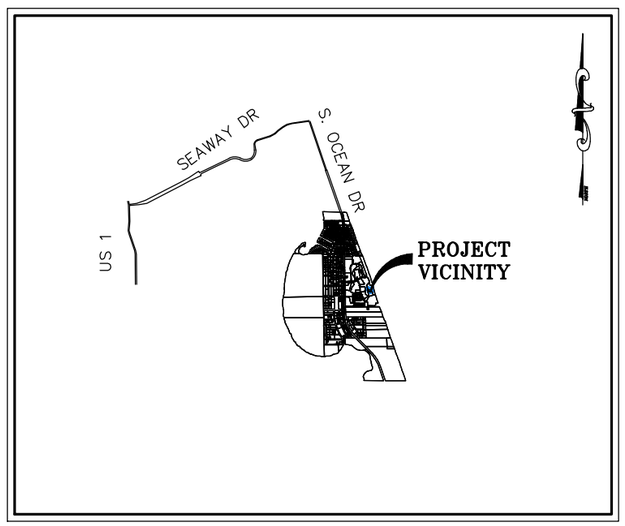
ST. LUCIE COUNTY, FLORIDA

PREPARED FOR

Ocean Village

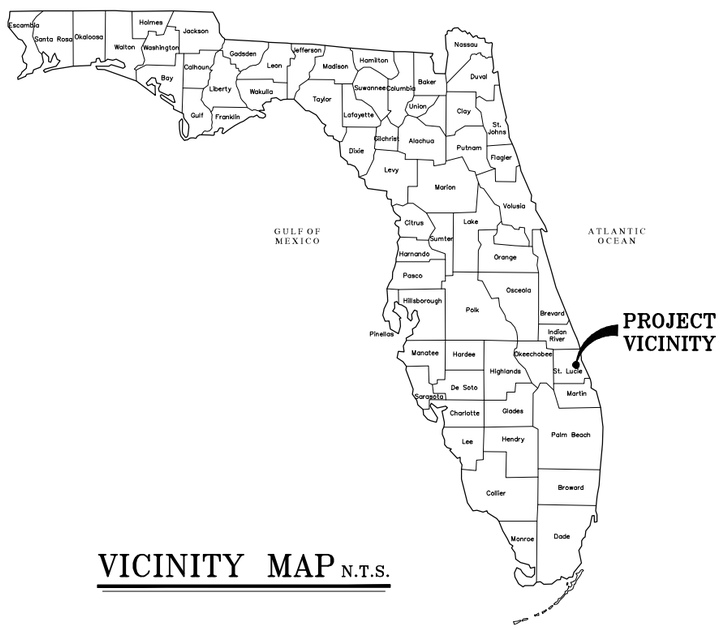


AREA MAP N.T.S.



LOCATION MAP N.T.S.

SECTION 07 TOWNSHIP, 35 SOUTH, RANGE 41 EAST



VICINITY MAP N.T.S.

INDEX TO SHEETS	
SHEET NO.	DESCRIPTION
1	COVER
2	GRADING DRAINGAGE PLAN
3	SPECIFICATIONS

LEGAL DESCRIPTION

PORTION OF 7 35 41 GOVT LOT 3–LESS THAT PART ASSD IN SURFSIDE–UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FP AS IN OR 237–127 AND LESS THAT PART ASSD IN CATAMARAN I– AND GOVT LOT 4– LESS A1A R/W– AND GOVT LOT 5 – LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN CORAL I AND LESS THAT PART GOVT LOT 5 ASSD AS BEACH CLUBHOUSE SITE AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE II AND LESS OCEAN HOUSE AS IN OR 692–2012 AND LESS AS IN OR 692–2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1668–205 AND LESS THAT PART GOVT LOT 4 MPDAF: FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO E R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.65 FT,TH N 89 47 03 E 175.03 FT,TH N 15 51 52 E 89.55 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC W,R OF 22 FT,TH NWLY ALG ARC 31.50 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 58 20 W 253.63 FT TO POB (40.02 AC) (OR 1955–808, 815)

GENERAL NOTES

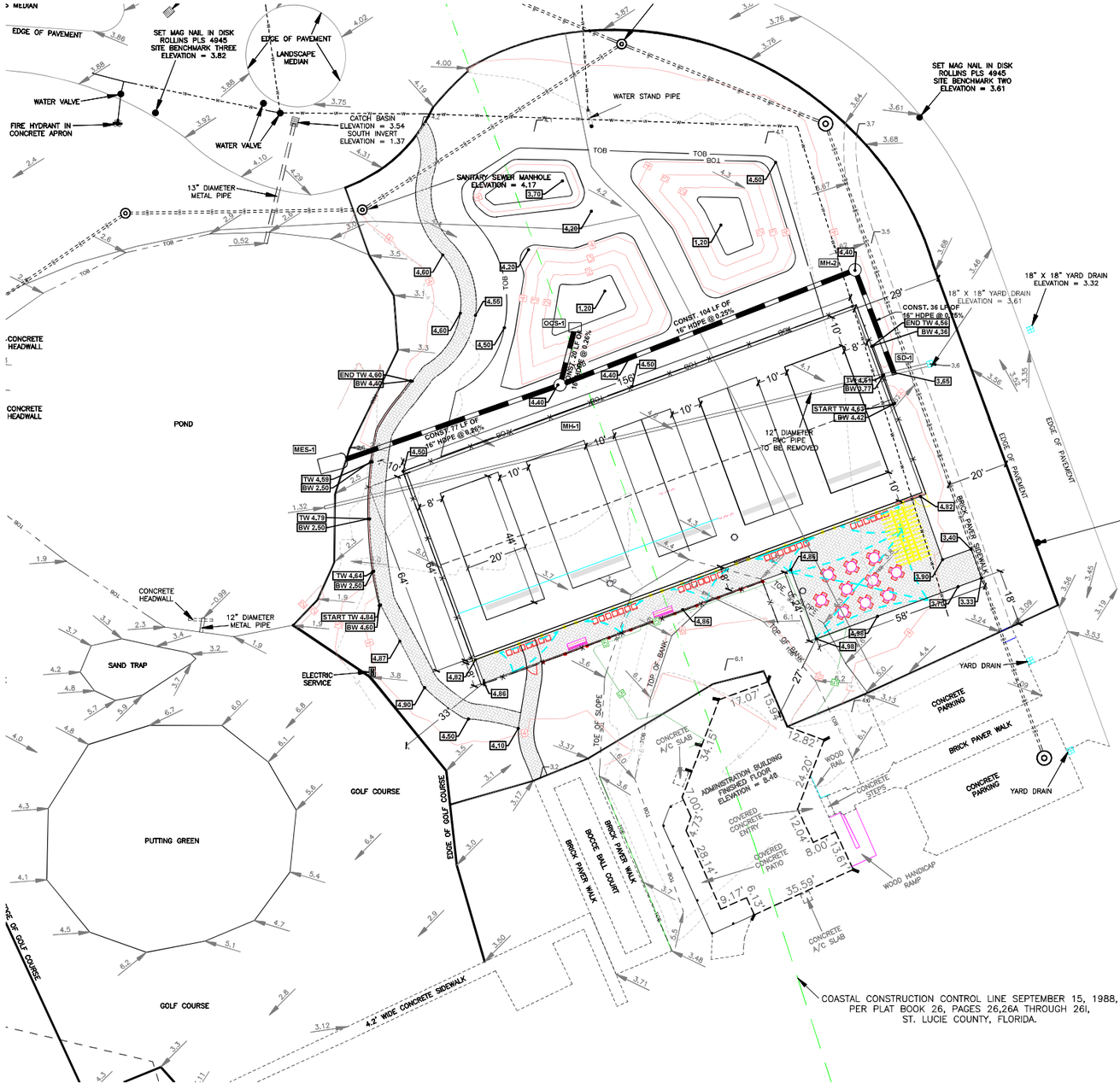
####

REVISIONS	
SHEET NO.	DATE

SUBMITTAL DATE: 11–13–2023

2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
PHONE 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA BOARD OF PROFESSIONAL
ENGINEERS AUTHORIZATION NO. 4286

THOMAS J. DEGRACE P.E. FL. REG. NO. 42354



GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 inch = 20 ft.

LEGEND

??? PROPOSED ELEVATION

??? EXISTING ELEVATION

NOTE

1. THE EXISTING SPOT ELEVATIONS WERE PROVIDED BY THE OWNER AND WERE USED AS THE BASIS FOR GENERATING THE EXISTING CONTOURS AS WELL AS THE PROPOSED.
2. CONTRACTOR SHALL PREFORM AN UNDERGROUND UTILITY SURVEY TO VERIFY EXISTING UTILITIES.
3. ALL PROPOSED SPOT ELEVATIONS ARE AT FINISHED GRADE.
4. PROPOSED SITE PLANS AND SPECIFICATIONS ARE WITHIN COMPLIANCE OF THE CRITERIA ESTABLISHED BY THE CITY OF FORT PIERCE COASTAL CODE; ARTICLE VII, COASTAL CONSTRUCTION CODE.
5. THERE MAY BE UNDERGROUND UTILITIES THAT WHERE NOT MARKED IN THE FIELD AND COULD NOT BE SHOWN ON THIS SURVEY.
6. SD-1 MUST BE FIELD VERIFIED ON ITS TIE IN ELEVATION FOR THE PIPE PRIOR TO INSTALLATION.

DRAINAGE STRUCTURE TABLE	
STRUCTURE NAME	STRUCTURE DETAILS
MES-1 SIDE DRAIN MES WITH 1:4 SLOPE - 15 IN. SINGLE ROUND HDPE PIPE	RIM = 2.71 E INV = 1.05
MH-1 MANHOLE	RIM = 4.40 N INV = 1.20 W INV = 1.25 E INV = 1.51
MH-2 MANHOLE	RIM = 4.39 S INV = 1.51 W INV = 1.25
OCS-1 CONTROL STRUCTURE	RIM = 4.50 S INV = 1.25
SD-1 YARD DRAIN	RIM = 3.65 N INV = 1.60

THOMAS J. DEGRACE P.E. FL. REG. NO 42354

NOTES:
1) ALL ELEVATIONS AND BENCHMARKS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM (N.A.V.D.) OF 1988.

COMPUTER FILE REF.	FIELD BK./PG.

CULPEPPER & TERPENING INC
2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
PHONE 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

– REVISIONS –	BY	DATE
. .	.	.
. .	.	.
. .	.	.
. .	.	.
. .	.	.
. .	.	.

	BY	DATE
DESIGNED	.	.
CALCS.	.	.
DRAWN	.	.
DETAILED	.	.
CHECKED	.	.
APPROVED	.	.

OCEAN VILLAGE PICKLEBALL COURT

PAVING GRADNING AND DRAINAGE PLAN

DATE: 11/12/23
HORIZ. SCALE: SCALE
VERT. SCALE: SCALE
JOB No. 23-111
SHEET 2 of 3

P:\Proj-2023\23-111 Ocean Village Pickleball Courts\Dwg\23-111 Ocean Village-Pickleball.dwg Date: 11/12/2023 5:21 PM By: EDGAR CHAPMAN

1. GENERAL

A. Mobilization: Mobilization shall meet the requirements of FDOT Section 101. This work shall include, but is not limited to, operations necessary for the movement of personnel, equipment, supplies, and incidentals to the project site, and for the establishment of temporary offices, buildings, safety equipment and first aid supplies, sanitary and other facilities, as required by State and local laws and regulations. the costs of bonds and any required insurance, and any other preconstruction expense necessary for the start of work, excluding the cost of construction materials, shall also be included in this section. This section also includes any and all work related to the final cleanup.

B. Construction Surveying: The Owner shall provide horizontal control consisting of four control points. The Owner shall also provide vertical benchmarks as shown on the plans. This control shall be provided one time only. The Contractor is responsible for all other construction surveying. The Contractor is responsible to protect these reference points and the construction staking throughout the job. The Contractor shall bear the cost of any necessary restaking.

C. Soil Testing: Soil Testing shall be performed by a certified testing laboratory. The contractor shall be responsible for payment of any failed tests and inspections.

2. EARTHWORK AND GRADING

Materials and construction methods for earthwork, excavation, embankment and grading shall meet the requirements of FDOT Section 120 and shall be performed to achieve final grades, elevations and typical sections as shown on the plans for the proposed work.

A. Clearing and Grubbing: Clearing and grubbing shall meet the requirements of FDOT Section 110 and shall be performed within the limits of the project work. This work shall include, but is not limited to, the removal of existing trees, brush stumps, roots and other objectionable material to a depth of 18 inches below the natural ground or design grade, whichever is lower. The areas to be cleared and grubbed generally consist of rights-of-way, utility easements, water management tracts, and portions of the lots as detailed on the plans. The Contractor shall confirm with the Owner the removal of any trees for possible preservation. All material shall be removed from the site of the project and shall be disposed of in accordance with local, regional, State and Federal laws, regulations and ordinances.

B. Rough Grade: The Contractor shall grade the rights-of-way and lots to meet the requirements of FDOT Sections 110 and 120 and shall conform to the lines, grades, and typical sections as shown on the plans.

C. Fine Grade: The Contractor shall fine grade the roadway to meet the requirements of FDOT Sections 110 and 120 and shall conform to the lines, grades and typical sections as shown on the plans.

D. Sod: Sod shall meet the requirements of FDOT Section 570, 575, and 981 and shall be placed adjacent to the curbing for a minimum width of 24 inches.

E. Seed and Mulch: Seed and mulch shall meet the requirements of FDOT Sections 570, 575, and 981 and shall be placed in all disturbed areas not otherwise addressed in plans provided by the owner.

3. DRAINAGE IMPROVEMENTS

Materials, trench excavation, pipe laying and backfilling operations for drainage improvements shall meet the requirements of FDOT Sections 125 and 430. Pipe shall be laid in true alignment in a pipe trench with an adequate supporting value and "bedded" to the detail shown in the plans and FDOT Section 430. All backfill shall be compacted to a minimum density of 95 percent of the maximum density as determined by AASHTO T-180, unless otherwise shown on the plans.

The Contractor shall provide all materials and labor to complete the work for drainage improvements at the locations, sizes, and types shown on the plans for the following items:

A. Reinforced Concrete Pipe: Reinforced concrete pipe shall meet the requirements of Class III of ASTM C-76, Wall Thickness "B", Latest Revision, as modified by FDOT Section 941. Gaskets for pipe joints shall be round rubber gaskets and shall meet the requirements of FDOT Section 942.

B. Corrugated Aluminum Pipe: Corrugated aluminum pipe shall meet the requirements of FDOT section 945, and shall be constructed as shown on the plans.

C. Polyviny Chloride (PVC) Pipe: PVC pipe shall meet the requirements of FDOT Section 948 and A.S.T.M. F-794, latest revision, and shall be constructed as shown on the plans.

D. Concrete Collar: Concrete collars shall meet the requirements of F.D.O.T. Standard Index No. 280 and shall be constructed to the detail shown on the plans.

E. Type "E" Inlet with Valley Gutter Top and Grate: Precast concrete catch basins shall meet the requirements of ASTM C-478 and 64T FDOT Section 425. Catch basins shall be Class I concrete and shall be constructed to the detail as shown on the plans. Valley gutter grates shall meet the requirements of ASTM A-123.

F. Storm Manhole: Storm manholes shall meet the requirements of ASTM C-478 and 64T FDOT Section 425. Storm manholes shall be Class I concrete and shall be constructed to the detail as shown on the plans.

4. PAVING IMPROVEMENTS

All paved areas shall meet the requirements of AASHTO Specifications and FDOT, and shall be constructed to the typical sections as shown on the plans.

The Contractor shall coordinate the services of an independent testing laboratory to conduct all required testing and retesting to comply with these Specifications. The Owner shall bear the cost of initial testing and the Contractor shall correct any deficient work at his own expense.

A. Asphaltic Concrete: Asphaltic concrete materials and construction methods shall meet the requirements of FDOT Sections 300, 320, 330 and 331 and shall be as shown in the typical sections. Prime Coats shall meet the requirements of FDOT Sections 300-1 through 300-7 and shall have an application rate of 0.10 gallons per square yard, unless a variation rate is approved by the Engineer.

B. Base: The base course shall be as shown on the typical sections on the plans. The base shall be compacted to 98 percent of the maximum density as determined by AASHTO T-180.

C. Subgrade: The subgrade shall be as shown in the typical sections of the plans, and shall extend six inches beyond the edge of the base course within the limits shown on the plans. Subgrade shall be compacted to 98 percent of the maximum density as determined by AASHTO T-180. If normal compaction methods do not meet the required densities, the subgrade shall be stabilized as directed by the Engineer.

D. 2' Valley Gutter Curb: Concrete 2' valley gutter curb shall meet the requirements of FDOT Section 520 and shall be constructed to the typical section as shown on the plans.

E. Concrete Curb: Concrete curb shall meet the requirements of FDOT Section 520 and shall be constructed to the typical section as shown on the plans.

F. Concrete Sidewalk: Concrete sidewalk shall meet the requirements of FDOT Section 522 and shall be constructed to the typical section shown on the plans.

G. Striping: Striping shall meet the requirements of FDOT Section 711, and shall be as shown in the plans. (Crosswalks , Stop Bars and Parking)

H. Stop Sign and Bar: Stop signs and bars shall meet the requirements of FDOT Section 700 and the Manual of Uniform Traffic Control Devices and shall be constructed in the locations as shown on the plans.

THE WORK

Existing Utilities and Structures:

Existing utilities, structures and facilities shown on the Drawings were located as accurately as possible from the records examined. No guarantee is made that all existing facilities are shown or that those shown are entirely accurate. The Contractor shall assure himself of the actual location of the utilities, structures, or facilities prior to performance of any work in the vicinity. The utility companies or utility agencies will co-operate with the Contractor's operations. Prior to start of the work, the Contractor shall request each utility agency to advise him of the location of their facilities in the vicinity. The Owner will assume no liability for damages sustained or cost incurred because of the Contractor's operation in the vicinity of existing utilities or structures, or to the temporary bracing and shoring of same. In the event that it is necessary to shore, brave, or swing a utility, the utility company or department affected should be contacted and their permission secured as to the method used for any such work.

Restoration of Damaged Structures or Utilities:

It shall be the responsibility of the Contractor to repair, rebuild or restore to its former condition, any and all portions of existing utilities, structures, equipment, appurtenances or facilities, other than those to be paid for under this Contract, which may be disturbed or damaged due to this construction operation, at no cost to the Owner.

Final Cleanup:

Upon completion of the work, but before final payment will be made, the Contractor shall clear and remove from the Project area, all falsework, equipment, surplus and discarded materials, rubbish and temporary structures which result from the work under this Agreement, and shall restore in an acceptable manner, all property which has been damaged during the prosecution of the work.

Record Information:

Upon completion of the work, but prior to submittal of the request for final payment, the Contractor shall obtain and submit record information to the Owner. This information shall include the following:

1. Water and Wastewater Systems:

   As-built plans for water/sewer mains shall be provided by the Contractor/Engineer of Record and shall be comprised of a reproducible mylar copy and three (3) blueline copies of a certified survey. The blueline copies shall bear the original signature and embossed seal of the surveyor who performed the as-built survey. The as-builts shall be submitted after the completion of construction or as otherwise indicated herein, prior to submittal to Port St. Lucie Utilities Systems Department. The as-built survey shall be prepared in plan and profile format by a professional land surveyor registered in the State of Florida, and shall comply with applicable provisions of the Florida Administrative Code and Chapter 472 of the Florida Statutes. The as-built drawing shall be at the same scale and reference the same baseline as the drawings prepared by the Engineer of Record. The horizontal and vertical location of the mains and appurtenances shall be accurately depicted to scale and shall be identified relative to the baseline and relative to readily identifiable permanent reference points existing after the completion of the construction. Locations shall be given for all fittings, valves, hydrants, manholes, sample points, air releases, etc., both horizontal and vertical, and the location of the main at each baseline station as shown on the plans (100 feet maximum) both horizontal and vertical. Underground facilities (i.e. drainage, gas, electric, telephone, etc.) crossing the mains shall be accurately shown both horizontally and vertically and shall identify size, type, facility, material, and clearance. All information shall be based upon measurements and observations made in the field by the surveyor certifying the survey, or by personnel under his employment, direction and supervision. The cost for preparing and maintaining the as-built plans shall be incidental to the construction cost.

2. Drainage System:

   a. High points and low points of swales;

   b. Locations and grate and invert elevations of all structures;

   c. Location, size, type, length and invert of all culverts.

3. Paving and Grading:

Location and elevation of high and low points in roadway and any other changes in grade.

The record information shall be certified by a Florida Professional Land Surveyor. Locations shall be made by reference to centerline stationing and offset or by other means acceptable to the Owner. Elevations shall be according to the North American Vertical Datum (NAVD).

Guarantee: All materials and the installation thereof which are furnished and installed by the Contractor, under the terms of the Agreement, shall be guaranteed by the Contractor against defective workmanship, mechanical and physical defects, leakage, breakage, and other damages and failure under normal operation for a period of one (1) year from the date of final payment, said date to constitute the commencement of the one (1) year warranty period. All materials and installations proving to be defective within the specified period of the guaranty shall be replaced, without cost to the Owner, by the manufacturer or the Contractor. The period of guarantee of each such replacement shall be from and after the date of installation thereof.

UTILITY CONTACTS

Company	Contact	Telephone Numbers
PSLUSD	Laney Southerly, PE	(772) 807-4452
Florida Power & Light	Diana Villegas	(772) 337-7011
Comcast Cable	Rick Johnson	(561) 402-4513
AT&T	Ivan Arlil	(772) 460-4441

GENERAL NOTES

1. Grassing shall be furnished and installed in conformance with the approved landscape plan. All disturbed areas not shown to be planted, mulched, etc. shall be sodded.
2. Sod shall be placed such that the top of the grass is at the same elevation as the top of adjacent finish grade.
3. The location of existing utilities shown is approximate only and must be field verified by the Contractor prior to beginning Work.
4. These plans shall not be used for construction unless they are marked "Approved for Construction" in the title block.
5. Contractor to obtain and review all permits prior to starting construction
6. Drawing scale may change due to reproduction
7. Maintenance of traffic must be in conformance with FDOT Specifications.
8. All nuisance exotic vegetation on-site must be removed in conjunction with site development.

THOMAS J. DEGRACE P.E. FL. REG. NO. 42354

811 Know what's below. Call before you dig.

NOTES:
1) ALL ELEVATIONS AND BENCHMARKS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM (N.A.V.D.) OF 1988.

COMPUTER FILE REF.	FIELD BK./PG.

CULPEPPER & TERPENING INC
2980 SOUTH 25th STREET • FORT PIERCE, FLORIDA 34981
PHONE 772-464-3537 • FAX 772-464-9497 • www.ct-eng.com
STATE OF FLORIDA BOARD OF PROFESSIONAL ENGINEERS AUTHORIZATION NO. 4286

- REVISIONS -	BY	DATE
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.
.	.	.

	BY	DATE
DESIGNED	-	-
CALCS.	-	-
DRAWN	.	.
DETAILED	-	-
CHECKED	.	-
APPROVED	.	-

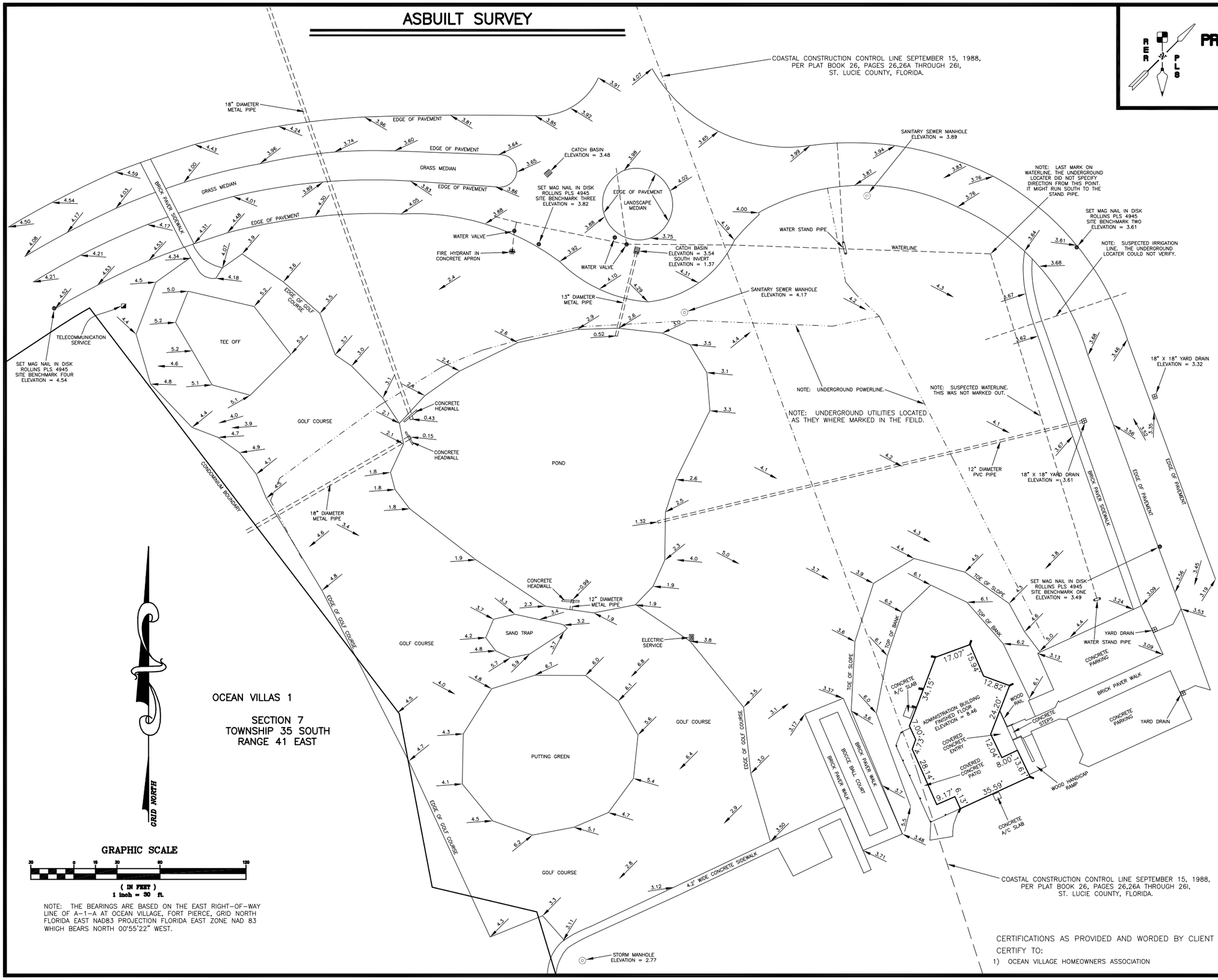
OCEAN VILLAGE PICKLEBALL COURT

SPECIFICATIONS

DATE: 11/13/23
HORIZ. SCALE: -
VERT. SCALE: -
JOB No. 23-111
SHEET 3 of 3

P:\Proj-2023\23-111 Ocean Village Pickleball Courts\Eng\23-111 Ocean Village-Pickleball-specifications.dwg Plotted: 11/12/2023 5:21 PM By: EDGAR COAPMAN

ASBUILT SURVEY



OCEAN VILLAS 1

SECTION 7
TOWNSHIP 35 SOUTH
RANGE 41 EAST

GRID NORTH

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

NOTE: THE BEARINGS ARE BASED ON THE EAST RIGHT-OF-WAY LINE OF A-1-A AT OCEAN VILLAGE, FORT PIERCE, GRID NORTH FLORIDA EAST NAD83 PROJECTION FLORIDA EAST ZONE NAD 83 WHICH BEARS NORTH 00°55'22" WEST.

CERTIFICATIONS AS PROVIDED AND WORDED BY CLIENT CERTIFY TO:

1) OCEAN VILLAGE HOMEOWNERS ASSOCIATION

ROLAND E. ROLLINS
PROFESSIONAL LAND SURVEYOR
3221 SW CRUMPACKER STREET
PORT ST. LUCIE, FLORIDA 34953
772-873-4700

BENCHMARK REFERENCE:

FOUND BRASS DISK IN CONCRETE MONUMENT STAMPED RILEY ST. LUCIE COUNTY 2005 VERTICAL CONTROL DISK. FOUND 177 FEET PLUS OR MINUS SOUTH OF THE CENTERLINE OF COCONUT DRIVE ON THE EAST SIDE OF STATE ROAD A-1-A 3' PLUS OR MINUS EAST OF THE EAST EDGE OF A 5 FOOT CONCRETE SIDEWALK RUNNING NORTH AND SOUTH, 39 FEET PLUS OR MINUS NORTHWEST OF THE WEST END OF A OCEAN VILLAGE SIGN, 16 FEET PLUS OR MINUS WEST OF A WOOD UTILITY POLE.
ELEVATION = 3.839 N.A.V.D. OF 1988

ELEVATIONS BASED ON N.A.V.D. OF 1988 AND SHOWN THUS 1.0

FLOOD ELEVATION INFORMATION

MAP NUMBER 12111C0183J — DATE OF FIRM FEB. 16TH, 2012
COMMUNITY NUMBER 120286 — PANEL 0183
BASE FLOOD ELEVATION 6.0 — SUFFIX J
FIRM ZONE AE

ADDENDUM	FIELD BOOK	PAGE	DATE	BY	CHECKED
ASBUILT SURVEY	E.F.B.		08/14/2023	R.E.R.	R.E.R.
ASBUILT SURVEY	E.F.B.		10/18/2023	R.E.R.	R.E.R.

LEGEND:

- ⊙ = SET 5/8" IRON REBAR WITH CAP P.L.S. NUMBER 4945
- • = SET NAIL IN DISK P.L.S. NUMBER 4945 UNLESS OTHERWISE NOTED.
- ⊙ = MANHOLE (M.H.)
- = CATCH BASIN (C.B.)
- = FIRE HYDRANT (F.H.)
- = WATER METER (W.M.)
- = WOOD POWER POLE (WD. P.P.)
- = CONCRETE POWER POLE (CONC. P.P.)
- = ANCHOR AND GUY WIRE
- = OVERHEAD WIRES
- = NOT TO SCALE
- = FENCELINE

NOTES:
1) LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR EASEMENTS, OWNERSHIP AND/OR RIGHT-OF-WAYS OF RECORD.
2) NO UNDERGROUND OR INTERIOR IMPROVEMENTS WERE LOCATED EXCEPT AS NOTED.
3) LEGAL DESCRIPTION AS SUPPLIED BY CLIENT.
4) BUILDING TIES ARE 90° OR RADIAL TO THE PROPERTY LINE.
5) ALL EASEMENTS SHOWN ARE PER RECORD PLAT UNLESS OTHERWISE NOTED.

PLOT DATE AND TIME: 10/24/2023 9:15 AM EST

LOT SQUARE FOOTAGE: N/A

SCALE: 1" = 20'

DATE OF LAST FIELD WORK: 10/18/2023

I HEREBY CERTIFY THAT THE SURVEY SHOWN HEREON COMPLIES WITH STANDARDS OF PRACTICE FOR SURVEYS AS CONTAINED IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

THIS SURVEY WAS ELECTRONICALLY CERTIFIED BY ROLAND E. ROLLINS PROFESSIONAL LAND SURVEYOR NUMBER 4945 AS TIME STAMPED AND DIGITALLY SIGNED ABOVE. IF THIS SURVEY IS PRINTED IN PAPER FORM THEN IT BECOMES INVALID WITHOUT THE SIGNATURE AND SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

JOB NUMBER: RR230801UD

PSM LLC
Pickleball Sound Mitigation

Initial Pickleball Sound Analysis Report

For

Ocean Village, Fort Pierce, FL

November 13, 2023

Robery M Unetich

Executive Summary: We have reviewed the new court site plans and the elevations of buildings and the court surface. These have been entered into ***Noise Tools*** software along with data collected at other pickleball courts concerning likely sound levels of play and the background noise data taken during our site visits in 2022 and 2023.

As the plots on these pages will illustrate, pickleball sound levels without sound barriers may be above American National Standards Institute (ANSI) recommendations and above the ordinary background noise level during low wind conditions.

We have considered a number of sound barrier designs and other pickleball sound mitigation methods to minimize the likely impact of pickleball sound at homes close to this site and our recommendation is that these courts should have **fifteen ft. high mass-loaded-vinyl (mlv) barriers along the north and14 ft high on the west court fences and 12 ft high sound absorbing barriers along the south fence** (to minimize reflected sound traveling to the north) and a 12 ft. wide barrier on the north-east side corner. It is not necessary to have chain link mesh reach above the 10 ft height and 10 or 12 ft chain link is generally available as are long heavy duty pipes for barrier support.

In addition, we recommend the use of paddles and tournament approved paddles that meet the requirements of our firm's latest Blue List of Recommended Paddles, which is attached as an appendix to this report. **We also recommend that ½ inch thick polyethylene, Nomex or aluminum core and fiberglass, graphite or composite face paddles not be permitted on these courts, since those models tend to be loud and to have a pitch above 1,000 Hz. This includes paddle models such as the Onix Z5, the Engage Encore, the Pro-lite Champion and the Paddletek Element and other models.**

If these recommendations are adopted, we believe that sound levels at all nearby homes including condos to the north, will be below 50 dBA for the vast majority of all hits and that other player sounds will also be attenuated to near or below background noise levels.

To be effective, the barrier materials must be of sufficient weight and properly sized and installed. We will provide additional guidance about sizing and mounting these recommended barriers. We are confident that if all of these steps are taken, pickleball sound at this site will be within the requirements stated above. We also have a set of suggestions about the fence design, such as installing diagonal corners to strengthen the fence but those suggestions are options.

Report Summary: This report is a follow-on report to the report delivered to Ocean Village in 2022. Therefore, it does not provide the usual description of pickleball sound and how we measure it. The report does, however, predict pickleball sound levels with and without specific combinations of sound barrier designs.

It also adds updated information about quieter pickleball equipment, a topic that is evolving rapidly because of the increase in attention pickleball sound is receiving nationwide. A benefit of this evolution is that the sound levels of many of the new paddles entering the market are lower and this trend can be expected to continue.

The design of the barriers recommended includes a consideration of noise ordinances, ANSI recommendations and the field experience of PSM LLC. The predictions of sound levels are experience based. The software used for analysis of barrier designs does a calculation of diffraction losses, reflected sound path echos and the insertion loss of barrier materials.

The initial drawing below is a site plan superimposed on a Google Earth satellite view. Local photos taken by PSM staff enable us to consider the heights and elevations of the building surrounding the proposed pickleball site. The software is using satellite photos obtained from Google Earth and elevation information of roof heights to predict sound levels resulting from a sound source placed to simulate players on the courts.

The Sections that follow include:

1. A Site Description

2. A review of local noise ordinances and the ANSI Recommendations

3. A plot of predicted sound levels with no barriers and with ordinary pickleball paddles

4. A plot of predicted sound levels with no barriers and with quieter paddles meeting the requirements of the PSM LLC Blue List or better, which is attached as an Appendix

5. Several plots of predicted sound levels with different height barriers on four sides of the courts

6. Our Conclusions and Recommendations

This report is an “Initial Report” that may be updated or revised when new input from Ocean Village or equipment vendors is received.

Site Description

The Latest Court Layout Drawing



Satellite View with distances to close homes from the center of the court area



The distances to homes from players in the center of the court location is about 250 ft. It is about 70 ft less for players on the west side, making it about 180 ft. The north fence is about 220 feet from the fence to homes The ground surface between the courts and the homes is primarily grass, which has a lower reflection coefficient than asphalt or concrete.

While pickleball sound levels can reach 70 dBA at 100 feet from players over a hard surface, a barrier will reduce the ground reflection component by 3 dB and because of the inverse square law of energy distribution, levels will decrease by 6 dB when the distance doubles. Tests show that the enforced use of **tournament approved quieter paddles**, many of which are listed in Appendix A, will reduce sound levels by 4 decibels. Using these factors we can calculate the predicted levels at the nearby homes with no barriers in place in the following plot



If we add barriers to three sides we will both attenuate the main path levels and attenuate the reflected path sounds. This design adds three 12 ft high (3.7 meter) barriers to the court fencing:



Sound levels are now close to our established goal of under 50 dBA LAFmax but not at the desirable level 0f 50 dBA or less.

It would be possible to reduce the levels by 2.5 decibels by requiring and enforcing the use of a quieter pickleball, such as the Onix Fuse, and this in fact one option. If that selection was made this would be the resulting sound level plot:



These levels are at the identified goal of 50 dBA or lower but it requires the enforced use of a ball such as the Onix Fuse.

Many pickleball players strongly prefer using the most popular tournament approved ball, the Franklin-X or Dura Fast 40. Rather than add a difficult to enforce requirement on all players, we modeled the idea of increasing barrier heights and using the Franklin-X ball in the next soundscape plot:

We also added a 12 ft high by 12 ft. length of barrier covered fence in the north-east corner to reduce sound diffraction around that corner. It is called barrier # 5 in the plot.

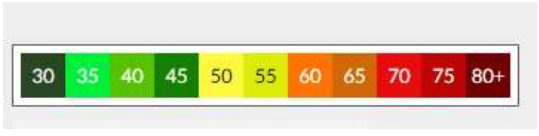
As an alternative design while retaining the use of the Franklin-X ball, we considered raising the barrier heights to 14 ft in two directions, west and north and we then obtained this plot:



The 14 ft high barrier does not need to be fully covered by chain link mesh. Heavy duty support posts, which are readily available, can support a 14 ft high pipe frame. We recommend that a structural engineer be involved in the fence design

Using the color graphics of Noise Tools Software, we see this soundscape in the following plot. This plot uses this color legend below for sound levels in dBA LAFmax metric.





The player in the above has been positioned (on Court 3, assuming a left to right court numbering method) to create the highest distant sound level.

To test that setting, the player is now moved to each court and the new soundscapes are plotted below:

Court 1 player:



Court 2 player:



Court 4 player:



Court 5 player:



The above plots include the placements of hitters on all five courts and the predicted sound level does not exceed 50 dBA at homes. This combination of barriers includes 14 ft high mlv types on the north and west and 1 12 ft high absorbing types along a portion of the south fencing plus a short section of mlv along the north east corner plus the use of quieter but tournament approved paddles and the most common tournament ball.

The next plot adds the suggested diagonal corner fences and barrier sections that increase fence strength and aid in sound reduction by eliminating the natural echo effect of square corners. This design now contains 8 barrier sections including 14 and 12 ft. heights and two barrier types along with quieter gear with predicted frequent pickleball sound levels below 50 dBA at all residences. At the condo to the north, the sound levels shown are at 5 ft above ground level on the sidewalk (42 dBA) and 27 ft high to the right at the third floor (47 dBA)



Increasing barrier heights reduces sound levels about 1 dB/ft. Sound levels are now below the target level of 50 dBA at all homes including on all floors. PSM LLC recommends that 15 ft high barriers also be considered as an option.

The final plot assumes that the north barrier height is increased to 15 ft above the court surface.



Note that this achieves a further reduction in sound levels to the north. A third elevation was added to the calculated predictions. The levels at the north condo now shown are 42 dBA on the sidewalk at 5 ft above ground, 42 dBA at the second story unit and 45 dBA at the third floor unit. Note also that the darg green shading, representing 45 dBA to 50 has a reduced area.

If Ocean Village selects a fencing company that can install a fence of these varying heights, with the diagonal corners recommended and with sufficient wind loading capability, PSM LLC recommends this design should be implemented.

Fort Pierce Noise Ordinances:

Noise is limited in ARTICLE II of the Fort Pierce Code of Ordinances. The followings sections, shown in italics, define the noise limits:

Sec. 26-37. - Purpose.

a) *Excessive, unnecessary or unusually loud noise is a detriment to the public health, comfort, convenience, safety, welfare and prosperity of city residents.*

(b)

b) *It is in the public interest that the regulations contained in this article be adopted as public policy to promote the public health, comfort, safety, welfare and repose of the city and its inhabitants.*

Sec. 26-38. - Terminology, standards, and definitions.

a)Definitions

*b) **Classification of use occupancy**. For purposes of defining the use occupancy, all premises containing habitually occupied sleeping quarters shall be considered residential use. All premises containing transient commercial sleeping quarters shall be considered commercial use. All premises containing businesses where sales, professional or other commercial uses are legally permitted shall be considered commercial use. All premises where manufacturing is legally permitted shall be considered industrial use. In cases of multiple use, the more restrictive use category shall prevail. Hospitals, nursing homes, schools, libraries, churches and all institutional uses shall be considered residential uses. Any area not otherwise classified shall conform to commercial standards.*

(c)

c) *Maximum permissible sound levels by use occupancy. It shall be unlawful to project a sound or noise, from one property into another property within the boundary of the use occupancy, which exceeds either the limiting noise spectra set forth in Table I below or exceeds the ambient noise level by more than three decibels when measured as specified under the noise enforcement practices as adopted by the city commission by ordinance.*

(1)

Sound or noise projecting from one use occupancy into another use occupancy with a different noise level limit shall not exceed the limits of the use occupancy into which the noise is projected.

(2)

The limits hereinabove referred to shall be in accordance with Table 1 in section 26-40.

Sec. 26-40. - Sound level limitations.

No person shall cause, suffer, allow, or permit the operation of any sound source in such a manner as to create a sound level that exceeds the sound level limits set forth in Table 1 when measured from the real property line of the nearest receiving property, using the slow response setting unless otherwise noted. Such a sound source would constitute a noise disturbance.

Table 1. Sound Level Limits by Receiving Property

Receiving Property Category	*Time*	*Sound Level Limit (dBA)*	*Sound Level Limit (dBC)*	*Sound Level Limit (dBZ)*
Residential	Monday through Saturday, 7:00 a.m.—11:00 p.m.	60	60	60
Residential	Sunday, 7:00 a.m.—1:00 p.m.	See subsection (1) of this section.	See subsection (1) of this section.	See subsection (1) of this section.
Residential	Sunday through Saturday, 11:00 p.m.—7:00 a.m.	See subsection (1) of this section.	See subsection (1) of this section.	See subsection (1) of this section.
Commercial	At all times	65	65	65
Industrial	At all times	70	70	70

(1) It shall be unlawful for any person to make, continue or cause to be made or continued within that portion of the city which has been designated as a residential or mixed use area of the city, between the hours of 11:00 p.m. and 7:00 a.m. of each day, and on Sunday from 7:00 a.m. to 1:00 p.m. any unreasonably loud, excessive, unnecessary, or unusual noise in such manner that noise produced, or the vibration made, by the same would be obvious, or cause discomfort and annoyance to an ordinary, reasonable prudent person at a distance greater than 50 feet from the real property line of the nearest receiving property. A sound level meter or sound level reading shall not be necessary for the enforcement of this subsection.

2) If the noise is an impulsive sound, the fast response setting shall be used and the daytime (7:00 a.m. to 11:00 p.m.) limits of Table 1 shall be increased by ten dBA, dBC, or dBZ.

Analysis of the Ordinances:

We defer to others the meaning of b) ***Classification of use occupancy****. Maximum permissible sound levels "****by use occupancy****",* which limits sound levels to within 3 decibels of background noise levels. While "**Use Occupancy**" may be a legal term, it is, in our view, not well defined in Article II of this code. In addition, this definition of background noise:

"Background sound level means the total sound pressure level in the area of interest excluding the noise source of interest."

is also not well defined here, although it is often the practice in acoustics to measure the average background noise level over a stated period of time, such as 10 minutes or one hour and this ANSI defined metric is called **Leq.**

We are currently analyzing on site noise data and we will calculate an **Leq** in the near future based upon our measurements.

The Sound Level Limits in Table 1 adjustment when impulse noise is being measured:

Table 1 of the ordinance establishes 60 dBA as the normal sound level limit except for impulse noise, which, according to Section 26-40 2), has a limit of 70 dBA as measured in the fast mode with a sound level meter. This is the ANSI defined mode our sound level predictions and measurements employ.

The above teaches us that the actual impulse noise level limit inFort Peirce is 70 dBA.

Conclusions:

Unless sound mitigation is employed, sound levels will exceed the ANSI recommendations and the recommendations of PSM LLC even if quieter gear is employed. It is necessary to add sound barriers to bring the noise levels down to about the background noise level.

Recommendations:

PSM LLC recommends that Ocean Village Install 14 ft high mass-loaded vinyl barriers along the west side of the proposed courts, 15 ft along the north and a 12 ft high absorbing barrier along the south side and enforce the use of quieter paddles. These steps will reduce frequent pickleball sound levels to or below 50 dBA outside of local residences at all floors of the buildings.

We recommend the diagonal corners sections for the fencing in three locations, which will enhance fence strength and reduce sound reflections.

The sound barriers along the north and west fence should not have gates or any openings that would permit sound to pass unobstructed. The fences do not need to have chain link material above the 10 ft height, if that assists in building the fencing. The south fence shields the building from pickleball sound and it avoids reflecting sound to the north because of its absorbing characteristics but it can have one or two gates for entry into the playing area.

PSM LLC is available to recommend vendors and mounting methods for these barriers. Ocean Village will need to develop a hurricane plan to protect the sound barriers and buildings as much as practical during hurricane conditions.

Suggestions:

Diagonal fence corners with triangular piping to change elevations are suggested to strengthen the fence . Tall hedges may be added to improve the appearance of the sound barriers.

We suggest waterproof baseboards along the bottom of the fences for attachment to the sound barriers and to keep the sound barriers from absorbing water or preventing water drainage from the court.

We suggest break away tie wraps along the top of the sound barriers to increase the ability to survive high wind conditions.

PSM LLC is available to assist in obtaining multiple quotes on sound barrier material.

The following pages are the most recent list of quieter paddles published by PSM LLC. A revised list with additional paddles will be released in December of this year.

The Pickleball Paddle Blue List

Quieter Pickleball Paddles

List updated: November 4, 2023

Introduction: The following paddles have been selected and qualified for 'Blue List' status through a testing procedure that uses a combination of metrics in addition to loudness (sound pressure). This includes the 'pitch' and duration of the sound produced when a pickleball is struck by a paddle.

These metrics were selected after reviewing with players and non-players the characteristics of a typical pickleball hit including input from some who consider impulse sounds of this type to be very annoying.

The resulting criteria were established by PSM LLC in 2022 as a means of recommending paddles to communities and pickleball clubs that are attempting to mitigate the sound of pickleball.

Test Procedure: PSM LLC is a pickleball acoustics consulting firm. We have built an echo free (or anechoic) chamber for testing pickleballs and paddles. A calibrated microphone is mounted in this chamber and a computer outside the chamber analyzes the microphone output.

Criteria: The paddles listed have a sound pressure level (SPL) below that generated by standard ½ inch thick fiberglass faced paddles. In addition, these paddles have a main pitch below 1,000 Hz and a decay time of the primary vibration mode under 5 milliseconds.

Using This List: PSM LLC updates the list as it tests and identifies additional paddles that meet the criteria.

Updating This List: To arrange additional paddle or pickleball testing, contact PSM LLC via email at bob@pickleballsound.com.

For an updated version of **The Blue List**, see the PSM LLC web site (pickleballsound.com) as well as the Pickleball Sound Mitigation Facebook group page. **The Pickleball Paddle Blue List** is copyright free.

THE PICKLEBALL PADDLE BLUE LIST
PICKLEBALL SOUND MITIGATION LLC
www.pickleballsound.com
Updated: November 4, 2023

Paddle Vendor	Paddle Model Name	Notes
CRBN	1 and 1x	
CRBN	2	
Diadem	Vice	1
Diadem	Warrior	
E6	16s	
Electrum	E Pro II	
Focus	Silencer	
Franklin	Pro Series 16 mm	
Gamma	Obsidian 16	
Gearbox	CX11	
Gearbox	CX14	
Gearbox	GX5 and GX6	
Joola	Ben Johns 16 mm	
Joola	Simone Jardim 16 mm	
Joola	Radius	
Master Athletics	Q1	1
One More	Vibe	
One More	Pro Custom	
Pickleball Rocks	The Dude	
Pickleball Rocks	Pink Widow	
Pro Drive	DRIVE	
Pro Kennex	Pro Speed	
Pro Kennex	Ovation	
Pro Pickleball	Infinity Widebody 16 MM	
Selkirk	Amped Epic	
Selkirk	Vanguard Invikta	
TMPR	Tantrum and TC-16	
Versix	Pro XL	
Wild Monkeys	Grizzly	
Wowlly	Surge XL	
Wolfe	Bite	

Note 1: Two of the above paddles are not USA Pickleball tournament approved

The Statistical Characteristics of Pickleball Sound

Pickleball sound level can be described as a stochastic process. This means that there are many factors which determine the level and pitch of the sound of any given pickleball hit.

These factors include who is playing and how aggressively a person is playing and environmental factors, such as wind and temperature. This complicates pickleball sound level predictions. If we predict a maximum sound level (SPL) of, for instance, 50 dBA, that level will not be the exact value of the very next hit.. What that number represents is expectation that a particular SPL will not frequently be exceeded. In the terminology of statistics, 50 dBA will be the probable 3 sigma level, and 99.7% of ball hits will be below that 3 sigma level.

This stochastic process limitation to predicting sound levels means that our predictions are for what we call "frequent" sounds and that is how our sound level predictions should be understood.

JOANNE HOLMAN, CLERK OF THE CIRCUIT COURT - SAINT LUCIE COUNTY
File Number: 2393882 OR BOOK 1955 PAGE 815
Recorded:04/30/04 12:08

* Doc Assump: $ 0.00
* Doc Tax : $ 21,700.00
* Int Tax : $ 0.00

PREPARED BY:
David N. Sowerby, Esquire
MELVILLE & SOWERBY, P.L.
2490 South 25th Street
Fort Pierce, Florida 34981

RETURN TO:
Carol Capri Kalliche, Esquire
BECKER & POLAKOFF, P.A.
3111 Stirling Road
Fort Lauderdale, FL 33312-6525

[Space Above This Line For Recording Data]

SPECIAL WARRANTY DEED

THIS SPECIAL WARRANTY DEED is made and executed this 23 day of April, 2004, by and between **RCR DEVELOPMENT COMPANY, INC., a Florida corporation**, (hereinafter "Grantor"), and, **OCEAN VILLAGE PROPERTY OWNERS ASSOCIATION, INC., a Florida corporation,** whose post office address is 2400 South Ocean Drive, Fort Pierce, FL 34949 (hereinafter "Grantee").

WITNESSETH: That the Grantor, for and in consideration of the sum of $10.00 and other good and valuable consideration to Grantor in hand paid by Grantee, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said Grantee and Grantee's heirs and assigns forever, the following described land, situate, lying and being in the County of St. Lucie, State of Florida, to wit:

SEE EXHIBIT "A" ATTACHED HERETO.

SUBJECT TO restrictions, reservations and easements of record, if any, which are not reimposed hereby, and real estate taxes subsequent to December 31, 2003;

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

AND the Grantor warrants, at the time of the delivery of the Deed, the premises were free from all encumbrances made by Grantor, and that Grantor will defend against the lawful claims of all persons claiming by, through or under Grantor, but against none other.

IN WITNESS WHEREOF, the Grantor has hereunto set its hand and seal the day and year first above written.

Signed, Sealed and Delivered
in the presence of:

David N. Sowerby

Maureen Lounsbery

RCR DEVELOPMENT COMPANY, INC.
a Florida corporation

By: _____
Roy Chapin, III, Vice President
2560 RCA Boulevard, Ste. 112,
Palm Beach Gardens, FL 33410

(corporate seal)

[Space Above This Line For Recording Data]

STATE OF FLORIDA
COUNTY OF ST. LUCIE

The foregoing instrument was acknowledged before me, this 23rd day of April, 2004, by ROY CHAPIN, III, as Vice President of RCR DEVELOPMENT COMPANY, INC., a Florida corporation, on behalf of the corporation, [✓] who is personally known to me, or [___] who produced his driver's license as identification.

Notary Stamp:

DAVID N. SOWERBY
MY COMMISSION # DD302396
EXPIRES: March 22, 2008
Fl. Notary Discount Assoc. Co.
1-800-3-NOTARY

Notary Public, State of Florida at Large
Commission #_____
My Commission Expires:

EXHIBIT "A" - Page 1

Commencing at the Southwest corner of Section 7, Township 35 South, Range 41 East, St. Lucie County, Florida, run South 89°17'30" East along the South line of said Section 7 a distance of 70.0 feet to a point on the easterly right-of-way line of State Road A-1-A, said point being the Point of Beginning.

From the Point of Beginning, run North along the easterly right-of-way line of State Road A-1-A a distance of 872.30 feet; thence run East a distance of 386.47 feet to a point of curvature; thence run along the arc of a curve concave to the North having a radius of 724.04 feet and a central angle 8°30'52" a distance of 107.60 feet to a point at the northwesterly corner of Catamaran, II, A Condominium as recorded in Office Record Book 334, Page 2451 of the Public Records of St. Lucie County, Florida; thence run along the boundary of Catamaran II as follows: run South 32°30'00" East a distance of 119.73 feet thence run South a distance of 59.0 feet; thence run South 38°00'00" West a distance of 239.70 feet; thence run South 19°07'00" West a distance of 270.0 feet; thence run South 70°53'00" East a distance of 255.07 feet; thence North 55°45'07" East a distance of 102.22 feet; thence departing from the boundary of Catamaran II run South a distance of 10.00 feet; thence run East a distance of 283.18 feet to a point on a curve on the westerly right-of-way line of Windward Drive, a 30 foot wide private right-of-way; thence with a radial bearing North 76°20'35" East run southerly along the arc of a curve having a radius of 465.00 feet and a central angle 16°20'35" a distance of 132.64 feet to a point of tangency; thence run South 30°00'00 East along said right-of-way a distance of 342.01 feet; thence run North 60°00'00" East a distance of 30.00 feet to a point on the easterly right-of-way line of Windward Drive and the Southwesterly corner of Ocean Villas III, A Condominium, as recorded in Official Record Book 277, Page 2686, of the Public Records of St. Lucie County, Florida; thence run along the boundary of Ocean Villas III as follows; run North 60°00'00" East a distance of 222.10 feet; thence run North 41°01'14" East a distance of 62.22 feet; thence departing from the boundary of Ocean Villas III, run South 85°35'08" East a distance of 88.57 feet to the Southwesterly corner of Seascape II, A Condominium, as recorded in Official Record Book 362, Page 2576, of the Public Records of St. Lucie County, Florida; thence run North 73°25'28" East along the south line of Seascape II a distance of 141.22 feet to a point on the coastal construction setback line; as recorded on September 15, 1988 in Plat Book 26, Pages 26, and 26A-26I of the Public Records of St. Lucie County, Florida; thence South 16°57'20" East along said coastal construction setback line a distance of 108.35 feet; thence continue along said coastal construction setback line South 17°00'01" East a distance of 546.04 feet to a point on the northerly right-of-way line of Blue Heron Boulevard, a county road; thence run along the northerly right-of-way line of said Blue Heron Boulevard as follows: thence run North 89°17'30" West a distance of 366.26 feet; thence run South 00°42'30" West a distance of 20.00 feet; thence run North 89°17'30" West a distance of 1458.50 feet to a point of intersection with the easterly right-of-way line of State Road A-1-A; thence run North along said easterly right-of-way line of State Road A-1-A a distance of 595.40 feet to the Point of Beginning.

EXHIBIT "A" - Page 2

LESS AND EXCEPT (OCEANHOUSES):

A PART OF SECTION 7 AND 18, TOWNSHIP 35 SOUTH, RANGE 41 EAST, ST. LUCIE COUNTY, FLORIDA AND THIS TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE SOUTH 00°00'00" WEST, A DISTANCE OF 595.43 FEET TO A POINT; THENCE SOUTH 89°17'30" EAST, ALONG THE NORTH RIGHT-OF-WAY LINE OF BLUE HERON BOULEVARD, A DISTANCE OF 1398.73 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND; THENCE NORTH 00°42'30" EAST, A DISTANCE OF 247.51 FEET TO A POINT; THENCE NORTH 89°17'30" WEST, A DISTANCE OF 163.79 FEET TO A POINT ON A CURVE CONCAVE TO THE WEST AND HAVING A RADIUS OF 165.00 FEET AND SAID POINT BEING IN THE EAST RIGHT-OF-WAY LINE OF WINDWARD DRIVE ACCORDING TO THE PLAT OF SOUTHPOINTE AS RECORDED IN PLAT BOOK 39, PAGES 7 AND 7A OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; THENCE NORTHERLY, ALONG THE ARC OF SAID CURVE AND THE EAST RIGHT-OF-WAY LINE OF SAID WINDWARD DRIVE, THROUGH A CENTRAL ANGLE OF 13°13'15", HAVING A CHORD BEARING OF NORTH 05°09'10" EAST AND A CHORD LENGTH OF 37.99 FEET, A DISTANCE OF 38.07 FEET TO A POINT OF COMPOUND CURVATURE ON A CURVE CONCAVE TO THE WEST AND HAVING A RADIUS OF 220.00 FEET; THENCE NORTHERLY, ALONG THE ARC OF SAID CURVE AND THE EAST RIGHT-OF-WAY LINE OF SAID WINDWARD DRIVE, THROUGH A CENTRAL ANGLE OF 06°50'26", HAVING A CHORD BEARING OF NORTH 04°53'31" WEST AND A CHORD LENGTH OF 26.25 FEET, A DISTANCE OF 26.27 FEET TO A POINT; THENCE SOUTH 89°17'30" EAST, A DISTANCE OF 105.17 FEET TO A POINT; THENCE NORTH 23°30'23" EAST, A DISTANCE OF 165.87 FEET TO A POINT; THENCE NORTH 32°52'26" EAST, A DISTANCE OF 161.88 FEET TO A POINT; THENCE NORTH 73°25'28" EAST, A DISTANCE OF 141.22 FEET TO A POINT ON THE COASTAL CONSTRUCTION CONTROL LINE AS RECORDED IN PLAT BOOK 26, PAGES 26, 26A THROUGH 26I OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; THENCE NORTH 72°59'59" EAST, A DISTANCE OF 372.95 FEET TO A POINT OF INTERSECTION WITH THE MEAN HIGH WATER LINE OF THE ATLANTIC OCEAN AS LOCATED ON OCTOBER 12, 2000 BY ROLAND E. ROLLINS, PROFESSIONAL LAND SURVEYOR; AT ELEVATION 1.95 FEET NATIONAL GEODETIC VERTICAL DATUM OF 1929; THENCE SOUTH 16°51'59" EAST, ALONG SAID MEAN HIGH WATER LINE, A DISTANCE OF 128.71 FEET TO A POINT; THENCE SOUTH 12°22'53" EAST, ALONG SAID MEAN HIGH WATER LINE, A DISTANCE OF 171.22 FEET TO A POINT; THENCE SOUTH 15°36'37" EAST, ALONG SAID MEAN HIGH WATER LINE, A DISTANCE OF 251.58 FEET TO A POINT; THENCE SOUTH 07°15'17" EAST, ALONG SAID MEAN HIGH WATER LINE, A DISTANCE OF 41.59 FEET TO A POINT; THENCE NORTH 89°17'30" WEST, A DISTANCE OF 243.45 FEET TO A POINT; THENCE SOUTH 16°24'50" EAST, A DISTANCE OF 119.30 FEET TO A POINT; THENCE SOUTH 73°35'10" WEST, A DISTANCE OF 51.60 FEET TO A POINT OF CURVATURE ON A CURVE CONCAVE TO THE SOUTHEAST AND HAVING A RADIUS OF 50.00 FEET; THENCE SOUTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 58°59'29", HAVING A CHORD BEARING OF SOUTH 44°29'21" WEST AND A CHORD LENGTH OF 49.24 FEET, A DISTANCE OF 51.48 FEET TO A POINT ON A NON-TANGENT LINE AND BEING ON THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD; THENCE NORTH 89°17'30" WEST, ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD, A DISTANCE OF 18.74 FEET TO A POINT ON THE SAID COASTAL CONSTRUCTION CONTROL LINE; THENCE NORTH 89°17'30" WEST, ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD, A DISTANCE OF 366.26 FEET TO A POINT; THENCE SOUTH 00°42'30" WEST, A DISTANCE OF 20.00 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD; THENCE NORTH 89°17'30" WEST, ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD, A DISTANCE OF 59.77 FEET TO THE POINT OF BEGINNING AND CONTAINING 9.574 ACRES OF LAND MORE OR LESS.

EXHIBIT "A" - Page 3

FURTHER LESS AND EXCEPT (GOLF LODGES - PHASE I):

A PART OF SECTION 18, TOWNSHIP 35 SOUTH, RANGE 41 EAST, ST. LUCIE COUNTY, FLORIDA AND THIS TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 18; THENCE SOUTH 89°17'30" EAST, ALONG THE NORTH LINE OF SAID SECTION 18, A DISTANCE OF 70.01 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF STATE ROAD A-1-A; THENCE SOUTH 00°00'00" EAST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 58.45 FEET TO A POINT; THENCE SOUTH 89°17'30" EAST, A DISTANCE OF 255.09 FEET TO A POINT; THENCE SOUTH 11°26'30" EAST, A DISTANCE OF 383.50 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND; THENCE SOUTH 89°17'30" EAST, A DISTANCE OF 206.24 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHEAST AND HAVING A RADIUS OF 50.00 FEET AND BEING ON THE WEST RIGHT-OF-WAY LINE OF SOUTHPOINTE DRIVE ACCORDING TO THE PLAT OF SOUTHPOINTE AS RECORDED IN PLAT BOOK 39, PAGES 7 AND 7A OF THE PUBLIC RECORDS OF ST. LUCIE COUNTY, FLORIDA; THENCE SOUTHERLY, ALONG THE ARC OF SAID CURVE AND THE WEST RIGHT-OF-WAY LINE OF SAID SOUTHPOINTE DRIVE, THROUGH A CENTRAL ANGLE OF 07°13'02", HAVING A CHORD BEARING OF SOUTH 04°19'01" WEST AND A CHORD LENGTH OF 12.59 FEET, A DISTANCE OF 12.60 FEET TO THE POINT OF TANGENCY; THENCE SOUTH 00°42'30" WEST, ALONG THE WEST RIGHT-OF-WAY LINE OF SAID SOUTHPOINTE DRIVE, A DISTANCE OF 92.44 FEET TO A POINT; THENCE SOUTH 45°39'48" WEST, ALONG THE WEST RIGHT-OF-WAY LINE OF SAID SOUTHPOINTE DRIVE, A DISTANCE OF 28.26 FEET TO A POINT; THENCE SOUTH 00°42'30" WEST, ALONG THE WEST RIGHT-OF-WAY LINE OF SAID SOUTHPOINTE DRIVE, A DISTANCE OF 37.03 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF BLUE HERON BOULEVARD; THENCE NORTH 89°17'30" WEST, ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD, A DISTANCE OF 233.25 FEET TO A POINT; THENCE NORTH 00°44'44" EAST, A DISTANCE OF 139.01 FEET TO A POINT; THENCE NORTH 64°56'27" EAST, A DISTANCE OF 52.94 FEET TO THE POINT OF BEGINNING AND CONTAINING 0.908 ACRE OF LAND MORE OR LESS.

FURTHER LESS AND EXCEPT (GOLF LODGES - PHASE II)

A PART OF SECTION 18, TOWNSHIP 35 SOUTH, RANGE 41 EAST, ST. LUCIE COUNTY, FLORIDA AND THIS TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 18; THENCE SOUTH 89°17'30" EAST, ALONG THE NORTH LINE OF SAID SECTION 18, A DISTANCE OF 70.01 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF STATE ROAD A-1-A; THENCE SOUTH 00°00'00" EAST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 58.45 FEET TO A POINT; THENCE SOUTH 89°17'30" EAST, A DISTANCE OF 255.09 FEET TO A POINT; THENCE SOUTH 11°26'30" EAST, A DISTANCE OF 140.76 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND; THENCE SOUTH 11°26'30" EAST, A DISTANCE OF 242.74 FEET TO A POINT; THENCE SOUTH 64°56'27" WEST, A DISTANCE OF 52.94 FEET TO A POINT; THENCE SOUTH 00°44'44" WEST, A DISTANCE OF 139.01 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF BLUE HERON BOULEVARD; THENCE NORTH 89°17'30" WEST, ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD, A DISTANCE OF 131.99 FEET TO A POINT; THENCE NORTH 00°00'00" WEST, A DISTANCE OF 399.35 FEET TO A POINT; THENCE SOUTH 89°17'30" EAST, A DISTANCE OF 133.61 FEET TO THE POINT OF BEGINNING AND CONTAINING 1.367 ACRES OF LAND MORE OR LESS.

EXHIBIT "A" - Page 4

FURTHER LESS AND EXCEPT (GOLF LODGES - PHASE III):

A PART OF SECTION 18, TOWNSHIP 35 SOUTH, RANGE 41 EAST, ST. LUCIE COUNTY, FLORIDA AND THIS TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 18; THENCE SOUTH 89°17'30" EAST, ALONG THE NORTH LINE OF SAID SECTION 18, A DISTANCE OF 70.01 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF STATE ROAD A-1-A; THENCE SOUTH 00°00'00" EAST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 45.45 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND; THENCE SOUTH 89°17'30" EAST, A DISTANCE OF 252.46 FEET TO A POINT; THENCE SOUTH 11°26'30" EAST, A DISTANCE OF 154.06 FEET TO A POINT; THENCE NORTH 89°17'30" WEST, A DISTANCE OF 283.02 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A; THENCE NORTH 00°00'00" WEST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 150.62 FEET TO THE POINT OF BEGINNING AND CONTAINING 0.926 ACRE OF LAND MORE OR LESS.

FURTHER LESS AND EXCEPT (GOLF LODGES - PHASE IV)

A PART OF SECTION 18, TOWNSHIP 35 SOUTH, RANGE 41 EAST, ST. LUCIE COUNTY, FLORIDA AND THIS TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 18; THENCE SOUTH 89°17'30" EAST, ALONG THE NORTH LINE OF SAID SECTION 18, A DISTANCE OF 70.01 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF STATE ROAD A-1-A; THENCE SOUTH 00°00'00" EAST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 196.07 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND; THENCE SOUTH 89°17'30" EAST A DISTANCE OF 149.41 FEET TO A POINT; THENCE SOUTH 00°00'00" EAST A DISTANCE OF 212.52 FEET TO A POINT; THENCE SOUTH 89°53'23" WEST A DISTANCE OF 149.40 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A; THENCE NORTH 00°00'00" WEST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 214.66 FEET TO THE POINT OF BEGINNING AND CONTAINING 0.733 ACRE OF LAND MORE OR LESS.

EXHIBIT "A" - Page 5

FURTHER LESS AND EXCEPT (GOLF LODGES - PHASE V):

A PART OF SECTION 18, TOWNSHIP 35 SOUTH, RANGE 41 EAST, ST. LUCIE COUNTY, FLORIDA AND THIS TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 18; THENCE SOUTH 89°17'30" EAST, ALONG THE NORTH LINE OF SAID SECTION 18, A DISTANCE OF 70.01 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF STATE ROAD A-1-A; THENCE SOUTH 00°00'00" EAST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 410.73 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND; THENCE NORTH 89°53'23" EAST, A DISTANCE OF 149.40 FEET TO A POINT; THENCE SOUTH 00°00'00" EAST, A DISTANCE OF 186.83 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF BLUE HERON BOULEVARD; THENCE NORTH 89°17'30" WEST, ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD, A DISTANCE OF 149.41 FEET TO THE POINT OF INTERSECTION WITH THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD AND THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A; THENCE NORTH 00°00'00" WEST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 184.70 FEET TO THE POINT OF BEGINNING AND CONTAINING 0.637 ACRE OF LAND MORE OR LESS.

FURTHER LESS AND EXCEPT (TRACT F):

A PART OF SECTION 18, TOWNSHIP 35 SOUTH, RANGE 41 EAST, ST. LUCIE COUNTY, FLORIDA AND THIS TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE SOUTH 00°00'00" WEST, A DISTANCE OF 595.43 FEET TO A POINT; THENCE SOUTH 89°17'30" EAST, ALONG THE NORTH RIGHT-OF-WAY LINE OF BLUE HERON BOULEVARD; A DISTANCE OF 1294.80 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND; THENCE NORTH 00°41'47" EAST ALONG THE EAST RIGHT-OF-WAY LINE OF WINDWARD DRIVE, A DISTANCE OF 191.04 FEET TO A POINT OF CURVATURE ON A CURVE CONCAVE TO THE SOUTHEAST AND HAVING A RADIUS OF 135.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE AND THE EAST RIGHT-OF-WAY LINE OF SAID WINDWARD DRIVE THROUGH A CENTRAL ANGLE OF 17°04'55", HAVING A CHORD BEARING OF NORTH 09°14'58" EAST AND CHORD LENGTH OF 40.10 FEET, A DISTANCE OF 40.25 FEET TO A POINT OF REVERSE CURVATURE ON A CURVE CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 165.00 FEET; THENCE NORTHEASTERLY ALONG THE ARC OF SAID CURVE AND THE EAST RIGHT-OF-WAY LINE OF SAID WINDWARD DRIVE THROUGH A CENTRAL ANGLE OF 06°01'38", HAVING A CHORD BEARING OF NORTH 14°46'36" EAST AND A CHORD LENGTH OF 17.35 FEET, A DISTANCE OF 17.36 FEET TO A POINT; THENCE SOUTH 89°17'30" EAST A DISTANCE OF 163.79 FEET TO A POINT; THENCE SOUTH 00°42'30" WEST A DISTANCE OF 247.53 FEET TO A POINT ON THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD; THENCE NORTH 89°17'30" WEST, ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID BLUE HERON BOULEVARD, A DISTANCE OF 173.93 FEET TO THE POINT OF BEGINNING AND CONTAINING 0.983 ACRE OF LAND MORE OR LESS.

EXHIBIT "A" - Page 6

FURTHER LESS AND EXCEPT (GOLF LODGES - NORTH):

A PART OF SECTION 7, TOWNSHIP 35 SOUTH, RANGE 41 EAST, ST. LUCIE COUNTY, FLORIDA AND THIS TRACT BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF SAID SECTION 7; THENCE SOUTH 89°17'30" EAST, ALONG THE SOUTH LINE OF SAID SECTION 7, A DISTANCE OF 70.01 FEET TO A POINT ON THE EAST RIGHT-OF-WAY LINE OF STATE ROAD A-1-A; THENCE NORTH 00°00'00" WEST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 390.08 FEET TO THE POINT OF BEGINNING OF THE HEREIN DESCRIBED TRACT OF LAND; THENCE NORTH 00°00'00" WEST, ALONG THE EAST RIGHT-OF-WAY LINE OF SAID STATE ROAD A-1-A, A DISTANCE OF 294.65 FEET TO A POINT; THENCE NORTH 89°47'03" EAST, A DISTANCE OF 175.03 FEET TO A POINT; THENCE NORTH 15°51'52" EAST, A DISTANCE OF 89.55 FEET TO A POINT OF CURVATURE ON A CURVE CONCAVE TO THE SOUTHEAST HAVING A RADIUS OF 73.00 FEET; THENCE NORTHEASTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 87°19'03", HAVING A CHORD BEARING OF NORTH 59°31'24" EAST AND A CHORD LENGTH OF 100.79 FEET, A DISTANCE OF 111.25 FEET TO A POINT OF REVERSE CURVATURE ON A CURVE CONCAVE TO THE NORTHWEST AND HAVING A RADIUS OF 51.00 FEET; THENCE NORTHEASTERLY, ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 68°58'23", HAVING A CHORD BEARING OF NORTH 68°41'43" EAST AND A CHORD LENGTH OF 57.75 FEET, A DISTANCE OF 61.39 FEET TO A POINT OF COMPOUND CURVATURE ON A CURVE CONCAVE TO THE WEST AND HAVING A RADIUS OF 22.00 FEET; THENCE NORTHWESTERLY, ALONG THE ARC OF SAID CURVE, THROUGH A CENTRAL ANGLE OF 82°02'01", HAVING A CHORD BEARING OF NORTH 06°48'29" WEST AND A CHORD LENGTH OF 28.88 FEET, A DISTANCE OF 31.50 FEET TO A POINT ON A NON-TANGENT LINE AND BEING ON THE THE SOUTH RIGHT-OF-WAY LINE OF CLIPPER BOULEVARD; THENCE NORTH 90°00'00" EAST, ALONG THE SOUTH RIGHT-OF-WAY LINE OF SAID CLIPPER BOULEVARD, A DISTANCE OF 49.71 FEET TO A POINT OF CURVATURE ON A CURVE CONCAVE TO THE NORTH AND HAVING A RADIUS OF 724.04 FEET; THENCE EASTERLY, ALONG THE SOUTH RIGHT-OF-WAY LINE OF SAID CLIPPER BOULEVARD AND THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 00°49'28", HAVING A CHORD BEARING OF NORTH 89°35'16" EAST AND A CHORD LENGTH OF 10.42 FEET, A DISTANCE OF 10.42 FEET TO A POINT; THENCE SOUTH 15°52'03" WEST, A DISTANCE OF 529.09 FEET TO A POINT; THENCE NORTH 83°58'20" WEST, A DISTANCE OF 253.63 FEET TO THE POINT OF BEGINNING AND CONTAINING 2.705 ACRES OF LAND MORE OR LESS.

FURTHER LESS AND EXCEPT (SOUTHPOINTE SUBDIVISION):

All of Southpointe Subdivision, except Tract B thereof, as recorded in Plat Book 39, Page 7, of the Public Records of St. Lucie County,Florida.

Saint Lucie County Property Appraiser

Michelle Franklin CFA

Report generated: Tuesday, November 14, 2023

Parcel Report





Parcel

PARCELNO: 2507-321-0001-000-5
Property ID: 33901
Owner1: Ocean Village POA Inc
SiteAddress: Southpointe DR

PARCELNO: 2507-321-0001-000-5
Property ID: 33901
Owner1: Ocean Village POA Inc
SiteAddress: Southpointe DR

PARCELNO: 2507-321-0001-000-5
Property ID: 33901
Owner1: Ocean Village POA Inc
SiteAddress: Southpointe DR

PARCELNO: 2507-321-0001-000-5
Property ID: 33901
Owner1: Ocean Village POA Inc
SiteAddress: Southpointe DR

PARCELNO: 2507-321-0001-000-5
Property ID: 33901
Owner1: Ocean Village POA Inc
SiteAddress: Southpointe DR

PARCELNO: 2507-321-0001-000-5
Property ID: 33901
Owner1: Ocean Village POA Inc
SiteAddress: Southpointe DR

PARCELNO: 2507-321-0001-000-5
Property ID: 33901
Owner1: Ocean Village POA Inc
SiteAddress: Southpointe DR

PARCELNO: 2507-321-0001-000-5
Property ID: 33901
Owner1: Ocean Village POA Inc
SiteAddress: Southpointe DR

Owner

Owner1: Ocean Village POA Inc
Owner2:
Owner3:
MailingAddress: 2400 S Ocean Dr Fort Pierce, FL 34949-8018

Owner1: Ocean Village POA Inc
Owner2:
Owner3:
MailingAddress: 2400 S Ocean Dr Fort Pierce, FL 34949-8018

Owner1: Ocean Village POA Inc
Owner2:
Owner3:
MailingAddress: 2400 S Ocean Dr Fort Pierce, FL 34949-8018

Owner1: Ocean Village POA Inc
Owner2:
Owner3:
MailingAddress: 2400 S Ocean Dr Fort Pierce, FL 34949-8018

Owner1: Ocean Village POA Inc
Owner2:
Owner3:
MailingAddress: 2400 S Ocean Dr Fort Pierce, FL 34949-8018

Owner1: Ocean Village POA Inc
Owner2:
Owner3:
MailingAddress: 2400 S Ocean Dr Fort Pierce, FL 34949-8018

Owner1: Ocean Village POA Inc
Owner2:
Owner3:
MailingAddress: 2400 S Ocean Dr Fort Pierce, FL 34949-8018

Owner1: Ocean Village POA Inc
Owner2:
Owner3:
MailingAddress: 2400 S Ocean Dr Fort Pierce, FL 34949-8018

Owner1: Ocean Village POA Inc
Owner2:
Owner3:
MailingAddress: 2400 S Ocean Dr Fort Pierce, FL 34949-8018

Overview

PrimaryLandUse: 7700 - CLUBS
DistrictGroup: 0022 - Fort Pierce
Subdivision: Metes and Bounds
Just/Market Value: $597,400
FinishedArea: 6,062
Acres: 40.02
TotalArea: 1,743,271

PrimaryLandUse: 7700 - CLUBS
DistrictGroup: 0022 - Fort Pierce
Subdivision: Metes and Bounds
Just/Market Value: $597,400
FinishedArea: 6,062
Acres: 40.02
TotalArea: 1,743,271

PrimaryLandUse: 7700 - CLUBS
DistrictGroup: 0022 - Fort Pierce
Subdivision: Metes and Bounds
Just/Market Value: $597,400
FinishedArea: 6,062
Acres: 40.02
TotalArea: 1,743,271

PrimaryLandUse: 7700 - CLUBS
DistrictGroup: 0022 - Fort Pierce
Subdivision: Metes and Bounds
Just/Market Value: $597,400
FinishedArea: 6,062
Acres: 40.02
TotalArea: 1,743,271

PrimaryLandUse: 7700 - CLUBS
DistrictGroup: 0022 - Fort Pierce
Subdivision: Metes and Bounds
Just/Market Value: $597,400
FinishedArea: 6,062
Acres: 40.02
TotalArea: 1,743,271

PrimaryLandUse: 7700 - CLUBS
DistrictGroup: 0022 - Fort Pierce
Subdivision: Metes and Bounds
Just/Market Value: $597,400
FinishedArea: 6,062
Acres: 40.02
TotalArea: 1,743,271

PrimaryLandUse: 7700 - CLUBS
DistrictGroup: 0022 - Fort Pierce
Subdivision: Metes and Bounds
Just/Market Value: $597,400
FinishedArea: 6,062
Acres: 40.02
TotalArea: 1,743,271

PrimaryLandUse: 7700 - CLUBS
DistrictGroup: 0022 - Fort Pierce
Subdivision: Metes and Bounds
Just/Market Value: $597,400
FinishedArea: 6,062
Acres: 40.02
TotalArea: 1,743,271

PrimaryLandUse: 7700 - CLUBS

DistrictGroup: 0022 - Fort Pierce

Subdivision: Metes and Bounds

Just/Market Value: $597,400

FinishedArea: 6,062

Acres: 40.02

TotalArea: 1,743,271

Legal Description

LegalDescription: 7 35 41 GOVT LOT 3-LESS THAT PART ASSD IN SURFSIDE-UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FP AS IN OR 237-127 AND LESS THAT PART ASSD IN CATAMARAN I- AND GOVT LOT 4- LESS A1A R/W- AND GOVT LOT 5 - LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN CORAL I AND LESS THAT PART GOVT LOT 5 ASSD AS BEACH CLUBHOUSE SITE AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE II AND LESS OCEAN HOUSE AS IN OR 692-2012 AND LESS AS IN OR 692-2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1668-205 AND LESS THAT PART GOVT LOT 4 MPDAF:FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO E R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.65 FT,TH N 89 47 03 E 175.03 FT,TH N 15 51 52 E 89.55 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC W,R OF 22 FT,TH NWLY ALG ARC 31.50 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 58 20 W 253.63 FT TO POB (40.02 AC) (OR 1955-808, 815)

LegalDescription: 7 35 41 GOVT LOT 3-LESS THAT PART ASSD IN SURFSIDE-UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FP AS IN OR 237-127 AND LESS THAT PART ASSD IN CATAMARAN I- AND GOVT LOT 4- LESS A1A R/W- AND GOVT LOT 5 - LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN CORAL I AND LESS THAT PART GOVT LOT 5 ASSD AS BEACH CLUBHOUSE SITE AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE II AND LESS OCEAN HOUSE AS IN OR 692-2012 AND LESS AS IN OR 692-2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1668-205 AND LESS THAT PART GOVT LOT 4 MPDAF:FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO E R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.65 FT,TH N 89 47 03 E 175.03 FT,TH N 15 51 52 E 89.55 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC W,R OF 22 FT,TH NWLY ALG ARC 31.50 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 58 20 W 253.63 FT TO POB (40.02 AC) (OR 1955-808, 815)

LegalDescription: 7 35 41 GOVT LOT 3-LESS THAT PART ASSD IN SURFSIDE-UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FP AS IN OR 237-127 AND LESS THAT PART ASSD IN CATAMARAN I- AND GOVT LOT 4- LESS A1A R/W- AND GOVT LOT 5 - LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN CORAL I AND LESS THAT PART GOVT LOT 5 ASSD AS BEACH CLUBHOUSE SITE AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4

ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE II AND LESS OCEAN HOUSE AS IN OR 692-2012 AND LESS AS IN OR 692-2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1668-205 AND LESS THAT PART GOVT LOT 4 MPDAF:FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO E R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.65 FT,TH N 89 47 03 E 175.03 FT,TH N 15 51 52 E 89.55 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC W,R OF 22 FT,TH NWLY ALG ARC 31.50 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 58 20 W 253.63 FT TO POB (40.02 AC) (OR 1955-808, 815)

LegalDescription: 7 35 41 GOVT LOT 3-LESS THAT PART ASSD IN SURFSIDE-UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FP AS IN OR 237-127 AND LESS THAT PART ASSD IN CATAMARAN I- AND GOVT LOT 4- LESS A1A R/W- AND GOVT LOT 5 - LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN CORAL I AND LESS THAT PART GOVT LOT 5 ASSD AS BEACH CLUBHOUSE SITE AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE II AND LESS OCEAN HOUSE AS IN OR 692-2012 AND LESS AS IN OR 692-2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1668-205 AND LESS THAT PART GOVT LOT 4 MPDAF:FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO E R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.65 FT,TH N 89 47 03 E 175.03 FT,TH N 15 51 52 E 89.55 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC W,R OF 22 FT,TH NWLY ALG ARC 31.50 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 58 20 W 253.63 FT TO POB (40.02 AC) (OR 1955-808, 815)

LegalDescription: 7 35 41 GOVT LOT 3-LESS THAT PART ASSD IN SURFSIDE-UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FP AS IN OR 237-127 AND LESS THAT PART ASSD IN CATAMARAN I- AND GOVT LOT 4- LESS A1A R/W- AND GOVT LOT 5 - LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN CORAL I AND LESS THAT PART GOVT LOT 5 ASSD AS BEACH CLUBHOUSE SITE AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE II AND LESS OCEAN HOUSE AS IN OR 692-2012 AND LESS AS IN OR 692-2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1668-205 AND LESS THAT PART GOVT LOT 4 MPDAF:FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO E R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.65 FT,TH N 89 47 03 E 175.03 FT,TH N 15 51 52 E 89.55 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC

W,R OF 22 FT,TH NWLY ALG ARC 31.50 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 58 20 W 253.63 FT TO POB (40.02 AC) (OR 1955-808, 815)

LegalDescription: 7 35 41 GOVT LOT 3-LESS THAT PART ASSD IN SURFSIDE-UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FP AS IN OR 237-127 AND LESS THAT PART ASSD IN CATAMARAN I- AND GOVT LOT 4- LESS A1A R/W- AND GOVT LOT 5 - LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN CORAL I AND LESS THAT PART GOVT LOT 5 ASSD AS BEACH CLUBHOUSE SITE AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE II AND LESS OCEAN HOUSE AS IN OR 692-2012 AND LESS AS IN OR 692-2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1668-205 AND LESS THAT PART GOVT LOT 4 MPDAF:FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO E R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.65 FT,TH N 89 47 03 E 175.03 FT,TH N 15 51 52 E 89.55 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC W,R OF 22 FT,TH NWLY ALG ARC 31.50 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 58 20 W 253.63 FT TO POB (40.02 AC) (OR 1955-808, 815)

LegalDescription: 7 35 41 GOVT LOT 3-LESS THAT PART ASSD IN SURFSIDE-UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FP AS IN OR 237-127 AND LESS THAT PART ASSD IN CATAMARAN I- AND GOVT LOT 4- LESS A1A R/W- AND GOVT LOT 5 - LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN CORAL I AND LESS THAT PART GOVT LOT 5 ASSD AS BEACH CLUBHOUSE SITE AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE II AND LESS OCEAN HOUSE AS IN OR 692-2012 AND LESS AS IN OR 692-2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1668-205 AND LESS THAT PART GOVT LOT 4 MPDAF:FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO E R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.65 FT,TH N 89 47 03 E 175.03 FT,TH N 15 51 52 E 89.55 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC W,R OF 22 FT,TH NWLY ALG ARC 31.50 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 58 20 W 253.63 FT TO POB (40.02 AC) (OR 1955-808, 815)

LegalDescription: 7 35 41 GOVT LOT 3-LESS THAT PART ASSD IN SURFSIDE-UNIT 2 AND LESS A1A R/W AND LESS TO CITY OF FP AS IN OR 237-127 AND LESS THAT PART ASSD IN CATAMARAN I- AND GOVT LOT 4- LESS A1A R/W- AND GOVT LOT 5 - LESS THAT PART GOVT LOTS 3, 4 AND 5 ASSD IN CAPSTAN I AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN CORAL I AND LESS THAT PART GOVT LOT 5

ASSD AS BEACH CLUBHOUSE SITE AND LESS THAT PART GOVT LOT 4 ASSD IN OCEAN VILLAS I AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS II AND LESS THAT PART GOVT LOTS 4 AND 5 ASSD IN OCEAN VILLAS III AND LESS THAT PART GOVT LOT 3 ASSD IN BEACHTREE I CLUSTER AND LESS THAT PART GOVT LOTS 3 AND 4 ASSD IN GOLF VILLAS AND ASSD IN BEACHTREE II AND LESS THAT PART GOVT LOT 3 ASSD IN SEASCAPE I AND LESS THAT PART GOVT LOT 4 ASSD IN CATAMARAN II AND LESS THAT PART OF GOVT LOT 5 ASSD IN SEASCAPE II AND LESS OCEAN HOUSE AS IN OR 692-2012 AND LESS AS IN OR 692-2011 AND LESS THAT PART OF GOVT LOT 1 ASSD IN OCEANHOUSES AT SOUTHPOINTE AS IN OR 1668-205 AND LESS THAT PART GOVT LOT 4 MPDAF:FROM SW COR OF SEC RUN S 89 17 30 E ALG S LI OF SEC 70.01 FT TO E R/W LI OF A1A,TH N 00 00 00 W ALG E R/W LI 390.08 FT TO POB,TH N 00 00 00 W ALG E R/W LI 294.65 FT,TH N 89 47 03 E 175.03 FT,TH N 15 51 52 E 89.55 FT TO CURVE CONC SE,R OF 73 FT,TH NELY ALG ARC 100.79 FT TO CURVE CONC NW,R OF 51 FT,TH NELY ALG ARC 61.39 FT TO CURVE CONC W,R OF 22 FT,TH NWLY ALG ARC 31.50 FT TO S R/W LI OF CLIPPER BLVD,TH N 90 00 00 E ALG S R/W LI 49.71 FT TO CURVE CONC N,R OF 724.04 FT,TH ELY ALG ARC AND S R/W LI 10.42 FT,TH S 15 52 03 W 529.09 FT,TH N 83 58 20 W 253.63 FT TO POB (40.02 AC) (OR 1955-808, 815)

Value History

Year	Just/Market Value	Building Value	Land Value	SFYI Value	Assessed Value	Exemption Amount	County Taxable	Save Our Home OR 10% Cap Differential	Ag Credit
2023	$597,400	$335,900	$185,900	$75,600	$563,963	$563,963	$0	$33,437	$0
2022	$891,900	$629,500	$185,900	$76,500	$512,694	$512,694	$0	$379,206	$0
2021	$643,600	$414,200	$185,900	$43,500	$466,086	$466,086	$0	$177,514	$0
2020	$637,400	$407,600	$185,900	$43,900	$423,715	$423,715	$0	$213,685	$0

Tax Links

SLC Tax Collector's Office taxes for this parcel
Download TRIM notice for this parcel

SLC Tax Collector's Office taxes for this parcel
Download TRIM notice for this parcel

SLC Tax Collector's Office taxes for this parcel
Download TRIM notice for this parcel

SLC Tax Collector's Office taxes for this parcel
Download TRIM notice for this parcel

SLC Tax Collector's Office taxes for this parcel
Download TRIM notice for this parcel

SLC Tax Collector's Office taxes for this parcel
Download TRIM notice for this parcel

SLC Tax Collector's Office taxes for this parcel
Download TRIM notice for this parcel

SLC Tax Collector's Office taxes for this parcel
Download TRIM notice for this parcel

Exemptions

Description	Tax Year	Grant Year	Amount
HOA/POA No Card	2023	2004	$563,963

Improvements

Building Sequence: 1

Bedrooms: 0

Bathrooms: 0

Building Type: LROF - LOW RISE OFFICE-1 STORY

Story Height: 1 Story

No of Living Units:

Total Finished Area: 2,447

Gross Sketched Area: 2,827

Year Built: 1973

Effective Year: 1976

Primary Roof Cover: Dim Shingle

Primary Roof Structure: Hip

Primary Wall: CB Stucco

A/C %: 100

Building Sequence: 2

Bedrooms: 0

Bathrooms: 0

Building Type: INDW - INDUSTRIAL-WAREHOUSE (STORAGE)

Story Height: 1 Story

No of Living Units:

Total Finished Area: 3,615

Gross Sketched Area: 4,015

Year Built: 2001

Effective Year: 2001

Primary Roof Cover: Enam Metal

Primary Roof Structure: Steel Truss

Primary Wall: Corr Metal

A/C %: 24

Building Sequence: 3

Bedrooms: 0

Bathrooms: 0

Building Type: CLHS - Clubhouse

Story Height:

No of Living Units:

Total Finished Area: 0

Gross Sketched Area: 0

Year Built:

Effective Year:

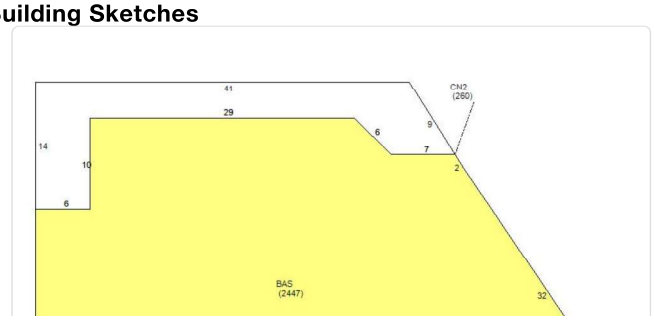
Primary Roof Cover:

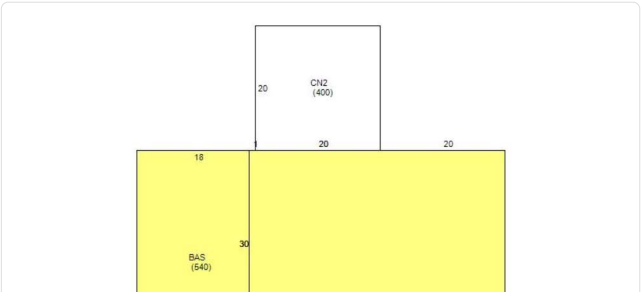
Primary Roof Structure:

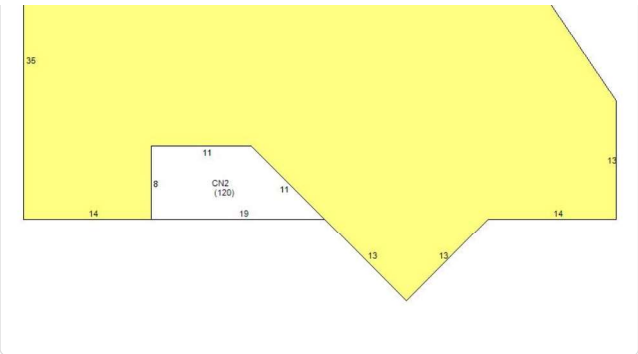
Primary Wall:

A/C %:

Building Sketches









Sub Area

Building Sequence	Sketch Area Code	Description	Finished Area	Gross Area
1	BAS	BASE AREA	2,447	2,447
1	CN2	CANOPY	0	380
2	BAS	BASE AREA	2,871	2,871
2	CN2	CANOPY	0	400
2	IOFL	INTERIOR OFFICE LOW QUALITY	744	744

SFYI

Description	Units	Year Built
CONCRETE LOW	10,612	2001
OHD AVG	282	2001
CHAIN LINK FENCE 6' TALL	417	2001
CLAY TENNIS COURT	13,200	1974
CHAIN LINK FENCE 10' TALL	480	1974
CB/8'	600	1974
Asphalt	16,400	1973
Asphalt	158,400	1973
BOARDWALK	360	1973
CHAIN LINK FENCE 6' TALL	450	1973

Land Lines

Line Number	Units	Unit Type
1	27.21	Acre
2	12.81	Acre

Permits

Permit Number	Issue Date	Description
BP22-0721	04/18/2022	Commercial New Construction
BP22-0722	04/18/2022	Site Work
BP22-0136	01/14/2022	Fence
BP21-3525	06/28/2021	Electric
BP20-3415	10/19/2020	Electric
BP19-2985	09/19/2019	Fence
BP16-1501	10/05/2017	Additions to existing construction
BP17-0387	02/10/2017	Electric
BP16-3268	12/13/2016	Electric
BP16-2964	11/17/2016	Re Roof Permit
BP15-2677	10/06/2015	Electric
BP15-1279	05/22/2015	Electric
BP14-2171	08/19/2014	Electric
BP14-1936	07/28/2014	Electric
BP14-0453	02/24/2014	Electric
BP12-2147	12/05/2012	Alterations/Remodeling
BP10-1923	08/19/2010	Alterations/Remodeling
BP09-0468	04/10/2009	Concrete
IRR200518	01/11/2006	Unknown
TT20052	03/04/2005	Unknown
SIDE20025	07/20/2004	Unknown
QUAD200411	01/01/2004	Unknown
CR2002-24	10/31/2002	Unknown
CR2002-35	10/30/2002	Unknown
SIDE2002-5	10/10/2002	Unknown
CR2002-23	09/27/2002	Unknown
F01-0001017	07/24/2001	Unknown
F000-000934	09/15/2000	Unknown
F88000143B	03/01/1988	Unknown
F88000143P	03/01/1988	Unknown
F88000143S	03/01/1988	Unknown

Sales History

Sale Date	Sale Price	Sale Code	Deed Type	Grantor	Book Page	View Document
04/23/2004	$3,100,000	XX02	SPWD	R C R Development Co Inc,	1955-815	Clerk of Courts
05/06/1998	$2,100,000	XX01	WD	OCEAN ESTATES INC	1144-493	Clerk of Courts
02/06/1995	$840,800	XX02	WD	FEDERAL DEPOSIT INSURANCE CORP	940-1266	Clerk of Courts
05/07/1990	$6,500,000	XX01	WD		692-2009	Clerk of Courts

Photos







v2023-08-17