City of Stuart

A G E N D A
LOCAL PLANNING AGENCY / PLANNING ADVISORY BOARD
TO BE HELD MARCH 19, 2020
AT 5:30 PM
COMMISSION CHAMBERS
121 S.W. FLAGLER AVE. STUART, FLORIDA 34994

LOCAL PLANNING AGENCY

Chair - Michael Herbach
Vice Chair - Ryan Strom
Board Member - Larry Massing
Board Member - Bill Mathers
Board Member - Christina de la Vega
Board Member - Li Roberts
Board Member - Campbell Rich
Ex Officio - Garret Grabowski

ADMINISTRATIVE

Development Director, Kev Freeman
Board Secretary, Jordan Pinkston

In compliance with the Americans with Disabilities Act (ADA), anyone who needs a special accommodation to attend this meeting should contact the City's ADA coordinator at 288-5306 at least 48 hours in advance of the meeting, excluding Saturday and Sunday.

If a person decides to appeal any decision made by the Board with respect to any matter considered at this meeting, he will need a record of the proceeding, and that for such purpose he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

CALL TO ORDER

ROLL CALL

APPROVAL OF MINUTES

Approval of LPA Minutes

COMMENTS FROM THE PUBLIC ON NON-AGENDA ITEMS

COMMENTS FROM THE BOARD MEMBERS

ACTION ITEMS

ORDINANCES

1. BRIDGEVIEW RESIDENTIAL PLANNED UNIT DEVELOPMENT(QJ)(RC):

ORDINANCE No. 2437-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE CITY'S COMPREHENSIVE PLAN THEREBY CHANGING THE FUTURE LAND USE DESIGNATION FROM "COMMERCIAL OFFICE RESIDENTIAL" TO "MULTI-FAMILY DENSITY RESIDENTIAL" FOR A 15.88 ACRE PARCEL ANNEXED BY ORDINANCE NO. 2415-2019, OWNED BY ATLANTIC REALTY PARTNERS, INC., AND LOCATED ON THE NORTHWEST CORNER OF STATE ROAD 76 (SW KANNER HIGHWAY) AND SW MARTIN HIGHWAY, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE BRIDGEVIEW RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD) CONSISTING OF TWO HUNDRED TWELVE (212) MULTI-FAMILY UNITS WITHIN TWO FOUR-STORY APARTMENT BUILDINGS; APPROVING A DEVELOPMENT SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTANT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES. (QJ) (RC)

2. HARBOR GROVE APARTMENTS RPUD - FLUM AND RE-ZONING (QUASI-JUDICIAL)(RC):

ORDINANCE No: 2436-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE CITY'S COMPREHENSIVE PLAN THEREBY CHANGING THE FUTURE LAND USE DESIGNATION FROM "COMMERCIAL" TO "MULTI-FAMILY RESIDENTIAL" FOR TWO PARCELS EQUALING 13.93 ACRES, OWNED BY TED GLASRUD ASSOCIATES, FL, LLC, LOCATED ON THE WEST SIDE OF S.E. COMMERCE AVENUE, SOUTH OF S.E. INDIAN STREET, AND NORTH OF S.E. FISCHER STREET WITH SAID LANDS BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE AHS AT HARBOR GROVE RESIDENTIAL PLANNED UNIT DEVELOPMENT RPUD CONSISTING OF THREE HUNDRED TWENTY FOUR (324) MULTI-FAMILY UNITS WITHIN NINE (9) INDIVIDUAL THREE-STORY APARTMENT BUILDINGS; APPROVING A DEVELOPMENT SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT; DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

3. STUART OCEAN RPUD - FIRST READING (QUASI-JUDICIAL)(RC):

ORDINANCE No. 2435-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, TO APPPROVE A REZONING FROM R-3 MULTIFAMILY/OFFICE TO

RESIDENTIAL PLANNED UNIT DEVELOPMENT "RPUD" ON THE CITY'S OFFICIAL ZONING MAP; FOR AN 11.04 ACRES PARCEL, OWNED BY SERRAGUI GROUP INVESTMENTS LLC, LOCATED ON THE SOUTH SIDE OF SE OCEAN BLVD BETWEEN THE POINTE ASSISTED LIVING FACILTY AND KINGSWOOD CONDO ASSOCIATION, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; ESTABLISHING STUART OCEAN TOWNHOMES RPUD CONSISTING OF EIGHTY (80) ATTACHED HOMES; APPROVING A MASTER SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

STAFF UPDATE

ADJOURNMENT

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
Local Planning Agency

Meeting Date: 3/19/2020

Prepared by: Jordan Pinkston

Title of Item:
Approval of February 20, 2020 LPA Minutes.

Summary Explanation/Background Information on Agenda Request:
N/A

Funding Source:
N/A

Recommended Action:
Approve.

ATTACHMENTS:

	Description	Upload Date	Type
	LPA Minutes 2.20.20	3/12/2020	Cover Memo

City of Stuart

MINUTES

LOCAL PLANNING AGENCY/PLANNING ADVISORY BOARD
TO BE HELD FEBRUARY 20, 2020 AT 5:30PM
COMMISSION CHAMBERS
121 SW FLAGLER AVE.
STUART, FL 34994

LOCAL PLANNING AGENCY

Chair – Ryan Strom
Vice Chair – Li Roberts
Board Member – Michael Herbach
Board Member – Larry Massing
Board Member – Campbell Rich
Board Member – Bill Mathers
Board Member – Cristina de la Vega
Ex Officio – Garrett Grabowski

ADMINISTRATIVE

Development Director – Kev Freeman
Board Secretary – Jordan Pinkston

CALL TO ORDER

ROLL CALL
Present: Michael Herbach, Li Roberts, Campbell Rich, Ryan Strom, Bill Mathers, Li Roberts, Larry Massing, Cristina de la Vega
Absent:

APPROVAL OF MINUTES
Motion: Action: Approve.
Moved by: Larry Massing
Seconded by: Michael Herbach
Motion passed unanimously.

COMMENTS FROM THE PUBLIC ON NON-AGENDA ITEMS: None.

COMMENTS FROM THE BOARD MEMBERS:

Michael Herbach said he gave copies of electrical vehicle incentives and state statutes.

Michael Mortell said that he has been working with staff to update the board by-laws and should have them to the board by the next meeting to adopt.

Ryan Strom changed order of the agenda, making item #1 first, item #3 second and item #2 third.

ACTION ITEMS: None.

ORDINANCES:

1. Amendment to City Tree Replacement code to comply with State Statue and to incorporate innovative storm water design. (RC)
   Ord 2432-2020: AN ORDINANCE OF THE CITY OF STUART, FLORIDA, AMENDING THE EXISTING CHAPTER V OF THE CITY'S LAND DEVELOPMENT CODE ENTITLED 'RESOURCE PROTECTION RELATED DEVELOPMENT STANDARDS' TO COMPLY WITH STATE STATUTE REGARDING TREE REMOVAL PERMITS AND TO PROMOTE INNOVATIVE STORMWATER TREATMENT AND LOW IMPACT DEVELOPMENT PRACTICES AND TO ALLOW THE CITY'S TREE REPLACEMENT FUND TO BE UTILIZED FOR INNOVATIVE STORMWATER TREATMENT SYSTEMS ON PUBLIC LANDS; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY; PROVIDING FOR CODIFICATION; AND PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

PRESENTATION: Kev Freeman, Development Director 5:46 PM

BOARD COMMENT:

Ryan Strom explained the format of the meeting.

Cristina de la Vega said that she has issues with 24-C regarding replacing pines with palm trees. She does not understand why that was the tree of choice. She expressed concerns about the current understory plants listed and requested staff expand the list. She also wants clarification on slash pine to palm.

Kev Freeman said that that is code and they are not proposing changes, they are only suggesting they should be replaced with like species. He said that they are removing palm trees and implanting canopy trees. He would like to explore a wider variety of trees to go in this ordinance.

Michael Herbach said he thinks that some of the problems are that there are only pines trees and oaks in the flats. He said that soil should be considered by a consultant.

Li Roberts clarified what staff is proposing.

Kev Freeman clarified that plans will be prepared by licensed architects.

Li Roberts suggested changing the wording to say, suitable native species such as. She asked if the money that is in the tree fund is being anticipated for staff to use.

Kev Freeman said that there is an opportunity for developments coming through to partner with them to incorporate better quality stormwater. He clarified details of how that would work.

Li Roberts asked about built-out areas that would benefit and what the city's responsibility would be.

Kev Freeman said they are currently looking into matching grant opportunities to expand that.

PUBLIC COMMENT: None.

MOTION:
Action: Approve with change to additional species E and L.
Moved by: Larry Massing
Second by: Cristina de la Vega
Motion passed unanimously.

2. STUART OCEAN RPUD - FIRST READING (QUASI-JUDICIAL)(RC): ORDINANCE No. 2435-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, TO APPPROVE A REZONING FROM R-3 MULTIFAMILY/OFFICE TO RESIDENTIAL PLANNED UNIT DEVELOPMENT "RPUD" ON THE CITY'S OFFICIAL ZONING MAP; FOR AN 11.04 ACRES PARCEL, OW NED BY SERRAGUI GROUP INVESTMENTS LLC, LOCATED ON THE SOUTH SIDE OF SE OCEAN BLVD BETW EEN THE POINTE ASSISTED LIVING FACILTY AND KINGSW OOD CONDO ASSOCIATION, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; ESTABLISHING STUART OCEAN TOWNHOMES RPUD CONSISTING OF EIGHTY (80) ATTACHED HOMES; APPROVING A MASTER SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT W ITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

PRESENTATION: Tom Reetz, Senior Planner

Bob Raynes, Gunster Law Firm
Mike Houston, HJA Design Studio

BOARD COMMENT:

Bob Raynes went over the development conditions and suggested revisions in the handout he provided.

Michael Herbach asked about spaces for mail pickup.

Li Roberts asked about anticipated parking at mail pickup.

Mike Houston confirmed where spaces would be located.

Larry Massing asked if staff has reviewed the changes before them.

Tom Reetz said that they have discussed changes but have not reviewed the red lines.

Cristina de la Vega asked how many parking spaces were for visitors.

Mike Houston confirmed there are thirty-eight guest spots on the site.

Bob Raynes continued to go over development conditions and suggested revisions in the handout he provided.

Kev Freeman suggested the applicant formulate a clearer timetable of development.

Michael Herbach asked if it was a 55+ community. He asked about additional exits.

Bob Raynes said that we would need an easement for a secondary access.

Michael Herbach asked about bus stops and expressed his concerns about current bus situations. He asked about recreational leases.

Aimee Carlson with Pulte Group said they are not planning a physical clubhouse and the association will own all the amenities.

Li Roberts discussed past project proposal entrances so roads were not staggered and said that the reason these were proposed would be for traffic control.

Mike Mortell said that he recalled the past proposal, but the reason that it was difficult was because of negotiations of easements.

Li Roberts asked for clarification on the density of units and greenspace.

Michael Houston said that this pervious, impervious questions because it is two stories.

Li Roberts asked about parcel B that isn't adjoining.

Tom Reetz confirmed it is counting 2 to 1 for offsite upland preserve, not open space.

Li Roberts said that she is concerned about the grade of the lot, drainage and runoff.

Mike Houston explained why they changed the site plan and added a buffer.

Li Roberts asked for confirmation about what will be done with the wooden fence along the boundary. She is concerned about trash collection, firetruck turnaround, eleven street parking spaces for eighty units, parking that belongs to the Kingswood swimming pool becoming a policing issue, amount of street parking, trail through the preserve area, grills, fences behind the property being too close, and school buses.

Bob Raynes addressed the fencing concern.

Li Roberts addressed the error on the elevation of the rear of the building on the floor plans and recommended they update their plans. She said that she thinks it is too much for the site, but appreciates the applicant trying to add appealing housing into the City of Stuart.

Michael Herbach asked if we can request that garages only be used for car storage.

Larry Massing said that would be difficult to enforce.

Cristina de la Vega asked about the location of roads for Kingswood.

Mike Houston said that is still an ongoing discussion about access easements for exists.

Cristina de la Vega said that it looks tight and asked about the amount of space the homeowners own behind each unit.

Todd Troxell, HJA Design Studio said that there are lot lines and they are fee simple lots that will be sold individually with 20 feet apart from the buildings, which is within code.

Cristina de le Vega asked for a breakdown of the pervious land.

Mike Houston clarified lot lines and open space.

Bob Raynes clarified the spacing that they are seeing on the renderings.

Todd Troxell said that the requirement for open space in a RPUD is 30% and we are exceeding that by 18%.

Larry Massing said that it appears to be tight, parking would have to be enforced.

Ryan Strom is concerned about the amount of code enforcement needed for the existing pool at Kingswood, mail parking spaces, on-street parking and trash pickup schedule.

Aimee Carlson said combined cans throughout the community.

Ryan Strom went into detail about concerns about trash logistics.

Tom Reetz said this is similar to other approved projects in regard to how trash will be coordinated.

Kev Freeman said that those other projects have higher density, less open space and less stormwater treatment than what we are seeing today. He said our fire department and public works department are not lenient, and staff has addressed all these issues and is very happy about how the project looks.

Ryan Strom said that he wanted to say that the applicant is only coming in with two stories, and he appreciates them not coming in with three stories or something with higher density.

Li Roberts said she thinks the problems are that it looks so tight because the lake piece looks removed, but if it was embedded into the property it would be more appeasing to the eye.

Kev Freeman said they are addressing their code and preserving the areas that are important.

Ryan Strom requested a motion.

Michael Herbach said that there are too many unknowns. He addressed the bus stops being an issue.

Ryan Strom said that it is almost advised to have them come back after changes are made.

Li Roberts advised that the applicant did not want to hear her motion if she were to make it and listed some of her concerns.

Mike Houston addressed the school bus issue.

Li Roberts said she is asking for a location to be carved out of their site of where a bus could stop, so kids or people do not have to go offsite.

Mike Houston addressed parking issue and expressed that this is a great addition to the city. He said that firetruck parking will be strongly enforced.

Michael Herbach asked that the applicant come back once the board's issues are addressed.

Li Roberts said that she is worried about on-street parking.

Bob Raynes said that he has spoken with Pulte representatives we want to continue to work with the Kingswood people. He offered to hear public comment and agreed to a continuance of the item.

Cristina de la Vega expressed that it is a great thing that the project is so low density compared to what could be put there.

Bob Raynes agreed and said that they want to continue to move forward.

PUBLIC COMMENTS:

1. Beth Lutz (SE Ocean Blvd.) – concerned about safety of young children and traffic.
2. Jane Cornett (SW Federal Highway) – suggested that this was premature. She described the different Kingswood phases, legal exists from the community, traffic, construction, drainage, lift station, would like to meet with city staff and Bob Raynes.
3. Judy Sabatino (SE Ocean Blvd.) – concerned about traffic and school children.
4. Katy Gibbs (SE Ocean Blvd.) – Kingswood residents, concerned about children, backyard size, playground area, safety and code enforcement.
5. Charles Scheer (SE Ocean Blvd.) – concerned about the noise abatement during the construction phase.
6. Charles Gutchione (SE Ocean Blvd.)– concerned about the environment, addressed an eagle's nest on the property.
7. Ken Visoky (SE Ocean Blvd.) – concerned about the retention pond and water table, storms with water runoff, traffic on roadways because they do not have sidewalks and traffic.
8. John Thomas (SE Ocean Blvd.) – concerned about the emergency access that fire department needs for their community.
9. Celeste Zehren (SE Ocean Blvd.) – concerned about the length of project and open issues, lake with children, noise pollution and construction pollution.
10. Jane Cooper (SE Ocean Blvd.) – concerned about traffic, type of development in a 55+ community, trespassing and code enforcement.
11. Patty Weiland (Kingswood) – concerned about children in between retirement communities.
12. Laura Giobbi (SE Ocean Blvd.) – concerned about water runoff.
13. Katy Gibbs (SE Ocean Blvd.) – said that she remembered that Kingswood was willing to move their entrance for the traffic pattern but did not have a board at the time.
14. Ivan Campodonico (SE Ocean Blvd.) – said that it should be a 55+ community.
15. Blanca Solorzaro (SE Ocean Blvd.) - Concerned about noise, traffic, and no pool on the property.
16. Stu Frankel (SE Ocean Blvd.)– addressed the pond but thinks that kids will want to come swim in their pool. He is concerned about traffic.

BOARD COMMENT:

Bob Raynes addressed the traffic study, drainage, lift station, lake concern, size of backyards and environmental study results.

Michael Herbach suggested using the pond as an irrigation source.

MOTION:
Action: Continue agenda item to March 19th LPA meeting.
Moved by: Michael Herbach
Second by: Larry Massing
Motion passed unanimously.

3. ORDINANCE No. 2434-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, BEING THE THIRD AMENDMENT OF ORDINANCE NO. 2307-2015, ALSO KNOW N AS THE "NEW AVONLEA PLANNED UNIT DEVELOPMENT (PUD)" CONSISTING OF 12.40 ACRES ZONED RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD), 16.24 ACRES ZONED COMMERCIAL PLANNED UNIT DEVELOPMENT (CPUD), AND 20.4 ACRES OF WETLAND/UPLAND PRESERVE ZONED RPUD, FOR A TOTAL OF 49.04 ACRES; SAID PUD BEING GENERALLY LOCATED BETW EEN NE DIXIE HIGHWAY TO THE SOUTH, LAND ON BOTH SIDES OF GREEN RIVER PARKWAY ON THE W EST, LAND ON BOTH SIDES OF CARDINAL AVENUE ON THE EAST AND THE CITY BOUNDARY TO THE NORTH, BEING MORE FULLY DESCRIBED BY EXHIBIT "A" ATTACHED; AMENDING SAID PUD TO PROVIDE FOR THE APPROVAL OF THE MASTER PARCEL SITE PLAN FOR THE AVONLEA CROSSINGS PARCEL B (PARCEL 16); PROVIDING FOR A MASTER OFF-SITE INFRASTRUCTURE PLAN FOR THE ENTIRE PUD; PROVIDING FOR REVISED AND ADDITIONAL DEVELOPMENT CONDITIONS OF APPROVAL; PROVIDING FOR AMENDED AND NEW TIMETABLES FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT W ITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES. (QJ) (RC)

PRESENTATION: Stephen Mayer, Senior Planner
Tim Hernandez, New Urban Communities

BOARD COMMENT:

Michael Herbach asked about the live-work units listed in the PUD.

Stephen Mayer confirmed that there will be no live-work units on this site.

Li Roberts asked about the outside elevations on the townhomes.

Tim Hernandez confirmed where the rear elevations will be facing.

Li Roberts asked about pricing.

Tim Hernandez said they are still discussing if they should be for sale or for rent and discussed potential price points for each.

Li Roberts suggested changing the look of the road so it seems like an extension of the sidewalk between building 1 and 12 and suggested where other crosswalks should be located. She asked about locations of mailboxes.

Tim Hernandez said that was a good idea and confirmed where the mailboxes will be located.

Li Roberts asked about the existing sidewalks and if there are grills.

Tim Hernandez said that he would consider putting a grill in the pool area.

Li Roberts asked if they could add a bus pull off area so in the future if there is a need for one it will not be a problem.

Tim Hernandez said that they are going to build it and the county or city can do whatever they want with it.

Kev Freeman said that we can come up with a condition that gives flexibility in the future.

Ryan Strom asked about the dumpster locations.

Tim Hernandez explained that they wanted to maximize parking and greenspace.

Li Roberts asked about fencing or foliage around the playground.

Tim Hernandez said he would be more inclined to add a hedge.

Cristina de la Vega asked about the amount and types of plants.

Tim Hernandez explained the plants and percentages of those they have in the project.

PUBLIC COMMENTS: None.

MOTION:
Action: Approve with recommendation of adding a flexible bus stop, paving crosswalks, landscaping for playground.
Moved by: Li Roberts
Second by: Larry Massing
Motion passed unanimously.

BOARD COMMENT: None.

STAFF UPDATE: None.

ADJOURNMENT:
Motion: Action: Adjourn.
Moved by: Michael Herbach
Seconded by: Cristina de la Vega

Ryan Strom, Chair

Jordan Pinkston, Board Secretary

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
Local Planning Agency

Meeting Date:3/19/2020 **Prepared by:**Stephen Mayer

Title of Item:
BRIDGEVIEW RESIDENTIAL PLANNED UNIT DEVELOPMENT(QJ)(RC):

ORDINANCE No. 2437-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE CITY'S COMPREHENSIVE PLAN THEREBY CHANGING THE FUTURE LAND USE DESIGNATION FROM "COMMERCIAL OFFICE RESIDENTIAL" TO "MULTI-FAMILY DENSITY RESIDENTIAL" FOR A 15.88 ACRE PARCEL ANNEXED BY ORDINANCE NO. 2415-2019, OWNED BY ATLANTIC REALTY PARTNERS, INC., AND LOCATED ON THE NORTHWEST CORNER OF STATE ROAD 76 (SW KANNER HIGHWAY) AND SW MARTIN HIGHWAY, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE BRIDGEVIEW RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD) CONSISTING OF TWO HUNDRED TWELVE (212) MULTI-FAMILY UNITS WITHIN TWO FOUR-STORY APARTMENT BUILDINGS; APPROVING A DEVELOPMENT SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTANT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES. (QJ) (RC)

Summary Explanation/Background Information on Agenda Request:

The intent of this application is to request a Large-scale future land use map (FLUM) amendment to the City's Comprehensive Plan Residential Planned Unit Development assigning a "Multi-Family Density Residential" land use, and a Zoning designation of (RPUD) on the City of Stuart Zoning Map. The subject property is 15.88 acres. The property is currently undeveloped. The intent of this project is to allow 212 attached multi-family apartment homes within two 4-story buildings to be developed on the site while upgrading the drainage and enhancing the upland and wetland preserve.

The 15.88-acre parcel was annexed into the city via Ordinance No. 2415-2019. The applicant is requesting to assign a RPUD zoning district to establish a new site plan and is requesting to assign a Future Land Use designation of Multi-Family Residential in order develop the property for 212 multi-family residential units. The property currently has a Martin County approval for 99,000 square feet of office use, 2 story building over 1 story of parking, and 30' in height. The approved office building is sited 52' from the north property line.

The applicant is requesting the following four (4) waivers from the City's Land Development Code:

1. Section 6.03.02: Drainage Specifications. Finished Floor Elevations of all buildings shall not be lower than 18 inches above the crown of the street on which the building fronts.

Request: The applicant is requesting the finished floor elevation to be 8.25 feet, which is 2.25 feet above the FEMA flood elevation requirements, however, is below the 9-foot elevation of Kanner Highway. The applicant has provided an engineering statement, prepared by MacKenzie Engineering and Planning, Inc., justifying a

relief from the code.

2. Section 6.01.13: Off-Street Parking Schedule. 1.5 parking spaces per unit (studios and 1 bedroom), and 2 parking spaces per unit (2 or more bedroom)

Request: The applicant is requesting a reduction in the number of required parking spaces. The applicant is justifying a smaller number of parking spaces, as they are providing for full protection of the wetlands on site, and they are holding to an industry standard for multi-family developments, at a ratio of 1.6 (or 1.6 parking spaces per unit, which is similar to the City's requirement for 1 bedroom multi-family).

3. Section 6.04.06. Land Use Transitions and Landscape Buffers. The buffer width requirement for a 4-story multi-family use adjacent to a single-family or multi-family use is 55'.

Request: The applicant is requesting a 25' wide landscape buffer along the northern property line, where the proposed multi-family use is abutting an existing mobile home park use. The separation between the nearest four-story building and the northern property line is 154.3'. Within this zone, there are three layers of landscaping (foundation planting, interior parking islands, a 6' wall and a heavily planted native buffer (with 12'-20' trees and 16'-25' palms). The applicant has provided a visual sightline study demonstrating that the view from the 4th story balcony will be blocked by the landscaping. Staff recommends that the applicant provide a heavy landscaping buffer that doubles the visual barrier of a landscaping buffer that would normally be in a 55' wide buffer.

4. Section 5.03.02 Wetland Protection Standards. The applicant is required to provide a minimum width of an upland buffer of 75' and at no point less than 50'. This is due to the wetland being an outstanding resource, consisting of mangroves.

Request: The applicant is providing a minimum average width of 75', however, due to site constraints, the minimum buffer narrows to 42.4' at one location. Staff is recommending the use of native groundcover, in lieu of sod in this location, which serves as a buffer between the surface parking area and the upland buffer.

Funding Source:
N/A
Recommended Action:
Motion to recommend approval and move to the City Commission.

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Ordinance 2437-2020	3/11/2020	DRAFT ORDINANCE
🗋	Staff Report	3/11/2020	Staff Report
🗋	Master Plan	3/11/2020	Exhibit
🗋	Site Plan	3/11/2020	Exhibit
🗋	Landscape Plan	3/11/2020	Exhibit
🗋	Architectural elevations	3/9/2020	Exhibit
🗋	Floor Plans	3/9/2020	Exhibit
🗋	RPUD Checklist	3/11/2020	Attachment
🗋	Traffic Report	3/9/2020	Attachment
🗋	Concurrency Traffic Analysis	3/9/2020	Attachment
🗋	Tree Disposition Plan	3/11/2020	Attachment
🗋	Environmental Assessment	3/11/2020	Attachment
🗋	Drainage Report	3/9/2020	Attachment

FFE Waiver Justification	3/9/2020	Attachment
Service Availability Letter	3/9/2020	Attachment
Survey	3/9/2020	Attachment
Staff Comp Plan review	3/11/2020	Backup Material

BEFORE THE CITY COMMISSION

CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2437-2020

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE CITY'S COMPREHENSIVE PLAN THEREBY CHANGING THE FUTURE LAND USE DESIGNATION FROM "COMMERCIAL OFFICE RESIDENTIAL" TO "MULTI-FAMILY DENSITY RESIDENTIAL" FOR A 15.88 ACRE PARCEL ANNEXED BY ORDINANCE NO. 2415-2019, OWNED BY ATLANTIC REALTY PARTNERS, INC., AND LOCATED ON THE NORTHWEST CORNER OF STATE ROAD 76 (SW KANNER HIGHWAY) AND SW MARTIN HIGHWAY, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE BRIDGEVIEW RESIDENTIAL PLANNED UNIT DEVELOPMENT (RPUD) CONSISTING OF TWO HUNDRED TWELVE (212) MULTI-FAMILY UNITS WITHIN TWO FOUR-STORY APARTMENT BUILDINGS; APPROVING A DEVELOPMENT SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTANT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

* * * * *

WHEREAS, the City Commission held a properly noticed hearing at a regularly scheduled City Commission to consider the application by Atlantic Realty Partners, Inc., for a 15.88 acre parcel of land located on the northwest corner of State Road 76 (also known as SW Kanner Highway) and SW Martin Highway; and

WHEREAS, the City of Stuart has determined the need to change the Future Land Use and Land Development zoning district for said lands; and

WHEREAS, the City Commission, has considered the Petitioner's voluntary request for land use designations, a rezoning to RPUD, and has also considered the recommendation of the City staff; and

WHEREAS, the Applicant has committed to the City that its development will comply with all development codes, plans, standards and conditions approved by the City Commission; and that it will bind its successors in title to any such commitments made upon approval of the approved RPUD; and

WHEREAS, at the hearing the applicant showed by substantial competent evidence that the application is consistent with the Stuart Comprehensive Plan, and the Land Development Code of the City, and with the procedural requirements of law; and

WHEREAS, the RPUD development will be in harmony with surrounding properties and their anticipated development;

WHEREAS, the foregoing recitals are true and adopted as findings of fact and conclusions of law.

WHEREAS, the property is legally described in **"Exhibit A"** of this ordinance. A map depicting the property is attached hereto as **Exhibit "B"** and made a part hereof by reference; and development conditions including a timetable for construction of amenities attached hereto as **Exhibit "C";**

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA THAT:

SECTION 1: The following new documents are on file as public records of the City, at the office of the City Clerk in City Hall, and attached hereto as **Exhibit "D"**, hereinafter the "Development Documents", shall be deemed a part of the development conditions, and shall supplement any earlier approvals:

a. **The Master Plan, Sheet MP-1, by Gentile, Glas, Holloway, O'Mahoney, and Associates, Inc., dated _____**
b. **Site Plan, Sheets SP-1 and SP-2, by Gentile, Glas, Holloway, O'Mahoney, and Associates, Inc., dated _____**
c. **The Landscape Plan, Sheets LP-1, thru LP-3, by Gentile, Glas, Holloway, O'Mahoney, and Associates, Inc., dated _____**
d. **Architectural Elevations, Sheets A2.10, A2.20A and A2.20B, prepared by Charlan Brock Associates, dated ___**
e. **Survey, prepared by GCY Incorporated, dated May 2019**
f. **Bridgeview Environmental Assessment Report, prepared by EW Consultants, Inc. dated _____**

SECTION 2: The Future Land Use designation in the City's Comprehensive Land Use Plan shall be established as "Multi-Family Density Residential". This ordinance may not become effective until 31 days after adoption. If challenged within 30 days after adoption, this ordinance may not become effective until the state land planning agency or the Administration Commission, respectively, issues a final order determining that the adopted large-scale land use amendment is in compliance as defined in s. 163.3184(1)(b).

SECTION 4: The Land Development (Zoning) District designation on the City of Stuart Official Zoning Map shall be established as "RPUD" Residential Planned Unit Development subject to the appeal period stated in Section 2, above.

SECTION 5: Except as otherwise provided herein, no development permits, site permits, or building permits shall be issued by the City except in compliance with the City's Land Development Code.

SECTION 6: All ordinances or parts of ordinances in conflict with this ordinance or any part thereof is hereby repealed to the extent of such conflict. If any provision of this ordinance conflicts with any contractual provision between the City and the developer of the site, this ordinance shall prevail.

SECTION 7: If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared severable.

SECTION 8: This ordinance shall be effective upon the last of the following to occur: adoption by the City Commission, and proper execution and acceptance by the Owner. However, the Future Land Use and Zoning Designations granted herein shall not be effective until thirty-one (31) days after adoption, and as otherwise provided by law.

SECTION 9: Upon complete execution of this Ordinance, including the Acceptance and Agreement by the Owner, the City Clerk is directed to record a Certified Copy of the same in the Public Records of Martin County, Florida.

Passed on first reading the ___ day of _____, 2020.

Commissioner _____ offered the foregoing Ordinance and moved its adoption. The motion was seconded by Commissioner _____and upon being put to a roll call vote, the vote was as follows:

	YES	NO	ABSENT	ABSTAIN
MICHAEL J. MEIER, MAYOR				
EULA R. CLARKE, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
KELLI GLASS LEIGHTON, COMMISSIONER				
MERRITT MATHESON, COMMISSIONER				

ADOPTED on second and final reading this ___ day of _____, 2020.

ATTEST:

_____
MARY R. KINDEL
CITY CLERK

_____
MICHAEL J. MEIER
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____
MICHAEL J. MORTELL
CITY ATTORNEY

ACCEPTANCE AND AGREEMENT

BY SIGNING THIS ACCEPTANCE AND AGREEMENT, THE UNDERSIGNED HEREBY ACCEPTS AND AGREES TO ALL OF THE TERMS AND CONDITIONS CONTAINED IN A RESIDENTIAL PLANNED UNIT DEVELOPMENT AND IN ALL EXHIBITS, ATTACHMENTS AND DEVELOPMENT DOCUMENTS, INTENDING TO BE BOUND THEREBY, AND THAT SUCH ACCEPTANCE AND AGREEMENT IS DONE FREELY, KNOWINGLY, AND WITHOUT ANY RESERVATION, AND FOR THE PURPOSES EXPRESSED WITHIN THE ABOVE ORDINANCE. IF IT IS LATER DISCOVERED THAT THE UNDERSIGNED, OR ITS SUCCESSORS OR ASSIGNS HAVE FAILED IN ANY MATERIAL WAY TO DEVELOP THIS RESIDENTIAL PLANNED UNIT DEVELOPMENT ACCORDING TO THIS ORDINANCE, ITS CONDITIONS, AND THE DEVELOPMENT PLANS AND DOCUMENTS, THE UNDERSIGNED UNDERSTANDS AND AGREES THAT THIS ORDINANCE MAY BE AMENDED OR REPEALED BY THE CITY COMMISSION, AND THAT OTHER ACTIONS MAY BE TAKEN AGAINST THE UNDERSIGNED BY THE CITY, INCLUDING BUT NOT LIMITED TO CODE ENFORCEMENT ACTIONS, PERMIT AND LICENSING REVOCATIONS, AND ALL APPLICABLE CIVIL AND CRIMINAL ACTIONS.

IN WITNESS WHEREOF THE UNDERSIGNED HAS EXECUTED THIS ACCEPTANCE AND AGREEMENT:

WITNESSES:

_____ By: _____

Print Name: _____

_____

Print Name: _____

OWNERS ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day

of _____, 2020, by _____, _____

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

CITY'S ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____day of _____, 2020, by MICHAEL J. MEIER, Mayor, and Mary Kindel, City Clerk, respectively, of the City of Stuart, Florida, a Florida municipal corporation.

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

EXHIBIT A – LEGAL DESCRIPTION

Legal Description

PARCEL CONTROL NUMBER 403841001051000002

NORTH PARCEL

Commencing at the intersection of the North line of the Miles or Hanson Grant and the Westerly right of way line of State Road No. 76; thence South 20°42'45" East, a distance of 1500.00 feet to the Point of Beginning; thence continuing along said Westerly right-of-way line, South 20°42'45" East, a distance of 439.03 feet; thence South 06°32'38" East, a distance of 49.16 feet; thence South 20°42'48" East, a distance of 318.71 feet to a point on the Northerly Right-of-Way line of S.W. Martin Highway; thence along said line South 22°47'40" West, a distance of 55.18 feet; thence South 68°30'26" West, a distance of 152.45 feet to the beginning of a tangent curve concave to the North having a radius 881.25 feet; thence Northwesterly along the arc of said curve through a central angle of 41°32'17" a distance 638.89 feet to a tangent line; thence North 69°12'10" West, a distance of 380.47 feet to a point on the Mean High Water Line; thence along said line North 03°47'25" East, a distance of 50.12 feet; thence North 16°40'46" East, a distance of 48.08 feet; thence North 05°17'18" West, a distance of 65.43 feet; thence North 34°10'01" East, a distance of 139.17 feet; thence North 31°06'00" East, a distance of 167.15 feet to a point on the South River Land Mobile Home Park (unrecorded); thence North 65°59'26" East, a distance of 760.50 feet to the Point of Beginning.

Containing 15.88 Acres, more or less.

EXHIBIT B – LOCATION MAP

Figure 1. Property Location Map

EXHIBIT C – DEVELOPMENT CONDITIONS

Approved Plans and Documents

2. The Bridgeview Residential RPUD project and use thereof shall comply with the following drawings:

   a. **The Master Plan, Sheet MP-1, by Gentile, Glas, Holloway, O'Mahoney, and Associates, Inc., dated _____**
   b. **Site Plan, Sheets SP-1 and SP-2, by Gentile, Glas, Holloway, O'Mahoney, and Associates, Inc., dated _____**
   c. **The Landscape Plan, Sheets LP-1, thru LP-3, by Gentile, Glas, Holloway, O'Mahoney, and Associates, Inc., dated _____**
   d. **Architectural Elevations, Sheets A2.10, A2.20A and A2.20B, prepared by Charlan Brock Associates, dated ___**
   e. **Survey, prepared by GCY Incorporated, dated May 2019**
   f. **Bridgeview Environmental Assessment Report, prepared by EW Consultants, Inc. dated _____**

3. Any modifications to the Master RPUD Site Plan that exceeds 10% of the approved building footprint, building setbacks, gross square footage, building location, parking size, location and number of parking, drainage areas, and location of landscaping may be approved by the City's Development Director, provided however, the Development Director may refer the matter to the City Commission for approval via a public hearing.

4. Development of the Subject Property as a RPUD shall include an impervious area of no more than (30%) impervious coverage for the RPUD. The maximum building height within the RPUD shall be 4 stories or 45'. Height shall be measured from the lowest permissible finished first floor elevation to the surface of a flat roof and to the eave of a pitched roof.

5. Notwithstanding any presence of premium parking, at no time shall any parking space be deemed unavailable for use due to an absence of a lease agreement for the use of said space.

6. Prior to certificate of occupancy of the last building, the applicant shall provide an engineer's written confirmation attesting that the RPUD's storm water system is in place and functioning in compliance with all approved plans and specifications.

7. Erosion and dust control measures to be implemented during construction shall be provided on the civil plans and submitted during site permit review. Water trucks shall be provided by the applicant as necessary during construction in order to reduce dust generated on-site.

8. Prior to construction, the applicant shall install a 4-foot silt fence/barrier along the northern property boundary that will inhibit wildlife from crossing into the Riverland Mobile Home Park.

Landscaping

9. The common areas including the projects community recreation areas and entry features shall be provided with landscaping with an irrigation system of sufficient capacity to maintain the landscaping in a healthy growing condition.

10. The City's landscape inspector shall have the opportunity to inspect all trees and/or landscape material with the landscape architect prior to installation. The developer shall bear the pass-thru fee for landscape consulting fees not to exceed $1,500.00.

11. A Landscape maintenance plan, executed in accordance with the Land Development Regulations, shall be submitted to the Development Department and approved prior to the issuance of a vertical construction building permit.

12. Prior to Certificate of Occupancy, all prohibited exotics and invasive species shall be removed from the entire site.

Required Open Space and Native Preserve Area

13. Open Space, not including wetlands and required internal landscaping. The RPUD shall be maintain the open space as depicted on the Site Plan by Gentile, Glas, Holloway, O'Mahoney and Associates, Inc. as described in Exhibit C. Required open space may include native vegetation areas and landscape buffers between the RPUD and adjacent property; however, other required landscaping shall not count towards the open space requirement.

14. Excluding wetlands defined by the South Florida Water Management District, not less than 33.4% of the total development site shall remain as undeveloped and recreated native vegetation area. The required native vegetation area may include open space areas and the landscape buffer between the site and adjacent property; however, other required landscaping shall not count towards the native vegetation requirement. The location of the native vegetation shall comply with the project's landscape plan, by Gentile, Glas, Holloway, O'Mahoney and Associates, Inc. The project shall adhere to the Preserve area mitigation and monitoring plan provided to the City prior to vertical construction building permit approval. The owner and developer shall adhere to the provisions of the Wetland Maintenance and Monitoring Plan and permanent maintenance will be the responsibility of the Developer, their successors or assigned.

Tree Mitigation

15. The project shall comply with Section 5.05.02 of the "Tree replacement and protection requirements" of the City's Land Development Code.

Prior to Issuance of Site Permits

16. Applicant shall provide a digital boundary survey and civil plan prior to the issuance of a site permit.

17. Civil Plans shall be reviewed and approved by all applicable City departments prior to the issuance of a site permit.

18. All regulatory agency permits, including but not limited to the South Florida Water Management District and Army Corp of Engineers, shall be obtained by the applicant and copies provided to the City prior to the commencement of any development activities.

19. All development activities shall comply with the City's Concurrency Management System prior to the issuance of building permits.

Development and Construction

20. The Developer shall construct the project's infrastructure in one phase.

21. The Developer shall install landscaping at the development's entry as shown on the landscaping plan prior to the first certificate of occupancy for a residential unit.

22. The property owner shall provide easements for licensed television services. Preserve area easements shall be dedicated to state agencies with the City of Stuart having the option to have those same easements.

23. In the event of any conflict in the provisions of Exhibit 'C' Development Conditions and attached exhibits, Exhibit 'C' shall prevail.

24. Prior to certificate of occupancy of the last building, the applicant shall provide an engineer's written confirmation attesting that the RPUD's storm water system is in place and functioning in compliance with all approved plans and specifications.

25. Erosion and dust control measures to be implemented during construction shall be provided on the civil plans and submitted during site permit review. Water trucks shall be provided by the applicant as necessary during construction in order to reduce dust generated on-site.

26. All utility improvements constructed by the developer within Florida's Department of Transportation's right-of-way, shall be constructed in a manner and form acceptable to the FDOT. The developer shall grant any such utility easements necessary for this site as may be required by the FDOT.

27. The projects turn lanes as described on the project's Master Site plan shall be completed before the first Certificate of Occupancy from either building is issued.

28. The project's storm water facilities, specifically the Native Planting schemes at the detention/retention areas/wetlands, will be designed using Low Impact Development "(LID) Techniques as described in the University of Florida IFSA Extension publication LID Practices: Integration Wetlands and Enhancing Storm water Basins". The proposed dry retention shall have native grasses along the edges of the retention area are to become part of the stormwater filtration process.

29. Temporary or freestanding storage units are prohibited on the property once construction is complete.

30. Site work including but not limited to land preparation, lake excavation, clearing and grading, drainage and water, sewer and irrigation lines, and private road shall be reviewed approved by the city's public works department and the city's engineering consultant prior to permitting.

Signage

31. All signs throughout the RPUD must have a consistent treatment, as to number, location, size, height, lighting, and materials with a unified theme throughout the Planned Unit Development. The development's monument sign shall adhere to the Proposed Entry Monument Sign drawing by Lucido and Associates.

HOA Requirements & Future Amendments

32. Owner shall not subject the Property to any condominium conversion and neither shall any portion of the Property be converted to units for sale in connection with a condominium conversion nor shall the title to any such units be transferred to any party other than being held as a single parcel for the purposes of apartment rental unless owner amends this restriction through a minor PUD amendment process.

33. Any applications to amend this Ordinance shall be limited to the Developer.

34. The City may elect at any time to assign a future land use designation of "Conservation" to the PUD's preserve areas without objection by the owners. Further, the City may at its discretion, take over maintenance of the preserve area(s) without objection by the owners.

35. Timetable for development shall be as follows:

Site and building permit application deemed sufficient for permit review under city codes and standards.	**December 1, 2021**
Final Certificate of Occupancy for all site and building improvements.	**December 1, 2023**

Allowable Uses

36. The following uses shall be permitted:
    a. Multi-Family Residential
    b. Home Occupations in accordance with the City's Land Development Code.

CITY OF STUART
LOCAL PLANNING AGENCY
March 19, 2020

Project Name: Bridgeview RPUD - FLU & Zoning assignment	**Property Owner:** Atlantic Realty Partners, Inc. (Contract Purchaser)
PCN #: 40-38-41-001-051-00000-2	**Applicant/Petitioner:** Atlantic Realty Partners, Inc. (Contract Purchaser)
Ordinance No: 2437-2020	**Agent/Representative:** Gentile, Glas, Holloway, O'Mahoney and Associates
	Case Planner: Stephen Mayer
Location: On the Northwest Corner of State Road 76 (SW Kanner Highway) and SW Martin Highway	

PROJECT SUMMARY		
Property Size (area)		15.88 Acres
Present Use		Undeveloped
Subject Property Land Use		Commercial Office Residential – Martin County
Adjacent FLU	*North*	Martin County TP (Trailer Park) (Riverland Mobile Home Park)
	South	Martin County COR (Vacant)
	East	Commercial (Cleveland Clinic)
	West	St. Lucie River
Subject Property Zoning		Commercial Office Residential (COR-1)
Adjacent Zoning	*North*	Martin County – Mobile Home (Riverland Mobile Home Park)
	South	Martin County COR (Vacant)
	East	CPUD (Cleveland Clinic)
	West	St. Lucie River
Proposed Land Use Designation & Zoning District		Multi-family Density Residential (RPUD)
Proposed Zoning District		Residential Planned Unit Development RPUD
Proposed Use		212 Multi-family Apartments
City Approvals		Building Department – No comments at this time. Fire Department – See comments attached Public Works – See comments attached Police Department – No comments at this time
Brief Explanation		The intent of this application is to request a Large-scale future land use map (FLUM) amendment to the City's Comprehensive Plan Residential Planned Unit

	Development assigning a "Multi-Family Density Residential" land use, and a Zoning designation of (RPUD) on the City of Stuart Zoning Map. The subject property is 15.88 acres. The property is currently undeveloped. The intent of this project is to allow 212 attached multi-family apartment homes within two 4-story buildings to be developed on the site while upgrading the drainage and enhancing the upland and wetland preserve.
Staff Recommendation: Staff recommends approval for the Future Land Use designation to Multi-Family Density Residential and zoning district designation to RPUD (Residential Planned Unit Development).	

STAFF REPORT AND RECOMMENDATION

I. LEGAL NOTICE REQUIREMENTS

A. Requirements for Application – The applications for the Future Land Use amendment to Multi-Family Density Residential, and zoning district designation to RPUD have been noticed in accordance with the requirements set forth in Sections 11.01.02, 11.01.09, and 11.02.00 of the Land Development Regulations.

B. Site Posting Date: 3-2-2020

C. Mail Notice Postmark: 3-2-2020 to property owners within 300 feet

D. Publication Date: 10 days prior to Second Reading

II. LARGE SCALE COMPREHENSIVE PLAN AMENDMENT AND ZONING MAP AMENDMENT ORDINANCE NO. 2398-20198

III. APPLICATION: Dated January 16, 2020

IV. HISTORY OF THE SITE

The 15.88-acre parcel was annexed into the city via Ordinance No. 2415-2019. The applicant is requesting to assign a RPUD zoning district to establish a new site plan and is requesting to assign a Future Land Use designation of Multi-Family Residential in order develop the property for 212 multi-family residential units. The property currently has a Martin County approval for 99,000 square feet of office use, 2 story building over 1 story of parking, and 30' in height. The approved office building is sited 52' from the north property line.

V. STAFF ANALYSIS

A. Site and Area Characteristics (Attachment C)
The subject property consists of one parcel totaling 15.88 acres in size, located on the northwest corner of State Road 76 (Kanner Highway) and Martin Highway.

B. Project Description

A Master Site Plan has been planned with 212 multi-family apartments within 2 four-story apartment buildings strategically placed to save all the existing wetland while enhancing the existing upland preserve and providing an average 50' of wetland buffer. The site includes community amenities with generous landscaping.

C. Future Land Use Amendment and Comprehensive Plan Consistency Review

A review of the Comprehensive Plan finds that the proposed list of uses that are consistent with the proposed Multi Density Future Land Designation:

This land-use category is allowing for two or more dwelling units per building. Includes single family detached, duplex/townhomes, apartments, condominiums, patio homes, garden homes, and adult living facilities, foster homes and zero-lot-line residences. Also public facilities, churches day care centers, schools and electric distribution substations are allowed.

Section 11.01.05G.1 (large-Scale Comprehensive Plan Amendments) of the Land Development Code requires the Local Planning Agency to consider the following criteria prior to making an advisory recommendation to the City Commission:

1. *The existing land use pattern;*

   The existing land use pattern surrounding the project area consist of a mobile home park, commercial and vacant land. Most of the vacant land near the project consists of wetlands within the County (to the South) and the mobile home community to the north (Riverland Park) is recommended to be adequately buffered from the Multi-family use.

2. *The possible creation of an isolated land use classification unrelated to adjacent and nearby classifications;*

   No, the proposed multifamily project will benefit the future commercial development on the east side of Kanner Highway and is consistent with the residential nature of the west side of Kanner Highway. Please see the attached exhibit.

3. *The population density pattern of the area and possible increase or overtaxing of the load on public facilities such as schools, utilities and streets;*

   No. The multifamily land use and the proposed project will rely on City of Stuart Utilities for services which have sufficient capacity to service the proposed project. The school capacity will be coordinated with the Martin County school board and concurrency will be reserved at the time of construction plan permitting. The streets have adequate capacity and the proposed improvements outlined in the proposed RPUD will improve the traffic patterns.

4. *The possible overloading of the City's sewage collection, treatment and disposal facilities;*

   The property will connect to the City's sewage collection, treatment and disposal facilities. The property is within the City of Stuart's service district.

5. *The possible overloading of the City's drainage system;*

   All development on the site would be required to comply with applicable City of Stuart stormwater management requirements with review and permitting from the South Florida Water Management District.

6. *The existing classification boundaries in relation to existing conditions on the subject property;*

   There are no issues in this regard.

7. *The existence of changed or changing conditions which make the passage of the proposed amendment necessary or appropriate;*

   The county/city has shown a trend toward development of residential uses and the need for apartment housing to support the local workforce and young professionals.

8. *The impact of the proposed amendment upon living conditions in the adjacent neighborhood;*

   The type and intensity of development that would be feasible on the subject property would not create an adverse impact to nearby neighborhoods. The site is buffered from abutting neighborhoods the north with an enhanced 25' foot landscape buffer.

9. *The impact of the amendment upon the flow of light and air to adjacent areas;*

   The type and intensity of development that would be feasible on the subject property would not create an adverse impact upon the flow of light and air to adjacent areas.

10. *The impact of the proposed amendment upon property values in the adjacent area;*

    The change in land use designation from commercial to residential would likely result in an increase in property values in the adjacent area by allowing for a local customer base for the surrounding commercial properties.

11. *The existence of other adequate sites in the City for the proposed land use classifications already permitting such use.*

    The goal of the proposed amendment is to allow for uses that are in demand. The subject location is ideal for multifamily units.

D. Rezoning and Land Development Code Consistency Review

The application has been reviewed for consistency with the City's LDC. Approval of the rezoning to RPUD would allow for attached housing to be constructed at the site.

The applicant is requesting the following four (4) waivers from the City's Land Development Code:

1. **Section 6.03.02: Drainage Specifications.** Finished Floor Elevations of all buildings shall not be lower than 18 inches above the crown of the street on which the building fronts.

Request: The applicant is requesting the finished floor elevation to be 8.25 feet, which is 2.25 feet above the FEMA flood elevation requirements, however, is below the 9-foot elevation of Kanner Highway. The applicant has provided an engineering statement, prepared by MacKenzie Engineering and Planning, Inc., justifying a relief from the code. The letter states that the site is more than two feet above the 100-year flood elevation, that the South Florida Water Management District permitting requirements will be satisfied in regards to on-site drainage, and in the unlikely event that the off-site flood waters do drain on the site (from Kanner Highway, which is where the relief of the Finished Floor Elevations is specifically requested), the flood waters are likely to flow around buildings and discharge into the wetlands that lead to the St. Lucie River.

2. **Section 6.01.13: Off-Street Parking Schedule.** 1.5 parking spaces per unit (studios and 1 bedroom), and 2 parking spaces per unit (2 or more bedroom)

   Request: The applicant is requesting a reduction in the number of required parking spaces. The applicant is justifying a smaller number of parking spaces, as they are providing for full protection of the wetlands on site, and they are holding to an industry standard for multi-family developments, at a ratio of 1.6 (or 1.6 parking spaces per unit, which is similar to the City's requirement for 1 bedroom multi-family). Staff can confirm that such a ratio has been requested and granted, such as the Watermark RPUD, and is supportive of the waiver request. Staff notes that an excess of parking demand would be contained to the site and should not affect neighboring properties. The property will also be managed, and therefore the demand for parking will be monitored privately.

3. **Section 6.04.06**. **Land Use Transitions and Landscape Buffers**. The buffer width requirement for a 4-story multi-family use adjacent to a single-family or multi-family use is 55'.

   Request: The applicant is requesting a 25' wide landscape buffer along the northern property line, where the proposed multi-family use is abutting an existing mobile home park use. The separation between the nearest four-story building and the northern property line is 154.3'. Within this zone, there are three layers of landscaping (foundation planting, interior parking islands, and a heavily planted native buffer (with 12'-20' trees and 16'-25' palms). The applicant has also provided a 6' wall to strengthen the visual barrier. The applicant has provided a visual sightline study demonstrating that the view from the 4th story balcony will be blocked by the landscaping, and that the view from the existing mobile homes will be significantly diminished by the screen wall, the landscaping and the distance separating the proposed buildings from the existing residences. Staff recommends that the applicant provide a heavy landscaping buffer that doubles the visual barrier of a landscaping buffer that would normally be in a 55' wide buffer. The width of the buffer is not as important as the density and visual impact that can be provided with an enhanced buffer that is only 25'. Furthermore, the building is located 154'.3 feet from the

property line. A 3-story office building has been approved for the site only 52' from the property line. It is reasonable that the additional 100' feet separation proposed by the applicant is justified for the additional story.

4. **Section 5.03.02 Wetland Protection Standards**. The applicant is required to provide a minimum width of an upland buffer of 75' and at no point less than 50'. This is due to the wetland being an outstanding resource, consisting of mangroves.

   Request: The applicant is providing a minimum average width of 75', however, due to site constraints, the minimum buffer narrows to 42.4' at one location. Staff is recommending the use of native groundcover, in lieu of sod in this location, which serves as a buffer between the surface parking area and the upland buffer. The width of this native planting is 10 feet. If this area is credited toward being similar to an upland buffer, the minimum buffer would be over 50' and therefore acceptable. The waiver would then be to accept the native treatment as upland buffer. Staff is in support of such a waiver, due to the severe site constraint in this narrow portion on the south side of the property, and the inclusion of native vegetation to simulate the natural appearance of the upland buffer.

E. Technical Review by Other Agencies

The City Building, Public Works, Fire, and Police Departments have reviewed the applications and have offered their comments. See attachment to this agenda item. Each department will provide specific comments at final site approval for permitting.

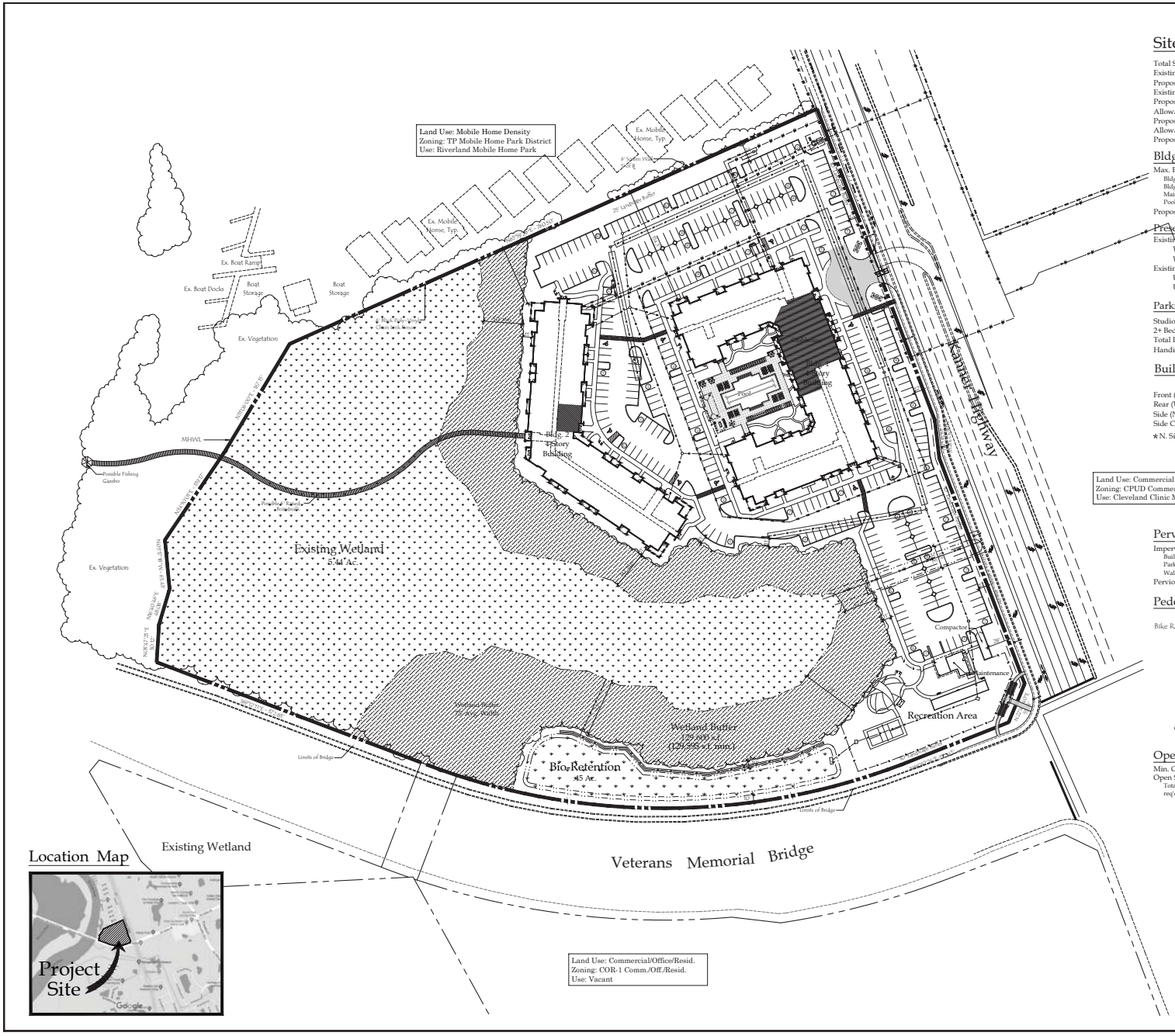
The applicant will be responsible to meet all federal, state and local permitting and environmental standards. Further, the applicant will also be required to demonstrate full compliance at all times.

VI. LOCAL PLANNING AGENCY BOARD RECOMMENDATION

The Local Planning Agency shall make an advisory recommendation to the City Commission as to the need and justification for the change and as to the relationship of the proposed change to the goals, objectives and policies of the Comprehensive Plan and of the Land Development Code. The Local Planning Agency shall include in its recommendation to the City Commission any information which it deems is relevant to issues relating to the proposed amendment.

VII. STAFF RECOMMENDATION (APPROVAL WITH CONDITIONS)

Staff has determined that the proposed future land use amendment to Multi-Family Density Residential and rezoning to RPUD is consistent with the goals, objectives and policies of the Comprehensive Plan and the regulations in the Land Development Code. Staff offers no objection to the requests.



Site Data

Total Site Area:	15.88 Ac., 691,857.47 s.f.
Existing Land Use	COR
Proposed Land Use	Multi-Family Residential/RPUD
Existing Zoning	COR-1
Proposed Zoning	R-3 Residential - Multi-Family Duplex/RPUD
Allowable Density	476 Units (30 du/ac.)
Proposed Density	212 Units (13.35 du/ac.)
Allowable Bldg. Ht.	4-Stories; 45' to eave (+Roof)
Proposed Bldg. Ht.	4-Stories; 42'-6" to eave (+Roof)

Bldg. Lot Coverage

Max. Bldg. Lot Coverage	30.0%; 207,557 s.f.
Bldg. 1	39,036 s.f.
Bldg. 2	27,938 s.f.
Maintenance Bldg.	945 s.f.
Pool Bldg.	360 s.f.
Proposed Bldg. Lot Cov.	9.9%; 68,279 s.f.

Preserve Area Calculations

Existing Wetland:	5.44 Ac.
Wetland to Remain:	5.44 Ac.
Wetland to be Mitigated	.00 Ac.
Existing Upland:	8.9 Ac.
Upland Preserve Required	2.23 Ac. (25.0%)
Upland Preserve Provided	2.97 Ac. (33.4%)

Parking Data

	Required	Provided
Studio/1 Bedrooms (108 Units)	162 Spaces (1.5 sp./unit)	
2+ Bedrooms (104 Units)	208 Spaces (2 sp./unit)	
Total Parking	370 Spaces (1.75 sp./unit)	342 Spaces (1.61 sp./unit)
Handicap Parking	8 Spaces	8 Spaces

Building Setback Data

	Required	Provided
Front (East)	25'	80.6'
Rear (West-Waterside)	25'	320.5'
Side (North)	55'*	79.3'
Side Corner (South)	15'	338.7'

*N. Side Setback - 25' + 10'/flr. above 1st Flr.

Pervious/Impervious Calculations

Impervious Area	30.3%; 211,657.47 s.f.
Buildings	68,279 s.f.
Parking & curbs	113,200 s.f.
Walks, decks & patios	30,178.47 s.f.
Pervious Area	69.4%; 480,200 s.f.

Pedestrian Amenity Data

	Required	Provided
Bike Racks (1 rack per 50 units (10 MAX))	10 (20 bikes)	10 (20 bikes)

Open Space Calculations

Min. Open Space Required	30.0%; 207,557.24 s.f.
Open Space Provided	67.0%; 463,200 s.f.
Total pervious area minus req'd parking lot & bldg. landscaping	17,000 s.f.

Location Map

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Environmental Consultants

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Bridgeview

City of Stuart, Florida

Designed: MTH
Drawn: MTH
Approved: GGG MTH EMO
Date: 1/13/20
Job no.
Revisions: 3/11/20

Cad no. CAD0

Seal

Digitally signed by M. Troy Holloway
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Sheet Title:

Master Site Plan

Scale: 1" = 60'

Sheet No.

MP-1

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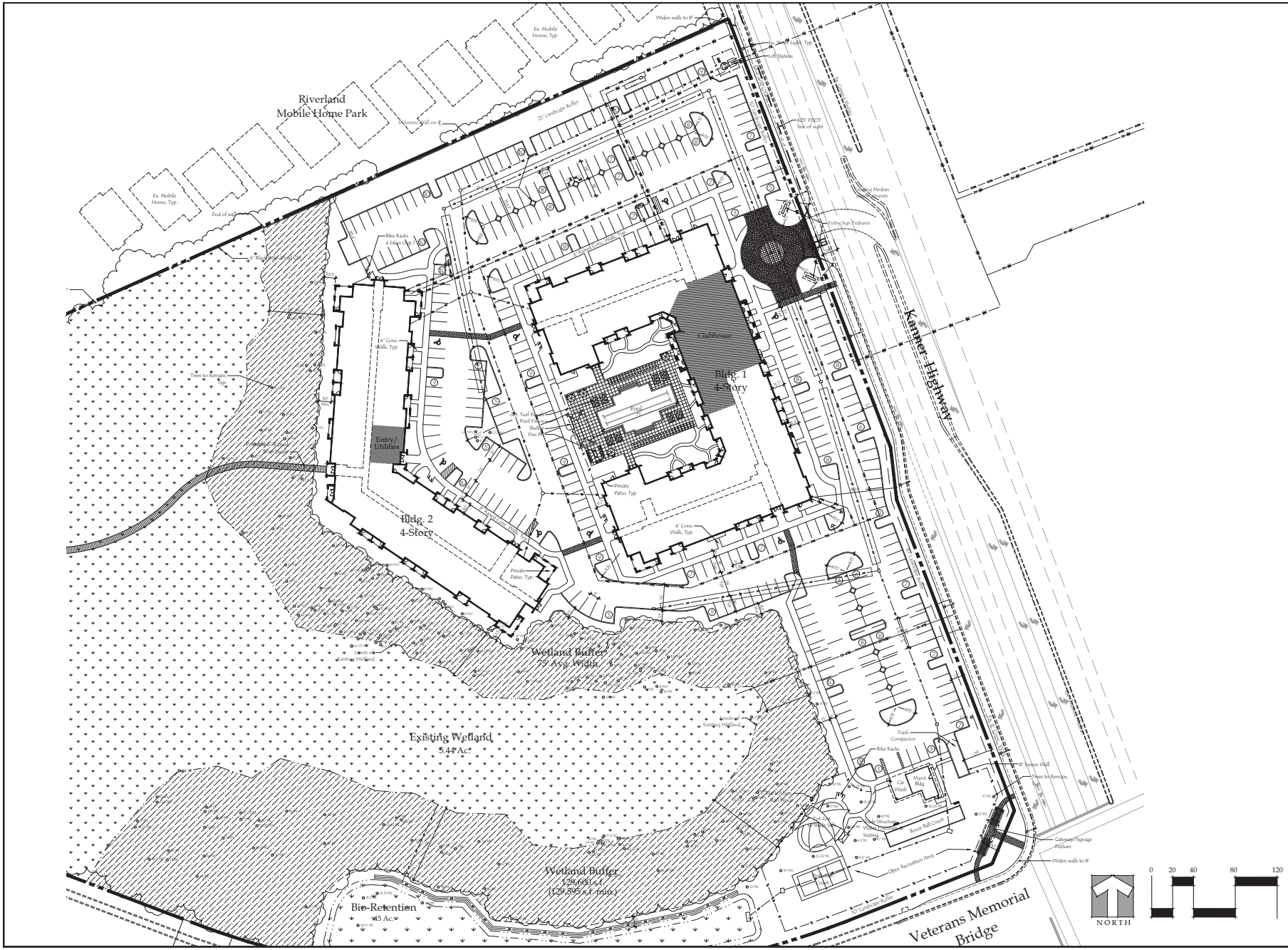

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Sheet Title:

Site
Development
Plan

Scale: 1" = 40'

Sheet No.

SP-1

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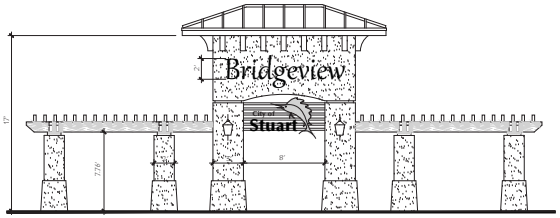


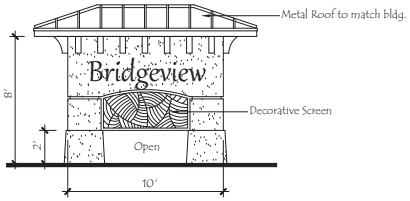
Gateway Signage Feature

6' Airt Stix 6' Contour Bench
by Anova, or approved equal.
Textured Sandstone Seat Color &
Textured Bronze Frame Color.

Bench Seating Detail

Airt Stix 6' 45 Gal. Trash Receptacle
w/side door, curve top;
by Anova, or approved equal.
Textured Sandstone Panels and Lid Colors.
Textured Bronze Frame Color.

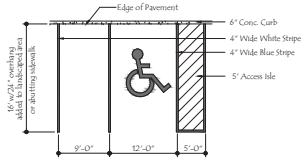
Trash Receptacle Detail



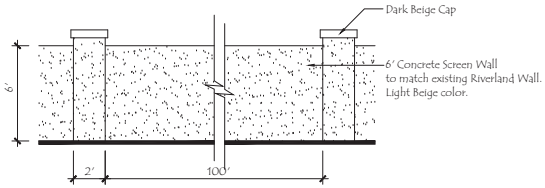
Entry Signage

Circle Powder Coated Bike Rack
Surface Mount by Anova, or approved equal.
Textured Sandstone Color
Textured Bronze Frame Color.

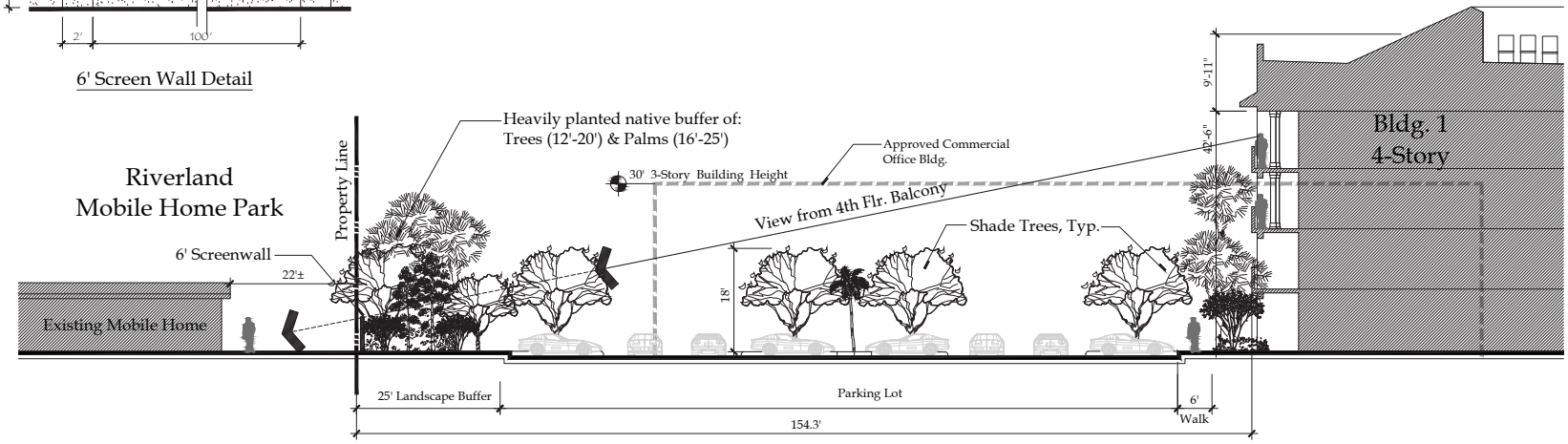
Bike Rack Detail



Typical Parking Detail



6' Screen Wall Detail



Sightline Study to Riverland Mobile Home Park

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Sheet Title:
Site
Development
Details

N.T.S.

Sheet No.
SP-2
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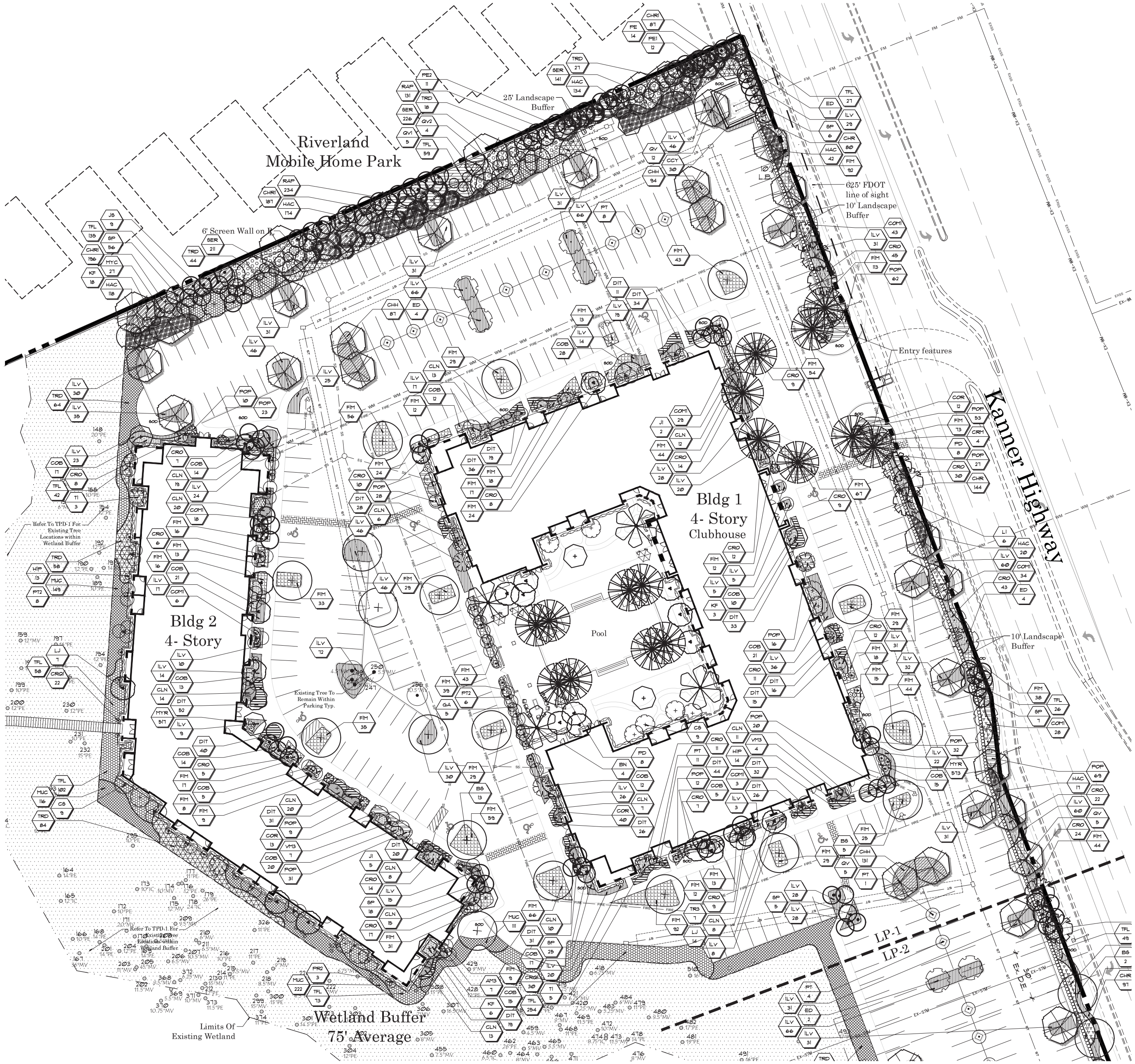

Landscape Data

Misc. Data

TOTAL SITE AREA	15388 A.C.
TOTAL PERVIOUS AREA	680,200 S.F. (69.4%)
TOTAL IMPERVIOUS AREA	211,657.47 S.F. (30.3%)

Tree Requirements

FOUNDATION TREES REQ. BLDG. #1: (1/30 L.F.)	35 TREES (1,075 L.F.)
FOUNDATION TREES PROVIDED BLDG. #1:	45 TREES (40 PALMS @ 2:1)
FOUNDATION TREES REQ. BLDG. #2: (1/30 L.F.)	46 TREES (1,376 L.F.)
FOUNDATION TREES PROVIDED BLDG. #2:	54 TREES (47 PALMS @ 3:1)
PARKING LOT TREES REQ.: (1/ISLAND)	58 TREES
PARKING LOT TREES PROVIDED:	56 TREES (EXCLUDES ISLANDS WITH FIRE HYDRANTS)
EAST LANDSCAPE BUFFER: (1/30 L.F.)	25 TREES; 766.9 L.F. (EXCLUDES DRIVE)
EAST LANDSCAPE BUFFER PROVIDED:	41 TREES (34 PALMS @ 2:1)
SOUTH LANDSCAPE BUFFER REQ.: (1/30 L.F.)	5 TREES; 159.4 L.F.
SOUTH LANDSCAPE BUFFER PROVIDED:	13 TREES (17 PALMS @ 3:1) N.I.C. INDIANTOWD RD.
WEST LANDSCAPE BUFFER REQ.: (1/30 L.F.)	N/A
WEST LANDSCAPE BUFFER PROVIDED:	N/A
NORTH LANDSCAPE BUFFER REQ.: (1/30 L.F.)	14 TREES;417.29 L.F.
NORTH LANDSCAPE BUFFER PROVIDED:	101 TREES (51 PALMS @ 2:1)
EXTRA INTERIOR TREES PROVIDED	60 TREES (PARKING / INTERIOR/ BUFFERS N.I.C.)
TOTAL TREES REQ.	183 TREES
TOTAL TREES PROVIDED	361 TREES (Palms 2:1)
	*Additional 178 Trees Towards Mitigation Credits. (Avg. Tree 12' o.a.,2.5" D.B.H. = 445 D.B.H. Inches)

	REQUIRED:	PROVIDED:
NATIVE TREE REQUIREMENT	50%	75.5 % (448 OUT OF 593)
NATIVE SHRUB & GROUNDCOVER REQUIREMENT	50%	74.0% (11,038 OUT OF 14,901)
TOTAL PERCENTAGE OF NATIVE VEG. PROVIDED	50%	74.1 % (11,486 OUT OF 15,494)
TOTAL CANOPY TREES OF REQUIRED	50% (91 OF 182)	190 CANOPY TREES

Landscape Notes:

- ALL PLANTING AREAS SHALL RECEIVE 100% COVERAGE FROM A FULLY AUTOMATIC IRRIGATION SYSTEM, EQUIPPED W/A RAIN SENSOR.
- IRRIGATION SHALL BE PROVIDED FROM ON SITE WELL
- ALL MECHANICAL/ELECTRICAL EQUIPMENT SHALL BE SCREENED FROM VIEW ON THREE (3) SIDES WITH AN APPROVED HEDGE MATERIAL. HEIGHT OF HEDGE SHALL BE EQUAL TO OR GREATER THAN THE HEIGHT OF THE UTILITY BEING SCREENED.
- CONTRACTOR SHALL PROVIDE A 3-4' DIA. MULCH RING AROUND ALL TREES THAT ARE NOT LOCATED WITHIN A LANDSCAPE BED
- ALL PLANTING BEDS/ISLANDS SHALL BE FREE OF SHELLROCK AND CONSTRUCTION DEBRIS, EXCAVATED TO A DEPTH OF 30" OR TO CLEAN NATIVE SOILS AND BACKFILLED WITH THE SPECIFIED BACKFILL MIXTURE
- ROOT BARRIERS SHALL BE INSTALLED FOR ALL TREES LOCATED WITHIN SIX FEET OF CURBS OR SIDEWALKS IN PUBLIC RIGHTS OF WAY. TOTAL LENGTH SHALL BE 20' ALONG CURB AND 20' ALONG SIDEWALK CENTERED ON THE TREE.
- VEGETATION REMOVAL PERMITS ARE REQUIRED PRIOR TO REMOVING, CLEARING OR STRIPPING ANY VEGETATION FROM PROPERTY LOCATED WITHIN THE CITY OF STUART.
- AT TIME OF PLANTING, PERIMETER TREES SHALL BE SPACED IN A WAY THAT COMPLIMENTS THE SPACING OF ANY EXISTING TREES ON ADJACENT, DEVELOPED PROPERTIES.
- SOD AND IRRIGATION SHALL BE PROVIDED WITHIN THE ROW BETWEEN THE SIDEWALK AND THE CURBING
- ALL TREES UNDER FPL POWER LINES ARE REQUIRED TO COMPLY WITH THE FPL PLANT THE RIGHT TREE IN THE RIGHT PLACE' GUIDLINES.
- ALL LANDSCAPE ISLANDS SHALL INCORPORATE THE INSTALLATION OF MOUNDING OF NATIVE SOILS A MIN. OF 6" ABOVE THE TOP OF CURB.
- ALL PLANT MATERIAL SHALL MEET THE FLORIDA GRADES AND STANDARDS OF FL. #1 QUALITY OR BETTER.
- ALL PLANT MATERIAL SHALL BE FIELD ADJUSTED TO AVOID CONFLICTS WITH LIGHT POLES AND ANY OTHER MISC. UTILITIES.

Plant Legend

Southern Slash Pine
Live Oak
Gumbo Limbo
Silver Bismarck Palm
Date Palm
Purple Trumpet Tree
Crape Myrtle 'Sioux'
Sabal Palm
Silver Buttonwood
Black Ironwood
Southern Red Cedar
Bald Cypress
Red Maple 'Florida Flame'
LIgustrum

Japanese Blueberry
Triple Montgomery Palm
Alexander Palm 'Single'
Alexander Palm 'Double'
Thatch Palm 'Triple'
Triple Christmas Palm
Double roebelinii Palm
Hibiscus
Crinum Lilly 'Queen Emma'
Rubber Vine Std.
Ti Plant 'Auntie Lou'
Gardenia 'Miami Supreme'
Pond Apple
Wax Myrtle
Leather Fern
Jatropha
Bougainvillea Std. 'Purple'

Dianella
Croton 'Curly Boy Red'
Fakahatchee Grass
Cocoplum 'Horizontalis'
Croton 'Mammy'
Podocarpus 'Pringles'
Ficus 'Green Island'
Croton 'Petra'
Florida Gamma Grass
Dwarf Firebush
Cocoplum 'Red Tip'
Muhly Grass
Ilex
Saw Palmetto
Sand Cord Grass
Myrsine
Dwarf Clusia
Simpson's Stopper
Coco Plum 'Red Tip'
Jamaican Caper

Xeriscape Requirements

	Points Required:	Points Provided:
1. Utilization Of Moisture sensing controller other than rain switch.	5	5
2. Plan submitted with low, moderate, and high water usage zones indicated.	5	-
3. Grass:		
a. 25-50 percent of the grass areas are made up of drought tolerant grass species from the list.	5	5
b. 51 percent or more of the grass areas are made up of drought tolerant grass species from the list.	10	-
4. Shrubs:		
a. 25-50 percent of the required shrubs are made up of drought tolerant species from the list.	5	-
b. 51 percent or more of the required shrubs are made up of drought tolerant species from the list.	10	10
5. Trees:		
a. 25-50 percent of the required trees are made up of drought tolerant species from the list.	5	-
b. 51 percent or more of the required trees are made up of drought tolerant species from the list.	10	-10
6. Extra shade trees in vehicular use areas:		
a. 25 percent more than the required shade trees planted in the vehicular use areas.	5	-
b. 50 percent more than the required shade trees planted in the vehicular use areas.	10	10
7. Sod area less than 50 percent of landscape area.	10	-
8. Utilization of compacted mulched planting beds at least three inches in depth in all planted areas except groundcover. (Use of Cypress mulch not recommended in order to protect natural cypress wetlands)	10	10
Total Points	50	

50

Scale: 0 15 30 60 90

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Bridgeview
City of Stuart, Florida

Designed:	NRD
Drawn:	BRD
Approved:	GGG MTH EMO
Date:	1/17/20
Job no.	
Revisions:	3/11/20

Cad no. CAD0

Seal

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Date: 2020.03.11 14:26:13 -04'00'

LC C000177

Sheet Title:
Landscape Development Plan

Scale: 1" = 30'

Sheet No.
LP-1

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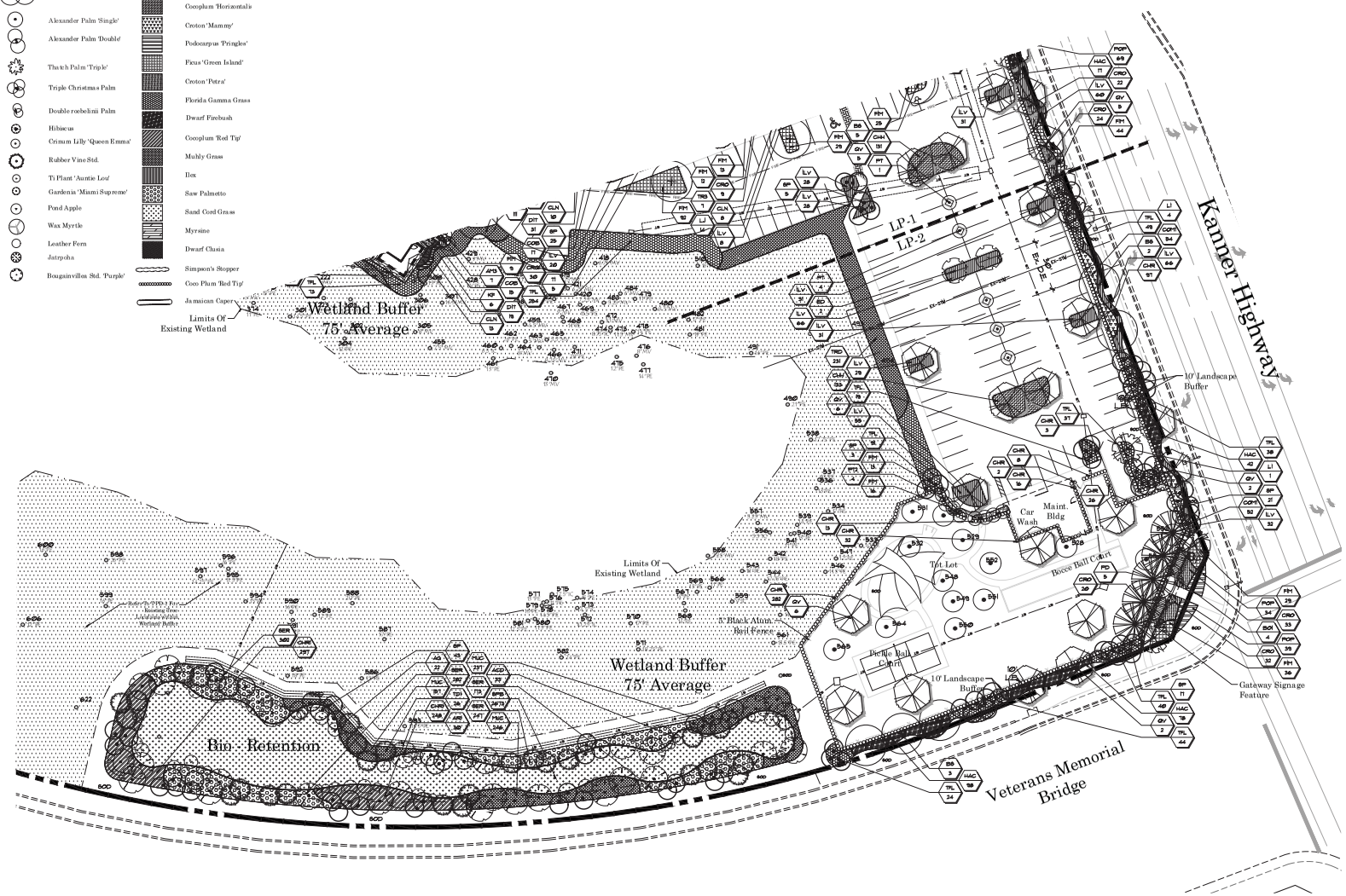
Plant Legend

- Southern Slash Pine
- Live Oak
- Gumbo Limbo
- Silver Bismarck Palm
- Date Palm
- Purple Trumpet Tree
- Crape Myrtle 'Sioux'
- Sabal Palm
- Silver Buttonwood
- Black Ironwood
- Southern Red Cedar
- Bald Cypress
- Red Maple 'Florida Flame'
- Ligustrum
- Japanese Blueberry
- Triple Montgomery Palm
- Alexander Palm 'Single'
- Alexander Palm 'Double'
- Thatch Palm 'Triple'
- Triple Christmas Palm
- Double roebelinii Palm
- Hibiscus
- Crinum Lilly 'Queen Emma'
- Rubber Vine Std.
- Ti Plant 'Auntie Lou'
- Gardenia 'Miami Supreme'
- Pond Apple
- Wax Myrtle
- Leather Fern
- Jatropha
- Bougainvillea Std. 'Purple'
- Dianella
- Croton 'Curly Boy Red'
- Fakahatchee Grass
- Cocoplum 'Horizontalis'
- Croton 'Mammy'
- Podocarpus 'Pringles'
- Ficus 'Green Island'
- Croton 'Petra'
- Florida Gamma Grass
- Dwarf Firebush
- Cocoplum 'Red Tip'
- Muhly Grass
- Ilex
- Saw Palmetto
- Sand Cord Grass
- Myrsine
- Dwarf Clusia
- Simpson's Stopper
- Coco Plum 'Red Tip'
- Jamaican Caper



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Revisions: 03/11/20

Cad no.: CAD0

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Sheet Title:
Landscape Development Plan

Scale: 1" = 30'

Sheet No.
LP-2
00-0000

Plant List

TREES

KEY	QTY.	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	CALIPER	SPACING	D.T.	NATIVE	REMARKS
AR1	30	ACER RUBRUM 'FLORIDA FLAME'	FLORIDA FLAME MAPLE	12 FT.	6-7'	2" MIN.	A.S.	M	Y	FULL & THICK, 3' CLEAR TRUNK
AG	22	ANNONA GLABRA	POND APPLE	6-8'	4-5'	1.5"	A.S.	L	Y	FULL & THICK
BO1	4	BOUGAINVILLEA 'NEW RIVER'	PURPLE BOUGAINVILLEA STANDARD	6-7 FT. O.A.	3 FT.		A.S.			FULL & THICK, STANDARD 3' C.T.
BS	23	BURSERA SIMARUBA	GUMBO LIMBO	12'	7-8'	2" MIN.	A.S.	V	Y	6' C.T. MIN. FULL SPECIMEN
CS	18	CONOCARPUS ERECTUS 'SERICEUS'	SILVER BUTTONWOOD	12'	6 FT.	3.5 IN.	A.S.			FULL, STANDARD, 3' C.T.
ED	11	ELAECOCARPUS DECIPIENS	JAPANESE BLUEBERRY	12'	5-6'	2.5"	A.S.	L	N	FULL & THICK TO GROUND, CONE SHAPED, SHEARED, FL. FANCY
GA	5	GARDENIA AUGUSTA 'MIAMI SUPREME'	MIAMI SUPREME GARDENIA	4'	3'	-	A.S.	L	N	FULL, STANDARD,
JI	7	JATROPHA INTEGERRIMA	JATROPHA	4'	3-4 FT.		A.S.	L	N	FULL DENSE CANOPY, STANDARD
JS	9	JUNIPER VIRGINIANA SILICICOLA	SOUTHERN RED CEDAR	12 FT.	6-7'	HEAVY	A.S.	V	Y	FULL & THICK TO BASE
KF	27	KRUGIODENDRON FERREUM	BLACK IRONWOOD	12'	5-6'	2" MIN.	A.S.	V	Y	FULL DENSE CANOPY
LI	11	LAGERSTROMIA INDICA 'SIOUX'	CRAPE MYRTLE	12'	6-7'	2.5"	A.S.	M	N	FULL DENSE CANOPY - MULTI TRUNK
LJ	21	LIGUSTRUM JAPONICUM	WAX PRIVET	12'	8-10'	MULTI	A.S.	M	N	FULL DENSE CANOPY MATCHED
PE2	11	PINUS ELLIOTTII DENSA	SOUTH FLORIDA SLASH PINE	16'	6-7'		A.S.	V	Y	FULL THICK CANOPY
PE1	12	PINUS ELLIOTTII DENSA	SOUTH FLORIDA SLASH PINE	14'	6-7'		A.S.	V	Y	FULL THICK CANOPY
PE	14	PINUS ELLIOTTII DENSA	SOUTH FLORIDA SLASH PINE	12'	4-5'		A.S.	V	Y	FULL THICK CANOPY
QV	38	QUERCUS VIRGINIANA	LIVE OAK	12'	7-8'	2.5"	A.S.	V	Y	FULL & THICK, FL#1
QV2	4	QUERCUS VIRGINIANA	LIVE OAK	20'	12'	4"	A.S.	V	Y	5' Min Clear Trunk - Full Dense Canopy - Fla#1
QV1	5	QUERCUS VIRGINIANA	LIVE OAK	16'	8-10'	3.5"	A.S.	V	Y	5' C.T. MIN. FULL SPECIMEN FLA #1
TI	8	TABEBUIA IMPETIGINOSA	PURPLE TRUMPET	12'	5-6'	1.5"	A.S.	M	N	FULL DENSE CANOPY -MATCHED SPECIMENS
TD1	26	TAXODIUM DISTICHUM	BALD CYPRESS	8'-10'-12'	5-6'		A.S.	L	Y	FULL THICK CANOPY STAGGER HEIGHTS

PALMS

KEY	QTY.	BOTANICAL NAME	COMMON NAME	HEIGHT		CALIPER	SPACING	D.T.	NATIVE	REMARKS
AM3	7	ADONIDIA MERRILLII	CHRISTMAS PALM TRIPLE	8'	G.W.	TRIPLE	A.S.	L	N	FULL & THICK, TRIPLE TRUNK, SCAR FREE
BN	4	BISMARCKIA NOBILIS 'SILVER SELECT'	BISMARCK PALM	8'	G.W.	-	A.S.	M	N	FULL & THICK, MATCHED SPECIMEN SCAR TRUNKS
PD	21	PHOENIX DACTYLIFERA 'MEDJOOL'	MEDJOOL DATE PALM	12'	G.W.	HEAVY	A.S.	M	N	FULL & THICK, SPECIMEN, MATCHED HEIGHTS
PR2	3	PHOENIX ROEBELENII	DOUBLE PYGMY DATE PALM	5-6'	O.A.	DOUBLE	A.S.	M	N	FULL & THICK DOUBLE TRUNK
PT2	18	PTYCHOSPERMA ELEGANS	ALEXANDER PALM 'DOUBLE'	8'	G.W.	DOUBLE	A.S.	M	N	FULL, DOUBLE TRUNK, MATCHED HEIGHTS SCAR FREE
PT	24	PTYCHOSPERMA ELEGANS	ALEXANDER PALM 'SINGLE'	8'	G.W.	SINGLE	A.S.	M	N	FULL, SINGLE TRUNK,SCAR FREE
SP	211	SABAL PALMETTO	SABAL PALM	14-32'	C.T.		A.S.	V	Y	STAGGER HEIGHTS IN GROUPS, HURRICANE CUT
TR3	7	THRINAX RADIATA	FLORIDA THATCH PALM 'TRIPLE'	5-6'	O.A.	TRIPLE	A.S.	V	Y	FULL & THICK, TRIPLE, MATCHED HEIGHTS
VM3	11	VEITCHIA MONTGOMERYANA	MONTGOMERY PALM 'TRIPLE'	10'	G.W.	TRIPLE	A.S.	M	N	FULL & THICK, TRIPLE, MATCHED HEIGHTS

ACCENTS

KEY	QTY.	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	GAL.	SPACING	D.T.	NATIVE	REMARKS
ACD	33	ACROSTICHUM DANAEIFOLIUM	LEATHER FERN	30"	30"		A.S.	L	Y	FULL TO BASE
COR	65	CORDYLINE FRUTICOSA 'AUNTIE LOU'	AUNTIE LOU TI PLANT	2'	O.A.	#3	A.S.	L	N	FULL TO BASE 3 P.P.P.
CRQ1	52	CRINUM AUGUSTUM 'QUEEN EMMA'	QUEEN EMMA CRINUM	30"	30"		A.S.	M	N	FULL, 1 P.P.P.

SHRUBS

KEY	QTY.	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	GAL.	SPACING	D.T.	NATIVE	REMARKS
CCY	30	CAPPARIS CYNOPHALLOPHORA	JAMAICA CAPER	24"	16"	#3MIN	2' O.C.	V	Y	FULL TO BASE
CHR1	1015	CHRYSOBALANUS ICACO 'RED TIP'	RED TIP COCOPLUM	24"	18 IN.	#3	2' O.C.	V	Y	FULL & THICK TO BASE
CHR	703	CHRYSOBALANUS ICACO 'RED TIP'	RED TIP COCOPLUM	24"	16"	#3 MIN	2' O.C.	V	Y	FULL TO BASE
CLN	176	CLUSIA ROSEA 'NANA'	MINIATURE PITCH APPLE	18 IN.	18 IN.		2' O.C.			FULL & THICK TO BASE
COB	239	CODIAEUM VARIAGATA 'CURLY BOY RED'	CROTON 'CURLY BOY RED'	24"	18"	#3	2' O.C.	M	N	FULL TO BASE
COM1	267	CODIAEUM VARIEGATUM 'MAMMEY'	MAMMEY CROTON	24 IN.	18 IN.	#3	2' O.C.	M	N	FULL TO BASE
CRO	418	CODIAEUM VARIEGATUM 'PETRA'	PETRA CROTON	22"	20"	#3	2' O.C.	M	N	FULL & THICK TO BASE
DIT	513	DIANELLA TASMANICA	BLUEBERRY FLAX LILY	14"	12"	#1	1.5' O.C.	M	N	FULL DENSE CLUMP
HAC	723	HAMELIA PATENS 'COMPACTA'	DWARF FIREBUSH	30 IN.	18 IN.		2' O.C.			FULL TO BASE
HIP	27	HIBISCUS SP. 'PINK'	PINK HIBISCUS	5'	3'	#25	A.S.	L	N	FULL DENSE CANOPY SPECIMEN STD.
ILV	1576	ILEX VOMITORIA 'STOKES DWARF'	STOKES DWARF	12 IN.	12 IN.	#3	2' O.C.	V	Y	FULL & THICK TO BASE
MUC	1238	MUHLENBERGIA CAPILLARIS	MUHLY GRASS	24"	24"	#3	2' O.C.	V	Y	FULLL DENSE CLUMP
MYF	1235	MYRCIANTHES FRAGRANS	SIMPSON'S STOPPER	24"	16"	#3MIN	2' O.C.	V	Y	FULL TO BASE
MYC	27	MYRICA CERIFERA	WAX MYRTLE	6'	4-5'	#65	A.S.	V	Y	FULL & THICK TO BASE, TO BE USED AS SCREENING MATERIAL
POP	465	PODOCARPUS MACROPHYLLUS 'PRINGLES'	DWARF PODOCARPUS	14 IN.	12 IN.	#3	2' O.C.	L	N	FULL & THICK TO BASE
RAP	365	RAPANEA PUNCTATA	MYRSINE	20"	18"	#3	2' O.C.	V	Y	FULL & THICK TO BASE
SER	1582	SERENOA REPENS	SAW PALMETTO	24"	24"	#3	2' O.C.	V	Y	FULL & THICK TO BASE
SPB	2673	SPARTINA BAKERI	SAND CORDGRASS	12"		BARE ROOT	2' O.C.	V	Y	BARE ROOT INSTALLATION
TRD	526	TRIPSACUM DACTYLOIDES	FAKAHATCHEE GRASS	24"	22"	#3	3' O.C.	V	Y	FULL DENSE CLUMP
TFL	1118	TRIPSACUM FLORIDANA	FLORIDA GAMMA GRASS	18 IN.	18 IN.	#3	2.5' O.C.	V	Y	FULL DENSE CLUMP

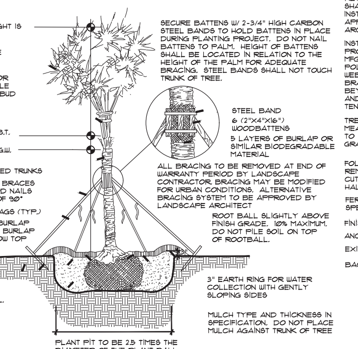
VINES

KEY	QTY.	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	GAL.	SPACING	D.T.	NATIVE	REMARKS
CRM	4	CRYPTOSTEGIA MADAGASCARIENSIS	RUBBER VINE	5'	4*5'	#25	A.S.	L	N	STANDARD FULL DENSE CANOPY

GROUNDCOVER

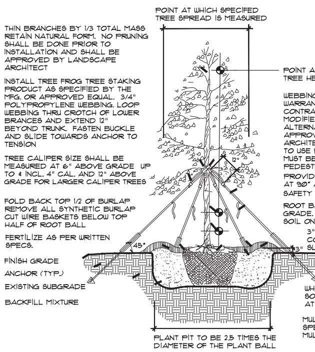
KEY	QTY.	BOTANICAL NAME	COMMON NAME	HEIGHT	SPREAD	GAL.	SPACING	D.T.	NATIVE	REMARKS
CHH	445	CHRYSOBALANUS ICACO 'HORIZONTAL'	HORIZONTAL COCOPLUM	16"	14"	#3	2' O.C.	V	Y	FULL & THICK TO BASE
FIM	1596	FICUS MICROCARPA 'GREEN ISLAND'	GREEN ISLAND FICUS	12 IN.	12 IN.	#3	2' O.C.	M	N	FULL & THICK TO BASE

Details



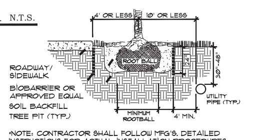
Palm Planting Detail N.T.S.

Tree Planting Over 3.5" Cal.

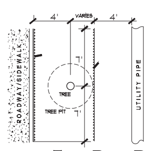


Tree Planting Detail N.T.S.

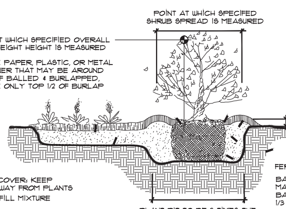
Tree Planting 1" To 3.5" Cal.



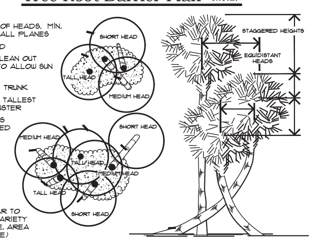
Tree Root Barrier Section N.T.S.



Tree Root Barrier Plan N.T.S.



Shrub & Ground Cover Planting Detail N.T.S.



Typical Cabbage Palm Layout N.T.S.

Specifications - Exterior Plants

1.4: QUALITY ASSURANCE:

SOIL ANALYSIS SHALL BE CONDUCTED BY THE LANDSCAPE CONTACTOR PRIOR TO APPLICATION OF ANY SOIL AMENDMENTS, FERTILIZERS AND BACKFILL MIXTURES. THE LANDSCAPE CONTACTOR SHALL USE A QUALIFIED SOIL TESTING LABORATORY

THE RESULT OF THE SOIL TESTS SHALL BE SUBMITTED TO THE OWNER AND LANDSCAPE ARCHITECT FOR REVIEW PRIOR TO THE APPILCATION OF SAID MATERIALS. ADJUSTMENTS TO THE SOIL AMENDENTS MAY BE MADE UPON CONSULTAION WITH THE OWNER AND THE LANDSCAPE ARCHITECT.

1.5: DELIVERY, STORAGE AND HANDLING:

PRUNING OF TREES SHALL BE DONE ON SITE AFTER PLANTING FOR DAMAGED LIMBS OR AS DIRECTED TO IMPROVE OVERALL PLANT APPEARANCE. DO NOT REMOVE MORE THAN 15% OF BRANCHES. PRUNING METHODS SHALL FOLLOW STANDARD HORTICULTURAL PRACTICES USING APPROPRIATE TOOLS. LOPPING, SHEARING OR TOPPING OF PLANT MATERIAL WILL BE GROUNDS FOR REJECTION. DAMAGED, SCARRED, FRAYED, SPLIT OR SKINNED BRANCHES, LIMBS OR ROOTS TO BE PRUNED BACK TO LIVE WOOD. THE CENTRAL LEADER OR BUD SHALL BE LEFT INTACT UNLESS SEVERELY DAMAGED.

PRUNE SHRUBS TO REMOVE DAMAGED BRANCHES, IMPROVE NATURAL SHAPE, THIN OUT STRUCTURE AND REMOVE NOT MORE THAN 15% OF BRANCHES.

1.6: WARRANTY:

WARRANT ALL PLANT MATERIAL FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE AGAINST DEATH AND UNHEALTHY CONDITION, EXCEPT AS MAY RESULT FROM NEGLECT BY OWNER, DAMAGE BY OTHERS AND UNUSUAL PHENOMENA BEYOND CONTRACTOR'S CONTROL. REPLACEMENTS SHALL BE MADE WITH COMPATIBLE SIZE AND QUALITY OF MATERIAL AT A TIME REQUESTED OR ACCEPTABLE BY THE OWNER OR LANDSCAPE ARCHITECT. PLANT MATERIAL REJECTED DURING THE COURSE OF CONSTRUCTION SHALL BE REMOVED WITHIN FIVE (5) WORKING DAYS AND REPLACED BEFORE THE FINAL INSPECTION FOR COMPLETION WILL BE SCHEDULED. WARRANTY ON REPLACEMENT PLANTS SHALL BE 1 YEAR FROM THE DATE OF FINAL ACCEPTANCE OF THE REPLACEMENTS. ANY DAMAGE TOLANDSCAPE, SODDED OR SEEDED AREAS DURING REPLACEMENT OF PLANT MATERIAL SHALL BE CORRECTED BY THE LANDSCAPE CONTRACTOR.

1.7: MAINTENANCE SERVICE:

MAINTENANCE AND GENERAL CLEAN UP SHALL BE PERFORMED DAILY. MAINTENANCE SHALL INCLUDE BUT NOT BE LIMITED TO WATERING, WEEDING, CULTIVATING, RESTORATION OF GRADE, REMOVAL OF LITTER, MOWING, PRUNING, RESETTING SETTLED PLANTS, REMOVING, REPAIRING OR REPLACING STAKES AND GUYS, PROTECTION FROM INSECTS AND DISEASES, FERTILIZATION AND SIMILAR OPERATIONS AS NEEDED TO ENSURE NORMAL GROWTH AND HEALTHY PLANT MATERIAL. MAINTENANCE SHALL BEGIN AFTER EACH PLANT IS PLANTED AND SHALL CONTINUE FOR NINETY (90) DAYS FROM THE DATE OF FINAL ACCEPTANCE.

1.8: QUANTITIES, LOCATION AND SUBSTITUTIONS:

THE QUANTITIES OF PLANT MATERIALS SHOWN ON PLANS SHALL TAKE PRECEDENCE OVER THE PLANT QUANTITIES ON THE PLANT LIST. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ADJUST THE NUMBER AND LOCATIONS OF THE DESIGNATED TYPES AND SPECIES OF PLANTS TO BE USED AT ANY OF THE LOCATIONS SHOWN. THE OWNER SHALL RECEIVE A CREDIT OR DEBIT FOR THE UNIT PRICE OF THE PLANT MATERIAL. NO SUBSTITUTION OF PLANT MATERIAL TYPES, SPECIFICATIONS OR SIZES WILL BE PERMITTED WITHOUT WRITTEN AUTHORIZATION FROM THE LANDSCAPE ARCHITECT. THE OWNER AND/OR LANDSCAPE ARCHITECT RESERVES THE RIGHT TO NOT ACCEPT PLANT MATERIAL THAT DOES NOT, IN THE OPINION OF THE OWNER AND/OR LANDSCAPE ARCHITECT, MEET THE SPECIFICATIONS HEREIN.

2.1: 2.2: 2.3: PLANT MATERIAL:

PROVIDE SIZES AND SPECIFICATIONS OF PLANTS AS SHOWN ON PLANS OR LISTED ON PLANT LIST. ALL TREES, PALMS, SHRUBS, GROUND COVERS AND OTHER PLANTS SHALL CONFORM TO THE STANDARD OF FLORIDA NO. 1 OR BETTER AS GIVEN IN THE LATEST EDITION OF GRADES AND STANDARDS FOR NURSERY PLANTS BY FLORIDA DEPARTMENT OF AGRICULTURE, PART I AND II. PLANT MATERIAL SHALL ALSO CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN, INC. (ANSI) BULLETIN Z 60.1 - 1990 AND AS REVISED.

SPECIMEN PLANTS SHALL BE FLORIDA FANCY OR BETTER AND SHALL CONFORM TO THE LITERATURE STANDARDS LISTED ABOVE.

2.4: TOP SOIL:

TOPSOIL SHALL BE FRIABLE FERTILE SOIL WITH REPRESENTATIVE CHARACTERISTICS OF AREA SOILS. IT SHOULD BE FREE OF HEAVY CLAY, SILT, STONE, EXCESS LIME, SHELL ROCK, PLANT ROOTS, WEEDS, DEBRIS OR OTHER FOREIGN MATTER. IT SHALL NOT CONTAIN NOXIOUS PLANT GROWTH (SUCH AS BERMUDA, TORPEDO OR NUT GRASS). IT SHALL TEST BETWEEN THE PH RANGE OF 5.0 TO 7.0 UNLESS OTHERWISE SPECIFIED AND CONTAIN NO TOXIC RESIDUE OR SUBSTANCES THAT WOULD ENDANGER PLANT GROWTH. IF TOPSOIL IS NOT AVAILABLE ON SITE, IT SHALL BE IMPORTED FROM LOCAL SOURCES WITH SIMILAR SOIL CHARACTERISTICS TO THAT FOUND AT PROJECT SITE. OBTAIN TOPSOIL ONLY FROM NATURALLY, WELL-DRAINED SITES WHERE TOPSOIL OCCURS IN A DEPTH NOT LESS THAN 4".

2.5: INORGANIC SOIL AMENDMENTS:

SAND SHALL BE CLEAN, SALT-FREE AND CONTAINING NO EXTRANEOUS MATTER.

MYCORRHIZAL AMENDMENT SHALL BE DIEHARD™ TRANSPLANT AS MANUFACTURED BY HORTICULTURAL ALLIANCE OR EQUAL TO WITH THE FOLLOWING INGREDIENTS:

ENDOMYCORRHIZAL FUNGI	HORTA-SORB WATER MANAGEMENT GEL
ECTOMYCORRHIZAL FUNGI	TRICHODERMA
BENEFICIAL BACTERIA	YUCCA PLANT EXTRACTS
HUMIC ACID	VITAMIN B COMPLEX
SOLUBLE SEA KELP	
AMINO ACIDS	

2.6: ORGANIC SOIL AMENDMENTS:

PEAT HUMUS SHALL BE DECOMPOSED PEAT WITH NO IDENTIFIABLE FIBERS OR IF AVAILABLE, MUCK MAY BE SUBSTITUTED AND SHALL BE FREE FROM STONES, EXCESSIVE PLANT ROOTS, DEBRIS OR OTHER FOREIGN MATTER. MUCK SHALL NOT BE OVERLY SATURATED WITH WATER.

2.7: FERTILIZATION:

PROVIDE FERTILIZER UNIFORM IN COMPOSITION, DRY, AND IN A FREE FLOWING CONDITION FOR APPLICATION BY SUITABLE EQUIPMENT, AND DELIVER IN UNOPENED BAGS OR CONTAINERS, EACH FULLY LABELED.

FERTILIZE TREES, SHRUBS AND GROUND COVERS WITH "MILORGANITE" OR AN APPROVED COMPLETE FERTILIZER. APPLY "MILORGANITE" IN A CIRCLE AROUND THE PLANT BEFORE MULCHING. DO NOT TOUCH THE PLANT WITH THE FERTILIZER. WATER IN FERTILIZER AFTER MULCHING. APPLY MILORGANITE" FERTILIZER AT THE FOLLOWING RATE:

5.00 LBS. OR 14.5 CUPS / PALMS
3.00 LBS. OR 8.70 CUPS / 12-16' MATERIAL
2.00 LBS. OR 5.80 CUPS / 8-12- MATERIAL
0.69 LBS OR 2.00 CUPS / 6-8' MATERIAL
0.19 LBS OR 1/2 CUP / 3 GAL. MATERIAL
0.10 LBS. OR 1/4 CUP / 1 GAL MATERIAL

2.8: MULCHES:

MULCH TO BE APPLIED TO ALL PLANTING BEDS, 3" THICK MIN.
PINE STRAW MULCH SHALL BE APPLIED ONLY TO THOSE AREAS AS INDICATED ON THE PLAN. APPLY 6" FLUFFED, 2-3" THICK AFTER COMPACTION.

2.10: PLANTING SOIL MIX:

BACKFILL MIXTURE: 1/2 PARENT SOIL, 1/2 MIXTURE (1/3 SAND, 1/3 TOPSOIL, 1/3 PEAT HUMUS).

3.1: PLANTING BED ESTABLISHMENT:

PREPARATION: PRIOR TO THE INSTALLATION OF PLANTS, THE SITE SHALL BE FREE OF WEEDS, GRASS, SOD, DEBRIS, ROCKS OR OTHER MATERIAL MAKING THE SITE UNPLANTABLE. FOR FINAL ACCEPTANCE ALL PLANTED AREAS SHALL BE WEED FREE.

FINISH GRADING: THE LANDSCAPE CONTRACTOR SHALL COORDINATE THE INSTALLATION AND GRADING OF TOPSOIL, IF NECESSARY, WITH THE GENERAL CONTRACTOR, TO INSURE THE SITE IS AT FINISH GRADE PRIOR TO INSTALLING PLANTS.

3.2: PLANTING TREES:

LAYOUT PLANTS ACCORDING TO LANDSCAPE PLANS. IF A CONFLICT ARISES AS TO THE LOCATION, SPACING OR OTHER CONFLICT, CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY.

EXCAVATE PIT TO TWO AND ONE-HALF (2 1/2) TIMES THE DIAMETER OF TREE BALL AND NOT LESS THAN 6" DEEPER. COMPACT A LAYER OF BACKFILL MIXTURE IN PIT TO LOCATE COLLAR OF PLANT PROPERLY IN A SLIGHTLY DISHED FINISH GRADE. BACKFILL AROUND BALL WITH BACKFILL MIXTURE, COMPACTED TO ELIMINATE VOIDS AND AIR POCKETS, WATERING THOROUGHLY AS LAYERS ARE PLACED. BUILD 3" HIGH BERM OF SOIL BEYOND EDGE OF EXCAVATION. APPLY FERTILIZER AS SPECIFIED AND THEN MULCH WITH THE TYPE AND THICKNESS SPECIFIED ON PLANT LIST.

GUY AND STAKE TREES, LESS THAN 3.5" IN CALIPER, IN FOUR DIRECTIONS WITH "ARBORBRACE" NYLON TREE GUYING KIT WITH HARDENED NYLON ANCHOR AND 3/4" 800 LB. POLYPROP UV WEBBING, MODEL (ATG-R) OR APPROVED EQUAL. STAKE TREES IMMEDIATELY AFTER PLANTING. FOR MULTI-TRUNK PLANT MATERIAL, ATTACH GUYS TO FOUR (4) LARGEST LIMBS, CARE MUST BE TAKEN NOT TO MAKE GUYS TOO TIGHT. FOR TREES 3.5" IN CALIPER AND OVER, TREES MUST BE STAKED WITH WOOD 2X4 METHOD. FOLLOW PALM STAKING DETAIL FOR REQUIREMENTS. THE LANDSCAPE ARCHITECT RESERVES THE RIGHT TO ELIMINATE GUYING OR STAKING. THE OWNER SHALL RECEIVE A CREDIT OR DEBIT FOR THE UNIT PRICE OF THE GUYING OR STAKING. THE LANDSCAPE CONTRACTOR SHALL REMOVE BRACING IN ONE YEAR.

3.2: PLANTING SHRUBS:

EXCAVATE PITS OR TRENCH TWO (2) TIMES DIAMETER OF BALLS OR CONTAINERS, AND 3" DEEPER THAN REQUIRED FOR POSITIONING AT PROPER HEIGHT. COMPACT A LAYER OF BACKFILL MIXTURE IN BOTTOM BEFORE PLACING PLANTS. CONTAINER GROWN MATERIALS SHALL BE PLANTED WITH 48 HOURS AFTER DELIVERY TO SITE. PLACE PLANT IN PIT AND BACKFILL AROUND PLANTS WITH BACKFILL MIXTURE, COMPACTED TO ELIMINATE VOIDS AND AIR POCKETS. WATER THOROUGHLY AS LAYERS ARE PLACED. FORM A 3" HIGH BERM OF SOIL BEYOND THE EDGES OF EXCAVATION. APPLY FERTILIZER AS SPECIFIED AND THEN MULCH WITH THE TYPE AND THICKNESS SPECIFIED ON PLANT LIST.

3.4: PLANTING GROUNDCOVERS:

LOOSEN SUBGRADE TO DEPTH OF 4" IN AREAS WHERE TOPSOIL HAS BEEN STRIPPED, AND SPREAD BACKFILL MIXTURE.

SPACE PLANTS AS OTHERWISE INDICATED. DIG HOLES LARGE ENOUGH TO ALLOW FOR SPREADING OF ROOTS. COMPACT BACKFILL TO ELIMINATE VOIDS, AND LEAVE GRADE SLIGHTLY DISHED AT EACH PLANT. WATER THOROUGHLY. APPLY FERTILIZER AS SPECIFIED AND THEN MULCH WITH THE TYPE AND THICKNESS SPECIFIED ON PLANT LIST, LIFTING PLANT FOLIAGE ABOVE MULCH. MULCH SHALL BE SPREAD BEFORE PLANTING PLANTS IN POTS LESS THAN 1 GALLON SIZE (4", LINERS, ETC.).

Specifications - Lawns and Grasses

2.1: PRODUCTS:

SOD SHALL MEET AMERICAN SOD PRODUCES ASSOCIATION STANDARDS FOR NURSERY GROWN SOD FOR THICKNESS OF CUT, PAD SIZE, STRENGTH OF SECTIONS, MOISTURE CONTENT AND THATCH. SOD SHALL BE GUARANTEED TO BE UNIFORM IN COLOR, LEAF TEXTURE, AND SHOOT DENSITY AND FREE OF WEEDS, DISEASE, FUNGUS, INSECTS OR OTHER IMPERFECTIONS AND SUFFICIENTLY KNITTED TO SUSTAIN GROWTH. SOD SHALL BE MOWED FOR FINAL ACCEPTANCE.

2.3: FERTILIZER:

FERTILIZE TURF AREAS WITH TYPE 1 FERTILIZER, COMPLYING WITH THE STATE FERTILIZER LAWS. THE FERTILIZER SHALL BE CHEMICALLY DESIGNATED WITH 12-8-8. PROVIDE AT LEAST 50% OF THE PHOSPHORIC ACID FROM NORMAL SUPER PHOSPHATE OR AN EQUIVALENT SOURCE PROVIDING A MINIMUM OF TWO UNITS OF SULFUR. THE AMOUNTS OF SULFUR AND ALL OTHER CHEMICAL SHALL BE INDICATED ON THE QUANTITATIVE ANALYSIS CARD ATTACHED TO THE UNOPENED BAG.

3.1: LAWN PREPARATION:

LOOSEN SUBGRADE TO DEPTH OF 4" AND GRADE WITH TOPSOIL PROVIDED ON SITE OR IMPORTED TO FINISH DESIGN ELEVATIONS. ROLL PREPARED LAWN SURFACE. WATER THOROUGHLY, BUT DO NOT CREATE MUDDY SOIL CONDITION.

FERTILIZE SOIL AT THE RATE OF APPROXIMATELY 10 LBS. PER 1000 S.F. SPREAD FERTILIZER OVER THE AREA TO RECEIVE GRASS BY USING AN APPROVED DISTRIBUTION DEVICE CALIBRATED TO DISTRIBUTE THE APPROPRIATE QUANTITY. DO NOT FERTILIZE WHEN WIND VELOCITY EXCEEDS 15 M.P.H. THOROUGHLY MIX FERTILIZER INTO THE TOP 2" OF TOPSOIL.

3.2: SODDING:

SOD TYPE SPECIFIED ON PLANT LIST SHALL BE MACHINE STRIPPED NOT MORE THAN 24 HOURS PRIOR TO LAYING.

LAY SOD STRIPS WITH TIGHT JOINTS, DO NOT OVERLAP. STAGGER STRIPS TO OFFSET JOINTS IN ADJACENT COURSES. WORK SIFTED SOIL MIX INTO MINOR CRACKS BETWEEN PIECES OF SOD AND REMOVE EXCESS SOIL DEPOSITS FROM SODDED AREAS. SOD ON SLOPES GREATER THAN 3:1 SHALL BE STAKED IN PLACE. ROLL OR TAMP LIGHTLY AND WATER THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING.

Landscape Certificatoin

LANDSCAPE CERTIFICATION: THE LANDSCAPE ARCHITECT SHALL PROVIDE FINAL CERTIFICATION TO THE OWNER AND MUNICIPALITY THAT PLANTS ARE INSTALLED PER THE DESIGN PLAN, DETAILS AND SPECIFICATIONS. ANY CHANGES TO THE PLAN WILL NEED TO HAVE THE LANDSCAPE ARCHITECT APPROVAL PRIOR TO INSTALLATION. CONFORMITY TO FLORIDA GRADE #1 IN THE ROOT BALL REQUIRES THE LANDSCAPE ARCHITECT TO INSPECT TREES PRIOR TO INSTALLATION AT THE SITE. IT IS THE RESPONSIBILITY OF THE OWNER/GENERAL CONTRACTOR/LANDSCAPE CONTRACTOR FOR ORGANIZING INSPECTIONS OF PLANT MATERIAL PRIOR TO INSTALLATION.

General Notes:

SOD TO BE ST. AUGUSTINE UNLESS OTHERWISE NOTED ON PLANS

ALL PLANTING AREAS SHALL RECEIVE 100% COVERAGE FROM A FULLY AUTOMATIC IRRIGATION SYSTEM EQUIPPED WITH A RAIN SENSOR.

ALL CONSTRUCTION DEBRIS & HARDPAN TO BE REMOVED FROM PLANTING BEDS TO A DEPTH OF 30"

UTILITES:

ABOVE AND BELOW GROUND UTILITIES SHALL BE VERIFIED AND LOCATED BY THE LANDSCAPE CONTRACTOR PRIOR TO COMMENCING WORK IN THE PROJECT AREA. IF UTILITY PLANS ARE AVAILABLE, THE CONTRACTOR SHALL EXAMINE THEM AND BRING ANY AND ALL CONFLICTS TO THE ATTENTION OF THE OWNER AND/OR LANDSCAPE ARCHITECT. WHEN WORKING IN AN AREA WHERE KNOWN UTILITIES EXIST, UTILITY LOCATIONS MAY NEED TO BE STAKED BY A SURVEYOR OR THE UTILITY COMPANIES. THE CONTRACTOR HAS THE OPTION TO CONTACT 811TO SCHEDULE LOCATION OF THE UTILITIES WHICH SUBSCRIBE TO THEIR SERVICE.

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Call before you dig.

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Bridgeview

City of Stuart, Florida

Designed:	BRD
Drawn:	BRD
Approved:	GGG MTH EMO
Date:	1/17/20
Job no.	
Revisions:	3/11/20

Cad no. CAD0

Seal

Digitally signed by M. Troy Holloway
Date: 2020.03.11 14:28:10 -04'00'

LC C000177

Sheet Title: Landscape Specifcation Plan

Scale: N.T.S.

Sheet No. LP-3

00-0000

1 BUILDING 1 - NORTH ELEVATION

SCALE: 1/16" = 1'-0"

2 BUILDING 1 - EAST ELEVATION

SCALE: 1/16" = 1'-0"

3 BUILDING 1 - SOUTH ELEVATION

SCALE: 1/16" = 1'-0"

4 BUILDING 1 - WEST ELEVATION

SCALE: 1/16" = 1'-0"

ELEVATION KEY NOTES

E1	30 YEAR ARCHITECTURAL STYLE SHINGLES OVER #30 FELT, OVER ROOF SHEATHING, OVER PRE-ENGINEERED ROOF TRUSSES
E2	METAL DRIP EDGE ON ALUMINUM WRAPPED TREATED 1X3 ON TREATED 2X8 FACSIA BOARD WITH ALUMINUM GUTTER PER ROOF PLAN
E3	STANDING SEAM METAL ROOF
E4	FIBER CEMENT TRIM OVER BUILDING WRAP ON EXTERIOR SHEATHING
E5	6" FIBER CEMENT LAP SIDING OVER BUILDING WRAP ON EXTERIOR SHEATHING
E6	10" FIBER CEMENT LAP SIDING OVER BUILDING WRAP ON EXTERIOR SHEATHING
E7	FIBER CEMENT PANEL
E8	FIBER CEMENT CLAD COLUMN
E9	42" VINYL GUARD RAIL. 48" AT FIRST FLOOR BALCONIES FACING POOL COURTYARD. ALL BALCONIES TO HAVE SCREEN ENCLOSURES.
E10	DECORATIVE BRACKET - FYPON OR EQUAL
E11	VINYL WINDOW
E12	STOREFRONT WINDOW SYSTEM
E13	ALUMINUM STANDARD GUTTER (TYP.)
E14	ALUMINUM STANDARD DOWNSPOUT (TYP.)
E15	EXTERIOR LIGHT FIXTURE
E16	GARAGE DOOR
E17	DRYER/BATH VENTS COORDINATE WITH MEP
E18	BUILDING SIGN (BY OTHERS)
E19	STONE VENEER
E20	PRE-CAST HEADER/SILL
E21	SELECT GRADE WOOD, PAINTED
E22	PRE-CAST STONE DETAIL
E23	STUCCO, PAINTED
E24	SHUTTER AWNING

BRIDGEVIEW APARTMENTS

City of Stuart, Florida

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architects • planners
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maitland florida 32751-7208
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BUILDING TYPE 1
OVERALL
ELEVATION

date: **00-00-0000**
job no: **4243**
drawn by: **JS**
reviewed by: **CBA**
issue history:
Δ Date

SCHEMATIC DESIGN

A2.10

City of Stuart, FL

FL

Charles L. Charlan
Charlan Brock & Associates, AA-C000798

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3 BLDG 2 EAST ELEVATION B GRAPHIC

SCALE: 1/16" = 1'-0"

2 BLDG 2 EAST ELEVATION A GRAPHIC

SCALE: 1/16" = 1'-0"

1 BUILDING 2 - NORTH ELEVATION

SCALE: 1/16" = 1'-0"

ELEVATION KEY NOTES

E1	30 YEAR ARCHITECTURAL STYLE SHINGLES OVER #30 FELT, OVER ROOF SHEATHING, OVER PRE-ENGINEERED ROOF TRUSSES
E2	METAL DRIP EDGE ON ALUMINUM WRAPPED TREATED 1X3 ON TREATED 2X8 FACSIA BOARD WITH ALUMINUM GUTTER PER ROOF PLAN
E3	STANDING SEAM METAL ROOF
E4	FIBER CEMENT TRIM OVER BUILDING WRAP ON EXTERIOR SHEATHING
E5	6" FIBER CEMENT LAP SIDING OVER BUILDING WRAP ON EXTERIOR SHEATHING
E6	10" FIBER CEMENT LAP SIDING OVER BUILDING WRAP ON EXTERIOR SHEATHING
E7	FIBER CEMENT PANEL
E8	FIBER CEMENT CLAD COLUMN
E9	42" VINYL GUARD RAIL, 48" AT FIRST FLOOR BALCONIES FACING POOL COURTYARD. ALL BALCONIES TO HAVE SCREEN ENCLOSURES.
E10	DECORATIVE BRACKET - FYPON OR EQUAL
E11	VINYL WINDOW
E12	STOREFRONT WINDOW SYSTEM
E13	ALUMINUM STANDARD GUTTER (TYP.)
E14	ALUMINUM STANDARD DOWNSPOUT (TYP.)
E15	EXTERIOR LIGHT FIXTURE
E16	GARAGE DOOR
E17	DRYER/BATH VENTS COORDINATE WITH MEP
E18	BUILDING SIGN (BY OTHERS)
E19	STONE VENEER
E20	PRE-CAST HEADER/SILL
E21	SELECT GRADE WOOD, PAINTED
E22	PRE-CAST STONE DETAIL
E23	STUCCO, PAINTED
E24	SHUTTER AWNING

City of Stuart, FL

Charles L. Charlan
Charlan Brock & Associates, AA-C000798

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BUILDING TYPE 2
OVERALL
ELEVATIONS

date: **00-00-0000**
job no: **4243**
drawn by: **Author**
reviewed by: **Checker**
issue history:
Δ Date

SCHEMATIC DESIGN

A2.20A

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3 BLDG 2 WEST ELEVATION B GRAPHIC

SCALE: 1/16" = 1'-0"

2 BLDG 2 WEST ELEVATION A GRAPHIC

SCALE: 1/16" = 1'-0"

1 BUILDING 2 - SOUTH ELEVATION

SCALE: 1/16" = 1'-0"

ELEVATION KEY NOTES

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E23	STUCCO, PAINTED
E24	SHUTTER AWNING

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BUILDING TYPE 2 OVERALL ELEVATIONS

date: **00-00-0000**
job no: **4243**
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SCHEMATIC DESIGN

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City of Stuart, FL

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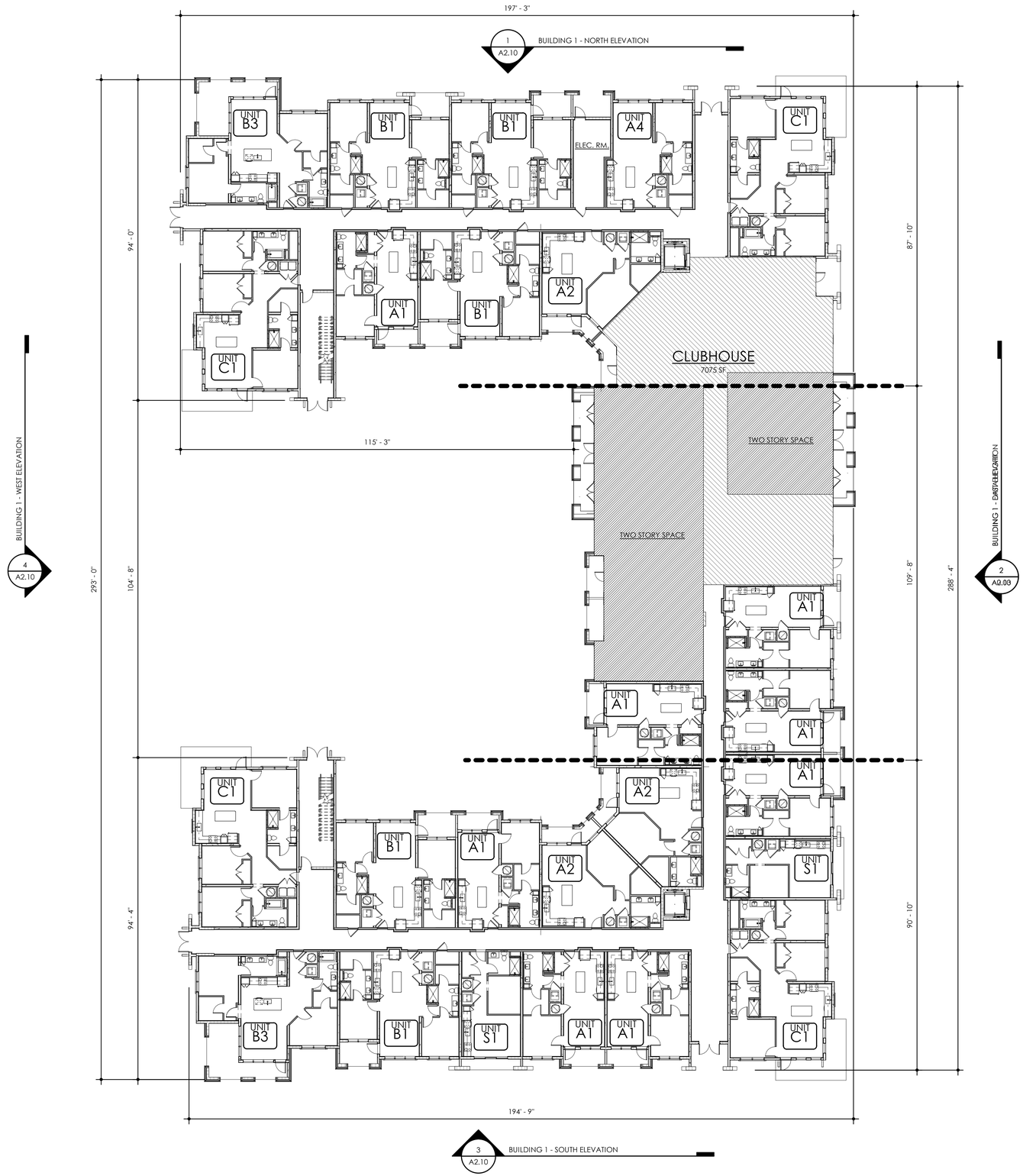

1 01-1ST FLOOR

SCALE: 1/16" = 1'-0"

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BLDG 1 - 1ST FLOOR - CONTROL PLAN

date: **00-00-0000**
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drawn by: **JS**
reviewed by: **CBA**
issue history:
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SCHEMATIC DESIGN

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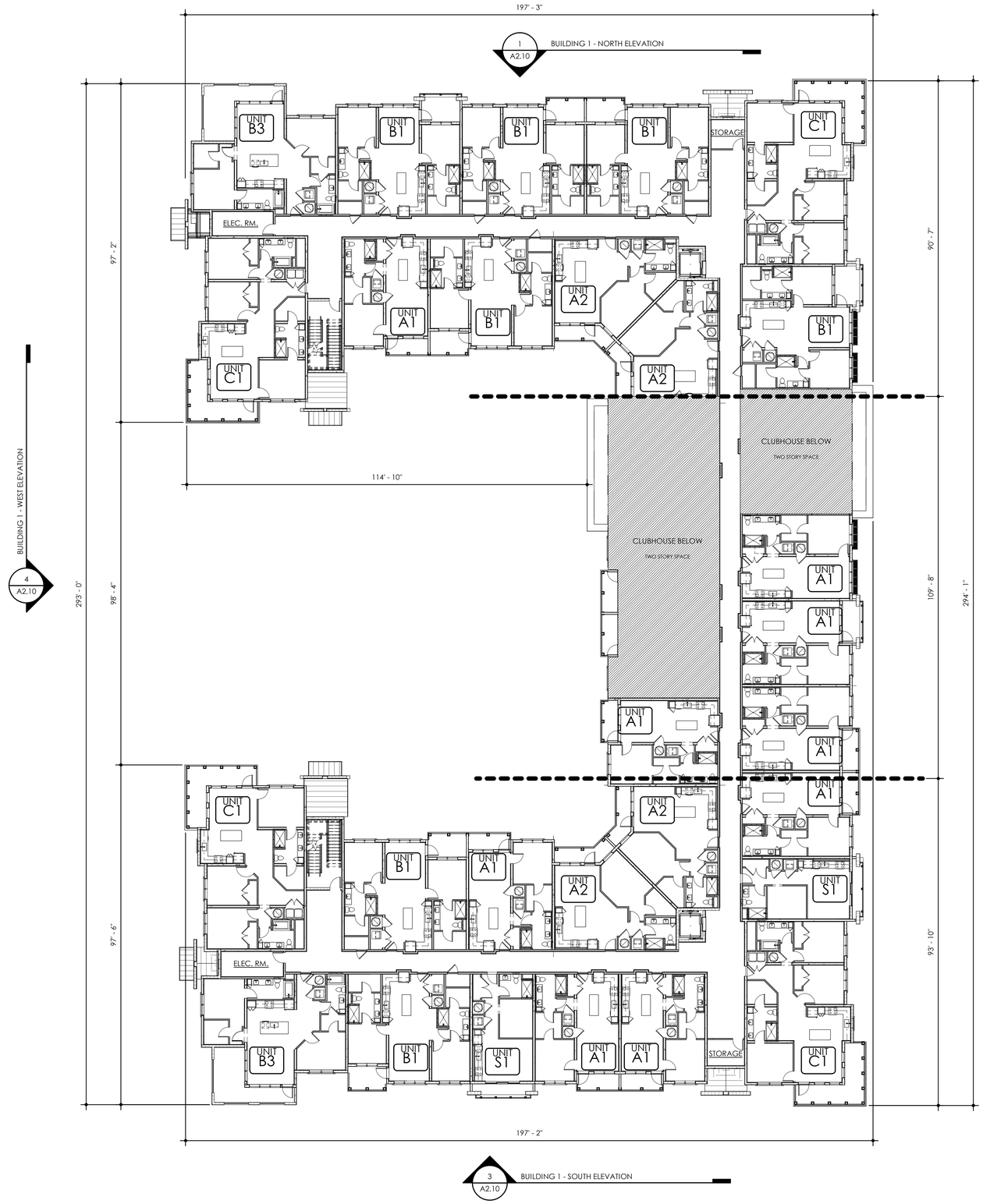

1 BLDG 1 - 2ND FLOOR

SCALE: 1/16" = 1'-0"

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BLDG 1 - 2ND FLOOR - CONTROL PLAN

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SCHEMATIC DESIGN

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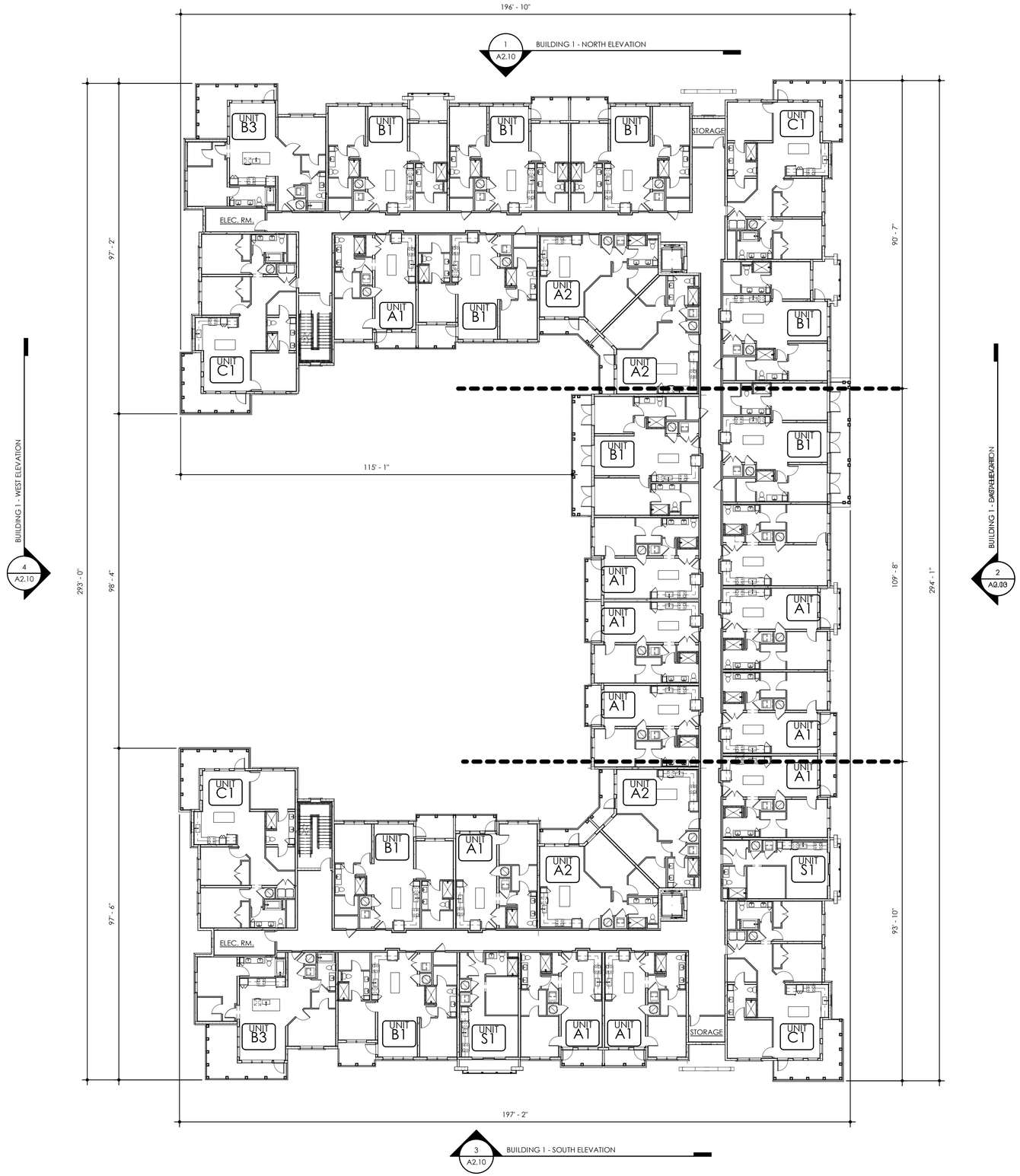

1 BLDG 1 - 3RD FLOOR

SCALE: 1/16" = 1'-0"

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BLDG 1 - 3RD FLOOR - CONTROL PLAN

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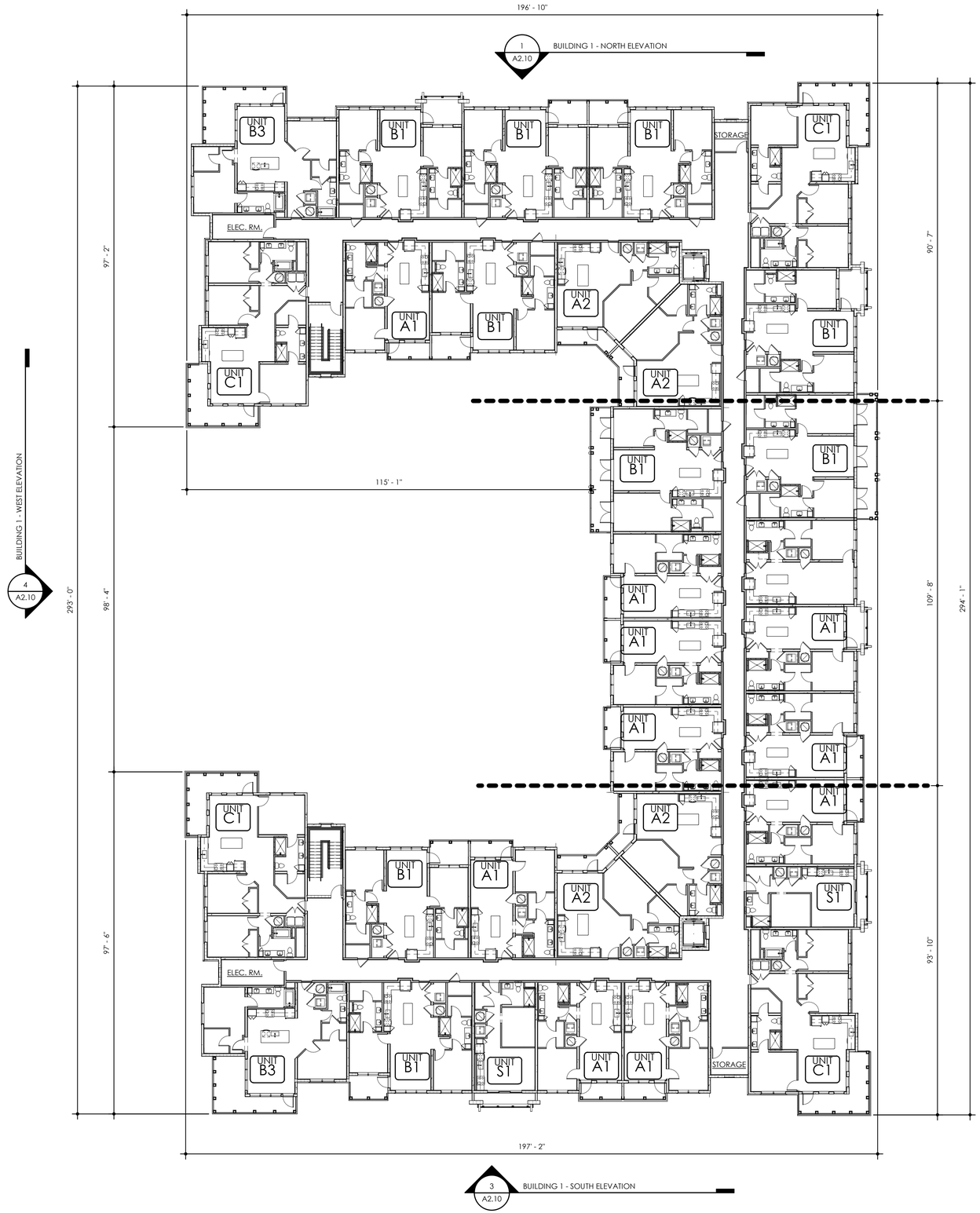

1 BLDG 1 - 4TH FLOOR

SCALE: 1/16" = 1'-0"

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BLDG 1 - 4TH FLOOR - CONTROL PLAN

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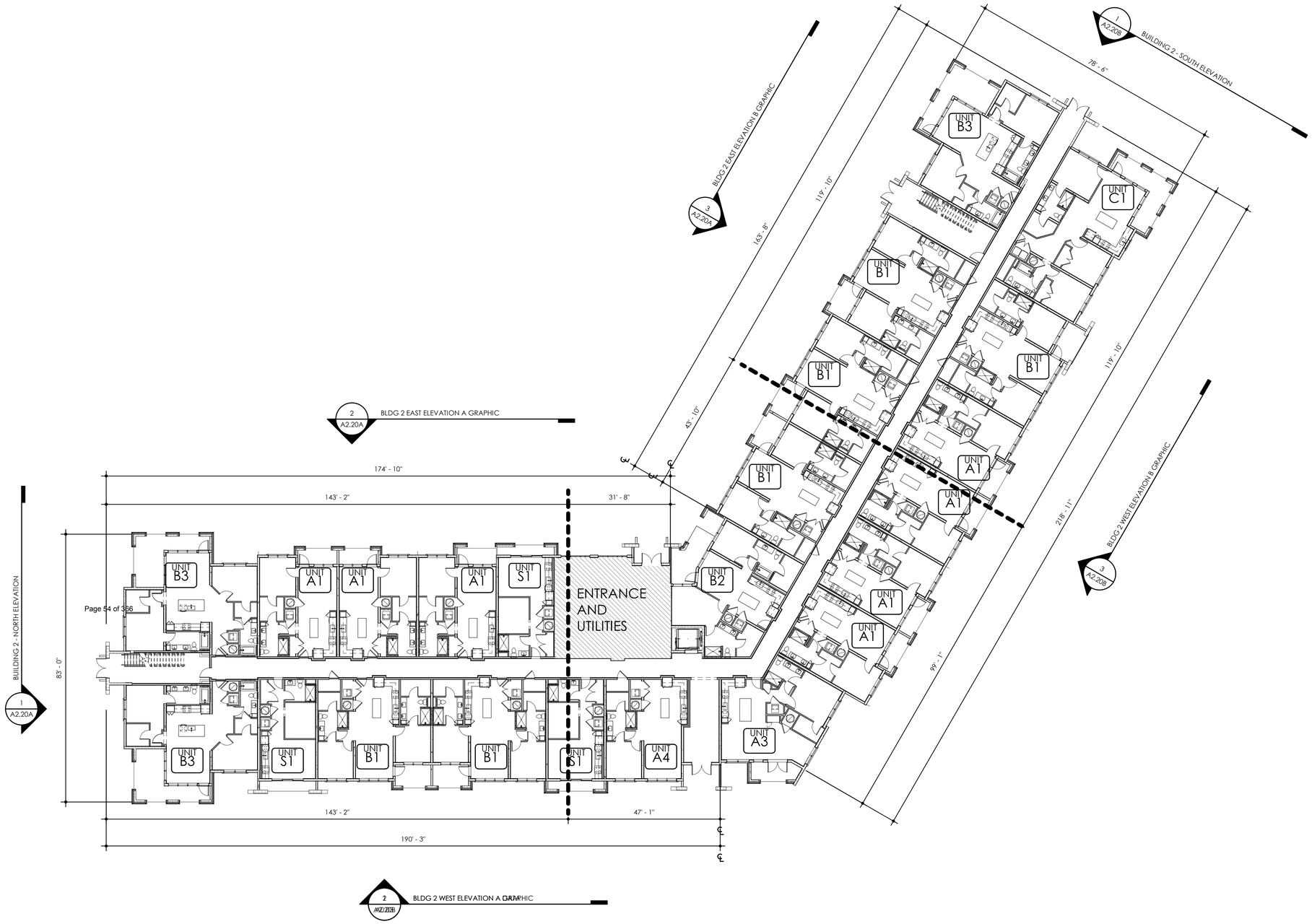

1 BLDG 2 - 1ST FLOOR

SCALE: 1/16" = 1'-0"

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BLDG 2 - 1ST FLOOR - CONTROL PLAN

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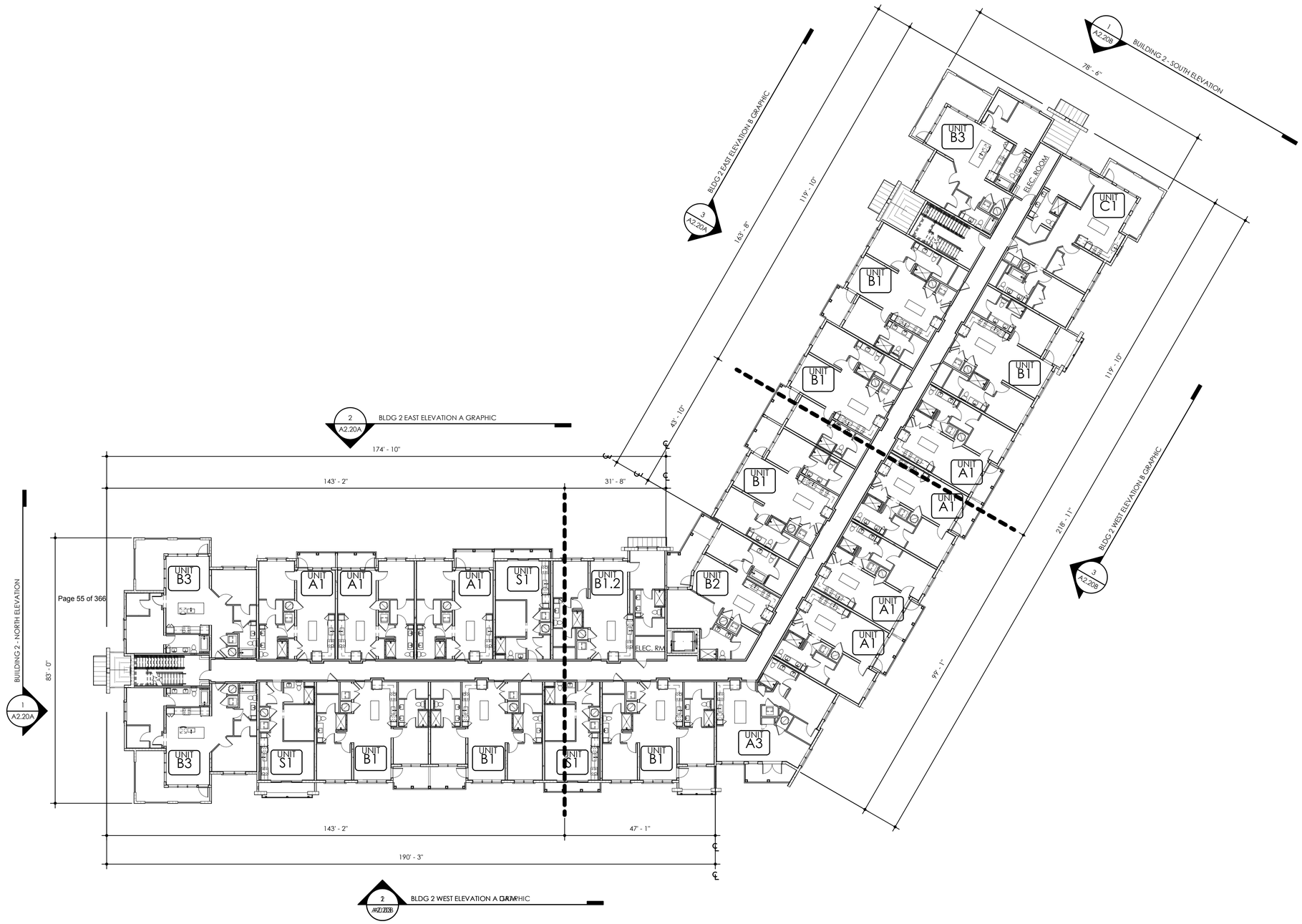

Page 55 of 366

1 BLDG 2 - 2ND FLOOR

SCALE: 1/16" = 1'-0"

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BLDG 2 - 2ND FLOOR - CONTROL PLAN

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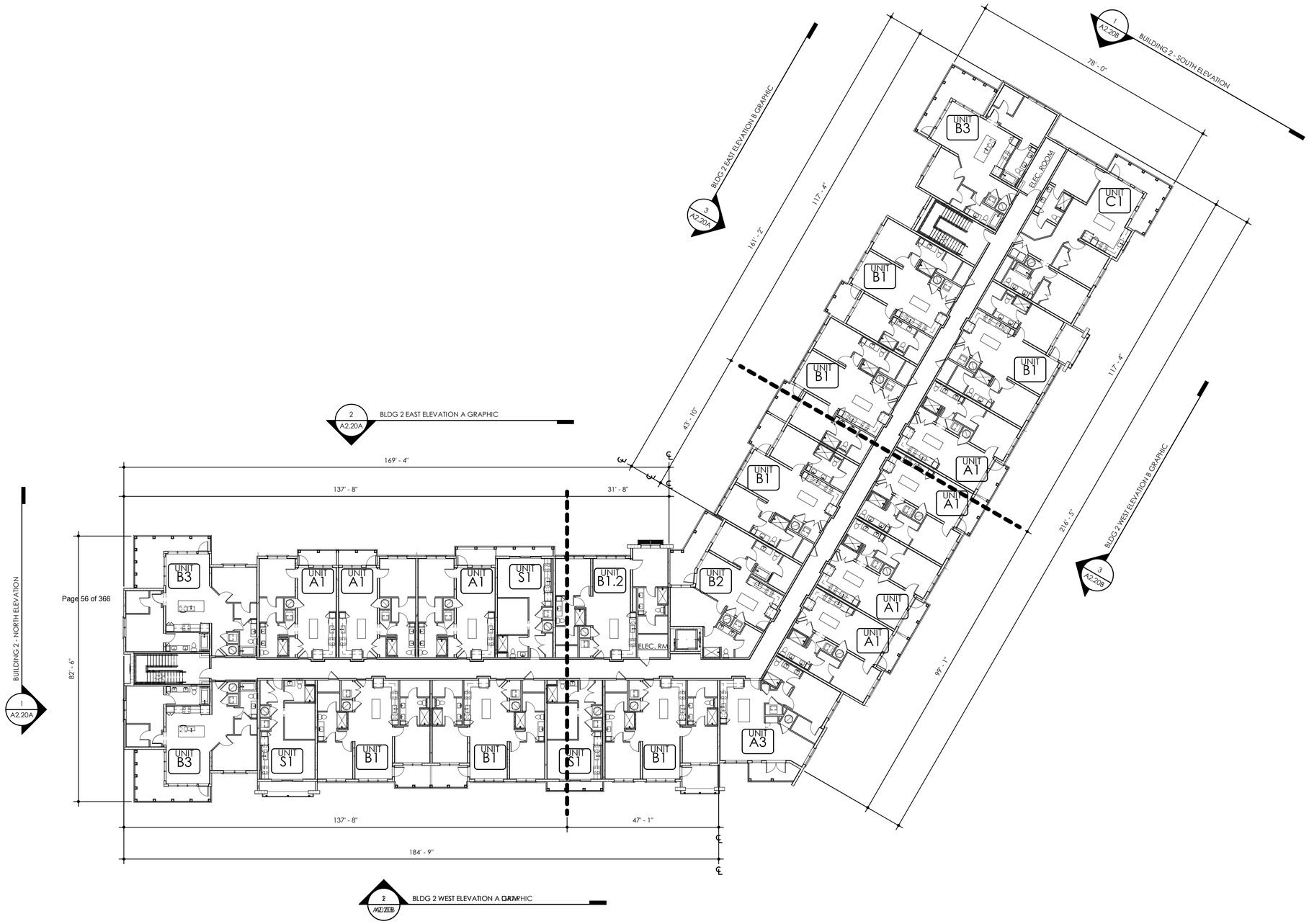

1 BLDG 2 - 3RD FLOOR

SCALE: 1/16" = 1'-0"

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BLDG 2 - 3RD FLOOR - CONTROL PLAN

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SCHEMATIC DESIGN

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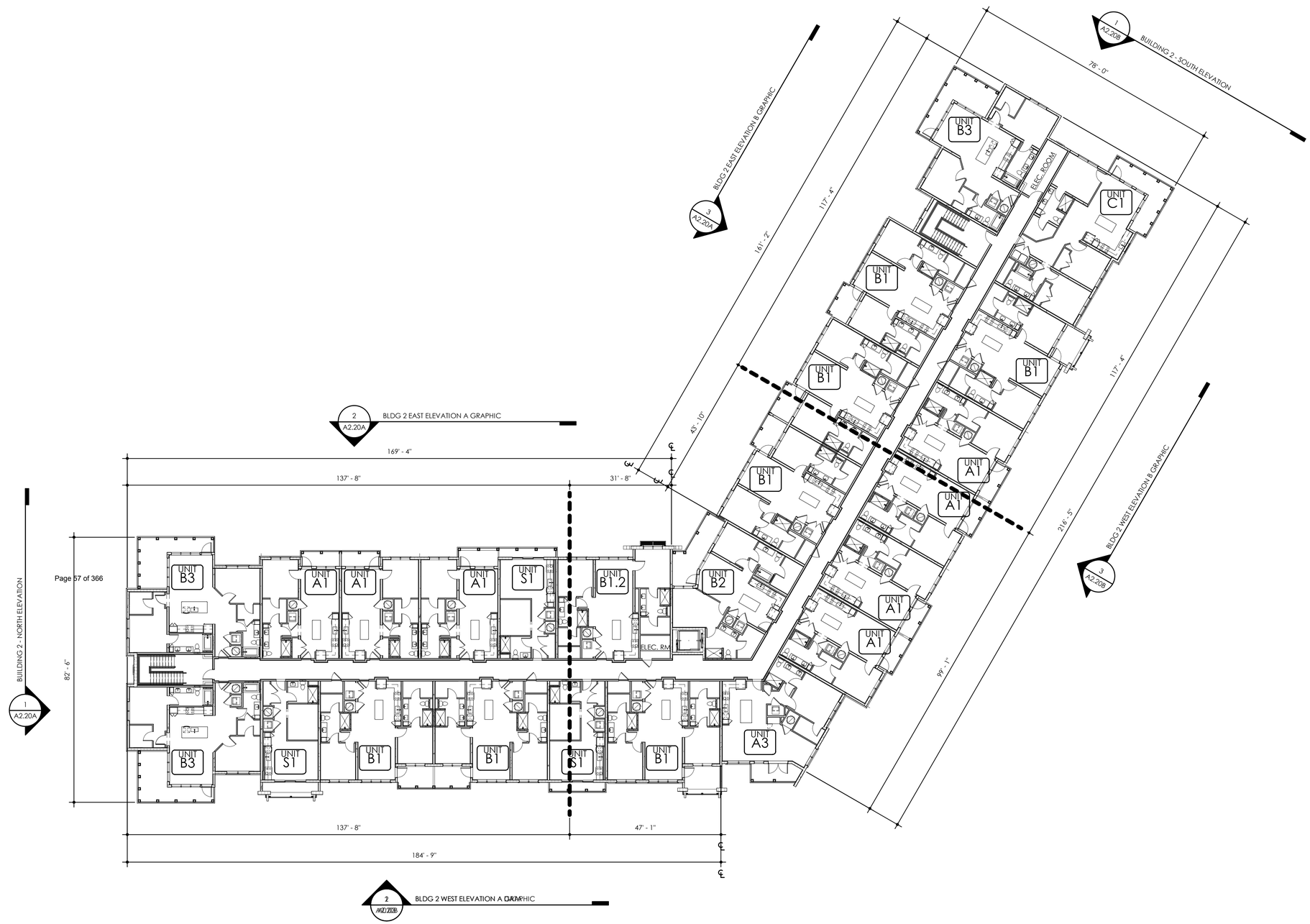

1 BLDG 2 - 4TH FLOOR

SCALE: 1/16" = 1'-0"

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BLDG 2 - 4TH FLOOR - CONTROL PLAN

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1 BUILDING 1 - NORTH ELEVATION

SCALE: 1/16" = 1'-0"

2 BUILDING 1 - EAST ELEVATION

SCALE: 1/16" = 1'-0"

3 BUILDING 1 - SOUTH ELEVATION

SCALE: 1/16" = 1'-0"

4 BUILDING 1 - WEST ELEVATION

SCALE: 1/16" = 1'-0"

ELEVATION KEY NOTES

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BUILDING TYPE 1
OVERALL
ELEVATION

date: **00-00-0000**
job no: **4243**
drawn by: **JS**
reviewed by: **CBA**
issue history:
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3 BLDG 2 EAST ELEVATION B GRAPHIC

SCALE: 1/16" = 1'-0"

2 BLDG 2 EAST ELEVATION A GRAPHIC

SCALE: 1/16" = 1'-0"

1 BUILDING 2 - NORTH ELEVATION

SCALE: 1/16" = 1'-0"

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E23	STUCCO, PAINTED
E24	SHUTTER AWNING

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BUILDING TYPE 2
OVERALL
ELEVATIONS

date: **00-00-0000**
job no: **4243**
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SCHEMATIC DESIGN

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3 BLDG 2 WEST ELEVATION B GRAPHIC

SCALE: 1/16" = 1'-0"

2 BLDG 2 WEST ELEVATION A GRAPHIC

SCALE: 1/16" = 1'-0"

1 BUILDING 2 - SOUTH ELEVATION

SCALE: 1/16" = 1'-0"

ELEVATION KEY NOTES

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E12	STOREFRONT WINDOW SYSTEM
E13	ALUMINUM STANDARD GUTTER (TYP.)
E14	ALUMINUM STANDARD DOWNSPOUT (TYP.)
E15	EXTERIOR LIGHT FIXTURE
E16	GARAGE DOOR
E17	DRYER/BATH VENTS COORDINATE WITH MEP
E18	BUILDING SIGN (BY OTHERS)
E19	STONE VENEER
E20	PRE-CAST HEADER/SILL
E21	SELECT GRADE WOOD, PAINTED
E22	PRE-CAST STONE DETAIL
E23	STUCCO, PAINTED
E24	SHUTTER AWNING

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City of Stuart, FL

Charles L. Charlan
Charlan Brock & Associates, AAC000798

BRIDGEVIEW APARTMENTS

City of Stuart, Florida

ATLANTIC RESIDENTIAL
3500 Lenox Road | Suite 1250 | Atlanta, Georgia 30326

cba
charlan • brock associates
architects • planners
1770 fennell street
maitland florida 32751-7208
407 660 8900 | f:407 875 9948
www . cbaarchitects . com

BUILDING TYPE 2
OVERALL
ELEVATIONS

date: **00-00-0000**
job no: **4243**
drawn by: **JS**
reviewed by: **CBA**
issue history:
Δ Date

SCHEMATIC DESIGN

A2.20B

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Residential PUD

Project:	Bridgeview RPUD
Date	3/9/2020

Adjacent N	County Mobile Home (Riverland)
Adjacent S	County COR (Vacant)
Adjacent E	Cleveland Clinic CPUD
Adjacent W	St Lucie River South Fork
Total Floor Space (sq.ft)	**None**

LDR Reference	Land Development Regulations	RPUD REVIEW STATUS
2.07.00 D.1	Land Use Designation	COMPLY
2.07.00 D.2 a	Uses	COMPLY
2.07.00 D.2 b	Compatible Residential Uses	COMPLY
2.07.00 D.2 c	Commercial (<30%)	NOT APPLICABLE
2.07.00.D.2.d	Commercial Uses (<30%) vertical	NOT APPLICABLE
2.07.00.D.3	Density	COMPLY
2.07.03 D.4.b	Open Space (>30%)	COMPLY
2.07.03 D.4.c	FAR	COMPLY
2.07.03.D.4.d	Native Vegetaion (>25%)	COMPLY

AREA, IMPERVIOUS SURFACE, SETBACK AND HEIGHT

2.04.03	Supplemental impervious surface	COMPLY
2.04.04	Supplemental setback requirements	COMPLY
2.04.05	Waterfront setbacks	NOT APPLICABLE
2.04.06	Certain street setbacks	NOT APPLICABLE
2.04.07	Supplemental building height	COMPLY
2.06.00	Supplemental Use standards	NOT APPLICABLE

4.04.01	Traffic Concurrency	COMPLY
4.09.00	School Concurrency	TO BE REVIEWED

RESOURCE PROTECTION

5.02.00	Environmental Assessment	COMPLY
5.03.02	Wetland Protection	EXCEPTION REQUESTED
5.04.00	Evironmentally sensitive lands	COMPLY
5.04.03	Monitoring & Maintenance	REVIEWED AT SITE PLAN
5.05.01	Tree Survey	COMPLY
5.05.02	Tree removal	COMPLY

5.06.00	Mangrove & Shoreline	NOT APPLICABLE
5.07.00	Floodplain Management	COMPLY
Comp Plan	Comprehensive Plan	COMPLY

TRANSPORTATION

6.01.04	Sidewalks/bikeways	COMPLY
6.01.05	Bike Ped (LCD)	COMPLY
6.01.06	Access	COMPLY
6.01.07	Drive-through	NOT APPLICABLE
6.01.08	Vehicular Access	COMPLY
6.01.09	Parking Code	EXCEPTION REQUESTED
6.01.18	Off-Street Loading	NOT APPLICABLE
6.01.19	PILOP	NOT APPLICABLE

STORMWATER

6.03.01	Generally	TO BE REVIEWED
6.03.04	Management	TO BE REVIEWED
6.03.08	Erosion	TO BE REVIEWED

LANDSCAPING

6.04.02	General Standards	COMPLY
6.04.02 A.1	Native Landscaping	COMPLY
6.04.06	Landscape Buffers	EXCEPTION REQUESTED
6.06.02 A.2	Shade Trees Required	COMPLY
6.06.02 A.4	Banyan, Fiscus & Rubber Trees	NOT APPLICABLE
6.06.02 A.5	Proximity to power lines	COMPLY
6.06.02 A.6	Shrubs	COMPLY
6.06.02 A.7	Hedges	COMPLY
6.06.02 A.8	Vines	NOT APPLICABLE
6.06.02 A.9	Ground cover	COMPLY
6.06.02 A.10	Grass Area	COMPLY
6.06.02 B	Irrigation	REVIEWED AT SITE PLAN

LANDSCAPE DESIGN

6.04.03 A	Utility Lines (Existing and Proposed)	COMPLY
6.04.03 B.1	Landscaped Area >20%	COMPLY
6.04.03 B.2	Interior landscaping >50%	COMPLY
6.04.03 B.3	location of impervious	COMPLY
6.04.03 B.4	Mulch	COMPLY
6.04.03 B.5	Shoreline protection	NOT APPLICABLE

6.04.03 B.8	Visibility triangles	COMPLY
6.04.06	Land Use Transitions	COMPLY

LANDSCAPING - PARKING AREAS

6.04.07 A.1	Landscaped strip adjacent to street	COMPLY
6.04.07 A.2	Landscaped strip length linear feet	COMPLY
6.04.07 A.2a	Parking area adjacent to street	COMPLY
6.04.07 A.2b	Hedge/wall/berm on outside of strip	COMPLY
6.04.07 A.2c	Other Landscaping	COMPLY
6.06.07 A.2d	Grass	COMPLY
6.04.07 A.3	Shrubs/ground cover	COMPLY
6.04.07 B	parking screened from private propery	NOT APPLICABLE
6.04.07 B.1	Landscaped strip adjacent to private property	NOT APPLICABLE
6.04.07 B.2a	Parking area adjacent to private property	NOT APPLICABLE
6.04.07 B.2b	Hedge/wall/berm on outside of strip	NOT APPLICABLE
6.04.07 B.2c	Other Landscaping	NOT APPLICABLE
6.04.07 B.2d	Grass	NOT APPLICABLE
6.04.07 B.3	Shrubs/ground cover	NOT APPLICABLE
6.04.07 C.1	Parking Area (Major Dev't only)	COMPLY
6.04.07 C.2	Parking area rear and sides of building	COMPLY
6.04.07 C.3	Interior trees	COMPLY
6.04.07 C.4	Vechicle encroachment	COMPLY
6.04.07 C.5	Interior landscaped islands	COMPLY
6.04.07 C.6	Terminal landscaped islands	COMPLY
6.04.07 C.7	Interior landscaped medians	COMPLY
6.04.07 C.8	Interior shade trees	COMPLY
6.04.07 D	Visability triangles	COMPLY
6.04.08	Tree Requirements	COMPLY
6.04.10	Loading Storage	NOT APPLICABLE

COMMERCIAL DEVELOPMENT STANDARDS

6.05.02 B	Building Location	NOT APPLICABLE
6.05.02 C	Building Orientation	NOT APPLICABLE
6.05.02 D	Façade Design	NOT APPLICABLE
6.05.02 E	Massing	NOT APPLICABLE
6.05.02 F	Other Features	NOT APPLICABLE
6.05.02 G	Transitional Elevations	NOT APPLICABLE
6.05.03 B	Blank Wall Area	NOT APPLICABLE
6.05.03 C	Repeating Façade	NOT APPLICABLE

6.05.04	Additional Façade	NOT APPLICABLE
6.05.05	Roof Treatments	NOT APPLICABLE
6.05.06	Entryways and customer entrance	NOT APPLICABLE
6.05.07	Materials and Color	NOT APPLICABLE
6.06.00	Green Development	NOT APPLICABLE
6.07.00	Lighting	NOT APPLICABLE
6.08.00	Dumpster & Recycling	NOT APPLICABLE
6.09.05	Fences	NOT APPLICABLE
6.11.00	Signs	TO BE REVIEWED

FUTURE LAND USE AMENDMENT

Bridgeview
City of Stuart, FL

Prepared for:
Atlantic Realty Acquisitions, LLC.
3500 Lenox Road, Suite 1250
Atlanta, GA 30326

Prepared by:

MacKenzie
Engineering & Planning, Inc.
1172 SW 30th Street, Suite 500
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Shaun G. MacKenzie LICENSE No. 61751 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SHAUN G. MACKENZIE, P.E. ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.
MACKENZIE ENGINEERING AND PLANNING, INC.
1172 SW 30TH STREET, SUITE 500
PALM CITY, FL 34990
CERTIFICATE OF AUTHORIZATION: 29013
SHAUN G. MACKENZIE, P.E. NO. 61751

Digitally signed by Shaun G MacKenzie
Date: 2020.01.15 14:04:29 -05'00'

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January 2020
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CA 29013

Shaun G. MacKenzie P.E.
PE Number 61751

MacKenzie
Engineering & Planning, Inc.

EXECUTIVE SUMMARY

MacKenzie Engineering and Planning, Inc. (MEP) was retained to evaluate the changes in the Future Land Use and Rezoning for the property located at the northwest corner of Indian Street and Kanner Hwy (SR 76), Stuart, FL (PCN: 40-38-41-00-10-510-0002). The applicant proposes to change the future land use from Commercial, Office, Residential to Multi-Family Residential.

Future Land Use and Rezoning – Net Increase in External Trips

The future land use and rezoning amendment trip generation resulting change is 208 daily, -37 AM peak hour (-75 in/38 out), and -11 PM peak hour (40 in/-51 out).

The transportation impacts of the change are de minimis.

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Institute of Traffic Engineers' (ITE) report, *Trip Generation (10th Edition)*
Future Land Use Map
Property ID

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INTRODUCTION

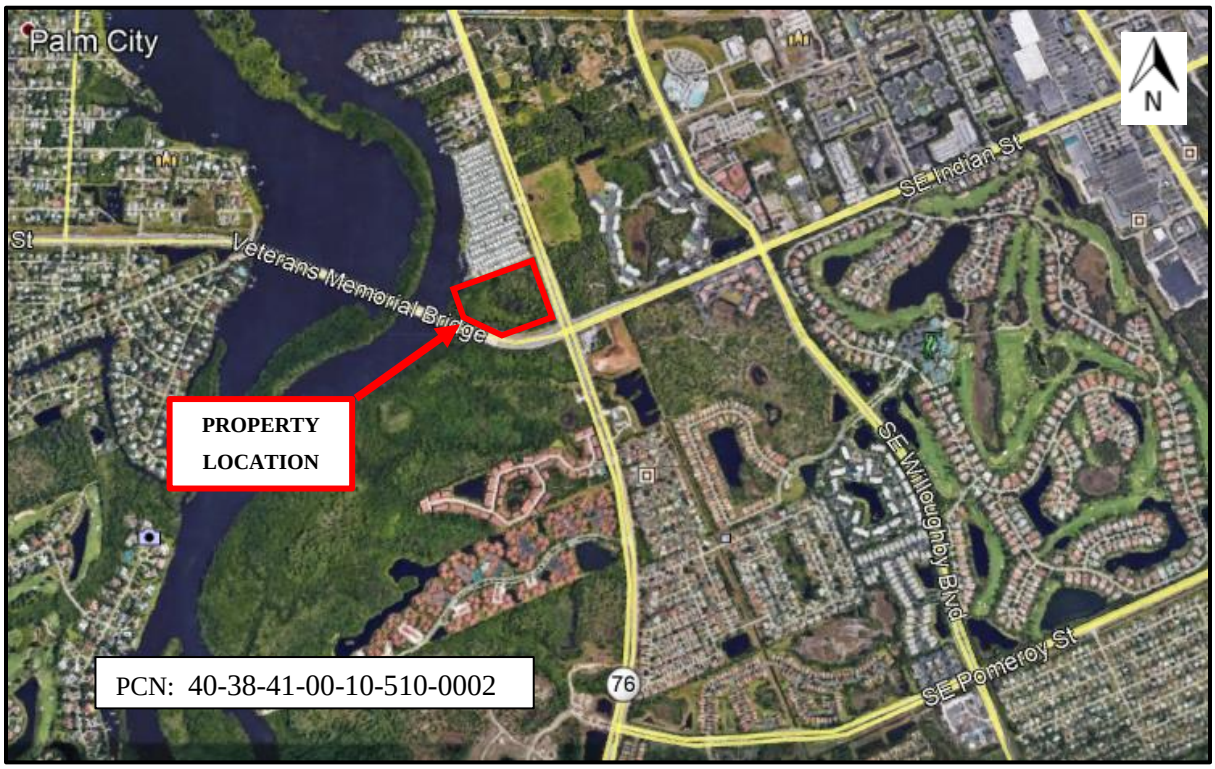
A future land use amendment is proposed on 15.88 acres located on the northwest corner of SE Indian Street and Kanner Hwy (SR 76), Martin County, FL (PCN: 40-38-41-00-10-510-0002). The amendment proposes to change the future land use (FLU) from Commercial, Office, Residential (COR) (Martin County) to Multi-Family Residential (MFR). The property details and proposed changes are shown below in Table 1. Figure 1 illustrates the property location.

Table 1. Proposed Land Use Change

Parcel ID	Existing Land Use	Proposed Land Use
40-38-41-00-10-510-0002	Commercial, Office, Residential	Multi-Family Residential

The FLU amendment traffic analysis will examine the impacts of changing future land use. The proceeding analysis will examine the ability of the existing roadway network to accommodate the increased demand and the future roadway network to accommodate the increased demand.

Figure 1. Property Location Map



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CURRENT DATA

The information contained below was used to develop the foregoing future land use traffic analysis.

- *Trip Generation, 10th Edition* (ITE report)
- Comprehensive Plan

FUTURE LAND USE CHANGE ANALYSIS

TRIP GENERATION

The study used trip generation rates and equations from the Institute of Transportation Engineers (ITE)'s report, *Trip Generation (10th Edition)* for:

- Multi-Family Housing Mid-Rise (ITE Code 221)
- General Office Building (ITE Code 710)

Existing Future Land Use (Commercial, Office, Residential)

- 99,000 SF General Office Building (ITE Code 710)

The existing future land use generates the following net new external trips:

- 946 daily, 108 AM peak hour (93 in/15 out), and 102 PM peak hour (16 in/86 out)

The existing future land use generates the following cumulative driveway trips:

- 1,051 daily, 120 AM peak hour (103 in/17 out), and 113 PM peak hour (18 in/95 out)

Proposed Future Land Use (Multi-Family Residential)

- 212 dwelling units Mid-Rise Multi-Family (ITE Code 221)

The existing future land use generates the following net new external trips and cumulative driveway trips:

- 1,154 daily, 71 AM peak hour (18 in/53 out), and 91 PM peak hour (56 in/35 out)

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Net Impact

The difference between the trip generation potential of the existing future land use and the proposed future land use was examined to determine estimated impact to the existing and future roadway network. Table 2 displays the resulting trip generation.

The proposed development will generate the following net new external trips:

- 208 daily, -37 AM peak hour (-75 in/38 out), and -11 PM peak hour (40 in/-51 out)

The proposed development will generate the following net change driveway trips:

- 103 daily, -49 AM peak hour (-85 in/36 out), and -22 PM peak hour (38 in/-60 out)

The net impact of the change is less than 0 peak hour trips as a result of the future land use amendment from COR to MFR. Adequate transportation capacity is available to serve the property.

Table 2. Future Land Use Trip Generation

Land Use	Intensity		Daily Trips	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out
Existing FLU Traffic									
General Office Building	99.000	1000 SF	1051	120	103	17	113	18	95
Pass-By Traffic									
General Office Building	10.0%		105	12	10	2	11	2	9
	NET EXISTING TRIPS		***946***	***108***	***93***	***15***	***102***	***16***	***86***
	Total Existing Driveway Volumes		***1051***	***120***	***103***	***17***	***113***	***18***	***95***
Proposed FLU Traffic									
Multifamily Housing(Mid-Rise)	212	DU	1,154	71	18	53	91	56	35
NET CHANGE IN TRIPS (FOR THE PURPOSES OF CONCURRENCY)			**208**	**-37**	**-75**	**38**	**-11**	**40**	**-51**
NET CHANGE IN DRIVEWAY VOLUMES			**103**	**-49**	**-85**	**36**	**-22**	**38**	**-60**

Note: Trip generation was calculated using the following data:

Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour in/out	AM Peak Hour Rate	PM Peak Hour in/out	PM Peak Hour Equation
Multifamily Housing(Mid-Rise)	221	DU	T = 5.45 (X) + -1.75	0%	26/74	Ln(T) = 0.98 Ln(X) + -0.98	61/39	Ln(T) = 0.96 Ln(X) + -0.63
General Office Building	710	1000 SF	Ln(T) = 0.97 Ln(X) + 2.5	10%	86/14	T = 0.94 (X) + 26.49	16/84	Ln(T) = 0.95 Ln(X) + 0.36

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REZONING ANALYSIS

The net change was examined to determine the estimated impact to the roadway network. Table 3 displays the rezoning resulting trip generation. The resulting change is 208 daily, -37 AM peak hour (-75 in/38 out), and -11 PM peak hour (40 in/-51 out) trips.

The zoning amendment trip generation results in a decrease to AM peak hour and PM peak hour trips.

Table 3. Rezoning Trip Generation

Land Use	Intensity		Daily Trips	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out
Existing Zoning Traffic									
General Office Building	99.000	1000 SF	1051	120	103	17	113	18	95
Pass-By Traffic									
General Office Building	10.0%		105	12	10	2	11	2	9
	NET EXISTING TRIPS		***946***	***108***	***93***	***15***	***102***	***16***	***86***
	Total Existing Driveway Volumes		***1051***	***120***	***103***	***17***	***113***	***18***	***95***
Proposed Zoning Traffic									
Multifamily Housing(Mid-Rise)	212	DU	1,154	71	18	53	91	56	35
NET CHANGE IN TRIPS (FOR THE PURPOSES OF CONCURRENCY)			**208**	**-37**	**-75**	**38**	**-11**	**40**	**-51**
NET CHANGE IN DRIVEWAY VOLUMES			**103**	**-49**	**-85**	**36**	**-22**	**38**	**-60**

Note: Trip generation was calculated using the following data:

Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour in/out	AM Peak Hour Rate	PM Peak Hour in/out	PM Peak Hour Equation
Multifamily Housing(Mid-Rise)	221	DU	T = 5.45 (X) + -1.75	0%	26/74	Ln(T) = 0.98 Ln(X) + -0.98	61/39	Ln(T) = 0.96 Ln(X) + -0.63
General Office Building	710	1000 SF	Ln(T) = 0.97 Ln(X) + 2.5	10%	86/14	T = 0.94 (X) + 26.49	16/84	Ln(T) = 0.95 Ln(X) + 0.36

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ANALYSIS

The future land use and rezoning changes are projected to result in a change of 208 daily, -37 AM peak hour (-75 in/38 out), and -11 PM peak hour (40 in/-51 out) trips. No further peak hour analysis is necessary because the change will result in a decrease in trips. The daily trips are projected to increase by 208 and the daily capacity of Kanner Highway is 59,900 trips per day. Conservatively, the maximum impact of the project is less than one percent (0.3 percent). Therefore the impact of the change is de minimis.

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CONCLUSION

MacKenzie Engineering and Planning, Inc. (MEP) was retained to evaluate the changes in the Future Land Use and Rezoning for the property located at the northwest corner of Indian Street and Kanner Hwy (SR 76), Stuart, FL (PCN: 40-38-41-00-10-510-0002). The applicant proposes to change the future land use from Commercial, Office, Residential to Multi-Family Residential.

Future Land Use and Rezoning – Net Increase in External Trips

The future land use and rezoning amendment trip generation resulting change is 208 daily, -37 AM peak hour (-75 in/38 out), and -11 PM peak hour (40 in/-51 out).

The transportation impacts of the change are de minimis.

APPENDICES

Land Use: 710
General Office Building

Description

A general office building houses multiple tenants; it is a location where affairs of businesses, commercial or industrial organizations, or professional persons or firms are conducted. An office building or buildings may contain a mixture of tenants including professional services, insurance companies, investment brokers, and tenant services, such as a bank or savings and loan institution, a restaurant, or cafeteria and service retail facilities. A general office building with a gross floor area of 5,000 square feet or less is classified as a small office building (Land Use 712). Corporate headquarters building (Land Use 714), single tenant office building (Land Use 715), office park (Land Use 750), research and development center (Land Use 760), and business park (Land Use 770) are additional related uses.

If information is known about individual buildings, it is suggested that the general office building category be used rather than office parks when estimating trip generation for one or more office buildings in a single development. The office park category is more general and should be used when a breakdown of individual or different uses is not known. If the general office building category is used and if additional buildings, such as banks, restaurants, or retail stores are included in the development, the development should be treated as a multiuse project. On the other hand, if the office park category is used, internal trips are already reflected in the data and do not need to be considered.

When the buildings are interrelated (defined by shared parking facilities or the ability to easily walk between buildings) or house one tenant, it is suggested that the total area or employment of all the buildings be used for calculating the trip generation. When the individual buildings are isolated and not related to one another, it is suggested that trip generation be calculated for each building separately and then summed.

Additional Data

The average building occupancy varied considerably within the studies for which occupancy data were provided. The reported occupied gross floor area was 88 for general urban/suburban sites and 96 percent for the center city core and dense multi-use urban sites.

Time-of-day distribution data for this land use for a weekday, Saturday, and Sunday are presented in Appendix A. For the 16 general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:30 and 8:30 a.m. and 4:30 and 5:30 p.m., respectively.

For the three general urban/suburban sites with person trip data, the overall highest volumes during the AM and PM on a weekday were counted between 8:45 and 9:45 a.m. and 12:45 and 1:45 p.m., respectively. For the three dense multi-use urban sites with person trip data, the overall highest volumes during the AM and PM on a weekday were counted between 8:30 and 9:30 a.m. and 4:45 and 5:45 p.m., respectively. For the four center city core sites with person trip data, the overall highest volumes during the AM and PM on a weekday were counted between 9:00 and 10:00 a.m. and 12:45 and 1:45 p.m., respectively.

The average numbers of person trips per vehicle trip at the eight center city core sites at which both person trip and vehicle trip data were collected were as follows:

- 2.76 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 2.90 during Weekday, AM Peak Hour of Generator
- 2.91 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 3.02 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 18 dense multi-use urban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.47 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.47 during Weekday, AM Peak Hour of Generator
- 1.46 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.53 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 23 general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.30 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.34 during Weekday, AM Peak Hour of Generator
- 1.32 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 1.41 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), California, Colorado, Connecticut, Georgia, Illinois, Indiana, Kansas, Kentucky, Maine, Maryland, Michigan, Minnesota, Missouri, Montana, New Hampshire, New Jersey, New York, Pennsylvania, Texas, Utah, Virginia, and Washington.

Source Numbers

161, 175, 183, 184, 185, 207, 212, 217, 247, 253, 257, 260, 262, 273, 279, 297, 298, 300, 301, 302, 303, 304, 321, 322, 323, 324, 327, 404, 407, 408, 418, 419, 423, 562, 734, 850, 859, 862, 867, 869, 883, 884, 890, 891, 904, 940, 944, 946, 964, 965, 972

General Office Building
(710)

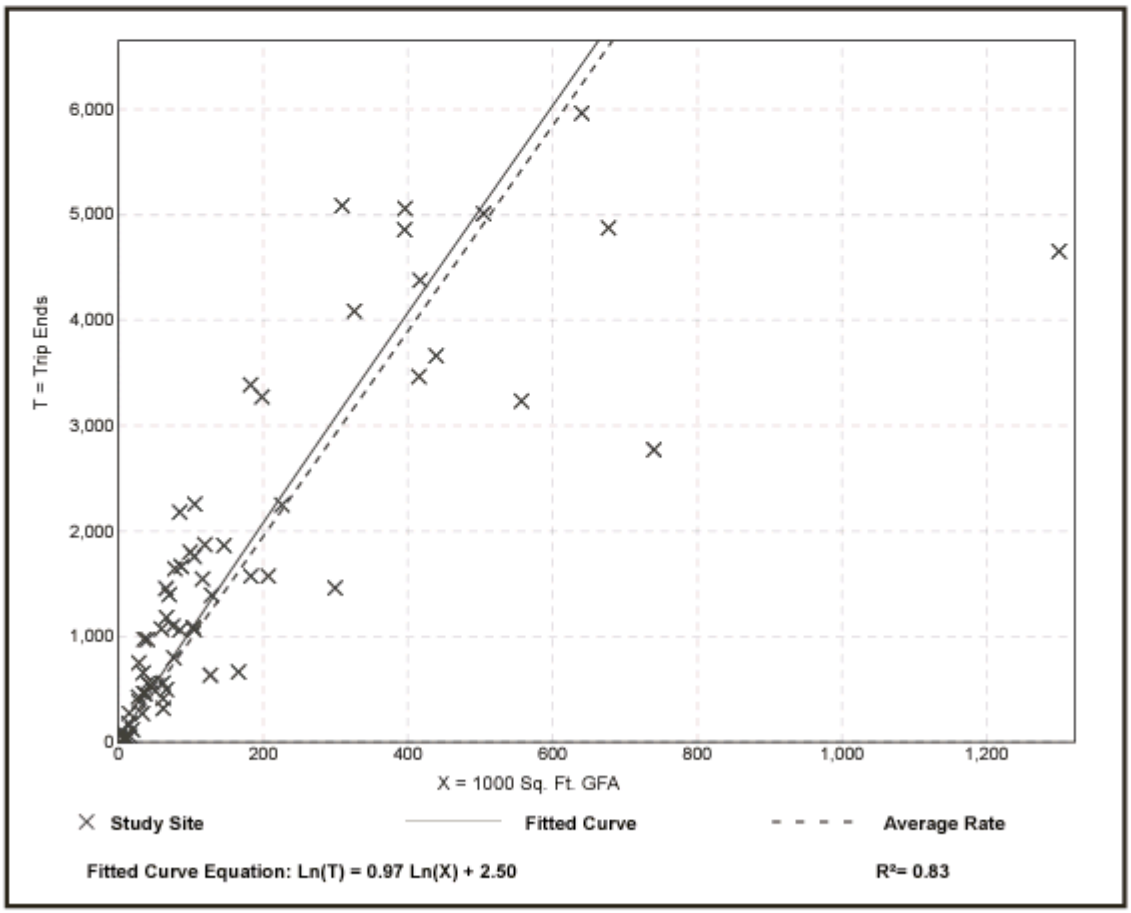
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 66
1000 Sq. Ft. GFA: 171
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
9.74	2.71 - 27.56	5.15

Data Plot and Equation



General Office Building
(710)

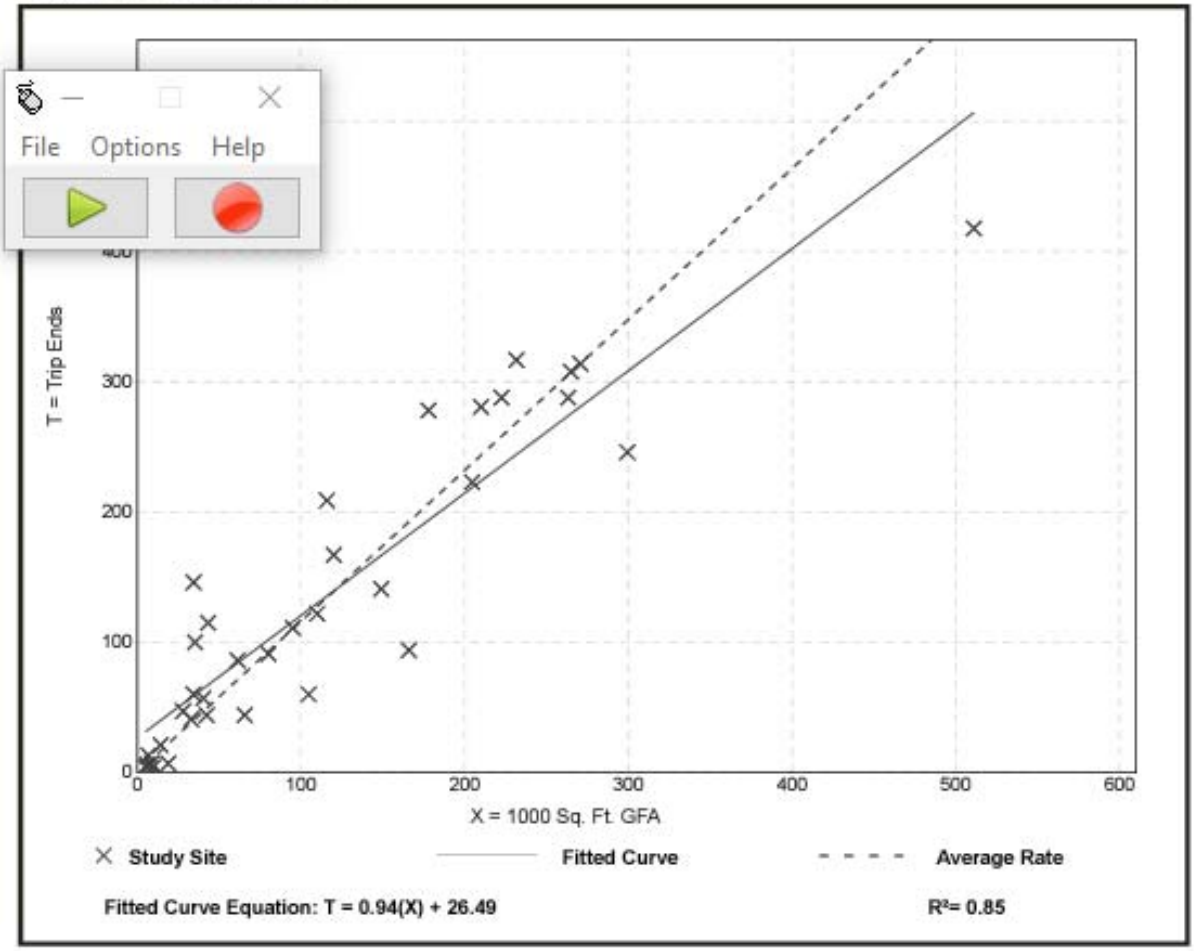
Adobe Digital Editio

Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 35
1000 Sq. Ft. GFA: 117
Directional Distribution: 86% entering, 14% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.16	0.37 - 4.23	0.47

Data Plot and Equation



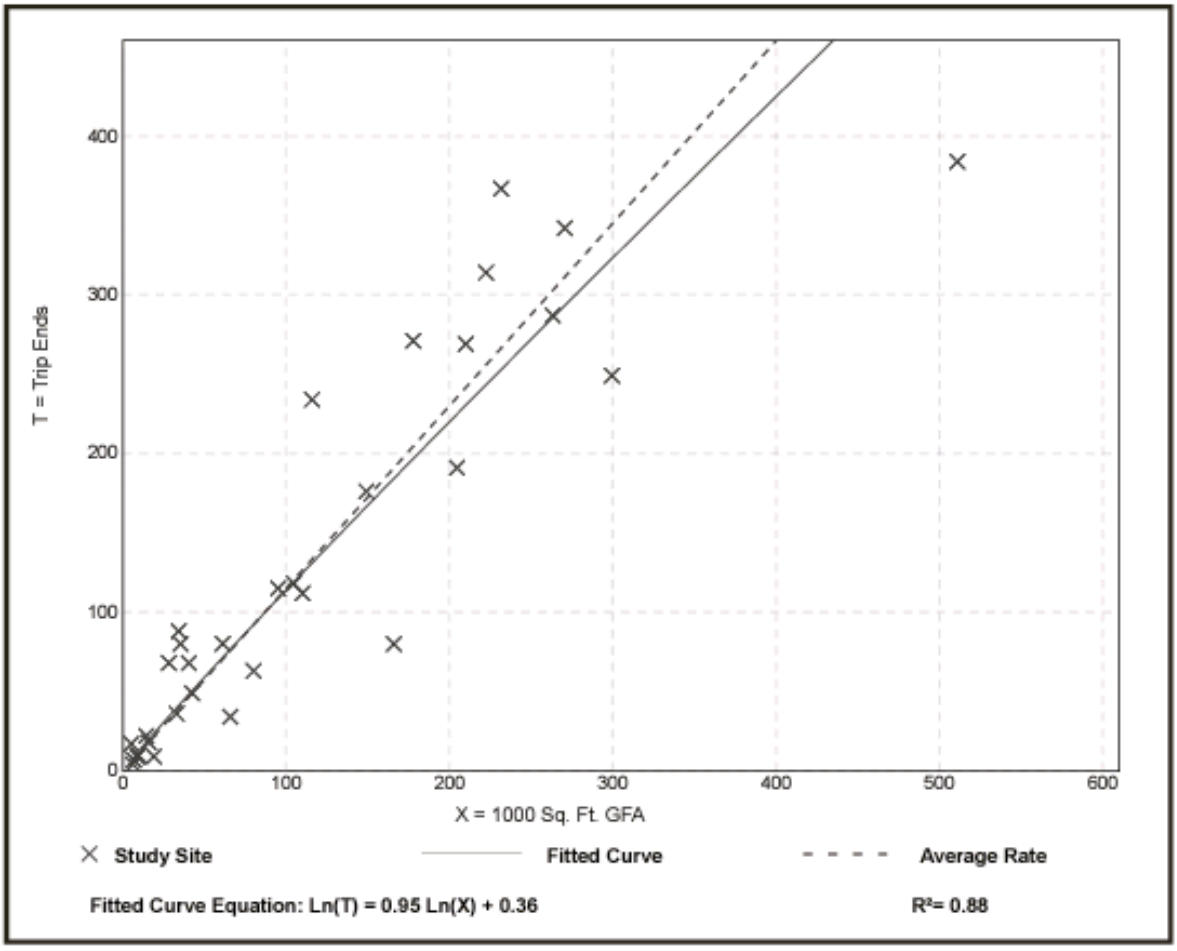
General Office Building
(710)

Vehicle Trip Ends vs:	**1000 Sq. Ft. GFA**
On a:	**Weekday,** **Peak Hour of Adjacent Street Traffic,** **One Hour Between 4 and 6 p.m.**
Setting/Location:	**General Urban/Suburban**
Number of Studies:	32
1000 Sq. Ft. GFA:	114
Directional Distribution:	16% entering, 84% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
1.15	0.47 - 3.23	0.42

Data Plot and Equation



Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have between three and 10 levels (floors). Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (Land Use 225), and mid-rise residential with 1st-floor commercial (Land Use 231) are related land uses.

Additional Data

In prior editions of *Trip Generation Manual*, the mid-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.46 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 95.7 percent of the total dwelling units were occupied.

Time-of-day distribution data for this land use are presented in Appendix A. For the eight general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:00 and 8:00 a.m. and 4:45 and 5:45 p.m., respectively.

For the four dense multi-use urban sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:15 and 5:15 p.m., respectively. For the three center city core sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 6:45 and 7:45 a.m. and 5:00 and 6:00 p.m., respectively.

For the six sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.46 residents per occupied dwelling unit.

For the five sites for which data were provided for both occupied dwelling units and total dwelling units, an average of 95.7 percent of the units were occupied.

The average numbers of person trips per vehicle trip at the five center city core sites at which both person trip and vehicle trip data were collected were as follows:

- 1.84 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.94 during Weekday, AM Peak Hour of Generator
- 2.07 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.59 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 32 dense multi-use urban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.90 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.90 during Weekday, AM Peak Hour of Generator
- 2.00 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.08 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 13 general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.56 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.88 during Weekday, AM Peak Hour of Generator
- 1.70 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.07 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), British Columbia (CAN), California, Delaware, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ontario, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Virginia, and Wisconsin.

Source Numbers

168, 188, 204, 305, 306, 321, 357, 390, 436, 525, 530, 579, 638, 818, 857, 866, 901, 904, 910, 912, 918, 934, 936, 939, 944, 947, 948, 949, 959, 963, 964, 966, 967, 969, 970

Multifamily Housing (Mid-Rise)
(221)

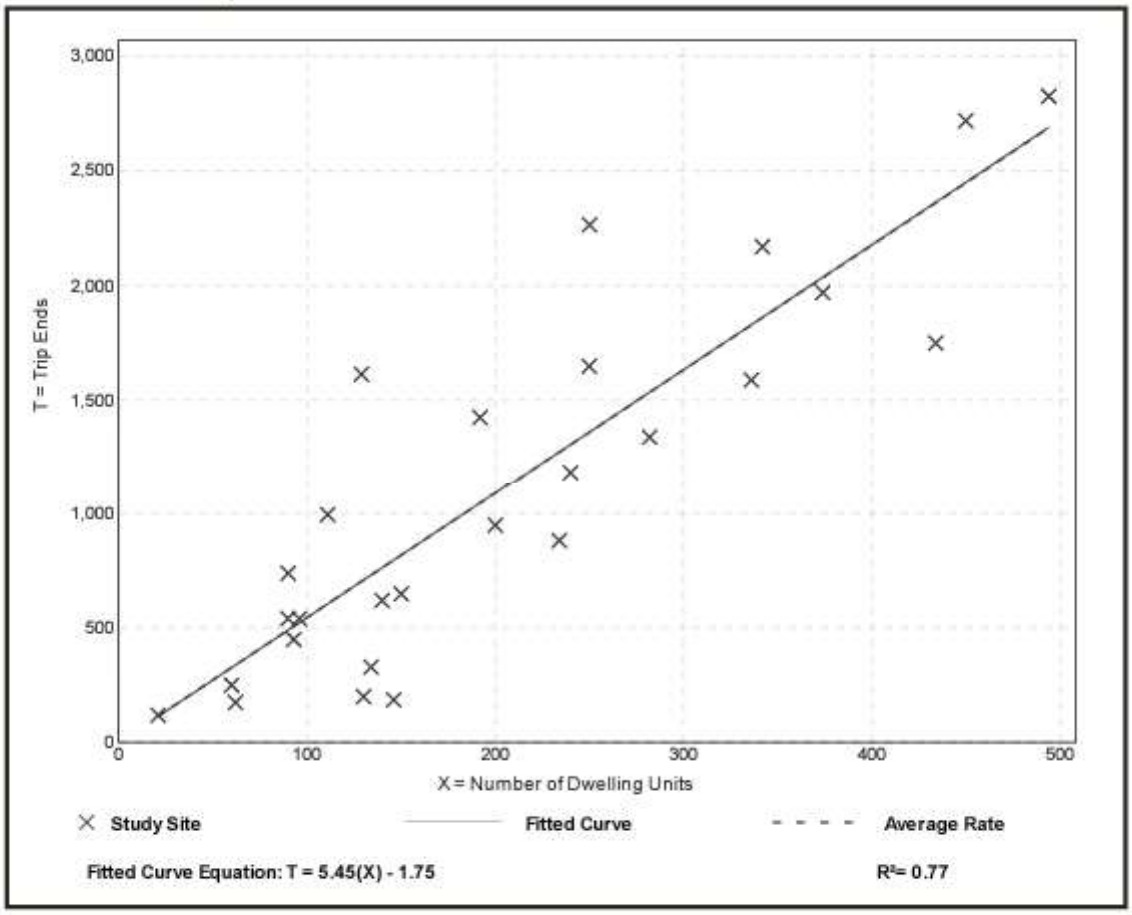
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. Num. of Dwelling Units: 205
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
5.44	1.27 - 12.50	2.03

Data Plot and Equation



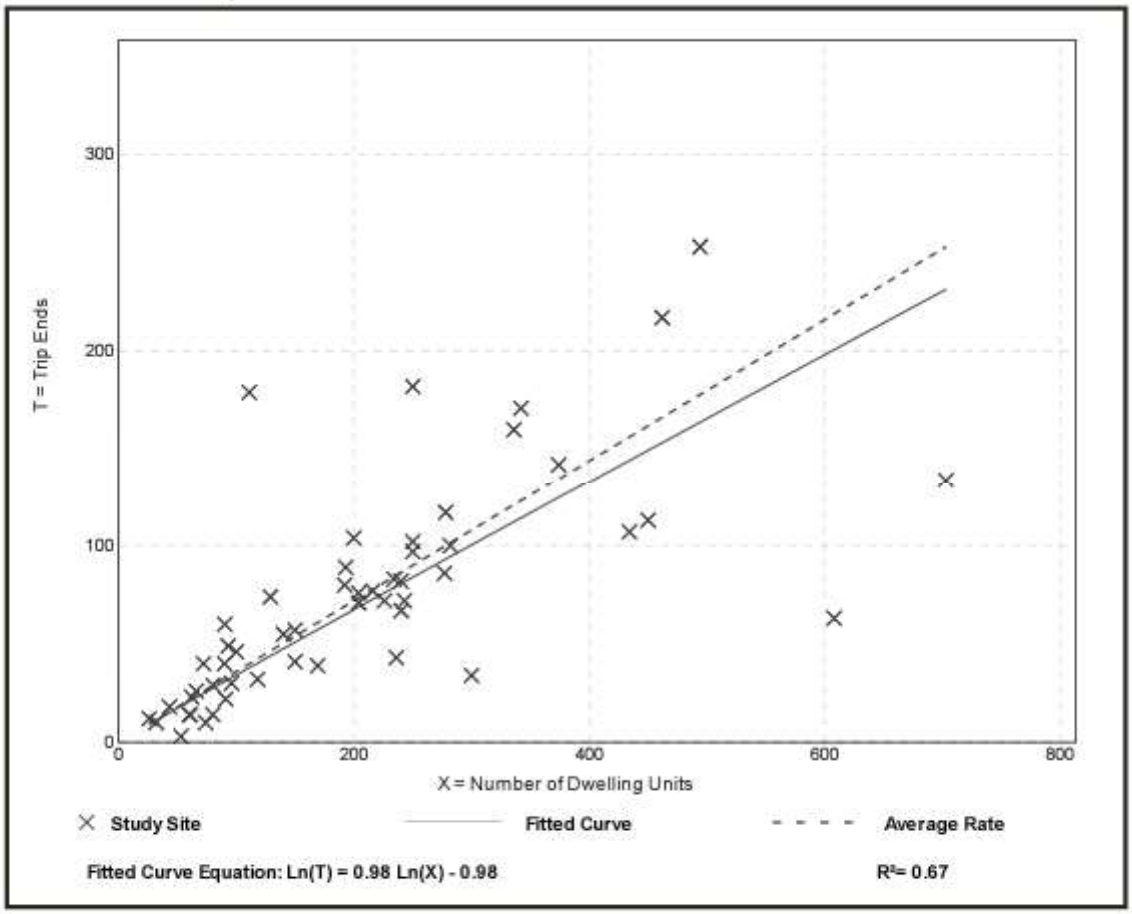
Multifamily Housing (Mid-Rise)
(221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 53
Avg. Num. of Dwelling Units: 207
Directional Distribution: 26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.06 - 1.61	0.19

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.98 Ln(X) - 0.98 **R^2= 0.67**

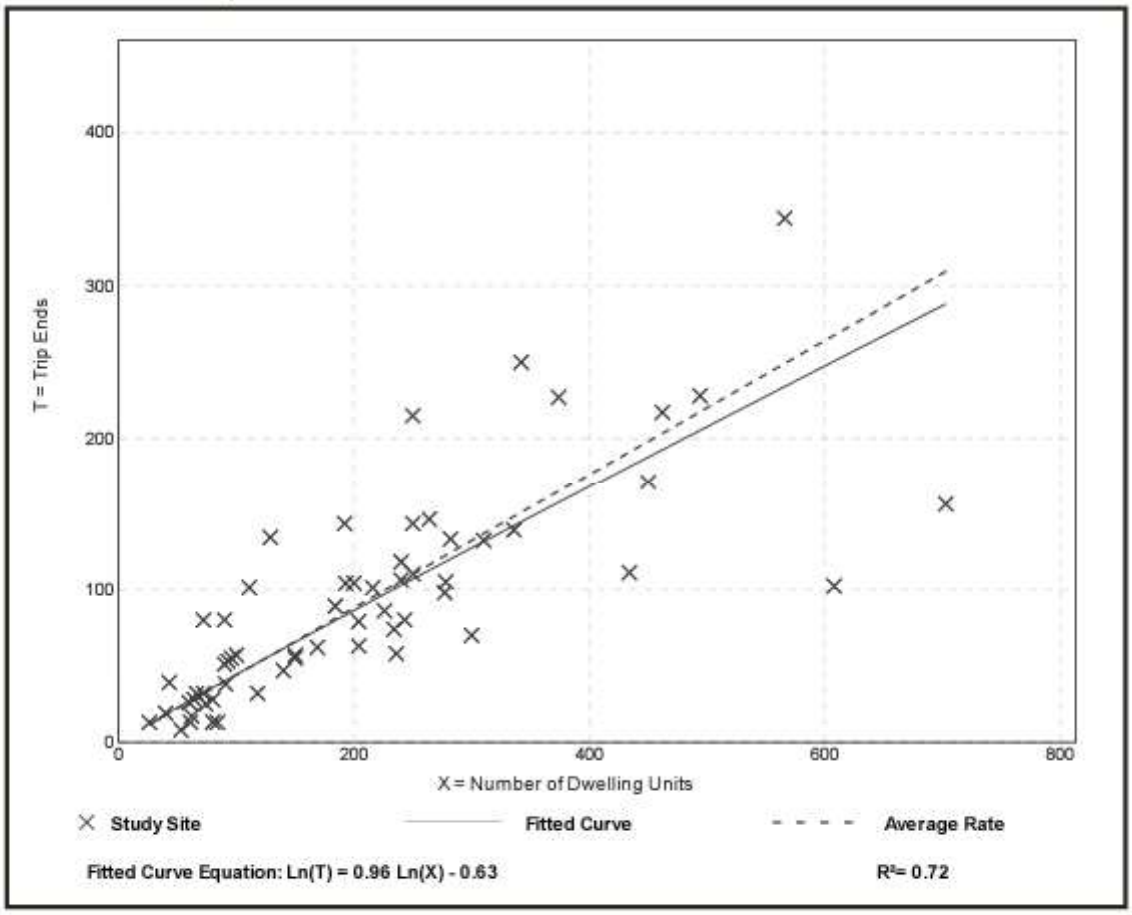
Multifamily Housing (Mid-Rise)
(221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 60
Avg. Num. of Dwelling Units: 208
Directional Distribution: 61% entering, 39% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.15 - 1.11	0.19

Data Plot and Equation

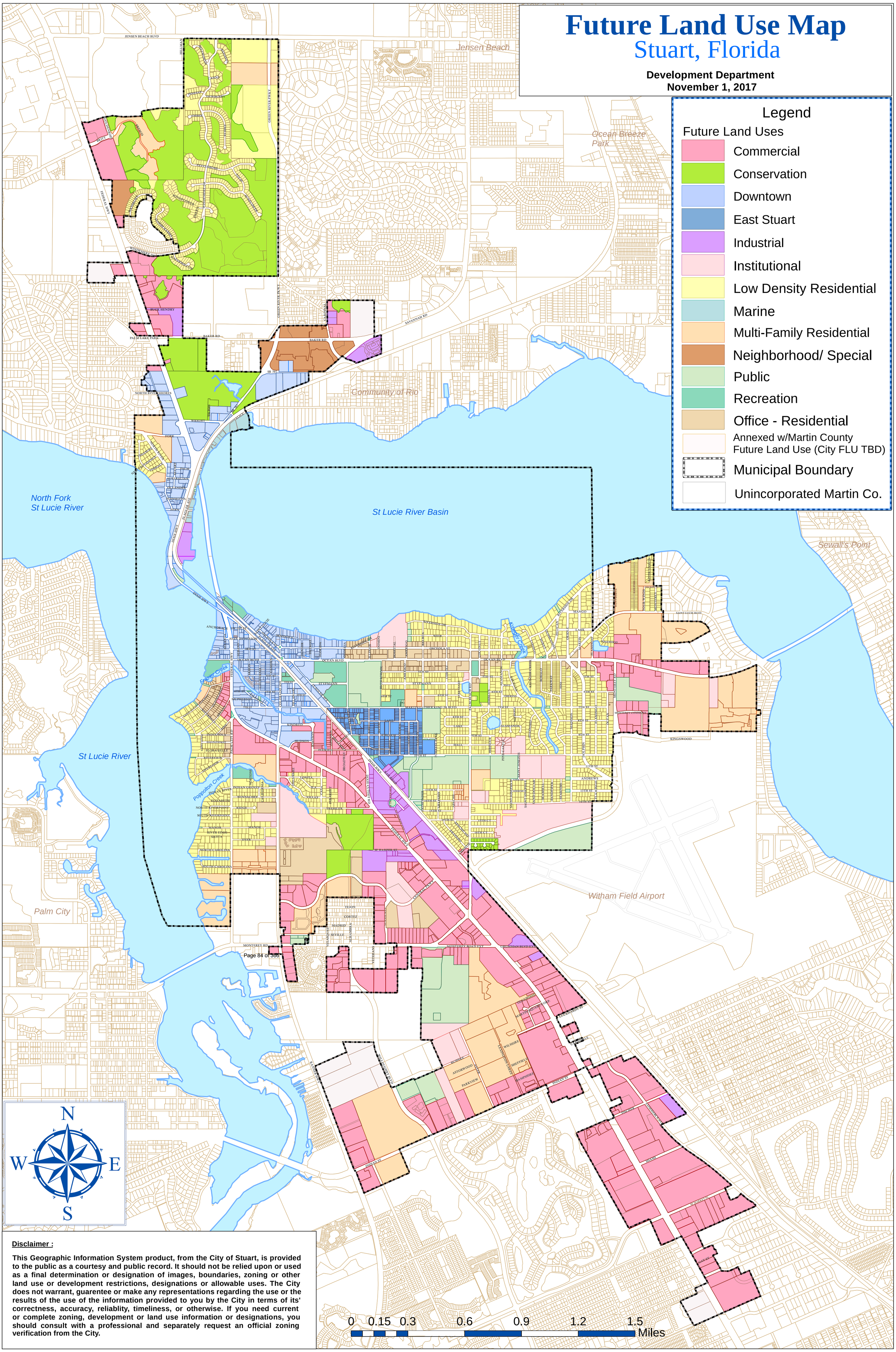


Fitted Curve Equation: Ln(T) = 0.96 Ln(X) - 0.63 **R^2= 0.72**

Future Land Use Map

Stuart, Florida

Development Department
November 1, 2017



Disclaimer :

This Geographic Information System product, from the City of Stuart, is provided to the public as a courtesy and public record. It should not be relied upon or used as a final determination or designation of images, boundaries, zoning or other land use or development restrictions, designations or allowable uses. The City does not warrant, guarentee or make any representations regarding the use or the results of the use of the information provided to you by the City in terms of its' correctness, accuracy, reliablity, timeliness, or otherwise. If you need current or complete zoning, development or land use information or designations, you should consult with a professional and separately request an official zoning verification from the City.

Martin County, Florida - Laurel Kelly, C.F.A

generated on 6/18/2019 9:31:28 AM EDT

Summary

Parcel ID	Account #	Unit Address	Market Total Value	Website Updated
40-38-41-001-051-00000-2	35989	S KANNER HWY, STUART	$769,590	6/15/2019

Owner Information

Owner(Current)	FAIRVIEW PROPERTIES INC
Owner/Mail Address	2400 S FEDERAL HWY #230 STUART FL 34994
Sale Date	3/3/2008
Document Book/Page	2312 2091
Document No.	2069649
Sale Price	0

Location/Description

Account #	35989	**Map Page No.**	HG-11
Tax District	7017	**Legal Description**	STUART FARMS SLY 300' OF LOT C, LOT D & THAT PART OF LOT E LYING N OF UNNAMED CREEK (LESS SR 76 R/W) & THAT PART OF LOT 6 OF COMMISSIONERS S/D OF HANSON GRANT LYING NLY OF UNNAMED CREEK & ELY OF ST LUCIE CANAL (LESS NLY 1500').. (& LESS FROM ALL ABOVE THAT 4.46 ACRES TO FLDOT PER OR 2441/0936)
Parcel Address	S KANNER HWY, STUART		
Acres	26.2100		

Parcel Type

Use Code	1000 Vacant Commercial
Neighborhood	50100 SW Stuart_Kanner_Willoughby

Assessment Information

Market Land Value	$769,590
Market Improvement Value	
Market Total Value	$769,590

Concurrency

Traffic Impact Analysis

Bridgeview
Martin County, FL

Prepared for:
Atlantic Realty Acquisitions, LLC.
3500 Lenox Road, Suite 1250
Atlanta, GA 30326

Prepared by:

MacKenzie
Engineering & Planning, Inc.
1172 SW 30th Street, Suite 500
Palm City, FL 34990
(772) 286-8030

Shaun G. MacKenzie LICENSE No. 61751 STATE OF FLORIDA PROFESSIONAL ENGINEER

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SHAUN G. MACKENZIE, P.E. ON THE DATE ADJACENT TO THE SEAL.

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

MACKENZIE ENGINEERING AND PLANNING, INC.
1172 SW 30TH STREET, SUITE 500
PALM CITY, FL 34990
CERTIFICATE OF AUTHORIZATION 29013
SHAUN G. MACKENZIE, P.E. NO. 61751

Digitally signed by Shaun G MacKenzie
Date: 2020.01.16 13:30:29 -05'00'

Shaun G. MacKenzie P.E.
PE Number 61751

181001
January 2020
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CA 29013

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EXECUTIVE SUMMARY

MacKenzie Engineering and Planning, Inc. (MEP) was retained to evaluate the transportation impacts related to development located at the northwest corner of SE Indian Street and Kanner Hwy (SR 76), Martin County, FL (PCN: 40-38-41-00-10-510-0002). The applicant proposes to develop 212 Multi-Family dwelling units (DU).

The development is projected to generate 1,154 daily, 71 AM peak hour (18 in/53 out), and 91 PM peak hour (56 in/35 out) trips.

Adequate transportation capacity is available to serve the project. A left-turn lane into the site exists and additional turn lanes are not warranted or recommended.

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APPENDICES

Kanner Highway & Driveway Intersection Surrounding
Kanner Highway & Driveway Analysis AM and PM Results
2018 Martin County Roadway LOS Inventory
Institute of Traffic Engineers' (ITE) report, *Trip Generation (10th Edition)*
Conceptual Site Plan
Property ID

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INTRODUCTION

A 212 multi-family dwelling unit (DU) project is proposed on the northwest corner of SE Indian Street and Kanner Hwy (SR 76), Martin County, FL (PCN: 40-38-41-00-10-510-0002). Figure 1 illustrates the general site location.

The traffic analysis examines the impacts the project. The proceeding analysis examines the ability of the existing roadway network to accommodate the increased demand from the project.

Figure 1. Site Location Map

CURRENT DATA

The information contained below was used to develop the foregoing site impact traffic analysis.

- *Trip Generation, 10th Edition* (ITE report)
- Comprehensive Plan

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TRIP GENERATION

Traffic Generation

The trip generation was projected based on the formulas in the Institute of Transportation Engineers' (ITE) report *Trip Generation (10th Edition)* and use Land-Use 221 (Multi-Family Housing Mid-Rise). The proposed development plan consists of the following:

- 212 DU Multi-Family (Land-Use 220 Multi-Family Housing Mid-Rise)

The proposed project is expected to generate the following net external and driveway trips:

- 1,154 daily, 71 AM peak hour (18 in/53 out), and 91 PM peak hour (56 in/35 out)

Table 1 presents the proposed project's trip generation.

Table 1. Trip Generation

Bridgeview Development
CONCURRENCY TRIP GENERATION

Land Use	Intensity	Daily Trips	AM Peak Hour Total	AM Peak Hour In	AM Peak Hour Out	PM Peak Hour Total	PM Peak Hour In	PM Peak Hour Out
Proposed Use								
Multifamily Housing(Mid-Rise)	212 DU	1,154	71	18	53	91	56	35

Note: Trip generation was calculated using the following data:

Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour in/out	AM Peak Hour Rate	PM Peak Hour in/out	PM Peak Hour Equation
Multifamily Housing(Mid-Rise)	221	DU	T = 5.45 (X) + -1.75	0%	26/74	Ln(T) = 0.98 Ln(X) + -0.98	61/39	Ln(T) = 0.96 Ln(X) + -0.63

s:\jobs - share drive\181 - atlantic realty\001 - bridgeview - civil engineering due diligence\3. traffic engineering\traffic study concurrency\[bridgeview - trip generation concurr

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Internal Capture

In order to provide a conservative analysis, internal capture is not utilized.

Pass-by Capture

Pass-by capture is proposed at 0 %

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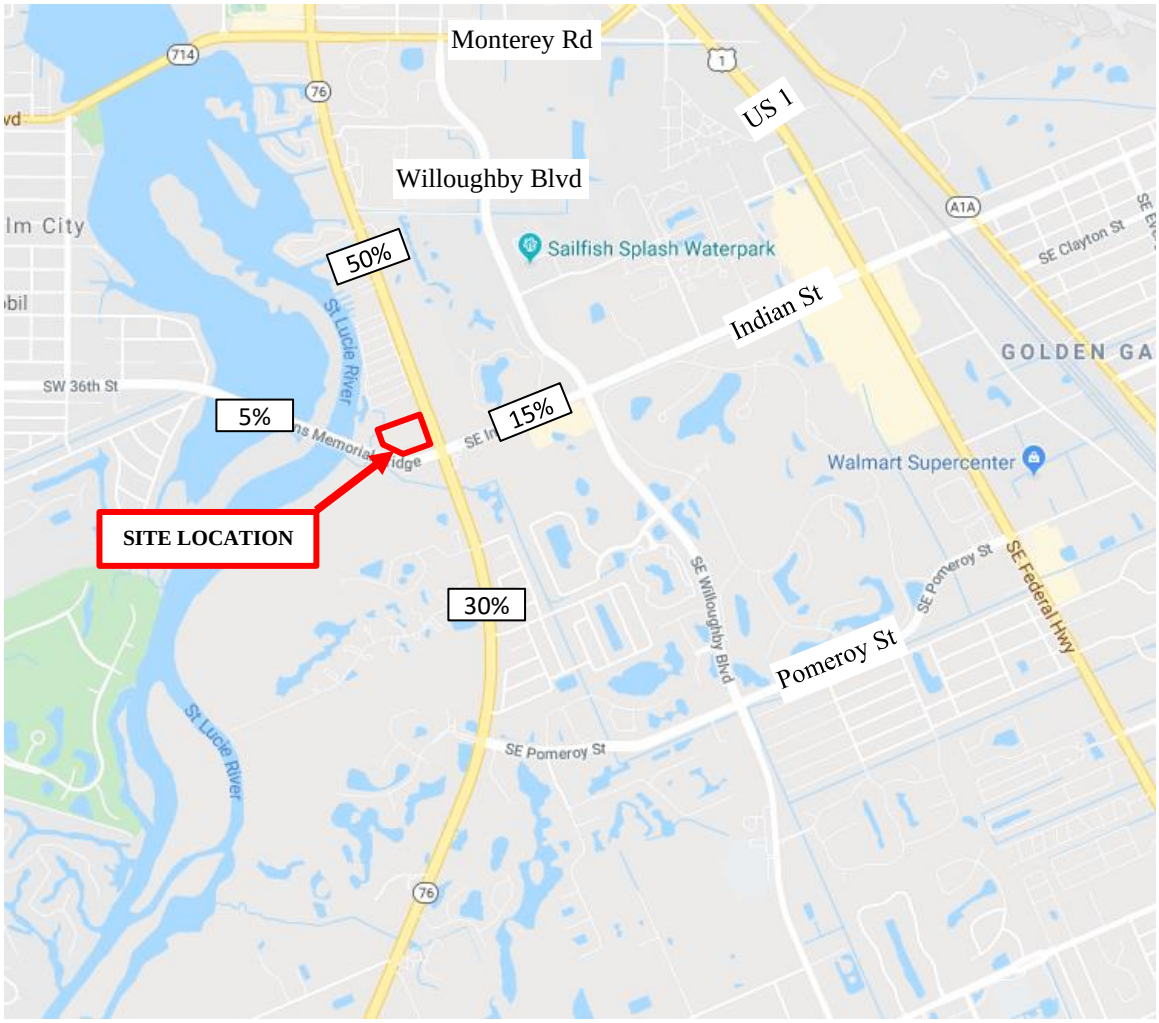
TRAFFIC ASSIGNMENT

The traffic assignment was developed based upon existing and proposed developments, generators, destinations, and knowledge of the local area. These factors were applied using traffic engineering rationale similar to the gravity model.

- North – 50%
- South – 30%
- West – 5%
- East – 15%

Figure 2. Traffic Distribution



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SIGNIFICANCE

Significant Impact

A project significantly impacts a facility if its peak hour trips use more than five percent (5%) of a roadway's capacity (City of Stuart Code, 4.05.02 Traffic Impact Analysis). The project's traffic assignment and net external trips were utilized to determine the number of project trips on each road segment. Road capacities from Martin County's Roadway Inventory report were utilized in the study. In order to determine the project significance, the project's trips were divided by the roadway segment capacity. The roadway capacities and the project significance are shown in Table 2.

Study Area

Based on Section 4.05.02 of the Code, the study area for transportation concurrency is all links and aggregated segments or parts thereof, on the major road network on which the project traffic has an impact of at least 5 percent and the first directly accessed roadway link (segment).

Table 2. Project Impacts 1-Way Peak Hour (Significance)

Roadway	From	To	Lanes	Generalized Service Capacity	Assign	Project Traffic	Significance	Significant Impact (Y/N)
Kanner Hwy (SR 76)	Salerno Rd	Indian St	6	3,020	30%	17	0.56%	no
	Indian St	SR-714	6	3,020	100%	56	1.85%	no
CR-714	Mapp Rd	SR-76	4	2,000	5%	3	0.15%	no
	SR-76	Willoughby Blvd	4	2,000	15%	8	0.40%	no

As shown in Table 2, there are no roadways that are significantly impacted by the project.

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ANALYSIS

The project is required to analyze the directly accessed roadway segment of Kanner Highway.

Table 3. Kanner Highway Peak Hour Peak Direction Traffic Analysis

Roadway	From	To	Lanes	Service Capacity	Peak Hour Existing Traffic	Count Year	Growth Rate	2022 Traffic Growth	2022 Background Traffic	Project Traffic	2022 Total Traffic	Meets Service Volume
SR 76 (Kanner Hwy)	Indian St	SR-714	6	3,020	770	2018	0.5%	16	786	56	842	YES

Based on the analysis, the adjacent segment of Kanner Highway operates acceptably and transportation concurrency is met. No signalized intersection analysis is necessary because the project consumes less than five percent of the roadway's capacity.

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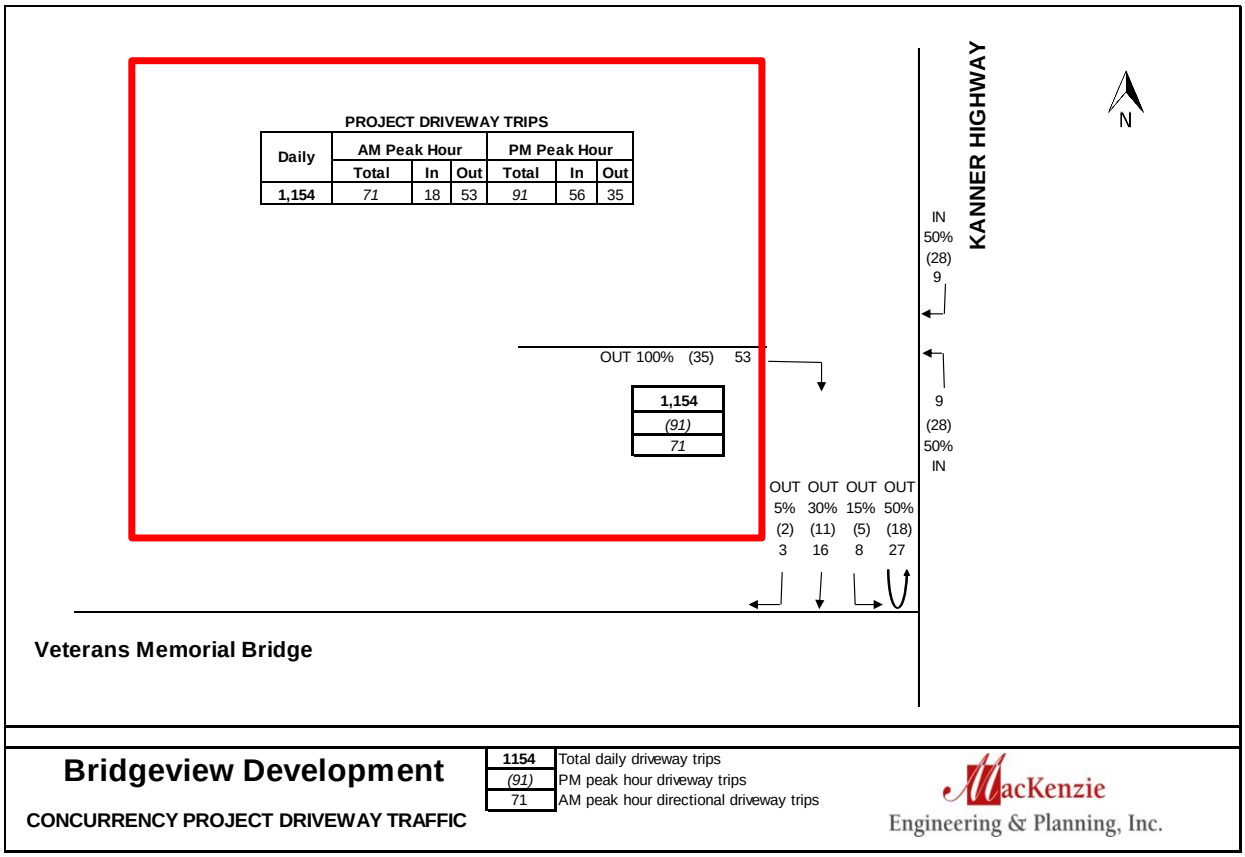
ACCESS

The project proposes one point of access on Kanner Highway at the existing directional median opening located about 700 feet north of Indian Street.

The access will provide right-in/right-out and left-in movements. A left-turn lane into the project exists. The need for a right-turn lane was evaluated based on FDOT's threshold of 80-120 peak hour right-turns.

Because the peak hour right-turn volume is projected to be 28 vehicles per hour, a right-turn lane into the project is not recommended or needed. Driveway trips are shown in Figure 3. The access was evaluated during the AM and PM peak hours and shows acceptable operation.

Figure 3. Driveway Trips



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Driveway Analysis

Growth Rate

The Kanner Highway & Driveway intersection historic annual growth on the surrounding facilities is 0.5% based on Martin County 2018 Roadway Level of Service Inventory Report. A 2.0 percent annual compound growth rate will be used for the driveway analysis in order to be conservative.

Kanner Highway & Driveway

MEP evaluated the Kanner Highway & Driveway intersection. With project traffic, the intersection is projected to be under capacity with all movements operating under capacity (v/c ratio less than 1.0). MEP obtained the 95th percentile queue from HCS 7 for each turn-lane at the intersection. Additional turn lanes into the project are not warranted. Storage for the existing left-turn lane into the project is adequate.

Table 4. Kanner Highway & Driveway Storage Analysis

Direction	Turn-Lane	AM Peak 95th% Queue (veh)	PM Peak 95th% Queue (veh)	Existing Storage (veh)	Adequate
Eastbound	Right	1	1	-	YES
Northbound	Left	1	1	8	YES

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CONCLUSION

MacKenzie Engineering and Planning, Inc. (MEP) was retained to evaluate the transportation impacts related to development located at the northwest corner of SE Indian Street and Kanner Hwy (SR 76), Martin County, FL (PCN: 40-38-41-00-10-510-0002). The applicant proposes to develop 212 Multi-Family dwelling units (DU).

The development is projected to generate 1,154 daily, 71 AM peak hour (18 in/53 out), and 91 PM peak hour (56 in/35 out) trips.

Adequate transportation capacity is available to serve the project. A left-turn lane into the site exists and additional turn lanes are not warranted or recommended.

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APPENDICES

Bridgeview
AM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 1
Kanner Hwy & Driveway

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM	0	0	0	0	0	0	0	0	0	0	184	0	0	0	357	0	541
7:15 AM	7:30 AM	0	0	0	0	0	0	0	0	0	0	230	0	0	0	341	0	571
7:30 AM	7:45 AM	0	0	0	0	0	0	0	0	0	0	298	0	0	0	306	0	604
7:45 AM	8:00 AM	0	0	0	0	0	0	0	0	0	0	276	0	0	0	377	0	653
8:00 AM	8:15 AM	0	0	0	0	0	0	0	0	0	0	344	0	0	0	328	0	672
8:15 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	332	0	0	0	314	0	646
8:30 AM	8:45 AM	0	0	0	0	0	0	0	0	0	0	328	0	0	0	255	0	583
8:45 AM	9:00 AM	0	0	0	0	0	0	0	0	0	0	223	0	0	0	214	0	437
		0	0	0	0	0	0	0	0	0	0	2215	0	0	0	2492	0	4707
Peak Hour Traffic Volume																		
7:30 AM	8:30 AM	0	0	0	0	0	0	0	0	0	0	1250	0	0	0	1325	0	2575

Count Taken:	2/14/2018
Buildout year:	2022
Growth Rate:	2.0%
Peak Season Factor:	1.00

	ebu	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	*** nbt**	**nbr**	**sbu**	**sbl**	*** sbt**	**sbr**
2/14/2018	0	0	0	0	0	0	0	0	0	0	1250	0	0	0	1325	0
Peak Season Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes		0	0	0		0	0	0		0	1250	0		0	1325	0
		2%	2%	2%		2%	2%	2%		2%	2%	2%		2%	2%	2%
Growth 2%	0	0	0	0	0	0	0	0	0	0	103	0	0	0	109	0
2022 Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1353**	**0**	**0**	**0**	**1434**	**0**
Project	0	0	0	53		0	0	0		9	27	0	0	0	0	9
Post	**0**	**0**	**0**	**53**	**0**	**0**	**0**	**0**	**0**	**9**	**1380**	**0**	**0**	**0**	**1434**	**9**

Project Traffic				Out						In	Out					In
Assignment	0%	0%	0%	100%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	50%

* NBT and SBT Volumes obtained from the FDOT Count Station 89 0114, 2/14/2018

Bridgeview
PM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 1
Kanner Hwy & Driveway

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM	0	0	0	0	0	0	0	0	0	0	286	0	0	0	217	0	503
4:15 PM	4:30 PM	0	0	0	0	0	0	0	0	0	0	250	0	0	0	221	0	471
4:30 PM	4:45 PM	0	0	0	0	0	0	0	0	0	0	317	0	0	0	245	0	562
4:45 PM	5:00 PM	0	0	0	0	0	0	0	0	0	0	310	0	0	0	262	0	572
5:00 PM	5:15 PM	0	0	0	0	0	0	0	0	0	0	309	0	0	0	282	0	591
5:15 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	318	0	0	0	261	0	579
5:30 PM	5:45 PM	0	0	0	0	0	0	0	0	0	0	247	0	0	0	271	0	518
5:45 PM	6:00 PM	0	0	0	0	0	0	0	0	0	0	293	0	0	0	259	0	552
		0	0	0	0	0	0	0	0	0	0	2330	0	0	0	2018	0	4348
Peak Hour Traffic Volume																		
4:30 PM	5:30 PM	0	0	0	0	0	0	0	0	0	0	1254	0	0	0	1050	0	2304

Count Taken: 2/14/2018
Buildout year: 2022
Growth Rate: 2.0%
Peak Season Factor: 1.00

	ebu	**ebl**	**ebt**	**ebr**	**wbu**	**wbl**	**wbt**	**wbr**	**nbu**	**nbl**	*** nbt**	**nbr**	**sbu**	**sbl**	*** sbt**	**sbr**
2/14/2018	0	0	0	0	0	0	0	0	0	0	1254	0	0	0	1050	0
Peak Season Facto	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes		0	0	0		0	0	0		0	1254	0		0	1050	0
		2%	2%	2%		2%	2%	2%		2%	2%	2%		2%	2%	2%
Growth 2%		0	0	0		0	0	0		0	103	0		0	87	0
2022 Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1357**	**0**	**0**	**0**	**1137**	**0**
Project		0	0	35		0	0	0		28	18	0	0	0	0	28
Post	**0**	**0**	**0**	**35**	**0**	**0**	**0**	**0**	**0**	**28**	**1375**	**0**	**0**	**0**	**1137**	**28**

Project Traffic				Out						In	Out					In
Assignment	0%	0%	0%	100%	0%	0%	0%	0%	0%	50%	50%	0%	0%	0%	0%	50%

* NBT and SBT Volumes obtained from the FDOT Count Station 89 0114, 2/14/2018

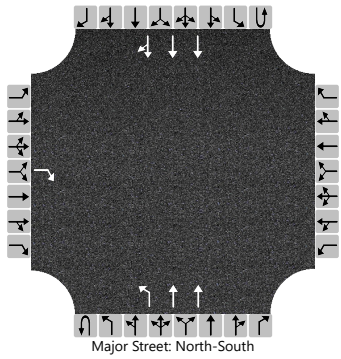
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/15/2020
Analysis Year	2022
Time Analyzed	
Intersection Orientation	North-South
Project Description	Bridgeview AM 2022

Site Information

Intersection	Kanner Hwy & DW
Jurisdiction	
East/West Street	Driveway
North/South Street	Kanner Hwy
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

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	1		0	0	0	0	1	2	0	0	0	3	0
Configuration				R						L	T				T	TR
Volume (veh/h)				53					0	9	1380				1434	9
Percent Heavy Vehicles (%)				2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1						5.3						
Critical Headway (sec)				7.14						5.34						
Base Follow-Up Headway (sec)				3.9						3.1						
Follow-Up Headway (sec)				3.92						3.12						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				56						9						
Capacity, c (veh/h)				299						218						
v/c Ratio				0.19						0.04						
95% Queue Length, Q_{95} (veh)				0.7						0.1						
Control Delay (s/veh)				19.8						22.3						
Level of Service (LOS)				C						C						
Approach Delay (s/veh)	19.8								0.1							
Approach LOS	C															

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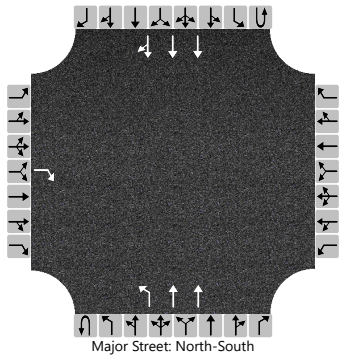
General Information

Analyst	MEP
Agency/Co.	MEP
Date Performed	1/15/2020
Analysis Year	2022
Time Analyzed	
Intersection Orientation	North-South
Project Description	Bridgeview PM 2022

Site Information

Intersection	Kanner Hwy & DW
Jurisdiction	
East/West Street	Driveway
North/South Street	Kanner Hwy
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: North-South

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	1		0	0	0	0	1	2	0	0	0	3	0
Configuration				R						L	T				T	TR
Volume (veh/h)				35					0	28	1375				1137	28
Percent Heavy Vehicles (%)				2					2	2						
Proportion Time Blocked																
Percent Grade (%)	0															
Right Turn Channelized	No															
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)				7.1						5.3						
Critical Headway (sec)				7.14						5.34						
Base Follow-Up Headway (sec)				3.9						3.1						
Follow-Up Headway (sec)				3.92						3.12						

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)				37						29						
Capacity, c (veh/h)				373						304						
v/c Ratio				0.10						0.10						
95% Queue Length, Q_{95} (veh)				0.3						0.3						
Control Delay (s/veh)				15.7						18.1						
Level of Service (LOS)				C						C						
Approach Delay (s/veh)	15.7								0.4							
Approach LOS	C															

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COUNTY: 89
STATION: 0114
DESCRIPTION: SR 76/COLORADO AVE - SW OF MONTEREY RD(COUNTY LINK
START DATE: 02/14/2018
START TIME: 2345

	DIRECTION: N					DIRECTION: S					COMBINED
TIME	1ST	2ND	3RD	4TH	TOTAL	1ST	2ND	3RD	4TH	TOTAL	TOTAL
0000	23	20	21	17	81	22	26	23	14	85	166
0100	17	7	11	9	44	12	6	11	7	36	80
0200	12	9	11	7	39	8	14	16	19	57	96
0300	7	8	6	4	25	18	23	25	30	96	121
0400	11	19	21	18	69	37	51	50	71	209	278
0500	41	38	53	51	183	97	113	127	151	488	671
0600	71	78	124	154	427	216	267	300	337	1120	1547
0700	184	230	298	276	988	357	341	306	377	1381	2369
0800	344	332	328	223	1227	328	314	255	214	1111	2338
0900	196	219	236	206	857	236	229	236	200	901	1758
1000	218	226	220	215	879	191	221	180	158	750	1629
1100	249	231	291	224	995	175	203	169	208	755	1750
1200	218	248	224	207	897	174	177	195	165	711	1608
1300	235	227	232	240	934	156	187	174	200	717	1651
1400	231	235	287	370	1123	232	214	198	189	833	1956
1500	187	240	240	297	964	210	266	164	180	820	1784
1600	286	250	317	310	1163	217	221	245	262	945	2108
1700	309	318	247	283	1157	282	261	271	259	1073	2230
1800	268	237	201	191	897	271	241	193	205	910	1807
1900	153	114	119	100	486	194	177	146	175	692	1178
2000	84	75	63	63	285	157	156	139	135	587	872
2100	72	62	64	68	266	116	127	102	101	446	712
2200	56	46	46	49	197	87	77	69	42	275	472
2300	36	34	32	22	124	46	31	28	27	132	256
24-HOUR TOTALS:					14307					15130	29437

PEAK VOLUME INFORMATION

	DIRECTION: N		DIRECTION: S		COMBINED DIRECTIONS	
	HOUR	VOLUME	HOUR	VOLUME	HOUR	VOLUME
A.M.	745	1280	700	1381	730	2575
P.M.	1630	1254	1645	1076	1630	2304
DAILY	745	1280	700	1381	730	2575

GENERATED BY SPS 5.0.53P

2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 8901 CEN.-W OF US1 TO I95

MOCF: 0.96

WEEK	DATES	SF	PSCF
1	01/01/2018 - 01/06/2018	0.98	1.02
2	01/07/2018 - 01/13/2018	0.99	1.03
3	01/14/2018 - 01/20/2018	0.99	1.03
* 4	01/21/2018 - 01/27/2018	0.98	1.02
* 5	01/28/2018 - 02/03/2018	0.97	1.01
* 6	02/04/2018 - 02/10/2018	0.96	1.00
* 7	02/11/2018 - 02/17/2018	0.96	1.00
* 8	02/18/2018 - 02/24/2018	0.95	0.99
* 9	02/25/2018 - 03/03/2018	0.95	0.99
*10	03/04/2018 - 03/10/2018	0.94	0.98
*11	03/11/2018 - 03/17/2018	0.94	0.98
*12	03/18/2018 - 03/24/2018	0.95	0.99
*13	03/25/2018 - 03/31/2018	0.95	0.99
*14	04/01/2018 - 04/07/2018	0.96	1.00
*15	04/08/2018 - 04/14/2018	0.97	1.01
*16	04/15/2018 - 04/21/2018	0.98	1.02
17	04/22/2018 - 04/28/2018	0.99	1.03
18	04/29/2018 - 05/05/2018	1.00	1.04
19	05/06/2018 - 05/12/2018	1.02	1.06
20	05/13/2018 - 05/19/2018	1.03	1.07
21	05/20/2018 - 05/26/2018	1.03	1.07
22	05/27/2018 - 06/02/2018	1.03	1.07
23	06/03/2018 - 06/09/2018	1.03	1.07
24	06/10/2018 - 06/16/2018	1.04	1.08
25	06/17/2018 - 06/23/2018	1.04	1.08
26	06/24/2018 - 06/30/2018	1.05	1.09
27	07/01/2018 - 07/07/2018	1.05	1.09
28	07/08/2018 - 07/14/2018	1.06	1.10
29	07/15/2018 - 07/21/2018	1.06	1.10
30	07/22/2018 - 07/28/2018	1.05	1.09
31	07/29/2018 - 08/04/2018	1.04	1.08
32	08/05/2018 - 08/11/2018	1.03	1.07
33	08/12/2018 - 08/18/2018	1.03	1.07
34	08/19/2018 - 08/25/2018	1.03	1.07
35	08/26/2018 - 09/01/2018	1.04	1.08
36	09/02/2018 - 09/08/2018	1.05	1.09
37	09/09/2018 - 09/15/2018	1.06	1.10
38	09/16/2018 - 09/22/2018	1.05	1.09
39	09/23/2018 - 09/29/2018	1.04	1.08
40	09/30/2018 - 10/06/2018	1.03	1.07
41	10/07/2018 - 10/13/2018	1.02	1.06
42	10/14/2018 - 10/20/2018	1.01	1.05
43	10/21/2018 - 10/27/2018	1.01	1.05
44	10/28/2018 - 11/03/2018	1.00	1.04
45	11/04/2018 - 11/10/2018	1.00	1.04
46	11/11/2018 - 11/17/2018	0.99	1.03
47	11/18/2018 - 11/24/2018	0.99	1.03
48	11/25/2018 - 12/01/2018	0.99	1.03
49	12/02/2018 - 12/08/2018	0.98	1.02
50	12/09/2018 - 12/15/2018	0.98	1.02
51	12/16/2018 - 12/22/2018	0.98	1.02
52	12/23/2018 - 12/29/2018	0.99	1.03
53	12/30/2018 - 12/31/2018	0.99	1.03

* PEAK SEASON

Martin County 2018 Roadway Level of Service Inventory Report

Road Name	From	To	Generalized Service Capacity	2018 Average Annual Daily Traffic	Peak Hour Factor K_{30}	Directional Distribution D_{100}	2018 Peak Hour Directional Volume	2018 Generalized LOS	Avg. Annual Growth Rate
CR-714 (Veteran's Memorial Bridge)	Mapp Rd	SR-76	2000	23,323	0.11	0.59	1,500	C	8.0%
CR-723 (Savanna Rd)	CR-707	NE 24th St	880	9,023	0.09	0.50	393	C	2.4%
CR-723 (Savanna Rd)	NE 24th St	CR-707A (Jensen Beach Blvd.)	880	10,500	0.09	0.53	473	C	1.6%
CR-726 (Citrus Blvd)	SR-710	Greenridge Ln	740	2,779	0.08	0.58	132	A/B	4.7%
CR-726 (Citrus Blvd)	Greenridge Ln	CR-76A	740	2,553	0.09	0.57	131	A/B	5.3%
CR-76A (Citrus Blvd.)	CR-726	SR-714	1200	4,204	0.09	0.55	215	A/B	5.6%
CR-76A (SW 96th St)	CR-726	Pennsylvania Ave	1200	3,768	0.09	0.56	190	A/B	4.7%
CR-76A (SW 96th St)	Pennsylvania Ave	SR-76	800	8,115	0.09	0.63	435	C	4.5%
CR-A1A (Dixie Hwy)	SR-5	CR-708	750	3,233	0.09	0.50	147	C	4.6%
CR-A1A (Dixie Hwy)	CR-708	Osprey St	880	7,508	0.11	0.53	454	C	3.6%
CR-A1A (Dixie Hwy)	Osprey St	Heritage Blvd	1190	6,641	0.08	0.55	292	A/B	4.1%
CR-A1A (Dixie Hwy)	Heritage Blvd	Cove Rd	1190	7,348	0.09	0.54	341	A/B	4.7%
CR-A1A (Dixie Hwy)	Cove Rd	Salerno Rd	790	12,223	0.09	0.53	602	D	3.6%
CR-A1A (Dixie Hwy)	Salerno Rd	St. Lucie Blvd	750	16,587	0.09	0.51	753	E	3.1%
CR-A1A (Dixie Hwy)	St Lucie Blvd	Jefferson St	750	13,991	0.10	0.50	700	D	2.5%
CR-A1A (Dixie Hwy)	Jefferson St	Indian St	1630	18,643	0.08	0.52	756	D	4.0%
CR-A1A (Dixie Hwy)	Indian St	SR-714	2000	16,285	0.10	0.50	790	C	0.9%
CR-A1A (Dixie Hwy)	SR-714	SE Fifth St	675	6,585	0.09	0.55	340	D	2.0%
Dr Martin Luther King Jr Blvd	Farm Rd	SR-710	675	2,169	0.07	0.53	83	C	4.0%
Farm Rd	Dr Martin Luther King Jr Dr	Palm Wy	750	2,588	0.06	0.59	93	C	2.0%
Fox Brown Rd	SR-710	CR-714	740	333	0.08	0.60	16	A/B	0.0%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB); CR-713 (PM/NB); Murphy Rd (PM/NB); SR-5 (AM/SB); SR-714 [Palm City Bridge] (PM/WB) and SR-714 (PM/WB).

Martin County 2018 Roadway Level of Service Inventory Report

Road Name	From	To	Generalized Service Capacity	2018 Average Annual Daily Traffic	Peak Hour Factor K_{30}	Directional Distribution D_{100}	2018 Peak Hour Directional Volume	2018 Generalized LOS	Avg. Annual Growth Rate
Goldenrod Rd	Britt Rd	SR-732	1630	4,838	0.08	0.61	242	C	0.5%
Goldenrod Rd	SR-732	SR-5	750	6,933	0.09	0.56	357	C	2.1%
Goldenrod Rd	SR-5	Westmoreland Blvd	750	4,350	0.09	0.73	273	C	4.6%
Gomez Ave	CR-708	Crossrip St	750	3,616	0.09	0.64	199	C	0.5%
Gomez Ave	Crossrip St	Osprey St	750	1,079	0.08	0.58	49	C	0.5%
Green River Parkway	Dixie Hwy	Baker Rd	750	6,728	0.10	0.64	444	D	5.2%
Green River Parkway	Baker Rd	SR-732	880	8,203	0.12	0.65	635	C	6.1%
Green River Parkway	SR-732	St. Lucie County	1190	8,395	0.10	0.63	513	C	4.2%
Horseshoe Point Rd	CR-A1A	Kubin Ave	675	5,725	0.08	0.53	252	C	0.5%
Indian St	SR-76	Willoughby Blvd	2000	28,668	0.10	0.58	1,679	C	7.0%
Indian St	Willoughby Blvd	SR-5	2000	28,304	0.08	0.50	1,189	C	3.9%
Indian St	SR-5	Commerce Ave	2000	22,456	0.09	0.54	1,031	C	0.5%
Indian St	Commerce Ave	CR-A1A	2000	24,848	0.09	0.50	1,068	C	1.0%
Indian St	CR-A1A	St Lucie Blvd	675	7,214	0.09	0.53	359	D	0.5%
Indian River Dr	Palmer St	CR-707	750	7,243	0.09	0.57	363	C	0.5%
Island Way	Palm Beach County	Jupiter Road	1200	4,326	0.10	0.58	261	A/B	2.6%
Island Way	Jupiter Road	Country Club Dr	750	5,230	0.08	0.52	204	C	3.1%
Jack James Rd	SR-76	Blue Water Wy	750	2,999	0.13	0.66	255	C	4.2%
Lares St	CR-708	CR-A1A	675	3,430	0.09	0.69	206	C	2.8%
Little Club Wy	Country Club Dr	Wooden Bridge Wy	675	2,382	0.08	0.55	103	C	1.2%
Locks Rd	Canal St	SR-76	675	3,722	0.08	0.53	154	C	1.1%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB); CR-713 (PM/NB); Murphy Rd (PM/NB); SR-5 (AM/SB); SR-714 [Palm City Bridge] (PM/WB) and SR-714 (PM/WB).

Martin County 2018 Roadway Level of Service Inventory Report

Road Name	From	To	Generalized Service Capacity	2018 Average Annual Daily Traffic	Peak Hour Factor K_{30}	Directional Distribution D_{100}	2018 Peak Hour Directional Volume	2018 Generalized LOS	Avg. Annual Growth Rate
SR-732 (Causeway Blvd)	CR-707	SR-A1A	1190	13,403	0.10	0.51	684	C	0.8%
SR-732 (Jensen Beach Blvd)	SR-5	Green River Pkwy	2000	25,891	0.10	0.52	1,319	C	0.5%
SR-732 (Jensen Beach Blvd)	Green River Pkwy	CR-723	2000	24,869	0.09	0.56	1,253	C	0.5%
SR-76 (Kanner Hwy)	SR-15	SR-710	740	2,117	0.09	0.57	105	A/B	8.0%
SR-76 (Kanner Hwy)	SR-710	CR-708	740	3,488	0.08	0.59	171	A/B	8.0%
SR-76 (Kanner Hwy)	CR-708	CR-711/CR-76A	1200	3,027	0.11	0.54	180	A/B	1.9%
SR-76 (Kanner Hwy)	CR-711/CR76A	Locks Rd	2000	12,928	0.12	0.52	813	C	1.2%
SR-76 (Kanner Hwy)	Locks Rd	Jack James	2000	20,494	0.09	0.60	1,082	C	2.0%
SR-76 (Kanner Hwy)	Jack James	Cove Rd	3020	45,918	0.10	0.52	2,409	C	2.4%
SR-76 (Kanner Hwy)	Cove Rd	Salerno Rd	3020	31,734	0.09	0.52	1,436	C	0.9%
SR-76 (Kanner Hwy)	Salerno Rd	Indian St	3020	29,492	0.10	0.52	1,468	C	2.6%
SR-76 (Kanner Hwy)	Indian St	SR-714	3020	21,161	0.07	0.52	759	C	0.5%
SR-76 (Kanner Hwy)	SR-714	SR-5	3020	25,033	0.08	0.50	1,001	C	0.5%
SR-A1A (Ocean Blvd)	SR-714	St Lucie Blvd	1630	19,372	0.11	0.57	1,193	D	1.4%
SR-A1A (Ocean Blvd)	St Lucie Blvd	Sewalls Point Rd	2000	21,532	0.09	0.51	1,010	C	0.5%
SR-A1A (Ocean Blvd)	Sewalls Point Rd	Macarthur Blvd	925	12,803	0.09	0.54	650	C	0.5%
SR-A1A (Ocean Blvd)	MacArthur Blvd	SR-732	1190	8,278	0.09	0.53	395	A/B	2.5%
SR-A1A (Ocean Blvd)	SR-732	St Lucie County	1190	14,957	0.12	0.54	953	D	3.6%
St Lucie Blvd	CR-A1A	Indian St	675	3,083	0.10	0.55	163	C	0.5%
St Lucie Blvd	Indian St	SR-A1A	675	7,420	0.11	0.54	421	D	0.8%
Westmoreland Blvd	St Lucie County	SR-5	790	12,542	0.08	0.60	632	D	2.6%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB); CR-713 (PM/NB); Murphy Rd (PM/NB); SR-5 (AM/SB); SR-714 [Palm City Bridge] (PM/WB) and SR-714 (PM/WB).

Land Use: 221
Multifamily Housing (Mid-Rise)

Description

Mid-rise multifamily housing includes apartments, townhouses, and condominiums located within the same building with at least three other dwelling units and that have between three and 10 levels (floors). Multifamily housing (low-rise) (Land Use 220), multifamily housing (high-rise) (Land Use 222), off-campus student apartment (Land Use 225), and mid-rise residential with 1st-floor commercial (Land Use 231) are related land uses.

Additional Data

In prior editions of *Trip Generation Manual*, the mid-rise multifamily housing sites were further divided into rental and condominium categories. An investigation of vehicle trip data found no clear differences in trip making patterns between the rental and condominium sites within the ITE database. As more data are compiled for future editions, this land use classification can be reinvestigated.

For the six sites for which both the number of residents and the number of occupied dwelling units were available, there were an average of 2.46 residents per occupied dwelling unit.

For the five sites for which the numbers of both total dwelling units and occupied dwelling units were available, an average of 95.7 percent of the total dwelling units were occupied.

Time-of-day distribution data for this land use are presented in Appendix A. For the eight general urban/suburban sites with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:00 and 8:00 a.m. and 4:45 and 5:45 p.m., respectively.

For the four dense multi-use urban sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 7:15 and 8:15 a.m. and 4:15 and 5:15 p.m., respectively. For the three center city core sites with 24-hour count data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 6:45 and 7:45 a.m. and 5:00 and 6:00 p.m., respectively.

For the six sites for which data were provided for both occupied dwelling units and residents, there was an average of 2.46 residents per occupied dwelling unit.

For the five sites for which data were provided for both occupied dwelling units and total dwelling units, an average of 95.7 percent of the units were occupied.

The average numbers of person trips per vehicle trip at the five center city core sites at which both person trip and vehicle trip data were collected were as follows:

- 1.84 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.94 during Weekday, AM Peak Hour of Generator
- 2.07 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.59 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 32 dense multi-use urban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.90 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.90 during Weekday, AM Peak Hour of Generator
- 2.00 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.08 during Weekday, PM Peak Hour of Generator

The average numbers of person trips per vehicle trip at the 13 general urban/suburban sites at which both person trip and vehicle trip data were collected were as follows:

- 1.56 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 7 and 9 a.m.
- 1.88 during Weekday, AM Peak Hour of Generator
- 1.70 during Weekday, Peak Hour of Adjacent Street Traffic, one hour between 4 and 6 p.m.
- 2.07 during Weekday, PM Peak Hour of Generator

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in Alberta (CAN), British Columbia (CAN), California, Delaware, District of Columbia, Florida, Georgia, Illinois, Maryland, Massachusetts, Minnesota, New Hampshire, New Jersey, Ontario, Oregon, Pennsylvania, South Carolina, South Dakota, Tennessee, Utah, Virginia, and Wisconsin.

Source Numbers

168, 188, 204, 305, 306, 321, 357, 390, 436, 525, 530, 579, 638, 818, 857, 866, 901, 904, 910, 912, 918, 934, 936, 939, 944, 947, 948, 949, 959, 963, 964, 966, 967, 969, 970

Multifamily Housing (Mid-Rise)
(221)

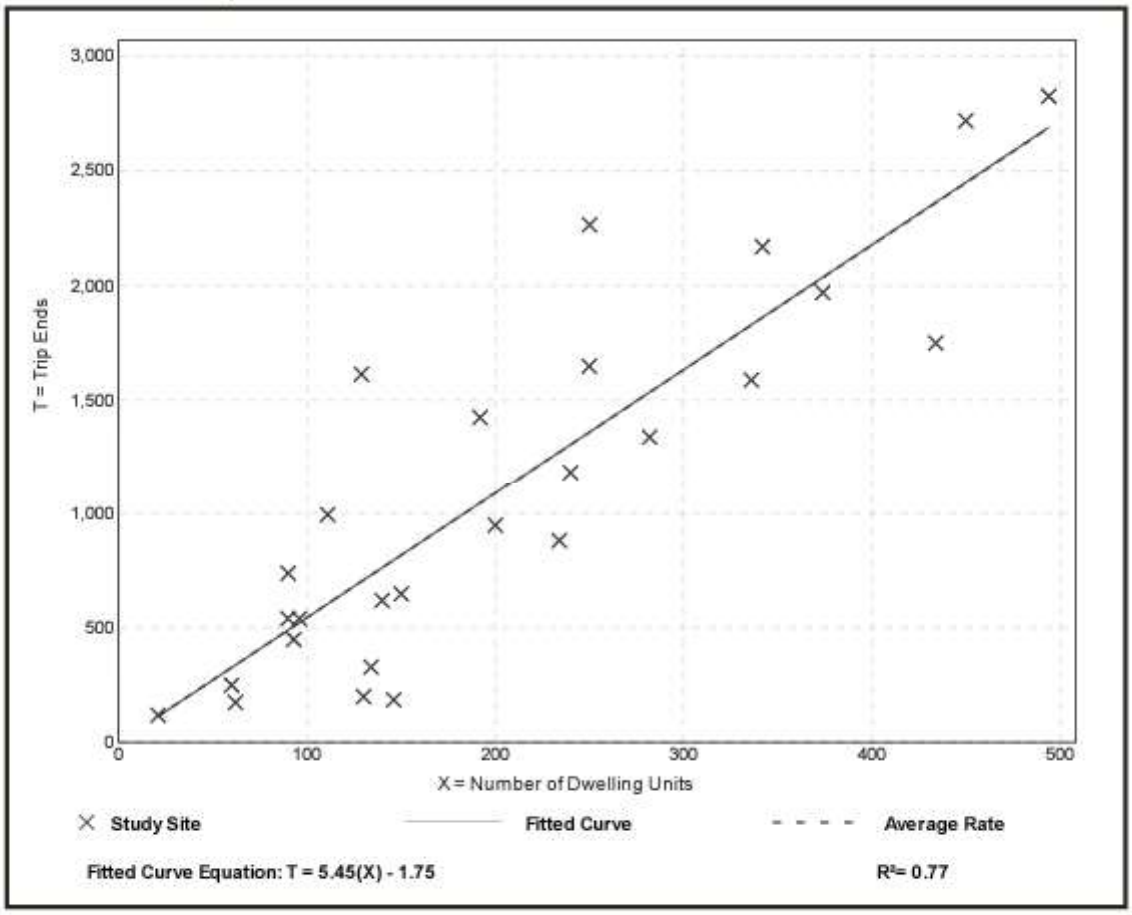
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 27
Avg. Num. of Dwelling Units: 205
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
5.44	1.27 - 12.50	2.03

Data Plot and Equation



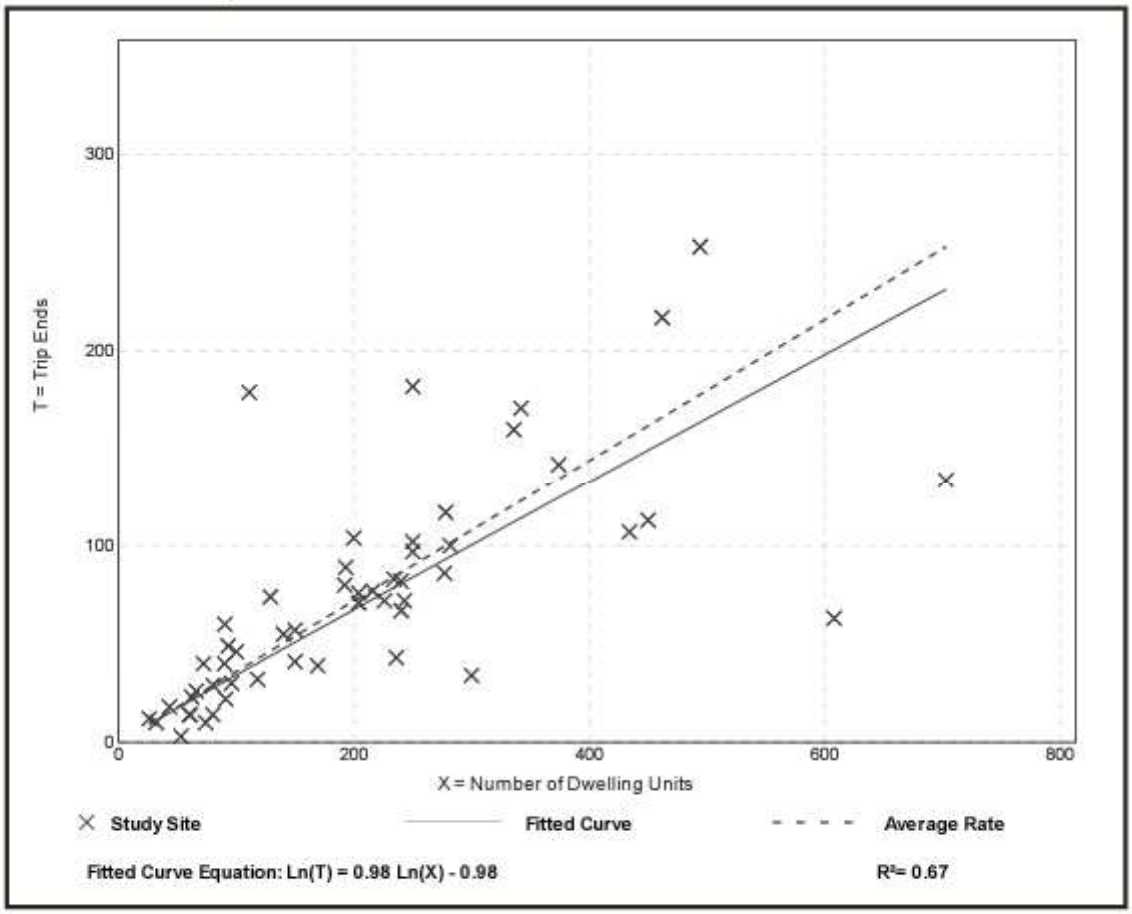
Multifamily Housing (Mid-Rise)
(221)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,** **Peak Hour of Adjacent Street Traffic,** **One Hour Between 7 and 9 a.m.**
Setting/Location:	**General Urban/Suburban**
Number of Studies:	53
Avg. Num. of Dwelling Units:	207
Directional Distribution:	26% entering, 74% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.36	0.06 - 1.61	0.19

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.98 Ln(X) - 0.98 R^2**= 0.67**

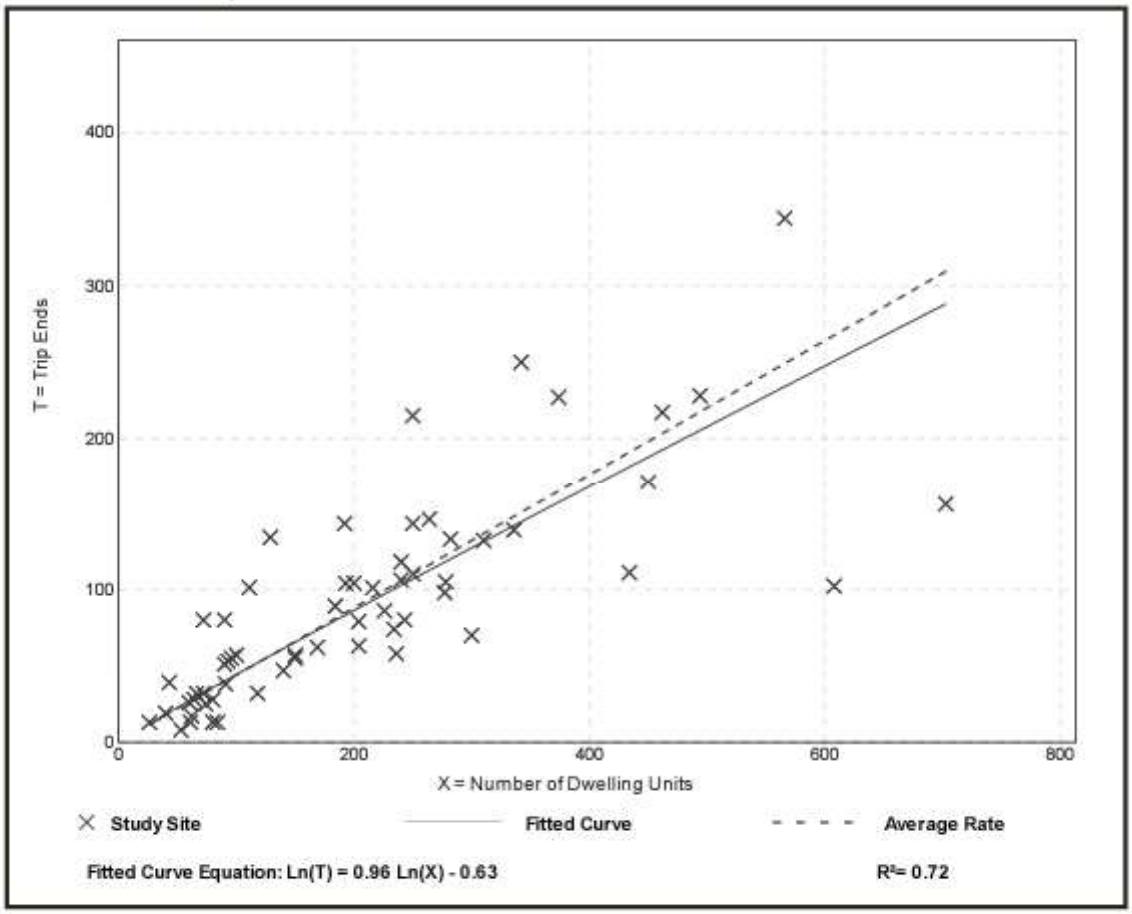
Multifamily Housing (Mid-Rise)
(221)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 60
Avg. Num. of Dwelling Units: 208
Directional Distribution: 61% entering, 39% exiting

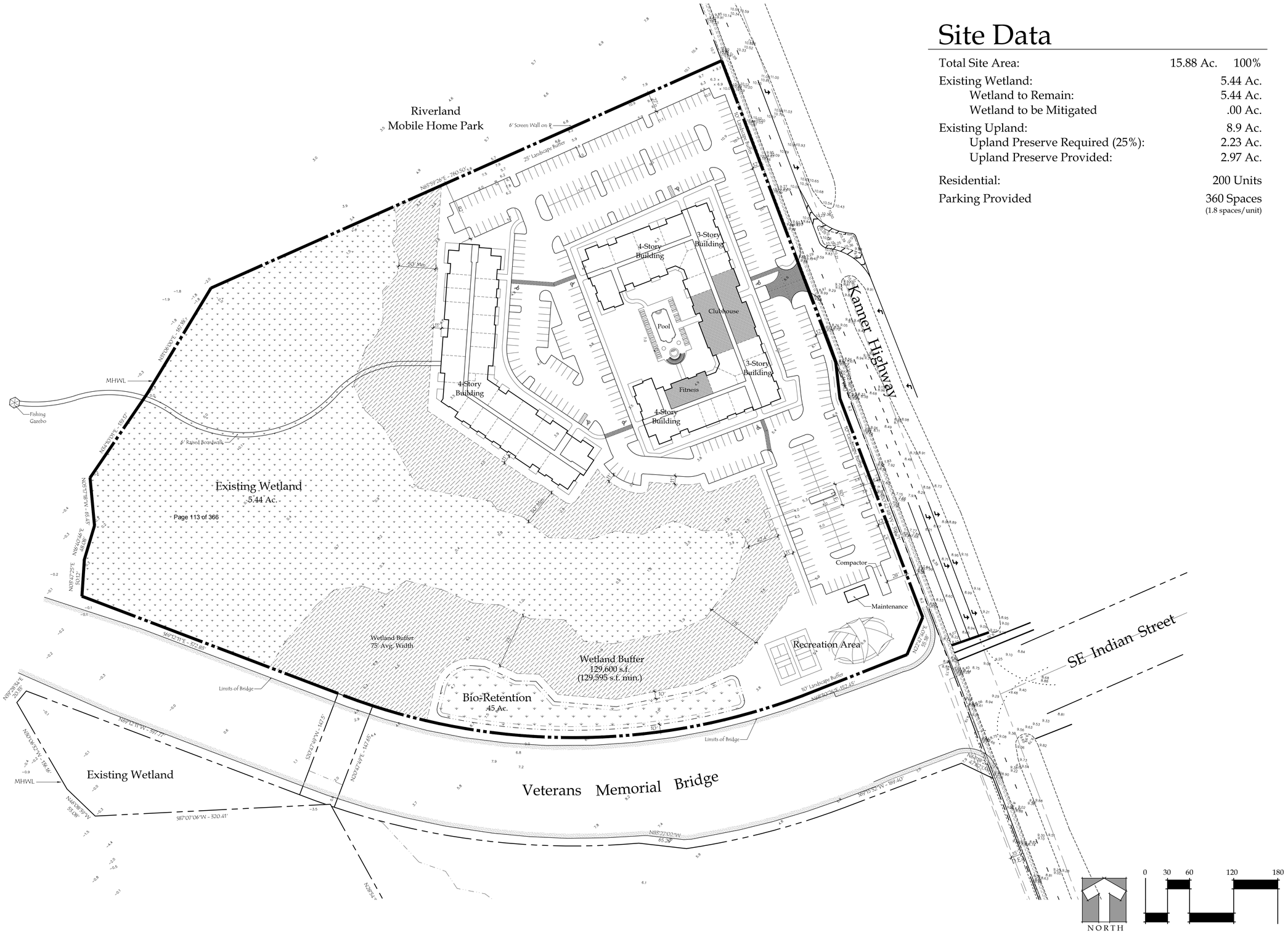
Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.44	0.15 - 1.11	0.19

Data Plot and Equation



Fitted Curve Equation: Ln(T) = 0.96 Ln(X) - 0.63 **R^2= 0.72**



Site Data

Total Site Area:	15.88 Ac.	100%
Existing Wetland:		5.44 Ac.
Wetland to Remain:		5.44 Ac.
Wetland to be Mitigated		.00 Ac.
Existing Upland:		8.9 Ac.
Upland Preserve Required (25%):		2.23 Ac.
Upland Preserve Provided:		2.97 Ac.
Residential:		200 Units
Parking Provided		360 Spaces (1.8 spaces/unit)

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Gentile Glas Holloway O'Mahoney & Associates, Inc.
Landscape Architects
Planners and
Environmental Consultants

1907 Commerce Lane
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561-575-5260 FAX
www.2gho.com

Bridgeview

Martin County, Florida

Designed:
Drawn:
Approved:
Date:
Job no.
Revisions:

Cad no. CAD0

Seal

LC C000177

Sheet Title:

Site Development Plan

Scale: 1" = 60'

Sheet No.

SP-1

00-0000

N:\Bridgeview - Atlantic Realty - 19-0409\Drawings\1st Submittal\Bridgeview Site Plan 10-9-19.dwg, 10/9/2019 4:34:35 PM, DWG To PDF.pc3

Martin County, Florida - Laurel Kelly, C.F.A

generated on 6/18/2019 9:31:28 AM EDT

Summary

Parcel ID	Account #	Unit Address	Market Total Value	Website Updated
40-38-41-001-051-00000-2	35989	S KANNER HWY, STUART	$769,590	6/15/2019

Owner Information

Owner(Current)	FAIRVIEW PROPERTIES INC
Owner/Mail Address	2400 S FEDERAL HWY #230 STUART FL 34994
Sale Date	3/3/2008
Document Book/Page	2312 2091
Document No.	2069649
Sale Price	0

Location/Description

Account #	35989	**Map Page No.**	HG-11
Tax District	7017	**Legal Description**	STUART FARMS SLY 300' OF LOT C, LOT D & THAT PART OF LOT E LYING N OF UNNAMED CREEK (LESS SR 76 R/W) & THAT PART OF LOT 6 OF COMMISSIONERS S/D OF HANSON GRANT LYING NLY OF UNNAMED CREEK & ELY OF ST LUCIE CANAL (LESS NLY 1500').. (& LESS FROM ALL ABOVE THAT 4.46 ACRES TO FLDOT PER OR 2441/0936)
Parcel Address	S KANNER HWY, STUART		
Acres	26.2100		

Parcel Type

Use Code	1000 Vacant Commercial
Neighborhood	50100 SW Stuart_Kanner_Willoughby

Assessment Information

Market Land Value	$769,590
Market Improvement Value	
Market Total Value	$769,590

Plant Legend

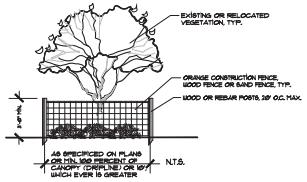
503 ⊕ 19.5" PE — Existing Tree To Remain

Identifies Tree Species & D.B.H.
Tree I.D. Number Typ.

503 + 16" PE — Existing Tree To Be Removed

Vegetation Protection Detail

NOT TO SCALE — PRESERVED TREES



FENCING OF UNDISTURBED AREAS:

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL ENCLOSE THE ENTIRE UNDISTURBED AREA, OR TREE, WITHIN A FENCE OR SIMILAR BARRIER AS SHOWN. WOODEN (OR EQUIVALENT) POSTS STEEL REBAR OR WOOD AT LEAST 2 x 2 INCHES SHALL BE IMPLANTED IN THE GROUND DEEP ENOUGH TO BE STABLE AND WITH AT LEAST 3 FEET VISIBLE ABOVE THE GROUND. THE PROTECTIVE POSTS SHALL BE PLACED NOT MORE THAN 30 FEET APART, AND SHALL BE LINKED TOGETHER BY ORANGE NET FENCE FABRIC, OR OTHER. NO HEAVY EQUIPMENT, VEHICLES, STORAGE OF MATERIALS, ETC. SHALL OCCUR WITHIN THE VEGI. PROTECTION ZONE. EXTREME CARE SHALL BE TAKEN WHEN WORKING NEAR THE BASE OF TREES. NO FINISH GRADE FILL SHALL BE PLACED WITHIN A ZONE OF 2/3 THE DIAMETER OF THE TREE CANOPY.

FLATWORK CONSTRUCTION WITHIN CANOPY & TREE BARRICADE SHALL BE BE DONE WITH EXTREME CARE TO MINIMIZE DISTURBANCE TO THE ROOTS BY EXCAVATING, COMPACTING OR ADDING FILL.

UTILITY WORK (TRENCHING) WITHIN THE CANOPY & TREE BARRICADE SHALL BE DONE WITH EXTREME CARE TO MINIMIZE DISTURBANCE TO THE ROOTS BY EXCAVATING, COMPACTING OR ADDING FILL. THE TREE BARRICADE WILL BE MODIFIED TEMPORARILY TO ALLOW ONLY THE MINIMUM WORK ZONE TRESPASS INTO THE CANOPY AREA. CONTINUING TO PROTECT THE REST OF THE CANOPY AREA WITH BARRICADE. NO FILL, EVEN TEMPORARY, SHALL BE PLACED IN ANY PROTECTED ZONE. AT THE CONCLUSION OF SAID ACTIVITY, THE WORKZONE SHALL BE CLEANED UP & TREE BARRICADES REPLACED TO THEIR ORIGINAL CONFIGURATION.

Tree Disposition Notes:

ALL EXISTING TREES TO BE STRAINED BY A CERTIFIED ARBORIST ONE MONTH PRIOR TO, DUE TO PRUNE HALF OF TREES AND SIGHT VISIBILITY AS REQUIRED FOR SAFE TRAVEL.

ALL EXISTING TREES TO BE KEPT IRRIGATED DURING CONSTRUCTION

ALL EXISTING TREES MUST BE DELIVERED AT THE END OF THE PROJECT IN EQUAL OR BETTER CONDITION WHICH ACCOMMODES THE SHAPE AND SIZE OF THE CANOPY AND THE SIGNS OF THE QUALITY AND VIGOROUS GROWTH.

ALL PROHIBITED EXOTIC AND INVASIVE SPECIES SHALL BE REMOVED FROM THE ENTIRE SITE PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

0 20 40 80 120

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Gentile Glas Holloway O'Mahoney & Associates, Inc.
Landscape Architects Planners and Environmental Consultants

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Suite 101
Jupiter, Florida 33458
561-575-9557
561-575-5260 FAX
www.2gho.com

Bridgeview

City of Stuart, Florida

Designed: BRD
Drawn: BRD
Approved: GGG MTH EMO
Date: 3/11/20
Job no.:
Revisions:

Cad no.: CAD0

Seal

Digitally signed by M. Troy Holloway
Date: 2020.03.11 14:25:14 -04'00'
I.C C000177

Sheet Title:
Tree Disposition Plan

Scale: 1" = 40'

Sheet No.
TD-1

00-0000

FILE: N:\BRIDGEVIEW - ATLANTIC REALTY - 19-0400\DRAWINGS\2ND SUBMITTAL\BRIDGEVIEW LANDSCAPE PLAN 3-11-2020.DWG
PLOTTED: 3/11/20 AT 2:09PM BY: BEN
XREFS: BRIDGEVIEW SITE PLAN 3-11-2020.DWG

Existing Tree List

Tag #	Species	Proposed Disposition	Size (DBH for Canopy Trees) (Ft. Ht. for Palms) To Be Removed	Size (DBH for Canopy Trees) (Ft. Ht. for Palms) To Remain	In Development Area	In Preserve Area	Specimen/Historic	Pine Mitigated Inches	Tree Mitigated Inches	Replacement Palms (1:1)	Notes
Bridgeview March-20											
1	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
2	SAND PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
3	SAND PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
4	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
5	SAND PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
6	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
7	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
8	SAND PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
9	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
10	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
11	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
12	SAND PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
13	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
14	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
15	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
16	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
17	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
18	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
19	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
20	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
21	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
22	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
23	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
24	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
25	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
26	SAND PINE	REMOVE	8.00"		Y	N	S	8.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
27	SAND PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
28	SAND PINE	REMOVE	8.00"		Y	N	S	8.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
29	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
30	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
31	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
32	SAND PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
33	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
34	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
35	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
36	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
37	SAND PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
38	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
39	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
40	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
41	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
42	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
43	SAND PINE	REMOVE	7.50"		Y	N	S	7.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
44	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
45	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
46	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
47	SAND PINE	REMOVE	7.50"		Y	N	S	7.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
48	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
49	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
50	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
51	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
52	SAND PINE	REMOVE	7.50"		Y	N	S	7.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
53	SAND PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
54	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
55	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
56	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
57	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
58	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
59	SAND PINE	REMOVE	8.00"		Y	N	S	8.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
60	SAND PINE	REMOVE	8.00"		Y	N	S	8.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
61	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
62	SAND PINE	REMOVE	8.50"		Y	N	S	8.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
63	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
64	SAND PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
65	SAND PINE	REMOVE	9.00"		Y	N	S	9.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
66	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
67	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
68	SAND PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
69	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
70	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
71	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
72	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
73	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
74	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
75	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
76	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
77	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
78	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
79	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
80	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
81	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
82	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
83	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
84	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
85	SAND PINE	REMOVE	8.00"		Y	N	S	8.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
86	SAND PINE	REMOVE	7.50"		Y	N	S	7.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
87	SAND PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
88	SAND PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
89	SLASH PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
90	SLASH PINE	REMOVE	24.00"		Y	N	S	24.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
91	SLASH PINE	REMOVE	22.00"		Y	N	S	22.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
92	SAND PINE	REMOVE	7.50"		Y	N	S	7.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
93	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
94	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
95	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
96	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
97	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
98	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
99	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
100	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
101	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
102	SAND PINE	REMOVE	9.00"		Y	N	S	9.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
103	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
104	SLASH PINE	REMOVE	22.00"		Y	N	S	22.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
105	SAND PINE	REMOVE	7.50"		Y	N	S	7.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
106	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
107	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
108	SAND PINE	REMOVE	9.00"		Y	N	S	9.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
109	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
110	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
111	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
112	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
113	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
114	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
115	SAND PINE	REMOVE	9.00"		Y	N	S	9.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
116	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
117	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
118	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
119	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
120	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
121	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
122	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
123	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
124	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
125	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
126	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
127	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
128	SAND PINE	REMOVE	4.50"		Y	N	S	4.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
129	SLASH PINE	REMOVE	20.00"		Y	N	S	20.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
130	SLASH PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
131	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
132	SAND PINE	REMOVE	8.00"		Y	N	S	8.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
133	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
134	SLASH PINE	REMOVE	20.00"		Y	N	S	20.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
135	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
136	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
137	SAND PINE	REMOVE	7.50"		Y	N	S	7.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
138	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
139	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
140	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
147	SLASH PINE	REMOVE	24.00"		Y	N	S	24.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
148	SLASH PINE	REMAIN		20.00"	N	Y	S				REMAIN IN PLACE
149	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
150	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
151	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
152	SLASH PINE	REMOVE	18.00"		Y	N	S	18.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
153	SLASH PINE	REMOVE	16.00"		Y	N	S	16.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
154	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
155	SLASH PINE	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
156	SWEET BAY	REMAIN		6.00"	N	Y	S				REMAIN IN PLACE
157	SWEET BAY	REMAIN		9.00"	N	Y	S				REMAIN IN PLACE
158	SWEET BAY	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
159	SWEET BAY	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
160	SLASH PINE	REMAIN		14.00"	N	Y	S				REMAIN IN PLACE
161	SLASH PINE	REMAIN		26.00"	N	Y	S				REMAIN IN PLACE
162	SLASH PINE	REMAIN		16.00"	N	Y	S				REMAIN IN PLACE
163	SWEET BAY	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
164	SLASH PINE	REMAIN		14.00"	N	Y	S				REMAIN IN PLACE
165	DAHOON HOLLY	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
166	SLASH PINE	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
167	SWEET BAY	REMAIN		36.00"	N	Y	S				REMAIN IN PLACE
168	SLASH PINE	REMAIN		14.00"	N	Y	S				REMAIN IN PLACE
169	SLASH PINE	REMAIN		14.00"	N	Y	S				REMAIN IN PLACE
170	SWEET BAY	REMAIN		9.00"	N	Y	S				REMAIN IN PLACE
171	SWEET BAY	REMAIN		20.00"	N	Y	S				REMAIN IN PLACE
172	SLASH PINE	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
173	DAHOON HOLLY	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
174	SWEET BAY	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
175	SWEET BAY	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
176	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
177	SLASH PINE	REMAIN		11.00"	N	Y	S				REMAIN IN PLACE
178	DAHOON HOLLY	REMAIN		24.00"	N	Y	S				REMAIN IN PLACE
179	SLASH PINE	REMAIN		26.00"	N	Y	S				REMAIN IN PLACE
180	SWEET BAY	REMOVE	18.00"		Y	N	S		18.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
181	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
182	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
183	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
184	SLASH PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
185	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
186	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
187	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
188	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
189	SLASH PINE	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
190	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
191	SLASH PINE	REMAIN		14.00"	N	Y	S				REMAIN IN PLACE
192	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
193	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
194	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
195	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
196	SLASH PINE	REMAIN		16.00"	N	Y	S				REMAIN IN PLACE
197	SLASH PINE	REMAIN		16.00"	N	Y	S				REMAIN IN PLACE
198	SLASH PINE	REMAIN		14.00"	N	Y	S				REMAIN IN PLACE
199	SLASH PINE	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
200	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
201	SLASH PINE	REMAIN		14.00"	N	Y	S				REMAIN IN PLACE
202	SWEET BAY	REMAIN		11.50"	N	Y	S				REMAIN IN PLACE
203	SWEET BAY	REMAIN		11.00"	N	Y	S				REMAIN IN PLACE
204	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
205	SWEET BAY	REMAIN		45.00"	N	Y	S				REMAIN IN PLACE
206	SWEET BAY	REMAIN		6.50"	N	Y	S				REMAIN IN PLACE
207	SWEET BAY	REMAIN		10.50"	N	Y	S				REMAIN IN PLACE
208	SWEET BAY	REMAIN		5.00"	N	Y	S				REMAIN IN PLACE
209	SWEET BAY	REMAIN		9.50"	N	Y	S				REMAIN IN PLACE
210	SWEET BAY	REMAIN		6.00"	N	Y	S				REMAIN IN PLACE
211	SWEET BAY	REMAIN		6.50"	N	Y	S				REMAIN IN PLACE
212	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
213	SWEET BAY	REMAIN		15.00"	N	Y	S				REMAIN IN PLACE
214	SLASH PINE	REMAIN		11.00"	N	Y	S				REMAIN IN PLACE
215	SWEET BAY	REMAIN		9.50"	N	Y	S				REMAIN IN PLACE
216	SLASH PINE	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
217	SLASH PINE	REMAIN		11.00"	N	Y	S				REMAIN IN PLACE
218	SWEET BAY	REMAIN		8.50"	N	Y	S				REMAIN IN PLACE
219	SWEET BAY	REMAIN		9.00"	N	Y	S				REMAIN IN PLACE
220	SWEET BAY	REMAIN		6.50"	N	Y	S				REMAIN IN PLACE
221	DAHOON HOLLY	REMAIN		4.50"	N	Y	S				REMAIN IN PLACE
222	SWEET BAY	REMAIN		7.00"	N	Y	S				REMAIN IN PLACE
223	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
224	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
225	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
226	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
227	SLASH PINE	REMOVE	13.50"		Y	N	S	13.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
228	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
229	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
230	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
231	SLASH PINE	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
232	SLASH PINE	REMAIN		15.00"	N	Y	S				REMAIN IN PLACE
233	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
234	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
235	SLASH PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
236	SLASH PINE	REMOVE	10.50"		Y	N	S	10.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
237	SLASH PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
238	SLASH PINE	REMOVE	18.00"		Y	N	S	18.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
239	SWEET BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
240	SWEET BAY	REMOVE	5.00"		Y	N	S		5.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
241	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
242	SLASH PINE	REMOVE	11.50"		Y	N	S	11.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
243	DAHOON HOLLY	REMOVE	24.00"		Y	N	S		24.00"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
244	SAND PINE	REMOVE	9.00"		Y	N	S	9.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
245	SWEET BAY	REMOVE	5.00"		Y	N	S		5.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
246	SWEET BAY	REMAIN		6.50"	N	Y	S				REMAIN IN PLACE
247	SWEET BAY	REMOVE	6.00"		Y	N	S		6.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
248	SWEET BAY	REMOVE	4.50"		Y	N	S		4.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
249	SWEET BAY	REMAIN		4.50"	N	Y	S				REMAIN IN PLACE
250	SWEET BAY	REMAIN		5.50"	N	Y	S				REMAIN IN PLACE
251	DAHOON HOLLY	REMOVE	24.00"		Y	N	S		24.00"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
252	SLASH PINE	REMOVE	15.00"		Y	N	S	15.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
253	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
254	DAHOON HOLLY	REMOVE	8.50"		Y	N	S		8.50"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
255	SWEET BAY	REMAIN		10.50"	N	Y	S				REMAIN IN PLACE
256	SLASH PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
257	SLASH PINE	REMOVE	15.00"		Y	N	S	15.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
258	SWEET BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
259	SWEET BAY	REMOVE	12.00"		Y	N	S		12.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
260	DAHOON HOLLY	REMOVE	8.00"		Y	N	S		8.00"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
261	DAHOON HOLLY	REMOVE	8.50"		Y	N	S		8.50"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
262	DAHOON HOLLY	REMOVE	7.00"		Y	N	S		7.00"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
263	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
264	SWEET BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
265	DAHOON HOLLY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
266	SWEET BAY	REMOVE	16.50"		Y	N	S		16.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
267	SLASH PINE	REMOVE	16.00"		Y	N	S	16.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
268	DAHOON HOLLY	REMOVE	6.50"		Y	N	S		6.50"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
269	SWEET BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
270	DAHOON HOLLY	REMOVE	4.50"		Y	N	S		4.50"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
271	SWEET BAY	REMOVE	7.00"		Y	N	S		7.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
272	SWEET BAY	REMOVE	7.00"		Y	N	S		7.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
273	SWEET BAY	REMOVE	6.00"		Y	N	S		6.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
274	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
275	SLASH PINE	REMOVE	10.50"		Y	N	S	10.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
276	SLASH PINE	REMOVE	13.00"		Y	N	S	13.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
277	SLASH PINE	REMOVE	10.50"		Y	N	S	10.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
278	SWEET BAY	REMOVE	7.00"		Y	N	S		7.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
279	SWEET BAY	REMOVE	10.00"		Y	N	S		10.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
280	SWEET BAY	REMOVE	5.00"		Y	N	S		5.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
281	SWEET BAY	REMOVE	9.50"		Y	N	S		9.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
282	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
283	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
284	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
285	SAND PINE	REMOVE	7.50"		Y	N	S	7.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
286	SAND PINE	REMOVE	9.00"		Y	N	S	9.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
287	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
288	SAND PINE	REMOVE	7.25"		Y	N	S	7.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
289	SLASH PINE	REMOVE	13.00"		Y	N	S	13.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
290	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
291	SLASH PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
292	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
293	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
294	DAHOON HOLLY	REMAIN		16.00"	N	Y	S				REMAIN IN PLACE
295	SLASH PINE	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
296	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
297	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
298	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
299	SWEET BAY	REMAIN		15.00"	N	Y	S				REMAIN IN PLACE
300	SLASH PINE	REMAIN		15.00"	N	Y	S				REMAIN IN PLACE
301	SLASH PINE	REMAIN		14.50"	N	Y	S				REMAIN IN PLACE
302	SWEET BAY	REMAIN		25.00"	N	Y	S				REMAIN IN PLACE
303	SWEET BAY	REMAIN		13.50"	N	Y	S				REMAIN IN PLACE
304	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
305	SWEET BAY	REMAIN		8.00"	N	Y	S				REMAIN IN PLACE
306	SWEET BAY	REMAIN		7.00"	N	Y	S				REMAIN IN PLACE
307	SWEET BAY	REMAIN		16.50"	N	Y	S				REMAIN IN PLACE
308	SLASH PINE	REMAIN		13.00"	N	Y	S				REMAIN IN PLACE
309	SWEET BAY	REMOVE	13.00"		Y	N	S		13.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
310	SLASH PINE	REMOVE	22.00"		Y	N	S	22.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
311	DAHOON HOLLY	REMOVE	7.50"		Y	N	S		7.50"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
312	SWEET BAY	REMOVE	7.50"		Y	N	S		7.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
313	SWEET BAY	REMOVE	4.50"		Y	N	S		4.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
314	SWEET BAY	REMOVE	6.50"		Y	N	S		6.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
315	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
316	SWEET BAY	REMOVE	6.75"		Y	N	S		6.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
317	SWEET BAY	REMOVE	10.00"		Y	N	S		10.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
318	SWEET BAY	REMOVE	7.75"		Y	N	S		7.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
319	SWEET BAY	REMOVE	4.75"		Y	N	S		4.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
320	SWEET BAY	REMOVE	8.00"		Y	N	S		8.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
321	SWEET BAY	REMOVE	9.00"		Y	N	S		9.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
322	SWEET BAY	REMOVE	6.75"		Y	N	S		6.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
323	SWEET BAY	REMOVE	14.00"		Y	N	S		14.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
324	SWEET BAY	REMOVE	6.00"		Y	N	S		6.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
325	SWEET BAY	REMOVE	7.00"		Y	N	S		7.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
326	SLASH PINE	REMAIN		11.00"	N	Y	S				REMAIN IN PLACE
327	SWEET BAY	REMOVE	8.00"		Y	N	S		8.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
328	SWEET BAY	REMOVE	6.50"		Y	N	S		6.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
329	SLASH PINE	REMOVE	16.00"		Y	N	S	16.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
330	SWEET BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
331	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
332	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
333	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
334	LOBLOLLY BAY	REMOVE	4.75"		Y	N	S		4.75"		MITIGATE/REPLACE LOBLOLLY TREE, 4.5" DBH MIN.
335	LOBLOLLY BAY	REMOVE	6.00"		Y	N	S		6.00"		MITIGATE/REPLACE LOBLOLLY TREE, 4.5" DBH MIN.
336	LOBLOLLY BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE LOBLOLLY TREE, 4.5" DBH MIN.
337	SLASH PINE	REMOVE	11.25"		Y	N	S	11.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
338	SLASH PINE	REMOVE	13.00"		Y	N	S	13.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
339	SLASH PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
340	SWEET BAY	REMOVE	9.00"		Y	N	S		9.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
341	SWEET BAY	REMOVE	9.25"		Y	N	S		9.25"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
342	DAHOON HOLLY	REMOVE	4.75"		Y	N	S		4.75"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
343	DAHOON HOLLY	REMOVE	14.00"		Y	N	S		14.00"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
344	SAND PINE	REMOVE	11.25"		Y	N	S	11.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
345	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
346	SLASH PINE	REMOVE	20.00"		Y	N	S	20.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
347	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
348	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
349	SLASH PINE	REMOVE	15.00"		Y	N	S	15.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
350	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
351	SAND PINE	REMOVE	5.50"		Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
352	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
353	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
354	SLASH PINE	REMOVE	18.00"		Y	N	S	18.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
355	SAND PINE	REMOVE	6.25"		Y	N	S	6.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
356	SAND PINE	REMOVE	5.25"		Y	N	S	5.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
357	SLASH PINE	REMOVE	20.00"		Y	N	S	20.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
358	SAND PINE	REMOVE	6.50"		Y	N	S	6.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
359	SLASH PINE	REMOVE	17.00"		Y	N	S	17.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
360	SLASH PINE	REMOVE	15.50"		Y	N	S	15.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
361	SLASH PINE	REMOVE	21.00"		Y	N	S	21.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
362	SAND PINE	REMOVE	8.50"		Y	N	S	8.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
363	SAND PINE	REMOVE	8.75"		Y	N	S	8.8"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
364	SLASH PINE	REMOVE	38.00"		Y	N	S	38.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
365	SLASH PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
366	SLASH PINE	REMOVE	16.00"		Y	N	S	16.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
367	SAND PINE	REMOVE	7.00"		Y	N	S	7.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
368	SWEET BAY	REMAIN		9.50"	N	Y	S				REMAIN IN PLACE
369	SWEET BAY	REMAIN		5.50"	N	Y	S				REMAIN IN PLACE
370	SWEET BAY	REMAIN		10.75"	N	Y	S				REMAIN IN PLACE
371	SWEET BAY	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
372	SWEET BAY	REMAIN		6.25"	N	Y	S				REMAIN IN PLACE
373	SLASH PINE	REMAIN		11.50"	N	Y	S				REMAIN IN PLACE
374	SLASH PINE	REMAIN		11.00"	N	Y	S				REMAIN IN PLACE
375	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
376	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
377	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
378	DAHOON HOLLY	REMOVE	6.00"		Y	N	S		6.00"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
379	SLASH PINE	REMOVE	13.00"		Y	N	S	13.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
380	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
381	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
382	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
383	SWEET BAY	REMOVE	10.25"		Y	N	S		10.25"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
384	SWEET BAY	REMOVE	7.25"		Y	N	S		7.25"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
385	SWEET BAY	REMOVE	7.75"		Y	N	S		7.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
386	SWEET BAY	REMOVE	5.25"		Y	N	S		5.25"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
387	SWEET BAY	REMOVE	5.75"		Y	N	S		5.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
388	SWEET BAY	REMOVE	8.00"		Y	N	S		8.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
389	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
390	SWEET BAY	REMOVE	7.25"		Y	N	S		7.25"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
391	SLASH PINE	REMOVE	13.00"		Y	N	S	13.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
392	SWEET BAY	REMOVE	6.75"		Y	N	S		6.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
393	SWEET BAY	REMOVE	25.00"		Y	N	S		25.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
394	DAHOON HOLLY	REMOVE	5.00"		Y	N	S		5.00"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
395	SWEET BAY	REMOVE	5.00"		Y	N	S		5.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
396	SLASH PINE	REMOVE	15.00"		Y	N	S	15.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
397	SLASH PINE	REMOVE	15.00"		Y	N	S	15.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
398	DAHOON HOLLY	REMOVE	6.75"		Y	N	S		6.75"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
399	SLASH PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
400	DAHOON HOLLY	REMOVE	5.25"		Y	N	S		5.25"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
401	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
402	DAHOON HOLLY	REMOVE	4.75"		Y	N	S		4.75"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
403	SWEET BAY	REMOVE	4.50"		Y	N	S		4.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
404	SWEET BAY	REMOVE	5.00"		Y	N	S		5.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
405	DAHOON HOLLY	REMOVE	6.00"		Y	N	S		6.00"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
406	SWEET BAY	REMOVE	10.50"		Y	N	S		10.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
407	SWEET BAY	REMOVE	9.00"		Y	N	S		9.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
408	SLASH PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
409	SWEET BAY	REMOVE	5.75"		Y	N	S		5.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
410	SWEET BAY	REMOVE	4.75"		Y	N	S		4.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
411	SLASH PINE	REMOVE	10.50"		Y	N	S	10.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
412	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
413	SWEET BAY	REMOVE	8.00"		Y	N	S		8.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
414	SWEET BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
415	SWEET BAY	REMOVE	8.50"		Y	N	S		8.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
416	DAHOON HOLLY	REMOVE	13.00"		Y	N	S		13.00"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
417	DAHOON HOLLY	REMOVE	8.25"		Y	N	S		8.25"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
418	SWEET BAY	REMAIN		6.75"	N	Y	S				REMAIN IN PLACE
419	SWEET BAY	REMAIN		6.75"	N	Y	S				REMAIN IN PLACE
420	SWEET BAY	REMAIN		7.25"	N	Y	S				REMAIN IN PLACE
421	SWEET BAY	REMAIN		7.25"	N	Y	S				REMAIN IN PLACE
422	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
423	SWEET BAY	REMAIN		6.75"	N	Y	S				REMAIN IN PLACE
424	SWEET BAY	REMAIN		7.50"	N	Y	S				REMAIN IN PLACE
425	SLASH PINE	REMAIN		11.50"	N	Y	S				REMAIN IN PLACE
426	SWEET BAY	REMAIN		6.50"	N	Y	S				REMAIN IN PLACE
427	SLASH PINE	REMAIN		11.50"	N	Y	S				REMAIN IN PLACE
428	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
429	SWEET BAY	REMAIN		9.00"	N	Y	S				REMAIN IN PLACE
430	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
431	SAND PINE	REMOVE	6.75"		Y	N	S	6.8"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
432	SAND PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
433	SAND PINE	REMOVE	9.50"		Y	N	S	9.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
434	SAND PINE	REMOVE	6.25"		Y	N	S	6.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
435	SAND PINE	REMOVE	5.00"		Y	N	S	5.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
436	SAND PINE	REMOVE	5.25"		Y	N	S	5.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
437	SAND PINE	REMOVE	5.25"		Y	N	S	5.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
438	SAND PINE	REMOVE	6.25"		Y	N	S	6.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
439	SAND PINE	REMOVE	4.75"		Y	N	S	4.8"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
440	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
441	SAND PINE	REMOVE	10.50"		Y	N	S	10.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
442	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
443	SLASH PINE	REMOVE	16.00"		Y	N	S	16.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
444	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
445	SAND PINE	REMOVE	6.00"		Y	N	S	6.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
446	SLASH PINE	REMOVE	17.00"		Y	N	S	17.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
447	SLASH PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
448	SWEET BAY	REMOVE	5.75"		Y	N	S		5.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
449	SLASH PINE	REMOVE	21.00"		Y	N	S	21.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
450	SLASH PINE	REMOVE	10.50"		Y	N	S	10.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
451	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
452	SLASH PINE	REMOVE	10.75"		Y	N	S	10.8"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
453	SLASH PINE	REMOVE	13.00"		Y	N	S	13.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
454	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
455	SWEET BAY	REMAIN		7.50"	N	Y	S				REMAIN IN PLACE
456	SWEET BAY	REMOVE	7.25"		Y	N	S		7.25"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
457	SLASH PINE	REMAIN		17.00"	N	Y	S				REMAIN IN PLACE
458	SLASH PINE	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
459	SWEET BAY	REMAIN		4.50"	N	Y	S				REMAIN IN PLACE
460	DAHOON HOLLY	REMAIN		6.50"	N	Y	S				REMAIN IN PLACE
461	SLASH PINE	REMAIN		13.00"	N	Y	S				REMAIN IN PLACE
462	SLASH PINE	REMAIN		26.00"	N	Y	S				REMAIN IN PLACE
463	SWEET BAY	REMAIN		5.00"	N	Y	S				REMAIN IN PLACE
464	SWEET BAY	REMAIN		8.00"	N	Y	S				REMAIN IN PLACE
465	SWEET BAY	REMAIN		5.50"	N	Y	S				REMAIN IN PLACE
466	SWEET BAY	REMAIN		8.25"	N	Y	S				REMAIN IN PLACE
467	SWEET BAY	REMAIN		9.00"	N	Y	S				REMAIN IN PLACE
468	SLASH PINE	REMAIN		11.00"	N	Y	S				REMAIN IN PLACE
469	SLASH PINE	REMAIN		11.50"	N	Y	S				REMAIN IN PLACE
470	SWEET BAY	REMAIN		13.00"	N	Y	S				REMAIN IN PLACE
471	SLASH PINE	REMAIN		28.00"	N	Y	S				REMAIN IN PLACE
472	SWEET BAY	REMAIN		10.00"	N	Y	S				REMAIN IN PLACE
473	SWEET BAY	REMAIN		11.50"	N	Y	S				REMAIN IN PLACE
474	DAHOON HOLLY	REMOVE	8.75"		Y	N	S		8.75"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
475	SLASH PINE	REMAIN		12.00"	N	Y	S				REMAIN IN PLACE
476	SWEET BAY	REMAIN		8.00"	N	Y	S				REMAIN IN PLACE
477	SLASH PINE	REMAIN		14.00"	N	Y	S				REMAIN IN PLACE
478	SLASH PINE	REMAIN		14.00"	N	Y	S				REMAIN IN PLACE
479	SLASH PINE	REMAIN		11.00"	N	Y	S				REMAIN IN PLACE
480	SWEET BAY	REMAIN		9.50"	N	Y	S				REMAIN IN PLACE
481	SLASH PINE	REMAIN		19.00"	N	Y	S				REMAIN IN PLACE
482	SLASH PINE	REMAIN		17.00"	N	Y	S				REMAIN IN PLACE
483	SWEET BAY	REMAIN		5.25"	N	Y	S				REMAIN IN PLACE
484	SWEET BAY	REMAIN		6.00"	N	Y	S				REMAIN IN PLACE
485	SLASH PINE	REMOVE	13.00"		Y	N	S	13.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
486	SLASH PINE	REMOVE	14.00"		Y	N	S	14.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
487	SWEET BAY	REMOVE	9.50"		Y	N	S		9.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
488	SWEET BAY	REMOVE	11.00"		Y	N	S		11.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
489	SLASH PINE	REMOVE	19.00"		Y	N	S	19.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
490	SLASH PINE	REMAIN		21.00"	N	Y	S				REMAIN IN PLACE
491	SLASH PINE	REMAIN		16.00"	N	Y	S				REMAIN IN PLACE
492	SLASH PINE	REMAIN		18.00"	N	Y	S				REMAIN IN PLACE
493	SLASH PINE	REMAIN		17.00"	N	Y	S				REMAIN IN PLACE
494	SLASH PINE	REMAIN		19.50"	N	Y	S				REMAIN IN PLACE
495	SLASH PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
496	DAHOON HOLLY	REMOVE	5.25"		Y	N	S		5.25"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
497	SLASH PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
498	SWEET BAY	REMOVE	6.75"		Y	N	S		6.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
499	SWEET BAY	REMOVE	6.75"		Y	N	S		6.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
500	SWEET BAY	REMOVE	6.50"		Y	N	S		6.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
501	DAHOON HOLLY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE DAHOON HOLLY TREE, 4.5" DBH MIN.
502	SLASH PINE	REMOVE	12.50"		Y	N	S	12.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
503	SWEET BAY	REMOVE	7.50"		Y	N	S		7.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
504	SLASH PINE	REMOVE	15.00"		Y	N	S	15.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
505	SWEET BAY	REMOVE	7.00"		Y	N	S		7.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
506	SWEET BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
507	SWEET BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
508	SWEET BAY	REMOVE	5.50"		Y	N	S		5.50"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
509	SWEET BAY	REMOVE	20.00"		Y	N	S		20.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
510	SLASH PINE	REMAIN		16.00"	N	Y	S				REMAIN IN PLACE
511	SLASH PINE	REMOVE	20.00"		Y	N	S	20.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
512	SWEET BAY	REMOVE	6.75"		Y	N	S		6.75"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
513	SLASH PINE	REMOVE	10.00"		Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
514	SLASH PINE	REMOVE	25.00"		Y	N	S	25.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
515	SLASH PINE	REMOVE	15.00"		Y	N	S	15.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
516	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
517	SLASH PINE	REMOVE	12.00"		Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
518	SLASH PINE	REMOVE	12.25"		Y	N	S	12.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
519	SLASH PINE	REMOVE	13.00"		Y	N	S	13.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
520	SLASH PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
521	SLASH PINE	REMOVE	10.50"		Y	N	S	10.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
522	SLASH PINE	REMOVE	11.00"		Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.

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Bridgeview
City of Stuart, Florida

Designed: BRD
Drawn: BRD
Approved: GGG MTH EMO
Date: 3/11/20
Job no.
Revisions:

Cad no. CADØ

Seal

REGISTERED LANDSCAPE ARCHITECT, M. TROY HOLLOWAY, LA 0001351, STATE OF FLORIDA

Digitally signed by M. Troy Holloway
Date: 2020.03.11 14:30:04 -04'00'

LC C000177

Sheet Title: Tree Disposition Plan

Scale: N.T.S.

Sheet No. TD-2

00-0000

FILE: N:\BRIDGEVIEW -ATLANTIC REALTY - 19-0406\DRAWINGS\2ND SUBMITTAL\BRIDGEVIEW LANDSCAPE PLAN 3-19-20.DWG
PLOTTED: 3/11/20 AT 2:25PM BY: BEN
XREFS: BRIDGEVIEW SITE PLAN 3-19-20.DWG

Existing Tree List

512	SLASH PINE	REMOVE	10.50"			Y	N	S	10.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
513	SLASH PINE	REMOVE	11.00"			Y	N	S	11.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
514	SLASH PINE	REMOVE	12.50"			Y	N	S	12.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
515	SLASH PINE	REMOVE	10.00"			Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
516	SLASH PINE	REMOVE	10.00"			Y	N	S	10.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
517	SLASH PINE	REMOVE	18.50"			Y	N	S	18.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
518	SLASH PINE	REMOVE	11.25"			Y	N	S	11.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
519	SLASH PINE	REMAIN		10.25"	N	Y	S					REMAIN IN PLACE
520	SLASH PINE	REMAIN		18.25"	N	Y	S					REMAIN IN PLACE
521	SLASH PINE	REMAIN		12.25"	N	Y	S					REMAIN IN PLACE
522	SLASH PINE	REMAIN		10.00"	N	Y	S					REMAIN IN PLACE
523	SWEET BAY	REMAIN		5.00"	N	Y	S					REMAIN IN PLACE
524	SLASH PINE	REMAIN		10.00"	N	Y	S					REMAIN IN PLACE
525	SLASH PINE	REMAIN		17.00"	N	Y	S					REMAIN IN PLACE
526	SWEET BAY	REMOVE	7.00"		N	N	S			7.00"		MITIGATE/REPLACE SWEET BAY TREE, 4.5" DBH MIN.
527	SLASH PINE	REMAIN		18.00"	N	Y	S					REMAIN IN PLACE
528	SLASH PINE	REMAIN		10.00"	N	Y	S					REMAIN IN PLACE
529	SLASH PINE	REMOVE	17.75"		N	Y	N	S	17.8"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
530	SLASH PINE	REMAIN		14.00"	N	Y	S					REMAIN IN PLACE
531	SLASH PINE	REMAIN		19.00"	N	Y	S					REMAIN IN PLACE
532	SLASH PINE	REMAIN		11.00"	N	Y	S					REMAIN IN PLACE
533	SLASH PINE	REMAIN		18.00"	N	Y	S					REMAIN IN PLACE
534	SLASH PINE	REMAIN		18.00"	N	Y	S					REMAIN IN PLACE
535	SLASH PINE	REMOVE	17.75"		N	Y	N	S	17.8"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
536	SLASH PINE	REMAIN		15.00"	N	Y	S					REMAIN IN PLACE
537	SLASH PINE	REMAIN		11.50"	N	Y	S					REMAIN IN PLACE
538	SLASH PINE	REMAIN		12.00"	N	Y	S					REMAIN IN PLACE
539	SLASH PINE	REMAIN		10.00"	N	Y	S					REMAIN IN PLACE
540	SLASH PINE	REMAIN		6.50"	N	Y	S					REMAIN IN PLACE
541	SLASH PINE	REMAIN		11.50"	N	Y	S					REMAIN IN PLACE
542	SLASH PINE	REMAIN		12.00"	N	Y	S					REMAIN IN PLACE
543	SLASH PINE	REMAIN		10.00"	N	Y	S					REMAIN IN PLACE
544	SLASH PINE	REMAIN		17.00"	N	Y	S					REMAIN IN PLACE
545	SLASH PINE	REMAIN		17.00"	N	Y	S					REMAIN IN PLACE
546	SLASH PINE	REMAIN		12.00"	N	Y	S					REMAIN IN PLACE
547	SWEET BAY	REMAIN		5.50"	N	Y	S					REMAIN IN PLACE
548	SWEET BAY	REMAIN		6.25"	N	Y	S					REMAIN IN PLACE
549	SWEET BAY	REMAIN		7.25"	N	Y	S					REMAIN IN PLACE
550	DAHOON HOLLY	REMAIN		9.00"	N	Y	S					REMAIN IN PLACE
551	SWEET BAY	REMAIN		14.50"	N	Y	S					REMAIN IN PLACE
552	SLASH PINE	REMAIN		19.50"	N	Y	S					REMAIN IN PLACE
553	SLASH PINE	REMOVE	12.00"			Y	N	S	12.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
554	SLASH PINE	REMOVE	12.50"			Y	N	S	12.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
555	SLASH PINE	REMAIN		12.25"	N	Y	S					REMAIN IN PLACE
556	SWEET BAY	REMAIN		16.00"	N	Y	S					REMAIN IN PLACE
557	SLASH PINE	REMAIN		11.00"	N	Y	S					REMAIN IN PLACE
558	SLASH PINE	REMAIN		14.00"	N	Y	S					REMAIN IN PLACE
559	SLASH PINE	REMAIN		14.00"	N	Y	S					REMAIN IN PLACE
560	SLASH PINE	REMAIN		19.00"	N	Y	S					REMAIN IN PLACE
561	SLASH PINE	REMAIN		17.00"	N	Y	S					REMAIN IN PLACE
562	SLASH PINE	REMAIN		18.25"	N	Y	S					REMAIN IN PLACE
563	DAHOON HOLLY	REMAIN		10.25"	N	Y	S					REMAIN IN PLACE
564	DAHOON HOLLY	REMAIN		4.50"	N	Y	S					REMAIN IN PLACE
565	SLASH PINE	REMAIN		15.00"	N	Y	S					REMAIN IN PLACE
566	DAHOON HOLLY	REMAIN		17.50"	N	Y	S					REMAIN IN PLACE
567	SLASH PINE	REMAIN		11.00"	N	Y	S					REMAIN IN PLACE
568	SLASH PINE	REMAIN		18.00"	N	Y	S					REMAIN IN PLACE
569	SLASH PINE	REMAIN		19.00"	N	Y	S					REMAIN IN PLACE
570	SLASH PINE	REMAIN		14.50"	N	Y	S					REMAIN IN PLACE
571	SLASH PINE	REMAIN		11.50"	N	Y	S					REMAIN IN PLACE
572	SLASH PINE	REMAIN		12.50"	N	Y	S					REMAIN IN PLACE
573	SLASH PINE	REMAIN		24.00"	N	Y	S					REMAIN IN PLACE
574	SLASH PINE	REMAIN		11.75"	N	Y	S					REMAIN IN PLACE
575	SLASH PINE	REMOVE	15.00"			Y	N	S	15.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
576	SLASH PINE	REMOVE	17.25"			Y	N	S	17.3"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
577	SLASH PINE	REMAIN		15.00"	N	Y	S					REMAIN IN PLACE
578	SLASH PINE	REMAIN		17.00"	N	Y	S					REMAIN IN PLACE
579	SLASH PINE	REMAIN		20.00"	N	Y	S					REMAIN IN PLACE
580	SLASH PINE	REMAIN		12.00"	N	Y	S					REMAIN IN PLACE
581	SLASH PINE	REMAIN		19.00"	N	Y	S					REMAIN IN PLACE
582	SLASH PINE	REMAIN		19.00"	N	Y	S					REMAIN IN PLACE
583	SLASH PINE	REMAIN		18.00"	N	Y	S					REMAIN IN PLACE
584	SLASH PINE	REMOVE	42.00"			Y	N	S	42.0"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
585	SLASH PINE	REMAIN		15.00"	N	Y	S					REMAIN IN PLACE
586	SLASH PINE	REMAIN		11.50"	N	Y	S					REMAIN IN PLACE
587	SLASH PINE	REMAIN		16.00"	N	Y	S					REMAIN IN PLACE
588	SLASH PINE	REMAIN		14.25"	N	Y	S					REMAIN IN PLACE
589	SLASH PINE	REMAIN		20.00"	N	Y	S					REMAIN IN PLACE
590	SLASH PINE	REMAIN		16.00"	N	Y	S					REMAIN IN PLACE
591	SLASH PINE	REMAIN		18.00"	N	Y	S					REMAIN IN PLACE
592	SLASH PINE	REMAIN		14.00"	N	Y	S					REMAIN IN PLACE
593	SLASH PINE	REMAIN		17.00"	N	Y	S					REMAIN IN PLACE
594	SLASH PINE	REMAIN		11.00"	N	Y	S					REMAIN IN PLACE
595	SLASH PINE	REMAIN		10.50"	N	Y	S					REMAIN IN PLACE
596	SLASH PINE	REMAIN		12.00"	N	Y	S					REMAIN IN PLACE
597	SLASH PINE	REMAIN		12.00"	N	Y	S					REMAIN IN PLACE
598	SLASH PINE	REMAIN		11.00"	N	Y	S					REMAIN IN PLACE
599	SLASH PINE	REMAIN		11.00"	N	Y	S					REMAIN IN PLACE
600	SLASH PINE	REMAIN		30.00"	N	Y	S					REMAIN IN PLACE
601	SLASH PINE	REMAIN		13.00"	N	Y	S					REMAIN IN PLACE
602	SLASH PINE	REMAIN		10.00"	N	Y	S					REMAIN IN PLACE
603	SLASH PINE	REMAIN		10.00"	N	Y	S					REMAIN IN PLACE
604	SLASH PINE	REMAIN		26.00"	N	Y	S					REMAIN IN PLACE
605	SLASH PINE	REMAIN		12.00"	N	Y	S					REMAIN IN PLACE
606	SLASH PINE	REMAIN		12.00"	N	Y	S					REMAIN IN PLACE
607	SLASH PINE	REMAIN		19.50"	N	Y	S					REMAIN IN PLACE
608	SLASH PINE	REMAIN		11.00"	N	Y	S					REMAIN IN PLACE
609	SLASH PINE	REMAIN		15.00"	N	Y	S					REMAIN IN PLACE
610	SLASH PINE	REMAIN		11.00"	N	Y	S					REMAIN IN PLACE
611	SLASH PINE	REMAIN		19.25"	N	Y	S					REMAIN IN PLACE
612	SLASH PINE	REMAIN		18.50"	N	Y	S					REMAIN IN PLACE
613	SAND PINE	REMOVE	5.50"			Y	N	S	5.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
614	SLASH PINE	REMOVE	10.50"			Y	N	S	10.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
615	SLASH PINE	REMOVE	11.50"			Y	N	S	11.5"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
616	SLASH PINE	REMOVE	11.75"			Y	N	S	11.8"			MITIGATE/REPLACE WITH PINE TREE MIN. 12' HT.
		TOTAL REMOVE:	906.50"									
		TOTAL REMAIN:		2780.50"								
					TOTAL REPLACEMENTS:				2924.75"	771.75"	0 palms	PER CITY FORMULA 1755 PINES AND 182 TREES TO REPLANT OR MITIGATE (SEE BELOW)

OPTIONS:

SlashSand Pine Replacement Formula: 2924.8 "
Total inches to remove X 1.5, divided by 2.5" = 1755 total trees to replant. OR
x 50% = 878 X x 75% of Plant Finder cost) $225 X 175% = $219] = $192,282 (total to pay into City fund)

Pine Replacement : 1755 trees (4.5")
OR 50% of trees (**878** trees) = **$192,282**
(based on a $219 replacement - 12')

Tree Replacement Formula: 771.75 " - 445 = 326.8 *
Total inches to remove X 2.5, divided by 4.5" = 182 total trees to replant. OR
x 50% = 91 X x 75% of Plant Finder cost) $800 X 175% = $1,400] = $127,400 (total to pay into City fund)

Tree Replacement : 182 trees (4.5")
OR 50% of trees (**91** trees) = **$127,400**
(based on a $1,400 replacement - 4.5")

PROPOSAL:

SLASH/SAND PINE MITIGATION: APPLICANT PROPOSES TO BUY OUT MITIGATION FOR PINE IMPACTS AT THE RATE SHOWN ABOVE = **$192,282**

TREE MITIGATION: APPLICANT PROPOSES TO BUY OUT MITIGATION FOR TREE IMPACTS AT THE RATE SHOWN ABOVE = **$127,400**

MITIGATION GRAND TOTAL: $319,682

** 445 additional tree D.B.H. credits exceeding code minimum shall be utilized towards mitigation.*

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Bridgeview
City of Stuart, Florida

Designed: BRD
Drawn: BRD
Approved: GG MTH EMO
Date: 3/11/20
Job no.:
Revisions:

Cad no.: CAD0

Seal

Digitally signed by M. Troy Holloway
Date: 2020.03.11 14:30:37 -04'00'
LC C000177

Sheet Title:
Tree Disposition Plan

Scale: N.T.S.

Sheet No.
TD-3
00-0000

FILE: N:\BRIDGEVIEW - ATLANTIC REALTY - 19-0404\DRA\WINGS\2ND SUBMITTAL\BRIDGEVIEW LANDSCAPE PLAN 3-19-20.DWG
PLOTTED: 3/11/20 AT 2:25PM BY: BEN
XREFS: BRIDGEVIEW SITE PLAN 3-19-20.DWG

BRIDGEVIEW

ATLANTIC RESIDENTIAL

ENVIRONMENTAL ASSESSMENT REPORT

Prepared by:

EW CONSULTANTS, INC.

September 2019
March 2020 (revised)

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2581 Metrocentre Blvd, Suite 1 • West Palm Beach, FL 33407 • 561-291-7950 Phone
www.ewconsultants.com

INTRODUCTION –

This report provides an Environmental Assessment of a 15.9+/- acre parcel currently located in unincorporated Martin County, Florida. The property is located in the Hanson Grant, Township 38S, Range 41E. The property is bounded on the west by a mangrove forest associated with the South Fork of the St. Lucie River, on the north by the Riverland mobile home park, on the east by S.R. 76, and on the south by the Veterans Memorial Bridge. The Location Map provided as Figure 1 displays the site location in relation to the surrounding area. Additionally, a 2019 aerial photograph of the site is included as part of this report as Figure 2.

This report includes an inventory of the soil types and vegetative communities present, as well as an analysis of the presence and potential presence of listed species within the parcel. This environmental assessment is based on field reconnaissance on the subject property performed in June 2015, and July 2019.

GENERAL PROPERTY DESCRIPTION –

Based on a recent site assessment (July 2019), along with several previous site investigations, conducted by staff from EW Consultants, Inc., the dominant land cover of the subject property are undeveloped lands comprised of both upland and wetland habitats. As a result of previously permitted activities, a bridge construction (Veterans' Memorial Bridge) has been completed. Several areas have been disturbed by the activities associated with the construction of the bridge. These areas are returning to their pre-development conditions with minimal invasive exotic vegetation encroaching. Similarly, areas adjacent to the newly constructed roadway, and the existing roadway shoulders are regularly mowed. The remainder of the parcel remain in conditions similar to those existing and observed over the course of the past eleven years.

The site generally consists of upland pine, oak, and scrubby flatwoods, a mix of sand pine scrub habitat, a bay swamp and ditch wetland system, and a portion of disturbed lands present on-site. Detailed discussions of land cover types are described in subsequent sections of this report.

SOILS –

A Soils Report produced by the United States Department of Agriculture/Natural Resources Conservation Service is provided in the Appendix of this report. According to the NRCS Soil Survey, three different soil types are found on the subject property. A description of the soils are as follows:

#35 Salerno Sand - This soil is a nearly level, poorly drained soil in broad areas of flatwoods. The water table is typically at a depth of less than 10 inches for 2 to 4 months during wet seasons, and at a depth of greater than 40 inches during the dry season

 # 50 Wulfert and Durbin Mucks, Tidal - This soil is a very deep, very poorly drained, and rapidly permeable soil in tidal areas along the Coast. The soils were formed with well decomposed organic

material and underlying materials. Slopes range from 0 to 1 percent and are flooded during normal daily high tides.

***#61 Hobe fine sand, 0 to 5 percent slopes* -** This nearly level to gently sloping soil is somewhat excessively drained. It is typically located on knolls and ridges in coastal areas of flatwoods. Often the surface layer is a grey fine sand. The water table is generally at a depth of 50 to 60 inches for brief periods, but is generally at a depth of 60 to 80 inches during the wet season, and below 80 inches the remainder of the year.

EXISTING LAND COVER TYPES –

Figure 3 provides an aerial view and nomenclature for the various types of land covers/FLUCCS codes which currently exist on-site. These vegetation types and coverage areas have been verified and checked over the course of the past seven years with the most recent verification conducted in July of 2019. The limits of these land cover types are general in nature; no surveying implements were used during the site investigation. This figure does not reflect a current wetland jurisdictional verification by any regulatory agency.

The land cover types found on the project include:

Wetland Communities –

#611 Bay Swamp – 5.4 acres
The site contains one wetland consisting of bay/maple swamp transitioning to a mangrove forest (off-site) to the west. The landward extent of the wetland area was verified by the South Florida Water Management District in 2008. The southern and western portions of the parcel contain a wetland system dominated by freshwater hardwood species such as red bay, loblolly bay and red maple. These areas remain in fair to good ecological condition, with some infestation of nuisance exotic plants such as *Lygodium* vine and Brazilian pepper.

The observed vegetation in these swamps predominantly includes the following species of note, as well as others that may not be specifically noted:

Loblolly bay	*Gordonia lasianthus*
Red bay	*Persea borbonia*
Dahoon holly	*Ilex cassine*
Red maple	*Acer rubrum*
Wax myrtle	*Myrica cerifera*
Gallberry	*Ilex glabra*
Saw palmetto	*Serenoa repens*
Smilax	*Smilax* spp.
Grapevine	*Vitis* spp.
Swamp fern	*Blechnum* spp.
Cinnamon fern	*Osmunda cinnamomea*
Strawberry guava	*Psidium cattleianum*
Red root	*Lachnanthes caroliniana*

Cabbage palm	*Sabal palmetto*
Leather fern	*Acrostichum* spp.
Brazilian pepper	*Schinus terebinthifolius*

Other Surface Waters (OSW) –

#510 Ditch – 0.1 acres
The project site contains a channelized ditch which is connected to the bay swamp described above. This ditch is located in the east-central portion of the site north of Veterans' Memorial Bridge. It connects to properties off-site to the east via a culvert below Kanner Highway. The ditch is overgrown with a dominance of exotic species such as Brazilian pepper and Old-world climbing fern.

Native Upland Communities –

There are five native upland community types found within the project area. Generally, the high point of the property is located adjacent to Kanner Highway, with the terrain gently sloping to the South Fork of the St. Lucie to the west.

A description of the upland habitat types follows and carry the following FLUCCS classifications:

#411 Pine Flatwoods – 5.0 acres
The flatwoods are located north and south of the central bay swamp feature. These areas contain a canopy of slash pines and bays with a dense understory of saw palmetto, gallberry and fetterbush up to eight feet in height. The ground cover is generally scarce due to the dense understory. This is likely the result of the long-term exclusion of fire from the site that allowed a dense saw palmetto understory to develop, thereby greatly reducing the ground cover density and diversity by preventing sunlight from reaching the forest floor. Some exotic vegetation is present in this area of flatwoods including Brazilian pepper, Old-world climbing fern, downy rose myrtle, earleaf acacia, and strawberry guava. The areas of pine flatwoods abutting the bay swamp contain more red bay and loblolly bay trees.

The observed vegetation in the flatwoods predominantly include the following species:

Slash pine	*Pinus elliottii*
Saw palmetto	*Serenoa repens*
Loblolly bay	*Gordonia lasianthus*
Red bay	*Persea borbonia*
Dahoon holly	*Ilex cassine*
Climbing fern	*Lygodium* spp.
Gallberry	*Ilex glabra*
Fetterbush	*Lyonia lucida*
Rusty lyonia	*Lyonia ferruginea.*
Smilax	*Smilax* spp.
Grapevine	*Vitis* spp.
Swamp fern	*Blechnum serrulatum*

Brazilian pepper	*Schinus terebinthifolius*
Wax myrtle	*Myrica cerifera*
Strawberry guava	*Psidium cattleianum*
Red root	*Lachnanthes caroliniana*
Coinvine	*Dalbergia ecastaphyllum*
Earleaf acacia	*Acacia auriculiformis*

#412 Scrubby flatwoods – 0.6 acres
This habitat occurs in the central portion of the site, adjacent to Kanner Highway and in the southern portion of the site adjacent to the bay swamp. These areas are characterized by a canopy of slash pines and scrub oak trees with a dense understory of scrub oaks, saw palmetto, and fetterbush up to eight feet in height.

The following vegetation types exist and were observed within this habitat:

Slash pine	*Pinus elliottii*
Saw palmetto	*Serenoa repens*
Sand live oak	*Quercus virginiana var. geminata*
Chapman oak	*Quercus chapmanii*
Reindeer moss	*Cladina evansii*
Rosemary	*Ceratiola ericoides*
Prickly pear	*Opuntia humifusa*
Gopher apple	*Licania michauxii*
Wire grass	*Aristida* spp.
Blazing star	*Liatrus chapmanii*
Deer tongue	*Carphephorus paniculatis*
Gallberry	*Ilex glabra*
Fetterbush	*Lyonia lucida*
Rusty lyonia	*Lyonia* spp.
Love vine	*Cassytha filiformis*
Grapevine	*Vitus* spp.

#413 Sand Pine Scrub – 0.2 acres
There is one area of sand pine scrub located north of the central bay swamp. The canopy in the sand pine/scrub consists of sand pines of various ages with scattered slash pines, as well. The scrub oaks present are above ten feet in height and form a sub-canopy along the eastern edge of the habitat. The dense canopy, combined with a coverage of mature grapevine, is shading out many of the normally occurring ground covers and wild flowers.

The observed vegetation in the sand pine scrub predominantly included the following species:

Sand pine	*Pinus clausa*
Saw palmetto	*Serenoa repens*
Sand live oak	*Quercus virginiana var. geminate*
Chapman oak	*Quercus chapmanii*
Reindeer moss	*Cladonia evansii*

Rosemary	*Ceratiola ericoides*
Prickly pear	*Opuntia humifusa*
Gopher apple	*Licania michauxii*
Wire grass	*Aristida* spp.
Blazing star	*Liatrus chapmanii*
Deer tongue	*Carphephorus paniculatis*
Gallberry	*Ilex glabra*
Fetterbush	*Lyonia lucida*
Rusty lyonia	*Lyonia* spp.
Love vine	*Cassytha filiformis*
Grapevine	*Vitus* spp.

#413/421 Sand Pine/Xeric Oak – 3.1 acres
There is one area of mixed sand pine and xeric oak located in the northeastern portion of the property. This area mainly consists of young scrub oak with an understory of palmetto and sparse sand pine. Sand pines found in this habitat type are generally immature saplings as many of the mature trees fell as a result of the 2004 and 2005 hurricanes. The scrub oak cover is sparse within this habitat type and as a result, there is a greater density and diversity of forbs and other ground cover vegetation typically found in a burned or managed scrub habitat.

The observed vegetation within the sand pine/xeric oak upland community predominantly included the following species of note as well as others that may not be specifically noted:

Sand pine	*Pinus clausa*
Saw palmetto	*Serenoa repens*
Chapman oak	*Quercus chapmanii*
Reindeer moss	*Cladina evansii*
Wire grass	*Aristida* spp.
Blazing star	*Liatris chapmanii*
Deer tongue	*Carphephorus paniculatis*
Tar flower	*Befaria racemosa*
Gallberry	*Ilex glabra*
Fetterbush	*Lyonia lucida*
Rusty lyonia	*Lyonia ferruginea*
Love vine	*Cassytha filiformis*
Grapevine	*Vitis* spp.

Non-Native Upland Communities –

#740 Disturbed Lands – 0.7 acres
There are several distinct areas of disturbed uplands on-site. These areas are associated with billboards along Kanner Highway, a strip of land used as a drainage swale along the property's north boundary adjacent to the Riverland development, previously cleared areas along Kanner Highway, and areas to the north of the Veterans' Memorial Bridge. Bahia grass and other stabilizing grasses dominate these areas, as well as grapevine, bamboo and Brazilian pepper.

These areas are subject to encroachment of invasive exotic species without proper maintenance activities.

#814 Roadway – 0.8 acres
There is a strip of land on-site north of and adjacent to the Veterans' Memorial Bridge which was utilized for the construction of the section of the bridge east of the St. Lucie River to Indian Street. This area is 0.8 acres and has been cleared and filled as part of the bridge construction. The Florida Department of Transportation is in the process of restoring this area to native habitats in accordance with the state permits issued for the bridge construction.

PRELIMINARY LISTED SPECIES SURVEY -

During the course of several site visits from 2006 to 2015, and again in July of 2019, observations were made for the potential presence of listed species of animals and plants on the site. With the diversity and condition of the habitat on the subject site, there is a potential for the presence of several listed species.

Upland Species -
A preliminary gopher tortoise survey was conducted on-site on January 23, 2008, which covered approximately 20% of the upland habitat in accordance with Florida Fish and Wildlife Conservation Commission protocol for tortoise population projection. No active or inactive burrows or signs (scat, tracks) of tortoises, which is a state Threatened species, were observed during this survey.

In February 2011, a second preliminary gopher tortoise survey was conducted and covered approximately 25% of the upland habitat on-site. No potentially occupied gopher tortoise burrows or evidence of tortoises (scat, tracks) were observed during this survey.

In June 2015, a gopher tortoise verification survey was performed to identify potential use of the property by listed species. Observations were made for listed species, and again, no listed species (or signs of listed species) were observed.

During the July 2019 site visit, which again covered approximately 20% of on-site gopher tortoise habitat, no evidence of tortoises (burrows, scat, tracks) were observed. However, it is likely that a survey covering more of the upland area may yield tortoise activity based on the habitat types on-site. It is recommended that a full survey in accordance with Florida Fish and Wildlife Conservation Commission protocol for tortoise population projection be conducted prior to land alteration.

There are several other species that may be associated with the upland habitats found on the site which are dependent on gopher tortoise burrows, including the gopher frog (Species of Special Concern) and the Eastern indigo snake (Threatened). These are commensal species commonly associated with gopher tortoise burrows. There were no individuals of these species observed during the field surveys.

Other listed faunal species associated with the upland habitat types on-site include the bald eagle (no longer listed but protected under the Bald and Golden Eagle Protection Act), and the Florida Scrub Jay (Threatened). There were no bald eagle nests or individuals observed on-site. An active nest has been identified on Martin County Kiplinger conservation parcel to the south. This nest is located approximately 3,000 feet from the southern boundary of the project site. The current U.S. Fish & Wildlife Service guidance suggests a protective zone of 660 feet for an active nest. Therefore, the project site is outside of this protective zone.

Based on the upland habitats present, a formal scrub jay survey per U.S. Fish & Wildlife guidelines was conducted on-site in March of 2011. No scrub jays or scrub jay activity was observed during this survey. The June 2019 observation was conducted outside of the U.S. Fish & Wildlife guidelines timeframe, therefore a formal scrub jay survey was not conducted. Observations were made to confirm the presence of scrub jays and note suitable habitat for their presence. There were no scrub jays observed on site during the July 2019 site visit, however suitable habitat was noted. It is recommended that a formal scrub jay survey be conducted during the U.S. Fish & Wildlife guidelines timeframes.

The assessments also included a review for upland listed species of plants. No upland species of listed plants were observed during the assessments. Based on habitat types present, air plants (*Tillandsia spp*) could potentially occur, however none were observed during surveys. Additionally, one upland species listed by the State as commercially exploited was observed – saw palmetto.

Wetland Species -
There are several listed animal species that are dependent on the types of wetland habitat present on-site and adjacent to the site. Field reconnaissance on the site included observations of white ibis (SSC) and little blue heron (SSC). It is possible that the bay swamp and associated mangrove swamp to the west (off-site) serve as foraging areas for other listed wading birds such as the snowy egret (SSC), tri-colored heron (SSC), roseate spoonbill (SSC), wood stork (Endangered), reddish egret (SSC), and brown pelican (SSC). There were no nesting pairs of the above species observed within the wetland areas on-site.

The assessments also included a review for wetland listed species of plants. One State threatened species was observed – golden leather fern (*Acrostichum aurem*); and one State commercially exploited species was observed – cinnamon fern (*Osmunda cinnamomea*).

PREVIOUS IMPACTS –

The project site shows very few signs of previous impacts other than those described under the FLUCCS code 740 and 814 categories. There are no established off-road trails, and trespassing appears to have been kept to a minimum over the years.

PROPOSED IMPACTS –

The portion of the existing ditch that falls within the development area will be replaced with a 36-inch culvert. The culvert will outfall into the remaining portion of the existing ditch west of the

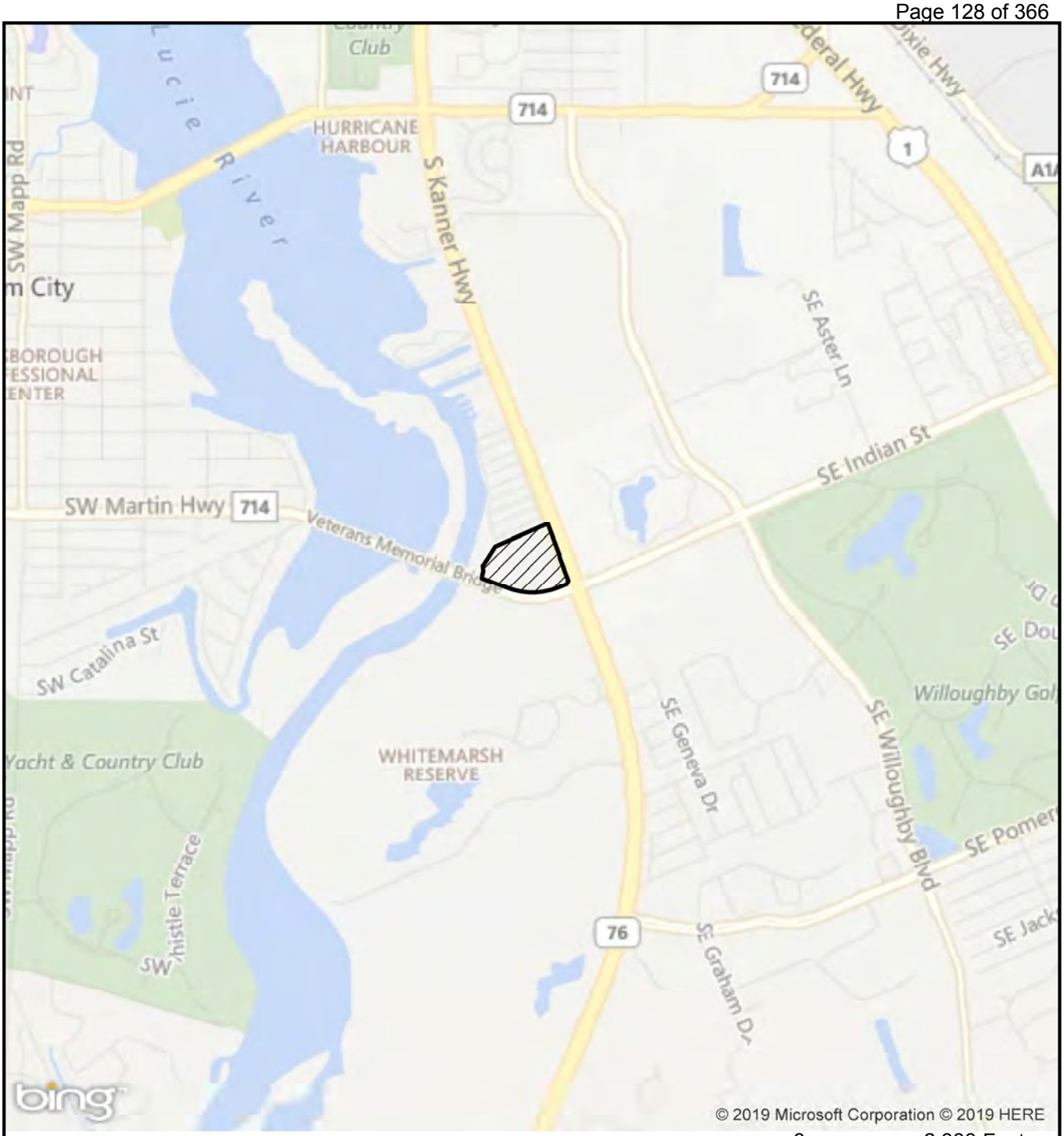
proposed parking area and just east of the upland buffer. Avoiding impacts to the ditch is not practical, as the ditch would run through the parking area. The culvert will allow for the conveyance of the water so there will be no change in hydrology to the wetland area. The ditch is currently overgrown with exotic species, which will be removed allowing for improved water flow and improved habitat quality.

The U.S. Fish and Wildlife Service (FWS) and Florida Fish and Wildlife Conservation Commission (FWC) will be consulted regarding potential for listed species on the site and recommended protection measures. Any correspondence will be provided to the City.

APPENDIX

Figure 1. Location Map
Figure 2. Quad Map
Figure 3. Aerial Map
Figure 4. FLUCFCS Map

Attachments:
Soils Report



0 2,000 Feet

LEGEND

- SITE (15.9+/- AC)

N

BRIDGEVIEW/ATLANTIC RESIDENTIAL LOCATION MAP

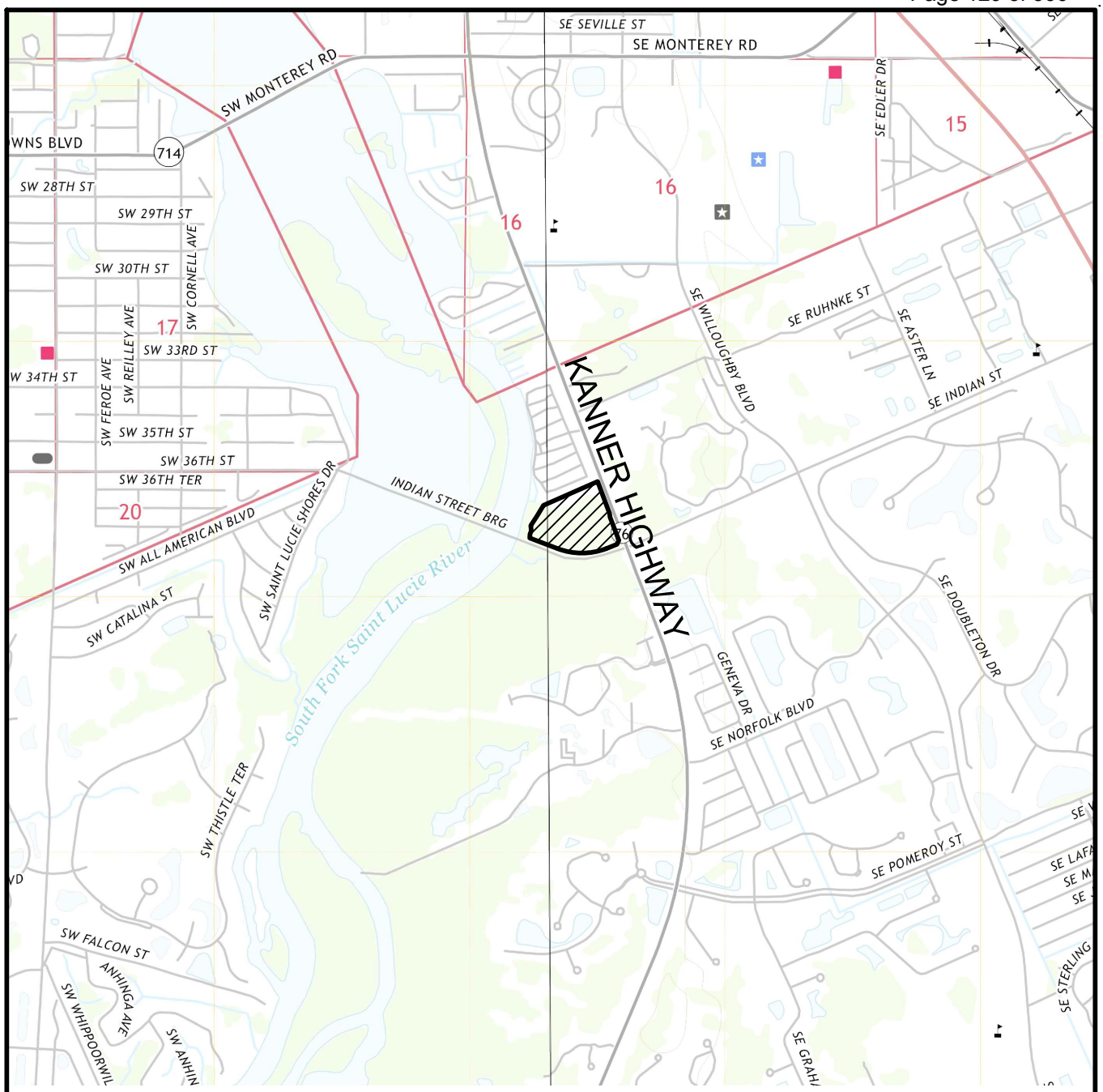
EW CONSULTANTS, INC.

2581 METROCENTRE BLVD., SUITE 1
WEST PALM BEACH, FL 33407
561-291-7950 PHONE 561-530-4908 FAX
WWW.EWCONSULTANTS.COM

JULY 2019

FIGURE

1



USGS QUAD MAP "ST LUCIE INLET", HANSON GRANT, TOWNSHIP 38 SOUTH, RANGE 41 EAST, STUART, MARTIN COUNTY, FLORIDA, LATITUDE 27°09'32" LONGITUDE -80°14'57"

LEGEND

- SITE (15.9± AC)

0 2000

SCALE IN FEET

BRIDGEVIEW/ATLANTIC RESIDENTIAL

QUAD

EW CONSULTANTS, INC.

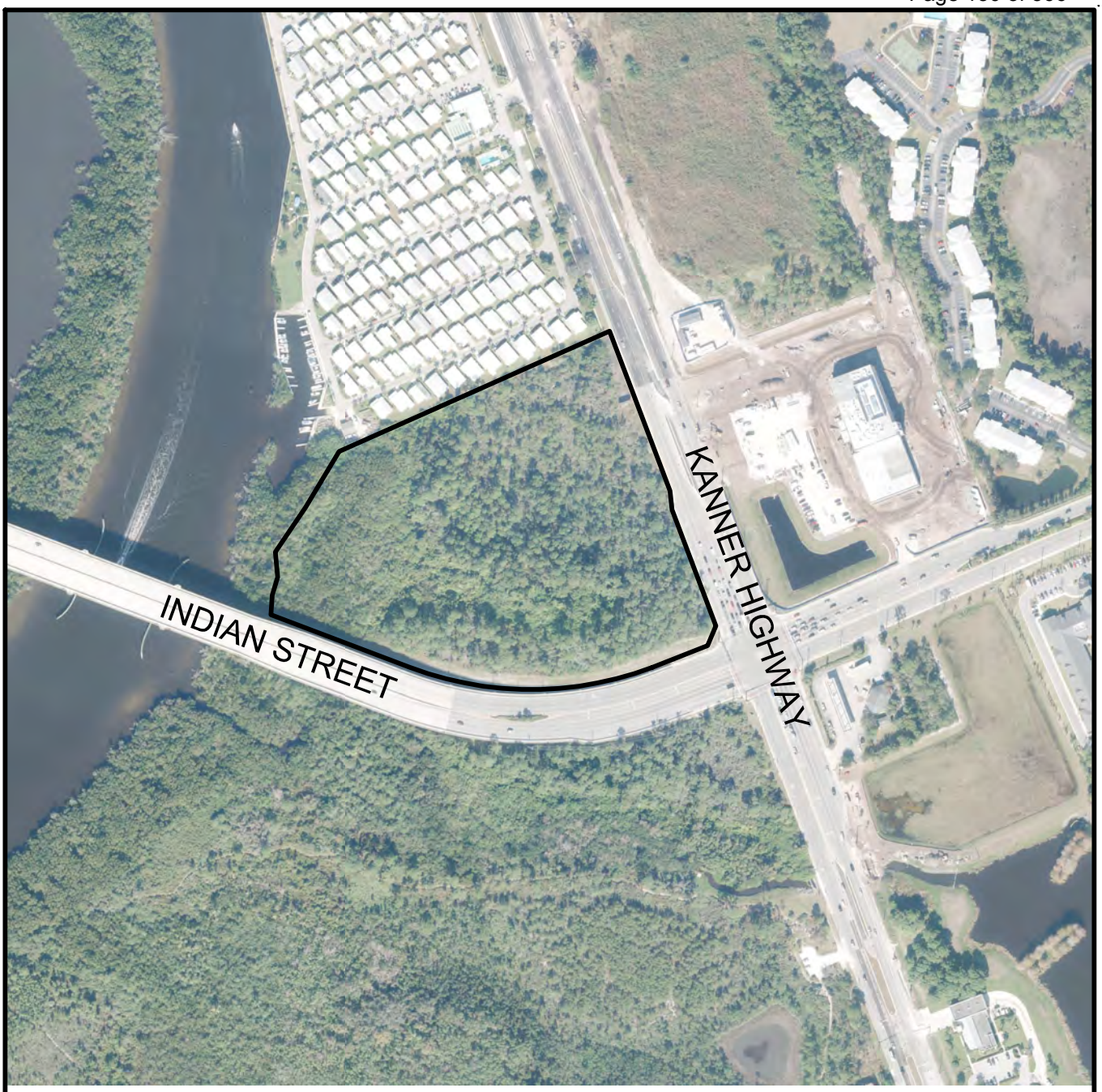
EW CONSULTANTS, INC.
2581 METROCENTRE BLVD., SUITE 1
WEST PALM BEACH, FL 33407
561-291-7950 PHONE 561-530-4908 FAX
WWW.EWCONSULTANTS.COM

JULY 2019

FIGURE

2

Bridgeview Site.dwg QUAD



MARTIN COUNTY AERIALS DATED 2019

0 400
SCALE IN FEET

BRIDGEVIEW/ATLANTIC RESIDENTIAL

AERIAL

EW CONSULTANTS, INC.
EW Consultants, Inc.
2581 Metrocentre Blvd., Suite 1
West Palm Beach, FL 33407
561-291-7950 Phone 561-530-4908 Fax
www.ewconsultants.com

JULY 2019

FIGURE
3

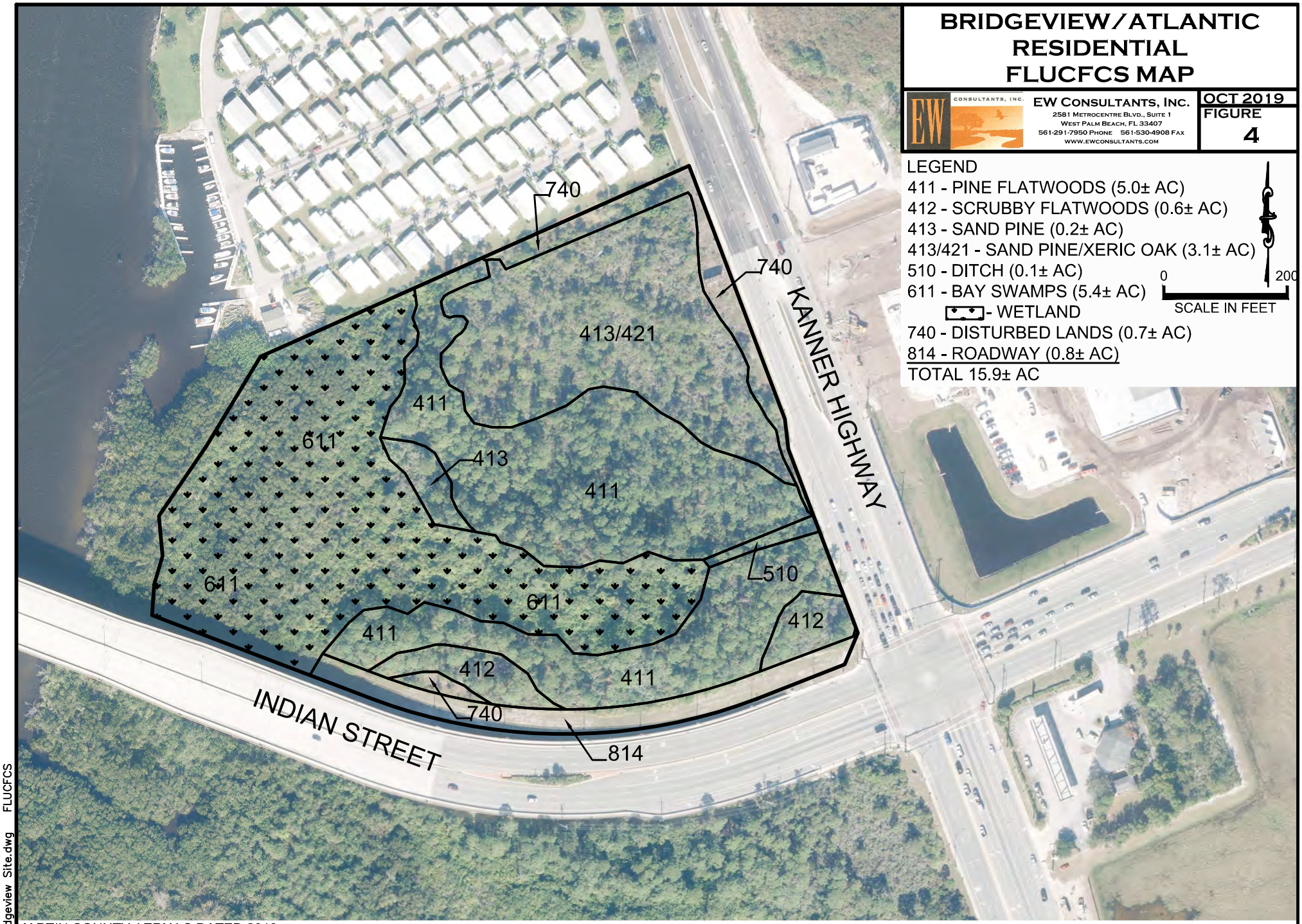
Bridgeview Site.dwg AERIAL

BRIDGEVIEW/ATLANTIC RESIDENTIAL FLUCFCS MAP

EW CONSULTANTS, INC.
2581 METROCENTRE BLVD., SUITE 1
WEST PALM BEACH, FL 33407
561-291-7950 PHONE 561-530-4908 FAX
WWW.EWCONSULTANTS.COM

OCT 2019

FIGURE 4



LEGEND
411 - PINE FLATWOODS (5.0± AC)
412 - SCRUBBY FLATWOODS (0.6± AC)
413 - SAND PINE (0.2± AC)
413/421 - SAND PINE/XERIC OAK (3.1± AC)
510 - DITCH (0.1± AC)
611 - BAY SWAMPS (5.4± AC)
- WETLAND
740 - DISTURBED LANDS (0.7± AC)
814 - ROADWAY (0.8± AC)
TOTAL 15.9± AC

0 200
SCALE IN FEET

MARTIN COUNTY AERIALS DATED 2019

Bridgeview Site.dwg FLUCFCS

Soil Map—Martin County, Florida
(BRIDGEVIEW/ATLANTIC RESIDENTIAL)

Map Scale: 1:2,380 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 35 70 140 210

Feet: 0 100 200 400 600

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

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

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

Special Point Features

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

Water Features

- Streams and Canals

Transportation

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

Background

- Aerial Photography

MAP INFORMATION

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

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

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

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

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

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

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

Soil Survey Area: Martin County, Florida
Survey Area Data: Version 17, Sep 17, 2018

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

Date(s) aerial images were photographed: Feb 14, 2015—May 8, 2015

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

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
23	Urban land, 0 to 2 percent slopes	0.0	0.0%
35	Salerno sand	6.7	42.1%
50	Wulfert and Durbin mucks, tidal	4.7	29.4%
61	Hobe fine sand, 0 to 5 percent slopes	4.5	28.4%
Totals for Area of Interest		**15.9**	**100.0%**

THOMAS ENGINEERING GROUP
125 W. INDIANTOWN RD., STE. 206
JUPITER, FL 33458
P: 561-203-7503
F: 561-203-7721

SURFACE WATER MANAGEMENT REPORT FOR BRIDGEVIEW

Stuart, Martin County, Florida

PREPARED BY
THOMAS ENGINEERING GROUP
CA # 27528

All elevations for this project were based on NAVD

Jason M Gunther

Digitally signed by Jason M Gunther
DN: c=US, o=Thomas Engineering Group LLC, ou=A01427E000001671DAD9DC90000D108, cn=Jason M Gunther
Date: 2020.01.15 11:26:23 -05'00'

Jason Gunther, PE
FL PE # 58629
January 14, 2020

I, **Jason Gunther**, do certify to Martin County that the application for **Bridgeview Stuart** has been designed in full compliance with Divisions 9 and 10 of Article 4 of the Martin County Land Development Regulations (LDR). I acknowledge that Martin County's LDR may and do include requirements that are more stringent or restrictive than the requirements of other regulatory agencies including, but not limited to, the South Florida Water Management District (SFWMD), the U.S. Army Corps of Engineers (USACOE), the U.S. Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP). Any plans, calculations, reports, or other documents submitted to Martin County or any regulatory agency in support of the application have been prepared in full recognition of and compliance with Martin County LDR.

Site Summary:

The 15.88-ac site is located on the NW corner of Kanner Hwy and SE Indian Street in unincorporated Martin County, Florida. The property is currently undeveloped and consists of 5.42-ac of wetlands. Currently there is a 30-foot drainage easement that runs east-west through the east side of the property, conveying stormwater from Kanner Hwy to the wetland on-site. The project site falls within the South Fork of the St. Lucie River Basin and is under the jurisdiction of the South Florida Water Management District (SFWMD) and Martin County. The site falls with a FEMA Flood Zone AE with elevation 6.00 NAVD.

Post-Development:

The applicant is proposing the development of a residential apartment complex, consisting of eight, three-story apartment buildings, a club house with community pool, and a recreational area. The project also includes the construction of a stormwater management system consisting of a series of manholes, catch basins, exfiltration trench and a 0.52-ac dry detention area, all interconnected by a pipe network. Water quality for the site will be achieved in the detention area and exfiltration trench prior to discharging to the wetland on-site. The existing outfall from Kenner Hwy will remain undisturbed by this project.

A pre-post analysis of the site was created using Cascade modeling software to determine the permitted discharge for the site. Per SFWMD's requirements for the South Fork of the St Lucie River Basin, the 25 year – 3 day storm event was considered to determine allowable discharge for the site. Additionally, the 5 year – 1 day and 100 year – 3 day zero discharge storms were modeled. The resulting stages and discharge for each storm event is summarized below.

Storm Event	Pre		Post	
	Stage (NAVD)	Discharge (cfs)	Stage (NAVD)	Discharge (cfs)
5 year – 1day	3.02	8.20	5.08	0.82
25 year – 3 day	3.05	26.38	6.04	10.86
100 year – 3 day	5.75	0.00	5.06	0.00

The project proposes to set the perimeter berm at elevation 6.15 NAVD which is above the 25 year, 3- day storm elevation. The pre-post analysis also indicates that the post 25 year – 3 day discharge of 10.86 cfs is less than the discharge for the pre conditions. Additionally, a bleeder is being proposed at elevation 4.08 NAVD, one inch above the bottom of the detention area. Building finish floor elevation has been set at elevation 8.25 NAVD, which is above the 100 year – 3 day zero discharge elevation and the FEMA Flood Zone elevation. Minimum pavement elevations have been set at 6.25 NAVD which is above the resulting stage for the 5 year – 1 day storm.

Water Quality

Water quality was calculated for 2.5-inches over the percent impervious with a factor of safety of 1.50 since the St. Lucie Basin is an impaired basin. The dry detention area will provide 0.40 ac-ft and will obtain an additional 25% credit resulting in a water quality volume of 0.5 ac-ft. The remaining water quality volume, 0.89 ac-ft, will be provided in 1,110 LF of exfiltration trench.

DRAINAGE CALCULATIONS - PRE

THOMAS ENGINEERING GROUP

125 W INDIANTOWN ROAD, SUITE 206, JUPITER, FL 33458
Tel: 561-203-7503

Date: 12/20/2019
Project: Bridgeview
Project No: FJ190015

Calculated By: *DAM*
Checked By: *JMG*

EXISTING DRAINAGE CALCULATIONS

Water Table: 2.00 NAVD

Land Use Summary:

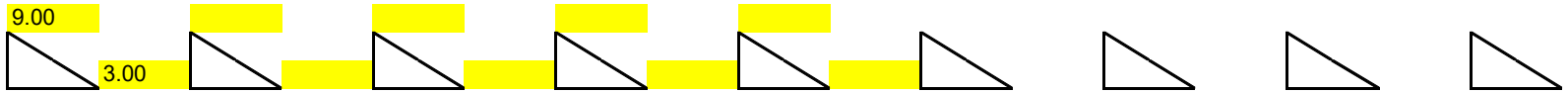
Lake Areas (A_L):	0	sf	or	0.000	ac
Roof Areas (A_R):	0	sf	or	0.000	ac
Paved Areas (A_P):	0	sf	or	0.000	ac
Green Areas (A_G):	455,627	sf	or	10.460	ac
Total (A_T):	455,627	sf	or	10.460	ac

THOMAS ENGINEERING GROUP

Date: 12/20/2019
Project: Bridgeview
Project No: FJ190015

EXISTING STAGE\STORAGE AREA CALCULATION (NAVD)

Exist. Grades



Stage	Undeveloped Area Area 10.460 0.000 (ac.-ft.)	Area 0.000 (ac.-ft.)	Area 0.000 (ac.-ft.)	Area 0.347 (ac.-ft.)	Area 0.000 (ac.-ft.)	Area 0.000 0.000 (ac.-ft.)	Area 0.000 0.000 (ac.-ft.)	Area 0.000 0.000 (ac.-ft.)	Area 0.000 0.000 (ac.-ft.)	Total Site 10.460
3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.50	0.22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.22
4.00	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.87
4.50	1.96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.96
5.00	3.49	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.49
5.50	5.45	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.45
6.00	7.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.84
6.50	10.68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.68
7.00	13.95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.95
7.50	17.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	17.65
8.00	21.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	21.79
8.50	26.37	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	26.37
9.00	31.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	31.38

THOMAS ENGINEERING GROUP

Date: 12/20/2019
Project: Bridgeview
Project No: FJ190015

DESIGN CRITERIA

Water Table ..... 2.00 NAVD
South fork St Lucie river
FEMA Elevation ..... Zone AE, Elev 6.0 NAVD

EXISTING STAGE\STORAGE AREA CALCULATION

Stage	Site Stage-Storage (previous page) (ac.-ft.)	Additional Stage-Storage (ac.-ft.)	Total Storage Area (ac.-ft.)
3.00	0.00	0.00	0.00
3.50	0.22	0.00	0.22
4.00	0.87	0.00	0.87
4.50	1.96	0.00	1.96
5.00	3.49	0.00	3.49
5.50	5.45	0.00	5.45
6.00	7.84	0.00	7.84
6.50	10.68	0.00	10.68
7.00	13.95	0.00	13.95
7.50	17.65	0.00	17.65
8.00	21.79	0.00	21.79
8.50	26.37	0.00	26.37
9.00	31.38	0.00	31.38

EXISTING SOIL STORAGE

Land Use Summary:

	Acres	Percent
Lake Areas (A_L):	0.000	0.0%
Roof Areas (A_R):	0.000	0.0%
Paved Areas (A_P):	0.000	0.0%
Green Areas (A_G):	10.460	100.0%
Total (A_T):	10.460	100.0%

Compacted Soil Storage per SFWMD Vol. IV Page C-III-1

Depth to Water Table (feet)	Compacted Water Storage (inches)
1	0.45
2	1.88
3	4.05
4	6.75

Average Pervious Grade (Elev.): 6.13 ft
Depth to Water Table: 4.13 ft
Soil Storage at Average Depth (S_S): 6.75 inches

Weighted S value:
= S_S x % Pervious

= 6.75 x 1 = **6.75 inches**

THOMAS ENGINEERING GROUP

Date: 12/20/2019
Project: Bridgeview
Project No: FJ190015

Rainfalls (P)

From Figure C-4, 5-Year 1-Day Storm =	5.60	inches
From Figure C-7, 25-Year 3-Day Storm =	10.90	inches
From Figure C-9, 100-Year 3-Day Storm =	13.30	inches

5-Year 1-Day Storm Event

Stage for 5-Year 1-day Storm Event (w/ discharge)	3.02	ft. NAVD w/	8.20 cfs	of discharge

25-Year 3-Day Storm Event

Stage for 25-Year 3-day Storm Event (w/ discharge)	3.05	ft. NAVD w/	26.38 cfs	of discharge

100-Year 3-Day Storm Event (Zero Discharge)

Runnoff (Q) = $(P - 0.2S)^2 / (P + 0.8S)$
= (13.3 - (0.2 x 6.75))^2 / (13.3 + (0.8 x 6.75))
= 7.64 inches of total runnoff
Runoff Volume = Q * Project Area
= 7.64 x 10.46 = 79.91 acre-inches = 6.66 acre-ft.

Stage for 100-Year 3-day Storm Event	5.75	ft. NAVD

Project Name: Bridgeview
Reviewer: DAM
Project Number: FJ190015
Period Begin: Dec 20, 2019;0000 hr End: Dec 25, 2019;0000 hr Duration: 120 hr
Time Step: 0.016 hr, Iterations: 10

Basin 1: Bridgeview Site

Method: Santa Barbara Unit Hydrograph
Rainfall Distribution: SFWMD - 24 hr
Design Frequency: 5 year
1 Day Rainfall: 5.6 inches
Area: 10.46 acres
Ground Storage: 6.75 inches
Time of Concentration: 0.5 hours
Initial Stage: 3 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
3.00	0.00
4.00	0.87
5.00	3.49
6.00	7.84
7.00	13.95
8.00	21.79
9.00	31.38

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	2.00
120.00	2.00
240.00	2.00

Structure: 1

From Basin: Bridgeview Site
To Basin: Offsite1
Structure Type: Gravity
Weir: Broad Crested, Crest Elev = 3 ft NGVD, Length = 900 ft, Weir Coef = 3.13
Bleeder: None
Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	3.00	2.00
2.00	0.11	0.00	0.00	0.00	3.00	2.00
4.00	0.25	0.00	0.00	0.00	3.00	2.00
6.00	0.46	0.00	0.00	0.00	3.00	2.00
8.00	0.77	0.00	0.00	0.00	3.00	2.00
10.00	1.19	0.00	0.00	0.00	3.00	2.00
12.00	3.67	8.36	8.03	0.16	3.02	2.00
14.00	4.58	1.80	1.82	0.83	3.01	2.00
16.00	4.93	1.02	1.02	1.03	3.01	2.00
18.00	5.13	0.63	0.63	1.15	3.00	2.00
20.00	5.33	0.64	0.64	1.26	3.00	2.00
22.00	5.47	0.44	0.44	1.34	3.00	2.00
24.00	5.60	0.44	0.44	1.41	3.00	2.00
26.00	5.60	0.01	0.01	1.43	3.00	2.00
28.00	5.60	0.00	0.00	1.43	3.00	2.00
30.00	5.60	0.00	0.00	1.43	3.00	2.00
32.00	5.60	0.00	0.00	1.43	3.00	2.00
34.00	5.60	0.00	0.00	1.43	3.00	2.00
36.00	5.60	0.00	0.00	1.43	3.00	2.00
38.00	5.60	0.00	0.00	1.43	3.00	2.00
40.00	5.60	0.00	0.00	1.43	3.00	2.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
42.00	5.60	0.00	0.00	1.43	3.00	2.00
44.00	5.60	0.00	0.00	1.43	3.00	2.00
46.00	5.60	0.00	0.00	1.43	3.00	2.00
48.00	5.60	0.00	0.00	1.43	3.00	2.00
50.00	5.60	0.00	0.00	1.43	3.00	2.00
52.00	5.60	0.00	0.00	1.43	3.00	2.00
54.00	5.60	0.00	0.00	1.43	3.00	2.00
56.00	5.60	0.00	0.00	1.43	3.00	2.00
58.00	5.60	0.00	0.00	1.43	3.00	2.00
60.00	5.60	0.00	0.00	1.43	3.00	2.00
62.00	5.60	0.00	0.00	1.43	3.00	2.00
64.00	5.60	0.00	0.00	1.43	3.00	2.00
66.00	5.60	0.00	0.00	1.43	3.00	2.00
68.00	5.60	0.00	0.00	1.43	3.00	2.00
70.00	5.60	0.00	0.00	1.43	3.00	2.00
72.00	5.60	0.00	0.00	1.43	3.00	2.00
74.00	5.60	0.00	0.00	1.43	3.00	2.00
76.00	5.60	0.00	0.00	1.43	3.00	2.00
78.00	5.60	0.00	0.00	1.43	3.00	2.00
80.00	5.60	0.00	0.00	1.43	3.00	2.00
82.00	5.60	0.00	0.00	1.43	3.00	2.00
84.00	5.60	0.00	0.00	1.43	3.00	2.00
86.00	5.60	0.00	0.00	1.43	3.00	2.00
88.00	5.60	0.00	0.00	1.43	3.00	2.00
90.00	5.60	0.00	0.00	1.43	3.00	2.00
92.00	5.60	0.00	0.00	1.43	3.00	2.00
94.00	5.60	0.00	0.00	1.43	3.00	2.00
96.00	5.60	0.00	0.00	1.43	3.00	2.00
98.00	5.60	0.00	0.00	1.43	3.00	2.00
100.00	5.60	0.00	0.00	1.43	3.00	2.00
102.00	5.60	0.00	0.00	1.43	3.00	2.00
104.00	5.60	0.00	0.00	1.43	3.00	2.00
106.00	5.60	0.00	0.00	1.43	3.00	2.00
108.00	5.60	0.00	0.00	1.43	3.00	2.00
110.00	5.60	0.00	0.00	1.43	3.00	2.00
112.00	5.60	0.00	0.00	1.43	3.00	2.00
114.00	5.60	0.00	0.00	1.43	3.00	2.00
116.00	5.60	0.00	0.00	1.43	3.00	2.00
118.00	5.60	0.00	0.00	1.43	3.00	2.00
120.00	5.60	0.00	0.00	1.43	3.00	2.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	8.20	12.02	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Bridgeview Sit	3.02	12.02	3.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Bridgeview Sit	1.43	0.00	1.43	0.00	0.00	0.00

Project Name: Bridgeview
Reviewer: DAM
Project Number: FJ190015
Period Begin: Dec 20, 2019;0000 hr End: Dec 25, 2019;0000 hr Duration: 120 hr
Time Step: 0.016 hr, Iterations: 10

Basin 1: Bridgeview Site

Method: Santa Barbara Unit Hydrograph
Rainfall Distribution: SFWMD - 3day
Design Frequency: 25 year
3 Day Rainfall: 10.9 inches
Area: 10.46 acres
Ground Storage: 6.75 inches
Time of Concentration: 0.5 hours
Initial Stage: 3 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
3.00	0.00
4.00	0.87
5.00	3.49
6.00	7.84
7.00	13.95
8.00	21.79
9.00	31.38

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	2.00
120.00	2.00
240.00	2.00

Structure: 1

From Basin: Bridgeview Site
To Basin: Offsite1
Structure Type: Gravity
Weir: Broad Crested, Crest Elev = 3 ft NGVD, Length = 900 ft, Weir Coef = 3.13
Bleeder: None
Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	3.00	2.00
2.00	0.10	0.00	0.00	0.00	3.00	2.00
4.00	0.20	0.00	0.00	0.00	3.00	2.00
6.00	0.29	0.00	0.00	0.00	3.00	2.00
8.00	0.39	0.00	0.00	0.00	3.00	2.00
10.00	0.49	0.00	0.00	0.00	3.00	2.00
12.00	0.59	0.00	0.00	0.00	3.00	2.00
14.00	0.68	0.00	0.00	0.00	3.00	2.00
16.00	0.78	0.00	0.00	0.00	3.00	2.00
18.00	0.88	0.00	0.00	0.00	3.00	2.00
20.00	0.98	0.00	0.00	0.00	3.00	2.00
22.00	1.07	0.00	0.00	0.00	3.00	2.00
24.00	1.17	0.00	0.00	0.00	3.00	2.00
26.00	1.31	0.00	0.00	0.00	3.00	2.00
28.00	1.46	0.02	0.01	0.00	3.00	2.00
30.00	1.60	0.05	0.04	0.01	3.00	2.00
32.00	1.74	0.07	0.07	0.01	3.00	2.00
34.00	1.88	0.10	0.10	0.03	3.00	2.00
36.00	2.03	0.12	0.12	0.05	3.00	2.00
38.00	2.17	0.15	0.15	0.07	3.00	2.00
40.00	2.31	0.17	0.17	0.10	3.00	2.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
42.00	2.45	0.19	0.19	0.13	3.00	2.00
44.00	2.59	0.21	0.21	0.16	3.00	2.00
46.00	2.74	0.23	0.23	0.20	3.00	2.00
48.00	2.88	0.25	0.25	0.23	3.00	2.00
50.00	3.04	0.30	0.30	0.28	3.00	2.00
52.00	3.24	0.43	0.42	0.34	3.00	2.00
54.00	3.55	0.74	0.74	0.44	3.00	2.00
56.00	3.98	1.14	1.14	0.59	3.01	2.00
58.00	4.59	1.86	1.86	0.83	3.01	2.00
60.00	8.14	26.80	26.20	1.84	3.05	2.00
62.00	9.44	4.02	4.07	3.67	3.01	2.00
64.00	9.94	2.08	2.09	4.10	3.01	2.00
66.00	10.23	1.25	1.25	4.34	3.01	2.00
68.00	10.52	1.25	1.25	4.54	3.01	2.00
70.00	10.71	0.84	0.84	4.70	3.00	2.00
72.00	10.90	0.84	0.84	4.84	3.00	2.00
74.00	10.90	0.02	0.02	4.88	3.00	2.00
76.00	10.90	0.00	0.00	4.88	3.00	2.00
78.00	10.90	0.00	0.00	4.88	3.00	2.00
80.00	10.90	0.00	0.00	4.88	3.00	2.00
82.00	10.90	0.00	0.00	4.88	3.00	2.00
84.00	10.90	0.00	0.00	4.88	3.00	2.00
86.00	10.90	0.00	0.00	4.88	3.00	2.00
88.00	10.90	0.00	0.00	4.88	3.00	2.00
90.00	10.90	0.00	0.00	4.88	3.00	2.00
92.00	10.90	0.00	0.00	4.88	3.00	2.00
94.00	10.90	0.00	0.00	4.88	3.00	2.00
96.00	10.90	0.00	0.00	4.88	3.00	2.00
98.00	10.90	0.00	0.00	4.88	3.00	2.00
100.00	10.90	0.00	0.00	4.88	3.00	2.00
102.00	10.90	0.00	0.00	4.88	3.00	2.00
104.00	10.90	0.00	0.00	4.88	3.00	2.00
106.00	10.90	0.00	0.00	4.88	3.00	2.00
108.00	10.90	0.00	0.00	4.88	3.00	2.00
110.00	10.90	0.00	0.00	4.88	3.00	2.00
112.00	10.90	0.00	0.00	4.88	3.00	2.00
114.00	10.90	0.00	0.00	4.88	3.00	2.00
116.00	10.90	0.00	0.00	4.88	3.00	2.00
118.00	10.90	0.00	0.00	4.88	3.00	2.00
120.00	10.90	0.00	0.00	4.88	3.00	2.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	26.38	60.02	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Bridgeview Sit	3.05	60.02	3.00	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Bridgeview Sit	4.88	0.00	4.88	0.00	0.00	0.00

DRAINAGE CALCULATIONS – POST

THOMAS ENGINEERING GROUP

125 W INDIANTOWN ROAD, SUITE 206, JUPITER, FL 33458
Tel: 561-203-7503

Date: 1/10/2020
Project: Bridgeview
Project No: FJ190015

Calculated By: *DAM*
Checked By: *JMG*

PROPOSED DRAINAGE CALCULATIONS

Water Table: 2.00 NAVD

Land Use Summary:

Lake Areas (A_L):	0	sf	or	0.000 ac
Roof Areas (A_R):	60,268	sf	or	1.384 ac
Paved Areas (A_P):	132,202	sf	or	3.035 ac
Green Areas (A_G):	263,157	sf	or	6.041 ac
Total (A_T):	455,627	sf	or	10.460 ac

Compute Water Quality Volume:

1) Provide at least 1 inch over the developed project:

V_{PRE} = 1 inch x A_T x 1 ft / 12 inches
= 1 x 10.46 / 12
= 0.87 ac-ft or 10.46 ac-in

2) Provide 2.5" over % impervious area:

a) Site Area for water quality pervious/impervious calculation:

A_S = A_T - (A_L)
= 10.46 - (0)
= 10.460 ac of site area for water quality pervious/impervious

b) Impervious area for water quality pervious/impervious calculation:

A_{IMP}= A_S - A_G
= 10.46 - 6.041
= 4.42 ac of impervious area for water quality pervious/impervious

c) Percent of impervious for water quality calculation:

= A_{IMP} / A_S x 100%
= 4.419 / 10.46 x 100%
= 42.2% impervious

d) For 2.5" times the percent impervious:

= 2.5" x % impervious area
= 2.5 x 0.422
= 1.06 inches to be treated

e) Compute required volume for quality retention

V_{PRE} = inches to be treated x (A_T - A_L)
= 1.06 x (10.46 - 0) x 1 foot / 12 inches
= 0.92 ac-ft or 11.09 ac-in

f) with 1.5 factor for impared waterways

= 1.5 x 14.62
= 1.39 ac-ft or 16.64 ac-in

3) Since the 16.635 ac-in is greater than the 10.46 ac-in computed for the first inch of runoff the volume of 16.635 ac-in controls.

The dry detention area provides 0.40 ac-ft of water quality volume, however applying a 25% credit for this type of treatment, results in a water quality volume of 0.5 ac-ft provided in the dry detention area.

THOMAS ENGINEERING GROUP

Date: 1/10/2020
Project: Bridgeview
Project No: FJ190015

PROPOSED STAGE\STORAGE AREA CALCULATION (NAVD)

Exist. Grades	8.25 / 6.25	8.25 / 6.75	7.75 / 4.50	6.00 / 4.00	8.00 / 7.75					

Stage	VUA	Sidewalk Area	Landscape Area	Dry Detention Area	Pool Deck Area				Building Area FFE=8.25 NAVD	Total Site 10.460
	Area 2.617	Area 0.230	Area 5.523	Area 0.518	Area 0.189	Area 0.000	Area 0.000	Area 0.000	Area 1.384	
	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.347 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	
2.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.50	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.18
5.00	0.00	0.00	0.21	0.39	0.00	0.00	0.00	0.00	0.00	0.60
5.50	0.00	0.00	0.85	0.62	0.00	0.00	0.00	0.00	0.00	1.47
6.00	0.00	0.00	1.91	0.87	0.00	0.00	0.00	0.00	0.00	2.78
6.50	0.04	0.00	3.40	1.12	0.00	0.00	0.00	0.00	0.00	4.56
7.00	0.37	0.00	5.31	1.38	0.00	0.00	0.00	0.00	0.00	7.07
7.50	1.02	0.04	7.65	1.64	0.00	0.00	0.00	0.00	0.00	10.35
8.00	2.00	0.12	10.36	1.90	0.02	0.00	0.00	0.00	0.00	14.40
8.50	3.27	0.23	13.12	2.16	0.12	0.00	0.00	0.00	0.00	18.90
9.00	4.58	0.34	15.88	2.42	0.21	0.00	0.00	0.00	0.00	23.43

THOMAS ENGINEERING GROUP

Date: 1/10/2020
Project: Bridgeview
Project No: F190054

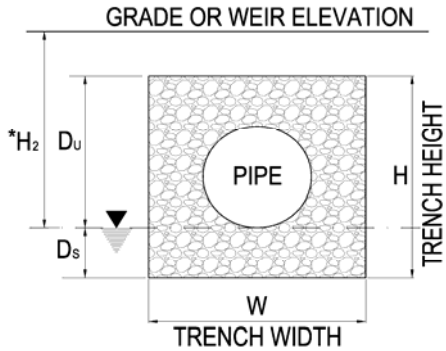
Exfiltration Trench Calculations

K-Value (Assumed):

Test Hole #	(cfs/ft^2/ft hd)	
1	1.00E-04	* K- value needs to be confirmed

Trench:

Water Table
Elev. 2.00



* DEPTH OF EFFECTIVE HEAD

Elev. 5.00 (weir)

Elev. 5.25 (Top of Trench)

Elev. -1.25 (Bottom of Trench)

K =	1.0E-04	cfs/ft^2 - ft head
H_2 =	3.00	ft
W =	9.00	ft
D_u =	3.25	ft
D_s =	3.25	ft
H = Du + Ds =	6.50	ft

1) Amount of trench needed:

V = 10.64 ac-in or 0.89 ac-ft

$$L = \frac{V}{K(H2W + 2H2Du - Du^2 + 2H2Ds) + (1.39 \times 10^{-4})WDu}$$

L = 1,107 feet

2) Proposed Trench Volume

L = 1,110 feet

V = L x (K(H2W + 2H2Du - Du^2 + 2H2Ds) + (1.39 x 10^-4)Wdu)

V = 10.67 ac-in or 0.89 ac-ft

THOMAS ENGINEERING GROUP

Date: 1/10/2020
Project: Bridgeview
Project No: FJ190015

DESIGN CRITERIA

Water Table ..... 2.00 NAVD
South fork St Lucie river
FEMA Elevation ..... Zone AE, Elev 6.0 NAVD

PROPOSED STAGE\STORAGE AREA CALCULATION

Stage	Site Stage-Storage (previous page) (ac.-ft.)	Trench Stage-Storage (ac.-ft.)	Total Storage Area (ac.-ft.)
-1.00	0.00	0.03	0.03
-0.50	0.00	0.10	0.10
0.00	0.00	0.21	0.21
0.50	0.00	0.24	0.24
1.00	0.00	0.31	0.31
1.50	0.00	0.38	0.38
2.00	0.00	0.44	0.44
2.50	0.00	0.51	0.51
3.00	0.00	0.58	0.58
3.50	0.00	0.65	0.65
4.00	0.00	0.72	0.72
4.50	0.18	0.79	0.97
5.00	0.60	0.85	1.46
5.50	1.47	0.89	2.36
6.00	2.78	0.89	3.67
6.50	4.56	0.89	5.45
7.00	7.07	0.89	7.96
7.50	10.35	0.89	11.24
8.00	14.40	0.89	15.29
8.50	18.90	0.89	19.79
9.00	23.43	0.89	24.32

PROPOSED SOIL STORAGE

Land Use Summary:

	Acres	Percent
Lake Areas (A_L):	0.000	0.0%
Roof Areas (A_R):	1.384	13.2%
Paved Areas (A_P):	3.035	29.0%
Green Areas (A_G):	6.041	57.8%
Total (A_T):	10.460	100.0%

Compacted Soil Storage per SFWMD Vol. IV Page C-III-1

Depth to Water Table (feet)	Compacted Water Storage (inches)
1	0.45
2	1.88
3	4.05
4	6.75

Average Pervious Grade (Elev.): 6.13 ft
Depth to Water Table: 4.13 ft
Soil Storage at Average Depth (S_S): 6.75 inches

Weighted S value:
= S_S x % Pervious

= 6.75 x 0.578 = **3.90 inches**

THOMAS ENGINEERING GROUP

Date: 1/10/2020
Project: Bridgeview
Project No: FJ190015

Rainfalls (P)

From Figure C-4, 5-Year 1-Day Storm =	5.60	inches
From Figure C-7, 25-Year 3-Day Storm =	10.90	inches

5-Year 1-Day Storm Event

Stage for 5-Year 1-day Storm Event (w/ discharge)	5.08	ft. NAVD w/	0.82 cfs	of discharge

25-Year 3-Day Storm Event

Stage for 25-Year 3-day Storm Event (w/ discharge)	6.04	ft. NAVD w/	10.86 cfs	of discharge

Project Name: Bridgeview
Reviewer: DAM
Project Number: FJ190015
Period Begin: Dec 20, 2019;0000 hr End: Dec 25, 2019;0000 hr Duration: 120 hr
Time Step: 0.016 hr, Iterations: 10

Basin 1: Bridgeview Site

Method: Santa Barbara Unit Hydrograph
Rainfall Distribution: SFWMD - 24 hr
Design Frequency: 5 year
1 Day Rainfall: 5.6 inches
Area: 10.46 acres
Ground Storage: 3.9 inches
Time of Concentration: 0.5 hours
Initial Stage: -1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
-1.50	0.00
0.00	0.21
1.00	0.31
2.00	0.44
3.00	0.58
4.00	0.72
5.00	1.46
6.00	3.67
7.00	7.96
8.00	15.29
9.00	24.32

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	2.00
120.00	2.00
240.00	2.00

Structure: 1

From Basin: Bridgeview Site
To Basin: Offsite1
Structure Type: Gravity
Weir: Broad Crested, Crest Elev = 6 ft NGVD, Length = 370 ft, Weir Coef = 3.13
Bleeder: Circular, Invert Elev = 4.08 ft NGVD, Diameter = 0.5 ft
Default Coefs: Weir Coef = 0.6, Orifice Coef = 0.6
Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	-1.50	2.00
2.00	0.11	0.00	0.00	0.00	-1.50	2.00
4.00	0.25	0.00	0.00	0.00	-1.50	2.00
6.00	0.46	0.00	0.00	0.00	-1.50	2.00
8.00	0.77	0.00	0.00	0.00	-1.50	2.00
10.00	1.19	0.34	0.00	0.00	-1.36	2.00
12.00	3.67	14.84	0.00	0.00	2.15	2.00
14.00	4.58	2.57	0.77	0.07	5.00	2.00
16.00	4.93	1.37	0.81	0.20	5.06	2.00
18.00	5.13	0.83	0.82	0.34	5.08	2.00
20.00	5.33	0.83	0.82	0.47	5.08	2.00
22.00	5.47	0.57	0.81	0.61	5.06	2.00
24.00	5.60	0.57	0.80	0.74	5.04	2.00
26.00	5.60	0.01	0.77	0.87	4.99	2.00
28.00	5.60	0.00	0.67	0.99	4.83	2.00
30.00	5.60	0.00	0.57	1.09	4.69	2.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
32.00	5.60	0.00	0.45	1.18	4.57	2.00
34.00	5.60	0.00	0.34	1.24	4.49	2.00
36.00	5.60	0.00	0.25	1.29	4.42	2.00
38.00	5.60	0.00	0.19	1.33	4.37	2.00
40.00	5.60	0.00	0.15	1.35	4.34	2.00
42.00	5.60	0.00	0.12	1.38	4.31	2.00
44.00	5.60	0.00	0.10	1.39	4.28	2.00
46.00	5.60	0.00	0.08	1.41	4.26	2.00
48.00	5.60	0.00	0.07	1.42	4.25	2.00
50.00	5.60	0.00	0.06	1.43	4.23	2.00
52.00	5.60	0.00	0.05	1.44	4.22	2.00
54.00	5.60	0.00	0.04	1.45	4.21	2.00
56.00	5.60	0.00	0.04	1.45	4.20	2.00
58.00	5.60	0.00	0.03	1.46	4.19	2.00
60.00	5.60	0.00	0.03	1.46	4.19	2.00
62.00	5.60	0.00	0.03	1.47	4.18	2.00
64.00	5.60	0.00	0.02	1.47	4.18	2.00
66.00	5.60	0.00	0.02	1.48	4.17	2.00
68.00	5.60	0.00	0.02	1.48	4.17	2.00
70.00	5.60	0.00	0.02	1.48	4.16	2.00
72.00	5.60	0.00	0.02	1.48	4.16	2.00
74.00	5.60	0.00	0.01	1.49	4.15	2.00
76.00	5.60	0.00	0.01	1.49	4.15	2.00
78.00	5.60	0.00	0.01	1.49	4.15	2.00
80.00	5.60	0.00	0.01	1.49	4.15	2.00
82.00	5.60	0.00	0.01	1.50	4.14	2.00
84.00	5.60	0.00	0.01	1.50	4.14	2.00
86.00	5.60	0.00	0.01	1.50	4.14	2.00
88.00	5.60	0.00	0.01	1.50	4.14	2.00
90.00	5.60	0.00	0.01	1.50	4.14	2.00
92.00	5.60	0.00	0.01	1.50	4.13	2.00
94.00	5.60	0.00	0.01	1.50	4.13	2.00
96.00	5.60	0.00	0.01	1.51	4.13	2.00
98.00	5.60	0.00	0.01	1.51	4.13	2.00
100.00	5.60	0.00	0.01	1.51	4.13	2.00
102.00	5.60	0.00	0.01	1.51	4.13	2.00
104.00	5.60	0.00	0.01	1.51	4.13	2.00
106.00	5.60	0.00	0.01	1.51	4.12	2.00
108.00	5.60	0.00	0.00	1.51	4.12	2.00
110.00	5.60	0.00	0.00	1.51	4.12	2.00
112.00	5.60	0.00	0.00	1.51	4.12	2.00
114.00	5.60	0.00	0.00	1.51	4.12	2.00
116.00	5.60	0.00	0.00	1.51	4.12	2.00
118.00	5.60	0.00	0.00	1.51	4.12	2.00
120.00	5.60	0.00	0.00	1.51	4.12	2.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	0.82	20.03	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Bridgeview Sit	5.08	20.03	-1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Bridgeview Sit	2.32	0.00	1.51	0.00	0.81	0.00

Project Name: Bridgeview
Reviewer: DAM
Project Number: FJ190015
Period Begin: Dec 20, 2019;0000 hr End: Dec 25, 2019;0000 hr Duration: 120 hr
Time Step: 0.016 hr, Iterations: 10

Basin 1: Bridgeview Site

Method: Santa Barbara Unit Hydrograph
Rainfall Distribution: SFWMD - 3day
Design Frequency: 25 year
3 Day Rainfall: 10.9 inches
Area: 10.46 acres
Ground Storage: 3.9 inches
Time of Concentration: 0.5 hours
Initial Stage: -1.5 ft NGVD

Stage (ft NGVD)	Storage (acre-ft)
-1.50	0.00
0.00	0.21
1.00	0.31
2.00	0.44
3.00	0.58
4.00	0.72
5.00	1.46
6.00	3.67
7.00	7.96
8.00	15.29
9.00	24.32

Offsite Receiving Body: Offsite1

Time (hr)	Stage (ft NGVD)
0.00	2.00
120.00	2.00
240.00	2.00

Structure: 1

From Basin: Bridgeview Site
To Basin: Offsite1
Structure Type: Gravity
Weir: Broad Crested, Crest Elev = 6 ft NGVD, Length = 370 ft, Weir Coef = 3.13
Bleeder: Circular, Invert Elev = 4.08 ft NGVD, Diameter = 0.5 ft
Default Coefs: Weir Coef = 0.6, Orifice Coef = 0.6
Pipe: None

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
0.00	0.00	0.00	0.00	0.00	-1.50	2.00
2.00	0.10	0.00	0.00	0.00	-1.50	2.00
4.00	0.20	0.00	0.00	0.00	-1.50	2.00
6.00	0.29	0.00	0.00	0.00	-1.50	2.00
8.00	0.39	0.00	0.00	0.00	-1.50	2.00
10.00	0.49	0.00	0.00	0.00	-1.50	2.00
12.00	0.59	0.00	0.00	0.00	-1.50	2.00
14.00	0.68	0.00	0.00	0.00	-1.50	2.00
16.00	0.78	0.00	0.00	0.00	-1.50	2.00
18.00	0.88	0.02	0.00	0.00	-1.49	2.00
20.00	0.98	0.04	0.00	0.00	-1.45	2.00
22.00	1.07	0.06	0.00	0.00	-1.39	2.00
24.00	1.17	0.08	0.00	0.00	-1.30	2.00
26.00	1.31	0.16	0.00	0.00	-1.15	2.00
28.00	1.46	0.20	0.00	0.00	-0.94	2.00
30.00	1.60	0.23	0.00	0.00	-0.68	2.00

Time (hr)	Cumulative Rainfall (in)	Instant Runoff (cfs)	Current Discharge (cfs)	Cumulative Discharge (acre-ft)	Head Water Stage (ft NGVD)	Tail Water Stage (ft NGVD)
32.00	1.74	0.26	0.00	0.00	-0.40	2.00
34.00	1.88	0.29	0.00	0.00	-0.07	2.00
36.00	2.03	0.31	0.00	0.00	0.40	2.00
38.00	2.17	0.34	0.00	0.00	0.93	2.00
40.00	2.31	0.36	0.00	0.00	1.39	2.00
42.00	2.45	0.38	0.00	0.00	1.86	2.00
44.00	2.59	0.40	0.00	0.00	2.33	2.00
46.00	2.74	0.41	0.00	0.00	2.81	2.00
48.00	2.88	0.43	0.00	0.00	3.30	2.00
50.00	3.04	0.50	0.00	0.00	3.87	2.00
52.00	3.24	0.69	0.00	0.00	4.11	2.00
54.00	3.55	1.14	0.12	0.01	4.30	2.00
56.00	3.98	1.68	0.43	0.05	4.56	2.00
58.00	4.59	2.59	0.71	0.15	4.90	2.00
60.00	8.14	32.63	1.02	0.28	5.50	2.00
62.00	9.44	4.64	5.26	1.25	6.02	2.00
64.00	9.94	2.36	2.42	1.79	6.01	2.00
66.00	10.23	1.41	1.46	2.08	6.00	2.00
68.00	10.52	1.40	1.40	2.32	6.00	2.00
70.00	10.71	0.94	1.22	2.53	5.99	2.00
72.00	10.90	0.94	1.21	2.73	5.97	2.00
74.00	10.90	0.02	1.18	2.93	5.90	2.00
76.00	10.90	0.00	1.15	3.12	5.81	2.00
78.00	10.90	0.00	1.12	3.31	5.72	2.00
80.00	10.90	0.00	1.08	3.49	5.64	2.00
82.00	10.90	0.00	1.05	3.66	5.56	2.00
84.00	10.90	0.00	1.02	3.83	5.49	2.00
86.00	10.90	0.00	0.98	4.00	5.41	2.00
88.00	10.90	0.00	0.95	4.16	5.34	2.00
90.00	10.90	0.00	0.92	4.31	5.27	2.00
92.00	10.90	0.00	0.88	4.46	5.20	2.00
94.00	10.90	0.00	0.85	4.60	5.14	2.00
96.00	10.90	0.00	0.82	4.74	5.07	2.00
98.00	10.90	0.00	0.78	4.87	5.01	2.00
100.00	10.90	0.00	0.70	5.00	4.88	2.00
102.00	10.90	0.00	0.60	5.10	4.73	2.00
104.00	10.90	0.00	0.50	5.20	4.61	2.00
106.00	10.90	0.00	0.37	5.27	4.51	2.00
108.00	10.90	0.00	0.28	5.32	4.44	2.00
110.00	10.90	0.00	0.21	5.36	4.39	2.00
112.00	10.90	0.00	0.16	5.39	4.35	2.00
114.00	10.90	0.00	0.13	5.41	4.31	2.00
116.00	10.90	0.00	0.10	5.43	4.29	2.00
118.00	10.90	0.00	0.08	5.45	4.27	2.00
120.00	10.90	0.00	0.07	5.46	4.25	2.00

STRUCTURE MAXIMUM AND MINIMUM DISCHARGES

Struc	Max (cfs)	Time (hr)	Min (cfs)	Time (hr)
1	10.86	60.97	0.00	0.00

BASIN MAXIMUM AND MINIMUM STAGES

Basin	Max (ft)	Time (hr)	Min (ft)	Time (hr)
Bridgeview Sit	6.04	60.97	-1.50	0.00

BASIN WATER BUDGETS (all units in acre-ft)

Basin	Total Runoff	Structure Inflow	Structure Outflow	Initial Storage	Final Storage	Residual
Bridgeview Sit	6.37	0.00	5.46	0.00	0.91	0.00

DRAINAGE CALCULATIONS – POST 100 YR ZERO DISCHARGE

THOMAS ENGINEERING GROUP

Date: 1/10/2020
Project: Bridgeview
Project No: FJ190015

PROPOSED STAGE\STORAGE AREA CALCULATION (NAVD)

Exist. Grades	8.25	8.25	7.75	6.00	8.00	4.50			
	6.25	6.75	4.50	4.00	7.75	1.00			

Stage	VUA	Sidewalk Area	Landscape Area	Dry Detention Area	Pool Deck Area	Wetland Area			Building Area FFE=8.25 NAVD	Total Site 15.880
	Area 2.617	Area 0.230	Area 5.523	Area 0.518	Area 0.189	Area 5.420	Area 0.000	Area 0.000	Area 1.384	
	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.347 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	0.000 (ac.-ft.)	
1.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1.50	0.00	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.19
2.00	0.00	0.00	0.00	0.00	0.00	0.77	0.00	0.00	0.00	0.77
2.50	0.00	0.00	0.00	0.00	0.00	1.74	0.00	0.00	0.00	1.74
3.00	0.00	0.00	0.00	0.00	0.00	3.10	0.00	0.00	0.00	3.10
3.50	0.00	0.00	0.00	0.00	0.00	4.84	0.00	0.00	0.00	4.84
4.00	0.00	0.00	0.00	0.00	0.00	6.97	0.00	0.00	0.00	6.97
4.50	0.00	0.00	0.00	0.18	0.00	9.49	0.00	0.00	0.00	9.67
5.00	0.00	0.00	0.21	0.39	0.00	12.20	0.00	0.00	0.00	12.80
5.50	0.00	0.00	0.85	0.62	0.00	14.91	0.00	0.00	0.00	16.37
6.00	0.00	0.00	1.91	0.87	0.00	17.62	0.00	0.00	0.00	20.39
6.50	0.04	0.00	3.40	1.12	0.00	20.33	0.00	0.00	0.00	24.89
7.00	0.37	0.00	5.31	1.38	0.00	23.04	0.00	0.00	0.00	30.10
7.50	1.02	0.04	7.65	1.64	0.00	25.75	0.00	0.00	0.00	36.10
8.00	2.00	0.12	10.36	1.90	0.02	28.46	0.00	0.00	0.00	42.86
8.50	3.27	0.23	13.12	2.16	0.12	31.17	0.00	0.00	0.00	50.06
9.00	4.58	0.34	15.88	2.42	0.21	33.88	0.00	0.00	0.00	57.31

THOMAS ENGINEERING GROUP

Date: 1/10/2020
Project: Bridgeview
Project No: FJ190015

DESIGN CRITERIA

Water Table	2.00	NAVD
South fork St Lucie river		
FEMA Elevation	Zone AE, Elev 6.0 NAVD	

PROPOSED STAGE\STORAGE AREA CALCULATION (INCLUDES WETLAND AREA)

Stage	Site Stage-Storage (previous page) (ac.-ft.)	Trench Stage-Storage (ac.-ft.)	Total Storage Area (ac.-ft.)
-1.00	0.00	0.03	0.03
-0.50	0.00	0.10	0.10
0.00	0.00	0.21	0.21
0.50	0.00	0.24	0.24
1.00	0.00	0.31	0.31
1.50	0.19	0.38	0.57
2.00	0.77	0.44	1.22
2.50	1.74	0.51	2.25
3.00	3.10	0.58	3.68
3.50	4.84	0.65	5.49
4.00	6.97	0.72	7.69
4.50	9.67	0.79	10.46
5.00	12.80	0.85	13.65
5.50	16.37	0.89	17.26
6.00	20.39	0.89	21.28
6.50	24.89	0.89	25.78
7.00	30.10	0.89	30.99
7.50	36.10	0.89	36.99
8.00	42.86	0.89	43.75
8.50	50.06	0.89	50.95
9.00	57.31	0.89	58.20

PROPOSED SOIL STORAGE

Land Use Summary:

	Acres	Percent
Wetland (A_W):	5.420	34.1%
Roof Areas (A_R):	1.384	8.7%
Paved Areas (A_P):	3.035	19.1%
Green Areas (A_G):	6.041	38.0%
Total (A_T):	15.880	100.0%

Compacted Soil Storage per SFWMD Vol. IV Page C-III-1

Depth to Water Table (feet)	Compacted Water Storage (inches)
1	0.45
2	1.88
3	4.05
4	6.75

Average Pervious Grade (Elev.):	6.13	ft
Depth to Water Table:	4.13	ft
Soil Storage at Average Depth (S_S):	6.75	inches

Weighted S value:

= S_S x % Pervious

= 6.75 x 0.38 = **2.57 inches**

THOMAS ENGINEERING GROUP

Date: 1/10/2020
Project: Bridgeview
Project No: FJ190015

Rainfalls (P)

From Figure C-9, 100-Year 3-Day Storm = 13.30 inches

100-Year 3-Day Storm Event (Zero Discharge)

Runnoff (Q) = $(P - 0.2S)^2 / (P + 0.8S)$
= (13.3 - (0.2 x 2.57))^2 / (13.3 + (0.8 x 2.57))
= 10.65 inches of total runnoff
Runoff Volume = Q * Project Area
= 10.65 x 15.88 = 169.12 acre-inches = 14.09 acre-ft.

Stage for 100-Year 3-day Storm Event	5.06	ft. NAVD

MacKenzie
Engineering & Planning, Inc.
1172 SW 30th Street • Suite 500 • Palm City • Florida • 34990
(772) 286-8030 • www.MackenzieEngineeringInc.com

January 10, 2020

City of Stuart – Planning & Zoning
121 SW Flagler Avenue, Stuart, FL 34994
City Phone: 772-288-1292

Re: Bridgeview Apartments
Master Final Site Plan
Finished Floor Elevation (FFE) - Justification Letter

Shaun G. MacKenzie LICENSE No. 61751 STATE OF FLORIDA PROFESSIONAL ENGINEER
THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY SHAUN G. MACKENZIE, P.E. ON THE DATE ADJACENT TO THE SEAL.
PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.
MACKENZIE ENGINEERING AND PLANNING, INC.
1172 SW 30TH STREET, SUITE 500
PALM CITY, FL 34990
CERTIFICATE OF AUTHORIZATION 29013
SHAUN G. MACKENZIE, P.E. NO. 61751

Digitally signed by Shaun G MacKenzie
Date: 2020.01.15 14:19:43 -05'00'

Shaun G. MacKenzie P.E.
Florida License No. 61751
Transportation Engineer
Engineering Business No. 29013

To whom it may concern,

MacKenzie Engineering and Planning, Inc. prepared this justification letter for the proposed project to demonstrate compliance with the stormwater and flood requirements. The proposed project is located at the northwest corner of Kanner Highway and Indian Street in Stuart, FL (Parcel ID: 40-38-41-001-051-00000-2). The project proposes to construct 212 apartment dwelling units.

In accordance to section *6.03.02.B.4. Finished floor elevations,* finished first floor elevations of all buildings or structures shall not be lower than the higher of the following elevations:

a. Two feet above the flood stage elevations established by FEMA; or
b. 18 inches above the crown of the street on which the building(s) or structure(s) fronts.

The FEMA flood elevation is 6 feet and the proposed flood elevation is 5 feet based on the proposed changes to the FEMA flood maps. The elevation of Kanner Highway varies from 9 feet to 10 feet and the overall site ranges from 3 to 10 feet in elevation (NAVD 88) based on a topographic survey completed in November 2011.

A finished floor elevation of 8.25 feet is proposed, which is 2.25 feet above the FEMA flood elevation. In addition, the site will be permitted to meet South Florida Water Management District (SFWMD) requirements, which are intended to satisfy both flood control and water quality from the site. The site will not comply with part b. of the code, and does not apply to this site because the site will be:

1. More than 2 feet above the 100-year flood elevation.
2. Satisfy SFWMD permitting requirements.
3. In the unlikely event that off-site flood waters drain to the site, the flood waters will flow around the building and discharge into the wetlands that lead to the St. Lucie River.

Therefore, site stormwater management is adequate and we do not believe that this code reference is applicable to the project.

Please contact me at 772-286-8030 if you have any questions.

© MacKenzie Engineering & Planning, Inc.
CA 29013

MacKenzie
Engineering & Planning, Inc.
1172 SW 30th Street • Suite 500 • Palm City • Florida • 34990
(772) 286-8030 • www.mackenzieengineeringinc.com

December 19, 2019

City of Stuart
Public Works Department
121 Flagler Avenue
Stuart, FL 34994

Re: Bridgeview Apartments
Service Availability Letters

To whom it may concern:

Bridgeview Apartments proposes to construct two (2) apartment buildings with 212 dwelling units located at northwest corner of Kanner Highway and Indian Street, Stuart, Florida. The parcel is located north of the Veterans Memorial Bridge, south of Riverland Mobile Home Park development and west of the newly built Martin Memorial Hospital. Below is a list of service availability:

- **Phone** – *AT&T.*
- **Cable** – *AT&T.*
- **Electric** – *Florida Power and Light (FPL).*
- **Water & Wastewater** – *City of Stuart Utilities.*
- **Solid Waste** – *City of Stuart Waste Management.*
- **School –** *Martin County School District.*

Please see attached correspondence with each provider at the end of this letter.

If you have any questions, please do not hesitate to contact Shaun Mackenzie at (772) -834-8909 or shaun@mackenzieengineeringinc.com.

Sincerely,

Shaun MacKenzie

Shaun G. MacKenzie, P.E.
Transportation Engineer
Florida Registration Number 61751
Engineering Business Number 29013

James P Virga
Manager OSP Engineering

AT&T Florida
329 NW Dixie Hwy
Stuart Florida 34994

T 772-692-2774
Jv3965@att.com
att.com

December 20, 2019

Enel Jean-Juste
Project Manager
MacKenzie Engineering & Planning, Inc.
1172 SW 30th Street, Suite 500
Palm City, FL 34990

RE: Bridgeview Apartments, PN 40-38-41-001-051-00000-2

Enel Jean - Juste:

This letter is in response to your request for information on the availability of service at the above Bridgeview Apartments – NW Corner SE Indian St and S Kanner Hwy in Stuart Florida, Parcel ID: 40-38-41-001-051-00000-2 by **AT&T.**

This letter acknowledges that the above referenced project is located in an area served by AT&T. Any service arrangements for Bridgeview Apartments will be subject to later discussions and agreements between the developer and AT&T. Please be advised that this letter is not a commitment by AT&T to provide service to Bridgeview Apartments in Stuart, FL.

Please contact me at the phone number included in this letter with any questions.

Thank you for contacting AT&T.

Sincerely,
James P Virga
329 NW Dixie Hwy
Stuart Florida 34994
Wireline Access-Construction and Engineering

AT&T

Florida Power & Light Company

December 11, 2019

Enel Jean-Justice/MacKenzie Engineering
1172 SW 30th st, suite 500
Palm City, Fl 34990

Re: Bridgeview Apartments
NW Corner of Kanner Hwy & Indian Street, Stuart, FL

Dear Enel:

Thank you for contacting FPL early in your planning process. At the present time FPL has sufficient capacity to provide electric service to your property. We have facilities available currently available at this location.

Please advise me early in the planning process once the final plans have been approved. This information will help us to provide you with the best service in accordance with applicable rates, rules and regulations. You may also respond to us through www.fpl.com. Please contact me if you have any questions.

Sincerely,

Rob Morris

Senior Technical Specialist

General School Capacity Analysis

This general analysis is completed to meet the development review policies specified in Section 6.2.6 of the Martin County, City of Stuart and Martin County School Board Interlocal Agreement for School Facilities Siting and Planning, and Section 17.7 Public School Facilities Element of the Martin County Comprehensive Plan.

Applicant/Project: **Bridgeview Apartments**
Project#: **Parcel - #40-38-41-001-051-00000-2**

Date Received: **1.7.2020**

Applicant Request: **Pre-Application for Rezoning FLU & Master Site Plan**

Student Generation Calculation:

Residential Units	**212**
Current Student Generation Rate	**.229**
Elementary	21
Middle	12
High	15
Total Forecasted	**49**

School Zone Enrollment & Permanent Capacity:

CSA	2019-2020 (as of 10/11/19) Enrollment	2023-2024 COFTE Projected Enrollment	LOS Concurrency Capacity
Stuart Zone – Elementary (Pinewood, Port Salerno, JD Parker Elem)	2226	2299	1978
South Zone – Middle (Anderson Middle, Murray Middle)	1770	1724	2009
Stuart Zone – High Martin County High	2179	2338	2160

Note: Current Enrollment reported from FOCUS, October Counts

Comments:

This General School Capacity Analysis shall be used in the evaluation of a development proposal, but shall not provide a guarantee that the students from the above referenced project will be assigned to attend the particular school(s) listed. The analysis indicates that the elementary and high school LOS Concurrency is currently over capacity, and projected to continue. Middle schools currently are projected to have capacity.

A School Concurrency Review is completed for Final Site Plan applications that include residential units. At that time a Final Concurrency Determination will be conducted. Mitigation to reach Level of Service (LOS) standards for the School District may need to be remedied based on Final analysis.

Prepared by: **Kimberly Everman, Capital Projects Planning Specialist**
Phone: 772-223-3105, ext. 134
Email: evermak@martin.k12.fl.us

Boundary Survey for: Atlantic Reality Acquisitions, LLC
Hanson Grant, Martin County, Florida

SURVEYORS NOTES

1. Notes indicating directional calls to found points, as indicated hereon, refer to North, South, East or West per the bearing base of the survey.

2. Mean High Water elevations shown on this survey were established in February 2007 and were approved by Florida Department of Environmental Protection under Mean High Water Survey file number 4188, dated December 24, 2007.

   The mean high water elevations for the South Fork of the St. Lucie River is a minus (0.16) feet NAVD 88 and a minus (0.39) feet NAVD 88 for "NO NAME CREEK".

3. All visible above ground visible improvements have been located as shown hereon.

4. Right-of-way information for State Road 76 was obtained from State of Florida State Road Department right-of-way Map Project 5510, Section 890602102, sheet 8. Dated August 1941, revised July 7, 1947 as recorded in Plat Book 7, Page 47 Martin County, Florida public records and Florida Department of Transportation Section Map 890602511, pages 13 and 14 dated 1985.

5. Bearings shown hereon are grid and are referenced to a line between National Geodetic Survey mark GCY B01 and GCY D14 having a bearing of North 81°12'32" East.

6. No underground improvements or utilities have been located on this survey.

7. This mean high water line survey complies with Chapter 177, Part III, Florida statues.

8. Additions and or deletions to this survey by other than the signing party (or parties) is prohibited without the written consent of the signing party (or parties).

10. No part of the surveyed lands lies within State Road 76 (SW Kanner Highway).

11. Surveyed lands lies in Parcel Number 40-38-41-001-051-00000-2, including the Southern portion of property.

12. Deeds
    a. Warranty Deed, O.R.B. 2215, Page 602, surveyed land lies within land described.
    b. Quit Claim Deed O.R.B. 2312, Page 2091, surveyed land lies within land described.
    c. Quitclaim Deed O.R.B. 2441, Page 1933, land described lies within surveyed land.

13. The southerly boundary of the surveyed land is adjacent and contiguous to a publicly dedicated right-of-way known Veterans Memorial Bridge, access is neither confirmed nor denied; and the easterly boundary of the surveyed land is adjacent, contiguous and has access to a publicly dedicated right-of way known as State Road 76 a.k.a SW Kanner Highway.

13. ALTA/NSPS Table A Items
    Item 1. Monumentation exist at all corners as shown on sheet 2.
    Item 2. No address number for this undeveloped property.
    Item 3. This property is located in Flood Zone "AE"(EL 6) according to Flood Insurance Rate Map Community Panel No. 12085C0142G, dated March 16, 2018 and Flood Zone "AE"(EL 6), "OTHER FLOOD AREAS" ZONE X and "OTHER AREAS" ZONE X, ZONE D according to Flood Insurance Rate Map Community Panel No. 12085C0161G, dated March 16, 2018.
    Item 4. Gross land area is 22.57± Acres.
    Item 6. (a)&(b) There was no zoning report provided to the surveyor.
    Item 7. There are no buildings on this property.
    Item 8. This property is undeveloped.
    Item 9. This property is undeveloped.
    Item 10. (a)There are no division or party walls with adjoining properties.
    Item 11. All observed utilities are shown on sheet 2.

12. I have reviewed the Chicago Title Insurance Company, commitment for Title Insurance Office File No. RCTC190128 / 401900380RE, with an effective date of 03/28/2019 @ 11:00 P.M., and with regards to the Schedule B, Section II exceptions that are matters of survey and have the following comments:

EXCEPTION 4 - Any claim that any portion of the insured land is sovereign lands of the State of Florida, including submerged, filled or artificially exposed lands accreted to such land. There are no known such lands.

EXCEPTION 5 - Any lien provided by County Ordinance or by Chapter 159, Florida Statutes, in favor of any city, town, village or port authority of unpaid service charges for service by any water, sewer or gas system supplying the insured land. Not a matter of survey.

EXCEPTION 6 - Restrictions, covenants, conditions, easements and other matters as contained on the Plat of Miles or Hanson Grant, recorded in Plat Book B, Page 59, Public Records of Dade (now Martin) County, Florida and as recorded in Plat Book 1, Page 11, of the Public Records of Palm Beach (now Martin) County, Florida. With regards to Plat Book B, Page 59 and Plat Book 1, Page 11, no specifically locatable matters of survey can be plotted on this survey.

EXCEPTION 7 - Restrictions, covenants, conditions, easements and other matters as contained on the Plat of Stuart Farms, recorded in Plat Book 1, Page 63, of the Public Records of Martin County, Florida. With regards to Plat Book 1, Page63 , no specifically locatable matters of survey can be plotted on this survey.

EXCEPTION 8 - Reservations in favor of the State of Florida contained in Murphy Act Deed recorded in Deed Book 31, Page 137. Affects subject property, shown on sheet 2. Subject property encumbered by Right-of-Way 0.85± acres.The Reservation is that portion of the surveyed lands lying west of the current west right-of-way line (east Boundary) and a line that lies 100.00 feet west of the current centerline of SR 76 (SW Kanner Highway).

EXCEPTION 9 - Outfall Ditch Easement in favor of the State of Florida, recorded in Official Records Book 42, Page 432. Item (e) affects subject property, shown on sheet 2. Items (a), (b), (c), (d) & (f) does not affect subject property.

EXCEPTION 10 - Resolutions regarding Zoning recorded in Official Records Book 324, Page 2659 as amended in Official Records Book 326, Page 938 and Official Records Book 357, Page 2364. The subject parcel is wholly contained within Parcel E of Official Records Book 324, page 2659, Official Records Book 326, page 938 and Official Records Book 357, page 2364.

EXCEPTION 11 - Utility Easement in favor of Martin County, recorded in Official Records Book 1005, Page 251. Does not affect subject property, shown on sheet 2.

EXCEPTION 12 - Perpetual Easement in favor of the State of Florida Department of Transportation, recorded in Official Records Book 2441, Page 945. Does not affects subject property, shown on sheet 2.

EXCEPTION 13 - Perpetual Easement in favor of the State of Florida Department of Transportation, recorded in Official Records Book 2441, Page 948 as recorded in Official Records Book 2448, Page 2333. Affects subject property, shown on sheet 2.

EXCEPTION 14 - Resolution regarding Zoning recorded in Official Records Book 2618, Page 2727. Affects all of subject property. Property is contained within lands described in Exhibit "A" of resolution number 12-10.28, OR Book 2618, page 2727.

EXCEPTION 15 - Resolution regarding Master Site Plan Approval for Bridgeview Business Center recorded in Official Records Book 2640, Page 2563. Affects all of subject property. Property is contained within lands described in Exhibit "A" of resolution number 12-10.29, OR Book 2640-2563.

EXCEPTION 16 - The nature, extent or existence of riparian is not insured. No riparian known for subject property.

EXCEPTION 17 - Notwithstanding the legal description in Schedule A, this policy does not insure title to any lands lying below the mean or ordinary high water line of any navigable or tidally influenced waters. Subject property is at and above Mean High Water Line.

EXCEPTION 18 - As to any portion of the premises herein described which is (a) submerged land or is (b) artificially filled in land, artificially exposed land, or any land accreted thereto, in what was formerly navigable waters, this policy is subject to the right of the United States Government and/or the State of Florida, arising by reason of the United States Government's control over navigable waters in the interest of navigation and commerce, and the inalienable right of the State of Florida in the lands and/or waters of such character. There are no known lands.

CERTIFIED TO:
Chicago Title Insurance Company
Republic Commercial Title Company, LLC
Atlantic Realty Acquisitions, LLC, a Georgia limited liability company, it's successors and assigns of the contract for the purchase and sale of real property for the surveyed land; and the landers of the foregoing.

LOCATION MAP
NOT TO SCALE

Department of
Environmental Protection

Charlie Crist
Governor

Mailyde Bowman Douglas Building
3800 Commonwealth Boulevard
Tallahassee, Florida 32399-3000
MS 105
Phone 850-245-2808
Fax 850-245-2940

Michael W. Sole
Secretary

Notice of Mean High Water Survey Filing

The Mean High Water Survey noted below has been filed in the Bureau of Surveying and Mapping public repository. The Mean High Water Survey File Number: 4188

Survey Date: 2/15/2007 County: MARTIN Waterbody SOUTH FORK ST LUCIE RIVER
Job Number **07-1004-01-01**
Project : PALM CITY SEC: TWP: RNG:
USGS 7.5 Minute Quad Map Name PALM CITY
Surveyor's Name ALBERT C. ALLEN,III,P.S.M PSM # 4130
Business Name: G.C.Y.,INCORPORATED
Mailing Address: P.O.BOX 1469
PALM CITY, FL 34990-1469
Phone (772) 286-8083 FAX: (772) 283-6174

For the Bureau of Surveying and Mapping — 12/24/2007 Date of Filing

"Protect, Conserve and Manage Florida's Environmental and Natural Resources"
www.dep.state.fl.us
Printed on recycled paper.

Legal Description

PARCEL CONTROL NUMBER 403841001051000002

NORTH PARCEL

Commencing at the intersection of the North line of the Miles or Hanson Grant and the Westerly right of way line of State Road No. 76; thence South 20°42'45" East, a distance of 1500.00 feet to the Point of Beginning; thence continuing along said Westerly right-of-way line, South 20°42'45" East, a distance of 439.03 feet; thence South 06°32'38" East, a distance of 49.16 feet; thence South 20°42'48" East, a distance of 318.71 feet to a point on the Northerly Right-of-Way line of S.W. Martin Highway; thence along said line South 22°47'40" West, a distance of 55.18 feet; thence South 68°30'26" West, a distance of 152.45 feet to the beginning of a tangent curve concave to the North having a radius 881.25 feet; thence Northwesterly along the arc of said curve through a central angle of 41°32'17" a distance 638.89 feet to a tangent line; thence North 69°12'10" West, a distance of 380.47 feet to a point on the Mean High Water Line; thence along said line North 03°47'25" East, a distance of 50.12 feet; thence North 16°40'46" East, a distance of 48.08 feet; thence North 05°17'18" West, a distance of 65.43 feet; thence North 34°10'01" East, a distance of 139.17 feet; thence North 31°06'00" East, a distance of 167.15 feet to a point on the South River Land Mobile Home Park (unrecorded); thence North 65°59'26" East, a distance of 760.50 feet to the Point of Beginning.

Containing 15.88 Acres, more or less.

Certification

(Not valid without the signature and original raised seal of a Florida licensed Surveyor and Mapper)

To Chicago Title Insurance Company, Republic Commercial Title Company, LLC, Atlantic Realty Acquisitions, LLC, a Georgia limited liability company, it's successors and assigns of the Contract for the purchase and sale of real property for the surveyed land; and the landers of the foregoing. this is to certify that this map or plat and the survey on which it is based were made in accordance with the 2016 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes items 1, 2, 3, 4, 6a, 6b, 6b, 7, 8, 9, 10, 11 of Table A thereof. The field work was completed on 5/28/2019.

I further certify that the Survey of the property shown and described hereon was completed under my direction and said Survey is true and correct to the best of my knowledge and belief.

I further certify that this Survey meets the Standards of Practice for Surveyors set forth by the Florida Board of Professional Surveyors and Mappers in Chapter 5J-17, Florida Administrative Code, pursuant to Section 472.027 Florida State Statutes. No search of the Public Records has been made by this office. The Survey is based on information furnished by client or client's representative.

5/28/2019
Date of Survey

NOTE:
This is an electronically signed and sealed document pursuant to Chapter 5J-17.062, Florida Administrative Code. The printed survey map or report or copies thereof are not valid without the original signature and seal of a Florida licensed surveyor or mapper.

PETER ANDERSEN CERTIFICATE NO. 5199 STATE OF FLORIDA PROFESSIONAL LAND SURVEYOR

Peter Andersen, PSM
Digitally signed by Peter Andersen, PSM
Date: 2019.06.26 09:15:00 -04'00'

Peter Andersen
Professional Survey and Mapper
Florida Certificate No. 5199

GCY
INCORPORATED
PROFESSIONAL SURVEYORS AND MAPPERS
CERTIFICATE OF AUTHORIZATION LB 4108
CORPORATE OFFICE
PO BOX 1469 • 1505 SW MARTIN HWY.
PALM CITY, FL 34991
(800) 386-1066 • WWW.GCYINC.COM

BOUNDARY SURVEY FOR:
AtlanticReality Acquisitions, LLC
MARTIN COUNTY **FLORIDA**

Scale:	Date:	File & Drawing No:
NA	May 2019	19103401
Drawn By: M.F.M.	Checked By: P.A.	Sheet 1 of 2

No.	Revisions	Date	By

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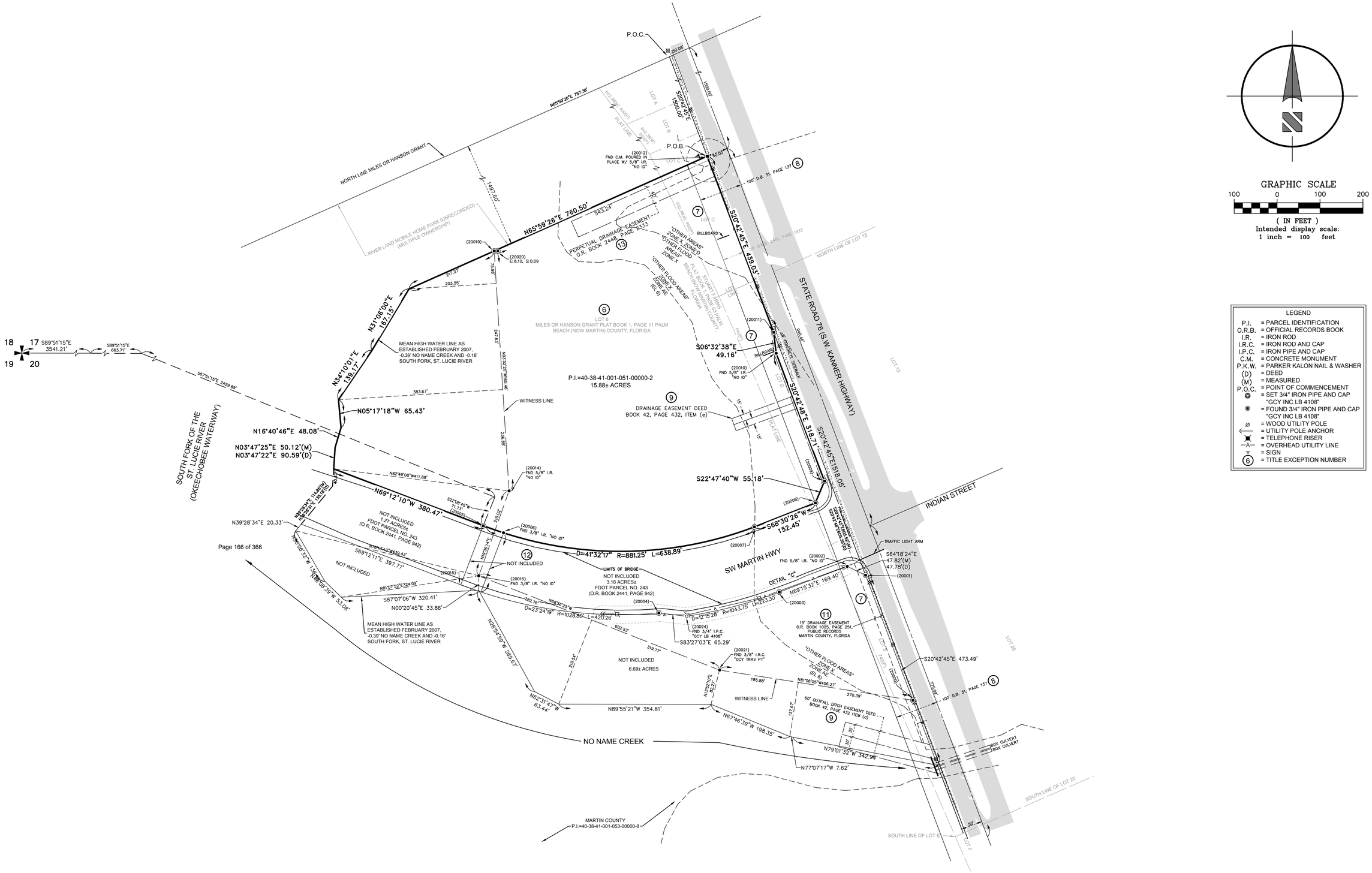
Drawing Name: **Bridge View**
Page(s): **66 - 69**
Field Book(s): **1824**



GRAPHIC SCALE

100 0 100 200

(IN FEET)
Intended display scale:
1 inch = 100 feet

LEGEND

P.I.	= PARCEL IDENTIFICATION
O.R.B.	= OFFICIAL RECORDS BOOK
I.R.	= IRON ROD
I.R.C.	= IRON ROD AND CAP
I.P.C.	= IRON PIPE AND CAP
C.M.	= CONCRETE MONUMENT
P.K.W.	= PARKER KALON NAIL & WASHER
(D)	= DEED
(M)	= MEASURED
P.O.C.	= POINT OF COMMENCEMENT
	= SET 3/4" IRON PIPE AND CAP "GCY INC LB 4108"
	= FOUND 3/4" IRON PIPE AND CAP "GCY INC LB 4108"
	= WOOD UTILITY POLE
	= UTILITY POLE ANCHOR
	= TELEPHONE RISER
—A—	= OVERHEAD UTILITY LINE
	= SIGN
6	= TITLE EXCEPTION NUMBER

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No.	Revisions	Date	By

GCY
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PALM CITY, FL. 34991
(800) 386-1066 • WWW.GCYINC.COM

BOUNDARY SURVEY FOR:

AtlanticReality Acquisitions, LLC

MARTIN COUNTY **FLORIDA**

Scale:	Date:	File & Drawing No:
1"=100'	May 2019	19-1034-01
Drawn By: M.F.M.	Checked By: P.A.	Sheet 2 of 2

BRIDGEVIEW RPUD.

COMPREHENSIVE PLAN REVIEW

FUTURE LAND USE ELEMENT

Objective A5. - Residential development.

Ensure land use compatibility by grouping complementary land use activities, including mixed-use land use developments in appropriate areas of the City. Work with the developers to integrate vehicular and pedestrian circulation systems, bike paths, parking, building location, and architectural design into a cohesive development.

Policy A5.1. The Future Land Use Element of the City's adopted Comprehensive Plan shall provide land for future residential use to promote a more compact development pattern. This shall include sufficient land suitable for the public utility facilities needed to support the projected level and pattern of development.

The proposed project is compact in form by being clustered in order to protect existing wetlands and their associated buffer areas. The development provides sufficient upland and preservation areas, while providing a medium-density development of approximately 15 dwelling units per acre. There are sufficient public utilities in place to support this pattern of development and the associated impacts of the development.

Policy A5.2. Development on all vacant, un-platted areas designated as residential should be compatible with any surrounding existing homes.

In order to consider the compatibility of a proposal we need to assess whether the existing residential development (Riverland) adjacent to the northern boundary of the proposed development are able to exist together without problem or conflict. The proposed development proposes an entirely residential development. The proposed buffers and preserve areas within the site, provide sufficient visual shielding to protect the surrounding existing residential development. The 4-storey height of the proposed development is adequately shielded from view. In respect of traffic impacts and safety the applicants' traffic study address volume and safety impacts in that respect and access is available, including a northbound access from Kanner Hwy. Overall, this proposal is considered to be compatible with the adjacent uses.

Policy A5.3. Wherever possible, medium density residential and recreation/open space areas should serve as buffers between higher and lower intensity residential uses to achieve an orderly land use transition.

The proposed project is of a higher density (15 du/ac). Considering that the highest density allowed within the City is 30 du/ac then this proposal is of a medium density. The proposed development is of greater intensity and height (4-stories) of adjacent residential uses of the Riverland mobile home development (single-story and approximately 9 du/ac).

The distance between the proposed building and those existing, which includes a car-parking area and enhanced buffer area provide a transition zone between the existing low density and the medium density proposal.

Policy A5.5. The City shall market itself as a community for families.

The development forms part of an inventory that widens housing options for existing and new residents of the City.

Policy A5.6. The City shall maintain a height limitation of the greater of 45 feet or four stories of occupiable space for all buildings. The City shall require landscaping of all new development and redevelopment to promote an aesthetic streetscape. The City shall require landscape buffers between single family residential and non-residential uses.

The proposal complies with the height limitation and incorporates substantial landscaping fronting the streetscape.

GOAL STATEMENT B

Minimize costs to current residents of growth, new development, and redevelopment, and encourage future land uses that maintain or enhance economical and efficient delivery of government utilities and services.

Objective B1. - Compact urban form. Discourage urban sprawl by facilitating urban redevelopment and infill development of properties and planning for urban infill and redevelopment of lands located within Stuart in order to achieve a compact urban form.

The proposal is considered to be a good example of a compact urban form of residential infill.

Objective B3. - Desirable pattern of land uses.

Promote and enhance a pattern of land uses that are compatible; that are convenient to City residents, businesses, and visitors; that avoid inappropriate or wasteful use of land; and that encourage efficient use of land, resources and facilities. Future land uses shall be designated to support the existing or planned community character, thereby prohibiting the development or expansion of uses which are inconsistent with the community's character. Reduce blighted areas through redevelopment. Land development and use regulations shall include provisions to ensure consistency with this Comprehensive Plan.

The proposal is considered to be a good use of vacant and underutilized land within the community characteristics of the City and one which protects the existing wetlands on site.

Policy B3.2. All development shall be compatible with and complementary to surrounding land uses and shall not unduly affect existing approved activities

The proposed development, by reason of proposed use, density and buffers is considered to be compatible with and complementary to surrounding activities.

Policy B1.4. Annexation and redevelopment strategies for infill development and redevelopment should be formulated to produce a future viable economy for the City.

The proposed development site is an infill development which adds to the local economy through the increased demand for commercial, entertainment and retail services/products by new residential occupiers. The housing units will increase the spectrum and variety of residential accommodation in the City, therefore adding to a balanced housing supply.

2.

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
Local Planning Agency

Meeting Date:3/19/2020 **Prepared by:**Tom Reetz

Title of Item:
HARBOR GROVE APARTMENTS RPUD - FLUM AND RE-ZONING (QUASI-JUDICIAL)(RC):

ORDINANCE No: 2436-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE CITY'S COMPREHENSIVE PLAN THEREBY CHANGING THE FUTURE LAND USE DESIGNATION FROM "COMMERCIAL" TO "MULTI-FAMILY RESIDENTIAL" FOR TWO PARCELS EQUALING 13.93 ACRES, OWNED BY TED GLASRUD ASSOCIATES, FL, LLC, LOCATED ON THE WEST SIDE OF S.E. COMMERCE AVENUE, SOUTH OF S.E. INDIAN STREET, AND NORTH OF S.E. FISCHER STREET WITH SAID LANDS BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE AHS AT HARBOR GROVE RESIDENTIAL PLANNED UNIT DEVELOPMENT RPUD CONSISTING OF THREE HUNDRED TWENTY FOUR (324) MULTI-FAMILY UNITS WITHIN NINE (9) INDIVIDUAL THREE-STORY APARTMENT BUILDINGS; APPROVING A DEVELOPMENT SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT; DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:

The intent of this application is to assign a Residential Planned Unit Development (RPUD) zoning designation and a multifamily land use to property in the city in order to construct 324 multifamily units on 13.93 acres owned by Ted Glasrud Associates, Fl, LLC. The proposed project consist of nine (9) 3-story apartment buildings. In addition to the apartment buildings, there will be amenities such as a clubhouse, pool, recreation/gym buildings and an outdoor gazebo. The apartment access will be privately gated for vehicles with separate secured gates for pedestrian access/egress.

The property is bounded to the east by undeveloped property and the recently approved Plantation Storage facility. To the west is an existing gas station and strip mall fronting U.S.1, both in Martin County. Access to the property will be from Commerce Avenue, which the applicant plans to make significant improvements to the roadway to allow for better access for the community. The proposed roadway improvements have been coordinated with the City of Stuart Public Works Department as well as with the Martin County Engineering Department via Bill Mathers engineering.

The 13.93 acre property currently has a commercial future land use designation and was the subject of a prior PUD which consolidated the preserve offsite in anticipation of the development of the property. The proposal is to change the land use to multifamily for 324 units with a gross density of 23.3 units per acre (UPA). The developer set out in the PUD agreement at condition No. #3 of Ordinance No. 2436-2020 that the developer shall set its rental rates at no more than 140% of the Area Median Income for the City of Stuart (or closest similar jurisdiction) as determined by the U.S. Department of Housing and Urban Development (HUD).

The applicant is asking for the following 3 variance exceptions to the City's code which allows for flexibility to the code which may be offset by providing other aspects of the project that above and beyond what the code

requires. The exceptions are as follows:

1. 2.07.00.D3 Density, The code allow up to 15 dwelling units per acre by right and up to 30 DUI with City Commission approval. The applicant is proposing 23.26 DU/acre.

2. 6.01.09 Parking Code: The code requires 1.5 parking spaces for one bedroom apartments and 2 parking spaces for two bedrooms. The applicant is proposing 1.5 spaces for both the one and two-bedroom units a reduction of 93 parking stalls overall.

3. 6.04.06 Land Use transitions: (Buffers) The code requires 25 feet between commercial and multifamily uses. The applicant is proposing 15 feet between commercial uses along U.S1 and the multifamily project.

Funding Source:
N/A
Recommended Action:
Motion to approve Ordinance No. 2436-2020 to be heard by the City Commission at first reading.

ATTACHMENTS:

	Description	Upload Date	Type
🗋	Ordinance No. 2436-2020	3/11/2020	Ordinance add to Y drive
🗋	Ordinance No 2436-2020 Exhibit D	3/11/2020	Ordinance add to Y drive
🗋	Staff Report - By Tom Reetz	3/9/2020	Staff Report
🗋	Environmental Comments	3/9/2020	Backup Material
🗋	Traffic consultantReview	3/9/2020	Backup Material
🗋	Consultant Comments	3/9/2020	Backup Material
🗋	Staff Review - Residential PUD	3/11/2020	Backup Material
🗋	Staff Comp Plan review	3/11/2020	Backup Material

BEFORE THE CITY COMMISSION

CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2436-2020

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, AMENDING THE FUTURE LAND USE MAP OF THE CITY'S COMPREHENSIVE PLAN THEREBY CHANGING THE FUTURE LAND USE DESIGNATION FROM "COMMERCIAL" TO "MULTI-FAMILY RESIDENTIAL" FOR TWO PARCELS EQUALING 13.93 ACRES, OWNED BY TED GLASRUD ASSOCIATES, FL, LLC, LOCATED ON THE WEST SIDE OF S.E. COMMERCE AVENUE, SOUTH OF S.E. INDIAN STREET, AND NORTH OF S.E. FISCHER STREET WITH SAID LANDS BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; AND FURTHER PROVIDING THAT SAID LANDS SHALL CONCURRENTLY ESTABLISH THE AHS AT HARBOR GROVE RESIDENTIAL PLANNED UNIT DEVELOPMENT RPUD CONSISTING OF THREE HUNDRED TWENTY FOUR (324) MULTI-FAMILY UNITS WITHIN NINE (9) INDIVIDUAL THREE-STORY APARTMENT BUILDINGS; APPROVING A DEVELOPMENT SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT; DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

WHEREAS, the City Commission held a properly noticed hearing at a regularly scheduled City Commission to consider the application by AHS Residential Services, LLC for

two contiguous parcels equaling 13.93 acres of land located on the west side of S.E. Commerce Avenue south of S.E. Indian Street and north of S.E. Fischer Street.

WHEREAS, the City of Stuart has determined the need to assign the future land use and a land development zoning district for said lands; and

WHEREAS, the City Commission, has considered the Petitioner's voluntary request to change land use and zoning designations, and has also considered the recommendation of the City staff.

WHEREAS, the Applicant has committed to the City that its development will comply with all development codes, plans, standards and conditions approved by the City Commission; and that it will bind its successors in title to any such commitments made upon approval of the RPUD; and

WHEREAS, at the hearing the applicant showed by substantial competent evidence that the application is consistent with the Stuart Comprehensive Plan, and the Land Development Code of the City, and with the procedural requirements of law; and

WHEREAS, the RPUD development will be in harmony with surrounding properties and their anticipated development;

WHEREAS, the foregoing recitals are true and adopted as findings of fact and conclusions of law.

WHEREAS, the property is legally described in **"Exhibit A"** of this ordinance. A map depicting the property is attached hereto as **Exhibit "B"** and made a part hereof by reference; and development conditions including a timetable for development attached hereto as **Exhibit "C";**

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA THAT:

SECTION 1: The following new documents are on file as public records of the City, at the office of the City Clerk in City Hall, and attached hereto as **Exhibit "D"**, hereinafter the

"Development Documents", shall be deemed a part of the development conditions, and shall supplement any earlier approvals:

a. **The Master Site Plan, Sheet SP-1, prepared by Lucido and Associates, Landscape Architects, dated 08.18.19 and last revised on 02.05.20.**
b. **Boundary and Topographic Survey, Sheet 1 of 1, prepared by Stephen Brown, Professional Surveyor and Mapper, dated 03.10.20.**
c. **The Landscape Plan Cover Sheet, The Landscape Plan, The Master Plant Schedule, Landscape Details, Landscape Specifications, Sheets CV, LA-1 thru LA-7, prepared by Lucido and Associates, dated 08.08.19 and last revised on 03.10.20.**
d. **Harbor Grove Fire Autoturn Fire Truck Access 1, Sheet EX-1 thru EX-3, prepared by Mathers Engineering Corporation, dated November, 2019.**
e. **Harbor Grove Conceptual Drainage and Fire Lines, Sheet 1 of 1, prepared by Mathers Engineering Corporation, dated November, 2019, last revised on January 30, 2020.**
f. **AHS at Harbor Grove Architectural Floor Plans and Elevations, Sheet A101, by Bellon BA Architects, dated 07.22.19**
g. **AHS Proposed Club House, Sheet A102, by Bellon BA, dated 11.06.19.**
h. **Photometrics Plan by Kome, (Originally for a project named Banyon Ridge with the same layout), dated 02.07.2019.**

SECTION 2: The Future Land Use designation in the City's Comprehensive Land Use Plan shall be established as "Multi-Family Density Residential". This ordinance may not become effective until 31 days after adoption. If challenged within 30 days after adoption, this ordinance may not become effective until the state land planning agency or the Administration Commission, respectively, issues a final order determining that the adopted large-scale land use amendment complies as defined in s. 163.3184(1)(b).

SECTION 4: The Land Development (Zoning) District designation on the City of Stuart Official Zoning Map shall be established as "RPUD" Residential Planned Unit Development subject to the appeal period stated in Section 2, above.

SECTION 5: Except as otherwise provided herein, no development permits, site permits, or building permits shall be issued by the City except in compliance with the City's Land Development Code.

SECTION 6: All ordinances or parts of ordinances in conflict with this ordinance or any part thereof is hereby repealed to the extent of such conflict. If any provision of this ordinance conflicts with any contractual provision between the City and the developer of the site, this ordinance shall prevail.

SECTION 7: If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared severable.

SECTION 8: This ordinance shall be effective upon the last of the following to occur: adoption by the City Commission, and proper execution and acceptance by the Owner. However, the Future Land Use and Zoning Designations granted herein shall not be effective until thirty-one (31) days after adoption, and as otherwise provided by law.

SECTION 9: Upon complete execution of this Ordinance, including the Acceptance and Agreement by the Owner, the City Clerk is directed to record a Certified Copy of the same in the Public Records of Martin County, Florida.

Passed on first reading the ____ day of _____, 2020.

Commissioner _____ offered the foregoing Ordinance and moved its adoption.

The motion was seconded by Commissioner _____ and upon being put to a roll call vote, the vote was as follows:

	YES	NO	ABSENT	ABSTAIN
MICHAEL J. MEIER, MAYOR				
EULA R. CLARKE, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
KELLI GLASS LEIGHTON, COMMISSIONER				
MERRITT MATHESON, COMMISSIONER				

ADOPTED this ___ day of _____, 2020.

ATTEST:

_____

MARY R. KINDEL
CITY CLERK

_____

MICHAEL J. MEIER
MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____

MICHAEL J. MORTELL
CITY ATTORNEY

ACCEPTANCE AND AGREEMENT

BY SIGNING THIS ACCEPTANCE AND AGREEMENT, THE UNDERSIGNED HEREBY ACCEPTS AND AGREES TO ALL OF THE TERMS AND CONDITIONS CONTAINED IN A RESIDENTIAL PLANNED UNIT DEVELOPMENT AND IN ALL EXHIBITS, ATTACHMENTS AND DEVELOPMENT DOCUMENTS, INTENDING TO BE BOUND THEREBY, AND THAT SUCH ACCEPTANCE AND AGREEMENT IS DONE FREELY, KNOWINGLY, AND WITHOUT ANY RESERVATION, AND FOR THE PURPOSES EXPRESSED WITHIN THE ABOVE ORDINANCE. IF IT IS LATER DISCOVERED THAT THE UNDERSIGNED, OR ITS SUCCESSORS OR ASSIGNS HAVE FAILED IN ANY MATERIAL WAY TO DEVELOP THIS RESIDENTIAL PLANNED UNIT DEVELOPMENT ACCORDING TO THIS ORDINANCE, ITS CONDITIONS, AND THE DEVELOPMENT PLANS AND DOCUMENTS, THE UNDERSIGNED UNDERSTANDS AND AGREES THAT THIS ORDINANCE MAY BE AMENDED OR REPEALED BY THE CITY COMMISSION, AND THAT OTHER ACTIONS MAY BE TAKEN AGAINST THE UNDERSIGNED BY THE CITY, INCLUDING BUT NOT LIMITED TO CODE ENFORCEMENT ACTIONS, PERMIT AND LICENSING REVOCATIONS, AND ALL APPLICABLE CIVIL AND CRIMINAL ACTIONS.

IN WITNESS WHEREOF THE UNDERSIGNED HAS EXECUTED THIS ACCEPTANCE AND AGREEMENT:

WITNESSES:

Owner: Ted Glasrud Associates, LLC

_____

Print Name: _____

By: _____

_____

Print Name: _____

OWNERS ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day of _____, 2020, by _____ owner.

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

CITY'S ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____day of _____, 2020, by Michael J. Meier, Mayor, and Mary Kindel, City Clerk, respectively, of the City of Stuart, Florida, a Florida municipal corporation.

_____

Notary Public, State of Florida

My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____

Type of Identification Produced _____

EXHIBIT A – LEGAL DESCRIPTION

LEGAL DESCRIPTION

PARCEL 1:

A PORTION OF TRACTS 66, 67 & 68, OF REVISED PLAT OF PORT SEWALL LAND COMPANY, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 3 PAGE 7 OF THE PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE PONT OF INTERSECTION OF THE SOUTH RIGHT OF WAY LINE OF INDIAN STREET AND THE WEST RIGHT OF WAY LINE OF COMMERCE AVENUE AS SHOWN IN OFFICIAL RECORDS BOOK 959 PAGE 2139; THENCE S.66°47'40"W., ALONG THE NORTH LINE OF SAID TRACT 68 AND THE SOUTH RIGHT OF WAY LINE OF INDIAN STREET A DISTANCE OF 299.86 FEET TO THE NORTHWEST CORNER OF SAID TRACT 68; THENCE S.23°12'20"E., ALONG THE WEST LINE OF TRACT 68 A DISTANCE OF 724.91 FEET TO THE SOUTHWEST CORNER OF SAID TRACT 68; THENCE N.66°47'40"E., ALONG THE SOUTH LINE OF SAID TRACTS 66, 67 & 68, A DISTANCE OF 622.90 FEET TO A POINT ON SAID WEST RIGHT OF WAY LINE OF COMMERCE AVENUE; THENCE N.37°16'10"W., ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 7.23 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE, CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 435.0 FEET AND A CENTRAL ANGLE OF 35°31'49"; THENCE NORTHWESTERLY, ALONG SAID RIGHT OF WAY AND THE ARC OF SAID CURVE, AN ARC DISTANCE OF 269.75 FEET TO A POINT OF REVERSE CURVATURE, CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 515.0 FEET, AND A CENTRAL ANGLE OF 49° 31'44"; THENCE NORTHWESTERLY ALONG SAID RIGHT OF WAY AND THE ARC OF SAID CURVE AN ARC DISTANCE OF 445.19 FEET TO A POINT OF TANGENCY; THENCE N.23°16'15"W., ALONG SAID RIGHT OF WAY A DISTANCE OF 100.04 FEET TO THE POINT OF BEGINNING.

PARCEL CONTAINING 301,542.96 SQUARE FEET, 6.9225 ACRES, +/-.

(TOGETHER WITH)

PARCEL 2:

THAT PART OF TRACTS 103, 104 AND 105, SEWALL'S POINT LAND COMPANY SUBDIVISION, ACCORDING TO THE MAP OR PLAT THEREOF, AS RECORDED IN PLAT BOOK 3, PAGE 7 OF THE PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA, LYING NORTH AND EAST OF THE FOLLOWING DESCRIBED LINE:

COMMENCE AT THE INTERSECTION OF THE CENTERLINE OF SE FISCHER STREET AND SE COMMERCE AVENUE, THENCE SOUTH 66 DEGREES WEST 304.68 FEET, THENCE NORTH 23 DEGREES WEST 40 FEET TO THE POINT OF BEGINNING, THENCE CONTINUE NORTHWEST 206.37 FEET, THENCE NORTH 37 DEGREES WEST 149.84 FEET, THENCE SOUTH 66 DEGREES WEST 253.59 FEET, THENCE NORTH 23 DEGREES WEST 40 FEET AND THENCE SOUTH 66 DEGREES WEST 254.98 FEET TO THE WEST LINE OF LOT 103 AND THE POINT OF TERMINUS OF SAID LINE.

PARCEL CONTAINING 305,243.29 SQUARE FEET, 7.0074 ACRES, +/-.

TOTAL ACREAGE CONTAINING 606,786.25 SQUARE FEET, 13.9299 ACRES, +/-.

EXHIBIT B – LOCATION MAP

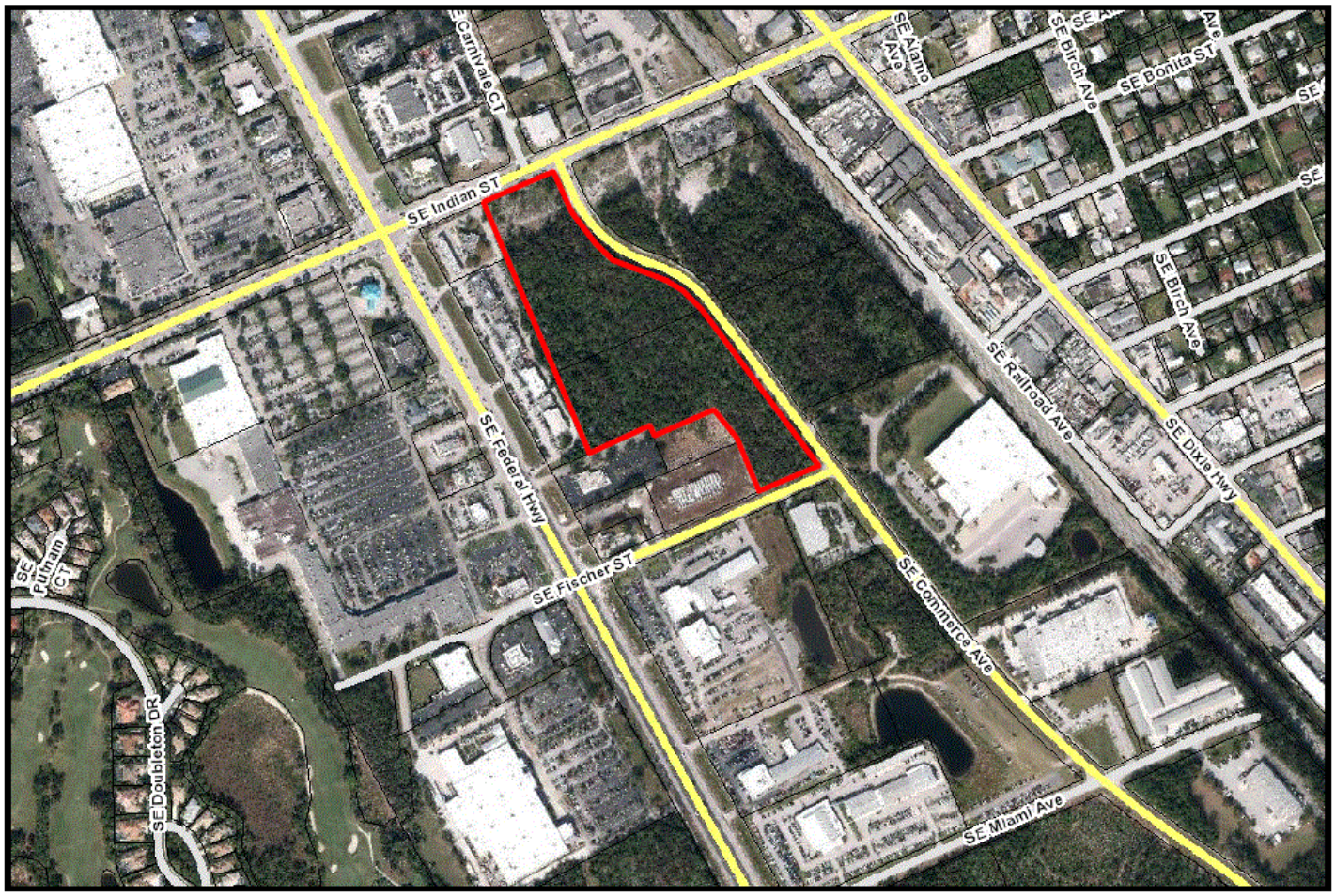

EXHIBIT C – DEVELOPMENT CONDITIONS

Approved Plans and Documents

1. The RPUD project and use thereof shall comply with the following drawings:

   a. **The Master Site Plan, Sheet SP-1, prepared by Lucido and Associates, Landscape Architects, dated 08.18.19 and last revised on 03.10.20.**
   b. **Boundary and Topographic Survey, Sheet 1 of 1, prepared by Stephen Brown, Professional Surveyor and Mapper, dated 6/11/2019.**
   c. **The Landscape Plan Cover Sheet, The Landscape Plan, The Master Plant Schedule, Landscape Details, Landscape Specifications, Sheets CV, LA-1 thru LA-7, prepared by Lucido and Associates, dated 08.08.19 and last revised on 03.10.20.**
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   g. **AHS Proposed Club House, Sheet A102, by Bellon BA, dated 11.06.19.**
   h. **Photometrics Plan by Kome, (Originally for a project named Banyon Ridge with the same layout), dated 02.07.2019.**

2. Any modifications to the Master RPUD Site Plan that is less than 10% of the approved building footprint, building setbacks, gross square footage, building location, parking size, location and number of parking spaces, drainage areas, impervious areas and location of landscaping may be approved by the City's Development Director, provided however, the Development Director may refer the matter to the City Commission for approval via a public hearing.

3. The developer shall set its rental rates at no more than 140% of the Area Median Income for the City of Stuart (or closest similar jurisdiction) as determined by the Department of Housing and Urban Development (HUD).

4. The maximum building height within the RPUD shall be 3 stories or 31'-9" to the roof parapet roof. Height shall be measured from the lowest permissible finished first floor elevation to the surface of a flat roof and to the eave of a pitched roof.

5. Prior to certificate of occupancy of the last building, the applicant shall provide an engineer's written confirmation attesting that the RPUD's storm water system is in place and functioning in compliance with all approved plans and specifications.

6. Erosion and dust control measures to be implemented during construction shall be provided on the civil plans and submitted during site permit review. Water trucks shall be provided by the applicant as necessary during construction in order to reduce dust generated on-site.

Landscaping

7. The common areas including the projects clubhouse and pool area shall be provided with landscaping with an irrigation system of enough capacity to maintain the landscaping in a healthy growing condition.

8. The City's landscape inspector shall have the opportunity to inspect all trees and/or landscape material with the landscape architect. The developer shall bear the pass-thru fee for landscape consulting fees not to exceed $1,500.00.

9. A Landscape plan, executed in accordance with the Land Development Regulations, shall be submitted to the Development Department and approved prior to the issuance of a certificate of occupancy.

Required Open Space and Native Preserve Area

10. Open Space. Not less 5.39 acres of the RPUD shall be open space as depicted on the Site Plan by Lucido and Associates as described in Exhibit C. Required open space may include native vegetation areas, however, other required landscaping shall not count towards the open space requirement.

Tree Mitigation

11. The project shall comply with Section 5.05.02 of the "Tree replacement and protection requirements" of the City's Land Development Code. All required tree mitigation will be met on site.

Prior to Issuance of Site Permits

12. Applicant shall provide a digital boundary survey and civil plan prior to the issuance of a site permit.

13. Civil Plans shall be reviewed and approved by all applicable City departments prior to the issuance of a site permit.

14. All regulatory agency permits, including but not limited to the South Florida Water Management District and Army Corp of Engineers, shall be obtained by the applicant and copies provided to the City prior to the commencement of any development activities.

15. All development activities shall comply with the City's Concurrency Management System prior to the issuance of building permits.

Development and Construction

16. Project phasing shall be shown on the site and construction plans and are subject to staff approval during plan review process. The first phase shall include work along the projects entrance, stormwater infrastructure and the clubhouse including vehicular gates.

17. The Developer shall install landscaping and gates at the development's entry location at as shown on the landscaping plan prior to the first certificate of occupancy for a residential unit. The entry gates shall be made operational prior to issuance of a certificate of occupancy.

18. The property owner shall provide easements for licensed television services that can coexist together with power in a public utility easement.

19. In the event of any conflict in the provisions of Exhibit 'C' Development Conditions and attached exhibits, Exhibit 'C' shall prevail.

20. Erosion and dust control measures to be implemented during construction shall be provided on the civil plans and submitted during site permit review. Water trucks shall be provided by the applicant as necessary during construction in order to reduce dust generated on-site.

21. All utility improvements constructed by the developer within Martin County's right-of-way, shall be constructed in a manner and form acceptable to Martin County. The developer shall grant any such utility easements necessary for this site as may be required by the Martin County.

22. The project's storm water facilities, specifically the Native Planting schemes at the Retention areas will be designed using Low Impact Development "(LID) Techniques as described in the University of Florida IFSA Extension publication LID Practices: Integration Wetlands and Enhancing Storm water Basins".

23. Temporary or freestanding storage units are prohibited on the property once construction is complete.

24. Site work including but not limited to land preparation, retention area excavation, clearing and grading, drainage and water, sewer and irrigation lines shall be reviewed and approved by the city's public works department and the city's engineering consultant prior to permitting.

Signage

25. All signs throughout the PUD must have a consistent treatment, as to number, location, size, height, lighting, and materials with a unified theme throughout the Planned Unit Development. The development's monument sign shall adhere to sign criteria found in Chapter 6 of the City's Land Development Code.

Future Amendments

26. Owner shall not subject the Property to any condominium conversion and neither shall any portion of the Property be converted to units for sale in connection with a condominium conversion nor shall the title to any such units be transferred to any party other than being held as a single parcel for the purposes of apartment rental.

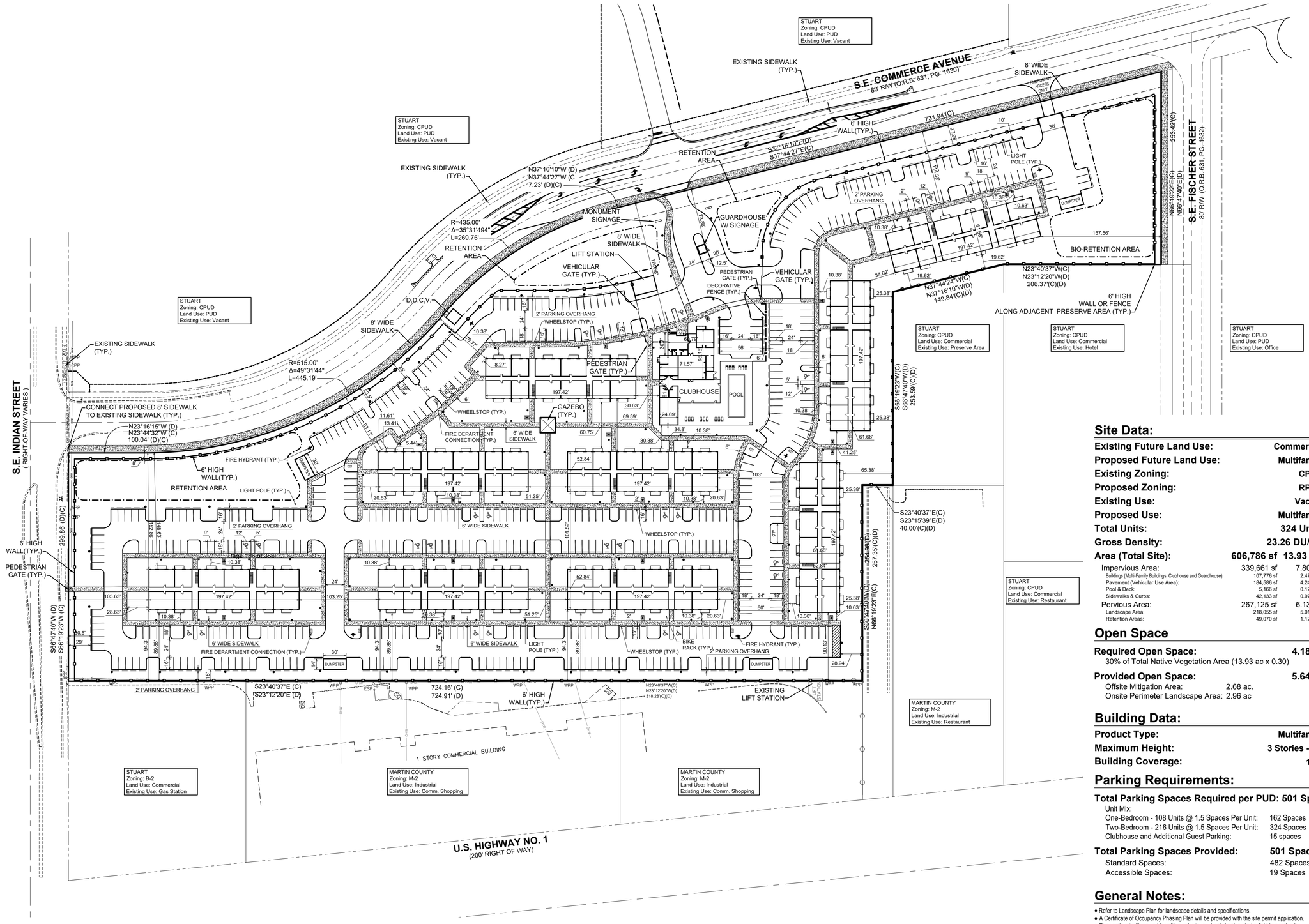
Timetable for Development

27. Timetable for development shall be as follows:

Site and building permit application deemed sufficient for permit review under city codes and standards.	**March 1, 2022**
Final Certificate of Occupancy for all site and building improvements.	**March 1, 2024**

Allowable Uses

28. The following uses shall be permitted:
    a. Multi-Family Residential
    b. Home Occupations in accordance with the City's Land Development Code.
    d. This residential facility shall not operate as an age restricted community in accordance with Florida Law.



Site Data:

Existing Future Land Use:	**Commercial**
Proposed Future Land Use:	**Multifamily**
Existing Zoning:	**CPUD**
Proposed Zoning:	**RPUD**
Existing Use:	**Vacant**
Proposed Use:	**Multifamily**
Total Units:	**324 Units**
Gross Density:	**23.26 DU/ac.**

Area (Total Site):	**606,786 sf**	**13.93 ac.**	
Impervious Area:	339,661 sf	7.80 ac.	(56.0%)
Buildings (Multi-Family Buildings, Clubhouse and Guardhouse):	107,776 sf	2.47 ac.	
Pavement (Vehicular Use Area):	184,586 sf	4.24 ac.	
Pool & Deck:	5,166 sf	0.12 ac.	
Sidewalks & Curbs:	42,133 sf	0.97 ac.	
Pervious Area:	267,125 sf	6.13 ac.	(44.0%)
Landscape Area:	218,055 sf	5.01 ac.	
Retention Areas:	49,070 sf	1.12 ac.	

Open Space

Required Open Space: **4.18 ac.**

30% of Total Native Vegetation Area (13.93 ac x 0.30)

Provided Open Space: **5.64 ac.**

Offsite Mitigation Area: 2.68 ac.
Onsite Perimeter Landscape Area: 2.96 ac

Building Data:

Product Type:	**Multifamily**
Maximum Height:	**3 Stories - 35'**
Building Coverage:	**18%**

Parking Requirements:

Total Parking Spaces Required per PUD: 501 Spaces

Unit Mix:

One-Bedroom - 108 Units @ 1.5 Spaces Per Unit:	162 Spaces
Two-Bedroom - 216 Units @ 1.5 Spaces Per Unit:	324 Spaces
Clubhouse and Additional Guest Parking:	15 spaces

Total Parking Spaces Provided:	**501 Spaces**
Standard Spaces:	482 Spaces
Accessible Spaces:	19 Spaces

General Notes:

- Refer to Landscape Plan for landscape details and specifications.
- A Certificate of Occupancy Phasing Plan will be provided with the site permit application.
- The applicant will request in writing, prior to any land clearing, that a field inspection be performed to determine if barricades have been properly installed on the site.
- All signs will be reviewed for compliance with the applicable regulations at the time the sign permit is issued.
- The property owner shall be required to provide adequate easements to ensure non-exclusive access to duly licensed cable television services to persons residing in this development. The easement shall specifically provide for the use by the franchised cable television system.
- The parking areas shown hereon are private and will be owned and maintained by the homeowners association.
- Water and sewer service shall be provided by Martin County Utilities.
- Photometric site lighting plans shall be provided to the City of Stuart for review and approval prior to site development permit approval.
- A Knox Box and Lock shall be installed on all gates.

lucido & associates
701 SE Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 223-0220

Key / Location:

N.T.S.

Project Team:

Client & Property Owner:	AHS Residential, LLC 12895 Southwest 132nd Street Suite 202 Miami, Florida 33186
Land Planner / Landscape Architect:	Lucido & Associates 701 East Ocean Boulevard Stuart, Florida 34994
Engineer:	Mathers Engineering Corporation 2431 Southeast Dixie Highway Stuart, Florida 34996
Surveyor:	Stephen J. Brown, Inc. 619 East 5th Street Stuart, Florida 34994
Environmental:	EW Consultants, Inc. 1000 SE Monterey Commons Boulevard Suite 208 Stuart, Florida 34996
Architect:	Slattery & Associates 2060 Northwest Boca Raton Boulevard Suite 2 Boca Raton, Florida 33431

AHS at Harbor Grove

City of Stuart, Martin County, Florida

Master Site Plan

Date	By	Description
08.08.19	J.J.	Initial Submittal
11.25.19	S.L.S.	1st Resubmittal
02.05.20	S.L.S.	2nd Resubmittal
03.10.20	S.L.S.	3rd Resubmittal & LPA

NORTH

SCALE: 1" = 60'

0 30' 60' 120'

REG. # 1018
Thomas P. Lucido

Designer	J.J.	Sheet
Manager	D.F.	**SP-1**
Project Number	19-345	
Municipal Number	---	
Computer File	19-345 - AHS Harbor Grove - Master Site Plan.dwg	

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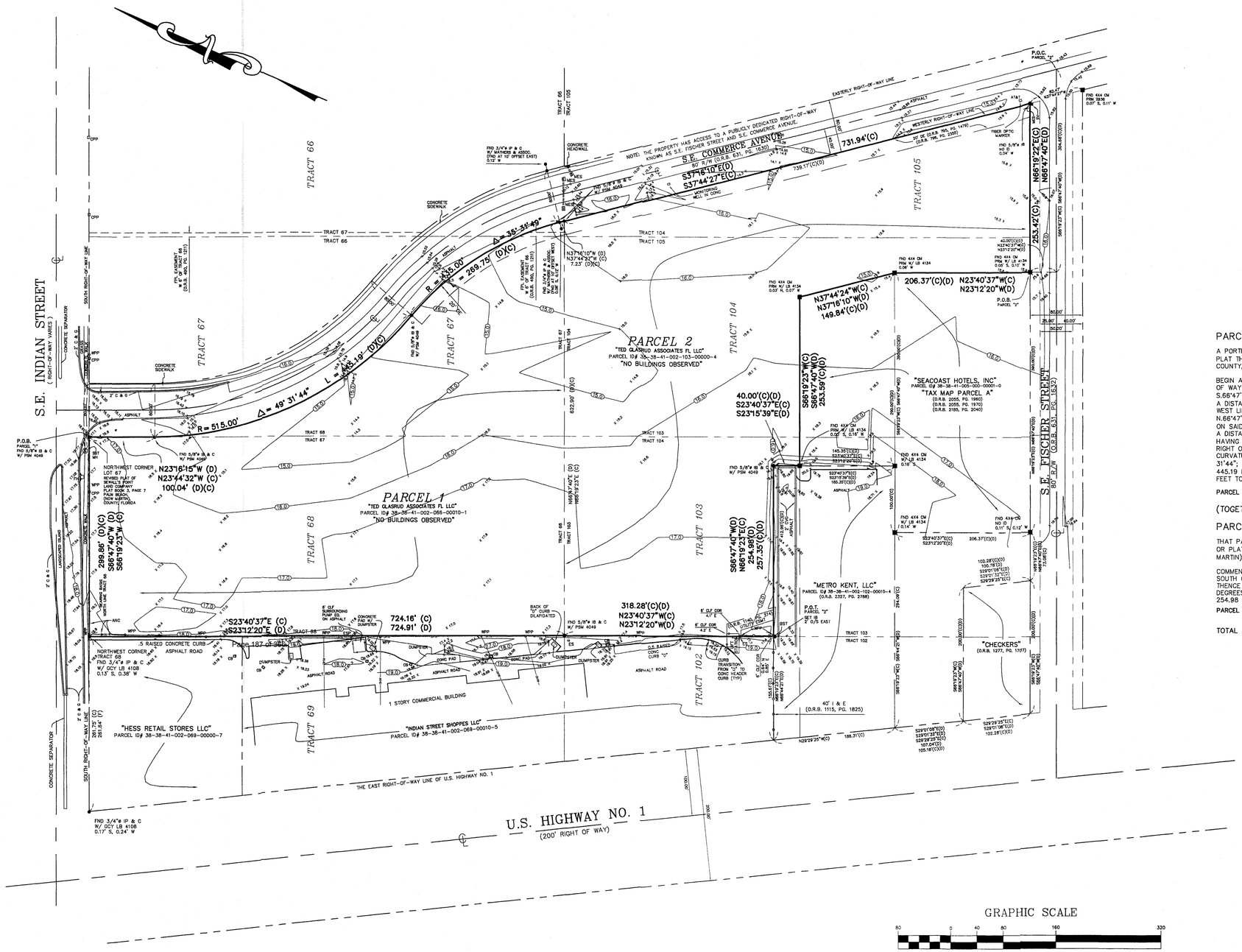

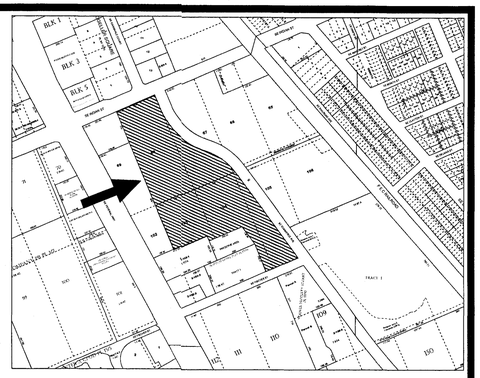

LOCATION MAP

LEGAL DESCRIPTION

PARCEL 1:

A PORTION OF TRACTS 66, 67 & 68, OF REVISED PLAT OF PORT SEWALL LAND COMPANY, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK 3 PAGE 7 OF THE PUBLIC RECORDS OF PALM BEACH (NOW MARTIN) COUNTY, FLORIDA; BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE PONT OF INTERSECTION OF THE SOUTH RIGHT OF WAY LINE OF INDIAN STREET AND THE WEST RIGHT OF WAY LINE OF COMMERCE AVENUE AS SHOWN IN OFFICIAL RECORDS BOOK 959 PAGE 2139; THENCE S.66°47'40"W., ALONG THE NORTH LINE OF SAID TRACT 68 AND THE SOUTH RIGHT OF WAY LINE OF INDIAN STREET A DISTANCE OF 299.86 FEET TO THE NORTHWEST CORNER OF SAID TRACT 68; THENCE S.23°12'20"E., ALONG THE WEST LINE OF TRACT 68 A DISTANCE OF 724.91 FEET TO THE SOUTHWEST CORNER OF SAID TRACT 68; THENCE N.66°47'40"E., ALONG THE SOUTH LINE OF SAID TRACTS 66, 67 & 68, A DISTANCE OF 622.90 FEET TO A POINT ON SAID WEST RIGHT OF WAY LINE OF COMMERCE AVENUE; THENCE N.37°16'10"W., ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 7.23 FEET TO A POINT OF CURVATURE OF A CIRCULAR CURVE, CONCAVE TO THE SOUTHWEST, HAVING A RADIUS OF 435.0 FEET AND A CENTRAL ANGLE OF 35°31'49"; THENCE NORTHWESTERLY, ALONG SAID RIGHT OF WAY AND THE ARC OF SAID CURVE, AN ARC DISTANCE OF 269.75 FEET TO A POINT OF REVERSE CURVATURE, CONCAVE TO THE NORTHEAST AND HAVING A RADIUS OF 515.0 FEET, AND A CENTRAL ANGLE OF 49° 31'44"; THENCE NORTHWESTERLY ALONG SAID RIGHT OF WAY AND THE ARC OF SAID CURVE AN ARC DISTANCE OF 445.19 FEET TO A POINT OF TANGENCY; THENCE N.23°16'15"W., ALONG SAID RIGHT OF WAY A DISTANCE OF 100.04 FEET TO THE POINT OF BEGINNING.

PARCEL CONTAINING 301,542.98 SQUARE FEET, 6.9225 ACRES, +/-.

(TOGETHER WITH)

PARCEL 2:

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PARCEL CONTAINING 305,243.29 SQUARE FEET, 7.0074 ACRES, +/-.

TOTAL ACREAGE CONTAINING 606,786.25 SQUARE FEET, 13.9299 ACRES, +/-.

GRAPHIC SCALE

80 0 40 80 160 320

(IN FEET)
1 inch = 80 ft.

AC	ACRE
A/C	AIR CONDITIONER
ALUM	ALUMINUM
ANC	ANCHOR
APPROX	APPROXIMATE
AVE	AVENUE
BRG	BEARING
BLK	BLOCK
BLVD	BOULEVARD
BLDG	BUILDING
BM	BENCHMARK
CATV	CABLE TELEVISION BOX
C	CALCULATED
CB	CATCH BASIN
Δ	CENTRAL ANGLE
CLF	CHAINLINK FENCE
CHD	CHORD
CONC	CONCRETE
CBS	CONC. BLOCK STRUCTURE
CM	CONCRETE MONUMENT
CNR	COULD NOT READ
CPP	CONCRETE POWER POLE
COR	CORNER
COV	COVERED
CMP	CORRUGATED METAL PIPE
CVG	CONCRETE VALLEY GUTTER
D	DEED
D/F	DRAINFIELD
DE	DRAINAGE EASEMENT
~~	DRAINAGE FLOW
ESMT	EASEMENT
EOC	EDGE OF CONCRETE
EOP	EDGE OF PAVEMENT
EOW	EDGE OF WATER
EM	ELECTRIC METER
ES	ELECTRIC SERVICE
ESP	ELECTRIC SERVICE POLE
ELEV	ELEVATION
X 17.00	EXISTING ELEVATION
FT	FEET
F	FIELD MEASUREMENT
FNC	FENCE
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HYDRANT
FPL	FLORIDA POWER & LIGHT
FND	FOUND
GOVT	GOVERNMENT
HSE	HOUSE
I & E	INGRESS & EGRESS EASEMENT
INV	INVERT
IB	IRON BAR
IP	IRON PIPE
IB & C	IRON BAR & CAP
IP & C	IRON PIPE & CAP
L	ARC LENGTH
LE	LANDSCAPE EASEMENT
LB	LICENSED BUSINESS NUMBER
LP	LIGHT POLE
M & W	MAG NAIL & WASHER
MAG	MAG NAIL
ME	MAINTENANCE EASEMENT
MH	MANHOLE
MHWL	MEAN HIGH WATER LINE
NL	NAIL
N & TT	NAIL & TIN TAB
N & W	NAIL & WASHER
NGVD	NATIONAL GEODETIC VERTICAL DATUM
NO ID	NO IDENTIFICATION
NTS	NOT TO SCALE
NAD	NORTH AMERICAN DATUM
ORB	OFFICIAL RECORD BOOK
O/S	OFFSET
OH	OVERHANG
OHW	OVERHEAD WIRE
PG	PAGE
PK	PARKER-KALON NAIL
PK & TT	PARKER-KALON NAIL & TIN TAB
PK & W	PARKER-KALON NAIL & WASHER
PVMT	PAVEMENT
PRM	PERMANENT REFERENCE MONUMENT
P	PLAT
PB	PLATBOOK
PCC	POINT OF COMPOUND CURVATURE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
POB	POINT OF BEGINNING
POC	POINT OF COMMENCEMENT
POT	POINT OF TERMINUS
PRC	POINT OF REVERSE CURVATURE
PT	POINT OF TANGENCY
PP	POWER POLE
PUE	PRIVATE UTILITY EASEMENT
PLS	PROFESSIONAL LAND SURVEYOR
R	PROPERTY LINE
PROP	PROPOSED
● 17.00	PROPOSED ELEVATION
PRO	PRORATED
R	RADIUS
RAD	RADIAL
RRS	RAILROAD SPIKE
RNG	RANGE
RLS	REGISTERED LAND SURVEYOR
RCP	REINFORCED CONCRETE PIPE
R/W	RIGHT OF WAY
SS	SANITARY SEWER
SECT	SECTION
SET I.B.	SET 5/8 IRON BAR & CAP #4049
SET PK	SET PK NAIL & WASHER #4049
S/T	SEPTIC TANK
S/W	SIDEWALK
SBT	SOUTHERN BELL TELEPHONE BOX
S/F	SQUARE FEET
S/D	SUBDIVISION
T	TANGENT
TCE	TEMPORARY CONSTRUCTION EASEMENT
TOB	TOP OF BANK
TOE	TOE OF SLOPE
TWP	TOWNSHIP
TRANS	TRANSFORMER
TYP	TYPICAL
UDE	UTILITY & DRAINAGE EASEMENT
UE	UTILITY EASEMENT
U/G	UNDERGROUND
UP	UTILITY POLE
WM	WATER METER
WV	WATER VALVE
WPP	WOOD POWER POLE
#	DIAMETER

1. PROPERTY ADDRESS: SE COMMERCE AVENUE
2. CERTIFIED TO:
   - AHS RESIDENTIAL, LLC

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

STEPHEN J. BROWN, INC

STEPHEN J. BROWN, PROFESSIONAL SURVEYOR AND MAPPER
REGISTRATION NO. 4049, STATE OF FLORIDA

Date of field survey: 01/23/2017

NOTES:

1. Survey of description as furnished by Client.
2. Lands shown hereon were not abstracted for easements and/or rights-of-way of record.
3. The bearings shown hereon are based on State Plane Coordinates, NAD 1983/1990, adjusted, Florida East Zone, using Geodetic Monuments, and reference a calculated bearing of S66°19'23"W, on the North Line of Tract 68.
4. Elevations shown hereon are relative to North American Vertical Datum of 1988, and are based on benchmark COM-MIA.
5. There are no above ground encroachments, unless otherwise shown.
6. The National Flood Insurance Program designation as indicated on the F.E.M.A. Map No. 12085C0161G, dated 03/16/2015, locates the parcel in Zone X, base flood elevation N/A feet; subject to any scaling and interpolation factors associated with mapping of this accuracy. This data is an interpretation by the surveyor and is provided as a courtesy. The flood zone(s) should be verified by a determination agency.
7. Underground foundations & utilities not located unless shown.
8. The expected use of the survey and map is for Commercial Purposes.
9. All measurements are in accordance with the United States standard, in feet.
10. Additions or deletions to survey maps or reports by other than the signing party or parties is prohibited without written consent of the signing party or parties.

REVISIONS	BY
UPDATE SURVEY 04/19/2019	S.J.B.
TITLE WORK 04/15/2019	S.J.B.
COMBINE PARCELS 06/19/2019	S.J.B.
ADDED 20' EASEMENT 08/01/2019	S.J.B.
FILE:	

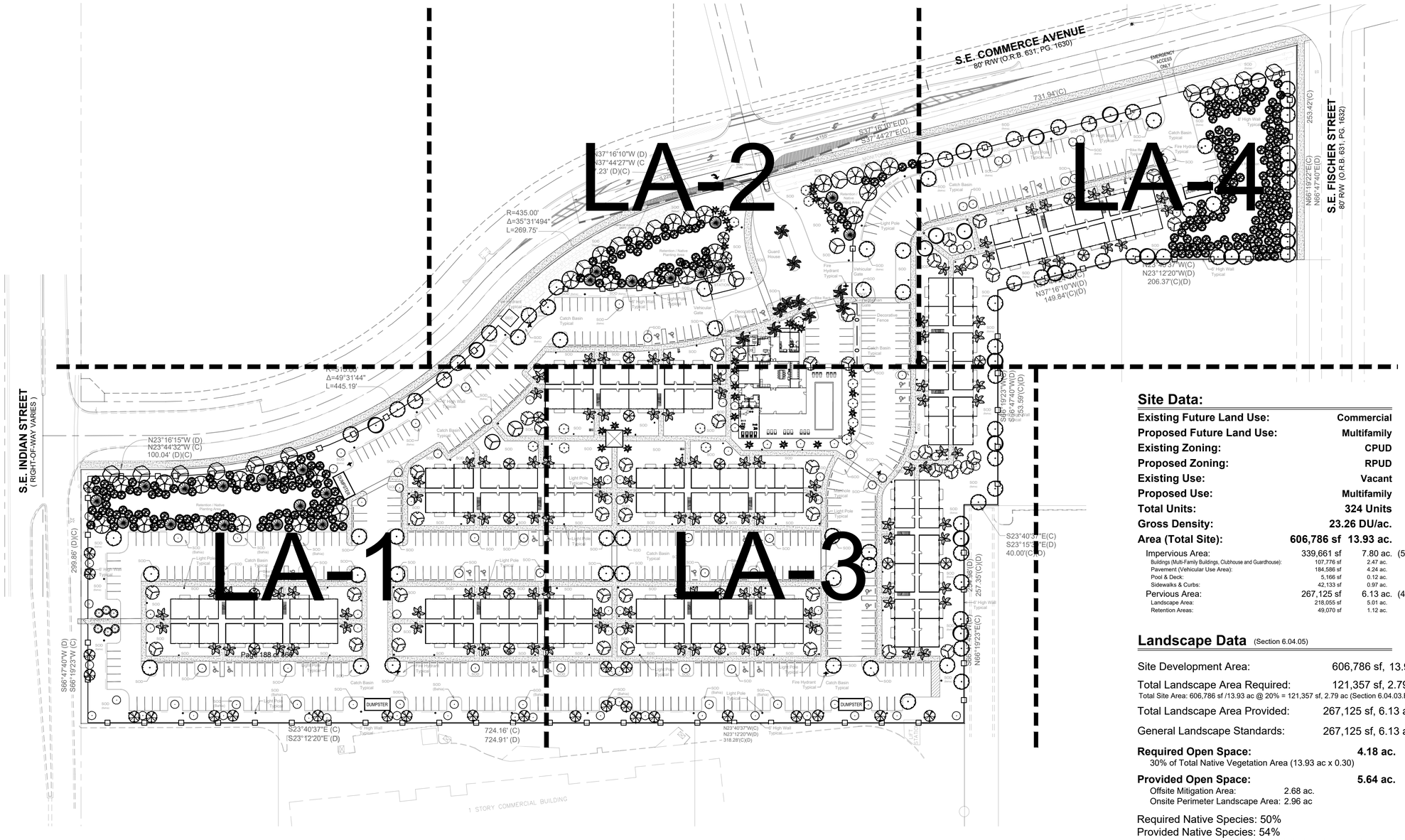
PREPARED FOR: AHS RESIDENTIAL, LLC

STEPHEN J. BROWN, INC
SURVEYORS · DESIGNERS · LANDPLANNERS · CONSULTANTS
619 EAST 5TH STREET, STUART, FLORIDA 34994 EMAIL: sjbinc@bellsouth.net PHONE: (772)-288-7176
LICENSED BUSINESS NUMBER: 6484

BOUNDARY AND TOPOGRAPHIC SURVEY

DRAWN	S.J.B.
CHECKED	S.J.B.
DATE	06/11/2019
SCALE	1" = 80'
JOB NO.	6986-04-02
SHEET	ONE

OF ONE SHEETS



lucido & associates

701 SE Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 223-0220

Key / Location:

N.T.S.

Project Team:

Client & Property Owner:	AHS Residential, LLC 12895 Southwest 132nd Street Suite 202 Miami, Florida 33186
Land Planner / Landscape Architect:	Lucido & Associates 701 East Ocean Boulevard Stuart, Florida 34994
Engineer:	Mathers Engineering Corporation 2431 Southeast Dixie Highway Stuart, Florida 34996
Surveyor:	Stephen J. Brown, Inc. 619 East 5th Street Stuart, Florida 34994
Environmental:	EW Consultants, Inc. 1000 SE Monterey Commons Boulevard Suite 208 Stuart, Florida 34996
Architect:	Slattery & Associates 2060 Northwest Boca Raton Boulevard Suite 2 Boca Raton, Florida 33431

Site Data:

Existing Future Land Use:		**Commercial**
Proposed Future Land Use:		**Multifamily**
Existing Zoning:		**CPUD**
Proposed Zoning:		**RPUD**
Existing Use:		**Vacant**
Proposed Use:		**Multifamily**
Total Units:		**324 Units**
Gross Density:		**23.26 DU/ac.**
Area (Total Site):	**606,786 sf**	**13.93 ac.**
Impervious Area:	339,661 sf	7.80 ac. (56.0%)
Buildings (Multi-Family Buildings, Clubhouse and Guardhouse):	107,776 sf	2.47 ac.
Pavement (Vehicular Use Area):	184,586 sf	4.24 ac.
Pool & Deck:	5,166 sf	0.12 ac.
Sidewalks & Curbs:	42,133 sf	0.97 ac.
Pervious Area:	267,125 sf	6.13 ac. (44.0%)
Landscape Area:	218,055 sf	5.01 ac.
Retention Areas:	49,070 sf	1.12 ac.

Landscape Data (Section 6.04.05)

Site Development Area: 606,786 sf, 13.93 ac.

Total Landscape Area Required: 121,357 sf, 2.79 ac (20%)

Total Site Area: 606,786 sf /13.93 ac @ 20% = 121,357 sf, 2.79 ac (Section 6.04.03.B.1)

Total Landscape Area Provided: 267,125 sf, 6.13 ac (44.0%)

General Landscape Standards: 267,125 sf, 6.13 ac (44.0%)

Required Open Space: 4.18 ac.

30% of Total Native Vegetation Area (13.93 ac x 0.30)

Provided Open Space: 5.64 ac.

Offsite Mitigation Area: 2.68 ac.

Onsite Perimeter Landscape Area: 2.96 ac

Required Native Species: 50%

Provided Native Species: 54%

At least 50 percent of all required landscaping in the form of trees, shrubs, ground cover and grass shall collectively consist of native vegetation (Section 6.04.02).

No one species of tree shall exceed 25 percent of the minimum number of trees required (Section 6.04.02).

Perimeter Landscape:

Perimeter Landscape Length:	3,968 lf.
Required Perimeter Trees: (1 tree per 30 lf. @ 3,968 lf.)	132 trees
Provided Perimeter Trees:	139 Trees
Required Perimeter Shrubs: (1 shrub per 2.5 lf. @ 3,968 lf.)	1,587 Shrubs
Provided Perimeter Shrubs:	5,028 Shrubs

Interior Vehicular Use Landscape:

Required Terminal Island Trees:	35 Trees
Provided Terminal Island Trees:	35 Trees (3 Palm Trees)
Required Interior Island Trees:	59 Trees
Provided Interior Island Trees:	74 Trees

Minimum Required Tree Credits: 405 Trees

Multi-Family Residential - Min.Total Site Trees Required (Section 6.04.08.B): (606,786 sf Total Site Area / 1,500 = 404.52)	405 Trees
Parking Island Trees Required (94 Islands - Terminal 35 + Interior 59):	94 Trees
Building Perimeter Adjacent To Parking (1 Tree per 20' @ 2,743'):	137 Trees
Property Perimeter (1 Tree per 30' @ 3,968 LF):	132 Trees

Provided Tree Credits: 472 Trees*

Shade Trees Provided:	395 Trees (84%)
Palm Trees Provided: (155 Palms @ 2:1)	77 Palms (16%)

*Additional trees planted beyond code minimum required to satisfy mitigation requirements. See Sheet LA-5 for mitigation calculations and Sheet LA-6 for total plant schedule.

AHS at Harbor Grove

City of Stuart, Martin County, Florida

Landscape Plan Cover Sheet

Date	By	Description
08.08.19	J.J.	Initial Submittal
11.04.19	B.W.	Revised per Comments
11.26.19	SJS	Revised per Site Changes
01.02.20	SJS	Revised per Comments
01.31.20	SJS	Revised per Site Changes
03.10.20	B.W.	Revised per Comments

NORTH

SCALE: 1" = 60'

0 30' 60' 120'

REG. # 1018
Thomas P. Lucido

Designer	J.J.	Sheet	CV
Manager	D.F.		
Project Number	19-345		
Municipal Number	---		
Computer File	19-345 AHS Residential - Landscape Plan.dwg		

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Landscape Notes

- Alternative plant species and enhanced landscaping beyond minimum requirements may be permitted subject to review and approval by the City of Stuart prior to installation. Trees and shrubs may be substituted based on availability.

- All required landscape improvements for each phase must be inspected and approved by City of Stuart prior to the issuance of a Certificate of Occupancy.

- No Cypress Mulch is to be used on site.

- Where existing vegetation meets minimum City of Stuart standards, this vegetation may be credited toward landscape requirements.

- Existing vegetation to remain undisturbed outside of construction limits. Proposed vegetation may be relocated due to unforeseen site conditions or in order to preserve existing vegetation.

- All prohibited exotic and invasive species shall be removed from the site prior to the issuance of a certificate of occupancy.

- See engineer's plans for all overhead & underground utility locations

- This plan has been designed to meet with the tree planting requirements contained within the FPL document entitled 'Plant the right tree in the Right Place'

- For existing or proposed utilities, no tree shall be planted where it could, at mature height conflict with overhead power lines. Large trees (height at maturity of more than 30') from the nearest overhead power line. Medium height tree (height at maturity between 20' and 30' shall be offset at least 20' and small trees (height at maturity of less than 20') require no offset.

- No tree shrubs, hedges or vines shall be planted within 7' of an existing or proposed utility pole, guy wire or pad-mounted transformer. Palms should be planted at a distance equal to or greater than the average frond length plus two (2) feet from power lines. Tree species shall be selected as to minimize conflicts with existing or proposed utilities.

- All above ground utilities shall be screened in accordance with City of Stuart requirements.

- All plant material to be Florida No. 1 quality and standards or better.

- As per Section 6.04.02 A.9, all landscape areas shall be sodded or otherwise covered with ground cover.

Irrigation Notes

- All Landscape & Sod areas shall be irrigated by an automated system that provides 100% coverage of Landscape and Sod areas.

- Irrigation systems shall conform to the following standards: Irrigation systems shall be continuously maintained in working order and shall be designed not to overlap water zones or to water impervious areas.

- No irrigation system shall be installed or maintained abutting any public street which causes water from the system to overspray onto the roadway or to strike passing vehicular traffic.

- Irrigation Water Source: To Be Determined

- All irrigation systems shall include a 'rain switch' to monitor rain levels and irrigation needs.

- Landscape plan designed as a xeriscape landscape. All irrigation zones are low water usage zones.

Required Xeriscape Points

At least 51% of the grass areas are made up of drought-tolerant grass species	10 points
At least 51% of the required shrubs are made up of drought-tolerant species	10 points
At least 51% of the required trees are made up of drought-tolerant species	10 points
Utilization of moisture sensing controller other than a rain-sensor override device	5 points
Plan submitted with low, moderate and high water usage zones indicated on the landscape plan*	5 points
Utilization of compacted mulch with a 3" min. depth in all planted areas except ground cover.	10 points
	50 total points

*Refer to Irrigation Notes for water usage zones.

Sheet Index:

LANDSCAPE PLANS ..... LA-1 - LA-4
TREE MITIGATION LA-5
PLANT SCHEDULE LA-6
LANDSCAPE DETAILS LA-7
LANDSCAPE SPECIFICATIONS LA-8

Drawing Name: J:\Projects Active\19-345 AHS Residential Glasrud Property\Landscape\ Mar 10, 2020 – 3:55pm 19-345 AHS Residential – Landscape Plan.dwg

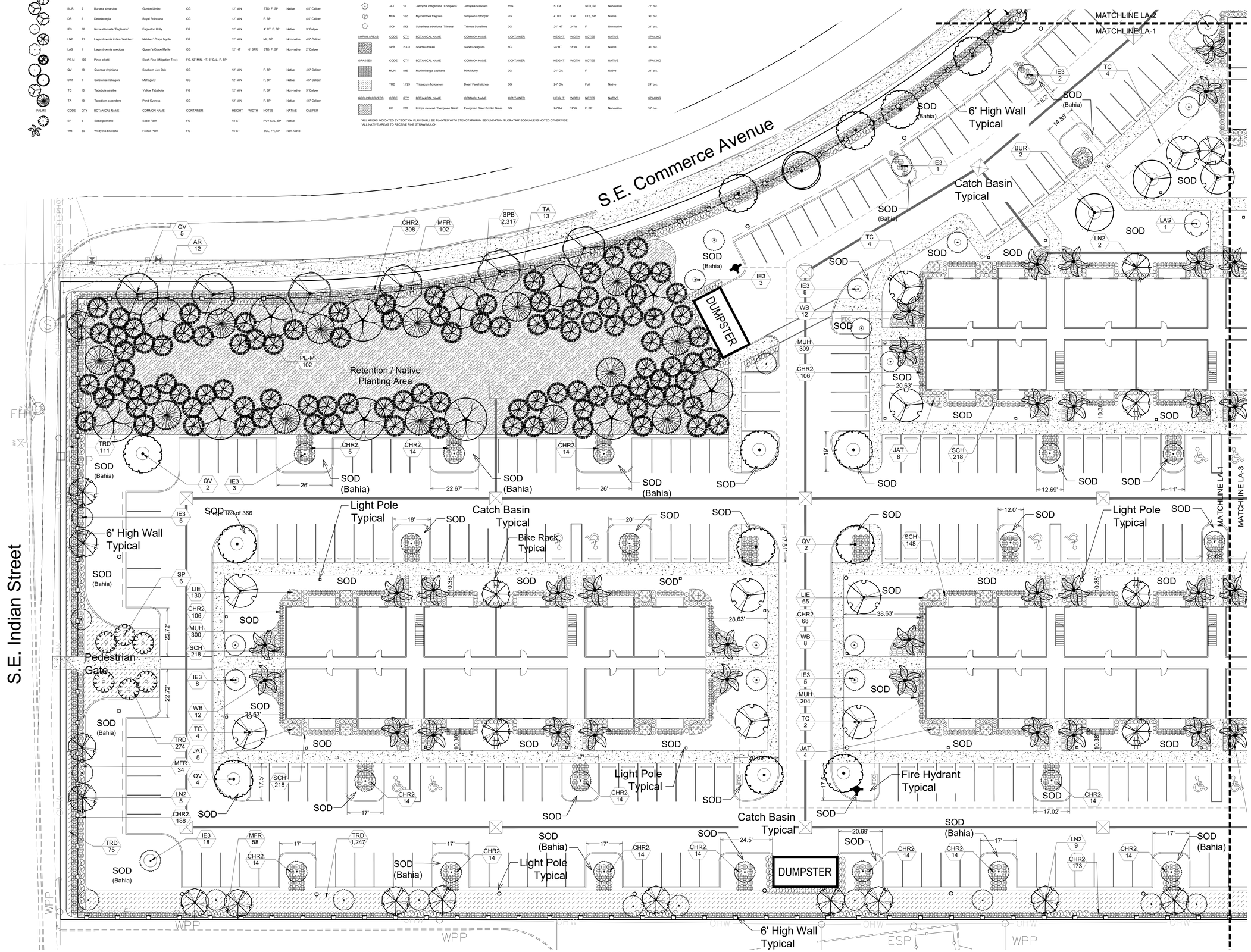
PLANT SCHEDULE LA-1

2020-03-10 14:26

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	AR	12	Acer rubrum	Red Maple	CG	12' MIN		F, SP	Native	4.5" Caliper
	BUR	2	Bursera simaruba	Gumbo Limbo	CG	12' MIN		STD, F, SP	Native	4.5" Caliper
	DR	6	Delonix regia	Royal Poinciana	CG	12' MIN		F, SP		4.5" Caliper
	IE3	52	Ilex x attenuata 'Eagleston'	Eagleston Holly	FG	12' MIN		4' CT, F, SP	Native	3" Caliper
	LN2	21	Lagerstroemia indica 'Natchez'	Natchez' Crape Myrtle	FG	12' MIN		ML, SP	Non-native	4.5" Caliper
	LAS	1	Lagerstroemia speciosa	Queen's Crape Myrtle	CG	12' HT	6' SPR	STD, F, SP	Non-native	2" Caliper
	PE-M	102	Pinus elliotti	Slash Pine (Mitigation Tree)	FG, 12' MIN. HT, 6" CAL, F, SP					
	QV	13	Quercus virginiana	Southern Live Oak	CG	12' MIN		F, SP	Native	4.5" Caliper
	SWI	1	Swietenia mahagoni	Mahogany	CG	12' MIN		F, SP	Native	4.5" Caliper
	TC	10	Tabebuia caraiba	Yellow Tabebuia	FG	12' MIN		F, SP	Non-native	3" Caliper
	TA	13	Taxodium ascendens	Pond Cypress	CG	12' MIN		F, SP	Native	4.5" Caliper
PALMS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	SP	6	Sabal palmetto	Sabal Palm	FG	18' CT		HVY CAL, SP	Native	
	WB	30	Wodyetia bifurcata	Foxtail Palm	FG	16' CT		SQL, FH, SP	Non-native	

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	CHR2	1,251	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	3G	24" HT	24"W	F, SP	Native	30" o.c.
	JAT	16	Jatropha integerrima 'Compacta'	Jatropha Standard	15G	5' OA		STD, SP	Non-native	72" o.c.
	MFR	162	Myrcianthes fragrans	Simpson's Stopper	7G	4' HT	3' W	FTB, SP	Native	36" o.c.
	SCH	543	Schefflera arboricola 'Trinette'	Trinette Schefflera	3G	24" HT	24"W	F	Non-native	24" o.c.
SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	SPB	2,331	Spartina bakeri	Sand Cordgrass	1G	24"HT	18"W	Full	Native	36" o.c.
GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	MUH	846	Muhlenbergia capillaris	Pink Muhly	3G	24" OA		F	Native	24" o.c.
	TRD	1,729	Tripsacum floridanum	Dwarf Fakahatchee	3G	24" OA		Full	Native	24" o.c.
GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	LIE	260	Liriope muscari 'Evergreen Giant'	Evergreen Giant Border Grass	3G	24"OA	12"W	F, SP	Non-native	18" o.c.

*ALL AREAS INDICATED BY "SOD" ON PLAN SHALL BE PLANTED WITH STENOTAPHRUM SECUNDATUM 'FLORATAM' SOD UNLESS NOTED OTHERWISE.
*ALL NATIVE AREAS TO RECEIVE PINE STRAW MULCH



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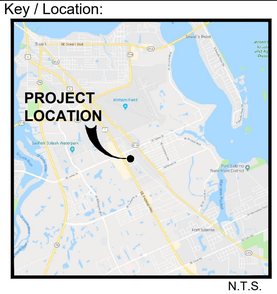
Key / Location:



N.T.S.

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Architect:	Slattery & Associates 2060 Northwest Boca Raton Boulevard Suite 2 Boca Raton, Florida 33431

AHS at Harbor Grove

City of Stuart, Martin County, Florida

Landscape Plan

Date	By	Description
08.08.19	J.J.	Initial Submittal
11.04.19	B.W.	Revised per Comments
11.26.19	SJS	Revised per Site Changes
01.02.20	SJS	Revised per Comments
01.31.20	SJS	Revised per Site Changes
03.10.20	B.W.	Revised per Comments

NORTH

SCALE: 1" = 20'

0 10' 20' 40'

REG. # 1018
Thomas P. Lucido

Designer	J.J.	Sheet
Manager	D.F.	**LA-1**
Project Number	19-345	
Municipal Number	---	
Computer File	19-345 AHS Residential - Landscape Plan.dwg	

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PLANT SCHEDULE LA-2

2020-03-10 14:26

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	AR	15	Acer rubrum	Red Maple	CG	12' MIN		F, SP	Native	4.5" Caliper
	BUR	2	Bursera simaruba	Gumbo Limbo	CG	12' MIN		STD, F, SP	Native	4.5" Caliper
	DR	6	Delonix regia	Royal Poinciana	CG	12' MIN		F, SP		4.5" Caliper
	IE3	2	Ilex x attenuata `Eagleston`	Eagleston Holly	FG	12' MIN		4` CT, F, SP	Native	3" Caliper
	LN2	5	Lagerstroemia indica `Natchez`	Natchez` Crape Myrtle	FG	12' MIN		ML, SP	Non-native	4.5" Caliper
	LAS	5	Lagerstroemia speciosa	Queen`s Crape Myrtle	CG	12' HT	6` SPR	STD, F, SP	Non-native	2" Caliper
	PE-M	48	Pinus elliotti	Slash Pine (Mitigation Tree)	FG, 12` MIN. HT, 6" CAL, F, SP					
	QV	13	Quercus virginiana	Southern Live Oak	CG	12' MIN		F, SP	Native	4.5" Caliper
	SWI	1	Swietenia mahagoni	Mahogany	CG	12' MIN		F, SP	Native	4.5" Caliper
	TC	5	Tabebuia caraiba	Yellow Tabebuia	FG	12' MIN		F, SP	Non-native	3" Caliper
	TA	9	Taxodium ascendens	Pond Cypress	CG	12' MIN		F, SP	Native	4.5" Caliper

PALMS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	PS	10	Phoenix sylvestris	Wild Date Palm	FG	14`CT		FH, SP, MATCHING	Non-native	HVY CAL
	VM	15	Veitchia montgomeryana	Montgomery Palm	FG	16`CT		SGL, FH, SP	Non-native	
	WB	4	Wodyetia bifurcata	Foxtail Palm	FG	16`CT		SGL, FH, SP	Non-native	

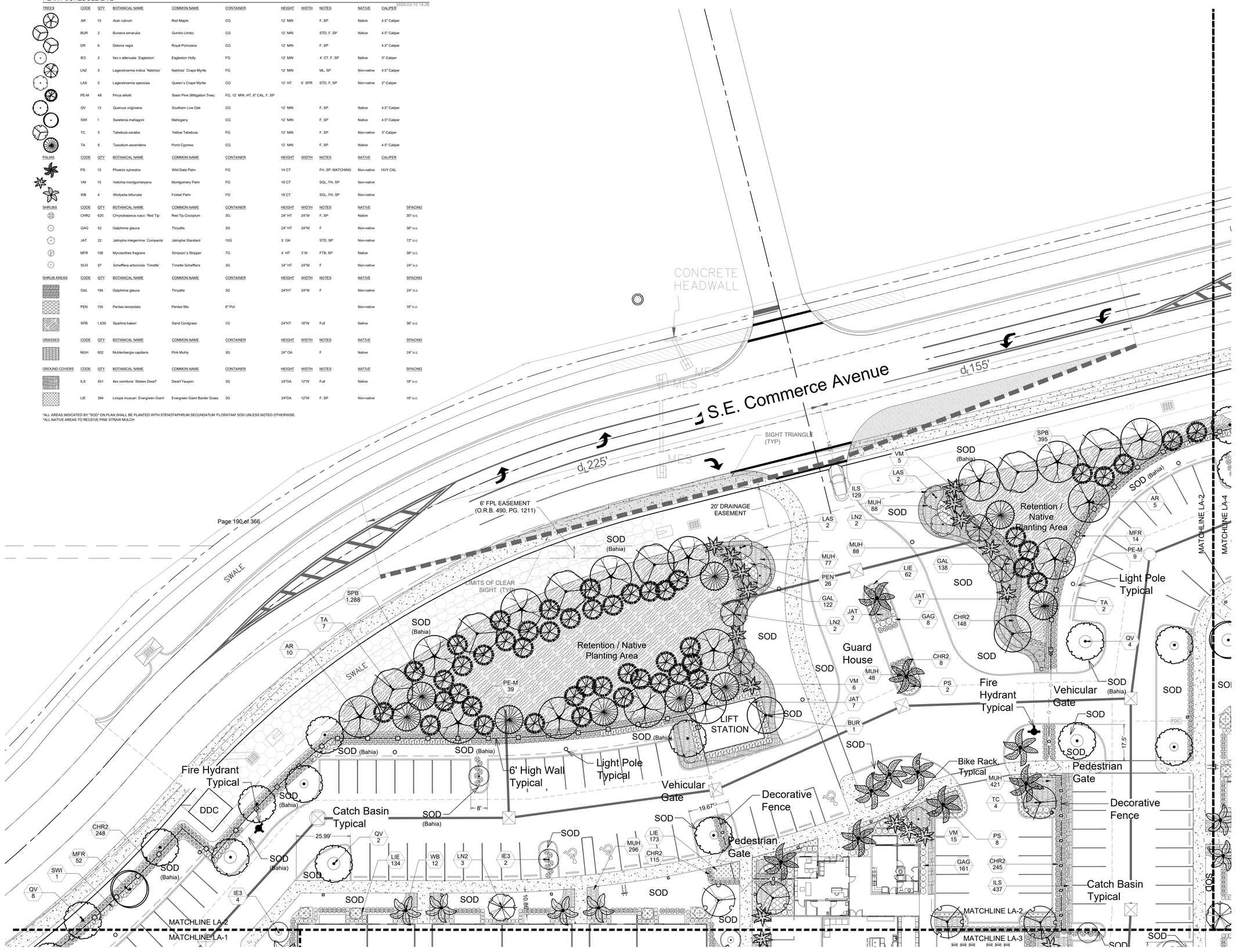
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	CHR2	620	Chrysobalanus icaco `Red Tip`	Red Tip Cocoplum	3G	24" HT	24"W	F, SP	Native	30" o.c.
	GAG	52	Galphimia glauca	Thryallis	3G	24" HT	24"W	F	Non-native	36" o.c.
	JAT	22	Jatropha integerrima `Compacta`	Jatropha Standard	15G	5` OA		STD, SP	Non-native	72" o.c.
	MFR	108	Myrcianthes fragrans	Simpson`s Stopper	7G	4` HT	3`W	FTB, SP	Native	36" o.c.
	SCH	97	Schefflera arboricola `Trinette`	Trinette Schefflera	3G	24" HT	24"W	F	Non-native	24" o.c.

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	GAL	194	Galphimia glauca	Thryallis	3G	24"HT	24"W	F	Non-native	24" o.c.
	PEN	155	Pentas lanceolata	Pentas Mix	6" Pot				Non-native	18" o.c.
	SPB	1,639	Spartina bakeri	Sand Cordgrass	1G	24"HT	18"W	Full	Native	36" o.c.

GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	MUH	602	Muhlenbergia capillaris	Pink Muhly	3G	24" OA		F	Native	24" o.c.

GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	ILS	451	Ilex vomitoria `Stokes Dwarf`	Dwarf Yaupon	3G	24"OA	12"W	Full	Native	18" o.c.
	LIE	394	Liriope muscari `Evergreen Giant`	Evergreen Giant Border Grass	3G	24"OA	12"W	F, SP	Non-native	18" o.c.

*ALL AREAS INDICATED BY "SOD" ON PLAN SHALL BE PLANTED WITH STENOTAPHRUM SECUNDATUM 'FLORATAM' SOD UNLESS NOTED OTHERWISE.
*ALL NATIVE AREAS TO RECEIVE PINE STRAW MULCH



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Landscape Plan

Date	By	Description
08.08.19	J.J.	Initial Submittal
11.04.19	B.W.	Revised per Comments
11.26.19	SJS	Revised per Site Changes
01.02.20	SJS	Revised per Comments
01.31.20	SJS	Revised per Site Changes
03.10.20	B.W.	Revised per Comments

NORTH

SCALE: 1" = 20'

0 10' 20' 40'

REG. # 1018
Thomas P. Lucido

Designer	J.J.	Sheet
Manager	D.F.	LA-2
Project Number	19-345	
Municipal Number	---	
Computer File	19-345 AHS Residential - Landscape Plan.dwg	

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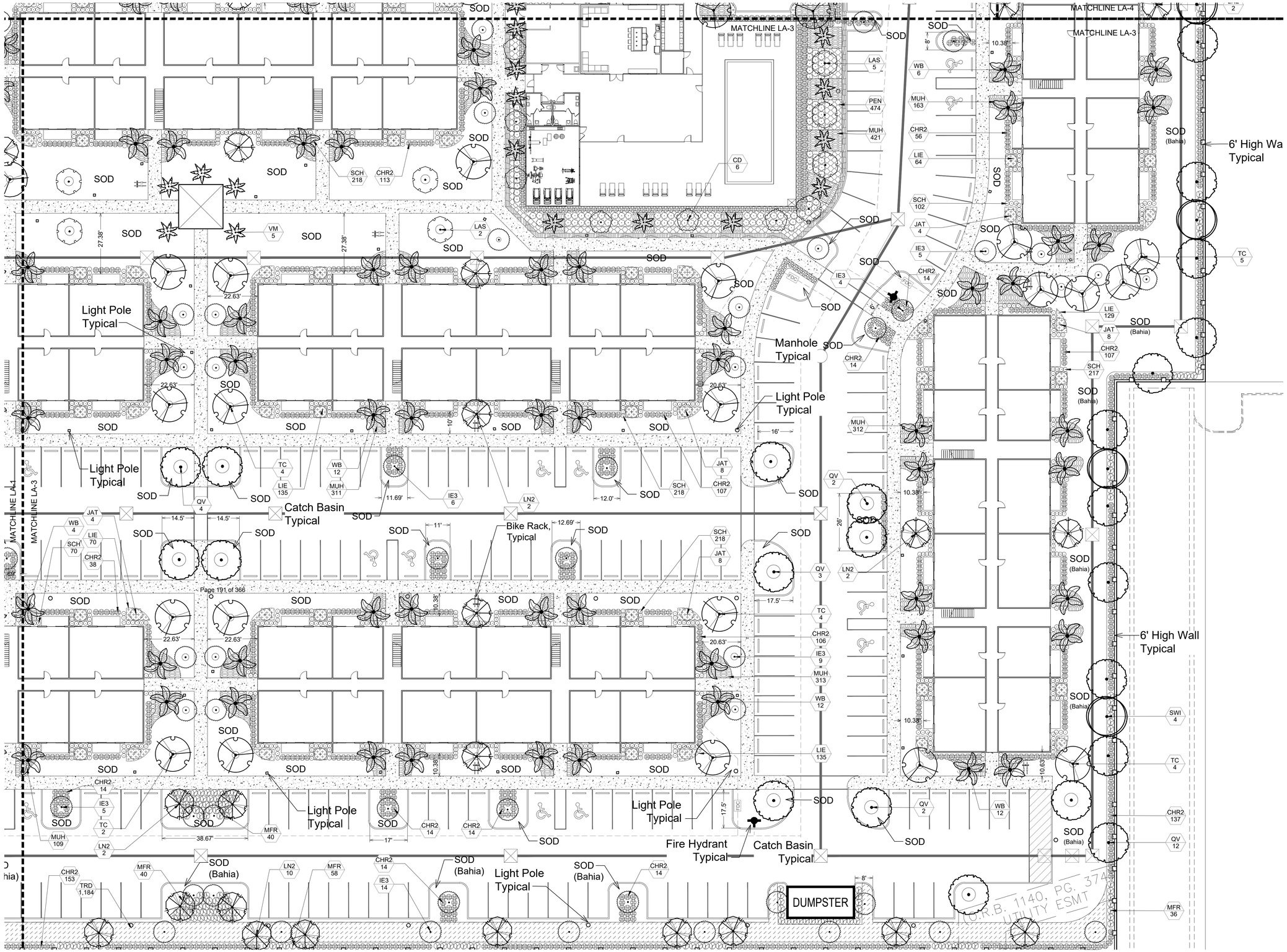
Drawing Name: J:\Projects Active\19-345 AHS Residential, Gasnul Property\Landscape\ Mar 10, 2020 – 3:55pm 19-345 AHS Residential – Landscape Plan.dwg



PLANT SCHEDULE LA-3

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	CD	6	Coccoloba diversifolia	Pigeon Plum	CG	12' MIN		STD, F, SP	Native	3" Caliper
	IE3	48	Ilex x attenuata 'Eagleston'	Eagleston Holly	FG	12' MIN		4' CT, F, SP	Native	3" Caliper
	LN2	19	Lagerstroemia indica 'Natchez'	Natchez' Crape Myrtle	FG	12' MIN		ML, SP	Non-native	4.5" Caliper
	LAS	8	Lagerstroemia speciosa	Queen's Crape Myrtle	CG	12' HT	6' SPR	STD, F, SP	Non-native	2" Caliper
	QV	23	Quercus virginiana	Southern Live Oak	CG	12' MIN		F, SP	Native	4.5" Caliper
	SWI	3	Swietenia mahagoni	Mahogany	CG	12' MIN		F, SP	Native	4.5" Caliper
	TC	20	Tabebuia caraiba	Yellow Tabebuia	FG	12' MIN		F, SP	Non-native	3" Caliper

PALMS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	VM	16	Veitchia montgomeryana	Montgomery Palm	FG	16'CT		SGL, FH, SP	Non-native
	WB	56	Wodyetia bifurcata	Foxtail Palm	FG	16'CT		SGL, FH, SP	Non-native

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	CHR2	1,129	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	3G	24" HT	24"W	F, SP	Native
	GAG	117	Galphimia glauca	Thryallis	3G	24" HT	24"W	F	Non-native
	JAT	40	Jatropha integerrima 'Compacta'	Jatropha Standard	15G	5' OA		STD, SP	Non-native
	MFR	174	Myrsiianthes fragrans	Simpson's Stopper	7G	4' HT	3'W	FTB, SP	Native
	SCH	987	Schefflera arboricola 'Trinette'	Trinette Schefflera	3G	24" HT	24"W	F	Non-native

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	PEN	373	Pentas lanceolata	Pentas Mix	6" Pot				Non-native

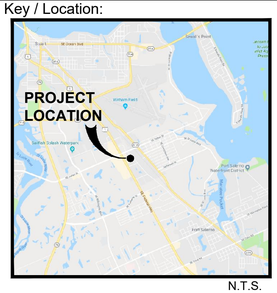
GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	MUH	1,697	Muhlenbergia capillaris	Pink Muhly	3G	24" OA		F	Native
	TRD	1,184	Tripsacum floridanum	Dwarf Fakahatchee	3G	24" OA		Full	Native

GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE
	ILS	313	Ilex vomitoria 'Stokes Dwarf'	Dwarf Yaupon	3G	24"OA	12"W	Full	Native
	LIE	670	Liriope muscari 'Evergreen Giant'	Evergreen Giant Border Grass	3G	24"OA	12"W	F, SP	Non-native

*ALL AREAS INDICATED BY "SOD" ON PLAN SHALL BE PLANTED WITH STENOTAPHRUM SECUNDATUM 'FLORATAM' SOD UNLESS NOTED OTHERWISE.
*ALL NATIVE AREAS TO RECEIVE PINE STRAW MULCH

lucido & associates
701 SE Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 223-0220

Key / Location:



N.T.S.

Project Team:

Client & Property Owner:	AHS Residential, LLC 12895 Southwest 132nd Street Suite 202 Miami, Florida 33186
Land Planner / Landscape Architect:	Lucido & Associates 701 East Ocean Boulevard Stuart, Florida 34994
Engineer:	Mathers Engineering Corporation 2431 Southeast Dixie Highway Stuart, Florida 34996
Surveyor:	Stephen J. Brown, Inc. 619 East 5th Street Stuart, Florida 34994
Environmental:	EW Consultants, Inc. 1000 SE Monterey Commons Boulevard Suite 208 Stuart, Florida 34996
Architect:	Slattery & Associates 2060 Northwest Boca Raton Boulevard Suite 2 Boca Raton, Florida 33431

AHS at Harbor Grove

City of Stuart, Martin County, Florida

Landscape Plan

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NORTH

SCALE: 1" = 20'

0 10' 20' 40'

REG. # 1018
Thomas P. Lucido

Designer	J.J.	Sheet	LA-3
Manager	D.F.		
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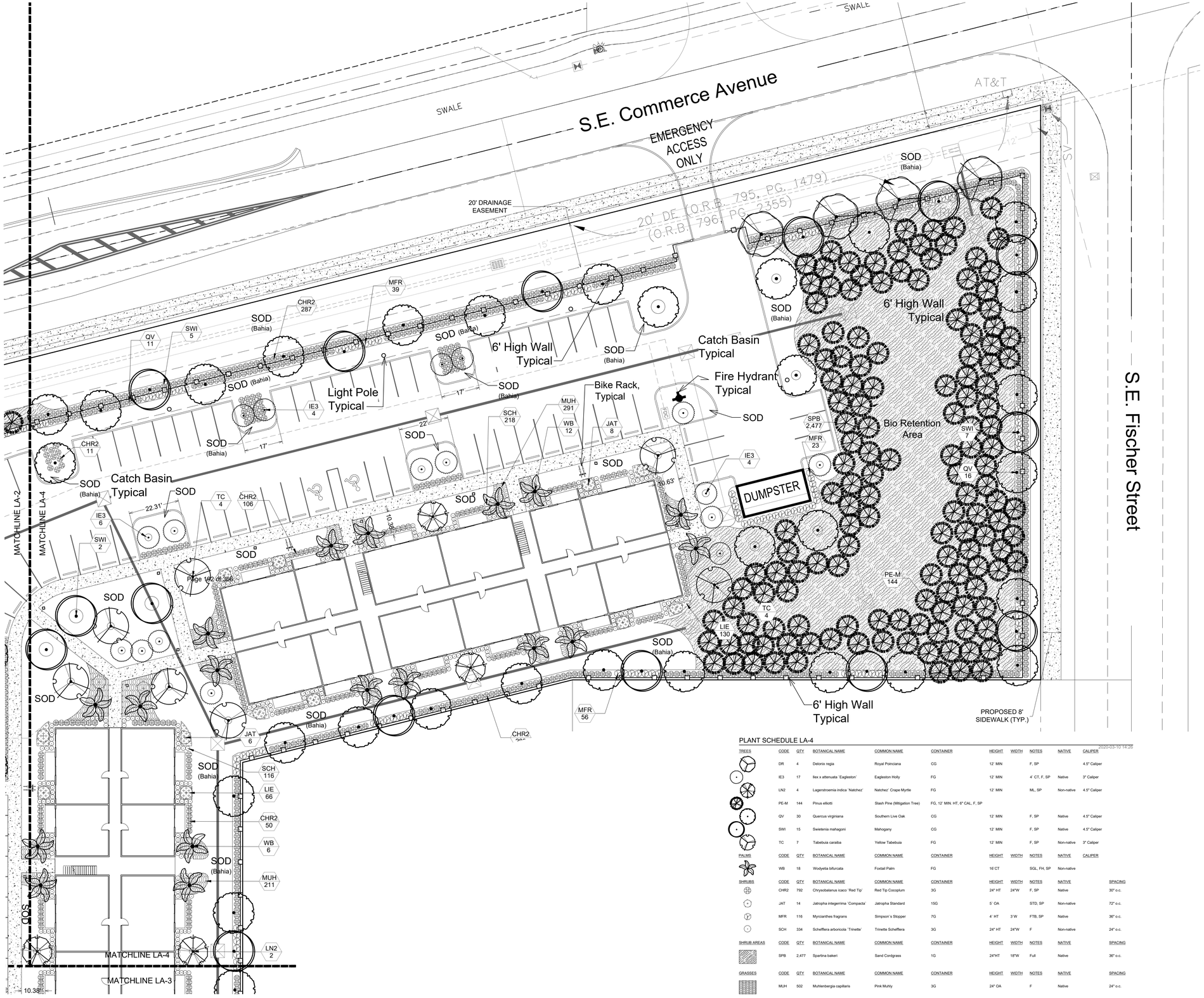

PLANT SCHEDULE LA-4

2020-03-10 14:26

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	DR	4	Delonix regia	Royal Poinciana	CG	12' MIN		F, SP		4.5" Caliper
	IE3	17	Ilex x attenuata 'Eagleston'	Eagleston Holly	FG	12' MIN		4' CT, F, SP	Native	3" Caliper
	LN2	4	Lagerstroemia indica 'Natchez'	Natchez' Crape Myrtle	FG	12' MIN		ML, SP	Non-native	4.5" Caliper
	PE-M	144	Pinus elliotti	Slash Pine (Mitigation Tree)	FG, 12' MIN. HT, 6" CAL, F, SP					
	QV	30	Quercus virginiana	Southern Live Oak	CG	12' MIN		F, SP	Native	4.5" Caliper
	SWI	15	Swietenia mahagoni	Mahogany	CG	12' MIN		F, SP	Native	4.5" Caliper
	TC	7	Tabebuia caraiba	Yellow Tabebula	FG	12' MIN		F, SP	Non-native	3" Caliper

PALMS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	WB	18	Wodyetia bifurcata	Foxtail Palm	FG	16' CT		SGL, FH, SP	Non-native	

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	CHR2	792	Chrysobalanus icaco 'Red Tip'	Red Tip Cocoplum	3G	24" HT	24"W	F, SP	Native	30" o.c.
	JAT	14	Jatropha integerrima 'Compacta'	Jatropha Standard	15G	5' OA		STD, SP	Non-native	72" o.c.
	MFR	116	Myrcianthes fragrans	Simpson's Stopper	7G	4' HT	3'W	FTB, SP	Native	36" o.c.
	SCH	334	Schefflera arboricola 'Trinette'	Trinette Schefflera	3G	24" HT	24"W	F	Non-native	24" o.c.

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	SPB	2,477	Spartina bakeri	Sand Cordgrass	1G	24"HT	18"W	Full	Native	36" o.c.

GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	MUH	502	Muhlenbergia capillaris	Pink Muhly	3G	24" OA		F	Native	24" o.c.

GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	LIE	196	Liriope muscari 'Evergreen Giant'	Evergreen Giant Border Grass	3G	24"OA	12"W	F, SP	Non-native	18" o.c.

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AHS at Harbor Grove

City of Stuart, Martin County, Florida

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0 10' 20' 40'

REG. # 1018
Thomas P. Lucido

Designer	J.J.	Sheet	
Manager	D.F.		**LA-4**
Project Number	19-345		
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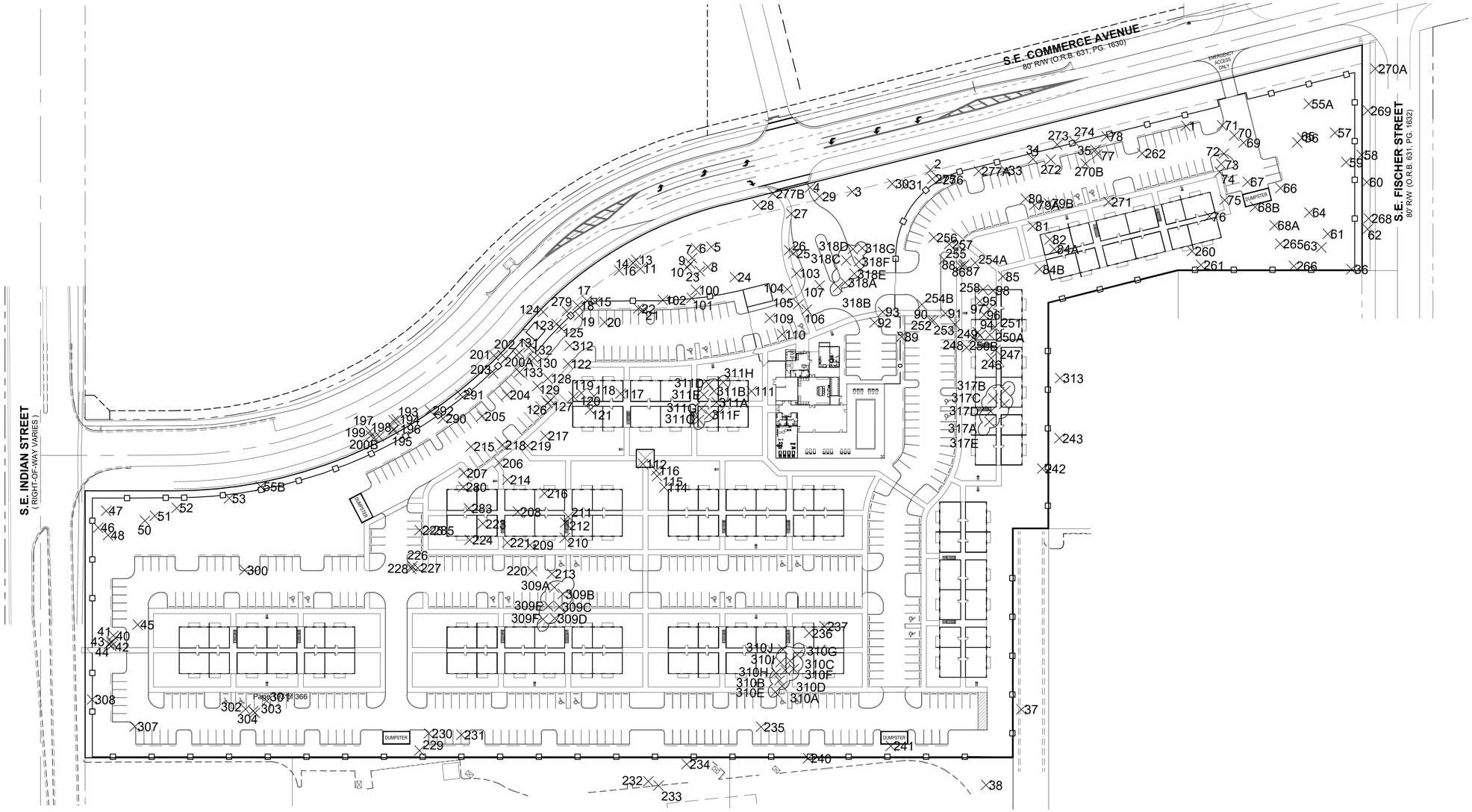

AHS GLASRUD PARCEL - TREE INVENTORY		
Tree #	Species	DBH (inches)
1	PINE	12.5
2	PINE	10.5
3	PINE	10
4	PINE	13.5
5	PINE	10.5
6	PINE	11
7	PINE	10.5
8	PINE	11
9	PINE	12
10	PINE	11
11	PINE	12
14	PINE	11
15	PINE	13
16	PINE	14
17	PINE	12.5
18	PINE	12
19	PINE	12
20	PINE	11.5
21	PINE	11
22	PINE	11
23	PINE	10
24	PINE	11
25	PINE	15
26	PINE	15
27	PINE	13
28	PINE	12.5
29	PINE	12
30	PINE	12
31	PINE	10.5
33	PINE	11
34	PINE	16
35	PINE	13
36	PINE	12.5
37	PINE	18
38	PINE	12
40	OAK	5
41	OAK	12
42	OAK	8
43	OAK	6
44	OAK	11
45	PINE	15.5
46	PINE	14
47	PINE	10
48	PINE	15
50	PINE	12
51	PINE	11
52	PINE	13
53	PINE	13
55A	PINE	13.5
55B	PINE	14
56	PINE	13
57	PINE	11
58	PINE	12.5
59	PINE	12
60	PINE	11
61	PINE	11
62	PINE	10
63	PINE	11.5
64	PINE	10
65	PINE	10
66	PINE	15
67	PINE	10
68A	PINE	11
68B	PINE	15
69	PINE	12
70	PINE	11
71	PINE	10
72	PINE	10
73	PINE	11
74	PINE	13
75	PINE	10
76	PINE	12
77	PINE	15
78	PINE	11
79A	PINE	11
79B	PINE	11.5
80	PINE	12
81	PINE	10
82	PINE	10.5
84A	PINE	11
84B	PINE	12
85	PINE	13
86	PINE	11
87	PINE	11
88	PINE	12
89	PINE	11.5
90	PINE	11.5
91	PINE	10.5
92	PINE	11
93	PINE	16
94	PINE	11
95	PINE	11.5
96	PINE	14
97	PINE	11
98	PINE	10.5
100	PINE	10
101	PINE	11.5
102	PINE	11.5
103	PINE	14
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105	PINE	13.5
106	PINE	13
107	PINE	12.5
109	PINE	12.5
110	PINE	11
111	PINE	12
112	PINE	11.5
114	PINE	11.5
115	PINE	10.5
116	PINE	10
117	PINE	12
118	PINE	11.5
119	PINE	11.5
120	DAHOON HOLLY	10
121	PINE	11
122	PINE	10.5
123	PINE	11
124	PINE	11
125	PINE	10.5
126	PINE	11
127	PINE	10.5
128	PINE	11
129	PINE	13
130	PINE	12
131	PINE	10.5
132	PINE	10
133	PINE	12
193	PINE	12
194	PINE	12
195	PINE	12
196	PINE	10
197	PINE	10
198	PINE	12
199	PINE	10.5
200A	PINE	10
200B	PINE	11
201	PINE	10.5
202	PINE	11.5
203	PINE	10.5
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242	PINE	13
243	PINE	14.5
246	PINE	15
247	PINE	11
248	PINE	11
249	PINE	13
250A	PINE	13
250B	PINE	14
251	PINE	12
252	PINE	12
253	PINE	10.5
254A	PINE	13
254B	PINE	16.5
255	PINE	11
256	PINE	11
257	PINE	12
258	PINE	11.5
260	PINE	11.5
261	PINE	15.5
262	PINE	11.5
265	PINE	12
266	PINE	16
268	PINE	10.5
269	PINE	10
270A	PINE	10
270B	PINE	10.5
271	PINE	11
272	PINE	13
273	PINE	10
274	PINE	12
275	PINE	11
276	PINE	10
277A	PINE	12.5
277B	PINE	12.5
279	PINE	12
280	PINE	10
283	PINE	12
285	PINE	10
290	PINE	11
291	PINE	12
292	PINE	15.5
300	OAK	9.5
301	PINE	10
302	OAK	7.5
303	OAK	5
304	OAK	5
307	OAK	15
308	OAK	5.5
309A	PINE	12
309B	PINE	12
309C	PINE	12
309D	PINE	12
309E	PINE	12
309F	PINE	12
310A	PINE	11
310B	PINE	11
310C	PINE	11
310D	PINE	11
310E	PINE	11
310F	PINE	11
310G	PINE	11
310H	PINE	11
310I	PINE	11
310J	PINE	11
311A	PINE	10
311B	PINE	10
311C	PINE	10
311D	PINE	10
311E	PINE	10
311F	PINE	10
311G	PINE	10
311H	PINE	10
312	PINE	10
313	PINE	18
317A	PINE	12
317B	PINE	12
317C	PINE	12
317D	PINE	12
317E	PINE	12
318A	PINE	10
318B	PINE	11
318C	PINE	13
318D	PINE	13
318E	PINE	12
318F	PINE	13
318G	PINE	13
TOTAL DBH REMOVED:		2,777.5 inches
TOTAL PINE DBH REMOVED:		2,678.0 inches
TOTAL HARDWOOD DBH REMOVED:		99.5 inches

DENOTES OFFSITE TREE, NOT INCLUDED

AHS at HARBOR GROVE - TREE MITIGATION DATA

Hardwood Calculation

99.5	inches (x)	2.5"	=	249	Inches
Total Inches Required (4.5" DBH min.)				249	Inches
Total Inches Provided for Mitigation:				**252**	**Inches**
27	Acer rubrum (4.5" DBH)		4.5"	121.5	Inches
29	Quercus virginiana (4.5" DBH)		4.5"	130.5	Inches

Pine Calculation

2,678	inches (x)	1.5"	=	4017.0	Inches
Total Inches Required (3" DBH min.)				4017.0	Inches
Total Inches Provided for Mitigation:				**4017.0**	**Inches**
294	Pinus elliottii (6" DBH)*		6.0"	1764.0	Inches
119	Ilex x attenuata 'Eagleston' (3" DBH)		3.0"	357.0	Inches
22	Taxodium ascendens (4.5" DBH)		4.5"	99.0	Inches
42	Tabebuia caraiba (3" DBH)		3.0"	126.0	Inches
4	Bursera simaruba (4.5" DBH)		4.5"	18.0	Inches
6	Coccoloba diversifolia (3" DBH)		3.0"	18.0	Inches
49	Lagerstroemia indica 'Natchez' (4.5" DBH)		4.5"	220.5	Inches
14	Lagerstroemia speciosa (3" DBH)		2.0"	28.0	Inches
50	Quercus virginiana (4.5" DBH)		4.5"	225.0	Inches
16	Delonix regia (4.5" DBH)		4.5"	72.0	Inches
20	Swietenia mahogoni (4.5" DBH)		4.5"	90.0	Inches
31	Veitchia montgomeryana (6.5" for 16' CT)		6.5"	201.5	Inches
10	Phoenix sylvestris (4.5" DBH for 14' CT)		4.5"	45.0	Inches
6	Sabal palmetto (8.5" DBH for 18' CT)		8.5"	51.0	Inches
108	Wodyetia bifurcata (6.5" for 16' CT)		6.5"	702.0	Inches

**Slash Pines planted for mitigation to be field located per final bio retention design. Pending final site conditions, slash pines may be substituted with contribution to City Tree Find in lieu of planting, per Sec. 5.05.02.A.1.h. or substituted with alternate size/quantities (2.5" caliper min.) of native trees to meet required mitigation, subject to staff approval.*

lucido & associates

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City of Stuart, Martin County, Florida

Landscape Plan
Tree Mitigation

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NORTH

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0 30' 60' 120'

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PLANT SCHEDULE TOTAL SITE

2020-03-10 14:26

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	AR	27	Acer rubrum	Red Maple	CG	12` MIN		F, SP	Native	4.5" Caliper
	BUR	4	Bursera simaruba	Gumbo Limbo	CG	12` MIN		STD, F, SP	Native	4.5" Caliper
	CD	6	Coccoloba diversifolia	Pigeon Plum	CG	12` MIN		STD, F, SP	Native	3" Caliper
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	QV	79	Quercus virginiana	Southern Live Oak	CG	12` MIN		F, SP	Native	4.5" Caliper
	SWI	20	Swietenia mahagoni	Mahogany	CG	12` MIN		F, SP	Native	4.5" Caliper
	TC	42	Tabebuia caraiba	Yellow Tabebuia	FG	12` MIN		F, SP	Non-native	3" Caliper
	TA	22	Taxodium ascendens	Pond Cypress	CG	12` MIN		F, SP	Native	4.5" Caliper

PALMS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	CALIPER
	PS	10	Phoenix sylvestris	Wild Date Palm	FG	14`CT		FH, SP, MATCHING	Non-native	HVY CAL
	SP	6	Sabal palmetto	Sabal Palm	FG	18`CT		HVY CAL, SP	Native	
	VM	31	Veitchia montgomeryana	Montgomery Palm	FG	16`CT		SGL, FH, SP	Non-native	
	WB	108	Wodyetia bifurcata	Foxtail Palm	FG	16`CT		SGL, FH, SP	Non-native	

SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	CHR2	3,791	Chrysobalanus icaco `Red Tip`	Red Tip Cocoplum	3G	24" HT	24"W	F, SP	Native	30" o.c.
	GAG	169	Galphimia glauca	Thryallis	3G	24" HT	24"W	F	Non-native	36" o.c.
	JAT	92	Jatropha integerrima `Compacta`	Jatropha Standard	15G	5` OA		STD, SP	Non-native	72" o.c.
	MFR	560	Myrcianthes fragrans	Simpson`s Stopper	7G	4` HT	3`W	FTB, SP	Native	36" o.c.
	SCH	1,961	Schefflera arboricola `Trinette`	Trinette Schefflera	3G	24" HT	24"W	F	Non-native	24" o.c.

SHRUB AREAS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	GAL	194	Galphimia glauca	Thryallis	3G	24"HT	24"W	F	Non-native	24" o.c.
	PEN	528	Pentas lanceolata	Pentas Mix	6" Pot				Non-native	18" o.c.
	SPB	6,447	Spartina bakeri	Sand Cordgrass	1G	24"HT	18"W	Full	Native	36" o.c.

GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	MUH	3,578	Muhlenbergia capillaris	Pink Muhly	3G	24" OA		F	Native	24" o.c.
	TRD	2,913	Tripsacum floridanum	Dwarf Fakahatchee	3G	24" OA		Full	Native	24" o.c.

GROUND COVERS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	HEIGHT	WIDTH	NOTES	NATIVE	SPACING
	ILS	764	Ilex vomitoria `Stokes Dwarf`	Dwarf Yaupon	3G	24"OA	12"W	Full	Native	18" o.c.
	LIE	1,520	Liriope muscari `Evergreen Giant`	Evergreen Giant Border Grass	3G	24"OA	12"W	F, SP	Non-native	18" o.c.

*ALL AREAS INDICATED BY "SOD" ON PLAN SHALL BE PLANTED WITH STENOTAPHRUM SECUNDATUM 'FLORATAM' SOD UNLESS NOTED OTHERWISE.

135,889 SF TOTAL SOD AREA WITHIN THE DEVELOPABLE SITE AREA
REQUIRED DROUGHT TOLERANT SOD SPECIES = 69,303 SF - 51.0%
PROVIDED DROUGHT TOLERANT SOD SPECIES = 74,039 SF - 54.5% - BAHIA SOD
SEE CIVIL PLANS FOR ALL DISTURBED AREAS OUTSIDE THE SITE LIMITS

*ALL NATIVE AREAS TO RECEIVE PINE STRAW MULCH

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Key / Location:

N.T.S.

Project Team:

Client & Property Owner: AHS Residential, LLC, 12895 Southwest 132nd Street, Suite 202, Miami, Florida 33186

Land Planner / Landscape Architect: Lucido & Associates, 701 East Ocean Boulevard, Stuart, Florida 34994

Engineer: Mathers Engineering Corporation, 2431 Southeast Dixie Highway, Stuart, Florida 34996

Surveyor: Stephen J. Brown, Inc., 619 East 5th Street, Stuart, Florida 34994

Environmental: EW Consultants, Inc., 1000 SE Monterey Commons Boulevard, Suite 208, Stuart, Florida 34996

Architect: Slattery & Associates, 2060 Northwest Boca Raton Boulevard, Suite 2, Boca Raton, Florida 33431

AHS at Harbor Grove

City of Stuart, Martin County, Florida

Master Plant Schedule

Date	By	Description
08.08.19	J.J.	Initial Submittal
11.04.19	B.W.	Revised per Comments
11.26.19	SJS	Revised per Site Changes
01.02.20	SJS	Revised per Comments
01.31.20	SJS	Revised per Site Changes
03.10.20	B.W.	Revised per Comments

NORTH

SCALE: 1" = 0'

0 0' 0' 0'

REG. # 1018
Thomas P. Lucido

Designer	J.J.	Sheet
Manager	D.F.	LA-6
Project Number	19-345	
Municipal Number	---	
Computer File	19-345 AHS Residential - Landscape Plan.dwg	

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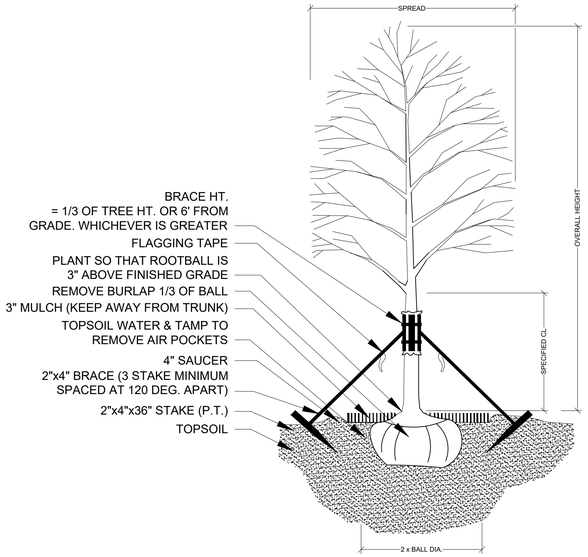
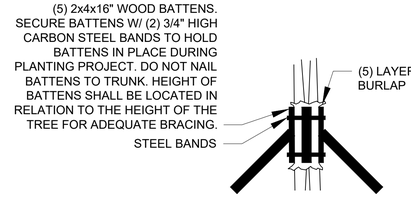
Drawing Name: J:\Projects Active\19-345 AHS Residential Glasrud Property\Landscape\ Mar 10, 2020 - 3:55pm 19-345 AHS Residential - Landscape Plan.dwg



TREE PLANTING & STAKING

NOT TO SCALE



BRACING DETAIL

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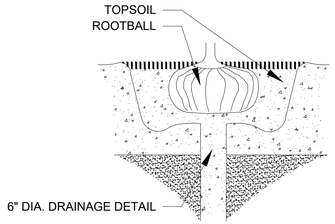

DRAINAGE TESTING DETAIL

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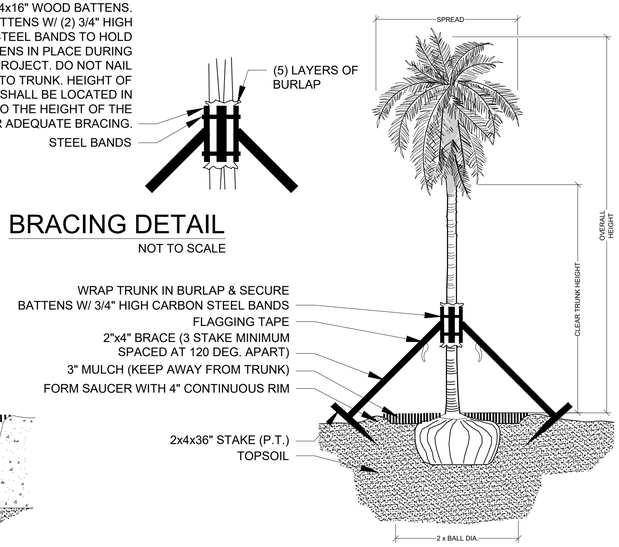

PALM PLANTING - ANGLE STAKE

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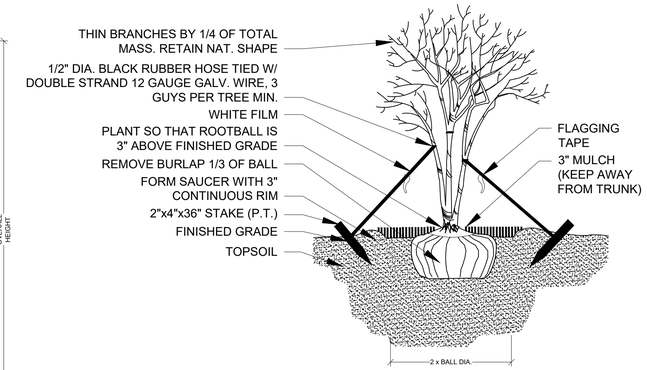
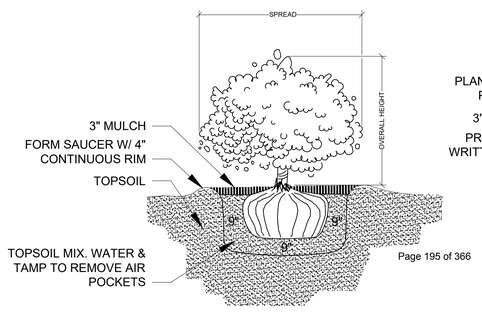


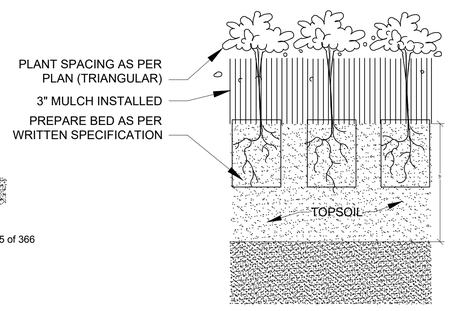
MULTI-TRUNK PLANTING & GUYING

NOT TO SCALE



SHRUB PLANTING

NOT TO SCALE



GROUNDCOVER PLANTING DETAIL

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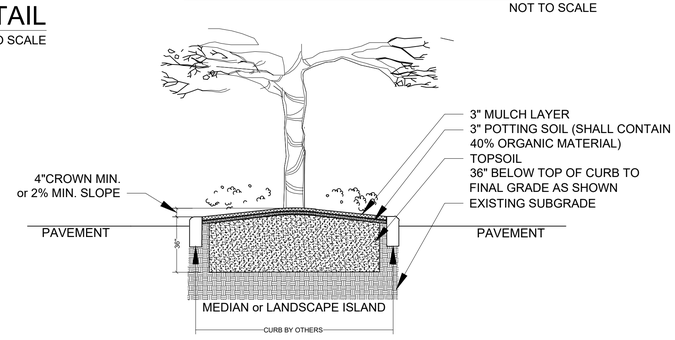
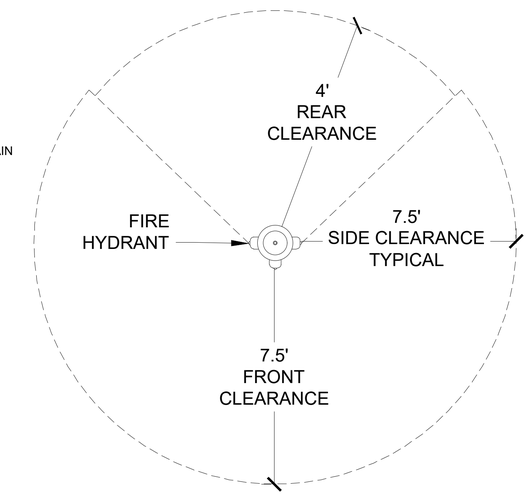


THIS DETAIL SHOWN DEPICTS A MEDIAN AND/OR LANDSCAPE ISLAND AND IS FOR GRAPHIC PURPOSES ONLY; SOIL PREPARATION SHALL APPLY TO ALL TREE, SHRUB, & GROUND COVER AREAS. THIS DOES NOT INCLUDE SOD AREAS

LANDSCAPE AREA PREPARATION DETAIL

NOT TO SCALE

- *TOPSOIL SHALL BE NATURAL, FRIABLE, FINE LOAMY SOIL POSSESSING CHARACTERISTICS OF REPRESENTATIVE TOPSOIL IN THE VICINITY OF THE PROJECT SITE THAT PRODUCES HEAVY GROWTH.
- TOPSOIL SHALL HAVE A PH RANGE OF 5.5-7.4, FREE FROM SUBSOIL, WEEDS, LITTER, SODS, CLAY, STONES, STUMPS, ROOTS, TRASH, HERBICIDES, TOXIC SUBSTANCES, OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH, OR HINDER PLANTING OPERATIONS.
- TOPSOIL SHALL CONTAIN A MINIMUM OF 3% ORGANIC MATERIAL.
- TOPSOIL MUST PERCOLATE WATER AT A RATE OF 1" PER HOUR (SEE ALSO DRAINAGE TESTING DETAIL FOR TREES)
- LANDSCAPE AREA SOILS SHALL BE APPROVED BY LANDSCAPE ARCHITECT/OWNER PRIOR TO PLANTING



FIRE HYDRANT CLEARANCE DETAIL

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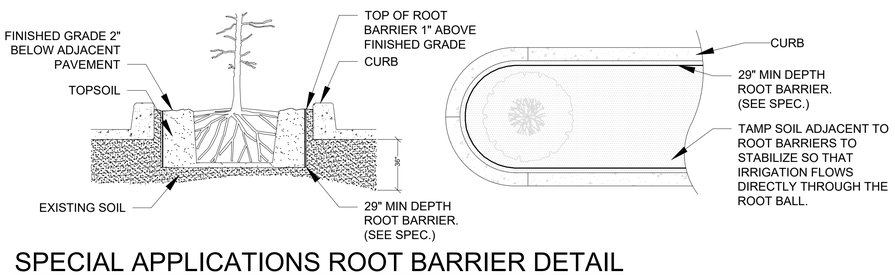
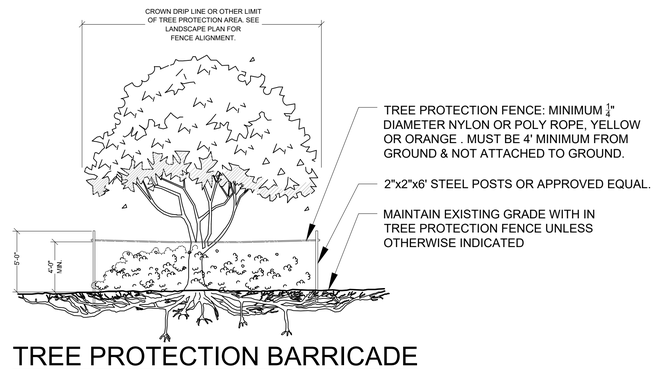


SPECIAL APPLICATIONS ROOT BARRIER DETAIL

NOT TO SCALE

NOTES:
1- ROOT BARRIER SHALL BE "BIO-BARRIER 29" DEPTH OR APPROVED EQUAL.
2- ROOT BARRIER SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.



TREE PROTECTION BARRICADE

NOT TO SCALE

NOTES:
1- SEE LANDSCAPE PLAN FOR FENCE ALIGNMENT.
3- NO PRUNING SHALL BE PERFORMED EXCEPT BY APPROVED ARBORIST.
4- NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.

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 NATIVE TOPSOIL, CARE MUST BE TAKEN TO KEEP THE CONSISTENCY OF THE SOIL MIX THE SAME THROUGHOUT THE PLANTING PIT AND DRAINAGE CHANNEL.

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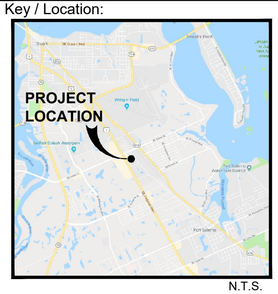
701 SE Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 223-0220

Key / Location:



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Architect:	Slattery & Associates 2060 Northwest Boca Raton Boulevard Suite 2 Boca Raton, Florida 33431

AHS at Harbor Grove

City of Stuart, Martin County, Florida

Landscape Details

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SCALE: 1" = 0'

0 0' 0' 0'

REG. # 1018
Thomas P. Lucido

Designer	J.J.	Sheet
Manager	D.F.	**LA-7**
Project Number	19-345	
Municipal Number	---	
Computer File	19-345 AHS Residential - Landscape Plan.dwg	

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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/herlself 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 plans, 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 Foreman 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:
The Landscape Contractor shall furnish a written guarantee warranting all materials, workmanship and plant materials, except sod, for a period of 18 MONTHS 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 guaranteeing 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 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 TOP SOIL:
A. Planting soil for all plantings shall consist of topsoil and be natural, friable, fertile, fine loamy soil possessing characteristics of representative topsoil in the vicinity of the project site that produces heavy growth. Topsoil shall have a PH range of 5.5-7.4, free from subsoil, weeds, litter, sods, clay, stones, stumps, roots, trash, herbicides, toxic substances, or any other material which may be harmful to plant growth, or hinder planting operations. Topsoil shall contain a minimum of 3% organic material. Topsoil must percolate water at a rate of 1" per hour (See also drainage testing detail for trees)

B. Landscape Area Preparation. The intent of this section is to ensure a healthy growing environment for all planting material in all landscaped areas. Landscape Contractor to examine existing soils prior to planting to ensure conformance to all definitions of "Topsoil" (seeLandscape Area Preparation Detail); In addition, a 3" layer of high organic (min 40%) potting soil shall be added to the topsoil and mixed in at time of planting. *East Coast Recycling Inc.* is a recommended source for imported Topsoil (if needed) as well as the top 3" layer of potting soil.

Existing soils must meet all definitions of 'Topsoil' as described above in all planting areas throughout the site. If existing soils do not meet all definitions of Topsoil, please refer to the 'Landscape Area Preparation' detail. Examination may require existing soils to be tested by an accredited testing laboratory. Should a soil test be necessary, Contractor shall contact soil testing lab directly to confirm such lab's soil collection and transmittal protocol; all costs if any shall be borne by the Contractor. Contractor shall provide to Landscape Architect for review the results of the soil test if conducted. Contractor shall schedule an on-site meeting with Landscape Architect to review existing and/or imported soils prior to planting. The Landscape Area Preparation is the responsibility of the Landscape Contractor. He/she shall except all responsibility of planting soils and shall honor all guarantee items in section 1.08.

2.07 FERTILIZER:
A. Commercial fertilizer shall comply with the state and local 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 container	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 planting areas except ground cover, shall receive compacted mulch with 3" minimum depth immediately after planting and thoroughly watered. Apply 3" max on tree & palm rootballs, keep 6" 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 landscape 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 Details for complete testing methods and requirements.

F. Planting pits shall be excavated to the following dimensions and backfilled with Topsoil- see Landscape Area Preparation Detail;
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 watering's. 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 trimming 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.

C. 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.

D. 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. Prior to installing any irrigation system components, the contractor shall obtain a water sample from the proposed water supply and conduct a particle size and count analysis on the sample using the services of a reputable lab certified in such analysis. Submit the test results to the owner/owner's representative for review and approval. Do not proceed further with system installation until given written approval to do so.

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.

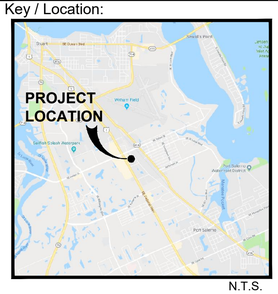
C. All plant material shall be alive and in good growing condition for each specified kind of plant at the time of acceptance. The rating of each plant according to Florida Grades and Standards shall be equal to or better than that called for on the plans and in these Specifications at the time of final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

E. All trees & shrubs shall be straight and in correct position per the landscape plans, details and specifications. All nursery, shipping and identification tags & ribbons shall be removed from trees & shrubs immediately after planting.

lucido & associates
701 SE Ocean Blvd., Stuart, Florida 34994 (772) 220-2100, Fax (772) 223-0220

Key / Location:



N.T.S.

Project Team:

Client & Property Owner:	AHS Residential, LLC 12895 Southwest 132nd Street Suite 202 Miami, Florida 33186
Land Planner / Landscape Architect:	Lucido & Associates 701 East Ocean Boulevard Stuart, Florida 34994
Engineer:	Mathers Engineering Corporation 2431 Southeast Dixie Highway Stuart, Florida 34996
Surveyor:	Stephen J. Brown, Inc. 619 East 5th Street Stuart, Florida 34994
Environmental:	EW Consultants, Inc. 1000 SE Monterey Commons Boulevard Suite 208 Stuart, Florida 34996
Architect:	Slattery & Associates 2060 Northwest Boca Raton Boulevard Suite 2 Boca Raton, Florida 33431

AHS at Harbor Grove

City of Stuart, Martin County, Florida

Landscape Specifications

Date	By	Description
08.08.19	J.J.	Initial Submittal
11.04.19	B.W.	Revised per Comments
11.26.19	SJS	Revised per Site Changes
01.02.20	SJS	Revised per Comments
01.31.20	SJS	Revised per Site Changes
03.10.20	B.W.	Revised per Comments

NORTH

SCALE: 1" = 0'

0 0' 0' 0'

REG. # 1018
Thomas P. Lucido

Designer	J.J.	Sheet
Manager	D.F.	**LA-8**
Project Number	19-345	
Municipal Number	---	
Computer File	19-345 AHS Residential - Landscape Plan.dwg	

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Smeal Aerial RM 75ft

	feet
Width	: 8.33
Track	: 7.92
Lock to Lock Time	: 6.0
Steering Angle	: 45.0

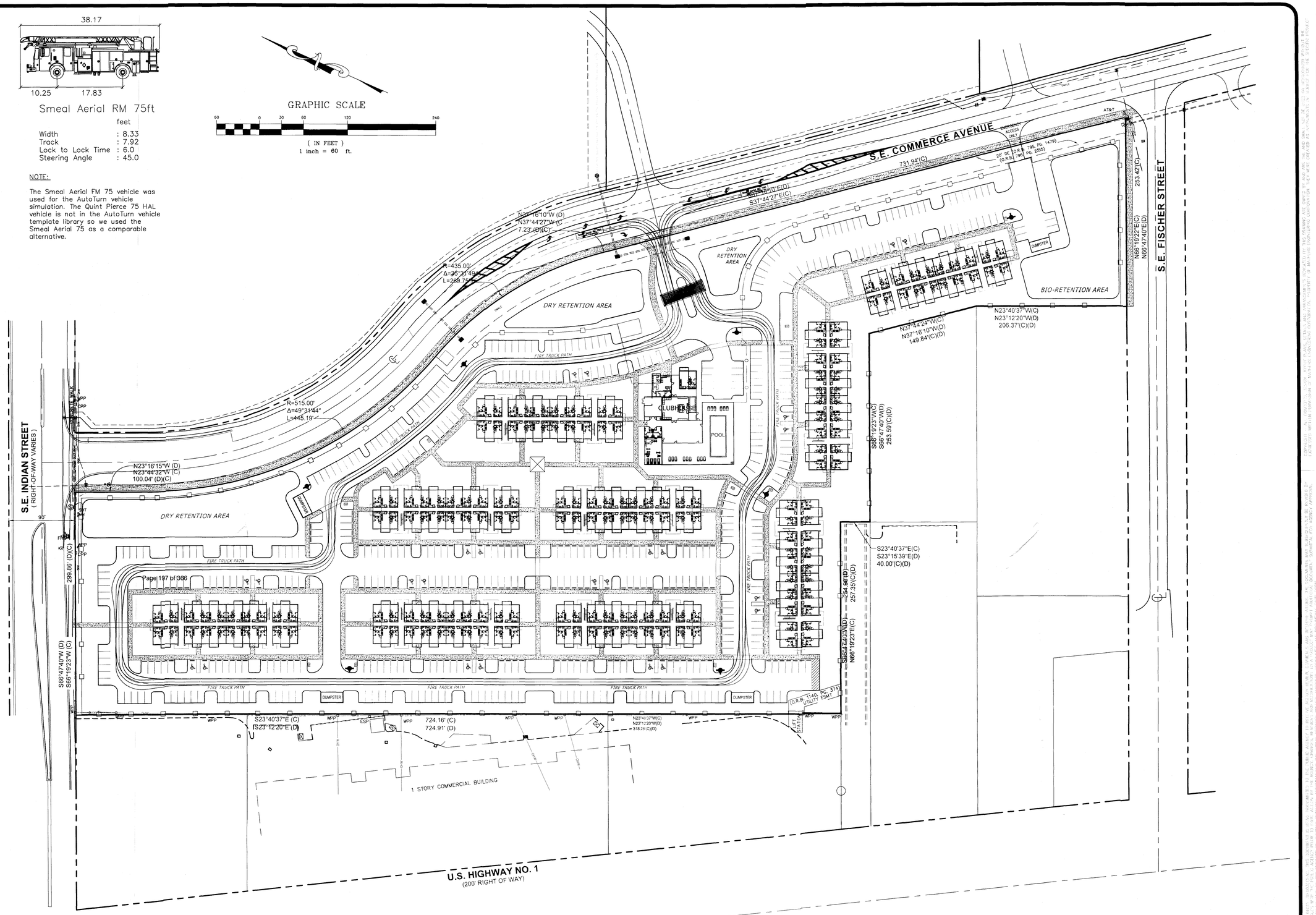
NOTE:

The Smeal Aerial FM 75 vehicle was used for the AutoTurn vehicle simulation. The Quint Pierce 75 HAL vehicle is not in the AutoTurn vehicle template library so we used the Smeal Aerial 75 as a comparable alternative.

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.



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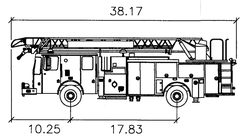
DATE	REVISIONS
11.22.19	REVISED LAYOUT
1.30.20	REV PER CITY-CLIENT

PHONE: (772) 287-0525
EB 0004456
2431 SE DIXIE HIGHWAY
STUART, FL 34996
MATHERS ENGINEERING CORPORATION

HARBOR GROVE
CITY OF STUART, FLORIDA
AUTOTURN FIRE TRUCK ACCESS 1

WILLIAM J. MATHERS, P.E.
LICENSE
PE 19658
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DRAWN	D.H.A.
CHECKED	W.J.M.
DATE	NOVEMBER 2019
SCALE	1" = 60'
JOB NO.	3760-01
SHEET	EX-1
OF	3 SHEETS



Smeal Aerial RM 75ft

	feet
Width	: 8.33
Track	: 7.92
Lock to Lock Time	: 6.0
Steering Angle	: 45.0

NOTE:

The Smeal Aerial FM 75 vehicle was used for the AutoTurn vehicle simulation. The Quint Pierce 75 HAL vehicle is not in the AutoTurn vehicle template library so we used the Smeal Aerial 75 as a comparable alternative.

GRAPHIC SCALE

60 0 30 60 120 240

(IN FEET)
1 inch = 60 ft.

S.E. COMMERCE AVENUE

S.E. FISCHER STREET

S.E. INDIAN STREET
(RIGHT-OF-WAY VARIES)

U.S. HIGHWAY NO. 1
(200' RIGHT OF WAY)

DRY RETENTION AREA

BIO-RETENTION AREA

CLUBHOUSE

POOL

FIRE TRUCK PATH

DUMPSTER

1 STORY COMMERCIAL BUILDING

R=435.00'
Δ=35°21'49"
L=269.75'

R=515.00'
Δ=49°31'44"
L=445.19'

N37°16'10"W (D)
N37°44'27"W (C)
7.23' (D)(C)

S37°16'10"E(D)
S37°44'27"E(C)

731.94'(C)

253.42'(C)

N66°19'22"E(C)
N66°47'40"E(D)

N37°44'24"W(C)
N37°16'10"W(D)
149.84'(C)(D)

N23°40'37"W(C)
N23°12'20"W(D)
206.37'(C)(D)

S66°19'23"W(C)
S66°47'40"W(D)
253.59'(C)(D)

S23°40'37"E(E)(C)
S23°15'39"E(D)
40.00'(C)(D)

N66°47'40"W(D)
N66°19'23"E(C)
254.96'(D)
257.35'(C)(D)

N23°16'15"W (D)
N23°44'32"W (C)
100.04' (D)(C)

299.86' (D)(C)

S66°47'40"W (D)
S66°19'23"W (C)

S23°40'37"E (C)
S23°12'20"E (D)

724.16' (C)
724.91' (D)

N23°40'37"W(C)
N23°12'20"W(D)
318.29'(C)(D)

90'

Page 198 of 365

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DATE	REVISIONS
11.22.19	REVISED LAYOUT
1.30.20	REV PER CITY-CLIENT

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MATHERS ENGINEERING CORPORATION

HARBOR GROVE
CITY OF STUART, FLORIDA
AUTOTURN FIRE TRUCK ACCESS 2

WILLIAM J. MATHERS, P.E.
LICENSE NO. 19658
PE 19658
STATE OF FLORIDA
PROFESSIONAL ENGINEER
01/31/2020

DRAWN	D.H.A.
CHECKED	W.J.M.
DATE	NOVEMBER 2019
SCALE	1" = 60'
JOB NO.	3760-01
SHEET	EX-2

OF 3 SHEETS

Smeal Aerial RM 75ft

	feet
Width	: 8.33
Track	: 7.92
Lock to Lock Time	: 6.0
Steering Angle	: 45.0

NOTE:

The Smeal Aerial FM 75 vehicle was used for the AutoTurn vehicle simulation. The Quint Pierce 75 HAL vehicle is not in the AutoTurn vehicle template library so we used the Smeal Aerial 75 as a comparable alternative.

GRAPHIC SCALE

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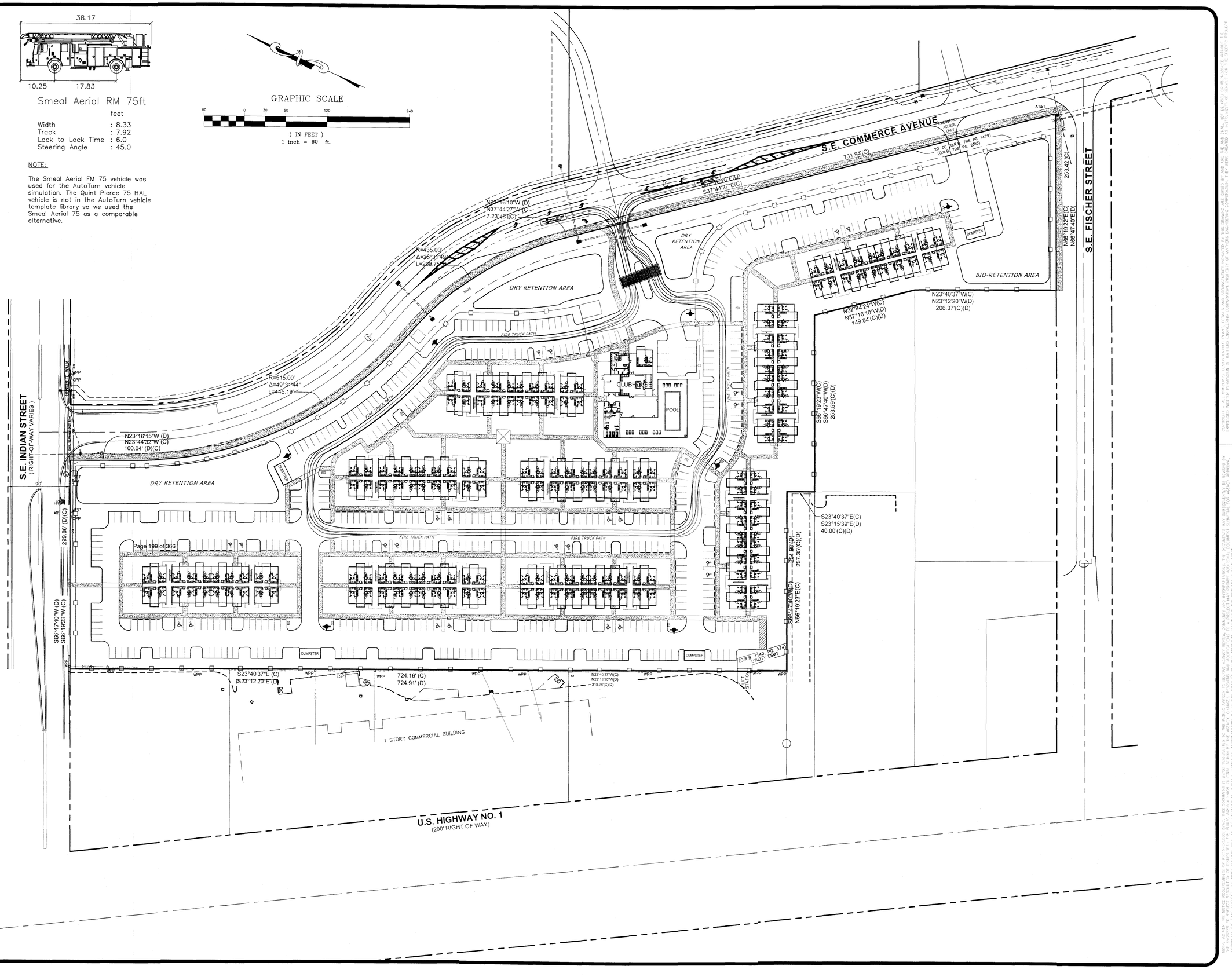
(IN FEET)
1 inch = 60 ft.



DATE	REVISIONS
11.22.19	REVISED LAYOUT
1.30.20	REV PER CITY-CLIENT

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HARBOR GROVE
CITY OF STUART, FLORIDA
AUTOTURN FIRE TRUCK ACCESS 3

WILLIAM MATHERS, P.E.
LICENSE NO. 19658
PE 19658
STATE OF FLORIDA
PROFESSIONAL ENGINEER

DRAWN	D.H.A.
CHECKED	W.J.M.
DATE	NOVEMBER 2019
SCALE	1" = 60'
JOB NO.	3760-01
SHEET	EX-3
OF	3 SHEETS

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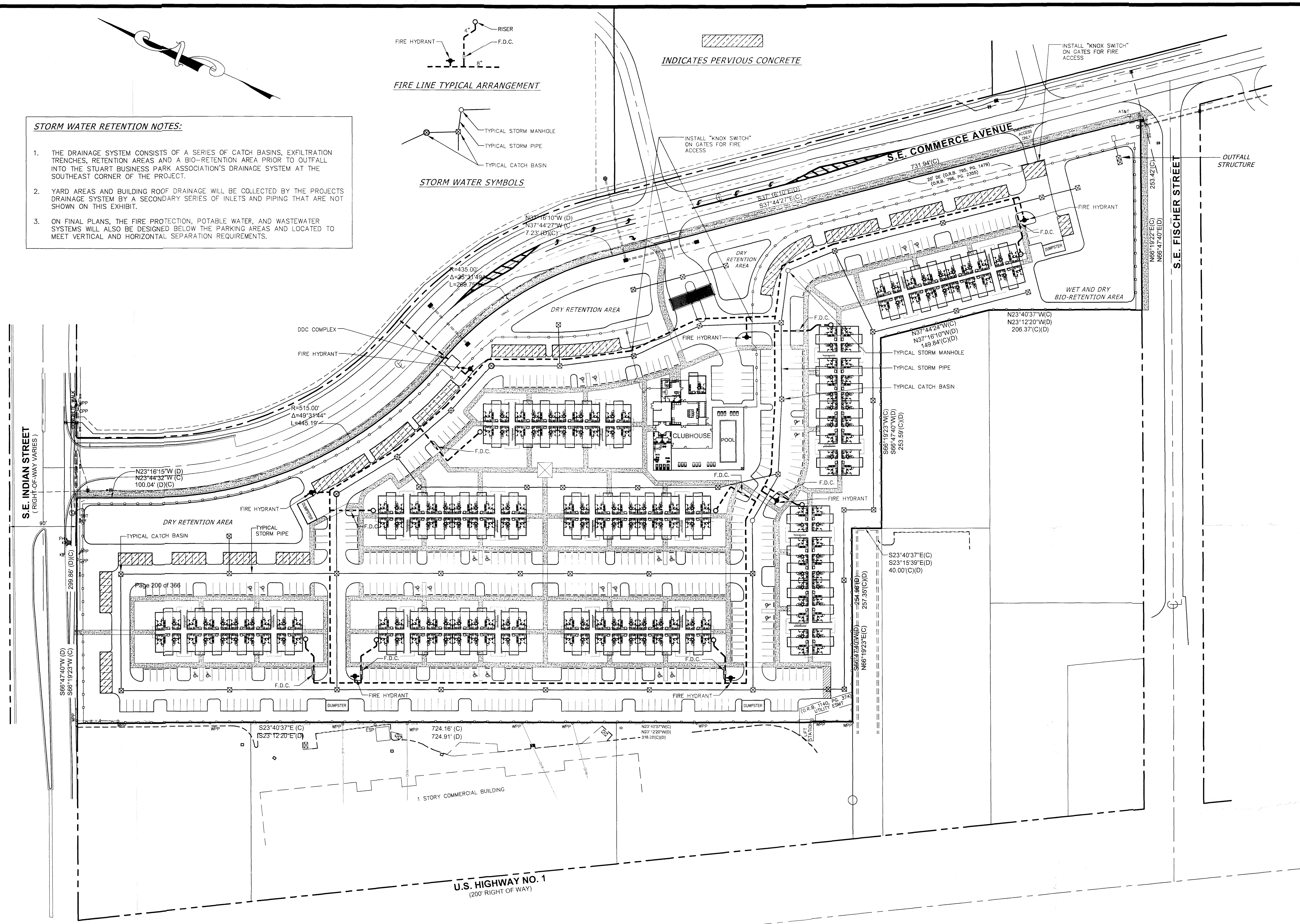
STORM WATER RETENTION NOTES:

1. THE DRAINAGE SYSTEM CONSISTS OF A SERIES OF CATCH BASINS, EXFILTRATION TRENCHES, RETENTION AREAS AND A BIO-RETENTION AREA PRIOR TO OUTFALL INTO THE STUART BUSINESS PARK ASSOCIATION'S DRAINAGE SYSTEM AT THE SOUTHEAST CORNER OF THE PROJECT.
2. YARD AREAS AND BUILDING ROOF DRAINAGE WILL BE COLLECTED BY THE PROJECTS DRAINAGE SYSTEM BY A SECONDARY SERIES OF INLETS AND PIPING THAT ARE NOT SHOWN ON THIS EXHIBIT.
3. ON FINAL PLANS, THE FIRE PROTECTION, POTABLE WATER, AND WASTEWATER SYSTEMS WILL ALSO BE DESIGNED BELOW THE PARKING AREAS AND LOCATED TO MEET VERTICAL AND HORIZONTAL SEPARATION REQUIREMENTS.



Page 200 of 366

NOTE:
STORM WATER SYSTEM AND FIRE LINES ARE CONCEPTUAL AND SUBJECT TO CHANGE DURING THE CIVIL DESIGN PHASE.

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DATE	REVISIONS
11.22.19	REVISED LAYOUT
1.30.20	REV PER CITY-CLIENT

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HARBOR GROVE
CITY OF STUART, FLORIDA
CONCEPTUAL DRAINAGE & FIRE LINES

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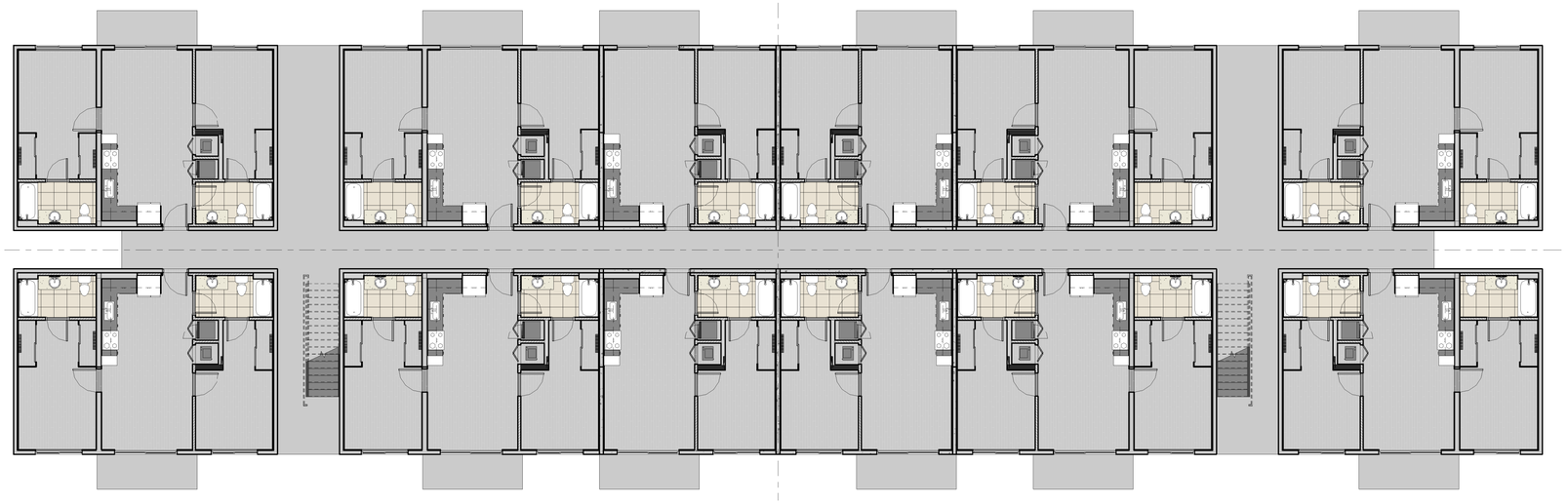
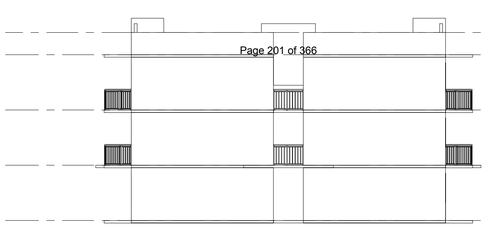
FL REG. # 19658
WILLIAM J. MATHERS LICENSE PE 19658 STATE OF FLORIDA PROFESSIONAL ENGINEER

DRAWN	D.H.A.
CHECKED	W.J.M.
DATE	NOVEMBER 2019
SCALE	1" = 60'
JOB NO.	3760-01
SHEET	1 OF 1 SHEETS



1 T.O. OF FINISH FLR.
1/8" = 1'-0"



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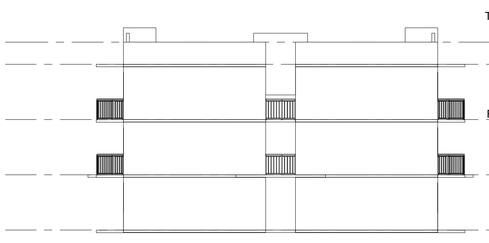
3/32" = 1'-0"

3 NORTH ELEVATION
3/32" = 1'-0"



5 WEST ELEVATION
3/32" = 1'-0"

4 SOUTH ELEVATION
3/32" = 1'-0"

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AA-26002616
ARCHITECTURE
LAND PLANNING
INTERIORS
CONSTRUCTION MANAGEMENT

AHS AT HARBOR GROVE
A RENTAL COMMUNITY

MARK	DATE	DESCRIPTION

PROJECT No. Project Number
DRAWN BY: A.C
CHECKED BY: LB
DATE: 07/22/19

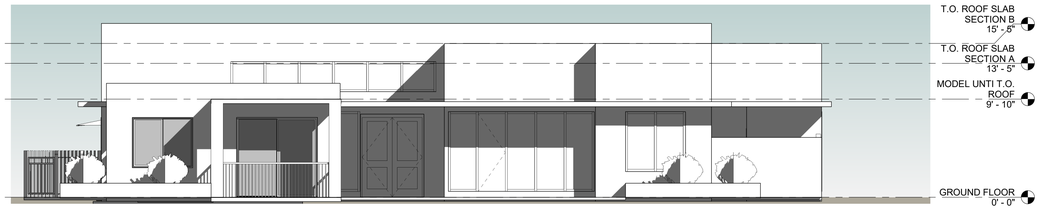
LEOPOLDO BELLON, AIA (AR-8737)

SHEET TITLE

A101

SHEET OF

\\AHS-QNAP-1\Bellon\AHS-PROJECTS\AHS-Construction Documents\AHS-PROJECTS\AHS-ST\ART\REVIT\AHS-HARBOR GROVE.rvt



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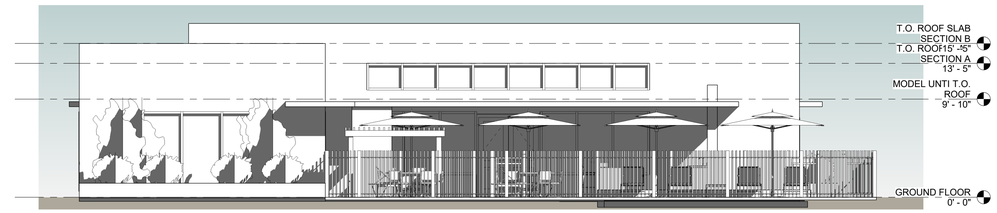
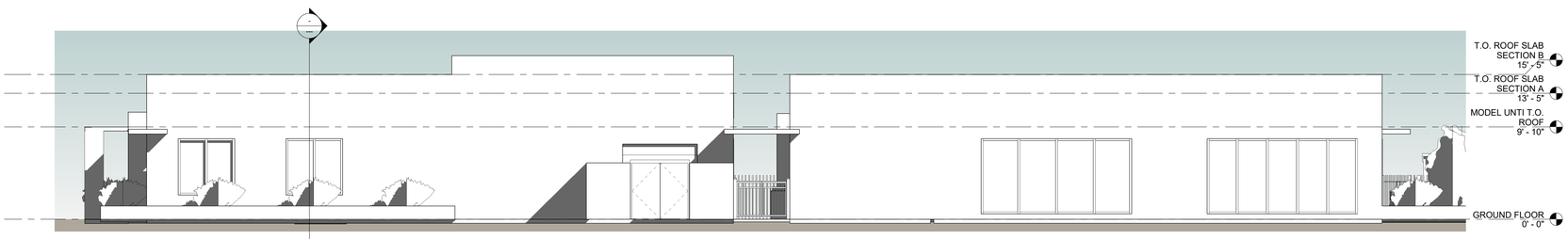


4 WEST ELEVATION
3/16" = 1'-0"



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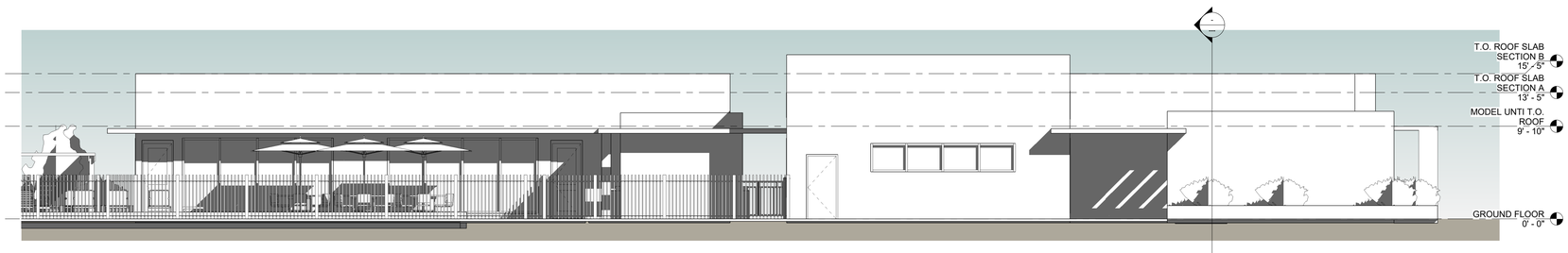

3 SOUTH ELEVATION
3/16" = 1'-0"

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MIAMI, FLORIDA 33186 - t. (305) 232-5122

BELLÓN

12930 S.W. 128 STREET
SUITE 203
MIAMI, FLORIDA 33186
T. (305) 278-7776
F. (305) 278-7473
WWW.BELLONWILANES.COM
AA-26002616
ARCHITECTURE
LAND PLANNING
INTERIORS
CONSTRUCTION MANAGEMENT

AHS-PROPOSED CLUB HOUSE

AHS
Enter address here

No.	DATE	DESCRIPTION

PROJECT No. Project Number
DRAWN BY: Author
CHECKED BY: Checker
DATE: 11/06/19

LEOPOLDO BELLON, AIA (AR-6737)

ELEVATIONS

A102

SHEET OF

Luminaire Schedule					
Symbol	Qty	Label	LLF	Description	Lum. Lumens
	77	80 4	0.903	EVERFINE - KMPT-80W Type IV	9448
	54	SA4	0.903	EVERFINE - KMPT-150W Type IV	17520

Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
BLDG 1 WALKWAY	Fc	5.31	14.4	0.7	7.59	20.57
BLDG 2 WALKWAY	Fc	5.76	14.1	0.6	9.60	23.50
BLDG 3 WALKWAY	Fc	6.52	14.2	0.6	10.87	23.67
BLDG 4 WALKWAY	Fc	5.68	16.4	0.5	11.36	32.80
BLDG 5 WALKWAY	Fc	6.26	15.0	0.7	8.94	21.43
BLDG 6 WALKWAY	Fc	6.52	14.2	0.6	10.87	23.67
BLDG 7 WALKWAY	Fc	6.77	14.6	0.7	9.67	20.86
BLDG 8 WALKWAY	Fc	5.72	13.7	0.7	8.17	19.57
BLDG 9 WALKWAY	Fc	6.42	14.1	0.6	10.70	23.50
CLUBHOUSE	Fc	5.01	14.1	0.7	7.16	20.14
ENTRY WALKWAY	Fc	5.97	8.5	1.7	3.51	5.00
NO BLDG 5 WALKWAY	Fc	3.52	6.1	1.1	3.20	5.55
PARKING LOT	Fc	3.47	12.5	0.6	5.78	20.83

CALCULATIONS AT GROUND

REFLECTANCES ARE .50

Rev. #	Description	Rev. Date
R1	.....	02/07/2019
R2	.....	.....
R3	.....	.....
R4	.....	.....
R5	.....	.....

Disclaimer
The calculations set forth herein are based on project specifications provided to us. Actual performance values may differ due to factors including but not limited to: manufacturing and testing procedures, component procedures, component performance, measurement techniques and varying field conditions such as, but not limited to, line voltage, temperature, atmospheric/environmental conditions and proper or improper installation. The properties, characteristics of surrounding surfaces, reflectances, furniture and architectural elements within the space may significantly affect calculations. Verifications of the calculations herein, including design acceptability, and compliance with any applicable lighting codes is your responsibility, and shall be based on your or your lighting architect, owner, or owners representative, as applicable. Please refer to Luminaire Schedule for light loss factor (LLF) details used in the calculations.

Project:
BANYON RIDGE SITE PLAN
Agent:
DEVON DARNELL
Site Client:
Komee Lighting, USA

KOMEE

Rev. #	Description	Rev. Date
R1	.....	02/07/2019
R2	.....	.....
R3	.....	.....
R4	.....	.....
R5	.....	.....

Disclaimer

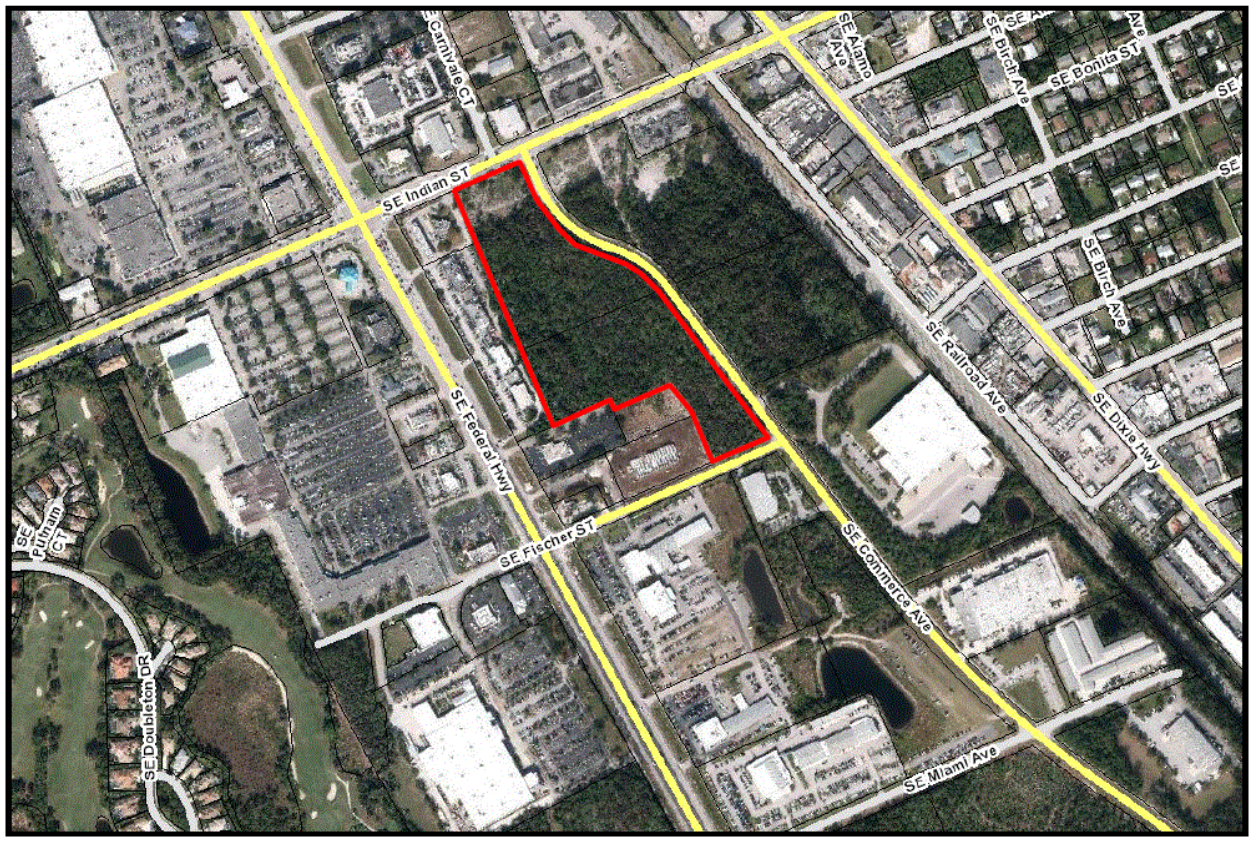
The calculations set forth herein are based on project specifications provided to us. Actual or installed values may differ due to factors including but not limited to manufacturing and testing procedures, component procedures, component performance, measurement techniques and varying field conditions such as, but not limited to, line voltage, temperature, atmospheric/environmental conditions, aging of components, dirt accumulation, shadows, reflectances, and other obstructions. Verifications of the calculations herein, including design acceptability, and compliance with any applicable codes, standards and specifications, are the responsibility of the project engineer, architect, owner, or owners representative, as applicable. Please refer to Luminaire Schedule for light loss factor (LLF) details used in the calculations.

Project:
HARBOR GROVE SITE PLAN
Agent:
JOSE BONNELL
Specifier:
Komee Lighting, USA

KOMEE

CITY OF STUART
Local Planning Agency
March 19, 2020

Project Name: Harbor Grove Apartments RPUD - FLU & Zoning change	**Property Owner:** Ted Glasrud Associates Fl, LLC
Project No.: Z19080005	**Applicant/Petitioner:** Doug Fitzwater, AHS Residential
Ordinance No: 2436-2020	**Agent/Representative:** Doug Fitzwater, Lucido and Associates
	Case Planner: Tom Reetz
Location: West of S.E. Commerce Ave.; south of S.E. Indian Street and north of S.E. Fischer Street.	



PROJECT SUMMARY		
Property Size (area)		13.93 Acres
Present Use		Undeveloped
Subject Property Land Use		Commercial
Adjacent FLU	*North*	Martin County – Industrial
	South	City of Stuart Commercial
	East	City of Stuart, Commercial
	West	City of Stuart Commercial & Martin County Industrial

Subject Property Zoning		CPUD
Adjacent Zoning	*North*	Martin County M-1 Industrial
	South	City of Stuart CPUD
	East	City of Stuart CPUD
	West	City of Stuart CPUD
Proposed Land Use Designation & Zoning District		Multi-family Density Residential (RPUD)
Proposed Zoning District		Residential Planned Unit Development RPUD
Proposed Use		324 Multi-family Apartments
City Approvals		Building Department – No comments at this time. Fire Department – See comments attached Public Works – See comments attached Police Department – No comments at this time
Brief Explanation		The intent of this application is to request a Large scale future land use map (FLUM) amendment to the City's Comprehensive Plan Residential Planned Unit Development assigning a "Multi-Family Density Residential" land use, and a Zoning designation of (RPUD) on the City of Stuart Zoning Map. The subject property is 13.93 acres. The property is currently undeveloped. The intent of this project is to allow 324 attached multi-family apartment homes within 9 buildings to be developed on the site while enhancing on site stormwater systems.
Staff Recommendation: Staff recommends approval for the Future Land Use designation to Multi-Family Density Residential and zoning district designation to RPUD (Residential Planned Unit Development).		

STAFF REPORT AND RECOMMENDATION

I. LEGAL NOTICE REQUIREMENTS

A. Requirements for Application – The applications for the Future Land Use amendment to Multi-Family Density Residential, and zoning district designation to RPUD have been noticed in accordance with the requirements set forth in Sections 11.01.02, 11.01.09, and 11.02.00 of the Land Development Regulations.

B. Site Posting Date: 3-4-2020

C. Mail Notice Postmark: 3-4-2020 to property owners within 300 feet

D. Publication Date: 10 days prior to Second Reading

II. LARGE SCALE COMPREHENSIVE PLAN AMENDMENT AND ZONING MAP AMENDMENT ORDINANCE NO. 2436-2020

III. APPLICATION: Dated August 4, 2019

IV. HISTORY OF THE SITE

The 13.93 acre parcel was annexed into the city as part of a mass annexation effort in the Spring and Fall of 1997. The applicant is requesting to assign a RPUD zoning district to establish a new site plan and is requesting to assign a Future Land Use designation of Multi-Family Residential in order develop the property for 324 multi-family residential units.

V. STAFF ANALYSIS

A. Site and Area Characteristics

The subject property consists of two parcels totaling 13.93 acres in size, located West of S.E. Commerce Avenue, south of S.E. Indian Street and north of S.E. Fischer Street.

B. Project Description

A Master Site Plan has been laid out with 324 multi-family apartments within 9 three-story apartment buildings with retention ponds/bio-swales strategically placed to enhance the stormwater aspect of the project. The site includes a gated entry with generous landscaping that is the result of planting mitigation inches back onto the site.

C. Future Land Use Amendment and Comprehensive Plan Consistency Review

A review of the Comprehensive Plan finds that the proposed list of uses that are consistent with the proposed Multi Density Future Land Designation:

> *This land-use category is allows for two or more dwelling units per building. Includes single family detached, duplex/townhomes, apartments, condominiums, patio homes, garden homes, and adult living facilities, foster homes and zero-lot-line residences. Also public facilities, churches day care centers, schools and electric distribution substations are allowed.*

Section 11.01.05G.1 (large-Scale Comprehensive Plan Amendments) of the Land Development Code requires the Local Planning Agency to consider the following criteria prior to making an advisory recommendation to the City Commission:

The existing land use pattern;
The existing land use pattern surrounding the project area consists of commercial properties along SE Federal Highway. And, to the north, south and west of the property there are existing businesses for potential employment, as well as the large business park to the south will provide job opportunities for the residents.

The possible creation of an isolated land use classification unrelated to adjacent and nearby classifications;
No, the proposed residential community would not create an isolated land use classification. Although the residential community would be a separate land use to the surrounding commercial properties, the nearby businesses will provide grocery, dining and job opportunities for the residential project.

The population density pattern of the area and possible increase or overtaxing of the load on public facilities such as schools, utilities and streets;
No. The multifamily land use and the proposed project will rely on Martin County Utilities for services which have sufficient capacity to service the proposed project. The school capacity will be coordinated with the Martin County school board and concurrency will be reserved at the time of construction plan permitting for the AHS at Harbor Grove RPUD. The streets have adequate capacity.

The possible overloading of the City's sewage collection, treatment and disposal facilities;
The property will not connect to the City's sewage collection, treatment and disposal facilities. The property is within the Martin County Utilities service district.

The possible overloading of the City's drainage system;
All development on the site would be required to comply with applicable City of Stuart stormwater management requirements with review and permitting from the South Florida Water Management District.

The existing classification boundaries in relation to existing conditions on the subject property;
There are no issues in this regard.

The existence of changed or changing conditions which make the passage of the proposed amendment necessary or appropriate;
The City of Stuart has shown a trend toward development of residential uses and the need for housing to support the local workforce and young professionals.

The impact of the proposed amendment upon living conditions in the adjacent neighborhood;
The type and intensity of development that would be feasible on the subject property would not create an adverse impact to nearby neighborhoods.

The impact of the amendment upon the flow of light and air to adjacent areas; The type and intensity of development that would be feasible on the subject property would not create an adverse impact upon the flow of light and air to adjacent areas.

The impact of the proposed amendment upon property values in the adjacent area;
The change in land use designation from commercial to residential would likely result in an increase in property values in the adjacent area by allowing for a local customer base for the surrounding commercial properties.

The existence of other adequate sites in the City for the proposed land use classifications already permitting such use.
There are few vacant properties in this area of Stuart with a land use of multifamily to provide town home units to existing and future residents.

D. Rezoning and Land Development Code Consistency Review

The application has been reviewed for consistency with the City's LDC. Approval of the rezoning to RPUD would allow for attached housing to be constructed at the site.

E. Technical Review by Other Agencies

The City Building, Public Works, Fire, and Police Departments have reviewed the applications and have offered their comments. See attachment to this agenda item. Each department will provide specific comments at final site approval for permitting.

The applicant will be responsible to meet all federal, state and local permitting and environmental standards. Further, the applicant will also be required to demonstrate full compliance at all times.

VI. LOCAL PLANNING AGENCY BOARD RECOMMENDATION

The Local Planning Agency shall make an advisory recommendation to the City Commission as to the need and justification for the change and as to the relationship of the proposed change to the goals, objectives and policies of the Comprehensive Plan and of the Land Development Code. The Local Planning Agency shall include in its recommendation to the City Commission any information which it deems is relevant to issues relating to the proposed amendment.

VII. STAFF RECOMMENDATION (APPROVAL WITH CONDITIONS)

Staff has determined that the proposed future land use amendment to Multi-Family Density Residential and rezoning to RPUD is consistent with the goals, objectives and policies of the Comprehensive Plan and the regulations in the Land Development Code. Staff offers no objection to the requests.

Kimley»Horn

Memorandum

To: Tom Reetz, Senior Planner, City of Stuart
From: Tom Fucigna, Environmental Scientist
Date: Feb 27, 2020
Subject: AHS at Harbor Grove Land Use Amendment, Third Response

We have reviewed the additional application materials provided under a cover letter from Lucido & Associates dated Feb 5, 2020 for the referenced site and compared it to Kimley Horn's Second Response Memorandum dated December 19, 2019 and the requirements in Chapter V. Resource Protection Related to Development Standards. The following is a summary of our findings. The provided materials complete the requirements of Chapter V.

Section 5.02.00 **Environmental Assessment Report** – Complete. The applicant provided an updated Environmental Assessment Report (EA) prepared by EW Consultants, Inc. dated as revised January 2020. The revised EA includes reference to the U.S. Fish and Wildlife Service (USFWS) Endangered Species database and the Florida Department of Agriculture and Consumer Services list of state-designated plant species as having been reviewed. The revised EA includes a comprehensive description of observations conducted and likelihood of occurrence of listed wildlife and plant species.

The revised EA includes correspondence provided to the Florida Fish and Wildlife Conservation Commission and USFWS, documenting that a request for information was submitted to these agencies.

Section 5.03.00 **Wetlands** – Completed previously.

Section 5.04.00 **Environmentally Sensitive Lands** – Completed previously.

Section 5.05.00 **Tree location map and tree survey -** Completed previously.

Section 5.06.00 **Mangrove and Shoreline Protection** – Completed previously. N/A.

Section 5.07.00 **Floodplains and Flood Damage Prevention** – Completed previously.

Section 5.08.01 **Martin County Wellfield Protection Ordinance** – Complete. The applicant provided a letter dated December 13, 2019 and an attached map from Mathers Engineering Corporation, documenting that the project site is not in a wellfield protection zone.

Section 5.09.00 **Historic Preservation** – Complete. The applicant provided a Cultural Resource Assessment Survey report (CRAS) prepared by Environmental Services, Inc. and dated January 2020. The CRAS concluded that "no archaeological sites, isolated artifacts, or historic structure remains were

encountered within the project boundaries" and "recommended that the proposed project proceed without further concern for impacts to significant cultural resources."

Kimley»Horn

To: Tom Reetz
Senior Planner
City of Stuart Development Department

From: Nicholas J. Mora, P.E.
Kimley-Horn and Associates, Inc.

Alexander R. Memering, E.I.T.
Kimley-Horn and Associates, Inc.

Date: December 18, 2019

Re: **AHS at Harbor Grove – City of Stuart, Florida**
2nd Review of Traffic Impact Analysis

Kimley-Horn has reviewed the Traffic Impact Analysis (revised September 30, 2019) prepared by O'Rourke Engineering & Planning related to the above-mentioned project. The subject project is located generally west of Commerce Avenue, south of Indian Street in the City of Stuart, Florida. The proposed development consists of 324 apartments and access to the project will be provided via a full access connection to Commerce Avenue and one full access connection on Fischer Avenue for emergency or limited access.

Based on the analysis provided, the project has the potential to generate 1,764 net new daily trips, 108 net new AM peak hour trips (28 in / 80 out), and 137 net new PM peak hour trips (84 in / 53 out).

The analysis demonstrates that adjacent impacted roadways have sufficient capacity available to support the proposed project trips and no ingress turn lanes are warranted. However, ingress turn lanes (southbound right-turn lane, southbound left-turn lane, and northbound left-turn lane) will be provided at the full access connection on Commerce Avenue based on the attached site plan. We have no further comments for the applicant at this time.

Thank you for the opportunity to assist the City of Stuart in reviewing the noted project. Please contact us if you have any questions or need additional information.

Kimley»Horn

To: Tom Reetz
Senior Planner
City of Stuart Development Department

From: Kevin Roberson, P.E.
Kimley-Horn and Associates, Inc.

Date: December 12, 2019

Re: AHS at **Harbor Grove – Stuart, Florida**
RPUD Amendment Application and Large Scale Land Use Amendment Review - Engineering

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Dear Mr. Reetz,

Kimley-Horn has reviewed the re-submittal of the RPUD Amendment Application and the Large Scale Land Use Amendment Application and associated documents, dated November 26, 2019, prepared by Lucido and Associates for the proposed AHS at Harbor Grove development in Stuart, Florida. Please find below our review comments pertaining to the following items listed within the application:

The applicant has addressed all prior Engineering comments. We noticed the site plan layout has changed slightly but have no further comments.

Thank you for the opportunity to assist the City of Stuart in reviewing the noted project. Please contact us if you have any questions or need additional information.

Sincerely,

Kimley-Horn and Associates, Inc.

Kevin M. Roberson, P.E.
Vice President

Residential PUD

Project:	Harbor Grove RPUD
Date	3.19.2020

Adjacent N	Martin County commercial and Residential
Adjacent S	Martin County - Trailer Park - Natille Estates
Adjacent E	City of Stuart CPUD
Adjacent W	Martin County - Preserve
Total Floor Space (sq.ft)	**87,749 sq. ft. 2.01 acres bldg footprint tot.**

LDR Reference	Land Development Regulations	RPUD REVIEW STATUS
2.07.00 D.1	Land Use Designation	COMPLY
2.07.00 D.2 a	Uses	COMPLY
2.07.00 D.2 b	Compatible Residential Uses	COMPLY
2.07.00 D.2 c	Commercial (<30%)	NOT APPLICABLE
2.07.00.D.2.d	Commercial Uses (<30%) vertical	NOT APPLICABLE
2.07.00.D.3	Density	EXCEPTION REQUESTED
2.07.03 D.4.b	Open Space (>30%)	COMPLY
2.07.03 D.4.c	FAR	COMPLY
2.07.03.D.4.d	Native Vegetaion (>25%)	COMPLY

AREA, IMPERVIOUS SURFACE, SETBACK AND HEIGHT

2.04.03	Supplemental impervious surface	COMPLY
2.04.04	Supplemental setback requirements	COMPLY
2.04.05	Waterfront setbacks	NOT APPLICABLE
2.04.06	Certain street setbacks	COMPLY
2.04.07	Supplemental building height	COMPLY
2.06.00	Supplemental Use standards	NOT APPLICABLE

4.04.01	Traffic Concurrency	COMPLY
4.09.00	School Concurrency	TO BE REVIEWED

RESOURCE PROTECTION

5.02.00	Environmental Assessment	COMPLY
5.03.02	Wetland Protection	COMPLY
5.04.00	Evironmentally sensitive lands	COMPLY
5.04.03	Monitoring & Maintenance	REVIEWED AT SITE PLAN
5.05.01	Tree Survey	COMPLY
5.05.02	Tree removal	COMPLY

5.06.00	Mangrove & Shoreline	NOT APPLICABLE
5.07.00	Floodplain Management	COMPLY
Comp Plan	Comprehensive Plan	COMPLY

TRANSPORTATION

6.01.04	Sidewalks/bikeways	COMPLY
6.01.05	Bike Ped (LCD)	COMPLY
6.01.06	Access	COMPLY
6.01.07	Drive-through	NOT APPLICABLE
6.01.08	Vehicular Access	NOT APPLICABLE
6.01.09	Parking Code	EXCEPTION REQUESTED
6.01.18	Off-Street Loading	NOT APPLICABLE
6.01.19	PILOP	NOT APPLICABLE

STORMWATER

6.03.01	Generally	COMPLY
6.03.04	Management	COMPLY
6.03.08	Erosion	TO BE REVIEWED

LANDSCAPING

6.04.02	General Standards	COMPLY
6.04.02 A.1	Native Landscaping	COMPLY
6.06.02 A.2	Shade Trees Required	COMPLY
6.06.02 A.4	Banyan, Fiscus & Rubber Trees	NOT APPLICABLE
6.06.02 A.5	Proximity to power lines	COMPLY
6.06.02 A.6	Shrubs	COMPLY
6.06.02 A.7	Hedges	COMPLY
6.06.02 A.8	Vines	NOT APPLICABLE
6.06.02 A.9	Ground cover	COMPLY
6.06.02 A.10	Grass Area	COMPLY
6.06.02 B	Irrigation	REVIEWED AT SITE PLAN

LANDSCAPE DESIGN

6.04.03 A	Utility Lines (Existing and Proposed)	COMPLY
6.04.03 B.1	Landscaped Area >20%	COMPLY
6.04.03 B.2	Interior landscaping >50%	COMPLY
6.04.03 B.3	location of impervious	COMPLY
6.04.03 B.4	Mulch	COMPLY
6.04.03 B.5	Shoreline protection	NOT APPLICABLE
6.04.03 B.8	Visibility triangles	COMPLY

6.04.06	Land Use Transitions	EXCEPTION REQUESTED

LANDSCAPING - PARKING AREAS

6.04.07 A.1	Landscaped strip adjacent to street	COMPLY
6.04.07 A.2	Landscaped strip length linear feet	COMPLY
6.04.07 A.2a	Parking area adjacent to street	COMPLY
6.04.07 A.2b	Hedge/wall/berm on outside of strip	COMPLY
6.04.07 A.2c	Other Landscaping	COMPLY
6.06.07 A.2d	Grass	COMPLY
6.04.07 A.3	Shrubs/ground cover	COMPLY
6.04.07 B	parking screened from private propery	NOT APPLICABLE
6.04.07 B.1	Landscaped strip adjacent to private property	NOT APPLICABLE
6.04.07 B.2a	Parking area adjacent to private property	NOT APPLICABLE
6.04.07 B.2b	Hedge/wall/berm on outside of strip	NOT APPLICABLE
6.04.07 B.2c	Other Landscaping	NOT APPLICABLE
6.04.07 B.2d	Grass	NOT APPLICABLE
6.04.07 B.3	Shrubs/ground cover	NOT APPLICABLE
6.04.07 C.1	Parking Area (Major Dev't only)	COMPLY
6.04.07 C.2	Parking area rear and sides of building	COMPLY
6.04.07 C.3	Interior trees	COMPLY
6.04.07 C.4	Vechicle encroachment	COMPLY
6.04.07 C.5	Interior landscaped islands	COMPLY
6.04.07 C.6	Terminal landscaped islands	COMPLY
6.04.07 C.7	Interior landscaped medians	COMPLY
6.04.07 C.8	Interior shade trees	COMPLY
6.04.07 D	Visability triangles	REVIEWED AT SITE PLAN
6.04.08	Tree Requirements	COMPLY
6.04.10	Loading Storage	NOT APPLICABLE

COMMERCIAL DEVELOPMENT STANDARDS

6.05.02 B	Building Location	NOT APPLICABLE
6.05.02 C	Building Orientation	NOT APPLICABLE
6.05.02 D	Façade Design	NOT APPLICABLE
6.05.02 E	Massing	NOT APPLICABLE
6.05.02 F	Other Features	NOT APPLICABLE
6.05.02 G	Transitional Elevations	NOT APPLICABLE
6.05.03 B	Blank Wall Area	NOT APPLICABLE
6.05.03 C	Repeating Façade	NOT APPLICABLE
6.05.04	Additional Façade	NOT APPLICABLE

6.05.05	Roof Treatments	NOT APPLICABLE
6.05.06	Entryways and customer entrance	NOT APPLICABLE
6.05.07	Materials and Color	NOT APPLICABLE
6.06.00	Green Development	NOT APPLICABLE
6.07.00	Lighting	NOT APPLICABLE
6.08.00	Dumpster & Recycling	NOT APPLICABLE
6.09.05	Fences	NOT APPLICABLE
6.11.00	Signs	TO BE REVIEWED

HARBOR GROVE RPUD. COMPREHENSIVE PLAN REVIEW

FUTURE LAND USE ELEMENT

Objective A5. - Residential development.

Ensure land use compatibility by grouping complementary land use activities, including mixed-use land use developments in appropriate areas of the City. Work with the developers to integrate vehicular and pedestrian circulation systems, bike paths, parking, building location, and architectural design into a cohesive development.

Policy A5.1. The Future Land Use Element of the City's adopted Comprehensive Plan shall provide land for future residential use to promote a more compact development pattern. This shall include sufficient land suitable for the public utility facilities needed to support the projected level and pattern of development.

The proposed project is compact in form by being clustered on a site that was part of a previous planning agreement which consolidated the required native upland preservation areas in order to increase ecological functions as a basis to aggregate conservation areas in higher quality existing habitat and concurrently free up areas of lower ecological quality. There are sufficient public utilities in place to support this pattern of development and the associated impacts of the development.

Policy A5.2. Development on all vacant, un-platted areas designated as residential should be compatible with any surrounding existing homes.

There are no existing surrounding homes, although recent development approvals are proposing apartment buildings to the south. Overall, this proposal is considered to be compatible with the adjacent uses.

Policy A5.3. Wherever possible, medium density residential and recreation/open space areas should serve as buffers between higher and lower intensity residential uses to achieve an orderly land use transition.

The proposed project is of similar density (22du/ac) to recently approved project to the south.

Policy A5.5. The City shall market itself as a community for families.

The development forms part of an inventory that widens housing options for existing and new residents of the City.

Policy A5.6. The City shall maintain a height limitation of the greater of 45 feet or four stories of occupiable space for all buildings. The City shall require landscaping of all new

development and redevelopment to promote an aesthetic streetscape. The City shall require landscape buffers between single family residential and non-residential uses.

The proposal complies with the height limitation and incorporates substantial landscaping fronting the streetscape.

GOAL STATEMENT B

Minimize costs to current residents of growth, new development, and redevelopment, and encourage future land uses that maintain or enhance economical and efficient delivery of government utilities and services.

Objective B1. - Compact urban form. Discourage urban sprawl by facilitating urban redevelopment and infill development of properties and planning for urban infill and redevelopment of lands located within Stuart in order to achieve a compact urban form.

The proposal is considered to be a good example of a compact urban form of residential infill.

Objective B3. - Desirable pattern of land uses.

Promote and enhance a pattern of land uses that are compatible; that are convenient to City residents, businesses, and visitors; that avoid inappropriate or wasteful use of land; and that encourage efficient use of land, resources and facilities. Future land uses shall be designated to support the existing or planned community character, thereby prohibiting the development or expansion of uses which are inconsistent with the community's character. Reduce blighted areas through redevelopment. Land development and use regulations shall include provisions to ensure consistency with this Comprehensive Plan.

The proposal is considered to be a good use of vacant and underutilized land within the community characteristics of the City. The proposed development pattern set in part by previous development approvals avoids the inappropriate or wasteful use of land; and sets out an efficient use of land, resources and facilities.

Policy B3.2. All development shall be compatible with and complementary to surrounding land uses and shall not unduly affect existing approved activities

The proposed development, by reason of proposed use, density and buffers, is considered to be compatible with and complementary to surrounding activities.

Policy B1.4. Annexation and redevelopment strategies for infill development and redevelopment should be formulated to produce a future viable economy for the City.

The proposed development site is an infill development which adds to the local economy through the increased demand for commercial, entertainment and retail services/products by new residential occupiers. The housing units will increase the spectrum and variety of residential accommodation in the City, therefore adding to a balanced housing supply.

3.

CITY OF STUART, FLORIDA
AGENDA ITEM REQUEST
Local Planning Agency

Meeting Date:3/19/2020 **Prepared by:**Tom Reetz

Title of Item:
STUART OCEAN RPUD - FIRST READING (QUASI-JUDICIAL)(RC):

ORDINANCE No. 2435-2020: AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, TO APPPROVE A REZONING FROM R-3 MULTIFAMILY/OFFICE TO RESIDENTIAL PLANNED UNIT DEVELOPMENT "RPUD" ON THE CITY'S OFFICIAL ZONING MAP; FOR AN 11.04 ACRES PARCEL, OWNED BY SERRAGUI GROUP INVESTMENTS LLC, LOCATED ON THE SOUTH SIDE OF SE OCEAN BLVD BETWEEN THE POINTE ASSISTED LIVING FACILTY AND KINGSWOOD CONDO ASSOCIATION, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; ESTABLISHING STUART OCEAN TOWNHOMES RPUD CONSISTING OF EIGHTY (80) ATTACHED HOMES; APPROVING A MASTER SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

Summary Explanation/Background Information on Agenda Request:
Ordinance No. 2435-2020 Stuart Ocean Townhomes RPUD returns to the Local Planning Agency for the board's recommendation to the City Commission. On February 20, 2020, the LPA asked for the project to be tabled to tonight's regularly scheduled meeting. Since then, the applicant has resubmitted a revised Site Plan with "no parking" signage at each T-Turnaround, a seating area/bus waiting area near the shared entrance at SE Ocean Blvd, revised Landscaping Plans, revised Floor Plans, a revised School Capacity Analysis and revised Development Conditions.

The subject property is an approximately 11.04-acre vacant property located on SE Ocean A1A Blvd. in an urban area of on the eastern edge of jurisdictional limits of the City of Stuart. The Future Land Use Map (FLUM) designation of the property is Multifamily (MF) with a compatible zoning district designation of R-3 Residential - multi-family/office. The subject property had been part of the Kingswood Condominium community, built starting in 1970 through to 1995. The subject property includes the lands that remained vacant and unbuilt and now within separate ownership to the Kingswood Condo community. In a number of places, existing driveways and parking areas from the Kingswood community encroach onto the subject site.

The proposed project consist of eighty 80 townhomes housed in 14 buildings, with 3.11 acres of preserved/ enhanced native areas or 28% of the site. The six dry retention areas totaling 26,848 sq. ft. will be planted with native vegetation. In Parcel B, 17,285 sq. ft. of the 34,571 sq. ft. of offsite preserve areas are proposed to be credited to the RPUD. Additionally, a 40,485 sq. ft. wet pond / lake is accommodating the retention of existing parking areas which serve the established Kingswood Condo community and is also intended to satisfy the drainage requirements of the proposed townhome community.

The proposed site plan achieves the preservation by creating preserve areas and native landscape areas in order to meet the 25% code requirements. Upland buffers/littoral planting is accommodated and includes an extension of existing preserve areas. To compensate for the removed native trees additional numbers of larger than required native trees and various palm trees are proposed on the site as indicated on the submitted landscape plans. However, the required pine tree mitigation has been met on site but the hardwoods cannot be

reasonably accommodated on the site and so the applicant is proposing to contribute 50% of the required replacement inches which comes out to $111,125 to the City's Tree Fund. The $111,125 currently slated for contribution to the City's Tree fund will be due in full or in part unless substituted with the incorporation of innovative stormwater design currently not proposed.

The applicant proposes to preserve trees and native understory for much of the area along this common boundary and the nature trail. In addition, supplemental native trees and shrubs will be planted in less dense areas to 'fill out" the native habitat.

The subject site includes a driveway that runs through the parcel from the Kingswood entrance off East Ocean Boulevard and connects to the south and SE Kingswood Terrace. That driveway alignment will be slightly changed, and new asphalt constructed. Other existing driveways and parking areas which are part of the Kingswood communities will not be changed as well as existing trails and sidewalk connections.Within the proposed Stuart Ocean Townhomes project driveways have been designed to measure 30' as private access drives with 20' wide drive types. Established access and circulation roads connected with the Kingswood Cond community are intended to be maintained and effectively linked to the proposed subject property driveways and circulation provisions.

In addition to vehicular access, the site includes effective pedestrian circulation that will accommodate the new residents of the subject property while also maintaining and enhancing pedestrian connectivity within the established Kingswood Condo community. The creation of trails around the proposed detention area and connections to the existing trails in place and serving existing communities, will provide an enhanced level of pedestrian connectivity benefiting all of the residents within the area.

The developer has met with all three phases of the neighboring Kingswood Condo Association and have made progress toward a more cohesive project with design features including buffers that provided positive attributes benefitting both communities.

If approved, The developer is ready to follow through obtain necessary permits with state agencies and the City's Development Department. The applicant has coordinated final plans with City of Stuart Public Works for water/sewer improvements. City staff and professional consultants have reviewed the project and are satisfied with the applicant's response and revisions to the plans.

Funding Source:
N/A

Recommended Action:
Motion to recommend approval of Ordinance No. 2435-2020 for consideration by the City Commission.

ATTACHMENTS:

	Description	Upload Date	Type
	Staff Report - By Tom Reetz	3/6/2020	Staff Report
	Ordinance No. 2435-2020	3/6/2020	Ordinance add to Y drive
	Ordinance No 2435-2020 Exhibit D	3/6/2020	Ordinance add to Y drive
	Architectural Rendering	2/10/2020	Backup Material
	Project Narrative	2/10/2020	Backup Material
	Applicant's justification letter with revisions	2/10/2020	Backup Material
	Applicants response to second round of comments	2/10/2020	Backup Material

Traffic Analysis	2/10/2020	Backup Material
KHA final review	2/10/2020	Backup Material
Stormwater Report	2/10/2020	Backup Material
FWC and FS letters	2/10/2020	Backup Material
Staff Code Review	2/10/2020	Backup Material
Staff Comp Plan review	3/9/2020	Backup Material

CITY OF STUART
Local Planning Agency
March 19th, 2020

Project Name: Stuart-Ocean Townhomes RPUD	**Property Owner:** Serragui Group Investments, LLC
Project No.: Z19090005	**Applicant/Petitioner**: Pulte Home Company, LLC /HJA Design Studio
Ordinance No: 2435-2020	**Agent/Representative:** Michael Houston HJA Design Studio
	Case Planner: Tom Reetz
Location: Located on the south side of SE Ocean Blvd between The Pointe Assisted Living Facility and Kingswood Condo Association.	

PROJECT SUMMARY		
Property Size (area)		11.04 Acres
Present Use		Undeveloped
Subject Property Land Use		Multi-Family
Adjacent FLU	*North*	Martin County Medium Density
	South	Multifamily
	East	Multifamily
	West	Institutional
Subject Property Zoning		R3 Multifamily /Office
Adjacent Zoning	*North*	Martin County Multifamily
	South	R3 Multifamily/Office

	East	R3 Multifamily/Office
	West	R3 Multifamily/Office
Proposed Use		Attached homes (up to 7) – See Ordinance 2435-2020
City Approvals		Building Department – No comments at this time. Fire Department – See attached comments Public Works – See attached comments
Brief Explanation		The intent of this application is to rezone from R-3 to RPUD. The subject property is 11.04 acres. The property is currently undeveloped. The intent of this project is to allow 80 attached homes to be developed on the site while upgrading the drainage and enhancing the buffers and creating a lake with Littoral plantings and footpaths.
Staff Recommendation: Staff recommends approval for the land use and zoning change for 80 town-home units and master site plan approval.		

STAFF REPORT AND RECOMMENDATION

I. LEGAL NOTICE REQUIREMENTS

A. Requirements for Application – The applications to rezone to RPUD have been noticed in accordance with the requirements set forth in Sections 11.01.02, 11.01.09, and 11.02.00 of the Land Development Regulations.

B. Site Posting Date: 02-05-2020

C. Mail Notice Postmark: 02-05-2020 to property owners within 300 feet

D. Publication Date: 10 days prior to Second Reading

II. MAJOR AMENDMENT TO THE RPUD ORDINANCE NO. 2319-2019

III. APPLICATION: Dated September 20, 2020

IV. HISTORY OF THE SITE

The subject property is an approximately 11.04-acre vacant property located on SE Ocean A1A Blvd. in an urban area of on the eastern edge of jurisdictional limits of the City of Stuart. The Future Land Use Map (FLUM) designation of the property is Multifamily (MF) with a compatible zoning district designation of R-3 Residential - multi-family/office. The subject property had been part of the Kingswood Condominium community, built starting in 1970 through to 1995. The subject property includes the lands that remained vacant and unbuilt and now within separate ownership to the Kingswood Condo community. In a number of places, existing driveways and parking areas from the Kingswood community encroach onto the subject site.

V. STAFF ANALYSIS

Site and Area Characteristics

The site plan along with the townhomes in 14 buildings, depicts 3.11 acres of preserved / enhanced native areas or 28% of the site. The six dry retention areas totaling 26,848 sq. ft. will be planted with native vegetation. In Parcel B, 17,285 sq. ft. of the 34,571 sq. ft of offsite preserve areas are to be credited to the subject property proposal. Additionally, a 40,485 sq. ft. wet pond / lake is accommodating the retention of existing parking areas which serve the established Kingswood Condo community and is also intended to be utilized by the proposed Pulte Home Company, LLC townhome community.

The existing vegetation on the site has been surveyed and the proposed development respects the preservation of existing vegetation where applicable and possible while accommodating an infill proposal within an urban area of the City of Stuart. The proposed site plan achieves the preservation by creating preserve areas and native landscape areas.

to meet the 25% code requirements. Upland buffers/littoral planting is accommodated and includes an extension of existing preserve areas.

Project Description

This unique townhouse project is a request for a rezoning from R-3 to RPUD and a Major Development

Site Plan Application. The site is located on the south side of East Ocean Boulevard and adjacent on three sides to the multi- family Kingswood community. The Point at Ocean Boulevard senior community ACLF is to the west of the site. The property consists of three separate parcels all owned by the same owner. The subject parcel for the rezoning consists of the largest parcel which is 11.04 acres and includes 80 proposed townhomes on the north and a 1.09-acre stormwater lake, preserve areas and recreational trails on the south. Parcels B is 0.57 acres and is not included in the rezoning but is being used for preserve credits. No use is proposed for Parcel A. The proposed townhouse project will be 7.25 units per acre and will be owned in fee- simple ownership. All of the townhomes are two stories with three bedrooms and have one and two car garages with a tandem parking space in their driveway. The site plan reflects, however, that the end units only have one garage space but have space for two cars. Eleven on- street guest spaces are proposed which include spaces for the mail kiosk area. A nature trail that exists between Kingswood and the subject site will be preserved and extended.

The site's proposed native vegetation and upland preserve are made up of three separate areas. The on- site preserve is 1.83 acres. Parcel B will have an offsite preserve credit of 0.40 acres. In addition, created native vegetation areas consist of 0.88 acres of littoral zones in the storm water lake, dry retention areas and their perimeters will be planted with native vegetation. The total proposed native vegetation areas / preserve areas equals 3.11 acres or 28% of the site which exceeds the City's 25% requirement.

This project is a classic opportunity for well-planned and contextual in-fill development within this area of older apartment complexes. The subject site includes a driveway that runs through the parcel from the Kingswood entrance off East Ocean Boulevard and connects to the south and SE Kingswood Terrace. That driveway alignment will be slightly changed, and new asphalt constructed. Other existing driveways and parking areas which are part of the Kingswood communities will not be changed as well as existing trails and sidewalk connections.

The proposed project has been planned and designed to harmonize with the existing neighborhood while providing for much needed new townhome

concept not found in this part of the City. The applicant is excited about the opportunity of developing their first new community in the City of Stuart.

Future Land Use Amendment and Comprehensive Plan Consistency Review

A review of the Comprehensive Plan finds that the proposed list of uses that are consistent with the proposed Low-Density Future Land Designation:

This land-use category allows for one or two dwelling units per building. Includes single family detached, duplex/townhomes, patio homes, garden homes, and adult living facilities, foster homes and zero-lot-line residences. Also, public facilities, churches day care centers, schools and electric distribution substations are allowed.

Section 11.01.05G.1 (large-Scale Comprehensive Plan Amendments) of the Land Development Code requires the Local Planning Agency to consider the following criteria prior to making an advisory recommendation to the City Commission:

1. The existing land use pattern;

The subject property has a Future Land Use designation of Multi-family Residential, Per Section 2.01.03, Table 1, the zoning on the subject property is compatible with Residential Planned Unit Development (RPUD). A townhome development is a permitted use as either a single family or multi-family land use classification. The land use pattern will remain unchanged as part of this proposal with Multi-family Residential dominating this part of the eastern edge of the City of Stuart's jurisdictional area. Patterns of development are predominantly residential, with a number of condominium communities having been established and an independent living facility to the immediate west of the property. Existing properties range in height from 2 to 4 stories with the proposed Stuart Ocean townhome community including maximum heights of 2 stories as part of the development pattern and scale. The proposal is consistent with the future land use provisions and consistent with the City Land Development Code provisions regarding use as per Section 2.01.03.

2. The possible creation of an isolated land use classification unrelated to adjacent and nearby classifications;

Rezoning the property to the RPUD will not detract from the overriding Multi- family future land use designation policy protection measures associated with the property. The majority of the properties surrounding the site are zoned R-3, Liberal

Multiple Family zoning district designation which includes the townhomes as a permitted use consistent with the applicant's request. The RPUD zoning agreement affords the project the opportunity to attached conditions specific to expectations for development on the site, will ensure safeguards are in place to complement existing patterns of development. Some of those additional safeguards will also offer the necessary assurances to the established Kingswood Condo residents regarding preservation of existing trails and parking areas, open space and upland preservation area provisions which offer significant amenity to the proposed and existing communities.

3. The population density pattern of the area and possible increase or overtaxing of the load on public facilities such as schools, utilities and streets;

The proposal site is located on the edge of the urban fringe of the City of Stuart's jurisdiction where infrastructure is readily available and access to stores and businesses lie close to the property. As an urban infill site, the property is located within a well-established residential community with schools, utilities and existing streets to be utilized to accommodate the project all readily available. Utilizing the subject property offers an opportunity to add to the existing City population, strengthening support of the existing schools, commercial and community infrastructure within the City limits and achieves a sustainable and complimentary form of development.

4. The possible overloading of the City's sewage collection, treatment and disposal facilities;

As per the Engineer's report and analysis provided in support of the project, existing water and sewer provisions are readily available and impact fees will be paid to contribute towards the introduction and maintenance of the project. Adding residential provisions to this part of the City will also provide a growth in tax revenues to add to the overall maintenance and provision of public service provisions within the City of Stuart.

5. The existence of changed or changing conditions which make the passage of the proposed amendment necessary or appropriate;

Rezoning the property to RPUD is an acceptable zoning district designation for properties with a Multi-family land use designation. A zoning change is required on the property to RPUD to address certain elements of the City of Stuart Land Development Regulations which do not make the necessary provisions to allow for the design and siting of townhomes regarding minimum lot sizes and minimum lot widths and introducing a townhouse type dwelling. Right of way requirements afforded to a property ordinarily require a 20' to center line for a two-way traffic access road whereas a townhome development such as that proposed on the subject property can achieve reduced driveway widths while ensuring the safe travel through the proposed community.

6. The impact of the proposed amendment upon living conditions in the adjacent neighborhood;

The development of a vacant infill lot in an urban area of the City of Stuart will provide additional residential units in this area of the City. Benefits to the adjacent neighborhood include greater access to an improved and well-planned set of open space and upland preservation areas through an expansion and formulization of trails. Proposed buffer provisions, landscape improvements and the introduction of a townhome development is of a scale, use and layout complimentary to the long-established residential condominium communities.

7. The impact of the amendment upon the flow of light and air to adjacent areas;

The proposed townhome units have been placed in blocks ranging from 2 to 7 units throughout the site. None of the units are within proximity to any single family residential units. The proposed two-story height will not detract from established residential units ranging from 2 to 4 stories in height at the Kingswood Condo community.

8. The impact of the proposed amendment upon property values in the adjacent area;

Developing the property with the assurances and development parameters clearly established in the PUD will increase property values and add to the tax bases in both the City and County.

9. The impact of the proposed rezoning upon improvement or development of adjacent property in accordance with existing regulations:

The proposed rezone to RPUD provides additional assurances in the form of a PUD zoning agreement in addition to the parameters of development afforded to a property with an R-3 zoning district designation.

10. The existence of other adequate sites in the City for the proposed land use classifications already permitting such use.

An objective of the City of Stuart is to plan for a city with diverse and sustainable supply of a mixed housing provision. This project will increase those provisions available within the City of Stuart.

A. Technical Review by Other Agencies

The City Building, Public Works, Fire, and Police Departments have reviewed the applications and have offered their comments. Each department will provide specific comments at final site approval for permitting.

The applicant will be responsible to meet all federal, state and local permitting and environmental standards. Further, the applicant will also be required to demonstrate full compliance at all times.

VI. LOCAL PLANNING AGENCY BOARD RECOMMENDATION

The Local Planning Agency shall include in its recommendation to the City Commission any information which it deems is relevant to issues relating to the proposed amendment to the RPUD.

VII. STAFF RECOMMENDATION (APPROVAL WITH CONDITIONS)

Staff has determined that the proposed rezoning to RPUD is consistent with the goals, objectives and policies of the Comprehensive Plan and the regulations in the Land Development Code. Staff offers no objection to the requests.

BEFORE THE CITY COMMISSION

CITY OF STUART, FLORIDA

ORDINANCE NUMBER 2435-2020

* * * * *

AN ORDINANCE OF THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA, TO APPPROVE A REZONING FROM R-3 MULTIFAMILY/OFFICE TO RESIDENTIAL PLANNED UNIT DEVELOPMENT "RPUD" ON THE CITY'S OFFICIAL ZONING MAP; FOR AN 11.04 ACRES PARCEL, OWNED BY SERRAGUI GROUP INVESTMENTS LLC, LOCATED ON THE SOUTH SIDE OF SE OCEAN BLVD BETWEEN THE POINTE ASSISTED LIVING FACILTY AND KINGSWOOD CONDO ASSOCIATION, SAID LAND BEING MORE FULLY DESCRIBED IN EXHIBIT "A" ATTACHED; ESTABLISHING STUART OCEAN TOWNHOMES RPUD CONSISTING OF EIGHTY (80) ATTACHED HOMES; APPROVING A MASTER SITE PLAN; PROVIDING FOR DEVELOPMENT CONDITIONS AND A TIMETABLE FOR DEVELOPMENT, DECLARING THE PLAN TO BE CONSISTENT WITH THE CITY'S COMPREHENSIVE PLAN; PROVIDING DIRECTIONS TO THE CITY CLERK; PROVIDING FOR REPEAL OF ALL ORDINANCES IN CONFLICT; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE, AND FOR OTHER PURPOSES.

* * * * *

WHEREAS, the City Commission held a properly noticed hearing at a regularly scheduled City Commission to consider the application by HJA DESIGN STUDIO and PULTE

HOME COMPANY, LLC representing Serragui Group Investments, LLC (owner), for a 11.04 acre parcel of land located on the south side of S.E. Ocean Blvd abutting The Pointe Assisted Living Facility and Kingswood Condo Association; and

WHEREAS, the City of Stuart has determined the need to rezone said lands; and

WHEREAS, the City Commission, has considered the Petitioner's voluntary request for zoning designation, and has also considered the recommendation of the City staff.

WHEREAS, the Applicant has committed to the City that its development will comply with all development codes, plans, standards and conditions approved by the City Commission; and that it will bind its successors in title to any such commitments made upon approval of the RPUD; and

WHEREAS, at the hearing the applicant showed by substantial competent evidence that the application is consistent with the Stuart Comprehensive Plan, and the Land Development Code of the City, and with the procedural requirements of law; and

WHEREAS, the RPUD development will be in harmony with surrounding properties and their anticipated development;

WHEREAS, the foregoing recitals are true and adopted as findings of fact and conclusions of law.

WHEREAS, the property is legally described in **"Exhibit A"** of this ordinance. A map depicting the property is attached hereto as **Exhibit "B"** and made a part hereof by reference; and development conditions including a timetable for construction attached hereto as **Exhibit "C";**

NOW THEREFORE, BE IT ORDAINED BY THE CITY COMMISSION OF THE CITY OF STUART, FLORIDA THAT:

SECTION 1: The following new documents are on file as public records of the City, at the office of the City Clerk in City Hall, and attached hereto as **Exhibit "D"**, hereinafter the

"Development Documents", shall be deemed a part of the development conditions, and shall supplement any earlier approvals:

a. **Major Development Site Plan (RPUD), Sheet SP-1, Sheet SP-2 &Sheet SP-3 prepared by HJA Design Studio, dated 09.20.19, resubmitted on 3.05.20.**
b. **ALTA/NSPS Land Title Survey, Sheets 1 & 2 of 2, by Caulfield and Wheeler, Inc, dated 05.1.2019.**
c. **Existing Tree Survey / Removal Plan, Landscape Plan, and Landscape Specifications, Sheets LP-1, LP-2, LP-3, LP-4, LP-5, LP-6, prepared by HJA Design Studios, dated 09.06.19, and most recently submitted on 3-05-20.**
d. **Architectural Floor Plans & Elevations and rendering, prepared by Florida Zone, dated 03.5.20**
e. **Truck Route Plan, Sheets TR-1, TR-2 dated 09/20/2019, by Bowman Consulting, dated 09.20.19.**
f. **Site Lighting Photometric Plan, Sheets L-1 & L-2, by HJA Design Studio, dated, 09.18.19.**

SECTION 2: The Land Development (Zoning) District designation on the City of Stuart Official Zoning Map shall be established as "RPUD" Residential Planned Unit Development amended by this ordinance to allow for 80 attached townhome units.

SECTION 3: This ordinance becomes effective upon adoption.

SECTION 4: Except as otherwise provided herein, no development permits, site permits, or building permits shall be issued by the City except in compliance with the City's Land Development Code.

SECTION 5: All ordinances or parts of ordinances in conflict with this ordinance or any part thereof is hereby repealed to the extent of such conflict. If any provision of this ordinance

conflicts with any contractual provision between the City and the developer of the site, this ordinance shall prevail.

SECTION 6: If any provision of this ordinance or the application thereof to any person or circumstance is held invalid, the invalidity shall not affect other provisions or applications which can be given effect without the invalid provision or application, and to this end the provisions of this ordinance are declared severable.

SECTION 7: This ordinance shall be effective upon the following to occur: adoption by the City Commission, and proper execution and acceptance by the Owner.

SECTION 8: The complete execution and recording of this Ordinance by the City Clerk shall occur no later than 60 days from the date of this approval, failing which this ordinance shall be void.

SECTION 9: Upon complete execution of this Ordinance, including the Acceptance and Agreement by the Owner, the City Clerk is directed to record a Certified Copy of the same in the Public Records of Martin County, Florida.

Passed on first reading the 9th day of February 2020.

Commissioner _____ offered the foregoing Ordinance and moved its adoption. The motion was seconded by Commissioner _____ and upon being put to a roll call vote, the vote was as follows:

	YES	NO	ABSENT	ABSTAIN
MICHAEL J. MEIER, MAYOR				
EULA R. CLARKE, VICE MAYOR				
BECKY BRUNER, COMMISSIONER				
KELLI GLASS LEIGHTON, COMMISSIONER				
MERRITT MATHESON, COMMISSIONER				

ADOPTED on second and final reading this _____day of _____, 2020.

ATTEST:

_____ _____

MARY R. KINDEL MICHAEL J. MEIER

CITY CLERK MAYOR

APPROVED AS TO FORM
AND CORRECTNESS:

_____

MICHAEL J. MORTELL
CITY ATTORNEY

ACCEPTANCE AND AGREEMENT

BY SIGNING THIS ACCEPTANCE AND AGREEMENT, THE UNDERSIGNED HEREBY ACCEPTS AND AGREES TO ALL OF THE TERMS AND CONDITIONS CONTAINED IN A RESIDENTIAL PLANNED UNIT DEVELOPMENT AND IN ALL EXHIBITS, ATTACHMENTS AND DEVELOPMENT DOCUMENTS, INTENDING TO BE BOUND THEREBY, AND THAT SUCH ACCEPTANCE AND AGREEMENT IS DONE FREELY, KNOWINGLY, AND WITHOUT ANY RESERVATION, AND FOR THE PURPOSES EXPRESSED WITHIN THE ABOVE ORDINANCE. IF IT IS LATER DISCOVERED THAT THE UNDERSIGNED, OR ITS SUCCESSORS OR ASSIGNS HAVE FAILED IN ANY MATERIAL WAY TO DEVELOP THIS RESIDENTIAL PLANNED UNIT DEVELOPMENT ACCORDING TO THIS ORDINANCE, ITS CONDITIONS, AND THE DEVELOPMENT PLANS AND DOCUMENTS, THE UNDERSIGNED UNDERSTANDS AND AGREES THAT THIS ORDINANCE MAY BE AMENDED OR REPEALED BY THE CITY COMMISSION, AND THAT OTHER ACTIONS MAY BE TAKEN AGAINST THE UNDERSIGNED BY THE CITY, INCLUDING BUT NOT LIMITED TO CODE ENFORCEMENT ACTIONS, PERMIT AND LICENSING REVOCATIONS, AND ALL APPLICABLE CIVIL AND CRIMINAL ACTIONS.

IN WITNESS WHEREOF THE UNDERSIGNED HAS EXECUTED THIS ACCEPTANCE AND AGREEMENT:

WITNESSES:

Serragui Group Investments, LLC,

_____

By: _____

Print Name: _____

Mauricio Chico – Managing Member

_____

Print Name: _____

OWNERS ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____ day of _____, 2020, by Mauricio Chico – Managing Member of Serragui Group Investments, LLC, _____

Notary Public, State of Florida
My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____
Type of Identification Produced _____

CITY'S ACKNOWLEDGMENT

The above Ordinance, Acceptance and Agreement was acknowledged before me this _____day of _____, 2020, by MICHAEL J. MEIER, MAYOR , and Mary R. Kindel, City Clerk, respectively, of the City of Stuart, Florida, a Florida municipal corporation.

_____
Notary Public, State of Florida
My Commission Expires:

Notary Seal

Personally Known _____ OR Produced Identification _____
Type of Identification Produced _____

EXHIBIT A – LEGAL DESCRIPTION - Stuart Ocean Townhomes

PARCEL 1:

The Northeast 1/4 of the Southwest 1/4 of Section 2, Township 38 South, Range 41 East, Martin County, Florida, lying South of the right-of-way for State Road A-1-A.

Less and Except the Westerly 250.00 feet thereof.

Also, Less and Except Buildings 1 through 21, inclusive, Buildings 33 through 43, inclusive, Buildings 53 through 59, inclusive, Recreation Areas 1, 2 and 3, and Sewer Pump Stations 1 and 2, Kingswood Condominium Apartment Buildings, according to the Declarations of Condominium thereof, recorded in Official Records Book 325, Page 1560, Official Records Book 332, Page 2706, Official Records Book 344, Page 1409, Official Records Book 359, Page 1191, Official Records Book 360, Page 546, Official Records Book 366, Page 1974, Official Records Book 366, Page 2065, Official Records Book 367, Page 2659, Official Records Book 369, Page 1771, Official Records Book 391, Page 1877, Official Records Book 392, Page 1887, Official Records Book 393, Page 1094, Official Records Book 399, Page 1214, Official Records Book 406, Page 504, Official Records Book 406, Page 593, Official Records Book 411, Page 2331 and Official Records Book 426, Page 696, and any amendments thereto, of the Public Records of Martin County, Florida.

The above described parcel being more particularly described as follows:

From the Southwest corner of the Northeast 1/4 of the Southwest 1/4 of said Section 2, bear South 89°45'22" East, along the South line of said Northeast 1/4, a distance of 250.00 feet; thence North 00°17'50" East a distance of 238.48 feet to the Point of Beginning; thence continue North 00°17'50" East a distance of 612.25 to a point on the South right-of-way line of State Road A-1-A, said point being a curve concave to the North, having a radius of 3,324.14 feet, whose center bears North 07°54'58" West, having a chord bearing and distance of North 78°31'28" East 412.75 feet; thence Easterly, along the arc of said curve through a central angle of 07°07'08", a distance of 413.02 feet to the Northwest corner of Building 54, Kingswood Condominium, as recorded in Official Records Book 411, Page 2331, Public Records of Martin County, Florida; thence the following courses along said Kingswood Condominium, South 15°02'31" East a distance of 120.00 feet; thence South 00°07'11" West a distance of 93.35 feet; thence North 89°52'49" West a distance of 20.00 feet; thence South 00°07'11" West a distance of 20.00 feet; thence South 89°52'49" East a distance of 20.00 feet; thence South 00°07'11" West a distance of 216.06 feet; thence South 33°09'58" West a distance of 51.55 feet; thence South 00°07'11" West a distance of 220.00 feet; thence continue South 00°07'11" West a distance of 224.85 feet to a point on the South line of the Northeast 1/4 of the Southwest 1/4 of said Section 2; thence North 89°45'22" West, along said South line, a distance of 261.44 feet; thence North 00°07'21" East a distance of 95.00 feet; thence North 45°47'29" West a distance of 206.67 feet to the Point of Beginning.

TOGETHER WITH:

Parcel A:

A parcel of land lying in Section 2, Township 38 South, Range 41 East, Martin County, Florida, said parcel being more particularly described as follows:

Commence at the Southwest corner of aforesaid Section 2, thence bear South 89°32'19" East, along the South line of said Section 2, a distance of 1,333.00 feet to a point on the Westerly line of the Southeast 1/4 of the Southwest 1/4 of said Section 2; thence North 00°21'51" East, along said Westerly line, a distance of 665.00 feet to a point on the South line of the North 1/2 of the Southeast 1/4 of the Southwest 1/4 of said Section 2 and the Point of Beginning of the herein described parcel of land; thence continue North 00°21'51" East, along said Westerly line, a

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distance of 223.11 feet to a point on the South line of Kingswood Condominium, Phase Three, Apartment Building No. 127 Parcel, as recorded in Official Records Book 637, Page 1736, Public Records of Martin County, Florida; thence the following courses, along the South line of Building No. 127 Parcel, South 89°44'25" East a distance of 81.08 feet; thence North 86°04'20" East a distance of 157.10 feet to the Southwest corner of Kingswood Condominium, Phase Three, Apartment Building No. 129 Parcel, as recorded in Official Records Book 597, Page 389, Public Records of Martin County, Florida; thence North 80°22'19" East, along the South line of said Building No. 129 Parcel, a distance of 118.87 feet to a point on West line of the drainage area conveyed to Kingswood Association No. 3, Inc., a Florida not for profit corporation, as recorded in Official Records Book 476, Page 2524, Public Records of Martin County, Florida; thence the following courses along said drainage area, South 09°37'41" East a distance of 18.13 feet; thence South 84°37'41" East a distance of 15.97 feet to the Northwest corner of Kingswood Condominium, Phase Three, Apartment Building No. 121 Parcel, as recorded in Official Records Book 729, Page 317, Public Records of Martin County, Florida; thence South 02°32'41" East, along the West line of said Building No. 121 Parcel, a distance of 107.60 feet to a point on the North line of Kingswood Condominium, Phase Three, Apartment No. 124 Parcel, as recorded in Official Records Book 739, Page 537, Public Records of Martin County, Florida; thence South 84°58'52" West, along the North line of said Building No. 124 Parcel, and the North line of Kingswood Condominium, Phase Three, Apartment No. 126 Parcel, as recorded in Official Records Book 719, Page 2289, Public Records of Martin County, Florida, a distance of 147.38 feet; thence South 85°01'04" West a distance of 27.38 feet to the Northeast Corner of Kingswood Condominium, Phase Three, Apartment Building No. 128 Parcel; thence North 89°32'40" West, along the North line of said parcel, a distance of 145.35 feet; thence South 00°21'51" West, along the West line of said Building No. 128 Parcel, a distance of 112.67 feet to a point on the South line of the North 1/2 of the Southeast 1/4 of the Southwest 1/4 of said Section 2; thence North 89°31'49" West, along said South line, a distance of 60.00 feet to the Point of Beginning.

Parcel B:

A parcel of land lying in Section 2, Township 38 South, Range 41 East, Martin County, Florida, said parcel being more particularly described as follows:

Commence at the Southwest corner of said Section 2, thence bear South 89°32'19" East, along the South line of said Section 2, a distance of 1,333.00 feet to a point on the West line of the Southeast 1/4 of the Southwest 1/4 of said Section 2; thence North 00°21'51" East, along said West line, a distance of 665.00 feet to a point on the South line of the North 1/2 of the Southeast 1/4 of the Southwest 1/4 of said Section 2; thence South 89°31'49" East, along said South line, a distance of 909.51 feet to the Southeast corner of Kingswood Condominium Apartment Building No. 118 Parcel, as recorded in Official Records Book 790, Page 985, Public Records of Martin County, Florida, and the Point of Beginning of the herein described parcel of land; thence proceed North 02°40'00" West, along the Easterly line of said Building No. 118 Parcel, a distance of 127.86 feet to a point on the South line of Kingswood Apartment Building No. 115 Parcel, as recorded in Official Records Book 790, Page 938, Public Records of Martin County, Florida; thence the following courses along said parcel, North 85°41'06" East, a distance of 78.68 feet; thence North 00°00'00" East a distance of 90.73 feet to a point on the South line of the drainage area conveyed to Kingswood Association No. 3, Inc., a Florida not for profit corporation, recorded in Official Records Book 476, Page 2524, Public Records of Martin County, Florida; thence the following courses along said drainage area, South 74°37'41" East a distance of 13.88 feet; thence South 84°37'41" East a distance of 98.97 feet; thence North 10°22'19" East a distance of 208.26 feet to a point on the West line of the 44 foot parcel added to Kingswood Condominium Building No. 109 Parcel, as recorded in Official Records Book 1117, Page 281, Public Records of Martin County, Florida; thence South 00°40'15" West, along said West line, a distance of 84.86 feet to the Northwesterly corner of

EXHIBIT B – LOCATION MAP

Stuart Ocean Townhomes

Acrial Map
City of Stuart

Prepared by:

HJA DESIGN STUDIO

North

Project # : 19005

EXHIBIT C – DEVELOPMENT CONDITIONS

Approved Plans and Documents

1. The Stuart Ocean Townhomes RPUD project and use thereof shall comply with the following drawings:

    a. **Major Development Site Plan (RPUD), Sheet SP-1, Sheet SP-2 &Sheet SP-3 prepared by HJA Design Studio, dated 09.20.19, resubmitted on 3.05.20.**
    b. **ALTA/NSPS Land Title Survey, Sheets 1 & 2 of 2, by Caulfield and Wheeler, Inc, dated 05.1.2019.**
    c. **Existing Tree Survey / Removal Plan, Landscape Plan, and Landscape Specifications, Sheets LP-1, LP-2, LP-3, LP-4, LP-5, LP-6, prepared by HJA Design Studios, dated 09.06.19, and most recently submitted on 3-05-20.**
    d. **Architectural Floor Plans & Elevations and rendering, prepared by Florida Zone, dated 03.5.20**
    e. **Truck Route Plan, Sheets TR-1, TR-2 dated 09/20/2019, by Bowman Consulting, dated 09.20.19.**
    f. **Site Lighting Photometric Plan, Sheets L-1 & L-2, by HJA Design Studio, dated, 09.18.19.**

2. Any modifications to the Master RPUD Site Plan that does not exceed 10% of the approved building footprint, building setbacks, gross square footage, building location, parking size, location and number of parking, drainage areas, and location of landscaping may be approved by the City's Development Director, provided however, the Development Director may refer the matter to the City Commission for approval via a public hearing.

3. Development of the Subject Property as a RPUD shall include an impervious area of not more than 250,002 sf or 5.74 acres (52% of the site) within the RPUD. The maximum

building height within the RPUD shall be 2 stories or 30 feet. Height shall be measured from the lowest permissible finished first floor elevation to the surface of a flat roof or to the eave of a pitched roof. The peak of a pitched roof may not exceed 15 feet above the maximum building height.

4. The developer shall post a sign at the mailboxes located along perpendicular stalls reserving two (2) parking spaces specifically for mail delivery and pick-up only.

Landscaping

5. The common areas shall be provided with landscaping with an irrigation system of enough capacity to maintain the landscaping in a healthy growing condition.

6. The City's landscape inspector shall have the opportunity to inspect all trees and/or landscape material with the landscape architect prior to installation. The developer shall bear the pass-thru fee for landscape consulting fees not to exceed $1,500.00.

7. A Landscape maintenance agreement, executed in accordance with Section 6.04.04.A.2. of the Land Development Regulations, shall be submitted to the Development Department and approved prior to the issuance of a certificate of occupancy.

Required Pervious and Native Preserve Area

8. Not less than 28.0% (3.11 acres) of the RPUD shall be Native Preserve that may include landscaped buffer and a .40 acre offsite preservation credit (Parcel B) areas as depicted on the Master Site Plan by HJA Design Studios as described in Exhibit C.

Tree Mitigation

9. The project shall comply with Section 5.05.02 of the City's Land Development Code regarding Tree Replacement and Protection requirements including extending the use of

the City's Tree Replacement fund to include potential use of the fund for innovative stormwater treatment and living shoreline projects. The $111,125 currently slated for contribution to the City's Tree fund will be due in full or in part unless substituted with the incorporation of innovative stormwater design.

Prior to Issuance of Site Permits

10. Applicant shall provide a digital boundary survey and civil plan prior to the issuance of a site permit.

11. Civil Plans shall be reviewed and approved by all applicable City departments prior to the issuance of a site permit.

12. All regulatory agency permits, including but not limited to the South Florida Water Management District and Army Corp of Engineers, shall be obtained by the applicant and copies provided to the City prior to the first certificate of occupancy.

Development and Construction

13. The Developer shall construct the project's infrastructure in one phase. The last building's townhouse unit shall obtain a certificate of occupancy by December 30, 2024.

14. Prior to the first certificate of occupancy the developer shall obtain FDOT approval for the access at the project's entry along SE Ocean Boulevard. The Developer shall install landscaping at the development's SE Ocean Boulevard entry as shown on the landscaping plan prior to the first certificate of occupancy for a residential unit.

15. Eradication of all invasive vegetation shall be completed by the developer, and inspected by the City, Prior to the issuance of the first building permit. This condition, however, shall not apply to any building permits issued for any models.

16. The property owner shall provide easements for licensed cable services, if required by service provider. Preserve area easements shall be dedicated to the City of Stuart prior to the first certificate of occupancy.

17. The developer shall obtain an easement from the Kingswood Condo Association for the access egress over the remaining existing roadway at the project's entry along SE Ocean Blvd.

18. The Developer shall install landscaping development's entry as shown on the landscaping plan prior to the first certificate of occupancy for a residential unit.

19. The developer shall eradicate all invasive vegetation for the entire site to be completed and inspected prior the first building permit being issued.

20. The property owner shall provide easements for licensed cable services. Preserve area easements shall be dedicated to state agencies with the City of Stuart having the option to have those same easements.

21. Water Services shall be provided by the City of Stuart with the site water supply taking place at/from the City of Stuart owned infrastructure and within the SE Ocean Blvd. R.O.W. with applicable backflow.

22. In the event of any conflict in the provisions of Exhibit 'C' Development Conditions and attached exhibits, Exhibit 'C' shall prevail.

23. Prior to certificate of occupancy of the last building, the applicant shall provide an engineer's written confirmation attesting that the RPUD's storm water system is in place and functioning in compliance with all approved plans and specifications.

24. Erosion and dust control measures to be implemented during construction shall be provided on the civil plans and submitted during site permit review. Water trucks shall be provided by the applicant as necessary during construction in order to reduce dust generated on-site.

25. All utility improvements constructed by the developer within DOT's right-of-way, shall be constructed in a manner and form acceptable to the DOT.

26. The project's Native Planting schemes at the lake will be designed using Low Impact Development "(LID) Techniques as described in the University of Florida IFSA Extension publication LID Practices: Integration Wetlands and Enhancing Storm water Basins".

27. Temporary or freestanding storage units are prohibited on the property once construction is complete.

28. A lighting plan shall be included on the Landscape plan for the community's common areas including any street lighting at permitting. All lights at the common areas shall be limited to 20 feet in height and shielded from neighboring property.

29. Site work including but not limited to land preparation, wet pond lake excavation, clearing and grading, drainage and water, irrigation lines, shall be reviewed approved by the City's Public Works department and the city's engineering consultant prior to permitting.

30. The developer shall make provision for the modification of the road system abutting the Kingwood pool area(s) shall be phased to maintain access to the pool area by residents.

Signage

31. All signs throughout the PUD must have a consistent treatment, as to number, location, size, height, lighting, and materials with a unified theme throughout the Planned Unit Development. The development's monument sign shall adhere to the conceptual Monument Sign on sheet SP-2 by HJA Design Studio.

Platting- HOA Requirements & Future Amendments

32. Plat approval per Section 11.01.05 of the City Land Development Code, shall occur prior to the issuance of the first building permit.

33. Prior to application for any development, the applicant/developer shall form a HOA (Homeowners Association) or other similar entity acceptable to the City Attorney, which shall be singularly responsible for the perpetual maintenance of the common site features and include restrictions regarding boats, boat trailers, sheds, etc.

34. City of Stuart waste receptacles, including recycle shall be stored in garages only. The developments HOA shall be responsible for enforcing this waste receptable policy. The property-owners association shall pay for initial bins (one trash bin and one recycle bin) for each unit for a total of 80 trash bins and 80 recycle bins at the time of permitting. The City will provide a single bill to the POA for trash pick-up.

35. There shall be no on street parking on trash/recycle collection days. The developer and home-owners association shall request and consent to law enforcement entry to property and enforcement of state and city laws to include traffic enforcement. Additionally, the City of Stuart Police Department shall have authority to enforce city laws and all conditions of development of Ordinance 2435-2020.

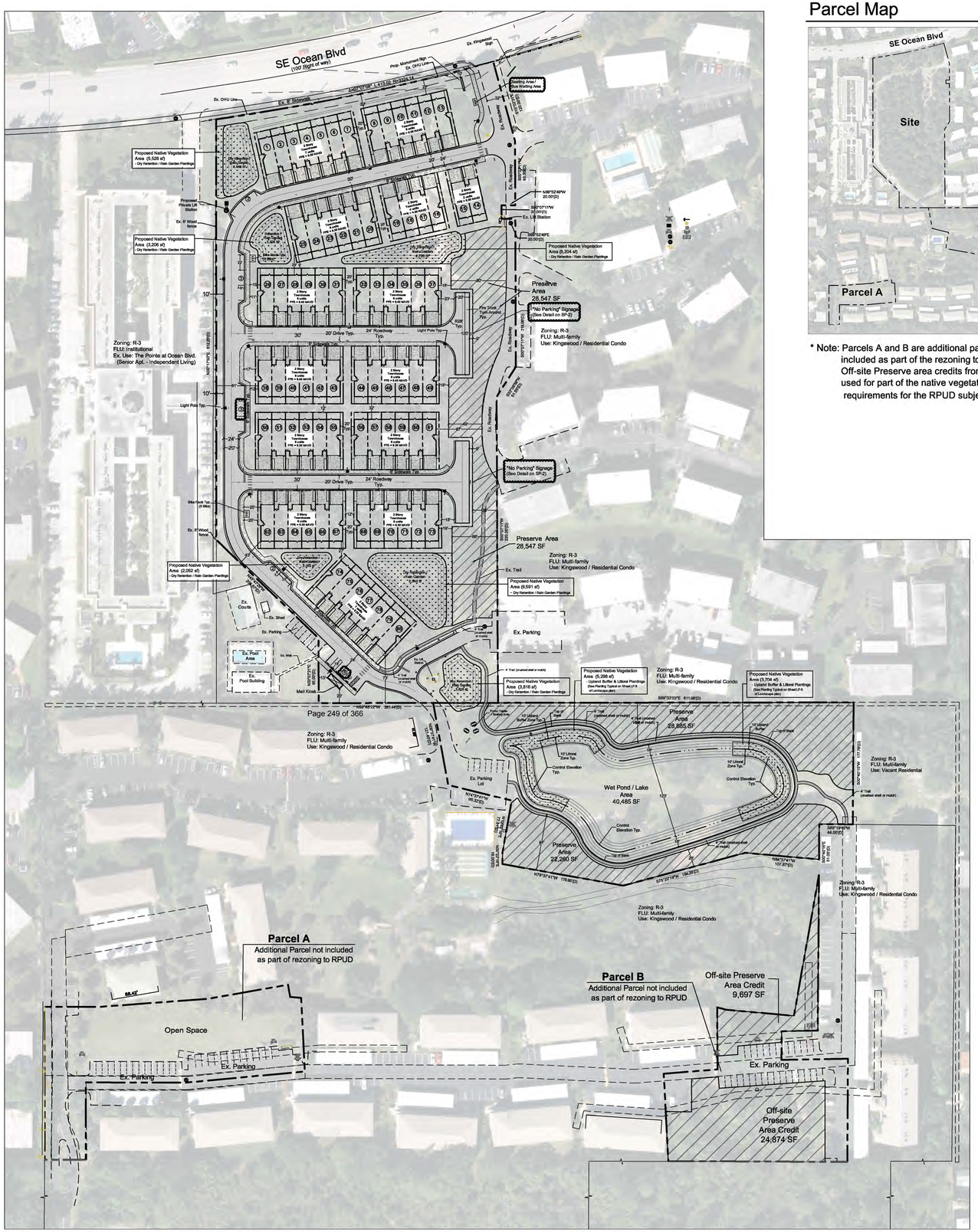
36. No yard waste shall be placed in the street.

37. All new fences shall be maintained by the Stuart Ocean Townhomes Home-Owners Association.

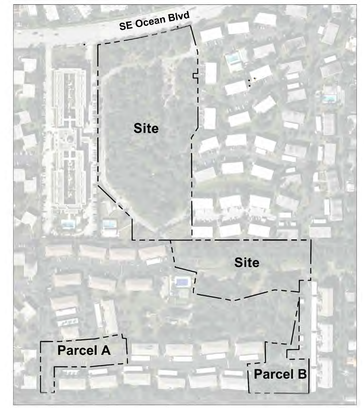
38. Any applications to amend this Ordinance shall be limited to the developer or the Home-Owners Association.

39. The Home-Owner's Association shall regulate any permits for guest parking.

40. If permitted by the Florida Department of Transportation, the developer shall provide a temporary construction entrance.



Parcel Map



* Note: Parcels A and B are additional parcels and are not included as part of the rezoning to RPUD.
Off-site Preserve area credits from Parcel B shall be used for part of the native vegetation / preserve area requirements for the RPUD subject property.

Location Map

Site Data

Total Site Area	11.04 Ac. / 481,103 sf
Future Land Use	Multi-family Residential
Existing Zoning	R-3
Proposed Zoning	RPUD
Proposed Use	2-Story / Single Family Townhomes
Proposed Dwelling Units	80

Density

Maximum Density - 30 DU/Ac. (11.04 Ac. x 30)	331 Max. Units
Proposed Density	80 Units
Proposed Gross Site Density	7.25 DU / Ac.

Impervious Area

Building Coverage	83,230 sf	1.91 Ac.	17%
Existing & Proposed Vehicular Use Areas	67,824 sf	1.56 Ac.	14%
Sidewalks / Paved Areas / Rear Patios	58,463 sf	1.34 Ac.	12%
Wet Pond / Lake	40,485 sf	0.93 Ac.	9%
Total:	250,002 sf	5.74 Ac.	52%

Pervious Area / Open Space

Dry Detention Areas	26,848 sf	0.62 Ac.	6%
Native Preserve Areas (On-site)	79,692 sf	1.83 Ac.	16%
Other Landscape / Open Space	124,561 sf	2.85 Ac.	26%
Total:	231,101 sf	5.30 Ac.	48%

Native Vegetation Area / Upland Preserve Data

Required Native Vegetation Area:	(481,103 sf x 25%)	120,275 sf / 2.76 Ac. / 25%
Provided Native Vegetation Area:		135,374 sf / 3.11 Ac. / 28%
Native Upland Preserve Areas		79,692 sf / 1.83 Ac.
Parcel B - Offsite Preserve Area Credit	(34,571 sf x 50% Credit)	17,285 sf / 0.40 Ac.
Proposed Native Vegetation Area		38,397 sf / 0.88 Ac.

Parking Data

Required Parking Spaces: (2 spaces per unit w/ 2 or more bedrooms)	160 Spaces
Provided Parking Spaces:	203 Spaces
One Car Garages (80 D.U.)	80 Spaces
One Car Driveways (53 D.U.)	53 Spaces
Two Car Driveways (27 D.U.)	54 Spaces
On-Street Parking (5 - 9' x 18 + 1 Handicap + 10 Parallel)	16 Spaces

Required Minimum Building Setbacks

Front Setback (From SE Ocean Blvd / North Property):	25 ft
Side Setback (From East And West Property Line):	15 ft (10 ft for Mail Kiosk)
Rear Setback (From South Property Line):	20 ft (10 ft for Mail Kiosk)

Lot Building Setbacks

Front Setback :	20 ft
Side Setback (Exterior Units):	4 ft
Side Setback (interior Units):	0 ft
Rear Setback :	10 ft
Building Separtion :	20 ft

Legend

Ex. Preserve Area

Proposed Native Vegetation Area

Site Lighting / Light Pole Typ.

Scale: 1" = 80'

0' 40' 80' 160' 240'

North

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Stuart Ocean Townhomes

City of Stuart
Major Development Site Plan (RPUD)
Florida

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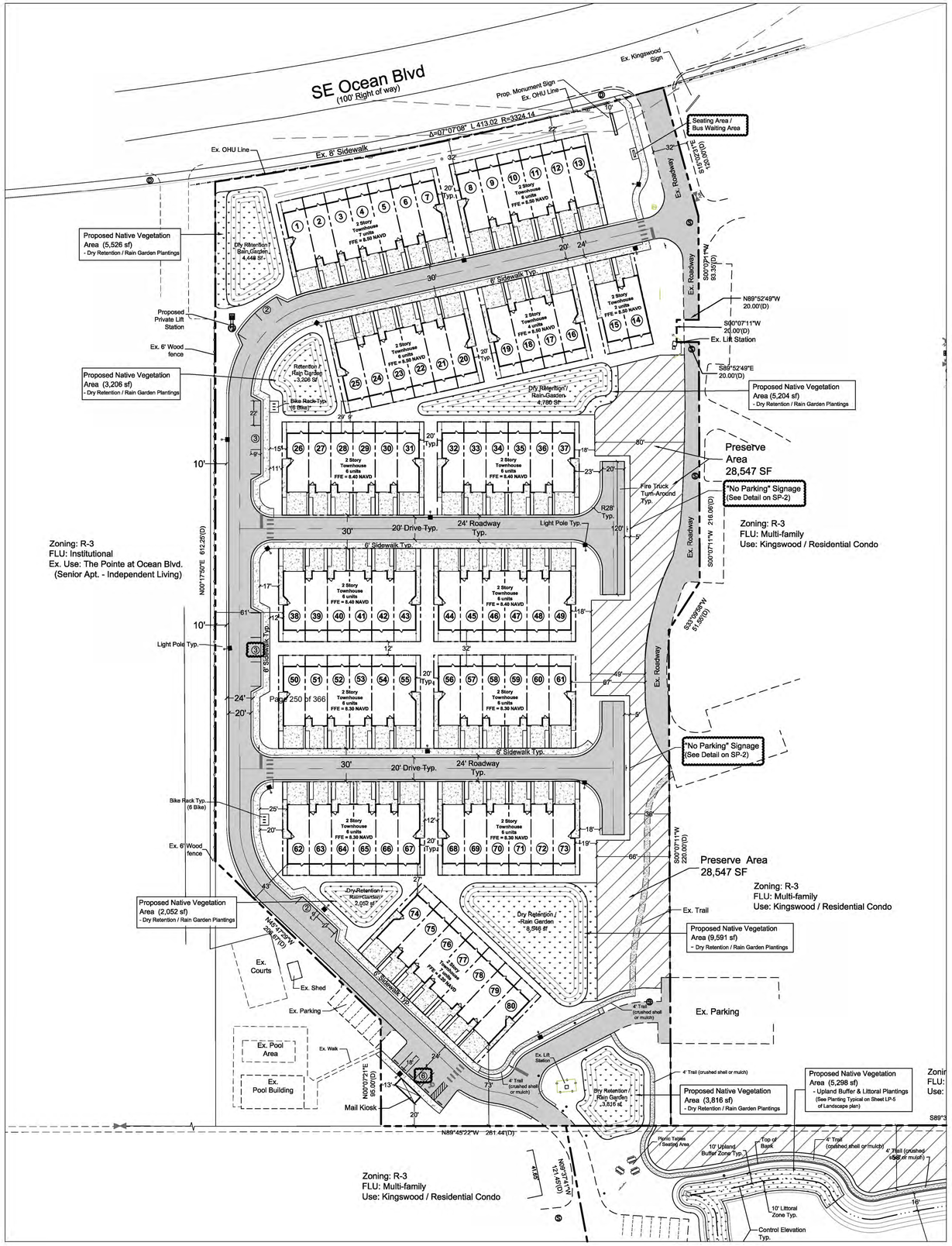
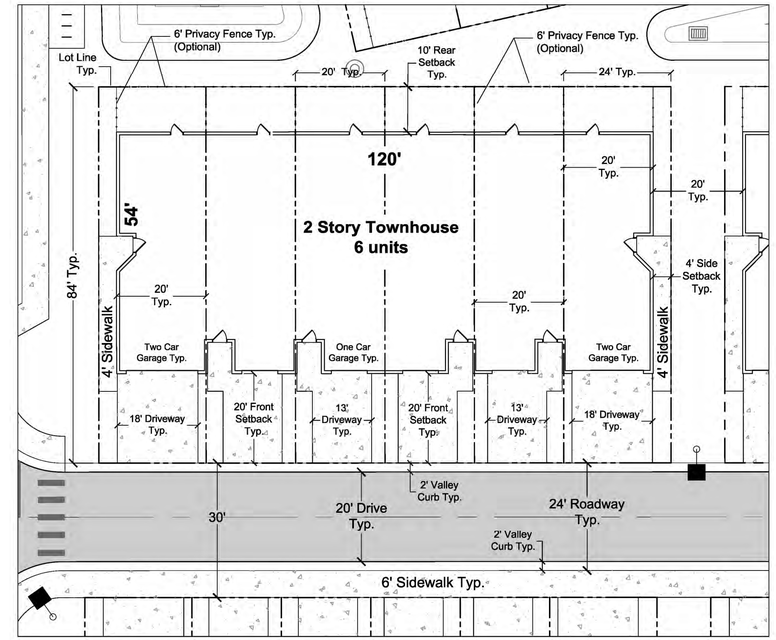
Job No.	19005
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	9-20-19
	12-05-19
Revision Dates	3-02-20

SP-1



Townhouse & Lot Typical

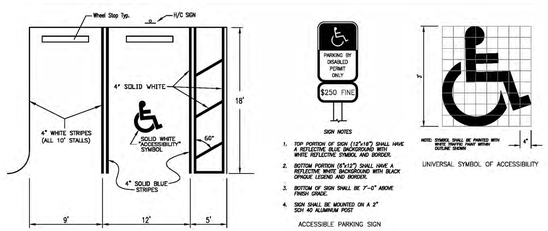


Lot Building Setbacks

Front Setback :	20 ft
Side Setback (Exterior Units):	4 ft
Side Setback (interior Units):	0 ft
Rear Setback :	10 ft
Building Separtion :	20 ft

Parking Space Detail

Scale: N.T.S.

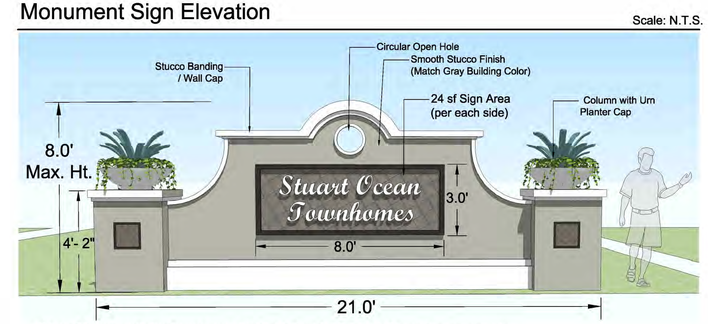


No Parking Sign Detail

Scale: N.T.S.

Monument Sign Elevation

Scale: N.T.S.



*Note: Monument Sign is conceptual. Final sign design and dimensions may vary.

Scale: 1" = 50'

0' 25' 50' 100' 150'

North

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Stuart Ocean Townhomes

City of Stuart Florida
Major Development Site Plan (RPUD)

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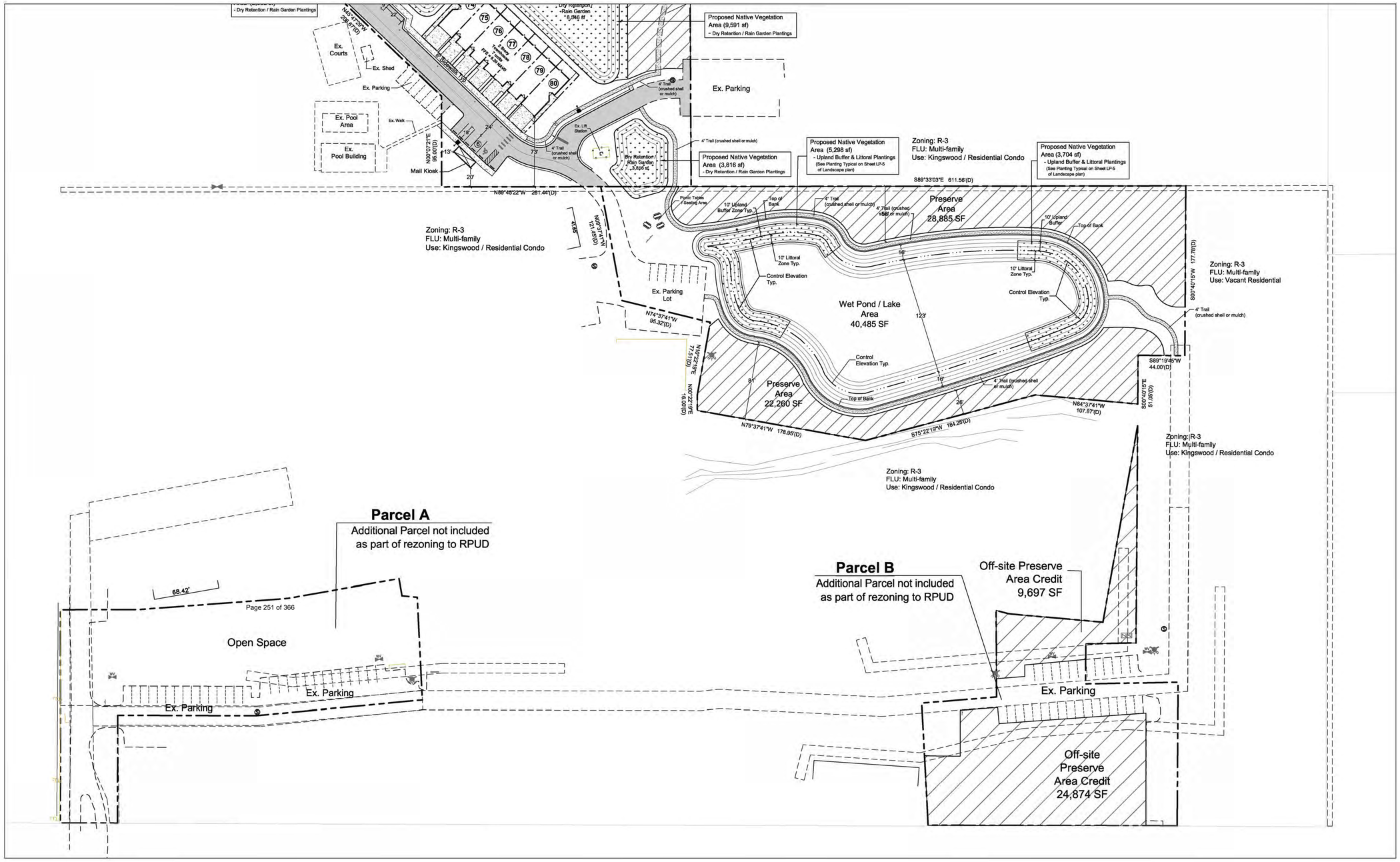
Revision Dates	3-02-20

SP-2



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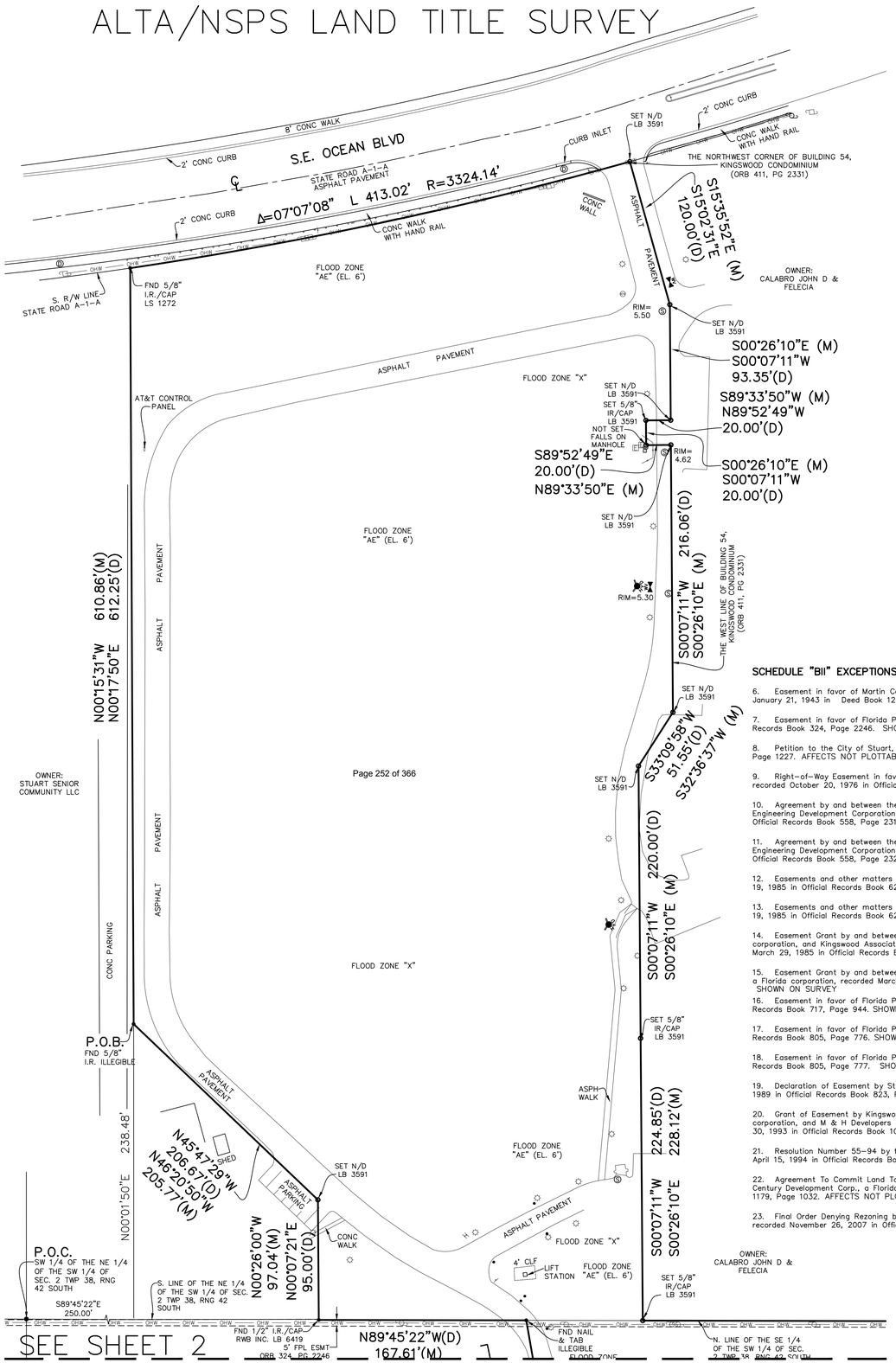
Scale: 1" = 50'

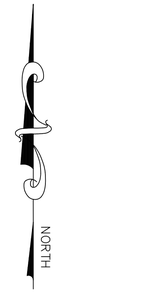
0' 25' 50' 100' 150'

North

SP-3

ALTA/NSPS LAND TITLE SURVEY





GRAPHIC SCALE

50 0 25 50 100

(IN FEET)
1 INCH = 50 FT.

DESCRIPTION:

A PARCEL OF LAND LYING IN SECTION 2, TOWNSHIP 38 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA, LYING SOUTH OF THE RIGHT-OF-WAY FOR STATE ROAD A-1-A.

LESS AND EXCEPT THE WESTERLY 250.00 FEET THEREOF.

ALSO, LESS AND EXCEPT BUILDINGS 1 THROUGH 21, INCLUSIVE, BUILDINGS 33 THROUGH 43, INCLUSIVE, BUILDINGS 53 THROUGH 59, INCLUSIVE, RECREATION AREAS 1, 2 AND 3, AND SEWER PUMP STATIONS 1 AND 2, KINGSWOOD CONDOMINIUM APARTMENT BUILDINGS, ACCORDING TO THE DECLARATIONS OF CONDOMINIUM THEREOF, RECORDED IN OFFICIAL RECORDS BOOK 325, PAGE 1560, OFFICIAL RECORDS BOOK 332, PAGE 2706, OFFICIAL RECORDS BOOK 344, PAGE 1409, OFFICIAL RECORDS BOOK 359, PAGE 1191, OFFICIAL RECORDS BOOK 360, PAGE 546, OFFICIAL RECORDS BOOK 366, PAGE 1974, OFFICIAL RECORDS BOOK 366, PAGE 2065, OFFICIAL RECORDS BOOK 367, PAGE 2659, OFFICIAL RECORDS BOOK 369, PAGE 1771, OFFICIAL RECORDS BOOK 391, PAGE 1877, OFFICIAL RECORDS BOOK 392, PAGE 1887, OFFICIAL RECORDS BOOK 393, PAGE 1094, OFFICIAL RECORDS BOOK 399, PAGE 1214, OFFICIAL RECORDS BOOK 406, PAGE 504, OFFICIAL RECORDS BOOK 406, PAGE 593, OFFICIAL RECORDS BOOK 411, PAGE 2331 AND OFFICIAL RECORDS BOOK 426, PAGE 696, AND ANY AMENDMENTS THERETO, OF THE PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA.

THE ABOVE DESCRIBED PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

FROM THE SOUTHWEST CORNER OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 2, BEAR SOUTH 89°45'22" EAST, ALONG THE SOUTH LINE OF SAID NORTHEAST 1/4, A DISTANCE OF 250.00 FEET; THENCE NORTH 00°17'50" EAST A DISTANCE OF 238.48 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE NORTH 00°17'50" EAST A DISTANCE OF 612.25 TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF STATE ROAD A-1-A, SAID POINT BEING A CURVE CONCAVE TO THE NORTH, HAVING A RADIUS OF 3,324.14 FEET, WHOSE CENTER BEARS NORTH 07°54'58" WEST, HAVING A CHORD BEARING AND DISTANCE OF NORTH 78°31'28" EAST 412.75 FEET; THENCE EASTERLY, ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 07°07'08", A DISTANCE OF 413.02 FEET TO THE NORTHWEST CORNER OF BUILDING 54, KINGSWOOD CONDOMINIUM, AS RECORDED IN OFFICIAL RECORDS BOOK 411, PAGE 2331, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE THE FOLLOWING COURSES ALONG SAID KINGSWOOD CONDOMINIUM, SOUTH 15°02'31" EAST A DISTANCE OF 120.00 FEET; THENCE SOUTH 00°07'11" WEST A DISTANCE OF 93.35 FEET; THENCE NORTH 89°52'49" WEST A DISTANCE OF 20.00 FEET; THENCE SOUTH 00°07'11" WEST A DISTANCE OF 20.00 FEET; THENCE SOUTH 89°52'49" EAST A DISTANCE OF 20.00 FEET; THENCE SOUTH 00°07'11" WEST A DISTANCE OF 216.06 FEET; THENCE SOUTH 33°09'58" WEST A DISTANCE OF 51.55 FEET; THENCE SOUTH 00°07'11" WEST A DISTANCE OF 220.00 FEET; THENCE CONTINUE SOUTH 00°07'11" WEST A DISTANCE OF 224.85 FEET TO A POINT ON THE NORTH LINE OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTH 89°33'03" EAST, ALONG SAID NORTH LINE, A DISTANCE OF 517.30 FEET; THENCE SOUTH 00°40'15" WEST A DISTANCE OF 177.78 FEET; THENCE NORTH 89°19'45" WEST A DISTANCE OF 5.00 FEET TO THE NORTHEAST CORNER OF THE 44 FOOT PARCEL ADDED TO KINGSWOOD CONDOMINIUM BUILDING NO. 109 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 1117, PAGE 281, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE THE FOLLOWING COURSES ALONG SAID PARCEL, NORTH 89°19'45" WEST A DISTANCE OF 44.00 FEET; THENCE SOUTH 00°40'15" WEST A DISTANCE OF 51.05 FEET TO A POINT ON THE NORTH LINE OF THE DRAINAGE AREA CONVEYED TO KINGSWOOD ASSOCIATION NO. 3, INC., A FLORIDA NOT FOR PROFIT CORPORATION, AS RECORDED IN OFFICIAL RECORDS BOOK 476, PAGE 2524, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE THE FOLLOWING COURSES ALONG SAID DRAINAGE AREA, NORTH 84°37'41" WEST A DISTANCE OF 107.87 FEET; THENCE SOUTH 75°22'19" WEST A DISTANCE OF 184.25 FEET; THENCE NORTH 79°37'41" WEST A DISTANCE OF 178.95 FEET TO A POINT ON THE EAST LINE OF RECREATION AREA NO. 4 PARCEL, AS DESCRIBED IN OFFICIAL RECORDS BOOK 1501, PAGE 1564, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE THE FOLLOWING COURSES ALONG SAID RECREATION AREA NO. 4 PARCEL, NORTH 00°22'19" EAST A DISTANCE OF 16.00 FEET; THENCE NORTH 10°22'19" EAST A DISTANCE OF 77.51 FEET; THENCE NORTH 74°37'41" WEST A DISTANCE OF 95.32 FEET; THENCE LEAVING SAID RECREATION AREA NO. 4 PARCEL, NORTH 09°37'41" WEST A DISTANCE OF 121.45 FEET TO A POINT ON THE SOUTH LINE OF THE NORTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 2; THENCE NORTH 89°45'22" WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 167.61 FEET; THENCE NORTH 00°07'21" EAST A DISTANCE OF 95.00 FEET; THENCE NORTH 45°47'29" WEST A DISTANCE OF 206.67 FEET TO THE POINT OF BEGINNING.

SAID LANDS SITUATE IN MARTIN COUNTY, FLORIDA.

CONTAINING 481,103 SQ. FT. / 11.045 ACRES, MORE OR LESS. (M)

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, COVENANTS, AND RIGHTS-OF-WAY OF RECORD.

TOGETHER WITH:

PARCEL A:

A PARCEL OF LAND LYING IN SECTION 2, TOWNSHIP 38 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF AFORESAID SECTION 2, THENCE BEAR SOUTH 89°32'19" EAST, ALONG THE SOUTH LINE OF SAID SECTION 2, A DISTANCE OF 1,333.00 FEET TO A POINT ON THE WESTERLY LINE OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 2; THENCE NORTH 00°21'51" EAST, ALONG SAID WESTERLY LINE, A DISTANCE OF 665.00 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 2 AND THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL OF LAND; THENCE CONTINUE NORTH 00°21'51" EAST, ALONG SAID WESTERLY LINE, A DISTANCE OF 223.11 FEET TO A POINT ON THE SOUTH LINE OF KINGSWOOD CONDOMINIUM, PHASE THREE, APARTMENT BUILDING NO. 127 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 637, PAGE 1736, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE THE FOLLOWING COURSES, ALONG THE SOUTH LINE OF BUILDING NO. 127 PARCEL, SOUTH 89°44'25" EAST A DISTANCE OF 81.08 FEET; THENCE NORTH 86°04'20" EAST A DISTANCE OF 157.10 FEET TO THE SOUTHWEST CORNER OF KINGSWOOD CONDOMINIUM, PHASE THREE, APARTMENT BUILDING NO. 129 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 597, PAGE 389, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE NORTH 80°22'19" EAST, ALONG THE SOUTH LINE OF SAID BUILDING NO. 129 PARCEL, A DISTANCE OF 118.87 FEET TO A POINT ON WEST LINE OF THE DRAINAGE AREA CONVEYED TO KINGSWOOD ASSOCIATION NO. 3, INC., A FLORIDA NOT FOR PROFIT CORPORATION, AS RECORDED IN OFFICIAL RECORDS BOOK 476, PAGE 2524, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE THE FOLLOWING COURSES ALONG SAID DRAINAGE AREA, SOUTH 09°37'41" EAST A DISTANCE OF 18.13 FEET; THENCE SOUTH 84°37'41" EAST A DISTANCE OF 15.97 FEET TO THE NORTHWEST CORNER OF KINGSWOOD CONDOMINIUM, PHASE THREE, APARTMENT BUILDING NO. 121 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 729, PAGE 317, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE SOUTH 02°32'41" EAST, ALONG THE WEST LINE OF SAID BUILDING NO. 121 PARCEL, A DISTANCE OF 107.60 FEET TO A POINT ON THE NORTH LINE OF KINGSWOOD CONDOMINIUM, PHASE THREE, APARTMENT NO. 124 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 739, PAGE 537, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE SOUTH 84°58'52" WEST, ALONG THE NORTH LINE OF SAID BUILDING NO. 124 PARCEL, AND THE NORTH LINE OF KINGSWOOD CONDOMINIUM, PHASE THREE, APARTMENT NO. 126 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 719, PAGE 2289, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA, A DISTANCE OF 147.38 FEET; THENCE SOUTH 85°01'04" WEST A DISTANCE OF 27.38 FEET TO THE NORTHEAST CORNER OF KINGSWOOD CONDOMINIUM, PHASE THREE, APARTMENT BUILDING NO. 128 PARCEL; THENCE NORTH 89°32'40" WEST, ALONG THE NORTH LINE OF SAID PARCEL, A DISTANCE OF 145.35 FEET; THENCE SOUTH 00°21'51" WEST, ALONG THE WEST LINE OF SAID BUILDING NO. 128 PARCEL, A DISTANCE OF 112.67 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 2; THENCE NORTH 89°31'49" WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 60.00 FEET TO THE POINT OF BEGINNING.

SAID LANDS SITUATE IN MARTIN COUNTY, FLORIDA.

CONTAINING 50,929 SQ. FT. / 1.169 ACRES, MORE OR LESS. (M)

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, COVENANTS, AND RIGHTS-OF-WAY OF RECORD.

LEGEND

ASPH – ASPHALT
L – ARC LENGTH
CLF – CHAIN LINK FENCE
CONC. – CONCRETE
F.P.L.–FLORIDA POWER & LIGHT
FND. – FOUND
I.R./CAP – IRON ROD & CAP
INV. – INVERT
O.R.B. – OFFICIAL RECORD BOOK
P.B. – PLAT BOOK
P.B.C.R. – PALM BEACH COUNTY RECORD
P.O.B. – POINT OF BEGINNING
P.O.C.– POINT OF COMMENCEMENT
PGS – PAGE(S)
R – RADIUS
R/W – RIGHT-OF-WAY
RGE. – RANGE
SEC – SECTION
Δ – DELTA (CENTRAL ANGLE)
RPZ – RPZ/DDCV
(D) – DEED
(M) – MEASURED
NO ID – NO IDENTIFICATION
N/D – NAIL/DISC

– EXISTING ELEVATION
SQ. FT. – SQUARE FEET
TWP. – TOWNSHIP
TYP. – TYPICAL
U.E. – UTILITY EASEMENT
– LIGHT POLE
– FIRE HYDRANT
– CATCH BASIN
– WATER VALVE
– SET 5/8" IR/CAP LB 3591
– SET NAIL/DISC LB 3591
– SANITARY MANHOLE
– DRAINAGE MANHOLE
– WOOD POWER POLE (UNLESS NOTED)
– CENTER LINE
– TRAFFIC SIGN
– ELECTRICAL WIRES OVERHEAD
– ANCHOR
– WATER METER
– ELECTRIC HAND HOLE
– IRRIGATION CONTROL VALVE
– CONCRETE POWER POLE

SCHEDULE "BII" EXCEPTIONS

6. Easement in favor of Martin County, a political subdivision of the State of Florida, recorded January 21, 1943 in Deed Book 12, Page 506. BLANKET EASEMENT

7. Easement in favor of Florida Power & Light Company recorded March 1, 1971 in Official Records Book 324, Page 2246. SHOWN ON SURVEY

8. Petition to the City of Stuart, Florida, recorded May 22, 1972 in Official Records Book 339, Page 1227. AFFECTS NOT PLOTTABLE

9. Right-of-Way Easement in favor of Southern Bell Telephone and Telegraph Company recorded October 20, 1976 in Official Records Book 408, Page 1241. AFFECTS NOT PLOTTABLE

10. Agreement by and between the City of Stuart, Florida, a municipal corporation, and Florida Engineering Development Corporation, a Florida corporation, recorded December 14, 1982 in Official Records Book 558, Page 2310. AFFECTS NOT PLOTTABLE

11. Agreement by and between the City of Stuart, Florida, a municipal corporation, and Florida Engineering Development Corporation, a Florida corporation, recorded December 14, 1982 in Official Records Book 558, Page 2323. AFFECTS NOT PLOTTABLE

12. Easements and other matters as shown on Kingswood South Site Plan recorded February 19, 1985 in Official Records Book 627, Page 2006. AFFECTS NOT PLOTTABLE

13. Easements and other matters as shown on Kingswood South Site Plan recorded February 19, 1985 in Official Records Book 627, Page 2394. AFFECTS NOT PLOTTABLE

14. Easement Grant by and between Florida Engineering Development Corporation, a Florida corporation, and Kingswood Association No. 4, Inc., a Florida not for profit corporation, recorded March 29, 1985 in Official Records Book 631, Page 1771.SHOWN ON SURVEY

15. Easement Grant by and between Angela McLaughlin and J. Byrnes Development Group, Inc., a Florida corporation, recorded March 6, 1987 in Official Records Book 710, Page 1696. SHOWN ON SURVEY

16. Easement in favor of Florida Power & Light Company recorded April 30, 1987 in Official Records Book 717, Page 944. SHOWN ON SURVEY

17. Easement in favor of Florida Power & Light Company recorded March 30, 1989 in Official Records Book 805, Page 776. SHOWN ON SURVEY

18. Easement in favor of Florida Power & Light Company recorded March 30, 1989 in Official Records Book 805, Page 777. SHOWN ON SURVEY

19. Declaration of Easement by St. Lucie View, Inc., a Florida corporation, recorded August 10, 1989 in Official Records Book 823, Page 1885. SHOWN ON SURVEY

20. Grant of Easement by Kingswood Association No. 3, Inc., a Florida not-for-profit corporation, and M & H Developers of Palm Beach, Inc., a Florida corporation, recorded December 30, 1993 in Official Records Book 1048, Page 1055. SHOWN ON SURVEY

21. Resolution Number 55-94 by the City Commission of the City of Stuart, Florida, recorded April 15, 1994 in Official Records Book 1066, Page 880. AFFECTS PARCELS A, B AND C ONLY NOT PLOTTABLE

22. Agreement To Commit Land To Development by and between Angela C. McLaughlin and Century Development Corp., a Florida corporation, recorded May 24, 1996 in Official Records Book 1179, Page 1032. AFFECTS NOT PLOTTABLE

23. Final Order Denying Rezoning by the City Commission of the City of Stuart, Florida, recorded November 26, 2007 in Official Record. AFFECTS NOT PLOTTABLE

DESCRIPTION CONTINUED:

PARCEL B:

A PARCEL OF LAND LYING IN SECTION 2, TOWNSHIP 38 SOUTH, RANGE 41 EAST, MARTIN COUNTY, FLORIDA, SAID PARCEL BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHWEST CORNER OF SAID SECTION 2, THENCE BEAR SOUTH 89°32'19" EAST, ALONG THE SOUTH LINE OF SAID SECTION 2, A DISTANCE OF 1,333.00 FEET TO A POINT ON THE WEST LINE OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 2; THENCE NORTH 00°21'51" EAST, ALONG SAID WEST LINE, A DISTANCE OF 665.00 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 2; THENCE SOUTH 89°31'49" EAST, ALONG SAID SOUTH LINE, A DISTANCE OF 909.51 FEET TO THE SOUTHEAST CORNER OF KINGSWOOD CONDOMINIUM APARTMENT BUILDING NO. 118 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 790, PAGE 985, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA, AND THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PARCEL OF LAND; THENCE PROCEED NORTH 02°40'00" WEST, ALONG THE EASTERLY LINE OF SAID BUILDING NO. 118 PARCEL, A DISTANCE OF 127.86 FEET TO A POINT ON THE SOUTH LINE OF KINGSWOOD APARTMENT BUILDING NO. 115 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 790, PAGE 938, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE THE FOLLOWING COURSES ALONG SAID PARCEL, NORTH 85°41'06" EAST, A DISTANCE OF 78.68 FEET; THENCE NORTH 00°00'00" EAST A DISTANCE OF 90.73 FEET TO A POINT ON THE SOUTH LINE OF THE DRAINAGE AREA CONVEYED TO KINGSWOOD ASSOCIATION NO. 3, INC., A FLORIDA NOT FOR PROFIT CORPORATION, RECORDED IN OFFICIAL RECORDS BOOK 476, PAGE 2524, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE THE FOLLOWING COURSES ALONG SAID DRAINAGE AREA, SOUTH 74°37'41" EAST A DISTANCE OF 13.88 FEET; THENCE SOUTH 84°37'41" EAST A DISTANCE OF 98.97 FEET; THENCE NORTH 10°22'19" EAST A DISTANCE OF 208.26 FEET TO A POINT ON THE WEST LINE OF THE 44 FOOT PARCEL ADDED TO KINGSWOOD CONDOMINIUM BUILDING NO. 109 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 1117, PAGE 281, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE SOUTH 00°40'15" WEST, ALONG SAID WEST LINE, A DISTANCE OF 84.86 FEET TO THE NORTHWESTERLY CORNER OF THE PARCEL CONVEYED TO KINGSWOOD ASSOCIATION NO. 3, INC., A FLORIDA NOT-FOR-PROFIT CORPORATION, AS RECORDED IN OFFICIAL RECORDS BOOK 1364, PAGE 768, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE THE FOLLOWING COURSES ALONG SAID PARCEL, SOUTH 00°48'55" WEST A DISTANCE OF 141.90 FEET; THENCE SOUTH 89°19'45" WEST A DISTANCE OF 52.58 FEET; THENCE SOUTH 00°40'15" WEST A DISTANCE OF 42.07 FEET; THENCE NORTH 89°19'45" EAST A DISTANCE OF 96.95 FEET TO A POINT ON THE WESTERLY LINE OF KINGSWOOD CONDOMINIUM BUILDING NO. 112 PARCEL, AS RECORDED IN OFFICIAL RECORDS BOOK 814, PAGE 757, PUBLIC RECORDS OF MARTIN COUNTY, FLORIDA; THENCE SOUTH 00°40'15" WEST, ALONG THE WESTERLY LINE OF SAID PARCEL, A DISTANCE OF 149.98 FEET TO A POINT ON THE SOUTH LINE OF THE NORTH 1/2 OF THE SOUTHEAST 1/4 OF THE SOUTHWEST 1/4 OF SAID SECTION 2; THENCE NORTH 89°31'49" WEST, ALONG SAID SOUTH LINE, A DISTANCE OF 261.03 FEET TO THE POINT OF BEGINNING.

SAID LANDS SITUATE IN MARTIN COUNTY, FLORIDA.

CONTAINING 49,374 SQ. FT. / 1.134 ACRES, MORE OR LESS. (M)

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS, COVENANTS, AND RIGHTS-OF-WAY OF RECORD.

1. SURVEY MAP OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL SEAL OF A FLORIDA LICENSED PROFESSIONAL LAND SURVEYOR.
2. LANDS SHOWN HEREON WERE ABSTRACTED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY COMMITMENT ORDER NO.: 7566276, DATED MARCH 28, 2019 @ 8:00 AM.
3. ELEVATIONS SHOWN HEREON ARE RELATIVE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988.
4. BEARINGS SHOWN HEREON ARE RELATIVE TO THE SOUTH LINE OF SECTION 2 TOWNSHIP 38 SOUTH, RANGE 41 EAST, BEARING S89°32'19"E.
5. THE "DESCRIPTION" SHOWN HEREON IS IN ACCORD WITH THE DESCRIPTION PROVIDED BY THE CLIENT.
6. UNDERGROUND FOUNDATIONS WERE NOT LOCATED.
7. ADDITIONS OR DELETIONS TO SURVEY MAPS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
8. FLOOD ZONE: "AE"(6') AND "X"; COMMUNITY PANEL NO. 120161 0154 G; DATE: MARCH 6, 2015.
9. BENCHMARK ORIGIN DESCRIPTION: MARTIN COUNTY BENCHMARK #890158. ELEVATION = 5.48' NAVD.
10. AT THE TIME OF THIS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF THE SUBJECT PROPERTY BEING USED AS A SOLID WASTE DUMP, SUMP OR SANITARY LANDFILL, CEMETARY OR BURIAL GROUND.
11. AT THE TIME OF THIS SURVEY THERE WAS NO OBSERVABLE SURFACE EVIDENCE OF EARTH MOVING WORK OR BUILDING CONSTRUCTION.
12. AT THE TIME OF THIS SURVEY THERE WAS NO OBSERVED EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS OR CHANGES IN STREET RIGHT-OF-WAY LINES.
13. AT THE TIME OF THIS SURVEY THERE WAS NO OBSERVED EVIDENCE OF WETLANDS DELINEATED BY APPROPRIATE AUTHORITIES.

CERTIFICATE:

:THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3. 4, 5, 8, 11, 12, 13, 16, 17, 18, AND 19. DATE OF FIELD WORK 4/19/19.

I FURTHER CERTIFY THAT THIS SURVEY MEETS THE STANDARDS OF PRACTICE SET FORTH IN CHAPTER 5J-17 ADOPTED BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYORS AND MAPPERS, PURSUANT TO FLORIDA STATUTES 472.027.

RONNIE L. FURNISS, P.S.M.
REG. LAND SURVEYOR #6272
STATE OF FLORIDA–LB 3591

REVISIONS	DATE	BY

FILE NAME 8164-1-SURVEY

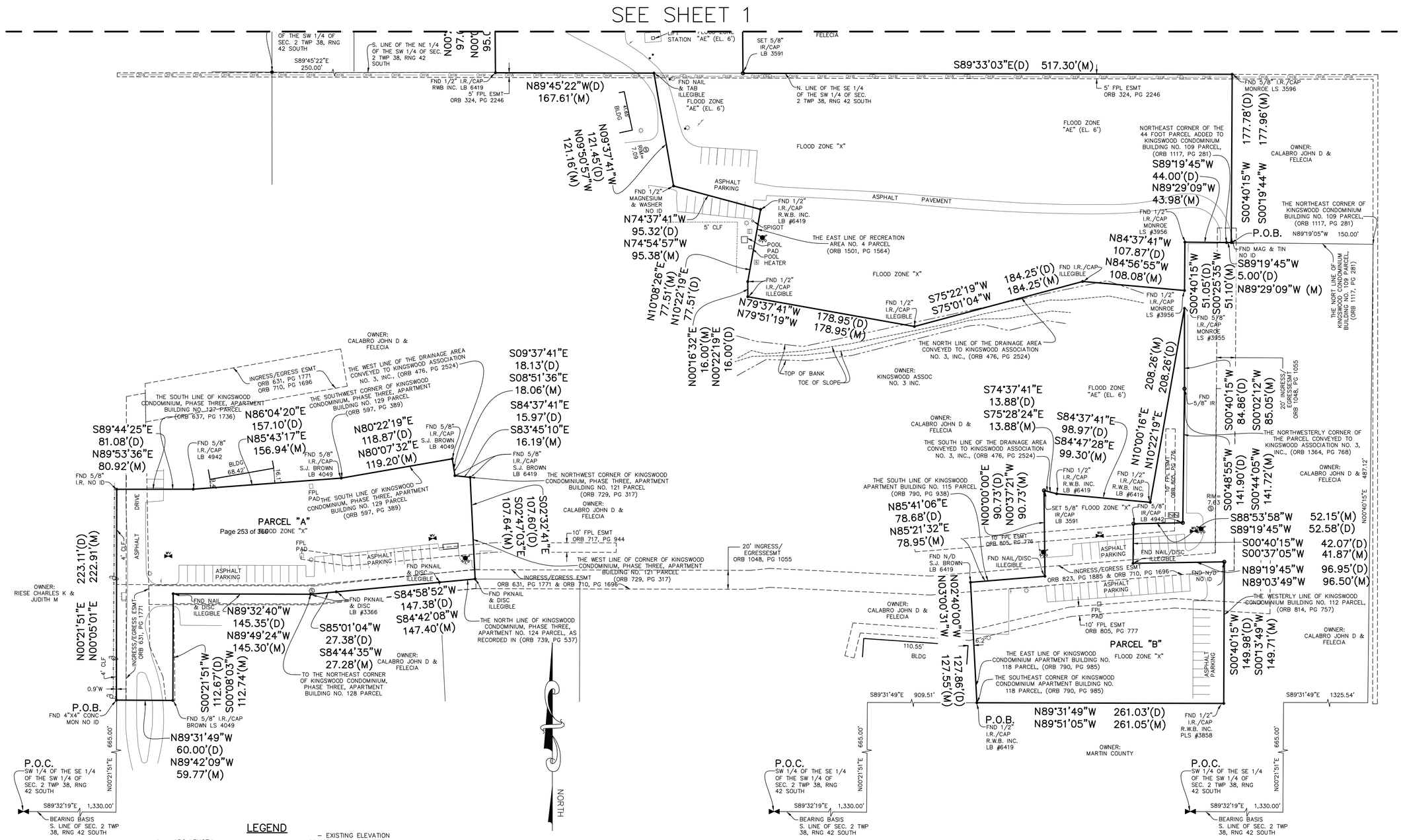
CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE • SURVEYING
7900 GLADES ROAD • SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561) 392-1991 / FAX (561) 750-1452

STUART PROPERTY 13.3 ACRES
A PORTION OF SW 1/4
SEC. 2, TWP 38, RNG 41
ALTA/NSPS LAND TITLE SURVEY

DATE	5/01/2019
DRAWN BY	RLF
F.B./ PG.	N/A
SCALE	1"=50'

JOB # 8164-1
SHT.NO. 1 OF 2 SHEETS

ALTA/NSPS LAND TITLE SURVEY



LEGEND

L – ARC LENGTH
CLF – CHAIN LINK FENCE
CONC. – CONCRETE
F.P.L.–FLORIDA POWER & LIGHT
FND. – FOUND
I.R./CAP – IRON ROD & CAP
INV. – INVERT
O.R.B. – OFFICIAL RECORD BOOK
P.B. – PLAT BOOK
P.B.C.R. – PALM BEACH COUNTY RECORD
P.O.B. – POINT OF BEGINNING
P.O.C.– POINT OF COMMENCEMENT
PGS – PAGE(S)
R – RADIUS
R/W – RIGHT-OF-WAY
RGE. – RANGE
SEC – SECTION
Δ – DELTA (CENTRAL ANGLE)
RPZ/DDCV – RPZ/DDCV
(D) – DEED
(M) – MEASURED

– EXISTING ELEVATION
SQ. FT. – SQUARE FEET
TWP. – TOWNSHIP
TYP. – TYPICAL
U.E. – UTILITY EASEMENT
– LIGHT POLE
– FIRE HYDRANT
– CATCH BASIN
– WATER VALVE
– SET 5/8" IR/CAP LB 3591
– SANITARY MANHOLE
– DRAINAGE MANHOLE
– WOOD POWER POLE (UNLESS NOTED)
– CENTER LINE
– TRAFFIC SIGN
– ELECTRICAL WIRES OVERHEAD
– ANCHOR
– WATER METER
– ELECTRIC HAND HOLE
– IRRIGATION CONTROL VALVE

GRAPHIC SCALE
50 0 25 50 100
(IN FEET)
1 INCH = 50 FT.

REVISIONS	DATE	BY

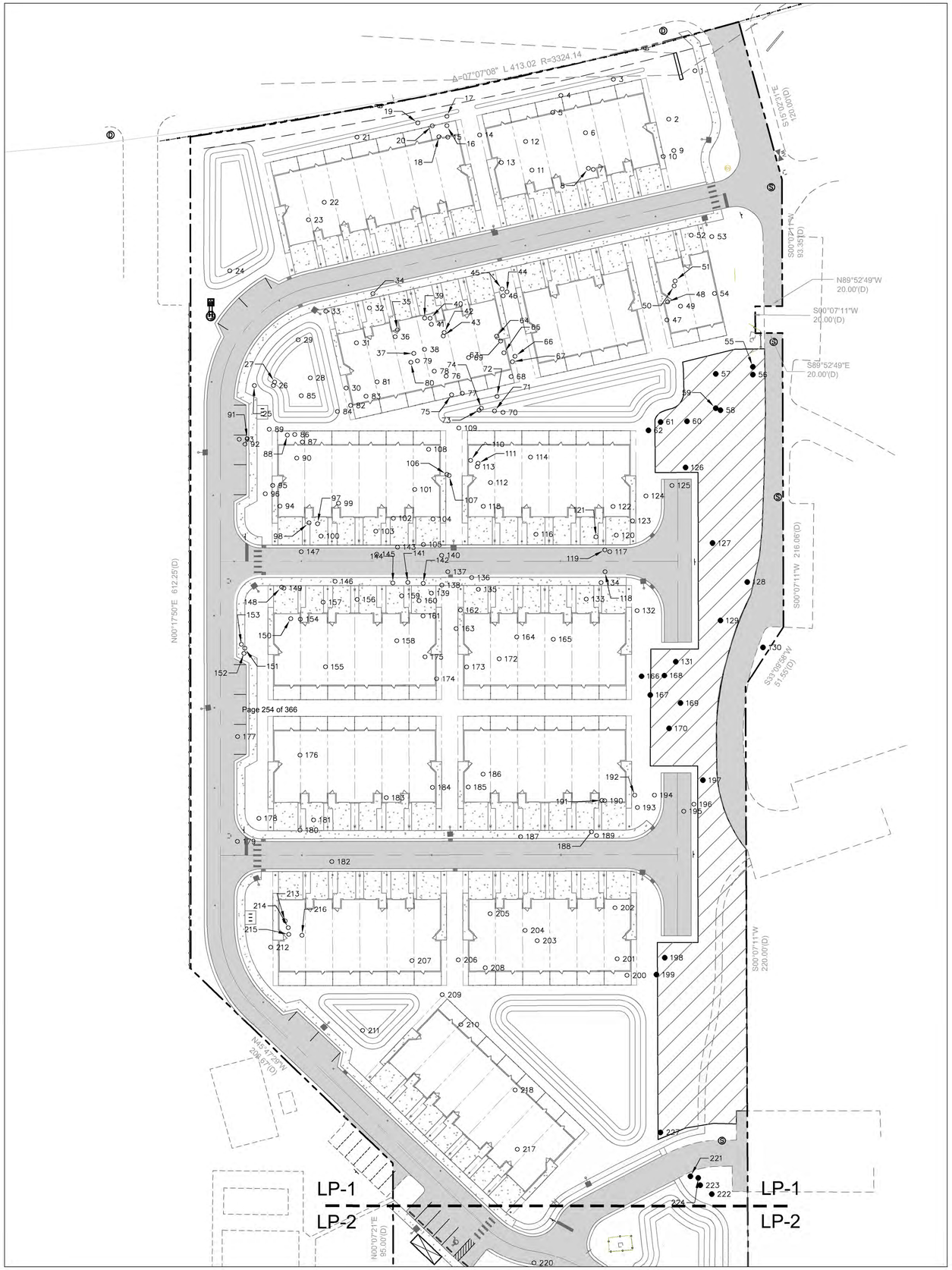
FILE NAME 8164-1-SURVEY

CAULFIELD & WHEELER, INC.
CIVIL ENGINEERING
LANDSCAPE ARCHITECTURE - SURVEYING
7900 GLADES ROAD - SUITE 100
BOCA RATON, FLORIDA 33434
PHONE (561)-392-1991 / FAX (561)-750-1452

STUART PROPERTY 13.3 ACRES
A PORTION OF SW 1/4
SEC. 2, TWP 38, RNG 41
ALTA/NSPS LAND TITLE SURVEY

DATE	5/01/2019
DRAWN BY	RF
F.B./ PG.	N/A
SCALE	1"=50'

JOB # 8164-1
SHT.NO. 2 OF 2 SHEETS



Existing Tree Chart

Tree No.	Species	Size DBH	Protected	Description	Status
1	Laurel Oak	22	Yes		Remove
2	Slash Pine	18	Yes		Remove
3	Slash Pine	19	Yes		Remove
4	Laurel Oak	7	Yes		Remove
5	Slash Pine	15	Yes		Remove
6	Laurel Oak	12	Yes	multi-stem	Remove
7	Laurel Oak	5	Yes	multi-stem	Remove
8	Laurel Oak	5	Yes	multi-stem	Remove
9	Slash Pine	15	Yes		Remove
10	Slash Pine	17	Yes		Remove
11	Laurel Oak	5	Yes	multi-stem	Remove
12	Slash Pine	19	Yes		Remove
13	Laurel Oak	5	Yes		Remove
14	Laurel Oak	9	Yes		Remove
15	Laurel Oak	17	Yes		Remove
16	Laurel Oak	8	Yes		Remove
17	Laurel Oak	6	Yes		Remove
18	Laurel Oak	6	Yes		Remove
19	Laurel Oak	7	Yes		Remove
20	Laurel Oak	17	Yes		Remove
21	Laurel Oak	26	Yes		Remove
22	Slash Pine	10	Yes		Remove
23	Slash Pine	12	Yes		Remove
24	Laurel Oak	21	Yes		Remove
25	Slash Pine	15	Yes		Remove
26	Laurel Oak	8	Yes		Remove
27	Slash Pine	15	Yes		Remove
28	Laurel Oak	9	Yes		Remove
* 29	Laurel Oak	7	Yes		Relocate
30	Laurel Oak	10	Yes		Remove
31	Laurel Oak	15	Yes		Remove
32	Laurel Oak	12	Yes		Remove
33	Laurel Oak	10	Yes		Remove
34	Slash Pine	10	Yes		Remove
35	Slash Pine	14	Yes		Remove
36	Laurel Oak	7	Yes		Remove
37	Laurel Oak	8	Yes		Remove
38	Slash Pine	10	Yes		Remove
39	Laurel Oak	7	Yes		Remove
40	Laurel Oak	7	Yes		Remove
41	Laurel Oak	7	Yes		Remove
42	Slash Pine	13	Yes		Remove
43	Slash Pine	13	Yes		Remove
44	Slash Pine	13	Yes		Remove
45	Slash Pine	10	Yes		Remove
Tree No.	**Species**	**Size DBH**	**Protected**	**Description**	**Status**
46	Slash Pine	19	Yes		Remove
47	Live Oak	18	Yes		Remove
48	Live Oak	5	Yes		Remove
49	Live Oak	7	Yes		Remove
50	Live Oak	8	Yes		Remove
51	Live Oak	10	Yes	multi-stem	Remove
52	Live Oak	7	Yes		Remove
53	Live Oak	14	Yes		Remove
54	Slash Pine	23	Yes		Remove
55	Slash Pine	14	Yes		Preserve
56	Slash Pine	15	Yes		Preserve
57	Slash Pine	16	Yes		Preserve
58	Live Oak	5	Yes		Preserve
59	Live Oak	12	Yes		Preserve
60	Live Oak	6	Yes		Preserve
61	Live Oak	8	Yes	multi-stem	Preserve
62	Live Oak	5	Yes		Preserve
63	Slash Pine	16	Yes		Remove
64	Slash Pine	16	Yes		Remove
65	Slash Pine	12	Yes		Remove
66	Slash Pine	14	Yes		Remove
67	Live Oak	5	Yes	multi-stem	Remove
68	Slash Pine	17	Yes		Remove
69	Slash Pine	11	Yes		Remove
70	Slash Pine	24	Yes		Remove
71	Slash Pine	14	Yes		Remove
72	Slash Pine	10	Yes		Remove
73	Slash Pine	15	Yes		Remove
74	Slash Pine	13	Yes		Remove
75	Live Oak	8	Yes		Remove
76	Slash Pine	10	Yes		Remove
77	NA		Yes		
78	Slash Pine	12	Yes		Remove
79	Live Oak	6	Yes		Remove
80	Slash Pine	10	Yes		Remove
81	Slash Pine	14	Yes		Remove
82	Slash Pine	12	Yes		Remove
83	Dahoon Holly	5	Yes		Remove
84	Slash Pine	11	Yes		Remove
85	Slash Pine	15	Yes		Remove
86	Slash Pine	17	Yes		Remove
87	Slash Pine	10	Yes		Remove
88	Slash Pine	10	Yes		Remove
89	Slash Pine	15	Yes		Remove
90	Slash Pine	16	Yes		Remove
Tree No.	**Species**	**Size DBH**	**Protected**	**Description**	**Status**
91	Live Oak	6	Yes		Remove
92	Live Oak	7	Yes		Remove
93	Slash Pine	11	Yes		Remove
94	Live Oak	11	Yes		Remove
95	Live Oak	8	Yes		Remove
96	Live Oak	6	Yes		Remove
97	Slash Pine	11	Yes		Remove
98	Slash Pine	11	Yes		Remove
99	Slash Pine	14	Yes		Remove
100	Live Oak	6	Yes		Remove
101	Slash Pine	19	Yes		Remove
102	Slash Pine	15	Yes		Remove
103	Live Oak	10	Yes		Remove
104	Slash Pine	13	Yes		Remove
105	Slash Pine	12	Yes		Remove
106	Dahoon Holly	5	Yes		Remove
107	Slash Pine	12	Yes		Remove
108	Laurel Oak	8	Yes		Remove
109	Laurel Oak	6	Yes		Remove
110	Slash Pine	10	Yes		Remove
111	Slash Pine	12	Yes		Remove
112	Slash Pine	15	Yes		Remove
113	Slash Pine	13	Yes		Remove
114	Live Oak	6	Yes	multi-stem	Remove
115	Slash Pine	18	Yes		Remove
116	Slash Pine	12	Yes		Remove
117	Slash Pine	10	Yes		Remove
118	Live Oak	6	Yes		Remove
119	Slash Pine	13	Yes		Remove
* 120	Live Oak	7	Yes		Relocate
* 121	Live Oak	7	Yes		Relocate
* 122	Live Oak	6	Yes		Relocate
123	Live Oak	11	Yes		Remove
* 124	Live Oak	6	Yes		Relocate
125	Live Oak	10	Yes		Remove
126	Live Oak	8	Yes		Preserve
127	Live Oak	21	Yes		Preserve
128	Live Oak	17	Yes		Preserve
129	Slash Pine	15	Yes		Preserve
130	Slash Pine	17	Yes		Preserve
131	Live Oak	19	Yes		Preserve
132	Slash Pine	23	Yes		Remove
133	Slash Pine	10	Yes		Remove
134	Live Oak	11	Yes		Remove
135	Slash Pine	12	Yes		Remove
136	Slash Pine	15	Yes		Remove
137	Slash Pine	11	Yes		Remove
138	Slash Pine	11	Yes		Remove
139	Slash Pine	9	No		Remove
140	Slash Pine	17	Yes		Remove
141	Slash Pine	18	Yes		Remove
142	Slash Pine	10	Yes		Remove
143	Slash Pine	15	Yes		Remove
144	Slash Pine	10	Yes		Remove
145	Slash Pine	14	Yes		Remove
146	Slash Pine	11	Yes		Remove
147	Live Oak	10	Yes		Remove
148	Live Oak	7	Yes		Remove
149	Slash Pine	22	Yes		Remove
150	Slash Pine	13	Yes		Remove
151	Sand Oak	4	No		Remove
152	Sand Oak	6	No		Remove
153	Sand Oak	11	No		Remove
154	Slash Pine	15	Yes		Remove
155	Slash Pine	12	Yes		Remove
156	Slash Pine	14	Yes		Remove
157	Slash Pine	11	Yes		Remove
158	Slash Pine	14	Yes		Remove
159	Slash Pine	13	Yes		Remove
160	Slash Pine	13	Yes		Remove
161	Slash Pine	11	Yes		Remove
162	Slash Pine	18	Yes		Remove
163	Slash Pine	14	Yes		Remove
164	Slash Pine	15	Yes		Remove
165	Sand Oak	6	No		Remove
166	Slash Pine	18	Yes		Preserve
167	Slash Pine	10	Yes		Preserve
168	Slash Pine	15	Yes		Preserve
169	Slash Pine	19	Yes		Preserve
170	Slash Pine	19	Yes		Preserve
171	Slash Pine	21	Yes		Remove
172	Slash Pine	19	Yes		Remove
173	Slash Pine	14	Yes		Remove
174	Slash Pine	11	Yes		Remove
175	Slash Pine	10	Yes		Remove
176	Slash Pine	15	Yes		Remove
177	Slash Pine	14	Yes		Remove
178	Sand Pine	5	No		Remove
179	Sand Pine	7	No		Remove
180	Sand Pine	7	No		Remove
Tree No.	**Species**	**Size DBH**	**Protected**	**Description**	**Status**
181	Sand Pine	5	No		Remove
182	Sand Oak	5	No		Remove
183	Sand Oak	8	No		Remove
184	Slash Pine	19	Yes		Remove
185	Slash Pine	17	Yes		Remove
186	Slash Pine	18	Yes		Remove
187	Slash Pine	19	Yes		Remove
188	Sand Oak	9	No		Remove
189	Sand Oak	9	No		Remove
190	Sand Oak	5	No		Remove
191	Sand Oak	8	No		Remove
192	Sand Oak	8	No		Remove
193	Sand Oak	5	No		Remove
194	Sand Oak	8	No		Remove
195	Slash Pine	13	Yes		Remove
196	Slash Pine	13	Yes		Remove
197	Slash Pine	13	Yes		Preserve
198	Sand Oak	4	No		Preserve
199	Sand Oak	10	No		Preserve
200	Sand Oak	11	No		Remove
201	Sand Oak	11	No		Remove
202	Sand Oak	7	No		Remove
203	Sand Oak	7	No		Remove
204	Sand Oak	12	No		Remove
205	Sand Oak	5	No		Remove
206	Sand Oak	5	No		Remove
207	Sand Oak	5	No		Remove
208	Sand Oak	11	No		Remove
209	Sand Oak	9	No		Remove
210	Cedar	10	Yes		Remove
211	Sand Oak	10	No		Remove
212	Sand Oak	9	No		Remove
213	Sand Oak	6	No		Remove
214	Sand Oak	4	No		Remove
215	Sand Oak	5	No		Remove
216	Sand Oak	7	No		Remove
217	Slash Pine	17	Yes		Remove
218	Sand Pine	8	No		Remove
219	Slash Pine	20	Yes		Preserve
220	Slash Pine	16	Yes		Remove
221	Slash Pine	11	Yes		Preserve
222	Slash Pine	15	Yes		Preserve
223	Slash Pine	11	Yes		Preserve
224	Slash Pine	16	Yes		Preserve
225	Slash Pine	24	Yes		Preserve
Tree No.	**Species**	**Size DBH**	**Protected**	**Description**	**Status**
226	Slash Pine	18	Yes		Preserve
227	Slash Pine	16	Yes		Preserve
228	Slash Pine	18	Yes		Preserve
229	Slash Pine	17	Yes		Preserve
230	Slash Pine	16	Yes		Preserve
231	Slash Pine	25	Yes		Preserve
232	Slash Pine	14	Yes		Preserve
233	Slash Pine	19	Yes		Preserve
234	Slash Pine	16	Yes		Preserve
235	Slash Pine	15	Yes		Off-site
236	Sand Oak	12	No		Off-site
237	Slash Pine	16	Yes		Remove
238	Sand Oak	8	No		Remove
239	Slash Pine	11	Yes		Preserve
240	Slash Pine	16	Yes		Preserve
241	Slash Pine	11	Yes		Preserve
242	Slash Pine	20	Yes		Preserve
243	Banyan	348	Yes	multi-stem	Preserve
244	Sand Pine	10	Yes		Off-site
245	Slash Pine	16	Yes		Off-site
246	Slash Pine	18	Yes		Off-site
247	Slash Pine	20	Yes		Preserve
248	Slash Pine	15	Yes		Preserve
249	Slash Pine	16	Yes		Preserve
250	Sand Pine	7	Yes		Preserve
251	Live Oak	9	Yes		Preserve
252	Sand Pine	9	Yes		Off-site
253	Live Oak	8	Yes		Preserve
254	Slash Pine	24	Yes		Preserve

Protected Tree Removal Summary

Protected Specimen Trees (Hardwood)

Total Inches (DBH) to be Removed	522 Inches
Total Inches (DBH) for Replacement (522 x 2.5)	1,305 Inches

Protected Specimen Pines (Softwood)

Total Inches (DBH) to be Removed	1,413 Inches
Total Inches (DBH) to be Replaced (1,429 x 1.5)	2,143.5 Inches

Legend

Ex. Trees to be Preserved

* Ex. Trees to be Relocated
(1 Laurel Oak & 4 Live Oaks)

Ex. Trees to be Removed

Notes

1. See Sheet LP-6 for applicable details and notes related to Tree Protection Barricades and Root Pruning / Tree Relocation.
2. See Sheet LP-3 for the location of Relocated Trees.
3. See Tree Mitigation data on Sheet LP-3 for proposed replacement inches.

Scale: 1" = 40'

0' 20' 40' 80' 120'

North

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Stuart Ocean Townhomes

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Existing Tree Survey / Removal Plan

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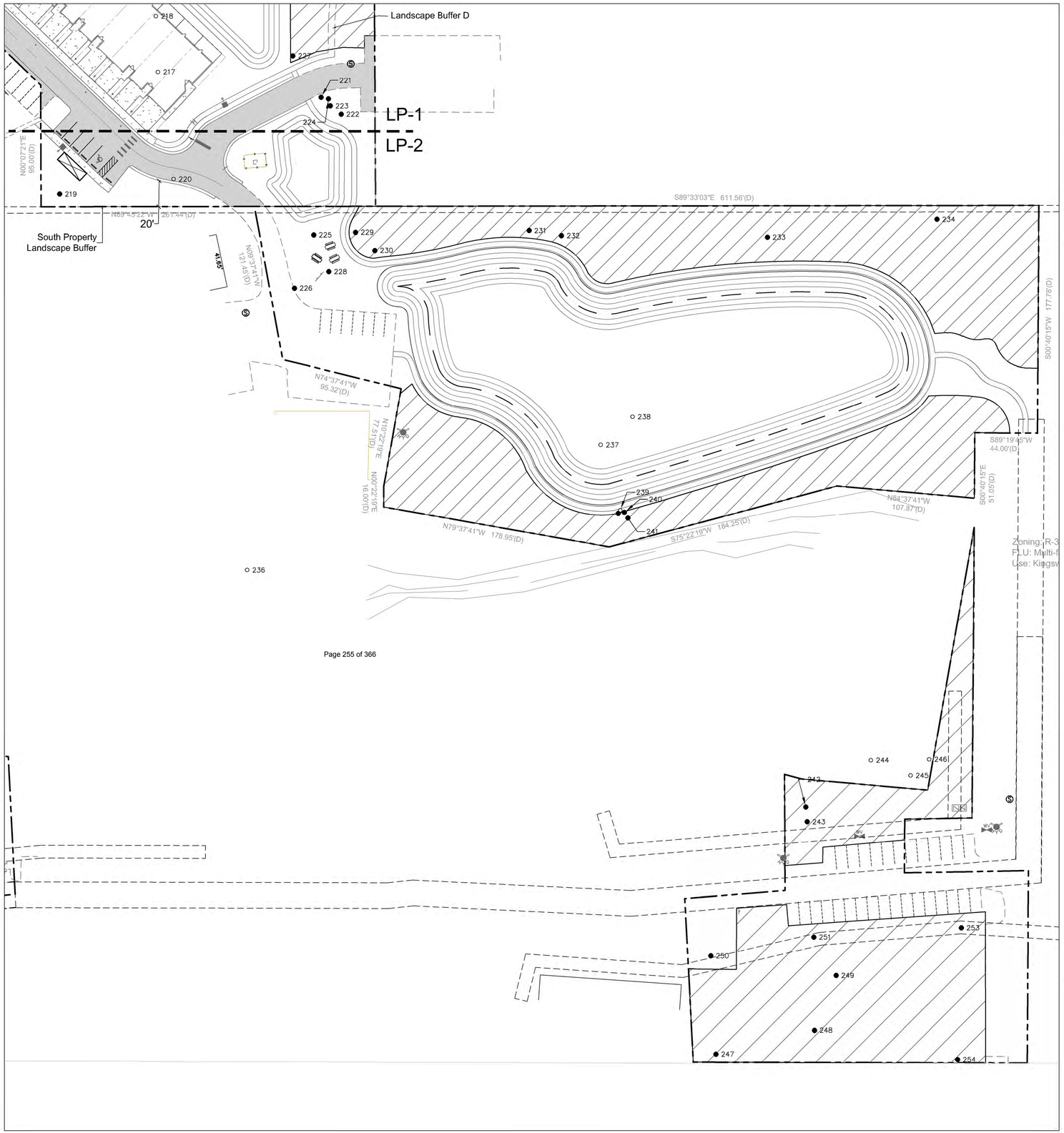
Job No.	19005
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	9-20-19
	12-05-19 1-16-20
Revision Dates	3-5-20

LP-1



Existing Tree Chart

Tree No.	Species	Size DBH	Protected	Description	Status
1	Laurel Oak	22	Yes		Remove
2	Slash Pine	18	Yes		Remove
3	Slash Pine	19	Yes		Remove
4	Laurel Oak	7	Yes		Remove
5	Slash Pine	15	Yes		Remove
6	Laurel Oak	12	Yes	multi-stem	Remove
7	Laurel Oak	5	Yes	multi-stem	Remove
8	Laurel Oak	5	Yes	multi-stem	Remove
9	Slash Pine	15	Yes		Remove
10	Slash Pine	17	Yes		Remove
11	Laurel Oak	5	Yes	multi-stem	Remove
12	Slash Pine	19	Yes		Remove
13	Laurel Oak	5	Yes		Remove
14	Laurel Oak	9	Yes		Remove
15	Laurel Oak	17	Yes		Remove
16	Laurel Oak	8	Yes		Remove
17	Laurel Oak	6	Yes		Remove
18	Laurel Oak	6	Yes		Remove
19	Laurel Oak	7	Yes		Remove
20	Laurel Oak	17	Yes		Remove
21	Laurel Oak	26	Yes		Remove
22	Slash Pine	10	Yes		Remove
23	Slash Pine	12	Yes		Remove
24	Laurel Oak	21	Yes		Remove
25	Slash Pine	15	Yes		Remove
26	Laurel Oak	8	Yes		Remove
27	Slash Pine	15	Yes		Remove
28	Laurel Oak	9	Yes		Remove
* 29	Laurel Oak	7	Yes		Relocate
30	Laurel Oak	10	Yes		Remove
31	Laurel Oak	15	Yes		Remove
32	Laurel Oak	12	Yes		Remove
33	Laurel Oak	10	Yes		Remove
34	Slash Pine	10	Yes		Remove
35	Slash Pine	14	Yes		Remove
36	Laurel Oak	7	Yes		Remove
37	Laurel Oak	8	Yes		Remove
38	Slash Pine	10	Yes		Remove
39	Laurel Oak	7	Yes		Remove
40	Laurel Oak	7	Yes		Remove
41	Laurel Oak	7	Yes		Remove
42	Slash Pine	13	Yes		Remove
43	Slash Pine	13	Yes		Remove
44	Slash Pine	13	Yes		Remove
45	Slash Pine	10	Yes		Remove
Tree No.	**Species**	**Size DBH**	**Protected**	**Description**	**Status**
46	Slash Pine	19	Yes		Remove
47	Live Oak	18	Yes		Remove
48	Live Oak	5	Yes		Remove
49	Live Oak	7	Yes		Remove
50	Live Oak	8	Yes		Remove
51	Live Oak	10	Yes	multi-stem	Remove
52	Live Oak	7	Yes		Remove
53	Live Oak	14	Yes		Remove
54	Slash Pine	23	Yes		Remove
55	Slash Pine	14	Yes		Preserve
56	Slash Pine	15	Yes		Preserve
57	Slash Pine	16	Yes		Preserve
58	Live Oak	5	Yes		Preserve
59	Live Oak	12	Yes		Preserve
60	Live Oak	6	Yes		Preserve
61	Live Oak	8	Yes	multi-stem	Preserve
62	Live Oak	5	Yes		Preserve
63	Slash Pine	16	Yes		Remove
64	Slash Pine	16	Yes		Remove
65	Slash Pine	12	Yes		Remove
66	Slash Pine	14	Yes		Remove
67	Live Oak	5	Yes	multi-stem	Remove
68	Slash Pine	17	Yes		Remove
69	Slash Pine	11	Yes		Remove
70	Slash Pine	24	Yes		Remove
71	Slash Pine	14	Yes		Remove
72	Slash Pine	10	Yes		Remove
73	Slash Pine	15	Yes		Remove
74	Slash Pine	13	Yes		Remove
75	Live Oak	8	Yes		Remove
76	Slash Pine	10	Yes		Remove
77	NA		Yes		
78	Slash Pine	12	Yes		Remove
79	Live Oak	6	Yes		Remove
80	Slash Pine	10	Yes		Remove
81	Slash Pine	14	Yes		Remove
82	Slash Pine	12	Yes		Remove
83	Dahoon Holly	5	Yes		Remove
84	Slash Pine	11	Yes		Remove
85	Slash Pine	15	Yes		Remove
86	Slash Pine	17	Yes		Remove
87	Slash Pine	10	Yes		Remove
88	Slash Pine	10	Yes		Remove
89	Slash Pine	15	Yes		Remove
90	Slash Pine	16	Yes		Remove
Tree No.	**Species**	**Size DBH**	**Protected**	**Description**	**Status**
91	Live Oak	6	Yes		Remove
92	Live Oak	7	Yes		Remove
93	Slash Pine	11	Yes		Remove
94	Live Oak	11	Yes		Remove
95	Live Oak	8	Yes		Remove
96	Live Oak	6	Yes		Remove
97	Slash Pine	11	Yes		Remove
98	Slash Pine	11	Yes		Remove
99	Slash Pine	14	Yes		Remove
100	Live Oak	6	Yes		Remove
101	Slash Pine	19	Yes		Remove
102	Slash Pine	15	Yes		Remove
103	Live Oak	10	Yes		Remove
104	Slash Pine	13	Yes		Remove
105	Slash Pine	12	Yes		Remove
106	Dahoon Holly	5	Yes		Remove
107	Slash Pine	12	Yes		Remove
108	Laurel Oak	8	Yes		Remove
109	Laurel Oak	6	Yes		Remove
110	Slash Pine	10	Yes		Remove
111	Slash Pine	12	Yes		Remove
112	Slash Pine	15	Yes		Remove
113	Slash Pine	13	Yes		Remove
114	Live Oak	6	Yes	multi-stem	Remove
115	Slash Pine	18	Yes		Remove
116	Slash Pine	12	Yes		Remove
117	Slash Pine	10	Yes		Remove
118	Live Oak	6	Yes		Remove
119	Slash Pine	13	Yes		Remove
* 120	Live Oak	7	Yes		Relocate
* 121	Live Oak	7	Yes		Relocate
* 122	Live Oak	6	Yes		Relocate
123	Live Oak	11	Yes		Remove
* 124	Live Oak	6	Yes		Relocate
125	Live Oak	10	Yes		Remove
126	Live Oak	6	Yes		Preserve
127	Live Oak	21	Yes		Preserve
128	Live Oak	17	Yes		Preserve
129	Slash Pine	15	Yes		Preserve
130	Slash Pine	17	Yes		Preserve
131	Live Oak	19	Yes		Preserve
132	Slash Pine	23	Yes		Remove
133	Slash Pine	10	Yes		Remove
134	Live Oak	11	Yes		Remove
135	Slash Pine	12	Yes		Remove
Tree No.	**Species**	**Size DBH**	**Protected**	**Description**	**Status**
136	Slash Pine	15	Yes		Remove
137	Slash Pine	11	Yes		Remove
138	Slash Pine	11	Yes		Remove
139	Slash Pine	9	No		Remove
140	Slash Pine	17	Yes		Remove
141	Slash Pine	18	Yes		Remove
142	Slash Pine	10	Yes		Remove
143	Slash Pine	15	Yes		Remove
144	Slash Pine	10	Yes		Remove
145	Slash Pine	14	Yes		Remove
146	Slash Pine	11	Yes		Remove
147	Live Oak	10	Yes		Remove
148	Live Oak	7	Yes		Remove
149	Slash Pine	22	Yes		Remove
150	Slash Pine	13	Yes		Remove
151	Sand Oak	4	No		Remove
152	Sand Oak	6	No		Remove
153	Sand Oak	11	No		Remove
154	Slash Pine	15	Yes		Remove
155	Slash Pine	12	Yes		Remove
156	Slash Pine	14	Yes		Remove
157	Slash Pine	11	Yes		Remove
158	Slash Pine	14	Yes		Remove
159	Slash Pine	13	Yes		Remove
160	Slash Pine	13	Yes		Remove
161	Slash Pine	11	Yes		Remove
162	Slash Pine	18	Yes		Remove
163	Slash Pine	14	Yes		Remove
164	Slash Pine	15	Yes		Remove
165	Sand Oak	6	No		Remove
166	Slash Pine	18	Yes		Preserve
167	Slash Pine	10	Yes		Preserve
168	Slash Pine	15	Yes		Preserve
169	Slash Pine	19	Yes		Preserve
170	Slash Pine	19	Yes		Preserve
171	Slash Pine	21	Yes		Remove
172	Slash Pine	19	Yes		Remove
173	Slash Pine	14	Yes		Remove
174	Slash Pine	11	Yes		Remove
175	Slash Pine	10	Yes		Remove
176	Slash Pine	15	Yes		Remove
177	Slash Pine	14	Yes		Remove
178	Sand Pine	5	No		Remove
179	Sand Pine	7	No		Remove
180	Sand Pine	7	No		Remove
Tree No.	**Species**	**Size DBH**	**Protected**	**Description**	**Status**
181	Sand Pine	5	No		Remove
182	Sand Oak	5	No		Remove
183	Sand Oak	8	No		Remove
184	Slash Pine	19	Yes		Remove
185	Slash Pine	17	Yes		Remove
186	Slash Pine	18	Yes		Remove
187	Slash Pine	19	Yes		Remove
188	Sand Oak	9	No		Remove
189	Sand Oak	9	No		Remove
190	Sand Oak	5	No		Remove
191	Sand Oak	8	No		Remove
192	Sand Oak	8	No		Remove
193	Sand Oak	5	No		Remove
194	Sand Oak	8	No		Remove
195	Slash Pine	13	Yes		Remove
196	Slash Pine	13	Yes		Remove
197	Slash Pine	13	Yes		Preserve
198	Sand Oak	4	No		Preserve
199	Sand Oak	10	No		Preserve
200	Sand Oak	11	No		Remove
201	Sand Oak	11	No		Remove
202	Sand Oak	7	No		Remove
203	Sand Oak	7	No		Remove
204	Sand Oak	12	No		Remove
205	Sand Oak	5	No		Remove
206	Sand Oak	5	No		Remove
207	Sand Oak	5	No		Remove
208	Sand Oak	11	No		Remove
209	Sand Oak	9	No		Remove
210	Cedar	10	Yes		Remove
211	Sand Oak	10	No		Remove
212	Sand Oak	9	No		Remove
213	Sand Oak	6	No		Remove
214	Sand Oak	4	No		Remove
215	Sand Oak	5	No		Remove
216	Sand Oak	7	No		Remove
217	Slash Pine	17	Yes		Remove
218	Sand Pine	8	No		Remove
219	Slash Pine	20	Yes		Preserve
220	Slash Pine	16	Yes		Remove
221	Slash Pine	11	Yes		Preserve
222	Slash Pine	15	Yes		Preserve
223	Slash Pine	11	Yes		Preserve
224	Slash Pine	16	Yes		Preserve
225	Slash Pine	24	Yes		Preserve
Tree No.	**Species**	**Size DBH**	**Protected**	**Description**	**Status**
226	Slash Pine	18	Yes		Preserve
227	Slash Pine	16	Yes		Preserve
228	Slash Pine	18	Yes		Preserve
229	Slash Pine	17	Yes		Preserve
230	Slash Pine	16	Yes		Preserve
231	Slash Pine	25	Yes		Preserve
232	Slash Pine	14	Yes		Preserve
233	Slash Pine	19	Yes		Preserve
234	Slash Pine	16	Yes		Preserve
235	Slash Pine	15	Yes		Off-site
236	Sand Oak	12	No		Off-site
237	Slash Pine	16	Yes		Remove
238	Sand Oak	8	No		Remove
239	Slash Pine	11	Yes		Preserve
240	Slash Pine	16	Yes		Preserve
241	Slash Pine	11	Yes		Preserve
242	Slash Pine	20	Yes		Preserve
243	Banyan	348	Yes	multi-stem	Preserve
244	Sand Pine	10	Yes		Off-site
245	Slash Pine	16	Yes		Off-site
246	Slash Pine	18	Yes		Off-site
247	Slash Pine	20	Yes		Preserve
248	Slash Pine	15	Yes		Preserve
249	Slash Pine	16	Yes		Preserve
250	Sand Pine	7	Yes		Preserve
251	Live Oak	9	Yes		Preserve
252	Sand Pine	9	Yes		Off-site
253	Live Oak	8	Yes		Preserve
254	Slash Pine	24	Yes		Preserve

Protected Tree Removal Summary

Protected Specimen Trees (Hardwood)

Total Inches (DBH) to be Removed	522 Inches
Total Inches (DBH) for Replacement (522 x 2.5)	1,305 Inches

Protected Specimen Pines (Softwood)

Total Inches (DBH) to be Removed	1,413 Inches
Total Inches (DBH) to be Replaced (1,429 x 1.5)	2,143.5 Inches

Legend

Ex. Trees to be Preserved

* Ex. Trees to be Relocated
(1 Laurel Oak & 4 Live Oaks)

Ex. Trees to be Removed

Notes

1. See Sheet LP-6 for applicable details and notes related to Tree Protection Barricades and Root Pruning / Tree Relocation.
2. See Sheet LP-3 for the location of Relocated Trees.
3. See Tree Mitigation data on Sheet LP-3 for proposed replacement inches.

Scale: 1" = 40'

0' 20' 40' 80' 120'

North

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City of Stuart
Existing Tree Survey / Removal Plan

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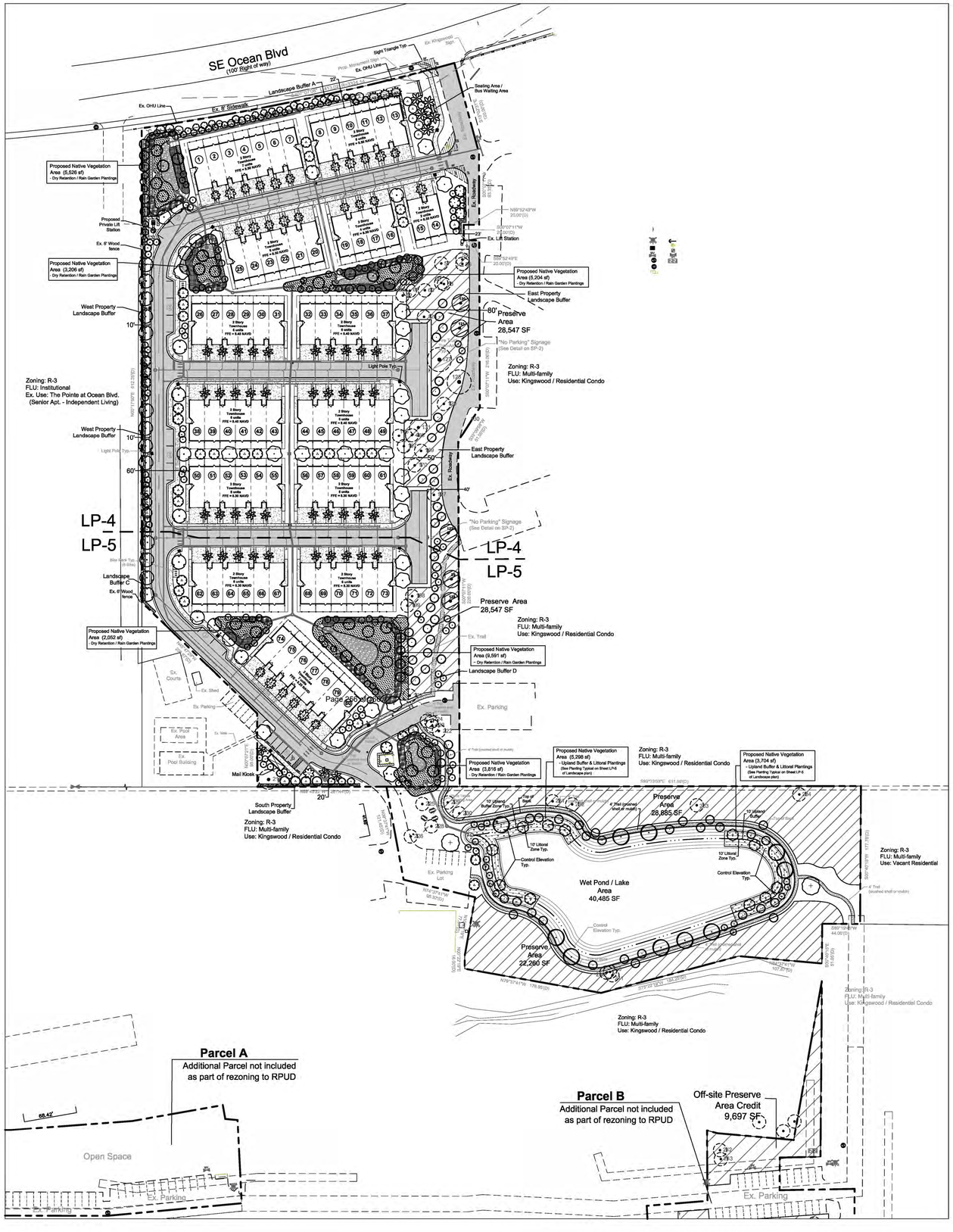
Job No.	19005
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	9-20-19
	12-05-19 1-16-20
Revision Dates	3-5-20

LP-2



Landscape Data

Total Site Area	11.04 Ac. / 481,103 sf
Future Land Use	Multi-family Residential
Existing Zoning	R-3
Proposed Zoning	RPUD
Proposed Use	2-Story / Single Family Townhomes
Proposed Dwelling Units	80

Required Landscape Area (20% of the total site gross area)

Total Gross Site Area	11.04 Ac. / 481,103 sf
Required Area (481,103 sf x 20%)	2.21 Ac. / 96,221 sf
Provided Area	5.33 Ac. / 232,255 sf (48%)

1 Tree per 1,500 sf of Development Site (Min. 50% Shade Trees)

Development Site (excludes ex. on-site preserve area)	401,411 sf (9.21 Ac.)
Total Trees Required (401,411 sf / 1,500 sf)	**268 Total Trees**
Total Shade Trees Required (268 Trees x 50%)	134 Trees
Total Trees Provided	**393 Total Trees**
4.5" DBH Shade Trees	163 Trees
2.5" DBH Shade Trees	88 Trees
Palms @ 1:1 Ratio	30 Trees
Palms @ 2:1 Ratio	112 Trees (224 Palms / 2)
	393 Total Trees

Perimeter Landscape Buffers

North Property Landscape Buffer- Adjacent to SE Ocean Blvd :

No Landscape Buffer required by city code
- Sec. 6.04.08. B.2. : 10' Landscape strip between abutting Right of Way and parking areas.
- No parking areas are being proposed abutting SE Ocean Blvd.

Buffer Provided :	22'
Trees Required:	Not Applicable
Trees Provided:	36 Trees
Trees	19 Trees
Palms @ 1:1 Ratio	3 Trees
Palms @ 2:1 Ratio	14 Trees (28 Palms / 2)
Trees Provided	36 Trees

East Property Landscape Buffer - Adjacent to Existing Multi-family

(Buffer not required for Proposed Single Family Dev. abutting Multi-family)

Multi-family abutting Multi-family Buffer Requirement - 672 LF

Buffer Width:	35' (25' + 10' for each additional bldg. story)
Buffer Screen:	8.75' (35' Buffer Width x 25%)
Trees:	22 Trees (1 tree per 30 LF)
Buffer Provided :	50' Average, Enhanced Native Upland Preserve Area which includes 60 additional provided trees

West Property Landscape Buffer - Adjacent to Existing Multi-family

(Buffer not required for Proposed Single Family Dev. abutting Multi-family)

Multi-family abutting Multi-family Buffer Requirement - 612 LF

Buffer Width:	35' (25' + 10' for each additional bldg. story)
Buffer Screen:	8.75' (35' Buffer Width x 25%)
Trees:	21 Trees (1 tree per 30 LF)
Buffer Provided :	10'
Trees Provided :	36 Trees
Trees	25 Trees
Palms @ 2:1 Ratio	11 Trees (22 Palms / 2)
Trees Provided	36 Trees

South Property Landscape Buffer - Adjacent to Existing Multi-family

(Buffer not required for Proposed Single Family Dev. abutting Multi-family)

Multi-family abutting Multi-family Buffer Requirement - 147 LF

Buffer Width:	35' (25' + 10' for each additional bldg. story)
Buffer Screen:	8.75' (35' Buffer Width x 25%)
Trees:	5 Trees (1 tree per 30 LF)
Buffer Provided :	20' Average
Trees Provided :	11 Trees
Trees	7 Trees
Ex. Trees	1 Tree (Ex. Pine # 219)
Palms @ 2:1 Ratio	3 Trees (6 Palms / 2)
Trees Provided	11 Trees

Interior / Parking Area Landscape Requirements

Interior / Terminal Landscape Island Requirement:

Each interior island shall contain a min. of 1 tree and a combination of shrubs, ground cover, grass and mulch. Hedge material used must be maintained at a max. height of 24". Not less than 50% of trees used in parking area interior landscaping shall be shade trees.

Trees Required:	8 Trees
Trees Provided:	8 Trees
Shade Trees	6 Trees (75%)
Palms @ 2:1 Ratio	2 Trees (4 Palms / 2)
Trees Provided	8 Trees

Tree Replacement / Mitigation Data

Protected Specimen Trees (Hardwood):

Inches to be Removed	522 Inches
Required Replacement Inches (522 x 2.5)	1,305 Inches
Provided On-site Replacement Inches	733.5 Inches
Total Amount to be paid into the City's Tree Fund	$111,125.00

City's Tree Fund Calculation:

571.5" (Remaining Inches) / 4.5" (Min. Size to Replace) = 127 Trees

127 Trees x $875 Each (175% of Average Plant Finder Cost of Tree)

* Applicant proposes to use the tree fund contribution for improvements to the existing community

Protected Specimen Pines (Softwood):

Inches to be Removed	1,429 Inches
Required Replacement Inches (1,429 x 1.5)	2,143.5 Inches
Provided On-site Replacement Inches	2,147 Inches

* Note: See Tree Schedule on Sheet LP-6 for total provided mitigation inches per tree

Legend

Relocated Trees (1 Laurel Oak & 4 Live Oaks)

Existing Trees to be Preserved

*Note: See Existing Tree Chart on Sheet LP-1 for more detailed info

Scale: 1" = 70'

0' 35' 70' 140' 210'

North

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Stuart Ocean Townhomes

City of Stuart Landscape Plan

Florida

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Drawn By	TT
Checked By	MH
Approved By	MH
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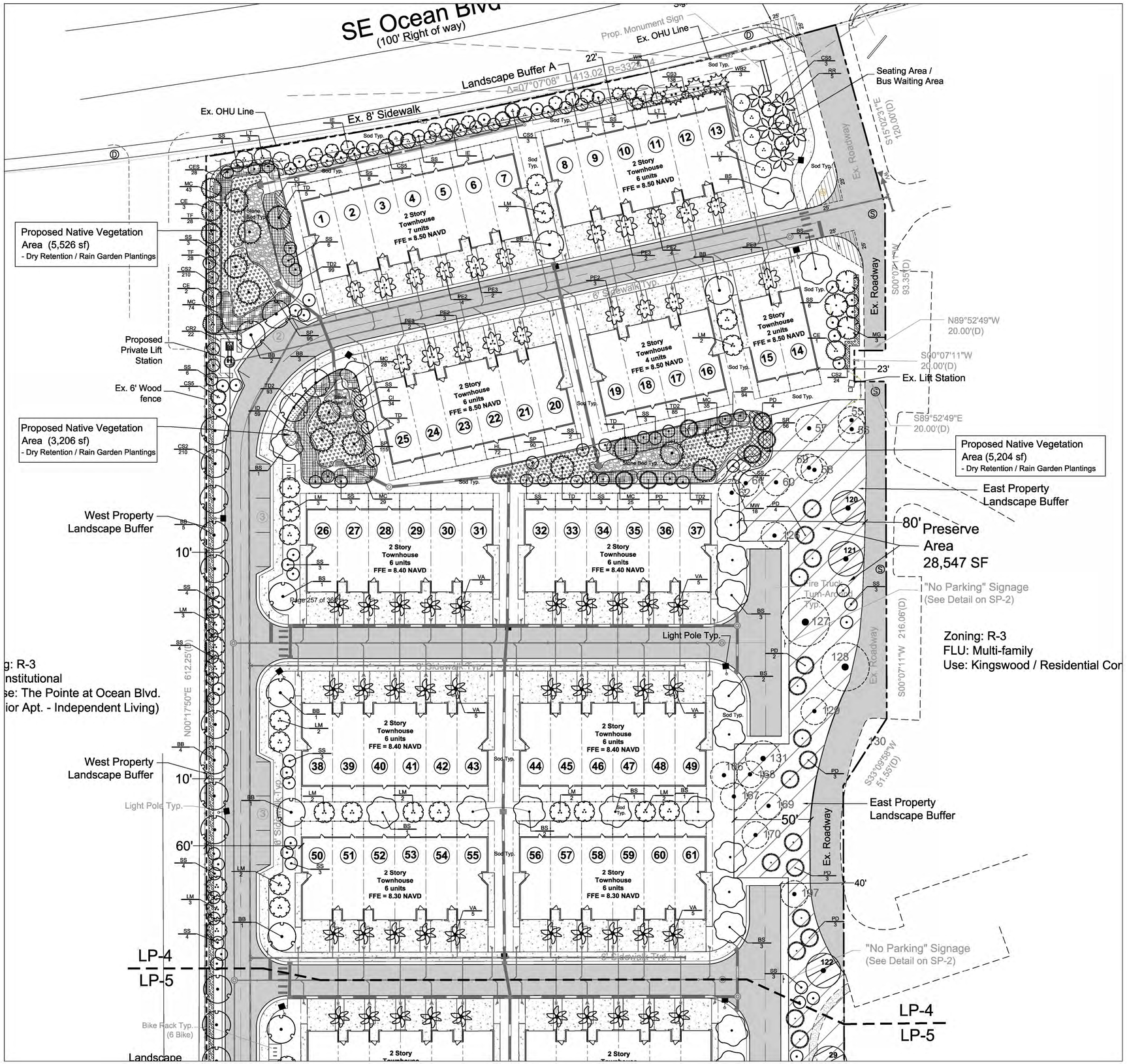
Revision Dates	3-5-20

LP-3



ABBREVIATED TREE SCHEDULE			
TREES (2.5" DBH)	CODE	QTY	BOTANICAL / COMMON NAME
	IE	9	Ilex x attenuata `Eagleston` / Eagleston Holly
	PD	68	Pinus elliotti `Densa` / Slash Pine
	TD3	11	Taxodium distichum / Bald Cypress
TREES (4.5" DBH)	CODE	QTY	BOTANICAL / COMMON NAME
	BB	28	Bucida buceras `Shady Lady` / Shady Lady Black Olive
	BS	25	Bursera simaruba / Gumbo Limbo
	CE	13	Conocarpus erectus / Green Buttonwood
	CS5	13	Conocarpus erectus `Sericeus` / Silver Buttonwood
	DR	2	Delonix regia / Royal Poinciana
	LM	33	Lagerstroemia fauriei ` Muskogee ` / Muskogee Crape Myrtle
	LT	9	Lagerstroemia fauriei `Tuscarora` / Crape Myrtle Coral Pink
	MG	4	Magnolia grandiflora `D.D. Blanchard` / Southern Magnolia
	QV	10	Quercus virginiana / Southern Live Oak
	TD	26	Taxodium distichum / Bald Cypress
PALM TREES	CODE	QTY	BOTANICAL / COMMON NAME
	PE2	17	Ptychosperma elegans / Alexander Palm
	PE3	10	Ptychosperma elegans / Alexander Palm
	RR	5	Roystonea regia / Royal Palm
	SS	172	Sabal palmetto / Cabbage Palm
	VA	43	Veitchia arecina / Montgomery Palm
	WR	4	Washingtonia robusta / Mexican Fan Palm
	WB2	3	Wodyetia bifurcata / Foxtail Palm

NOTE: These are abbreviated Tree & Shrub Schedules.
See Sheet LP-6 for Schedules with Specifications.

ABBREVIATED SHRUB SCHEDULE		
GRASSES / GROUNDCOVERS	QTY	BOTANICAL / COMMON NAME
HL	333	Hymenocallis latifolia / Spider Lily
MC	467	Muhlenbergia capillaris / Pink Muhly
SP	1,145	Spartina bakeri / Sand Cord Grass
TF	80	Tripsacum dactyloides / Fakahatchee Grass
TD2	497	Tripsacum floridanum / Dwarf Fakahatchee
SHRUBS	QTY	BOTANICAL / COMMON NAME
CI	168	Chrysobalanus icaco / Cocoplum
CR2	22	Chrysobalanus icaco `Red Tip` / Red Tip Cocoplum
CS3	138	Clusia guttifera / Small-Leaf Clusia
CS2	280	Clusia guttifera / Small-Leaf Clusia
CES	51	Conocarpus erectus ` sericeus` / Silver Buttonwood
ID	59	Ilex vomitoria `Schillings Dwarf` / Dwarf Schillings Holly
MW	31	Myrica cerifera / Wax Myrtle
SR	90	Serenoa repens / Saw Palmetto

Legend

Relocated Trees
(1 Laurel Oak & 4 Live Oaks)

Existing Trees to be Preserved

*Note: See Existing Tree Chart on Sheet LP-1 for more detailed info

Scale: 1" = 30'

0' 15' 30' 60' 90'

North

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Stuart Ocean Townhomes

City of Stuart Florida

Landscape Plan

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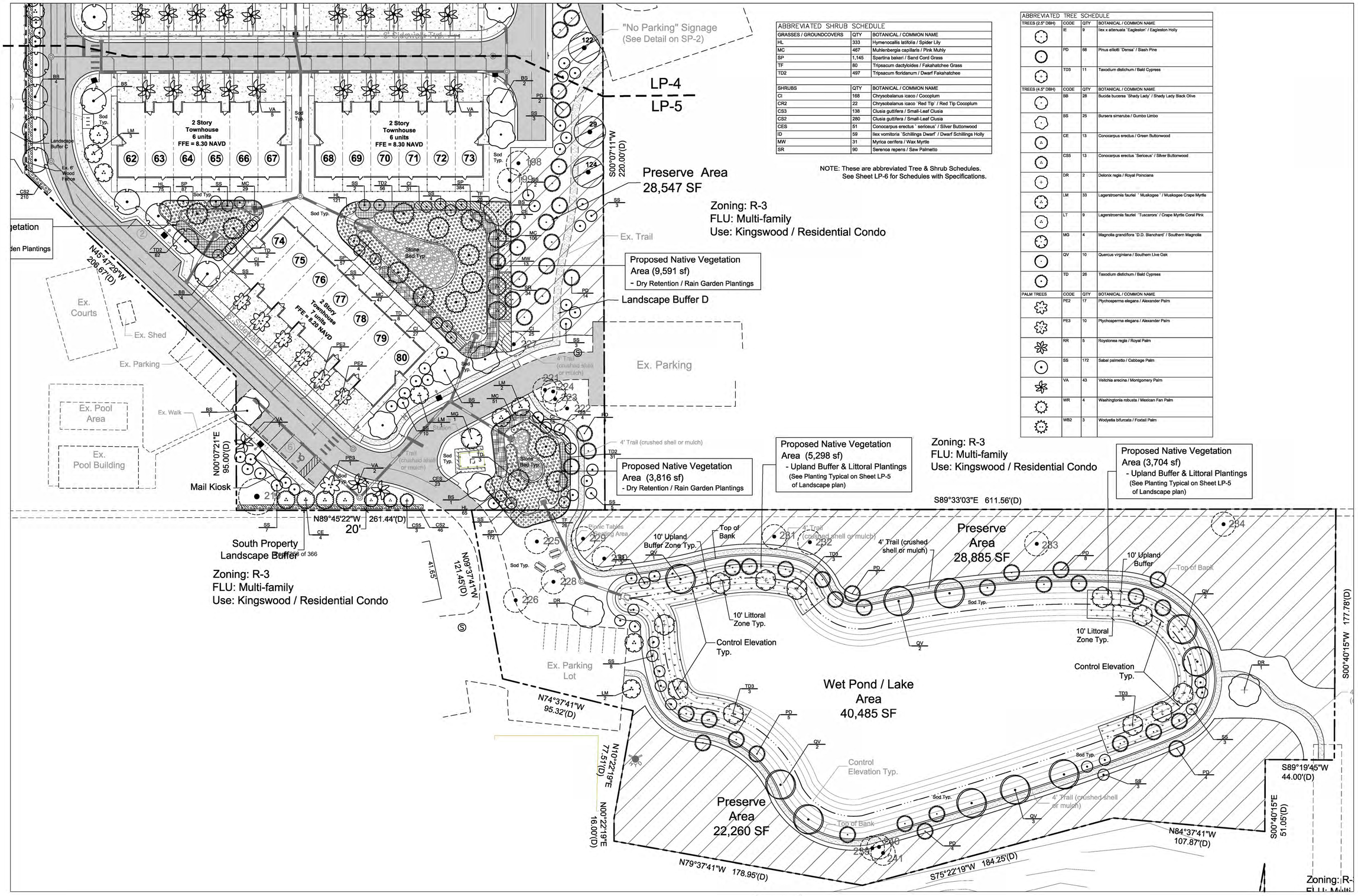
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	9-20-19
	12-05-19 1-16-20
Revision Dates	3-5-20

LP-4



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NOTE: These are abbreviated Tree & Shrub Schedules.
See Sheet LP-6 for Schedules with Specifications.

ABBREVIATED TREE SCHEDULE			
TREES (2.5" DBH)	CODE	QTY	BOTANICAL / COMMON NAME
	IE	9	Ilex x attenuata `Eagleston` / Eagleston Holly
	PD	68	Pinus elliottii `Densa` / Slash Pine
	TD3	11	Taxodium distichum / Bald Cypress
TREES (4.5" DBH)	CODE	QTY	BOTANICAL / COMMON NAME
	BB	28	Bucida buceras `Shady Lady` / Shady Lady Black Olive
	BS	25	Bursera simaruba / Gumbo Limbo
	CE	13	Conocarpus erectus / Green Buttonwood
	CS5	13	Conocarpus erectus `Sericeus` / Silver Buttonwood
	DR	2	Delonix regia / Royal Poinciana
	LM	33	Lagerstroemia fauriei `` Muskogee `` / Muskogee Crape Myrtle
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	QV	10	Quercus virginiana / Southern LIve Oak
	TD	26	Taxodium distichum / Bald Cypress
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	WR	4	Washingtonia robusta / Mexican Fan Palm
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Legend

Relocated Trees (1 Laurel Oak & 4 Live Oaks)

Existing Trees to be Preserved

*Note: See Existing Tree Chart on Sheet LP-1 for more detailed info

Scale: 1" = 30'

0' 15' 30' 60' 90'

North

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City of Stuart Landscape Plan

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Drawn By	TT
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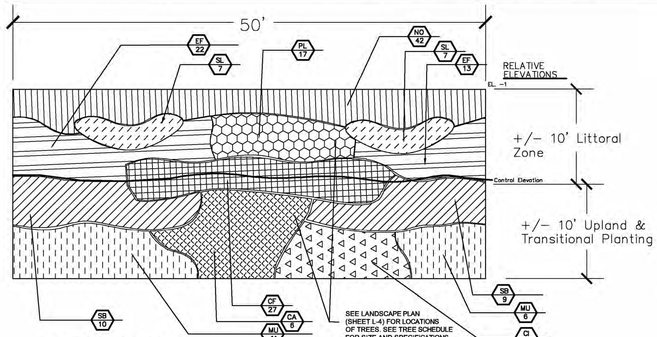
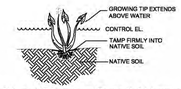
Approved By	MH
Submittal Dates	9-20-19
	12-05-19 1-16-20
Revision Dates	3-5-20

LP-5

50' Section of Typical Lake Littoral & Upland Buffer Planting Zone - 20' Width

N.T.S.





Littoral Planting Detail / Notes

N.T.S.

1. ALL PLANT MATERIALS SHALL BE PLANTED AND MAINTAINED IN A NATURAL ARRANGEMENT.
2. LITTORAL PLANTING ESTABLISHMENT SHALL BE COMPLETED ON STABILIZED SLOPES CONFORMING TO GRADES SET FROM CONTROL ELEVATION AND THE APPROVED CONSTRUCTION DRAWINGS.
3. PLANT SPECIES MAY BE SUBSTITUTED WITH SIMILAR NATIVE SPECIES INDIGENOUS TO THE REGION BASED ON AVAILABILITY FROM LOCAL NATIVE NURSERIES.
4. THE SLOPES OF CONSTRUCTED LAKE FROM THE TOP OF THE BANK TO THE CONTROL ELEVATION SHALL BE IMMEDIATELY STABILIZED AND / OR SODDED TO THE SATISFACTION OF THE GROWTH MANAGEMENT DEPTARTMENT UPON COMPLETION OF THE LAKE CONSTRUCTION.

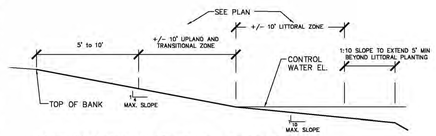
Plant List - Littoral Zone

QTY (50' TYP)	QTY (TOTAL)	SYMBOL	SPECIES(BOTANICAL/COMMON)	SPECIFICATION
14	130	SL*	SAGITTARIA LATIFOLIA / DUCK POTATO	2' O.C., BARE ROOT
42	391	NO*	NYMPHEA ODORATA / FRAGRANT WATER LILY	2' O.C., BARE ROOT
35	326	EF*	ELEOCHARIS FLAVESCENS / SPIKE RUSH	2' O.C., BARE ROOT
27	251	CF*	CANNA FLACCIDA / GOLDEN CANNA LILY	2' O.C., BARE ROOT
17	158	PL*	PONTEDERIA LANCEOLATA / PICKEREL WEED	2' O.C., BARE ROOT

Plant List - Upland Buffer Zone

QTY (50' TYP)	QTY (TOTAL)	SYMBOL	SPECIES(BOTANICAL/COMMON)	SPECIFICATION
19	177	SB*	SPARTINA BAKERI / SMOOTH CORDGRASS	3' O.C., 1 GAL., FULL
6	56	CA*	CALLICARPA AMERICANA / BEAUTYBERRY	5' O.C., 3 GAL., FULL
17	158	MU*	MUHLENBERGIA CAPILLARIS / MUHLY GRASS	3' O.C., 1 GAL., FULL
4	37	CI*	CHRYSOBALANUS ICACO / COCOPLUM	5' O.C., 3 GAL., FULL

*=FLORIDA NATIVE

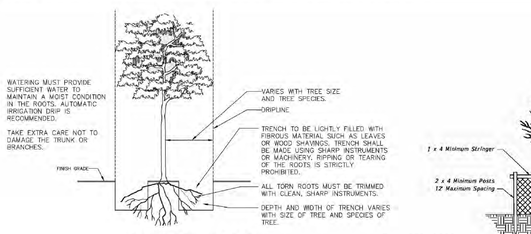


Littoral / Upland Buffer Zone - Cross Section

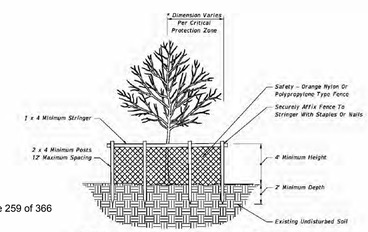
N.T.S.

* QUANTITIES ARE FOR A TYPICAL 50' SECTION. LINEAR FOOTAGE OF LITTORAL / UPLAND BUFFER SHOWN AROUND PERIMETER OF LAKE IS 463 LF. THEREFORE QUANTITIES SHOULD BE MULTIPLIED BY 9.3 (463 LF / 50) . SEE LANDSCAPE PLAN (SHEET LP-5) FOR LOCATION OF REQUIRED TREES. SEE TREE SCHEDULE FOR SIZE AND SPECIFICATIONS.

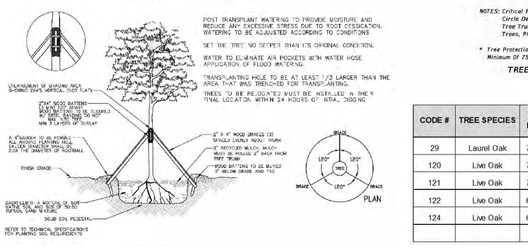
Root Pruning / Tree Relocation Chart & Details



ROOT PRUNING DETAIL



TREE PROTECTION BARRICADE

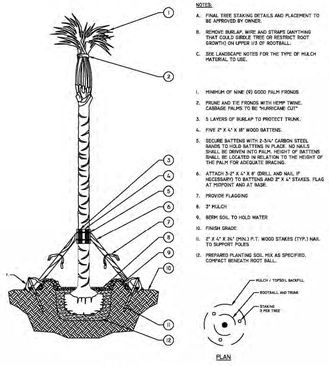


TREE RELOCATION DETAIL

N.T.S.

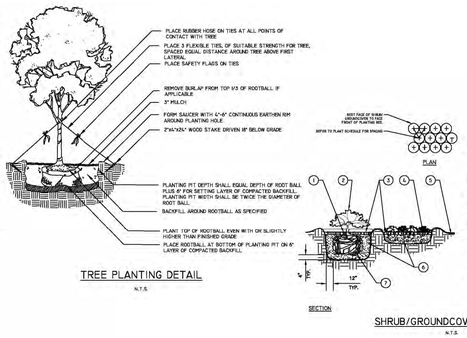
CODE #	TREE SPECIES	TREE D.B.H.	ROOTBALL DIAMETER	TRANSPLANTING HOLE SIZE (Min.)	MIN. WAITING TIME BETWEEN ROOT PRUNING & RELOCATION
29	Laurel Oak	7" DBH	70" DIA.	93" DIA.	2 Months (8 weeks)
120	Live Oak	7" DBH	70" DIA.	93" DIA.	2 Months (8 weeks)
121	Live Oak	7" DBH	70" DIA.	93" DIA.	2 Months (8 weeks)
122	Live Oak	6" DBH	60" DIA.	80" DIA.	2 Months (8 weeks)
124	Live Oak	6" DBH	60" DIA.	80" DIA.	2 Months (8 weeks)

Planting / Landscape Details



PALM TREE PLANTING

N.T.S.



TREE PLANTING DETAIL

N.T.S.

1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. WHEN USED IN MASSES: PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT.
3. 3" MULCH AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED IN THE PLANTING SPECIFICATION.
7. SCARIFY ROOTBALL SIDES AND BOTTOM.

SHRUB/GROUNDCOVER PLANTING

N.T.S.

Xeriscape Landscape Requirement

To obtain a development permit, an applicant shall attain a minimum of 50 points from the following table of design options. As used in the table, "list" means the list of drought tolerant species set forth in the most current South Florida Water Management District's Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape

Design Options:	Points	Points Received
(1) Utilization of moisture sensing controller other than rain switch	5	5
(2) Plan submitted with low, moderate and high water usage zones indicated on the landscape plan	5	
(3) Grasses / ground covers:		
25 - 50 % of the grasses / ground covers are made up of drought tolerant species from the list	5	
51 % or more of the grasses / ground covers are made up of drought tolerant species from the list	10	10
(4) Shrubs:		
25 - 50 % of the required shrubs are made up of drought tolerant species from the list	5	
51 % or more of the required shrubs are made up of drought tolerant species from the list	10	10
(5) Trees:		
25 - 50 % of the required trees are made up of drought tolerant species from the list	5	
51 % or more of the required trees are made up of drought tolerant species from the list	10	10
(6) Extra shade trees in vehicular use areas:		
25 % more than the required shade trees planted in the vehicular use areas.	5	5
50 % more than the required shade trees planted in the vehicular use areas.	10	
(7) Sod area less than 50 percent of provided landscape area.	10	
(8) Utilization of compacted mulched planting beds at least three inches in depth in all planted areas except ground covers. (Use of Cypress Mulch prohibited)	10	10

Total Points Provided: 50 Points

Landscape Notes

1. Plant materials used in conformance with the provisions of this landscape code shall conform to the Standards for Florida No. 1 or better as given in "Grades and Standards for Nursery Plants" Part I and Part II, 1963, State of Florida, Department of Agriculture, Tallahassee.
2. Tree locations may be adjusted for site permit application based on final construction and utility plans. Alternative plant species and enhanced landscaping beyond minimum requirements may be permitted subject to review and approval by the City of Stuart prior to installation. Trees and shrubs may be substituted based on availability.
3. For existing or proposed utilities, no tree shall be planted where it could, at mature height conflict with overhead power lines. Large trees (height at maturity of no more than 30') from the nearest overhead power line. Medium height tree (height at maturity between 20' and 30' shall be offset at least 20') and small trees (height at maturity of less than 20') require no offset. Palms should be planted at a distance equal to or greater than the average frond length plus two (2) feet from power lines.
5. No tree, shrubs, hedges or vines shall be planted within 5' of an existing or proposed utility pole, guy wire or pad-mounted transformer. Tree species shall be selected as to minimize conflicts with existing or proposed utilities.
6. Ground cover used in lieu of grass shall be planted so as to present a finished appearance and reasonable complete coverage within three months of installation. All landscaped areas shall be sodded or otherwise covered with ground cover.
7. Mulch shall be installed in all planting areas to a minimum depth of three inches. The use of cypress mulch is prohibited
8. All landscaping within a visibility triangle shall provide unobstructed cross-visibility at a level between three feet and six feet and shall comply with the most current edition of the State of Florida DOT Roadway and Traffic Design Standards, Index 546 regarding visibility triangles.
9. Any hedge materials located within an interior landscaped island shall be maintained at a height of not more than 24 inches.
10. All above ground utilities shall be screened in accordance with City of Stuart requirements.
11. All required landscaping installed pursuant to this landscape code shall be installed according to accepted good planting practices.
12. All prohibited, exotic, and invasive species shall be removed from the entire site prior to the issuance of a certificate of occupancy.
13. All native vegetation which is not located in areas requiring their removal as reflected by an approved plan document shall be retained in an undisturbed state as provided in Chapter V, Resource Protection Related Development Standards.
14. To assure the health and survival of protected trees that are not to be removed, the contractor shall avoid the following kinds of tree injuries during all development activities: a. Mechanical injuries to roots, trunk, and branches; b. Injuries by chemical poisoning; c. Injuries by grade changes; d. Injuries by excavations, fill and; e. Injuries by paving.
15. Prior to any land preparation or other development activities a protective barrier easily visible to equipment operators shall be placed around all protected trees so as to encompass the entire tree protection zone.
16. No attachment, wires (other than supportive wires), signs or permits may be fastened to any protected tree.
17. No equipment, construction materials or debris of any kind shall be placed within the protective barrier.
18. Sod areas and quantities shall be provided at the time of site permit. 51% of sod areas provided shall be either zoysia or bahia sod species.

Irrigation Notes

1. All landscape & sod areas shall be irrigated by an automated system that provides 100% coverage and overlap.
2. Irrigation systems shall conform to the following standards: Irrigation systems shall be continuously maintained in working order and shall be designed not to overlap water zones or to water impervious areas.
3. No irrigation system shall be installed or maintained abutting any public street which causes water from the system to overspray onto the roadway or to strike passing vehicular traffic.
4. Irrigation Water Source: Well
5. Irrigation system shall provide a moisture sensing controller other than rain switch to monitor rain levels and irrigation needs.

TREE SCHEDULE

	TREES (2.5" DBH)	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	NATIVE	CREDIT
*		IE	9	Ilex x attenuata `Eagleston` / Eagleston Holly * Pine Mitigation (Softwoods)	2.5" DBH, 12 - 13` Ht. x 6` Spr., Std., 4-5` ct.	Yes	22.5 inches
*		PD	68	Pinus elliotti `Densa` / Slash Pine * Pine Mitigation (Softwoods)	2.5" DBH., 12` ht. x 6` Spr., Std., 4-5` ct.	Yes	170 inches
*		TD3	11	Taxodium distichum / Bald Cypress * Pine Mitigation (Softwoods)	2.5"DBH, 12` - 13` Ht. x 6` Spr., Std., 4-5` ct.	Yes	27.5 inches
	TREES (4.5" DBH)	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	NATIVE	CREDIT
		BB	28	Bucida buceras `Shady Lady` / Shady Lady Black Olive * Tree Mitigation (Hardwoods)	4.5" DBH., 15` - 17` Ht. x 6 - 7` Spr., Std., 4-5` ct.	No	126 inches
*		BS	25	Bursera simaruba / Gumbo Limbo * Tree Mitigation (Hardwoods)	4.5" DBH, 14` - 16` Ht. x 6 - 8` Spr., Std., 5` - 6` ct.	Yes	103.5 inches
*		CE	13	Conocarpus erectus / Green Buttonwood * Tree Mitigation (Hardwoods)	4.5" DBH., 12 - 14` Ht. x 6` - 8` Spr., Multi-trunk, 4-5` ct.	Yes	58.5 inches
*		CS5	13	Conocarpus erectus `Sericeus` / Silver Buttonwood * Tree Mitigation (Hardwoods)	4.5" DBH., 12` Ht. x 6` Spr., Multi-trunk, 4` ct.	Yes	58.5 inches
*		DR	2	Delonix regia / Royal Poinciana * Tree Mitigation (Hardwoods)	4.5" DBH, 14` - 16` Ht. x 6 - 8` Spr., Std., 5` - 6` ct.	No	9 inches
*		LM	33	Lagerstroemia fauriei ` Muskogee ` / Muskogee Crape Myrtle * Tree Mitigation (Hardwoods)	4.5" DBH., 12 - 13` Ht. x 6` Spr., Multi-trunk, 5- 6` ct.	No	148.5 Inches
*		LT	9	Lagerstroemia fauriei `Tuscarora` / Crape Myrtle Coral Pink * Tree Mitigation (Hardwoods)	4.5" DBH., 12 - 13` Ht. x 6` Spr., Multi-trunk, 5- 6` ct.	no	40.5 inches
*		MG	4	Magnolia grandiflora `D.D. Blanchard` / Southern Magnolia * Tree Mitigation (Hardwoods)	4.5" DBH., 15` - 17` Ht. x 6 - 7` Spr., Std., 4-5` ct.	Yes	18 inches
*		QV	10	Quercus virginiana / Southern Live Oak * Tree Mitigation (Hardwoods)	4.5" DBH, 16 -18` Ht x 7 - 9` Spr., Std., 6` ct.	Yes	54 inches
*		TD	26	Taxodium distichum / Bald Cypress * Tree Mitigation (Hardwoods)	4.5" DBH., 15` - 17` Ht. x 6 - 7` Spr., Std., 4-5` ct.	Yes	117 inches
	PALM TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	NATIVE	CREDIT
*		PE2	17	Ptychosperma elegans / Alexander Palm * Pine Mitigation (Softwoods)	13` ct., Double Specimen	No	76.5 inches
*		PE3	10	Ptychosperma elegans / Alexander Palm * Pine Mitigation (Softwoods)	14` ct., Triple Specimen	No	45 inches
*		RR	5	Roystonea regia / Royal Palm * Pine Mitigation (Softwoods)	18` ct.	Yes	42.5 inches
*		SS	172	Sabal palmetto / Cabbage Palm * Pine Mitigation (Softwoods)	32 @ 15` ct., 40 @ 17` ct., 50 @ 19`ct., 50 @ 21` ct.	Yes	1,526 inches
		VA	43	Veitchia arecina / Montgomery Palm * Pine Mitigation (Softwoods)	14` ct., Single Specimen	No	193.5 inches
*		WR	4	Washingtonia robusta / Mexican Fan Palm * Pine Mitigation (Softwoods)	2 @ 16` ct., 2 @ 18` ct.	No	30 inches
*		WB2	3	Wodyetia bifurcata / Foxtail Palm * Pine Mitigation (Softwoods)	14` ct., Double Specimen	No	13.5 inches

Note: 14' ct. = 4.5 inches. For every one foot of clear trunk of palm tree exceeding 14' ct., credit will be given for one inch of replacement .

*** Drought Tolerant Tree Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Provided / Req. Trees 393 Trees
Shade Trees 251 Trees
1:1 Palm Trees 30 Trees
2:1 Palm Trees 112 Trees (224 Palm / 2)

Drought Tolerant Trees Provided 335 Trees (85%)

Native Tree Requirement (50% Minimum)

Total Provided / Req. Trees 393 Trees
Shade Trees 251 Trees
1:1 Palm Trees 30 Trees
2:1 Palm Trees 112 Trees (224 Palm / 2)

Native Trees Required (393 Required Trees x 50%) 197 Trees (50%)
Native Trees Provided 267 Trees (68%)

SHRUB SCHEDULE

	GRASSES / GROUNDCOVERS	QTY	BOTANICAL / COMMON NAME	SIZE	DETAILS	NATIVE	SPACING
**	HL	333	Hymenocallis latifolia / Spider Lily	1 gal	* Full pot	Yes	24" o.c.
**	MC	467	Muhlenbergia capillaris / Pink Muhly	1 gal	* Full pot	Yes	36" o.c.
**	SP	1,145	Spartina bakeri / Sand Cord Grass	1 gal	* Full pot	Yes	36" o.c.
**	TF	80	Tripsacum dactyloides / Fakahatchee Grass	1 gal	Full	Yes	48" o.c.
**	TD2	497	Tripsacum floridanum / Dwarf Fakahatchee	1 gal	Full	Yes	30" o.c.
	SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	DETAILS	NATIVE	SPACING
*	CI	168	Chrysobalanus icaco / Cocoplum	3 gal	Full	Yes	36" o.c.
	CR2	22	Chrysobalanus icaco `Red Tip` / Red Tip Cocoplum	3 gal	24" Ht., full	Yes	36" o.c.
*	CS3	138	Clusia guttifera / Small-Leaf Clusia	3 gal	24" - 30" Ht., Full	Yes	30" o.c.
*	CS2	280	Clusia guttifera / Small-Leaf Clusia	3 gal	24" Ht. Min.	Yes	36" o.c.
*	CES	51	Conocarpus erectus ` sericeus` / Silver Buttonwood	3 gal	24" Ht., full	Yes	30" o.c.
*	ID	59	Ilex vomitoria `Schillings Dwarf` / Dwarf Schillings Holly	3 gal	Full	Yes	24" o.c.
*	MW	31	Myrica cerifera / Wax Myrtle	3 gal	Full	Yes	48" o.c.
*	SR	90	Serenoa repens / Saw Palmetto	1 gal	Full	Yes	36" o.c.

*** Drought Tolerant Shrub Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Provided Shrubs 864 Shrubs
Drought Tolerant Shrubs 842 Shrubs (97%)

**** Drought Tolerant Grasses / Ground Covers Species**
(per most current SFWMD Waterwise, South Florida Landscapes, Landscaping to Promote Water Conservation Using the Principles of Xeriscape)

Total Provided Grasses / GC 2,449 Grasses / GC
Drought Tolerant Grasses / GC 2,449 Grasses / GC (100%)

Native Shrub Requirement (50% Minimum)

Total Provided Shrubs 864 Shrubs
Native Shrubs Provided 864 Shrubs (100%)

Native Grasses / Ground Cover Requirement (50% Minimum)

Total Provided Grasses / GC 2,449 Grasses / GC
Native Grasses / Ground Covers 2,449 Grasses / GC (100%)

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Stuart Ocean Townhomes

City of Stuart Florida

Landscape Specifications

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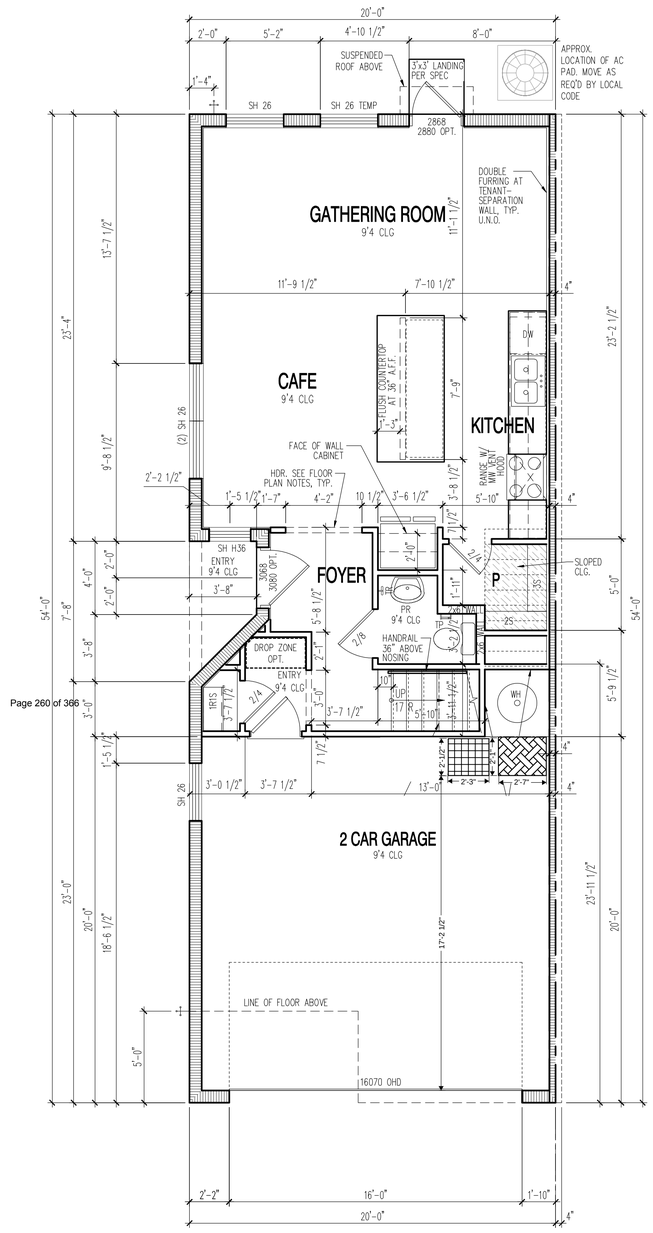
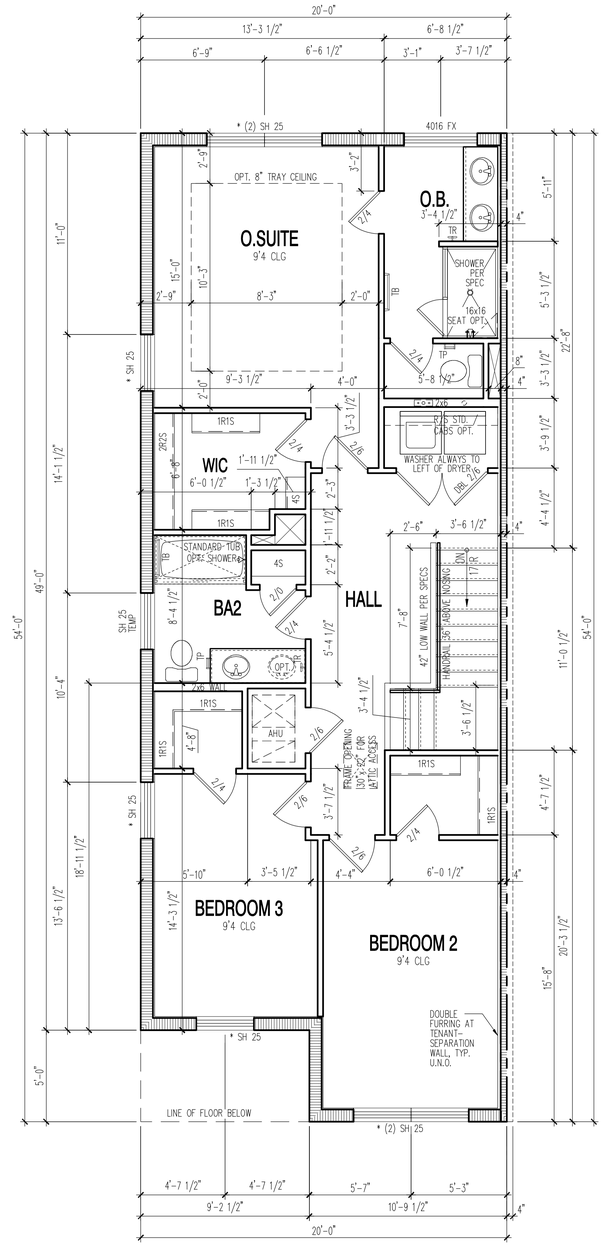
Job No. 19005
Drawn By TT
Checked By MH
Approved By MH
Submittal Dates 9-6-19
12-05-19 1-16-20
Revision Dates 3-5-20

LP-6



GRAYTON - 1ST FLOOR

SCALE: 1/4"=1'-0"



GRAYTON - 2ND FLOOR

SCALE: 1/4"=1'-0"

LEGEND

- TRASH RECEPTICLE 25"x27"
- RECYCLE RECEPTICLE 26"x31"

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Bonita Springs, Florida 34134 (239) 495-4800

PulteGroup

BASE FLOOR PLANS

PRODUCTION MANAGER

CONTROL DATE: 2/16/18

REV #	DATE / DESCRIPTION

PROJECT TYPE
SF ATTACHED

COMMUNITY NAME

LAWSON COMMUNITY ID

GARAGE HANDING
–

VERSION NUMBER
1.0

PLAN NAME / NPC
NAVARRE 2498.502

GRAYTON 2567.508

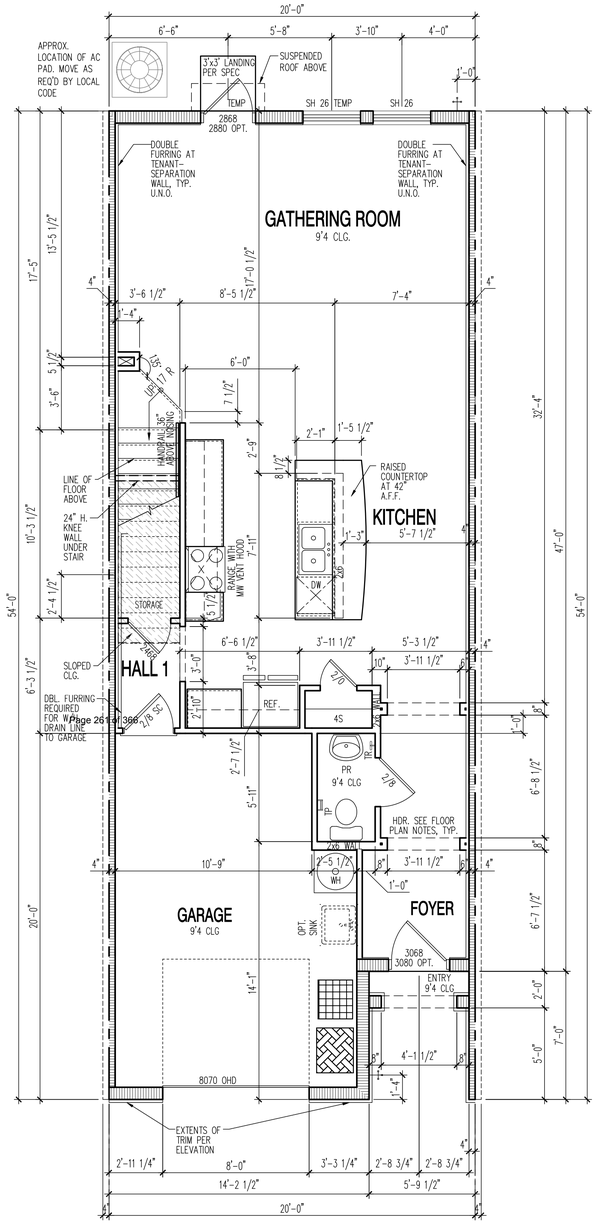
LAWSON PLAN ID

LEGACY PLAN NUMBER / NAME

SHEET
A1.11

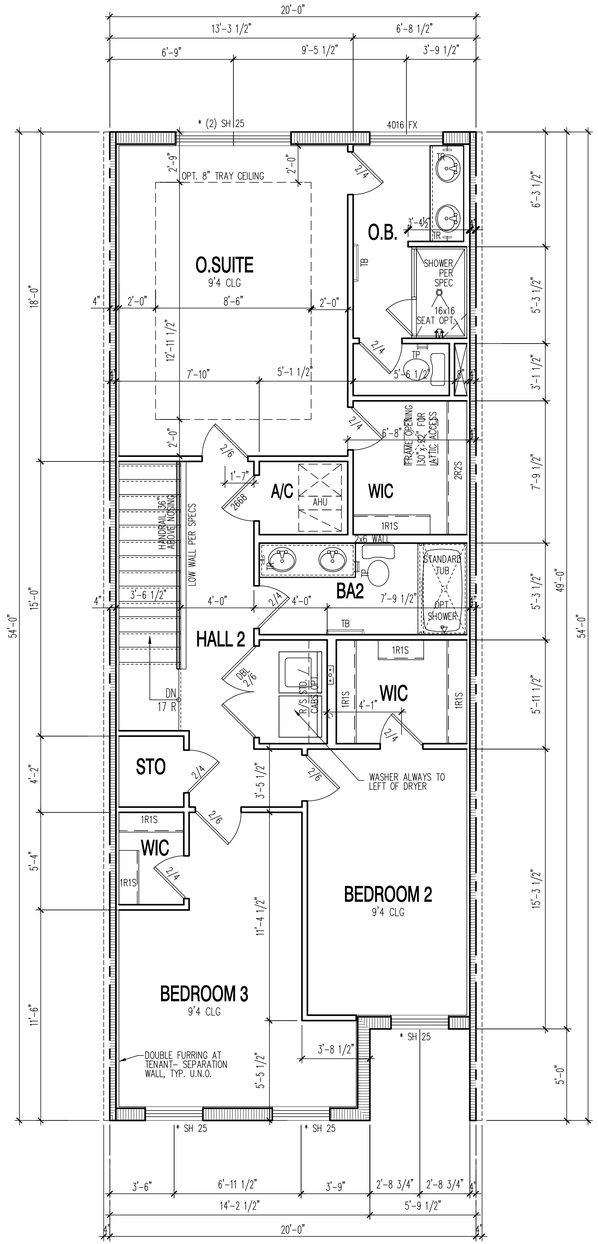
NOTE: SCALES NOTED ON DRAWINGS RELATE TO FULL SIZE PLOTS ON 22x34 SHEETS - 11x17 SHEETS REPRESENT 1/2 SCALE PLOTS

PLOTTED: June 13, 2018 / Rajeev Kumar / TQS 3_18"_20"-TN_GRAYTON_NAVARRE_MASTER_ARCH_2018-06-13.DWG



NAVARRE - 1ST FLOOR (INTERIOR UNIT)

SCALE: 1/4"=1'-0"



NAVARRE - 2ND FLOOR (INTERIOR UNIT)

SCALE: 1/4"=1'-0"

LEGEND

TRASH RECEPTICLE 25"x27"

RECYCLE RECEPTICLE 26"x31"

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BASE FLOOR PLANS-INTERIOR UNIT

PRODUCTION MANAGER	
CONTROL DATE:	2/16/18
REV #	DATE / DESCRIPTION

PROJECT TYPE: SF ATTACHED

COMMUNITY NAME: — — — —

LAWSON COMMUNITY ID: — — — —

GARAGE HANDING: –

VERSION NUMBER: 1.0

PLAN NAME / NPC: NAVARRE 2498.502

LAWSON PLAN ID: — — — —

LEGACY PLAN NUMBER / NAME: — — — —

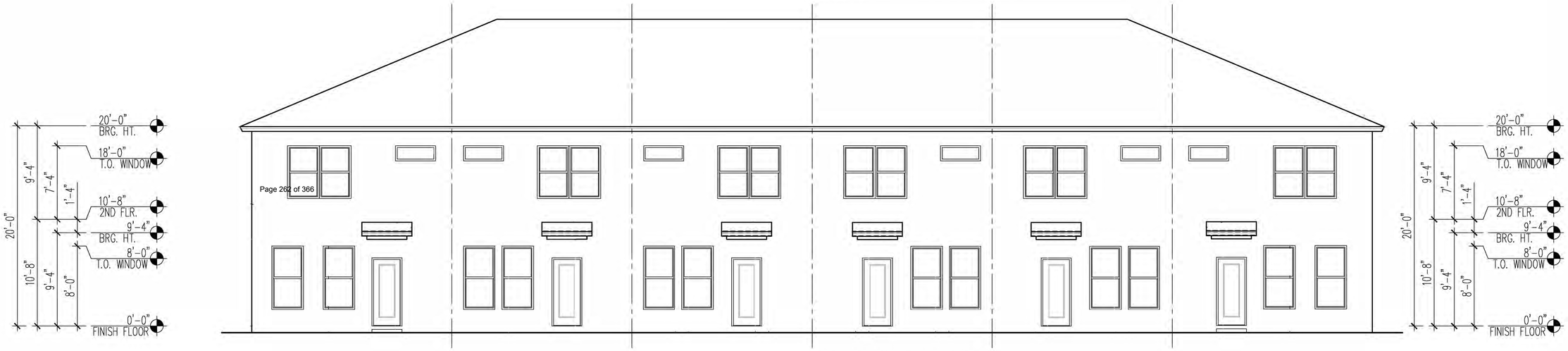
SHEET A1.11

NOTE: SCALES NOTED ON DRAWINGS RELATE TO FULL SIZE PLOTS ON 22x34 SHEETS - 11x17 SHEETS REPRESENT 1/2 SCALE PLOTS

PLOTTED: May 22, 2019 / Mark Anderson / TC3 3_20"-TH_NAVARRE_MASTER_ARCH_2019-05-09.DWG

FRONT ELEVATION

SCALE: 3/16"=1'-0"

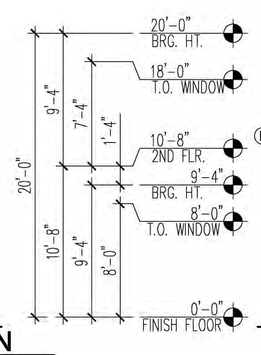


REAR ELEVATION

SCALE: 3/16"=1'-0"

LEFT ELEVATION

SCALE: 3/16"=1'-0"



RIGHT ELEVATION

SCALE: 3/16"=1'-0"

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ELEVATIONS - FM1A

PRODUCTION MANAGER
--

CONTROL DATE: 2/16/18

REV #	DATE / DESCRIPTION

PROJECT TYPE
SF ATTACHED

COMMUNITY NAME
--

LAWSON COMMUNITY ID
--

GARAGE HANDING
--

VERSION NUMBER
1.0

PLAN NAME / NPC
NAVARRE 2498.502

GRAYTON 2567.508

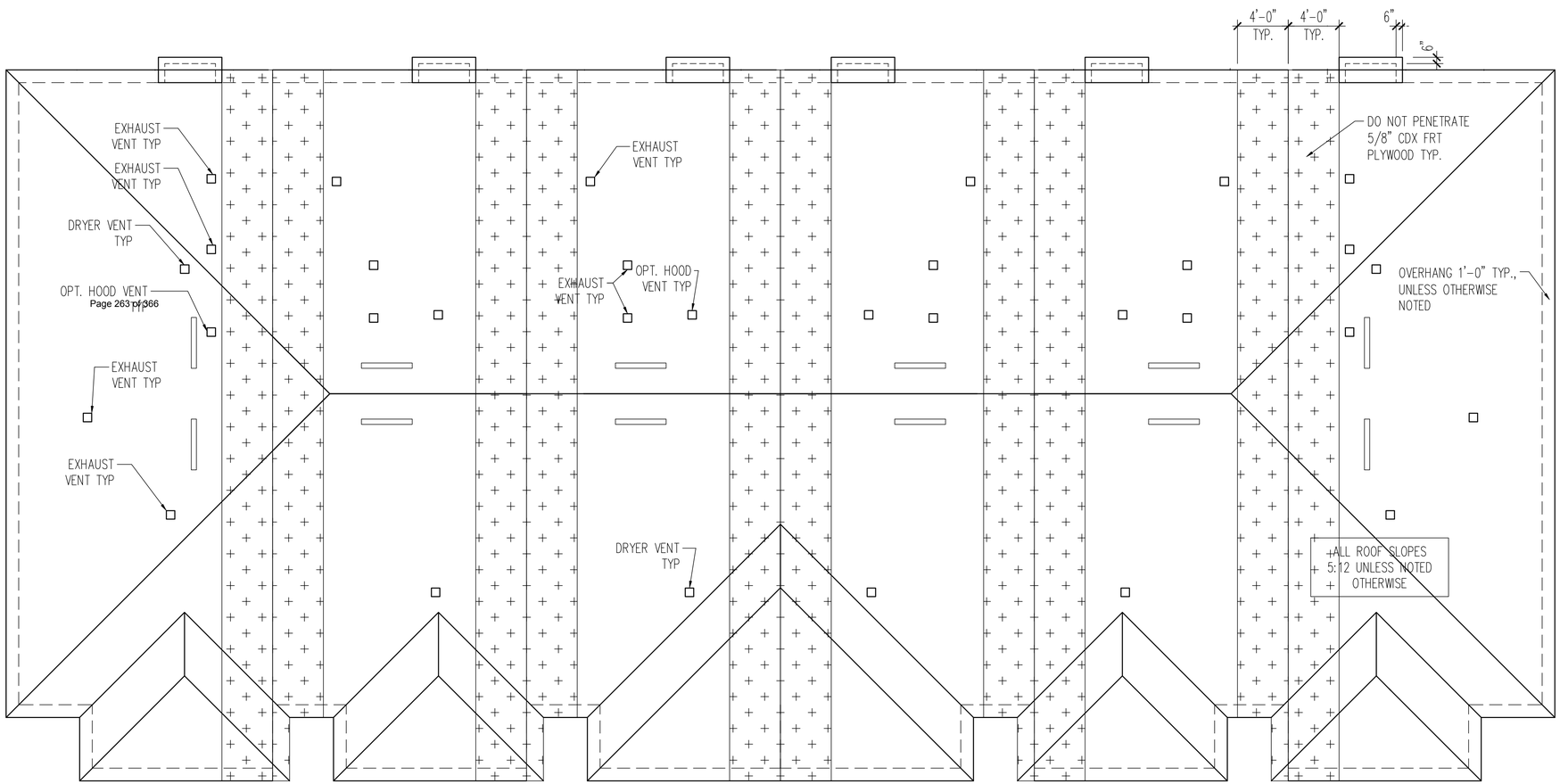
LAWSON PLAN ID
--

LEGACY PLAN NUMBER / NAME
--

SHEET
B6.3-FM1A

NOTE: SCALES NOTED ON DRAWINGS RELATE TO FULL SIZE PLOTS ON 22x34 SHEETS – 11x17 SHEETS REPRESENT 1/2 SCALE PLOTS

PLOTTED: June 13, 2018 / Rajeev Kumar / TCG 3_18_20-7H_GRAYTON_NAVARRE_MASTER_ARCH_2018-06-13.DWG



ROOF PLAN

SCALE: 3/16"=1'-0"

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ROOF PLAN

PRODUCTION MANAGER
--
CONTROL DATE: 2/16/18

REV #	DATE / DESCRIPTION

NOTE: SCALES NOTED ON DRAWINGS RELATE TO FULL SIZE PLOTS ON 22x34 SHEETS – 11x17 SHEETS REPRESENT 1/2 SCALE PLOTS

PROJECT TYPE
SF ATTACHED

COMMUNITY NAME
--
LAWSON COMMUNITY ID

GARAGE HANDING
--

VERSION NUMBER
1.0

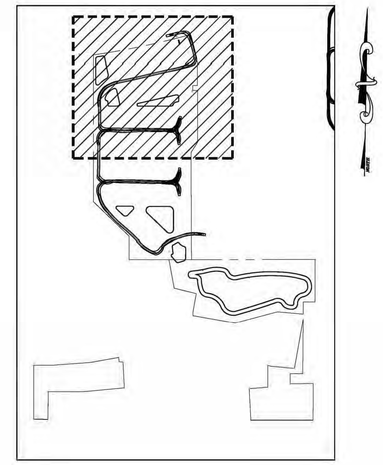
PLAN NAME / NPC
NAVARRE 2498.502

LAWSON PLAN ID
--
LEGACY PLAN NUMBER / NAME
--

SHEET
B6.4-FM1A

PLOTTED: May 22, 2019 / Mark Anderson / TCG 3_20'-TH_NAVARRE_MASTER_ARCH_2019-05-09.DWG

PROPERTY LINE
ADJACENT PROPERTY LINE
EDGE OF SIDEWALK
UTILITY EASEMENT
WOOD FENCE
EDGE OF PAVEMENT
CHAIN LINK FENCE
CENTERLINE OF ROAD
OVERHEAD ELECTRIC SERVICE
WATER LINE
SEWER LINE
TYPE "F" CURB & GUTTER
DRAINAGE MANHOLE
IRRIGATION CONTROL VALVE
RPZ / DDCV
SIGN / CROSSWALK SIGNAL
FIRE HYRANT
CONCRETE UTILITY POLE/CONCRETE POWER POLE
SANITARY SEWER MANHOLE
SPOT ELEVATION
WATER VALVE / BACKFLOW PREVENTER
GUY ANCHOR
SANITARY SEWER MANHOLE
HAND HOLE
TRAFFIC JUNCTION BOX
UTILITY BOX
LIGHT POLE
WOOD UTILITY POLE



PROPOSED LEGEND

ASPHALT PAVEMENT
HEAVY DUTY CONCRETE PAVEMENT
CONCRETE PAVEMENT
TREE RESERVATION
TYPE "F" CURB & GUTTER
BUILDING SETBACK LINE
LANDSCAPE BUFFER LINE
FPL EASEMENT
PARKING OVERHANG
RETENTION POND
EDGE OF PAVEMENT
ELECTRIC TRANSFORMER W/ BOLLARDS
PARKING STRIPING
PARKING COUNT
FUEL VENTS
AIR/VAC
SIGN
MONUMENT SIGN
FUEL VENTS
AIR/VAC
BIKE RACK
RAMP

DATUM NOTE

1. THE ELEVATIONS SHOWN HERON ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD 29).

ABBREVIATIONS

EX.	EXISTING	S	SOUTH
INV.	INVERT	SAN.	SANITARY
N	NORTH	SS	SANITARY SEWER
PUB.	PUBLIC	SD	STORM DRAIN
PL	PROPERTY LINE	TYP.	TYPICAL
PROP.	PROPOSED	W	WEST
PRIV.	PRIVATE	W/	WITH
R/W	RIGHT OF WAY	WV	WATER VALVE

SITE DATA	
APPLICATION NAME	SERRAGUI GROUP INVESTMENTS LLC.
PARCEL CONTROL NUMBER	02-38-41-000-000-00020-6 & 01-38-41-000-000-00050-9
ZONING	R-3 - RESIDENTIAL (MULTI-FAMILY/DUPLEX)
SECTION/TOWNSHIP/RANGE	SECTION 2; TOWNSHIP 38 SOUTH; RANGE 41 EAST
PROPOSED USE	2-STORY SINGLE FAMILY TOWNHOMES
PROPOSED ZONING	RPUD (30 DU/ AC)
PROPOSED DWELLING UNITS	80 UNITS
F.A.R	0.17

SITE CALCULATIONS			
AREA	SF	ACRES	%
PARCEL A	349,446	8.02	73
PARCEL B	131,156	3.01	27
TOTAL SITE AREA (PARCEL A + B)	480,602	11.03	100
IMPERVIOUS AREAS: PAVEMENT/SIDEWALK/REAR PATIOS	55,062	1.26	12
EXISTING & PROPOSED VEHICULAR USED AREAS	66,670	1.53	14
BUILDING COVERAGE	83,230	1.91	17
TOTAL IMPERVIOUS AREA	204,962	4.70	43
DRY RETENTION AREAS	70,866	1.63	14
NATIVE PRESERVE AREAS	87,975	2.02	18
OTHER LANDSCAPE / OPEN SPACE	119,797	2.75	25
OPEN SPACE (GREEN)	275,640	6.33	57
OPEN SPACE REQUIRED			35% (MIN)

BUILDING SETBACKS		
DIRECTION	REQUIRED	PROPOSED
NORTH	50 FT	32.4 FT
EAST	5 FT	23 FT
SOUTH	10' FT	72.8 FT
WEST	5 FT	43 FT

PARKING	
PARKING REQUIRED	
2 SPACES PER UNIT W/ 2 OR MORE BEDROOMS	160 SPACES
PARKING PROVIDED	
1 SPACE PER GARAGE + 1 PER DRIVEWAY + 11 ON-STREET	171 SPACES
TOTAL PROVIDED	331 SPACES

LANDSCAPE BUFFERS		
DIRECTION	REQUIRED	PROPOSED
NORTH	15 FT	21.6 FT
EAST	25 FT	40.6 FT
SOUTH	25 FT	20.5 FT
WEST	25 FT	10.0 FT

GRAPHIC SCALE
30 0 15 30 60
(IN FEET)
1 inch = 30 ft.

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Phone: (954) 314-8480
www.bowmanconsulting.com
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TRUCK ROUTE PLAN
STUART OCEAN TOWNHOMES
S.E. OCEAN BLVD
CITY OF STUART
MARTIN COUNTY, FLORIDA

Pulte Homes

REVISIONS

DATE	DESCRIPTION

BR	SU	JT
DESIGN	DRAWN	CHKD

SCALE: 1" = 20'
JOB No.: 010655-01-001
DATE: 09/20/2019
SHEET TR-1

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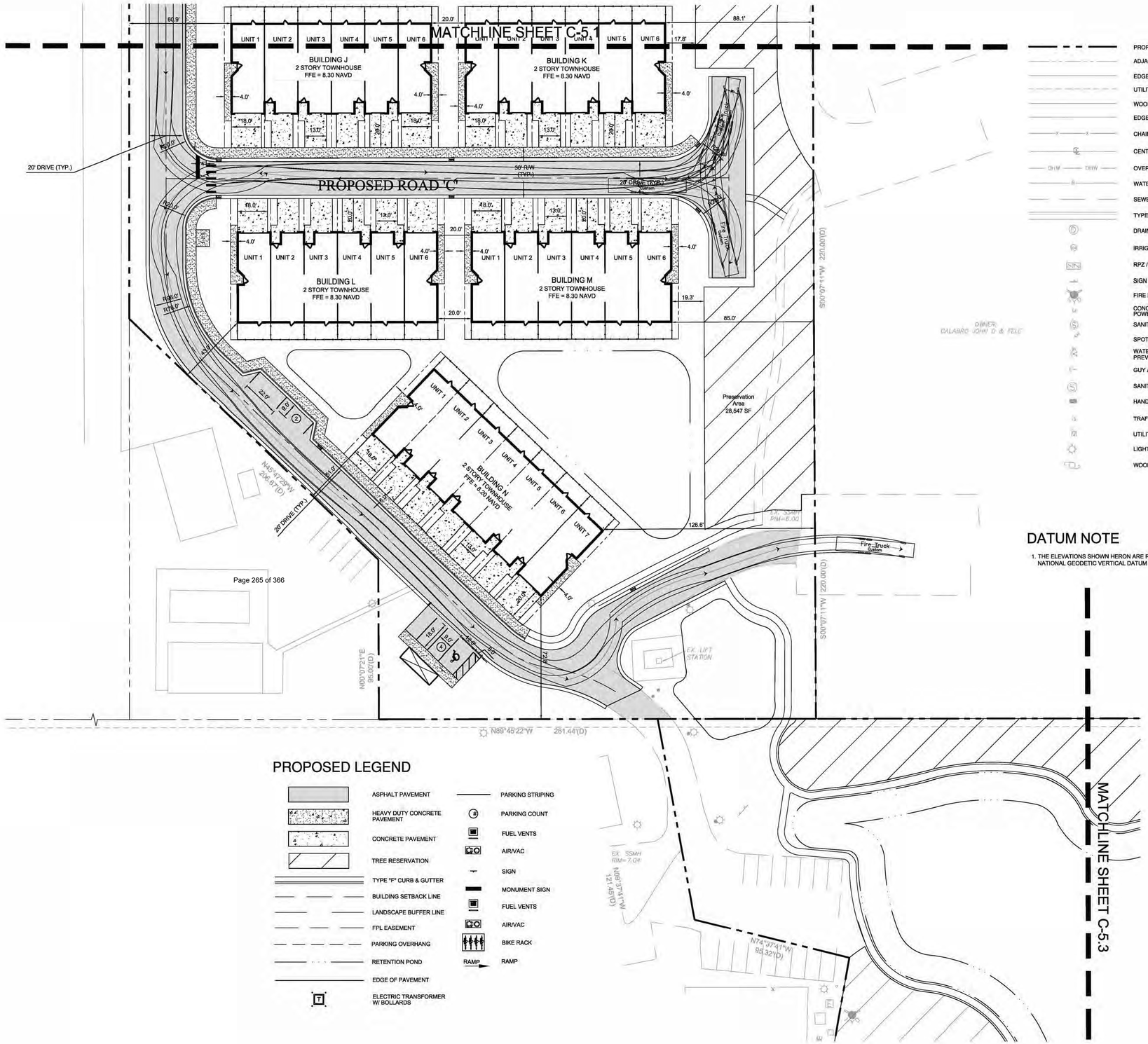

PROPOSED LEGEND

- ASPHALT PAVEMENT
- HEAVY DUTY CONCRETE PAVEMENT
- CONCRETE PAVEMENT
- TREE RESERVATION
- TYPE "F" CURB & GUTTER
- BUILDING SETBACK LINE
- LANDSCAPE BUFFER LINE
- FPL EASEMENT
- PARKING OVERHANG
- RETENTION POND
- EDGE OF PAVEMENT
- ELECTRIC TRANSFORMER W/ BOLLARDS
- PARKING STRIPING
- PARKING COUNT
- FUEL VENTS
- AIR/VAC
- SIGN
- MONUMENT SIGN
- FUEL VENTS
- AIR/VAC
- BIKE RACK
- RAMP — RAMP

- PROPERTY LINE
- ADJACENT PROPERTY LINE
- EDGE OF SIDEWALK
- UTILITY EASEMENT
- WOOD FENCE
- EDGE OF PAVEMENT
- CHAIN LINK FENCE
- CENTERLINE OF ROAD
- OVERHEAD ELECTRIC SERVICE
- WATER LINE
- SEWER LINE
- TYPE "F" CURB & GUTTER
- DRAINAGE MANHOLE
- IRRIGATION CONTROL VALVE
- RPZ / DDCV
- SIGN / CROSSWALK SIGNAL
- FIRE HYRANT
- CONCRETE UTILITY POLE/CONCRETE POWER POLE
- SANITARY SEWER MANHOLE
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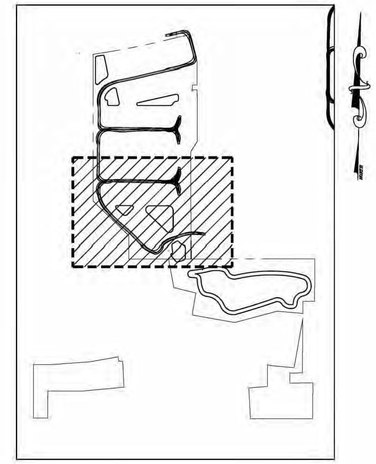
- WATER VALVE / BACKFLOW PREVENTER
- GUY ANCHOR
- SANITARY SEWER MANHOLE
- HAND HOLE
- TRAFFIC JUNCTION BOX
- UTILITY BOX
- LIGHT POLE
- WOOD UTILITY POLE



ABBREVIATIONS

EX.	EXISTING	S	SOUTH
INV.	INVERT	SAN.	SANITARY
N	NORTH	SS	SANITARY SEWER
PUB.	PUBLIC	SD	STORM DRAIN
PL	PROPERTY LINE	TYP.	TYPICAL
PROP.	PROPOSED	W	WEST
PRIV.	PRIVATE	W/	WITH
R/W	RIGHT OF WAY	WV	WATER VALVE

DATUM NOTE

1. THE ELEVATIONS SHOWN HERON ARE REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM 1929 (NGVD 29).

SITE DATA

APPLICATION NAME	SERRAGUI GROUP INVESTMENTS LLC.
PARCEL CONTROL NUMBER	02-38-41-000-000-00020-6 & 01-38-41-000-000-00050-9
ZONING	R-3 - RESIDENTIAL (MULTI-FAMILY/DUPLEX)
SECTION/TOWNSHIP/RANGE	SECTION 2; TOWNSHIP 38 SOUTH; RANGE 41 EAST
PROPOSED USE	2-STORY SINGLE FAMILY TOWNHOMES
PROPOSED ZONING	RPUD (30 DU/ AC)
PROPOSED DWELLING UNITS	80 UNITS
F.A.R	0.17

SITE CALCULATIONS

AREA	SF	ACRES	%
PARCEL A	349,446	8.02	73
PARCEL B	131,156	3.01	27
TOTAL SITE AREA (PARCEL A + B)	480,602	11.03	100
IMPERVIOUS AREAS: PAVEMENT/SIDEWALK/REAR PATIOS	55,062	1.26	12
EXISTING & PROPOSED VEHICULAR USED AREAS	66,670	1.53	14
BUILDING COVERAGE	83,230	1.91	17
TOTAL IMPERVIOUS AREA	204,962	4.70	43
DRY RETENTION AREAS	70,868	1.63	14
NATIVE PRESERVE AREAS	87,975	2.02	18
OTHER LANDSCAPE / OPEN SPACE	119,797	2.75	25
OPEN SPACE (GREEN)	275,640	6.33	57
OPEN SPACE REQUIRED			35% (MIN)

BUILDING SETBACKS

DIRECTION	REQUIRED	PROPOSED
NORTH	50 FT	32.4 FT
EAST	5 FT	23 FT
SOUTH	10' FT	72.8 FT
WEST	5 FT	43 FT

PARKING

PARKING REQUIRED	
2 SPACES PER UNIT W/ 2 OR MORE BEDROOMS	160 SPACES
PARKING PROVIDED	
1 SPACE PER GARAGE + 1 PER DRIVEWAY + 11 ON-STREET	171 SPACES
TOTAL PROVIDED	331 SPACES

LANDSCAPE BUFFERS

DIRECTION	REQUIRED	PROPOSED
NORTH	15 FT	21.6 FT
EAST	25 FT	40.6 FT
SOUTH	25 FT	20.5 FT
WEST	25 FT	10.0 FT

GRAPHIC SCALE

30 0 15 30 60

(IN FEET)
1 inch = 30 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 ADAPTATION BY BOWMAN CONSULTING SHALL BE WITHOUT LIABILITY TO BOWMAN CONSULTING.

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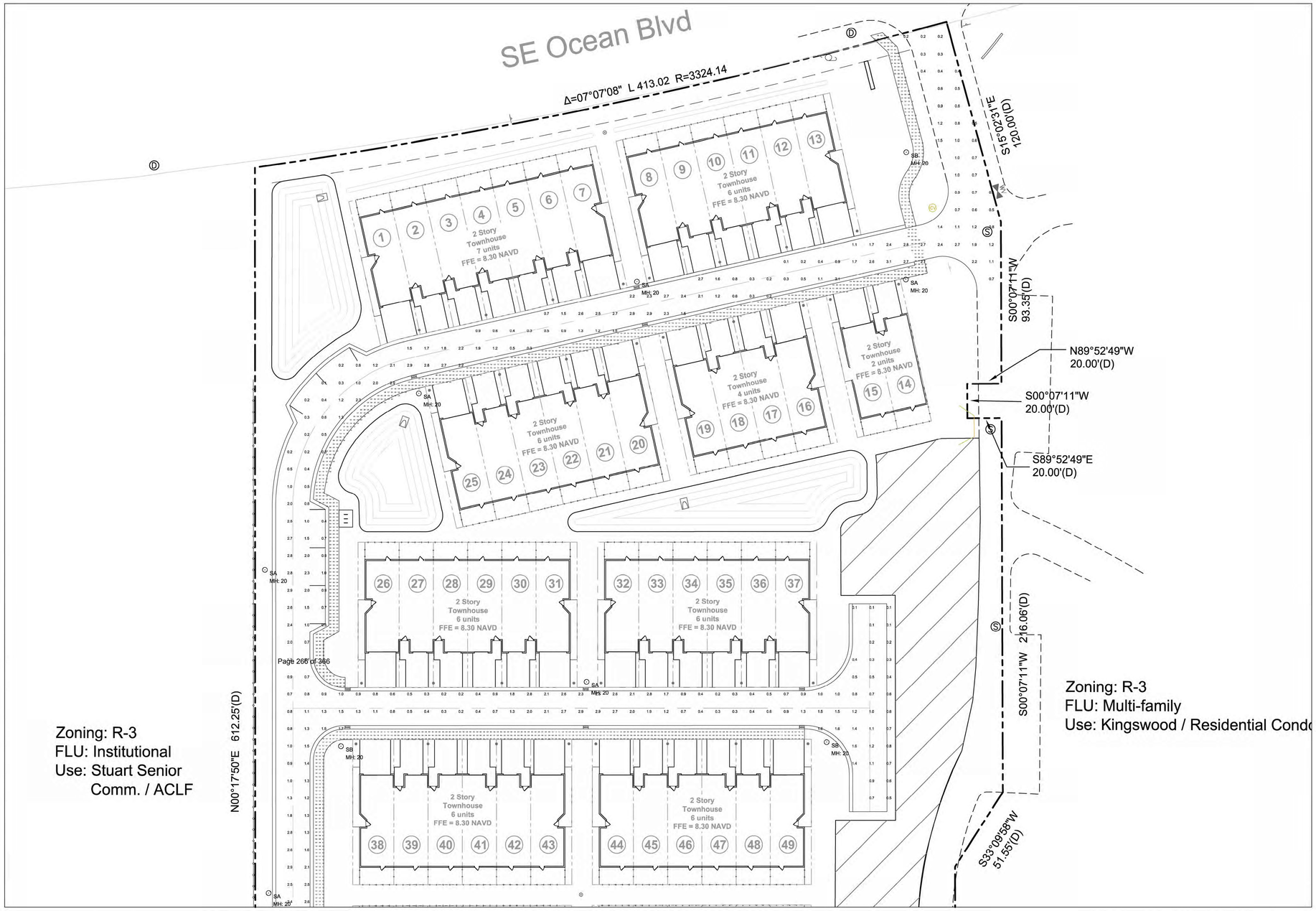
TRUCK ROUTE PLAN
STUART OCEAN TOWNHOMES
S.E. OCEAN BLVD
CITY OF STUART
MARTIN COUNTY, FLORIDA

Pulte Homes

REVISIONS	
DATE	DESCRIPTION

BR DESIGN	SU DRAWN	JT CHKD
SCALE:	1" = 20'	
JOB No.:	010655-01-001	
DATE:	09/20/2019	
SHEET	TR-2	



Photometrics Calculation Software Generated Luminaire Schedule								
Symbol	Qty	Label	Arrangement	Lum. Lumens	Arr. Lum. Lumens	LLF	Lum. Watts	Arr. Watts
⊙	10	SA	SINGLE	12184	12184	0.900	156.5	156.5
⊙	5	SB	SINGLE	12893	12893	0.900	156.5	156.5

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
CENTER SIDEWALK	Illuminance	Fc	0.91	2.9	0.1	9.10	29.00
NORTH SIDEWALK	Illuminance	Fc	1.12	3.2	0.1	11.20	32.00
SITE	Illuminance	Fc	1.09	3.1	0.0	N.A.	N.A.
SOUTH SIDEWALK	Illuminance	Fc	1.28	2.9	0.0	N.A.	N.A.

STUART OCEAN TOWNHOMES - SITE

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MFR	CATALOG NUMBER	VOLTS	LAMPS	INPUT WATTS	MOUNTING	DIMMING (If Req)	REMARKS
SA	LED SITE LUMINAIRE	INVUE	MSA-F06-LED-E1-T2-FINISH	UNV	LED	156W	20' POLE	0-10V	NOTE 1, 2
SB	LED SITE LUMINAIRE	INVUE	MSA-F06-LED-E1-5XQ-FINISH	UNV	LED	156W	20' POLE	0-10V	NOTE 1, 2

FIXTURE SCHEDULE NOTES

NOTE 1: ADVISE FINISH

NOTE 2: FIXTURES MOUNTED ON 20' DIRECT-BURIAL FIBERGLASS PLP POLE #SFLD525

FOR QUESTIONS PERTAINING TO THIS FIXTURE SCHEDULE PLEASE CONTACT RYAN HUFF @ LIGHTING DYNAMICS (772) 285-7169; RHUFF@LIGHTINGDYNAMICS.COM

Lighting Plan By:

LIGHTING DYNAMICS, INC.
7835 West Commercial Blvd.
Tamarac, FL 33351
(954) 944-0286
www.lightingdynamics.com

Scale: 1" = 30'

0' 15' 30' 60' 90'

North

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LA 0000905

Stuart Ocean Townhomes

City of Stuart
Site Lighting / Photometric Plan

Florida

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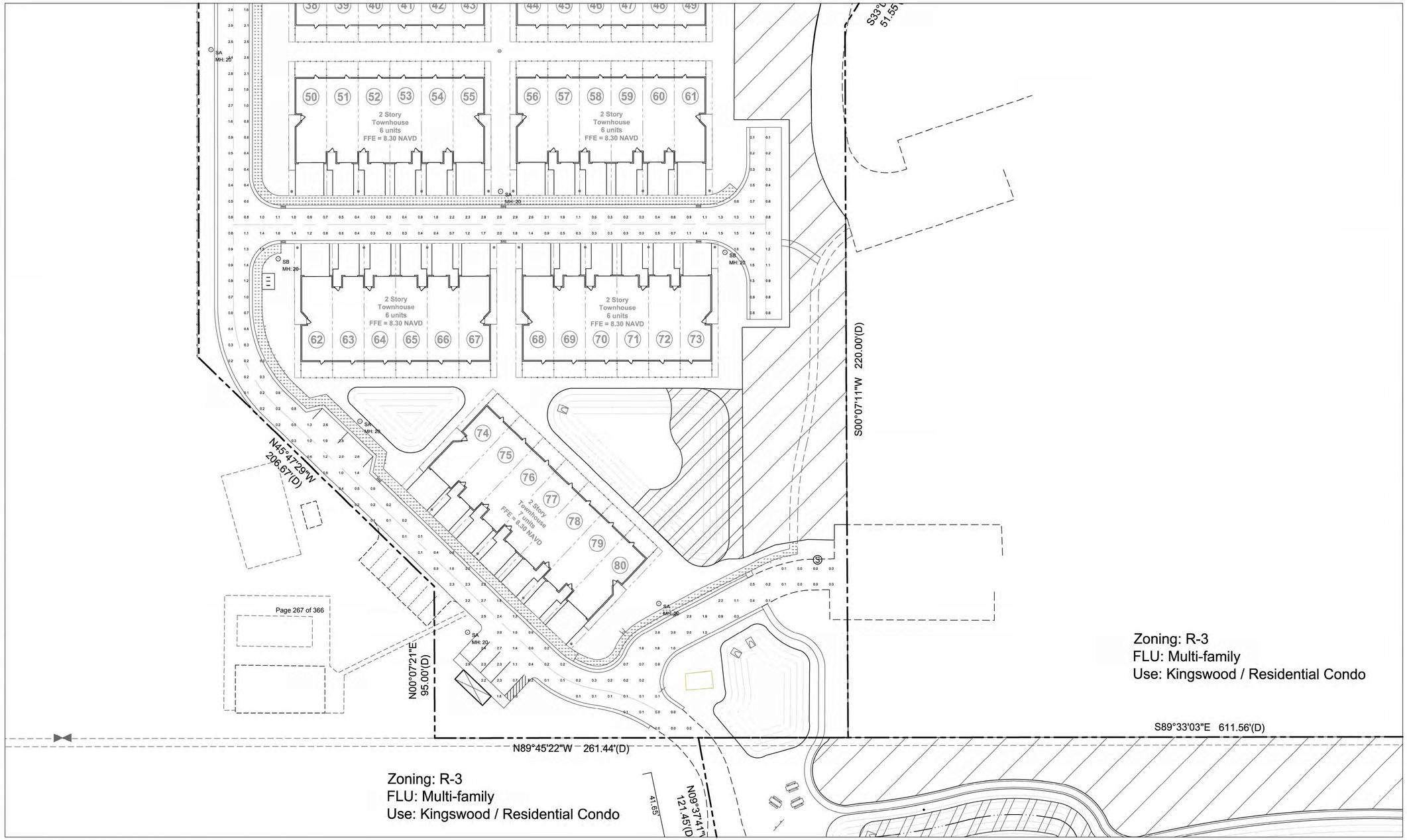
Job No. 19005
Drawn By TT
Checked By MH
Approved By MH
Submittal Dates 9-18-19

Revision Dates

L-1



Photometrics Calculation Software Generated Luminaire Schedule								
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0' 15' 30' 60' 90'

North

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Stuart Ocean Townhomes

City of Stuart
Site Lighting / Photometric Plan

Florida

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Job No. 19005
Drawn By TT
Checked By MH
Approved By MH
Submittal Dates 9-18-19

Revision Dates

L-2

December 5, 2019

Stuart Ocean Townhomes
RPUD Zoning & Major Development Site Plan Approval

Project Narrative

This unique townhouse project is a request for a rezoning from R-3 to RPUD and a Major Development Site Plan Application. The site is located on the south side of East Ocean Boulevard and adjacent on three sides to the multi- family Kingswood community. The Point at Ocean Boulevard senior community ACLF is to the west of the site. The property consists of three separate parcels all owned by the same owner. The subject parcel for the rezoning consists of the largest parcel which is 11.04 acres and includes 80 proposed townhomes on the north and a 1.09 acre stormwater lake, preserve areas and recreational trails on the south. Parcels B is 0.57 acres and is not included in the rezoning but is being used for preserve credits. No use is proposed for Parcel A. The proposed townhouse project will be 7.25 units per acre and will be owned in fee- simple ownership. All of the townhomes are two stories with three bedrooms and have one and two car garages with a tandem parking space in their driveway. The site plan reflects, however, that the end units only have one garage space but have space for two cars. Eleven on- street guest spaces are proposed which include spaces for the mail kiosk area. A nature trail that exists between Kingswood and the subject site will be preserved and extended.

The site's proposed native vegetation and upland preserve are made up of three separate areas. The on-site preserve is 1.83 acres. Parcel B will have an offsite preserve credit of 0.40 acres. In addition, created native vegetation areas consist of 0.88 acres of littoral zones in the storm water lake, dry retention areas and their perimeters will be planted with native vegetation. The total proposed native vegetation areas / preserve areas equals 3.11 acres or 28% of the site which exceeds the City's 25% requirement.

This project is a classic opportunity for well planned and contextual in-fill development within this area of older apartment complexes. The subject site includes a driveway that runs through the parcel from the Kingswood entrance off East Ocean Boulevard and connects to the south and SE Kingswood Terrace. That driveway alignment will be slightly changed, and new asphalt constructed. Other existing driveways and parking areas which are part of the Kingswood communities will not be changed as well as existing trails and sidewalk connections.

The proposed project has been planned and designed to harmonize with the existing neighborhood while providing for a much needed new townhome concept not found in this part of the City. The applicant is excited about the opportunity of developing their first new community in the City of Stuart.

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December 5, 2019
Our Ref #: 19-005

Stuart Ocean Townhomes
RPUD Zoning &
Major Development Site Plan Approval

The Request: On behalf of Pulte Home Company, LLC as the Contract Purchaser, this is a request to rezone the property from R-3, residential - multi-family/office to a Residential Planned Unit Development (RPUD) to allow the construction of 80 unit two story townhomes located off of SE Ocean A1A Blvd. in Stuart, Florida. A major development site plan is also required to approve the project. These requests are to be considered concurrent by staff.

The Subject Property: The subject property is an approximately 11.04-acre vacant property located on SE Ocean A1A Blvd. in an urban area of on the eastern edge of jurisdictional limits of the City of Stuart. The Future Land Use Map (FLUM) designation of the property is Multifamily (MF) with a compatible zoning district designation of R-3 Residential - multi-family/office. The subject property had been part of the Kingswood Condominium community, built starting in 1970 through to 1995. The subject property includes the lands that remained vacant and unbuilt and now within separate ownership to the Kingswood Condo community. In a number of places, existing driveways and parking areas from the Kingswood community encroach onto the subject site.

The property owner is Serragui Group Investments, LLC with the prospective purchaser and applicant being Pulte Home Company, LLC.

The property is included in the Kingswood Condo subdivision and consists of two legal parcels depicted as parcel control numbers 02-38-41-000-00000020-6 and 02-38-41-000-00000050-9. The largest parcel 02-38-41-000-00000020-6 fronts SE Ocean Blvd. and consists of 8.0291 acres of vacant property intended to accommodate the proposed 80-unit two story Pulte Home Company, LLC townhome community. Two vacant parcels (A and B) as per parcel 02-38-41-000-00000050-9 includes 5.2840 acres of land intended to accommodate upland preserve.

The site plan along with the townhomes in 14 buildings, depicts 3.11 acres of preserved / enhanced native areas or 28% of the site. The six dry retention areas totaling 26,848 sq. ft. will be planted with native vegetation. In Parcel B, 17,285 sq. ft. of the 34,571 sq. ft of offsite preserve areas are to be credited to the subject property proposal. Additionally, a 40, 485 sq. ft. wet pond / lake is accommodating the retention of existing parking areas which serve the established Kingswood Condo community and is also intended to be utilized by the proposed Pulte Home Company, LLC townhome community.

The existing vegetation on the site has been surveyed and the proposed development respects the preservation of existing vegetation where applicable and possible while accommodating an infill proposal within an urban area of the City of Stuart. The proposed site plan achieves the preservation by creating preserve areas and native landscape areas

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to meet the 25% code requirements. Upland buffers/littoral planting is accommodated and includes an extension of existing preserve areas.

Tree Mitigation: This in-fill site, like many vacant parcels in the City of Stuart, will require the removal of native trees to allow for this new much- needed townhome community. The adjacent Kingswood community has utilized the eastern portion of the site for a nature trail and in a number of cases for driveways and parking areas. The applicant proposes to preserve trees and native understory for much of the area along this common boundary and the nature trail. In addition, supplemental native trees and shrubs will be planted in less dense areas to 'fill out" the native habitat.

To compensate for the removed native trees additional numbers of larger than required native trees and various palm trees are proposed on the site as indicated on the submitted landscape plans. However, the required pine tree mitigation has been met on site but the hardwoods cannot be reasonably accommodated on the site and so the applicant is proposing to contribute 50% of the required replacement inches which comes out to $111,125 to the City's Tree Fund. The applicant is proposing that, where feasible, this amount be used to supplement non- landscaped areas within the Kingswood Community including the existing pool southwest of the proposed project and other open spaces.

Surrounding Properties Land Use & Zoning: The subject property consists of two vacant parcels located to the south of SE Ocean A1A Blvd. with an established principle access off this State maintained as a major arterial right-of-way.

Property immediately abutting to the north of the subject property consists of the SE Ocean A1A Blvd. and an established Cedar Pointe Village residential condominium community further north of SE Ocean A1A Blvd. Cedar Pointe Village is a property located within Martin County's jurisdiction with a Future Land Use designation of High Density Residential and a zoning district designation of R-3, Liberal Multiple Family. The subject property is within the City of Stuart and has a Land Use designation of Multi-family and is zoned R-3, Residential - multi-family/office.

To the east and south of the subject property is the long established 444-unit Kingswood Condominium Community built from 1970 until 1995 with floor plans ranging from 2-bedroom, 2-bathroom condos with 1,236 sq. ft. to 1-bed, 1-bath condos with 691 sq.ft. of living area. Most of the Kingswood community consists of two-story condos with three newer 4 story elevator buildings having been completed more recently on the neighboring property. The Kingswood Condo community is separated into three phases with each having a separate property management company and HOA structure. Phases 1 and 3 each have one pool, clubhouse and shuffleboard courts and Phase 2 has the same amenities but with two pools and clubhouses. The property to the east and south has a Multi-family future land use designation and is zoned R-3, Liberal Multiple Family. The vacant parcels the subject of this development proposal have been carefully designed to safeguard the Kingswood Condo existing amenities while introducing an infill project of a scale and architectural style that is sympathetic and mindful of the existing established residential community.

To the West of the subject property is The Pointe at Ocean Blvd., an independent living community with apartments consisting of 3 story units with an Institutional Future Land Use and an R-3, Liberal Multiple Family zoning district designation. Further west of the subject property is Vista Pines condo community with a Multi-family future land use and R-3, Liberal Multiple Family zoning district designation.

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Proposed Development: The applicant is proposing to construct 80-unit two story townhomes known as Stuart Ocean Townhomes on a vacant infill property situated on the urban edge of the City of Stuart jurisdiction. The 80 units are to be accommodated in 14 separate townhome buildings consisting of the following breakdown in number of units per each:

Building A 7 units
Building B 6 units
Building C 6 units
Building D 4 units
Building E 2 units
Building F 6 units
Building G 6 units
Building H 6 units
Building I 6 units
Building J 6 units
Building K 6 units
Building L 6 units
Building M 6 units
Building N 7 units

The townhome development has been designed to be easily accessed of SE Ocean A-1A Blvd. with multiple driveway connections creating a well-planned urban infill project of a scale and density sympathetic to the longer standing established communities. Proposed driveways and sidewalks consist of layouts that will improve pedestrian and vehicular connections within the subject property and the surrounding established Kingswood Condo community. The townhomes have open floor plans and a two-car garage. Each of the floorplans consists of three-bedrooms and 2.5-baths measuring just under 1,900 square feet of living space.

A rezone to RPUD is required to address certain code provisions that are not included in the City LDR when considering the introduction of townhomes when property is zoned R-3:

- Section Sec. 2.04.01. - Generally. Minimum lot area 6,000 sq.ft.
- Minimum lot width 60 ft.
- Minimum Setbacks – front 25 ft,, sides 8 ft. and rear 20 ft.
- Sec. 6.01.03. - Rights-of-way. - Minimum driveway access requires 20 ft each side of center line as a local street and 15ft as an alley. The site plan makes provisions for 30 ft. private access driveways.
- Section 6.07.00.C.- Lighting maximum of 15 feet in height within non-vehicular pedestrian areas where the applicant requests a maximum height of 20 feet.
- Sec. 6.11.17. - Design standards matrix requires a maximum height of 6 ft. where the applicant is requesting a maximum height of 8 ft.

The public benefits offered as part of the development application and PUD zoning agreement include the following:

- The creation of preserve areas and native landscape areas to meet the 25% on property.

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- Upland buffer provisions where a littoral and extension of existing preserve is proposed.
- The creation of recreational lake trails that provide connectivity for pedestrians throughout the proposed and existing communities.

Such a request is consistent with Comprehensive Plan Objective B1 – Compact Urban Form, as the project discourages urban sprawl by facilitating urban redevelopment an infill development of properties and planning for urban infill and redevelopment of lands located within Stuart to achieve a compact urban form. The project is also consistent with Comprehensive Plan Objective B3. Desirable pattern of land uses. The proposal will enhance the pattern of development in a way that is compatible and convenient to City residents, businesses and visitors and avoids inappropriate or wasteful use of land.

Access & Vehicular Circulation & Pedestrian Connectivity: The main access to the subject property is intended to utilize the existing connection from the Kingswood Condo Community to SE Ocean SR A-1A Blvd. In addition, a cross connection on the southern portion of the subject property is intended to be accommodated to achieve a connection of vehicular traffic directly to Monterey Road (SR-714), via Kingswood Terrace. Within the proposed Stuart Ocean Townhomes project driveways have been designed to measure 30' as private access drives with 20' wide drive types. Established access and circulation roads connected with the Kingswood Cond community are intended to be maintained and effectively linked to the proposed subject property driveways and circulation provisions.

In addition to vehicular access, the site includes effective pedestrian circulation that will accommodate the new residents of the subject property while also maintaining and enhancing pedestrian connectivity within the established Kingswood Condo community. The creation of trails around the proposed detention area and connections to the existing trails in place and serving existing communities, will provide an enhanced level of pedestrian connectivity benefiting all of the residents within the area.

Traffic Study: A Traffic Impact Study has been prepared by the JFO Group, Inc. Trip distribution and assignment has incorporated the characteristics of the proposed development as well as the surrounding network configuration. The proposal was assessed against the provisions of the Land Development Code and categorized as a project with de minimis impact and a development in compliance with the Adequate Public Facilities Standards. Refer to the Traffic Impact Study for the full and complete analysis of the proposal against traffic and concurrency code provisions.

Parking Provisions: City of Stuart Land Development Code, Sec. 6.01.13. - Off-street parking schedule, requires 2 parking spaces per unit when 2 or more bedrooms are proposed. Parking within the subject property is proposed to include 198 spaces where 160 spaces are required. The 38 additional parking spaces will ensure adequate parking provision within the community and includes 11 on street parking spaces. The retention of existing parking on parcels A and B as indicated on the site plan achieves the retention of parking that has been historically connected with serving existing residents of the Kingswood Condo Community. The subject property site plan has been designed to achieve an unobstructed access through the parking areas to ensure emergency service vehicles may navigate through the property safely and effectively.

Architectural Details: The project has been designed with the theme of the architecture being South Florida Mediterranean with an emphasis on residential details of a high standard to represent Pulte Home, LLC products well established within other communities across Florida. The facades and variable size of the townhome buildings in

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blocks ranging from two to seven units within each of the structures, create a visual interest and varying scale of development throughout the proposed community. Architectural details are included on each of the four sides of the proposed townhome units with the entry to the development via SE East Ocean A1A Blvd offering a high standard of design and scale.

Landscaping & Buffers: The landscape as proposed meets the requirements of the City's approved plant list and exceeds the 50% native requirements.

Landscape buffers have been provided on the eastern and western sides of the subject property with a 10' landscape buffer to be included on the western edge and measuring 80 ft. at its widest point along a large part of the eastern edge of the subject property. Throughout the subject property a series of dry retention areas are also intended to accommodate rain gardens, adding an extensive visual and environmental amenity to the project. Internal to the property the applicant has provided the necessary plantings according to the height of the respective buildings. Additional landscaping will be provided within the trail areas, around the dry detention areas and within the public open space areas.

Signage: A signage program will be proposed as part of the site plan application. The signage will include a proposed monument sign intended to identify Stuart Ocean Townhome development to the public. The sign will be located at the main vehicular entrance off of SE East Ocean A1-A Blvd. 10 feet from the right of way. The sign will be a maximum height of 8' by a maximum base width of 21'. The sign will include the project address and name of the residential community.

Request for Major Site Plan Approval:

Demonstration that the proposed 80 unit townhome development is consistent with the relevant components of the City of Stuart Comprehensive Plan including concurrency with adopted levels-of-service for utilities/facilities and compatibility with existing/planned uses.

FLU – The subject property has a future land use (FLU) designation of Multifamily (MF). Per Section 2.01.03 Table 1, the zoning of the subject property is a compatible Residential Planned Unit Development (RPUD). A townhome use is a permitted use in the RPUD zoning district per code Section 2.02.02 Table 2.

The Multi-family future land use designation and proposed RPUD zoning district designation affords the property the opportunity to accommodate 330 residential units on the subject property and a maximum density of 30 dwelling units per acre. The applicant proposes to accommodate 80-unit townhome development, with a proposed density of 7.25 dwelling units per acre which will not exceed the density requirements of Section 2.03.03 regarding density provisions. The intensity is of the will not exceed LDC Sec. 2.03.10. - Table 4 requirements.

The use is compatible with both existing uses, zoning and FLU. The proposed use is compatible with the surrounding established namely residential condo communities.

LOS Transportation - The proposed development is located on SE East Ocean A-1a Blvd. It is anticipated that the proposed development will have no adverse impact on the level

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of service applicable to SE Ocean Blvd and this part of the community. The Traffic Impact Study provides details to support this statement.

The following Level of Service standards are adopted in the Comprehensive Plan Infrastructure element to be used as the basis for determining the availability of facility capacity.

• Sanitary sewer facilities o 80 gallons per capita per day (residential) o 1,100 gallons per acre per day (nonresidential) o 115 gallons per capita per day (total wastewater flow rate) • Solid waste facilities o 3.5 pounds per capita per day (residential) o 0.007 pounds per square foot per day (nonresidential) • Drainage facilities o Retention of half of the runoff of a 25-year/3-day-duration storm event for parcels greater than 1 acre, and retention of half of the runoff of a 10-year/3-day storm event for parcels less than 1 acre • Finished Potable water o 250 gallons per day per equivalent residential connection o The site is within the service area whereby such levels of service are available and adequate to accommodate an 80 unit townhome development.

With the exception of those applicable code provisions detailed above as applicable for review against the merits of the request to rezone the property to RPUD, the project complies with the relevant development standards of the City of Stuart Land Development Code.

Rezoning Application:

Rezoning and Land Development Code Consistency Review : Section 11.01.02.7 (Zoning Map Changes) of the Land Development Code requires the Local Planning Agency to consider the following criteria prior to making an advisory recommendation to the City Commission.

Comprehensive Plan Policy A7.1. includes townhomes as a permitted use for properties with either a Low Density Residential or Multi-Family Residential land use designation. As the property has a Multi-Family Land Use designation, a townhome use is therefore permitted, as is the case with a property zoned R-3, Liberal Multiple Family zoning district designation.

The existing land use pattern: The subject property has a Future Land Use designation of Multi-family Residential, Per Section 2.01.03, Table 1, the zoning on the subject property is compatible with Residential Planned Unit Development (RPUD). A townhome development is a permitted use as either a single family or multi-family land use classification. The land use pattern will remain unchanged as part of this proposal with Multi-family Residential dominating this part of the eastern edge of the City of Stuart's jurisdictional area. Patterns of development are predominantly residential, with a number of condominium communities having been established and an independent living facility to the immediate west of the property. Existing properties range in height from 2 to 4 stories with the proposed Stuart Ocean townhome community including maximum heights of 2 stories as part of the development pattern and scale. The proposal is consistent with the future land use provisions and consistent with the City Land Development Code provisions regarding use as per Section 2.01.03.

The possible creation of an isolated district unrelated to adjacent and nearby districts: Rezoning the property to the RPUD will not detract from the overriding Multi-family future land use designation policy protection measures associated with the property. The majority of the properties surrounding the site are zoned R-3, Liberal

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Multiple Family zoning district designation which includes the townhomes as a permitted use consistent with the applicant's request. The RPUD zoning agreement affords the project the opportunity to attached conditions specific to expectations for development on the site, will ensure safeguards are in place to compliment existing patterns of development. Some of those additional safeguards will also offer the necessary assurances to the established Kingswood Condo residents regarding preservation of existing trails and parking areas, open space and upland preservation area provisions which offer significant amenity to the proposed and existing communities.

The population density pattern of the area and possible increase or overtaxing of the land on public facilities such as schools, utilities and streets: The proposal site is located on the edge of the urban fringe of the City of Stuart's jurisdiction where infrastructure is readily available and access to stores and businesses lie close to the property. As an urban infill site, the property is located within a well-established residential community with schools, utilities and existing streets to be utilized to accommodate the project all readily available. Utilizing the subject property offers an opportunity to add to the existing City population, strengthening support of the existing schools, commercial and community infrastructure within the City limits and achieves a sustainable and complimentary form of development.

The possible overloading of the City's utility system: As per the Engineer's report and analysis provided in support of the project, existing water and sewer provisions are readily available and impact fees will be paid to contribute towards the introduction and maintenance of the project. Adding residential provisions to this part of the City will also provide a growth in tax revenues to add to the overall maintenance and provision of public service provisions within the City of Stuart.

The existing district boundaries in relation to existing conditions on the subject property: Addressed above.

The existence of changed or changing conditions which make the passage of the proposed rezoning necessary or appropriate: Rezoning the property to RPUD is an acceptable zoning district designation for properties with a Multi-family land use designation. A zoning change is required on the property to RPUD to address certain elements of the City of Stuart Land Development Regulations which do not make the necessary provisions to allow for the design and siting of townhomes regarding minimum lot sizes and minimum lot widths and introducing a townhouse type dwelling. Right of way requirements afforded to a property ordinarily require a 20' to center line for a two-way traffic access road whereas a townhome development such as that proposed on the subject property can achieve reduced driveway widths while ensuring the safe travel through the proposed community.

The impact of the proposed rezoning upon living conditions in the adjacent neighborhood: The development of a vacant infill lot in an urban area of the City of Stuart will provide additional residential units in this area of the City. Benefits to the adjacent neighborhood include greater access to an improved and well-planned set of open space and upland preservation areas through an expansion and formulization of trails. Proposed buffer provisions, landscape improvements and the introduction of a townhome development is of a scale, use and layout complimentary to the long-established residential condominium communities.

The impact of the rezoning upon the flow of light and air to adjacent areas: The proposed townhome units have been placed in blocks ranging from 2 to 7 units throughout

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the site. None of the units are within proximity to any single family residential units. The proposed two-story height will not detract from established residential units ranging from 2 to 4 stories in height at the Kingswood Condo community.

The impact of the proposed rezoning upon property values in the adjacent area: Developing the property with the assurances and development parameters clearly established in the PUD will increase property values and add to the tax bases in both the City and County.

The impact of the proposed rezoning upon improvement or development of adjacent property in accordance with existing regulations: The proposed rezone to RPUD provides additional assurances in the form of a PUD zoning agreement in addition to the parameters of development afforded to a property with an R-3 zoning district designation.

The existence of other adequate sites in the City for the proposed use in districts already permitting such use: An objective of the City of Stuart is to plan for a city with diverse and sustainable supply of a mixed housing provision. This project will increase those provisions available within the City of Stuart.

Application to Rezone Real Property Components (as per application form requirements).

Item#	Typical Plan Components	Response
1	Schedule a pre-application	Pre-application meeting completed 2019
2	Plans 24” x 36” – 2 sets	Attached are 2 sets of the final site plan in State Plan Coordinates
3	Folded drawings	All documents are folded as per requirements
4	Graphic scale displayed	Completed
5	Title Block	Completed with north arrow, street address, date prepared and the company who produced the document
6	Site data summary	Provided a final site plan consistent with the Major Development Plan application. The site plan indicates density, the number of proposed townhouse units, open space provision and upland preserve areas. Parameters for development of the site in accordance with the proposed Multi-Family Residential Future Land Use.
7	Legal Description and parcel boundary survey	Boundary survey prepared by a licensed surveyor in the State of Florida
8	Vicinity Map	Attached
9	Zoning Map, Future Land Use Map and Aerial Map	Attached & labelled
10	CD in pdf downloadable file	Completed and file combined to provide bookmarks of each document submitted downloadable file on disc.

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11	Signed and sealed pdf downloadable file on disc	Scanned versions of the documents requiring signature have been attached to be read in conjunction with the original paper sets
12	Revised plans to be clouded and accompanied by a cover letter	Not applicable
13	Access and traffic flow plans	Access is from the A1A - SE OceanBlvd. utilizing an existing access roadway established to accommodate the Kingswood Condo community. A Traffic Impact Study is attached.
14	Any traffic lights installed will require traffic pre-emption device	N/A
15	Fire Department Access, Water Supply, etc.	The utilization of an existing access road is detailed on the site plan. Adequate access has been provided to accommodate Emergency Service Vehicles and maintain effective links with the existing roadway layouts connected with the established residential communities.
16	Existing buildings and structures on the project and within 50 feet of the project's property lines	The site plan depicts links with existing infrastructure and proximity to existing structures and buildings within 50 feet of the subject property. An aerial map has also been provided showing the surrounding properties.
17	Existing uses and zoning on all adjacent property	The site plan, a series of map exhibits and the justification letter/narrative depict the existing uses, zoning and land use on adjacent properties.
18	Locations of the nearest available public water supply and wastewater disposal system and the proposed tie-in points	Such details are included on the site plan and civil plans and demonstrate water and wastewater systems are in place to accommodate the subject property proposal.
19	Proposed development to show location, size, allowable use, height, total gross floor area, and distance to property lines and between buildings. Number of buildings, density per gross acre, height and type of fences, walls, etc. Architectural elevations, off street parking, etc.	Details as applicable are included on the site plan and architectural elevations with more specific parameters for development included within the draft RPUD.
20	Building setback distances from property lines, abutting right of way centerlines, and all adjacent buildings and structures.	Details are included on the site plan and the Draft RPUD zoning agreement.

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21	Minimum floor elevations of buildings and finished floor elevations of subject property and adjacent property.	Provided on the site plan details in accordance with Florida Statutes and Building Code provisions.
22	Pedestrian Circulation System and Points of Ingress and egress	Provided on the final site plan with efforts to maintain and improve pedestrian and vehicular access within the subject property and with the established adjacent communities.
23	Concurrency review. Traffic Study or Statement. School Concurrency.	A Traffic Impact Study has been provided demonstrating compliance. A school concurrency form has been completed and attached to the application packet demonstrating compliance with school concurrency requirements.
24	Phasing plan/details.	The project will be completed in a single phase as per the site plan details.
25	Dumpsters.	Not applicable.
26	Various plans included. Site lighting plan. Signage plan, landscape plan	Provided in accordance with LDR requirements.
27	Location, names and widths of proposed streets. etc.	Location of streets provided, private access drives within the property. Naming of such will need to be completed as the project progresses.
28	Utility lines and structures such as water, sewer, gas, electric, telephone, hydrants, main size, etc.	Utility lines and structures are depicted in the civil drawings/documentation as provided by the Engineer of Record.
29	Cross sections and specifications of all proposed pavements	Provided as part of the civil drawings/documentation provided by the Engineer of Record.
30	Location of proposed retention/detention areas	Provided on the site plan details and supporting civil documents
31	Typical and special roadway and drainage sections	Provided by the Engineer of Record
32	Locations of all land to be abandoned, dedicated or reserved for all public and private uses including rights-of way, easements, special reservations	Not applicable.
33	Location of onsite well and any wells within 1500 feet.	Will be analyzed and provided at the time of site permit.
34	Pre-application meetings – potential environmental impacts to be discussed.	A pre-application meeting was completed ahead of the submittal of the development application. Discussions included ensuring environmental elements of the existing site and established residential communities are respected.

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34A	Avoidance or minimization of wetland or other environmental impacts.	No wetlands exist on the property or immediately adjacent to. Environmental impacts have been minimized while achieving the effective utilization of an infill property within an urban part of the City.
34B	On site minimization.	As per the site plan details.
34C	All waterbodies, watercourses, wetlands and associated buffers on site and immediately adjacent to the site	No wetlands or waterbodies on or immediately adjacent to the subject property.
34D	Existing vegetation on site	Existing vegetation on the property has been depicted on the survey/tree survey and environmental report.
34E	Wetlands – wetland delineation map and opinion from professional regarding wetland environmental value	Not applicable as no wetlands exist on or adjacent to the property.
34F	Wildlife observed	As per the environmental report.
34G	Preserve area and upland buffer evaluation	Achieved preserve area requirements on the subject property and provided buffers to minimize impacts on the surrounding established residential communities as applicable.
34H	Native vegetation Preserve Area Onsite/Offsite	Achieved on site as per the details depicted on the site plan and landscape plan. Utilized existing parcels connected to the site for open space and upland preserve calculations.
34I	Use of drought-tolerant native vegetation in landscaping	Refer to landscape plan for details.
34J	Exotic and invasive vegetation to be removed	Refer to environmental study.
35	Frontage type(s).	Two story townhouse structures have been located with principle elevations of Buildings A and B fronting East Ocean Blvd. Refer to architectural elevations for details regarding architectural styles, scale and massing of the building(s).
36	Minimum percentage of façade	Not applicable.
37	Location of transition line if applicable.	Not applicable.
38	Minimum percentage of glass	Not applicable.
39	Slope of pitched roof.	As per architectural elevations and details.
40	Height of parapet wall, if any	Not applicable.
41	List of exterior materials, colors and finishes.	As per architectural elevations and details.
42	Architectural details.	As per architectural elevations and details.
43	Curb cut, if any	Utilizing existing curb cut onto East Ocean Blvd.
44	Outbuildings, if any	Not applicable.

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45	Height, length, depth, projection of balcony rails.	As per architectural elevations and details.
46	Traffic Drive aisle width.	As per site plan details and civil plans
47	Material of roofs and gutters	As per architectural elevations and details.
48	Specification of arcades and porches if any	Not applicable.
49	Materials, configuration, and operations of windows and doors	As per architectural elevations and details.
50	Garden wall, if any	Not applicable

Objective B1. - Compact urban form.
Discourage urban sprawl by facilitating urban redevelopment and infill development of properties and planning for urban infill and redevelopment of lands located within Stuart in order to achieve a compact urban form.

Objective B3. - Desirable pattern of land uses.
Promote and enhance a pattern of land uses that are compatible; that are convenient to City residents, businesses, and visitors; that avoid inappropriate or wasteful use of land; and that encourage efficient use of land, resources and facilities. Future land uses shall be designated to support the existing or planned community character, thereby prohibiting the development or expansion of uses which are inconsistent with the community's character. Reduce blighted areas through redevelopment. Land development and use regulations shall include provisions to ensure consistency with this Comprehensive Plan.

Water service is to be provided by the City of Stuart.

The Service Provider will be City of Stuart. A subsequent site plan submittal packet, complete with Engineering construction plans will demonstrate adequate treatment plan capacity exists to service the development of the site. *A potable water service capacity reservation for any development on the site will require the execution of a Water and Wastewater Service Agreement with City of Stuart Utilities to secure such provisions.*

Sanitary sewer service is to be provided by the City of Stuart Treatment Facility. Sanitary sewer treatment plan capacity will be required to be reserved through the execution of the water and wastewater service agreement with City of Stuart and the payment of applicable fees. Wastewater lines of adequate capacity to service the development site are in place.

If you have any questions or comments or need additional information- please call or email me. Thank you for your time and assistance. We look forward to working with you and your team.

Sincerely,

Michael Houston ASLA

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President HJA Design Studio, LLC

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HJA DESIGN STUDIO
LANDSCAPE ARCHITECTURE

VIA EMAIL

January 31, 2020

Tom Reetz
Senior Planner
City of Stuart Planning Department
49 Flagler Avenue
Stuart, Florida

Re: Stuart Ocean Townhomes -RPUD Rezoning & Major Development Site Plan
3rd Resubmittal - Response Letter

Our Ref #: 19005

Dear Tom,

Below, please see responses to 2nd round of comments received from staff regarding Public Works and Fire Department comments on 1-29-20. Please let me know if you have any questions or would like to discuss in more detail. Thank you.

Fire Department

1. FFPC 6th edition, NFPA 1 18.5.1 Fire hydrants shall be provided in accordance with Section 18.5 for all new buildings, or buildings relocated into the jurisdiction unless otherwise permitted by 18.5.1.1 or 18.5.1.2. NFPA 1 18.5.1.4 The distances specified in Section 18.5 shall be measured along the fire department access roads in accordance with 18.2.3.
Response: Acknowledged. The plans have been updated to ensure hydrant have been provided in accordance with Section 18.5 of FFPC 6th Edition. Please see attached sheets C-10.0, C-10.1, TR-1 and TR-2.

2. Curbs at the turn arounds shall be mountable curbs.
Response: The curbs at the turn arounds shall be mountable Type E curbs. Please see attached sheet C-5.1, 5.2 & 5.5.

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Public Works

1. WATER- The proposed water supply connection is not approved. The site water supply must take place at/from the City of Stuart owned infrastructure and within the SE Ocean Blvd. R.O.W. with applicable backflow protection.

Response: The proposed water supply has been revised to connect to the City of Stuart owned infrastructure within SE Ocean Blvd. with backflow protection. Please see attached sheet C-10.4.

2. Must utilized City of Stuart Construction Standard details (latest version) as it relates to the all proposed construction within the Public ROW as well as the proposed potable water meters & water meter boxes. Each potable water meter box must include an inlet lockable curb stop, a dual check located on the outlet side of the meter and a manufactured opening within the meter box lid for the AMR antenna for radio read meters.

Response: All proposed construction within public right-of-way, will utilize the City of Stuart Construction Standard details. The water meters have been provided with the mentioned specifications. Please see attached sheets C-10.0 and C-10.4.

3. All construction pertinent to this Department shall be installed, inspected and tested in accordance with the City of Stuart Minimum Design and Construction Standards latest edition and the City of Stuart Specifications and Ordinances where applicable. In case of discrepancies between the construction plans and afore mentioned manuals, the most restrictive shall apply.
All plans to be reviewed by this Department shall be routed through the Permit Technician in the Development Department. Approval by this department shall not be construed to be a license to proceed with work and shall not be construed as authority to violate, cancel, alter or set aside any of the provisions of the City Code. Approval shall not prevent this department from thereafter requiring a correction of errors in plans, construction or violation of City Code.
CODE COMPLIANCE RESTS WITH THE DESIGN ENGINEER.

Response: Acknowledged. All construction pertinent to the department will be installed, inspected and tested in accordance with City of Stuart Minimum Design and Construction Standards.

If you have any questions or comments or need additional materials please call or email me. Thank you for your time and assistance.

Sincerely,

Michael Houston ASLA
President HJA Design Studio, LLC

c.c. Aimee Carlson
Andrew Maxey
Todd Troxell

Revised November 8, 2019
August 31, 2019

Aimee Craig Carlson, AICP
Director of Land Planning & Entitlement
SE Florida Division
4400 PGA Blvd, Suite 700
Palm Beach Gardens, FL 33410

RE: Stuart Ocean Townhomes – Traffic Impact Study
Parcel ID: 27-37-41-033-000-00040-2/-00050-9

Dear Aimee,

JFO Group Inc. has been retained to evaluate a traffic impact analysis to determine compliance with the *Martin County Adequate Public Facilities Standards – Article V, Division 3, Section 5.63-5.64, of the Martin County Land Development Code*. This traffic statement is associated with the site plan application for the Stuart Ocean Townhomes property. The site is located on the south side of Ocean Boulevard (SR-A1A), about 0.60 miles east of Monterey Road (SR-714) in the City of Stuart. Figure 1 shows the project location in relation to the transportation network. Parcel ID Number associated with this project is 02-38-41-000-000-00020-6/-00050-9. A copy of the property appraiser information is included as Exhibit 1 while Exhibit 2 includes a copy of the proposed site plan for the project. Project buildout is expected in the year 2024.

Figure 1 : Project Location

The Stuart Ocean Townhomes project is proposing 80 townhomes. Project trip generation rates used for this analysis were based on ITE Trip Generation Rates, 10th Edition. Table 1 shows the rates used in order to determine the trip generation for Daily, AM, and PM peak hour conditions. Exhibit 3 includes the ITE Trip Generation rates used in this analysis.

Table 2 summarizes the net Daily, AM, and PM peak trips potentially generated by the proposed development. According to Table 2, the net Daily, AM and PM peak trips potentially generated due to the proposed development are 586, 37 and 45 trips respectively. According to Section 5.64.C. from the Land Development Regulations (LDR) and given the trip generation characteristics from Table 2, this analysis needs to consider the first directly accessed road on the major road network.

Table 1: Trip Generation Rates

Land Use	ITE Code	Daily Trip Gen.	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Townhouse	220	7.32	23%	77%	0.46	63%	37%	0.56

Table 2: Trip Generation

Land Use	Intensity	Daily Traffic	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Townhouse	80 DU	586	9	28	37	28	17	45

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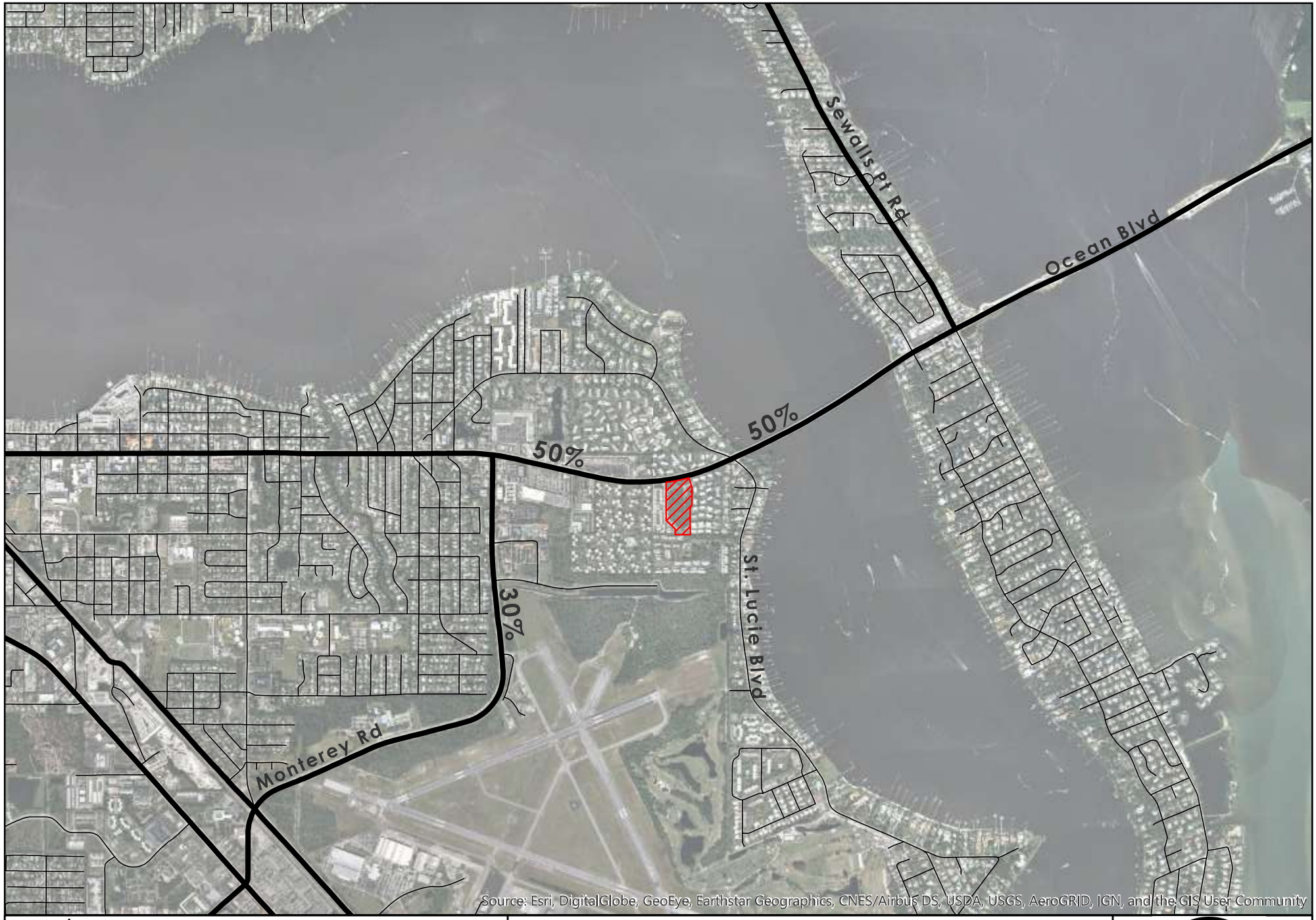

Project Site

0.15 0.07 0 0.15 0.3 0.45 0.6 Miles

Figure 2: Trip Distribution Stuart Ocean

JFO GROUP INC

The main access to the site is being proposed on the existing connection from the Kingswood Community to Ocean Boulevard (SR-A1A). In addition, there is a cross connection on the southern portion of the site that will connect vehicular traffic directly to Monterey Road (SR-714) via SE Kingswood Terrace. Trip distribution and assignment included in Figure 2 incorporates the characteristics of the proposed development as well as the surrounding network configuration. Figure 3 provides Daily, AM and PM peak hour driveway volumes for the Stuart Ocean Townhomes property.

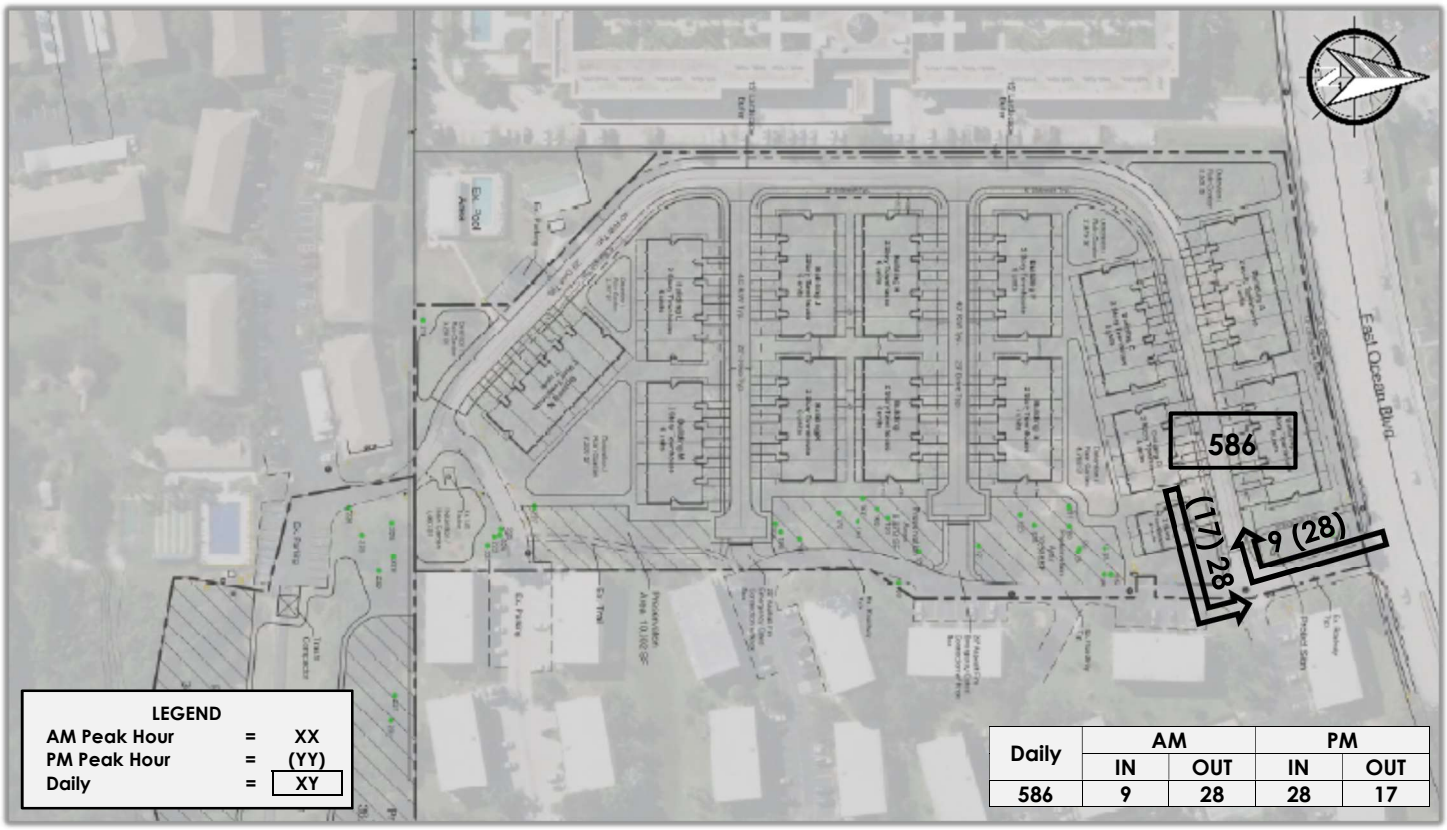

Figure 3: Project Driveway Volumes

Based on the trip generation characteristics shown in Table 2, PM peak hour period has higher trip generation than the AM peak hour period. Therefore, following Martin County LDR, project traffic impact shall be analyzed for PM peak hour conditions. Table 3 presents a summary of the project impact on the roadway links for the project build-out during peak hour conditions. Under the assumed distribution, Volume/Capacity (V/C) ratios for peak hour conditions were analyzed for the project build-out. This V/C calculation provides a preliminary understanding of future conditions at the assumed project build-out in 2024.

Table 3: Level of Service Analysis

Link	From	To	Capacity	Average Annual Growth Rate[1]	2018 Peak Hour Directional Volume[1]	2024 Projected Traffic	Project Assignment	PM Peak Hour				
								Project Traffic Peak Direction	Project Impact	2024 Total Peak Hour Directional	2024 V/C	Exceeds LOS?
SR-A1A (Ocean Blvd)	SR-714	St Lucie Blvd	1,630	1.4%	1,193	1,297	50%	14	0.86%	1,311	0.80	NO
SR-714 (Monterey Rd)	CR-A1A	SR-A1A	1,910	2.4%	1,068	1,231	30%	8	0.42%	1,239	0.65	NO

PM Directional Peak Hour = 28 Trips (IN)

[1] Source: *Martin County 2018 Roadway LOS inventory Report*, effective March 1, 2018. See Exhibit 4.

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As shown in Table 3, the Stuart Ocean Townhomes development will potentially generate less than one percent (1%) of the adopted LOS "D" for major thoroughfares within the study area. In addition, V/C ratios will be less than one hundred ten percent (110%).

Furthermore, on April 12, 2019, turning movement counts at the proposed access were collected to determine if a right turn lane will be warranted at project buildout. On April 18, 2019, F-DOT issued a conceptual approval for the project to use the existing full median on the south side of SE Ocean Boulevard (SR-A1A), located approximately 750 feet west of SE St. Lucie Boulevard. See Exhibit 5 for a copy of the FDOT approval. Exhibit 6 includes HCS analyses for the project driveway. Table 4 summarizes the results of the HCS analyses. As shown in Table 4, a right turn lane at the project driveway is not warranted, and, the existing left turn lane will be able to accommodate existing and future traffic.

Table 4: HCS Driveway Analysis Summary

Approach	Eastbound				Westbound				Northbound			
Movement	**U**	**L**	**T**	**R**	**U**	**L**	**T**	**R**	**U**	**L**	**T**	**R**
AM												
Volume (veh/h)	-	-	722	12	0	11	1231	-	-	35	-	29
95% Queue Length, Q_{95} (veh)	-	-	-	-	-	0.0	-	-	-	0.5	-	0.2
95% Queue Length, Q_{95} (ft)	-	-	-	-	-	-	-	-	-	12.5	-	5
Turn Lane (ft)	-	-	-	-	-	160	-	-	-	100	-	100
PM												
Volume (veh/h)	-	-	1126	36	0	30	908	-	-	25	-	13
95% Queue Length, Q_{95} (veh)	-	-	-	-	-	0.2	-	-	-	0.5	-	0.1
95% Queue Length, Q_{95} (ft)	-	-	-	-	-	5	-	-	-	12.5	-	2.5
Turn Lane (ft)	-	-	-	-	-	160	-	-	-	100	-	100

Therefore, according to Section 5.64.B from the *Martin County - Land Development Code* the subject development is categorized as a *project with de minimis impact*. The traffic impact of the proposed site plan for the Stuart Ocean Townhomes development has been evaluated following *Section V.3.5.64 of the Martin County Land Development Code*. This analysis shows that the proposed development will be in compliance with *Martin County Adequate Public Facilities Standards – Article V, Division 3 of the Martin County Land Development Code*.

Sincerely,

JFO GROUP INC
COA Number 32276

JUAN F. ORTEGA
LICENSE
No. 63422
Digitally signed by Juan F Ortega
Date: 2019.11.08 21:18:44 -05'00'
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

Enclosures:
Exhibit 1: Property Appraiser Information
Exhibit 2: Preliminary Site Plan
Exhibit 3: ITE Trip Generation Rates
Exhibit 4: 2018 Roadway LOS Report
Exhibit 5: F-DOT Conceptual Approval
Exhibit 6: Driveway Analysis
Exhibit 7: Traffic Impact Analysis Review

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This item has been electronically signed and sealed by Dr. Juan F. Ortega PE on November 8, 2019 using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Martin County Property Information Lookup

General Information

Parcel #	023841000000000206
Owner Name:	SERRAGUI GROUP INVESTMENTS LLC
Owner Address:	21 SW 15TH RD STE 200 MIAMI, FL 33129
Site Address:	,
Storm Surge Evacuation Zone:	
Flood Zone:	AE,X500,X
Base Flood Elevation:	6,N/A' NAVD
FIRM Panel:	12085C0154G
Urban Service District:	Primary
Municipality:	City of Stuart
Taxing District:	Municipality
ISO-PPC Rating:	Contact City of Stuart Fire Rescue
Subdivision infill applicability:	No

Building Design Wind Speed

Occupancy Category I:	150
Occupancy Category II:	160
Occupancy Category III and IV:	170

Land Use

*NOTE: Land Use information can change frequently, please verify with the Martin County Growth Management Department at 772-288-5495

Zoning:	STUART
Zoning Details:	N/A
Future Landuse	NO DATA
Landuse Details:	N/A

Community Redevelopment

CRA:	N/A
Zoning Overlay Zone:	N/A
Mixed Use Areas:	N/A

Schools

School information obtained from the Martin County School District system. If there are any questions, please contact the Martin County School District at 772-219-1200

Elementary School:	J D Parker Elem
Middle School:	Stuart Middle School
High School:	Jensen Beach High School

Created: August , 16th, 2019 10:56 PM

Property Location Map

Election Information

Election information obtained from the Martin County GIS system. If there are any questions, please contact the Martin County Supervisor of Elections at 772-288-5637

Voter Precinct	7	
Commission District:	1	
Commissioner:	Doug Smith	772-288-5400
Clerk of Circuit Court:	Carolyn Timmann	772-288-5576
County Sheriff:	William Snyder	772-220-7000
Property Appraiser:	Laurel Kelly	772-288-5608
School Superintendent:	Laurie J. Gaylord	772-219-1200
Supervisor of Elections:	Vicki Davis	772-288-5637
Tax Collector:	Ruth Pietruszewski	772-288-5600

Utilities & Solid Waste

Service:	Utility:	Availability:	Phone:
Water:	City of Stuart Utilities	Call	772-288-5317
Sewer:	City of Stuart Utilities	Call	772-288-5317

Recycle Collection:	N/A
Trash Collection:	N/A

Print

Disclaimer: The Geographic Information System map product, received from Martin County, ("COUNTY") is provided "as is" without warranty of any kind, and the COUNTY expressly disclaims all express and implied warranties, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. The COUNTY does not warrant, guarantee, or make any representations regarding the use, or the results of the use, of the information provided to you by the COUNTY in terms of correctness, accuracy, reliability, timeliness or otherwise. The entire risk as to the results and performance of any information obtained from the COUNTY is entirely assumed by the recipient. Please contact the responsible Martin County Department for specific determinations.

Martin County Property Information Lookup

General Information

Parcel #	023841000000000509
Owner Name:	SERRAGUI GROUP INVESTMENTS LLC
Owner Address:	21 SW 15TH RD STE 200 MIAMI, FL 33129
Site Address:	,
Storm Surge Evacuation Zone:	
Flood Zone:	AE,X500,X
Base Flood Elevation:	6,N/A' NAVD
FIRM Panel:	12085C0154G
Urban Service District:	Primary
Municipality:	City of Stuart
Taxing District:	Municipality
ISO-PPC Rating:	Contact City of Stuart Fire Rescue
Subdivision infill applicability:	No

Building Design Wind Speed

Occupancy Category I:	150
Occupancy Category II:	160
Occupancy Category III and IV:	170

Land Use

*NOTE: Land Use information can change frequently, please verify with the Martin County Growth Management Department at 772-288-5495

Zoning:	STUART
Zoning Details:	N/A
Future Landuse	NO DATA
Landuse Details:	N/A

Community Redevelopment

CRA:	N/A
Zoning Overlay Zone:	N/A
Mixed Use Areas:	N/A

Schools

School information obtained from the Martin County School District system. If there are any questions, please contact the Martin County School District at 772-219-1200

Elementary School:	J D Parker Elem
Middle School:	Stuart Middle School
High School:	Jensen Beach High School

Created: August , 16th, 2019 10:55 PM

Property Location Map

Election Information

Election information obtained from the Martin County GIS system. If there are any questions, please contact the Martin County Supervisor of Elections at 772-288-5637

Voter Precinct	7	
Commission District:	1	
Commissioner:	Doug Smith	772-288-5400
Clerk of Circuit Court:	Carolyn Timmann	772-288-5576
County Sheriff:	William Snyder	772-220-7000
Property Appraiser:	Laurel Kelly	772-288-5608
School Superintendent:	Laurie J. Gaylord	772-219-1200
Supervisor of Elections:	Vicki Davis	772-288-5637
Tax Collector:	Ruth Pietruszewski	772-288-5600

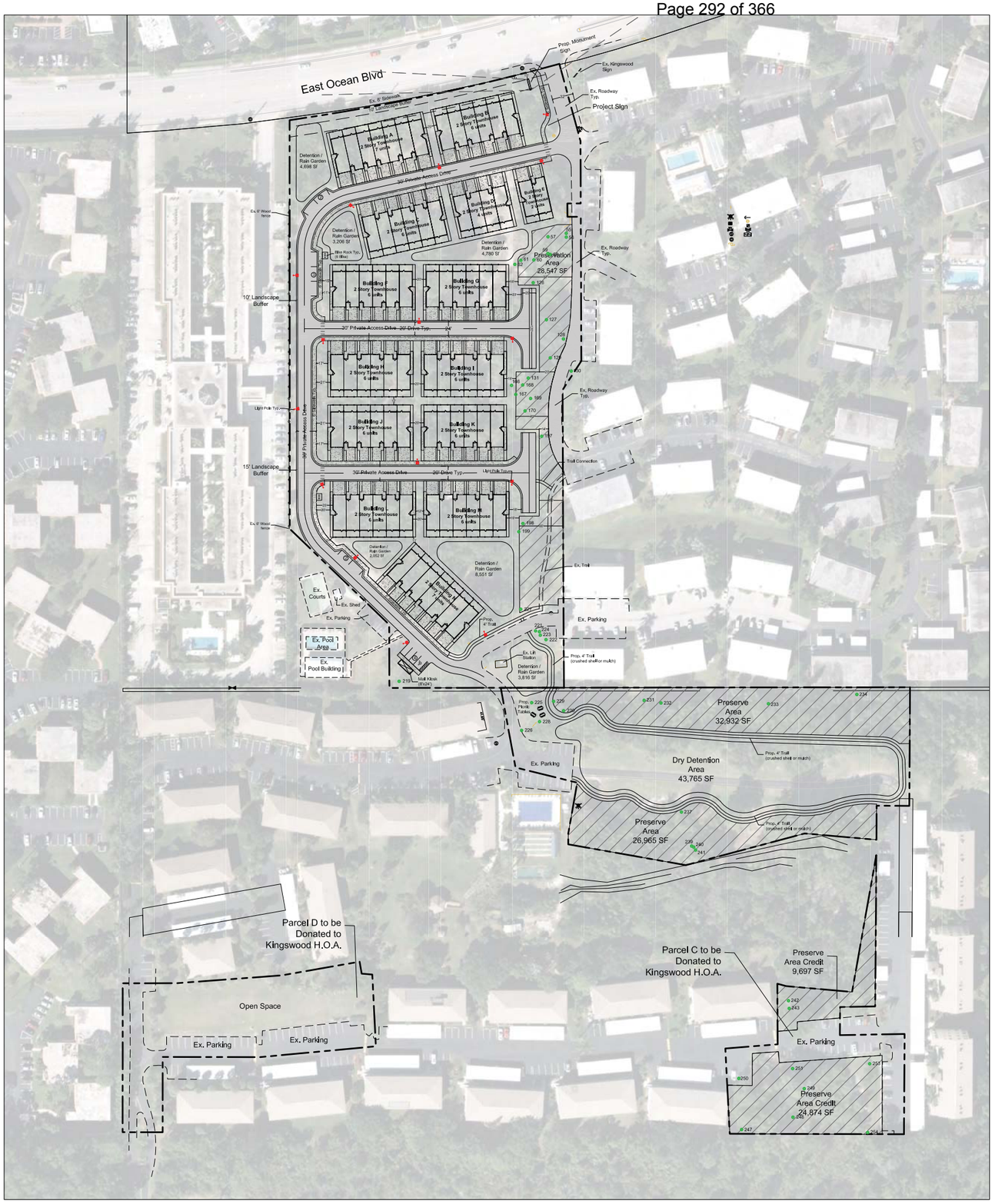
Utilities & Solid Waste

Service:	Utility:	Availability:	Phone:
Water:	City of Stuart Utilities	Call	772-288-5317
Sewer:	City of Stuart Utilities	Call	772-288-5317

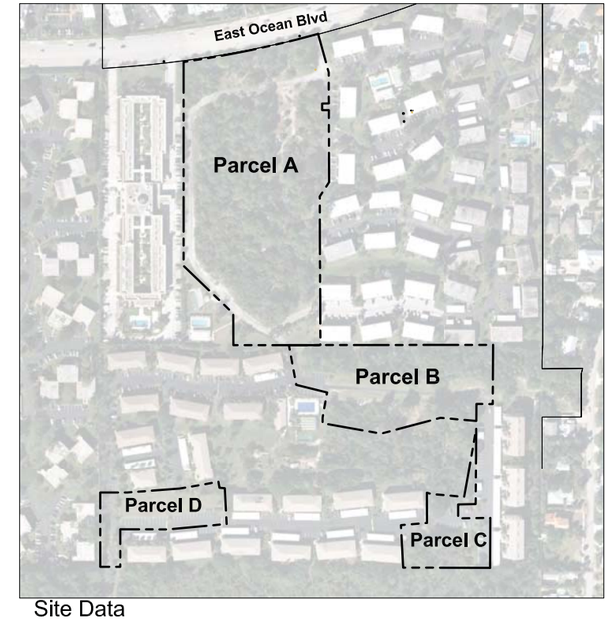
Recycle Collection:	
Trash Collection:	N/A

Print

Disclaimer: The Geographic Information System map product, received from Martin County, ("COUNTY") is provided "as is" without warranty of any kind, and the COUNTY expressly disclaims all express and implied warranties, including but not limited to the implied warranties of merchantability and fitness for a particular purpose. The COUNTY does not warrant, guarantee, or make any representations regarding the use, or the results of the use, of the information provided to you by the COUNTY in terms of correctness, accuracy, reliability, timeliness or otherwise. The entire risk as to the results and performance of any information obtained from the COUNTY is entirely assumed by the recipient. Please contact the responsible Martin County Department for specific determinations.



Parcel Map



Site Data

Total Site Area	11.03 Ac. / 480,602 sf
Parcel A	8.02 Ac. / 349,446 sf
Parcel B	3.01 Ac. / 131,156 sf
Future Land Use	Multi-family Residential
Existing Zoning	R-3
Proposed Zoning	RPUD (30 DU/ AC)
Proposed Use	2-Story Single Family Townhomes
Proposed Dwelling Units	80 Units

Density

Maximum Density - 30 DU/Ac. (11.03 Ac. x 30)	330 Max. Units
Proposed Density	80 Units
Proposed Gross Site Density	7.25 DU / Ac.

Impervious Area

Building Coverage	83,230 sf		
Existing & Proposed Vehicular Use Areas	66,670 sf		
Sidewalks / Paved Areas / Rear Patios	58,463 sf		
Total:	208,363 sf	4.78 Ac.	43%

Pervious Area / Open Space

Dry Detention Areas	70,868 sf		
Native Preserve Areas	88,444 sf		
Other Landscape / Open Space	112,927 sf		
Total:	272,239 sf	6.25 Ac.	57%

Native Upland Preserve Data

Required Native Preserve Area: (480,602 sf x 25%)	120,150 sf / 2.76 Ac. / 25%
Provided Native Preserve Area:	123,015 sf / 2.82 Ac. / 26%
Parcel A & B -Native Preserve Areas	88,444 sf
Parcel C - Native Preserve Area Credit	34,571 sf

Parking Data

Required Parking Spaces: (2 spaces per unit w/ 2 or more bedrooms)	160 Spaces
Provided Parking Spaces:	198 Spaces
One Car Garages (80 D.U.)	80 Spaces
One Car Driveways (53 D.U.)	53 Spaces
Two Car Driveways (27 D.U.)	54 Spaces
On-Street Parking (3 - 9' x 18 + 1 Handicap + 7 Parallel)	11 Spaces

Scale: 1" = 80'

0' 40' 80' 160' 240'

North

HJA DESIGN STUDIO
LANDSCAPE ARCHITECTURE
50 E. Ocean Blvd., Suite 101
Stuart, Florida 34994
T 772.678.7200
F 772.678.7201
www.hjadesignstudio.com
LA 0000905

Stuart Ocean Townhomes

City of Stuart
Major Development Site Plan (RPUD)

Florida

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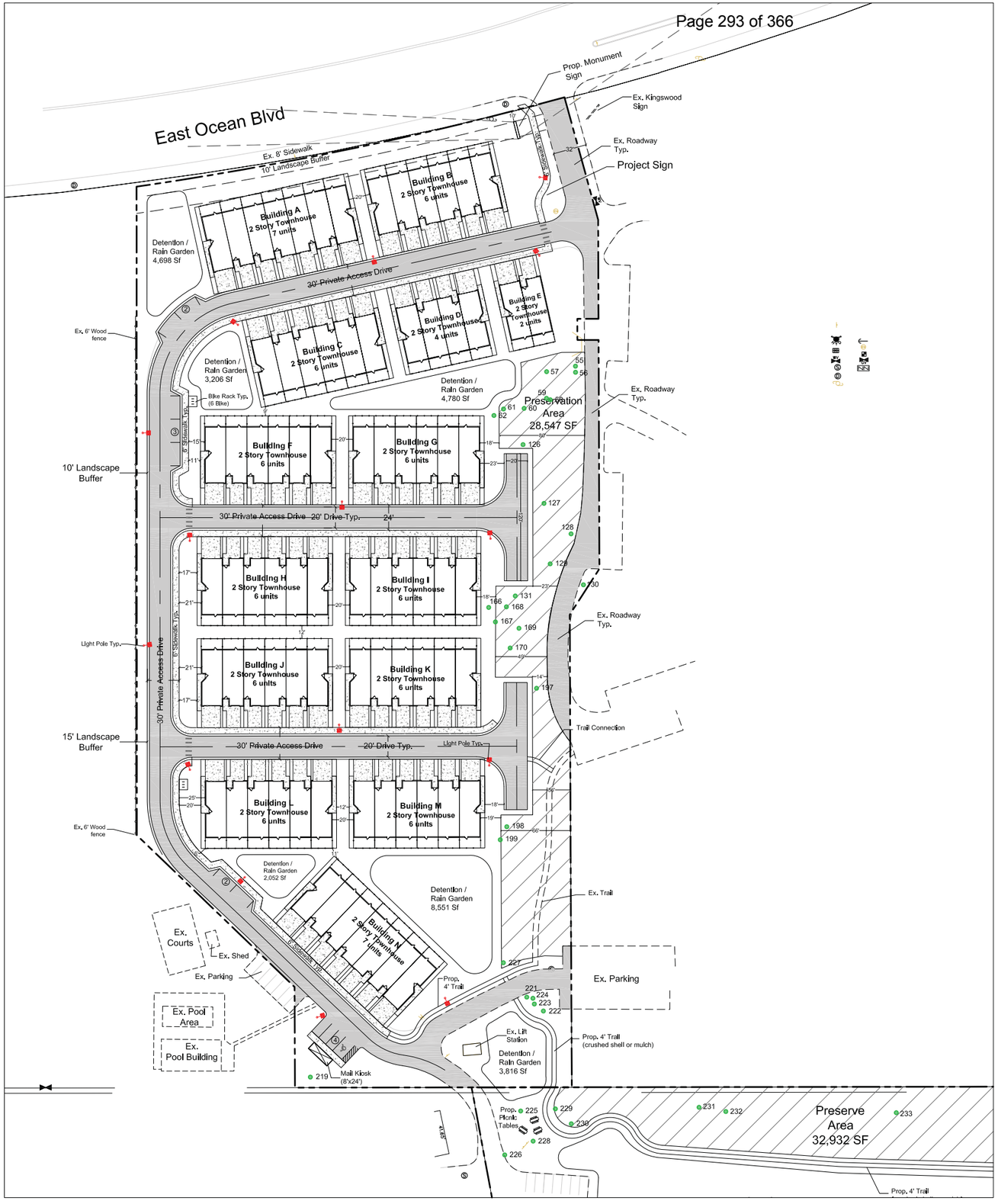
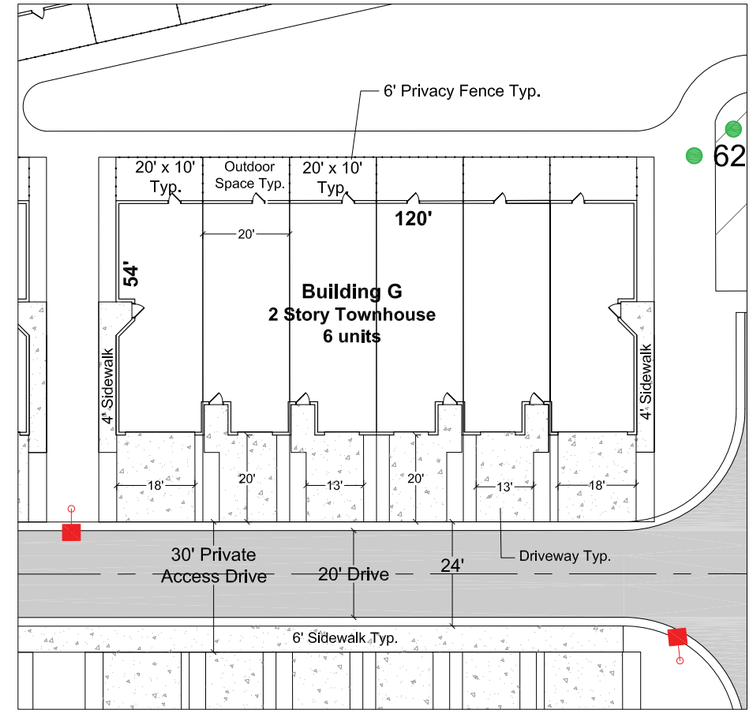
Job No.	19005
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	9-6-19
Revision Dates	

SP-1



Townhouse Enlargement Typical



Scale: 1" = 50'

0' 25' 50' 100' 150'

North

HJA DESIGN STUDIO
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50 E. Ocean Blvd., Suite 101
Stuart, Florida 34994
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Stuart Ocean Townhomes

City of Stuart
Major Development Site Plan (RPUD)

Florida

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Job No.	19005
Drawn By	TT
Checked By	MH
Approved By	MH
Submittal Dates	9-6-19
Revision Dates	

SP-2

Multifamily Housing (Low-Rise)
(220)

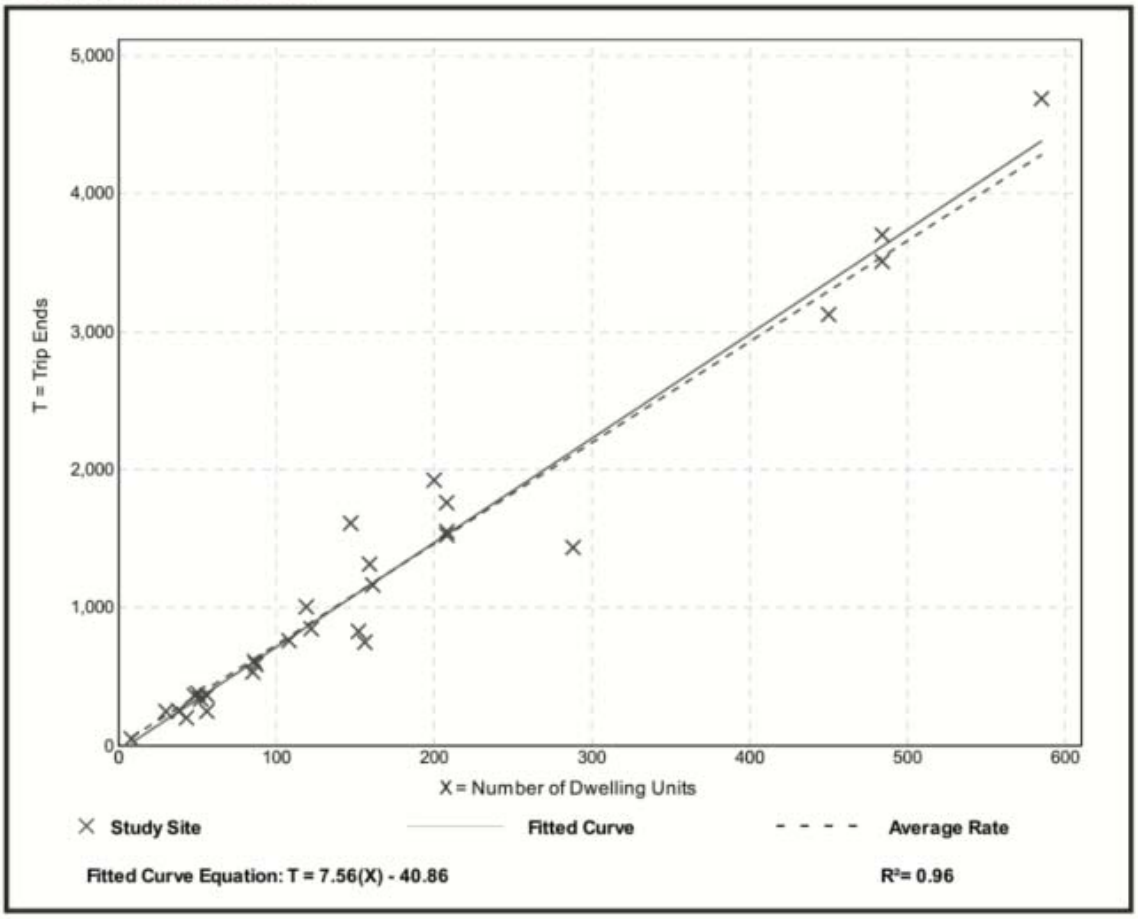
Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

Setting/Location: General Urban/Suburban
Number of Studies: 29
Avg. Num. of Dwelling Units: 168
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
7.32	4.45 - 10.97	1.31

Data Plot and Equation



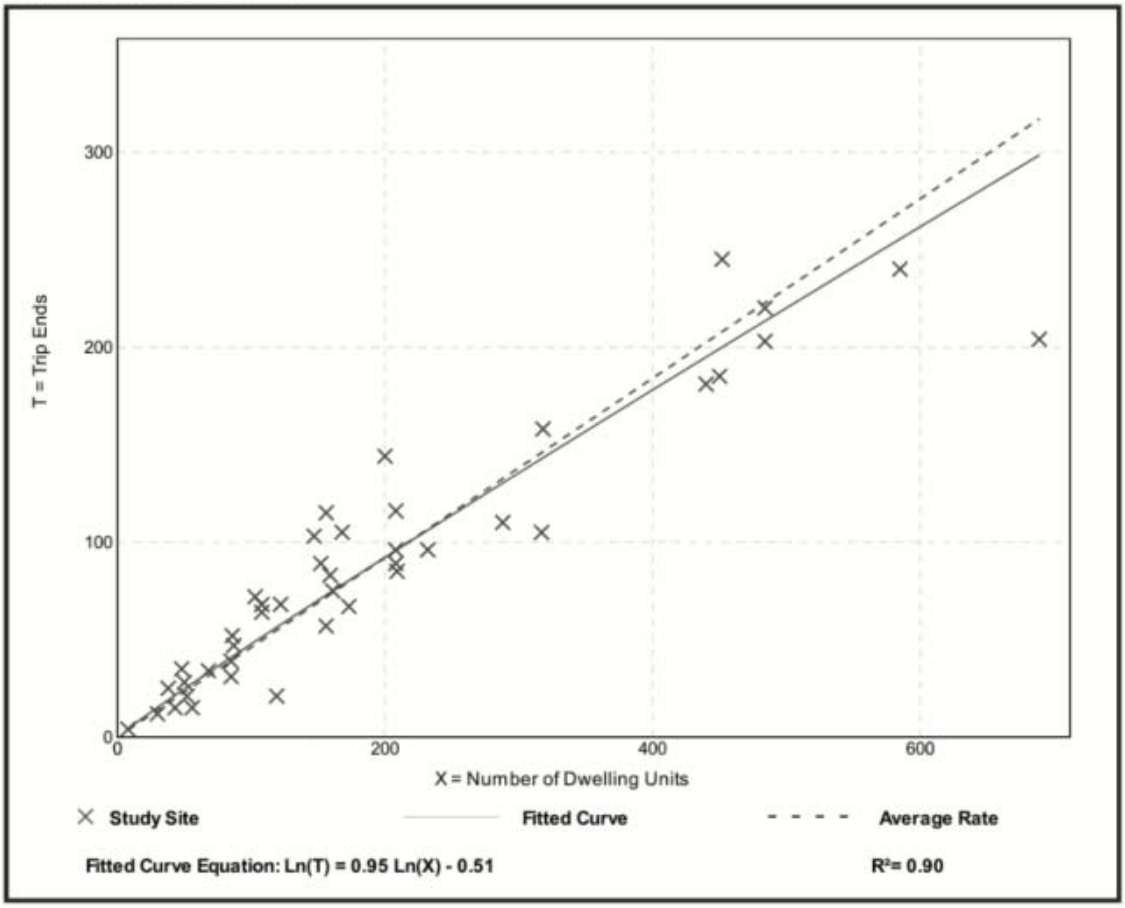
Multifamily Housing (Low-Rise)
(220)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	42
Avg. Num. of Dwelling Units:	199
Directional Distribution:	23% entering, 77% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.46	0.18 - 0.74	0.12

Data Plot and Equation



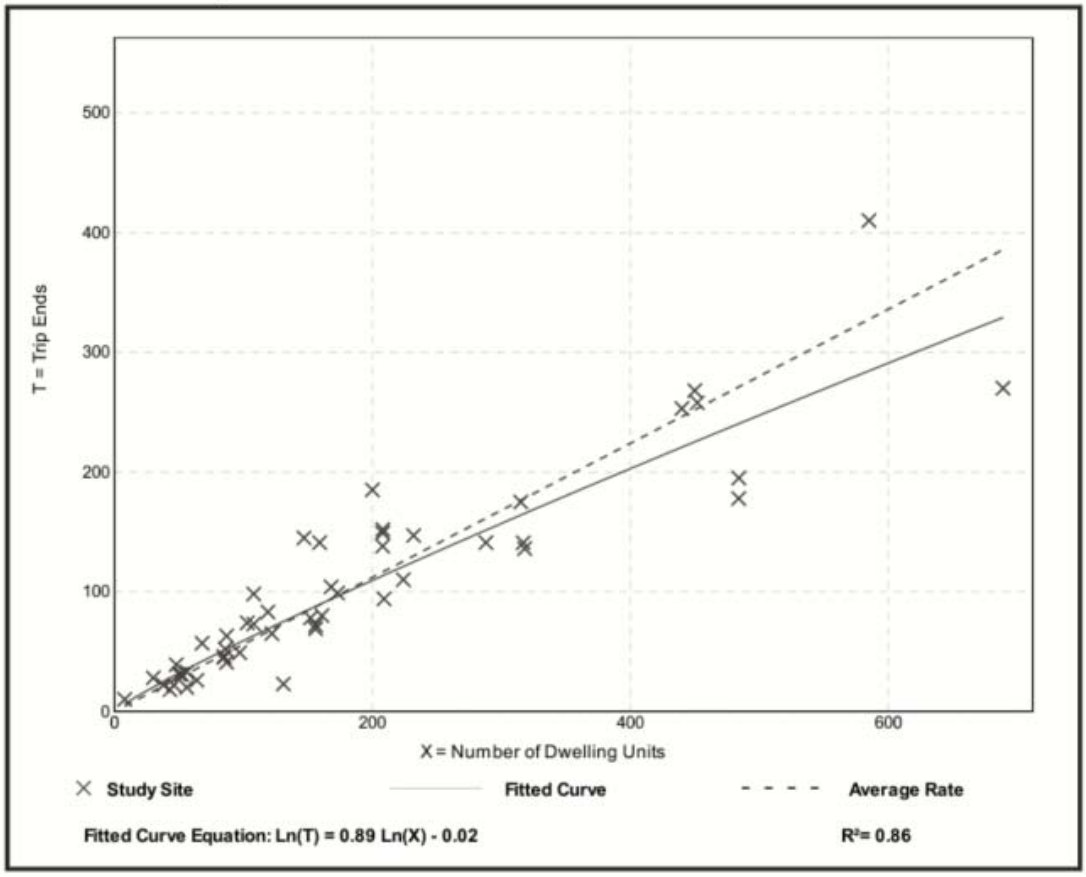
Multifamily Housing (Low-Rise)
(220)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	50
Avg. Num. of Dwelling Units:	187
Directional Distribution:	63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.56	0.18 - 1.25	0.16

Data Plot and Equation



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Martin County 2018 Roadway Level of Service Inventory Report

Road Name	From	To	Generalized Service Capacity	2018 Average Annual Daily Traffic	Peak Hour Factor K_{30}	Directional Distribution D_{100}	2018 Peak Hour Directional Volume	2018 Generalized LOS	Avg. Annual Growth Rate
SR-5 (US-1)	Baker Rd	Britt Rd	3020	53,335	0.08	0.51	2,203	C	0.5%
SR-5 (US-1)	Britt Rd	SR-732	3020	55,454	0.09	0.53	2,616	C	0.9%
SR-5 (US-1)	SR-732	Westmoreland Blvd	4040	64,326	0.09	0.61	3,414	C	0.6%
SR-5 (US-1)	Westmoreland Blvd	St Lucie County	4040	62,920	0.08	0.52	2,519	C	1.1%
SR-710 (Warfield Blvd)	Okeechobee County	Fox Brown Rd	670	6,227	0.06	0.59	231	A/B	4.4%
SR-710 (Warfield Blvd)	Fox Brown Rd	CR-609 (Allapattah)	670	7,587	0.07	0.51	279	C	4.7%
SR-710 (Warfield Blvd)	CR-609 (Allapattah)	Van Buren	870	11,942	0.10	0.60	709	C	8.0%
SR-710 (Warfield Blvd)	Van Buren	CR-726 (Citrus)	765	11,942	0.10	0.60	709	C	8.0%
SR-710 (Warfield Blvd)	CR-726	SR-76 (Kanner)	2450	10,528	0.06	0.53	329	A/B	5.7%
SR-710 (Warfield Blvd)	SR-76	Palm Beach County	2450	6,863	0.07	0.53	251	A/B	1.4%
SR-714 (Martin Hwy)	I-95	CR-76A (Citrus)	1200	12,902	0.10	0.53	684	C	4.7%
SR-714 (Martin Hwy)	CR-76A (Citrus)	Florida's Turnpike	2000	20,756	0.10	0.58	1,180	C	4.8%
SR-714 (Martin Downs Blvd)	Florida's Turnpike	CR-713	2000	20,107	0.09	0.53	948	C	1.8%
SR-714 (Martin Downs Blvd)	CR-713	Matheson Ave	2000	28,929	0.09	0.61	1,588	C	1.2%
SR-714 (Martin Downs Blvd)	Matheson Ave	Mapp Rd	2000	32,616	0.10	0.53	1,718	C	2.7%
SR-714 (Palm City Bridge)	Mapp Rd	SR-76	2000	34,965	0.10	0.59	2,022	F	0.9%
SR-714 (Monterey Rd)	SR-76	Willoughby Blvd	2000	28,608	0.10	0.52	1,488	C	5.2%
SR-714 (Monterey Rd)	Willoughby Blvd	Monterey Extension	2000	25,028	0.10	0.54	1,284	C	1.7%
SR-714 (Monterey Rd)	Monterey Extension	SR-5	2000	15,598	0.09	0.62	899	C	0.5%
SR-714 (Monterey Rd)	SR-5	CR-A1A	1630	20,190	0.09	0.52	966	D	0.5%
SR-714 (Monterey Rd)	CR-A1A	SR-A1A	1910	18,242	0.10	0.61	1,068	C	2.4%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB); CR-713 (PM/NB); Murphy Rd (PM/NB); SR-5 (AM/SB); SR-714 [Palm City Bridge] (PM/WB) and SR-714 (PM/WB).

Martin County 2018 Roadway Level of Service Inventory Report

Road Name	From	To	Generalized Service Capacity	2018 Average Annual Daily Traffic	Peak Hour Factor K_{30}	Directional Distribution D_{100}	2018 Peak Hour Directional Volume	2018 Generalized LOS	Avg. Annual Growth Rate
SR-732 (Causeway Blvd)	CR-707	SR-A1A	1190	13,403	0.10	0.51	684	C	0.8%
SR-732 (Jensen Beach Blvd)	SR-5	Green River Pkwy	2000	25,891	0.10	0.52	1,319	C	0.5%
SR-732 (Jensen Beach Blvd)	Green River Pkwy	CR-723	2000	24,869	0.09	0.56	1,253	C	0.5%
SR-76 (Kanner Hwy)	SR-15	SR-710	740	2,117	0.09	0.57	105	A/B	8.0%
SR-76 (Kanner Hwy)	SR-710	CR-708	740	3,488	0.08	0.59	171	A/B	8.0%
SR-76 (Kanner Hwy)	CR-708	CR-711/CR-76A	1200	3,027	0.11	0.54	180	A/B	1.9%
SR-76 (Kanner Hwy)	CR-711/CR76A	Locks Rd	2000	12,928	0.12	0.52	813	C	1.2%
SR-76 (Kanner Hwy)	Locks Rd	Jack James	2000	20,494	0.09	0.60	1,082	C	2.0%
SR-76 (Kanner Hwy)	Jack James	Cove Rd	3020	45,918	0.10	0.52	2,409	C	2.4%
SR-76 (Kanner Hwy)	Cove Rd	Salerno Rd	3020	31,734	0.09	0.52	1,436	C	0.9%
SR-76 (Kanner Hwy)	Salerno Rd	Indian St	3020	29,492	0.10	0.52	1,468	C	2.6%
SR-76 (Kanner Hwy)	Indian St	SR-714	3020	21,161	0.07	0.52	759	C	0.5%
SR-76 (Kanner Hwy)	SR-714	SR-5	3020	25,033	0.08	0.50	1,001	C	0.5%
SR-A1A (Ocean Blvd)	SR-714	St Lucie Blvd	1630	19,372	0.11	0.57	1,193	D	1.4%
SR-A1A (Ocean Blvd)	St Lucie Blvd	Sewalls Point Rd	2000	21,532	0.09	0.51	1,010	C	0.5%
SR-A1A (Ocean Blvd)	Sewalls Point Rd	Macarthur Blvd	925	12,803	0.09	0.54	650	C	0.5%
SR-A1A (Ocean Blvd)	MacArthur Blvd	SR-732	1190	8,278	0.09	0.53	395	A/B	2.5%
SR-A1A (Ocean Blvd)	SR-732	St Lucie County	1190	14,957	0.12	0.54	953	D	3.6%
St Lucie Blvd	CR-A1A	Indian St	675	3,083	0.10	0.55	163	C	0.5%
St Lucie Blvd	Indian St	SR-A1A	675	7,420	0.11	0.54	421	D	0.8%
Westmoreland Blvd	St Lucie County	SR-5	790	12,542	0.08	0.60	632	D	2.6%

Segments with shaded LOS require additional analysis.
The peaks are: CR-A1A (PM/SB); CR-713 (PM/NB); Murphy Rd (PM/NB); SR-5 (AM/SB); SR-714 [Palm City Bridge] (PM/WB) and SR-714 (PM/WB).

Florida Department of Transportation

RON DESANTIS
GOVERNOR

3400 West Commercial Boulevard
Fort Lauderdale, FL 33309

KEVIN J. THIBAULT
SECRETARY

April 18, 2019

THIS PRE-APPLICATION LETTER IS VALID UNTIL – **April 18, 2020**
THIS LETTER IS NOT A PERMIT APPROVAL

Juan F. Ortega
JFO Group Inc
11924 Forest Hill Boulevard
Suite 10A-123, Wellington, FL 33414

Dear Juan F. Ortega:

RE: **April 18, 2019-** Pre-application Meeting for **Category D Driveway**
Martin- Not within City Limits, Urban; SR A1A; Sec. # 89040; MP: 2.299
Access Class - 07; Posted Speed - 35; SIS - N; Ref. Project:

Request: To use existing full median on the south side of SE Ocean Boulevard(SR-A1A), located approximately 750 feet east of SE St. Lucie Blvd.

SITE SPECIFIC INFORMATION
Project Name & Address: **Stuart Ocean – 2950 Southeast Ocean Blvd, Stuart, FL 34996**
Applicant/Property Owner: **PulteGroup, Inc**
Parcel Size: **8.0 Acres** Development Size: **80 DU/Townhouses**

WE APPROVE YOUR REQUEST

This decision is based on your presentation of the facts, site plan and survey - please see the **conditions** and **comments** below. You may choose to review this concept further with the District Access Management Review Committee (AMRC).

Conditions:
- **A minimum driveway length of 25 feet, as measured from the ultimate right-of-way line to the first conflict point shall be provided. If a gate is installed a minimum driveway length of 100 feet is required.**
- **A recorded cross access agreement or easement with the adjacent property to the east shall be provided prior to the Permit approval.**

Comments:

- Drainage mitigation is required for any impacts within FDOT right-of-way (i.e. increased runoff or reduction of existing storage). A Storm Water Pollution Prevention Plan must be submitted with the application for more than one acre of "disturbed area" as defined by the Florida Department of Environmental Protection (FDEP).
- The applicant shall donate the right-of-way to the Department if right-of-way dedication is required to implement the improvements,
- Dimensions between driveways are measured from the near edge of pavement to near edge of pavement and for median openings are measured from centerline to centerline unless otherwise indicated.

The purpose of this Pre-Application letter is to document the conceptual review of the approximate location of driveway(s) to the State Highway system and to note required improvements, if any. This letter shall be submitted with any further reviews and for permitting. The Department's personnel shall review permit plans for compliance with this letter as well as current Department standards and/or specifications. Final design must consider the existing roadway profile and any impacts to the existing drainage system. **Note, this letter does not guarantee permit approval.** The permit may be denied based on the review of the submitted engineering plans. Be aware that any approved median openings may be modified (or closed) in the future, at the sole discretion of the Department. For right-of-way dedication requirements go to: https://gis.dot.state.fl.us/OneStopPermitting; click on Statewide Permit News; Scroll down to District 4; Scroll down to Additional Information and Examples and choose Right-of-way Donations/Dedications.
Please contact the Access Management Manager - Tel. # 954-777-4363 or e-mail: ashok.sampath@dot.state.fl.us with any questions regarding the Pre-Approval Letter and Permits Office - Tel. # 954-777-4383 with any questions regarding permits.

Sincerely,

S. Ashok

Ashok Sampath, M.S.
District Access Management Manager

cc: Nesa Y. Harden NYH
File: S:\Transportation Operations\Traffic Operations\Access Management\1. Pre-Apps and Variance\2019-04-18\4. 89040 MP 2.29 SR A1A_Stuart Ocean\89040 MP 2.29 SR A1A_Stuart Ocean.docx

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Intersection Volume Development

SE Ocean Blvd and Kingwood Development

Stuart Ocean

Input Data

GR	=	1.40%
Peak Season	=	1.03
Traffic Count Year	=	2019
Buildout Year	=	2023
Years	=	4

AM Peak Hour		PM Peak Hour		Intensity
In	Out	In	Out	
9	28	28	17	80 Townhomes

AM Peak Hour

AM	Eastbound			Westbound			Northbound			Southbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Volume 12-Apr-19	-	663	7	6	1,130	-	19	-	14	-	-	-
Peak Season Volume (Existing)	**-**	**683**	**7**	**6**	**1,164**	**-**	**20**	**-**	**14**	**-**	**-**	**-**
2023 Historic Growth	-	722	7	6	1,231	-	21	-	15	-	-	-
Major Project Traffic	-	0	0	0	0	-	0	-	0	-	-	-
Future Background	**-**	**722**	**7**	**6**	**1,231**	**-**	**21**	**-**	**15**	**-**	**-**	**-**
% Project Traffic	-	-	50%	50%	-	-	50%	-	50%	-	-	-
Project Traffic Direction	-	-	IN	IN	-	-	OUT	-	OUT	-	-	-
Project Traffic	-	-	5	5	-	-	14	-	14	-	-	-
2023 Future Total	**-**	**722**	**12**	**11**	**1,231**	**-**	**35**	**-**	**29**	**-**	**-**	**-**

PM Peak Hour

PM	Eastbound			Westbound			Northbound			Southbound		
	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT	LT	Thru	RT
Volume 12-Apr-19	-	1,034	20	15	834	-	15	-	4	-	-	-
Peak Season Volume (Existing)	**-**	**1,065**	**21**	**15**	**859**	**-**	**15**	**-**	**4**	**-**	**-**	**-**
2023 Historic Growth	-	1,126	22	16	908	-	16	-	4	-	-	-
Major Project Traffic	-	0	0	0	0	-	0	-	0	-	-	-
Future Background	**-**	**1,126**	**22**	**16**	**908**	**-**	**16**	**-**	**4**	**-**	**-**	**-**
% Project Traffic	-	-	50%	50%	-	-	50%	-	50%	-	-	-
Project Traffic Direction	-	-	IN	IN	-	-	OUT	-	OUT	-	-	-
Project Traffic	-	-	14	14	-	-	9	-	9	-	-	-
2023 Future Total	**-**	**1,126**	**36**	**30**	**908**	**-**	**25**	**-**	**13**	**-**	**-**	**-**

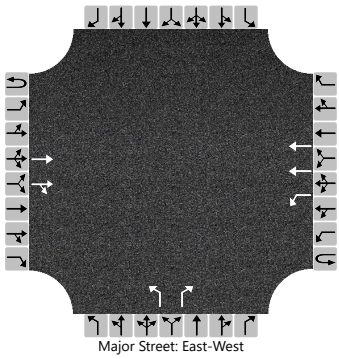
General Information

Analyst	JF
Agency/Co.	JFO
Date Performed	10/28/2019
Analysis Year	2023
Time Analyzed	AM
Intersection Orientation	East-West
Project Description	Stuart Ocean Townhomes

Site Information

Intersection	SE Ocean Blvd & Kingswood
Jurisdiction	F-DOT
East/West Street	SE Ocean Blvd
North/South Street	Kingswood
Peak Hour Factor	0.95
Analysis Time Period (hrs)	0.25

Lanes



Major Street: East-West

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	2	0	0	1	2	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			722	12	0	11	1231			35		29				
Percent Heavy Vehicles (%)					0	2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.5		6.9				
Critical Headway (sec)						4.14				6.84		6.94				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						12				37		31				
Capacity, c (veh/h)						838				257		612				
v/c Ratio						0.01				0.14		0.05				
95% Queue Length, Q_{95} (veh)						0.0				0.5		0.2				
Control Delay (s/veh)						9.4				21.4		11.2				
Level of Service (LOS)						A				C		B				
Approach Delay (s/veh)					0.1				16.8							
Approach LOS									C							

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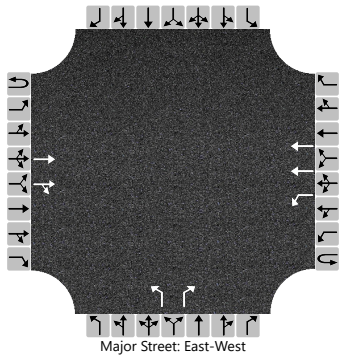
General Information

Analyst	JF
Agency/Co.	JFO
Date Performed	10/28/2019
Analysis Year	2023
Time Analyzed	PM
Intersection Orientation	East-West
Project Description	Stuart Ocean Townhomes

Site Information

Intersection	SE Ocean Blvd & Kingswood
Jurisdiction	F-DOT
East/West Street	SE Ocean Blvd
North/South Street	Kingswood
Peak Hour Factor	0.95
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	2	0	0	1	2	0		1	0	1		0	0	0
Configuration			T	TR		L	T			L		R				
Volume (veh/h)			1126	36	0	30	908			25		13				
Percent Heavy Vehicles (%)					0	2				2		2				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized									No							
Median Type | Storage	Left + Thru								1							

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.5		6.9				
Critical Headway (sec)						4.14				6.84		6.94				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.22				3.52		3.32				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						32				26		14				
Capacity, c (veh/h)						566				181		436				
v/c Ratio						0.06				0.15		0.03				
95% Queue Length, Q_{95} (veh)						0.2				0.5		0.1				
Control Delay (s/veh)						11.7				28.3		13.5				
Level of Service (LOS)						B				D		B				
Approach Delay (s/veh)					0.4				23.2							
Approach LOS									C							

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KMF Traffic Group, LLC
Stuart, FL
(772) 221-7971

Manual Traffic Count - All Traffic
SE Ocean Blvd and Kingwood Development
Stuart, FL

File Name : OCAMPM
Site Code : JO1920
Start Date : 4/12/2019
Page No : 1

Groups Printed- All Traffic

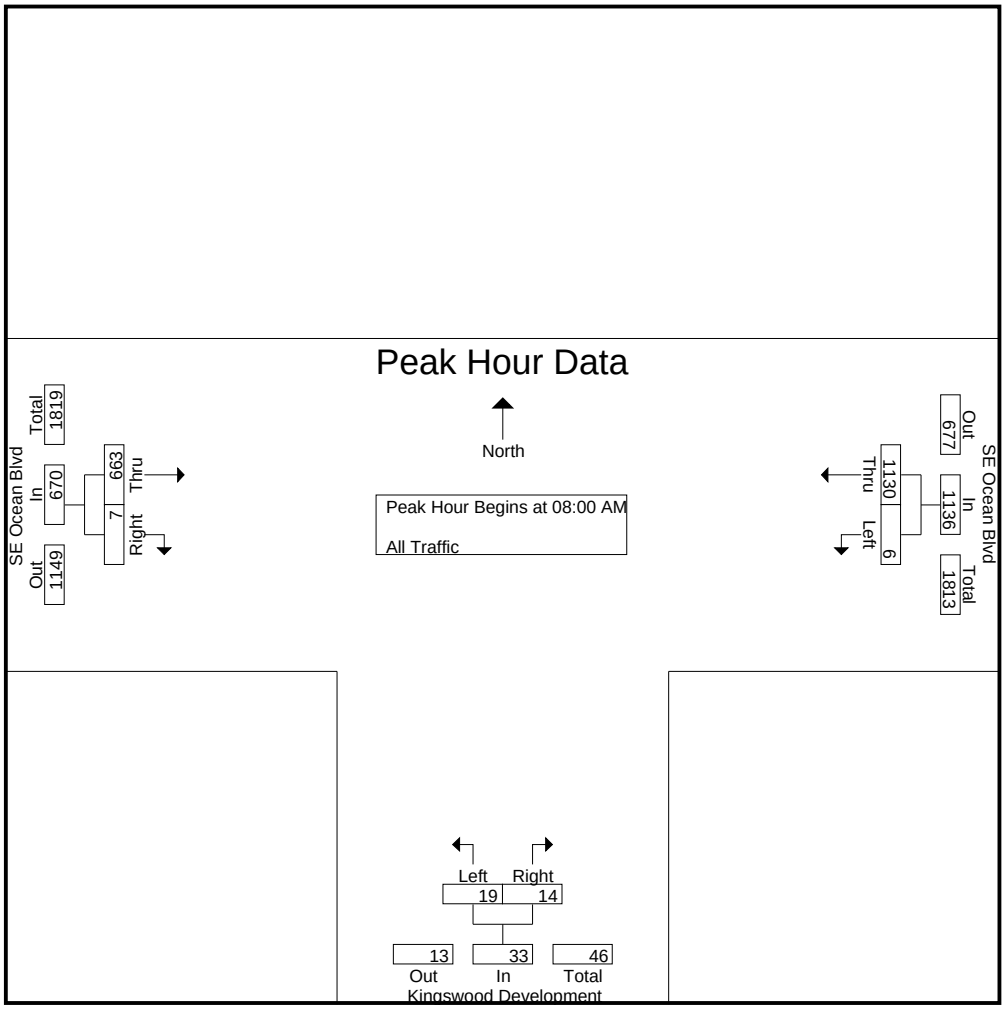
	Kingswood Development NB			SE Ocean Blvd EB			SE Ocean Blvd WB			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
07:00 AM	0	2	2	1	54	55	147	0	147	204
07:15 AM	2	0	2	1	91	92	160	1	161	255
07:30 AM	4	0	4	2	138	140	218	1	219	363
07:45 AM	1	5	6	1	155	156	218	0	218	380
Total	7	7	14	5	438	443	743	2	745	1202
08:00 AM	4	3	7	2	132	134	237	1	238	379
08:15 AM	2	7	9	1	168	169	333	0	333	511
08:30 AM	3	5	8	2	186	188	248	0	248	444
08:45 AM	5	4	9	2	177	179	312	5	317	505
Total	14	19	33	7	663	670	1130	6	1136	1839
*** BREAK ***										
04:00 PM	2	2	4	5	225	230	148	3	151	385
04:15 PM	2	4	6	0	234	234	165	4	169	409
04:30 PM	3	6	9	5	248	253	209	3	212	474
04:45 PM	1	4	5	9	266	275	255	6	261	541
Total	8	16	24	19	973	992	777	16	793	1809
05:00 PM	0	0	0	5	255	260	177	2	179	439
05:15 PM	0	5	5	1	265	266	193	4	197	468
05:30 PM	0	1	1	4	273	277	181	1	182	460
05:45 PM	1	0	1	2	223	225	178	1	179	405
Total	1	6	7	12	1016	1028	729	8	737	1772
Grand Total	30	48	78	43	3090	3133	3379	32	3411	6622
Apprch %	38.5	61.5		1.4	98.6		99.1	0.9		
Total %	0.5	0.7	1.2	0.6	46.7	47.3	51	0.5	51.5	

KMF Traffic Group, LLC
Stuart, FL
(772) 221-7971

Manual Traffic Count - All Traffic
SE Ocean Blvd and Kingwood Development
Stuart, FL

File Name : OCAMPM
Site Code : JO1920
Start Date : 4/12/2019
Page No : 2

	Kingswood Development NB			SE Ocean Blvd EB			SE Ocean Blvd WB			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 08:00 AM										
08:00 AM	4	3	7	2	132	134	237	1	238	379
08:15 AM	2	7	9	1	168	169	333	0	333	511
08:30 AM	3	5	8	2	186	188	248	0	248	444
08:45 AM	5	4	9	2	177	179	312	5	317	505
Total Volume	14	19	33	7	663	670	1130	6	1136	1839
% App. Total	42.4	57.6		1	99		99.5	0.5		
PHF	.700	.679	.917	.875	.891	.891	.848	.300	.853	.900

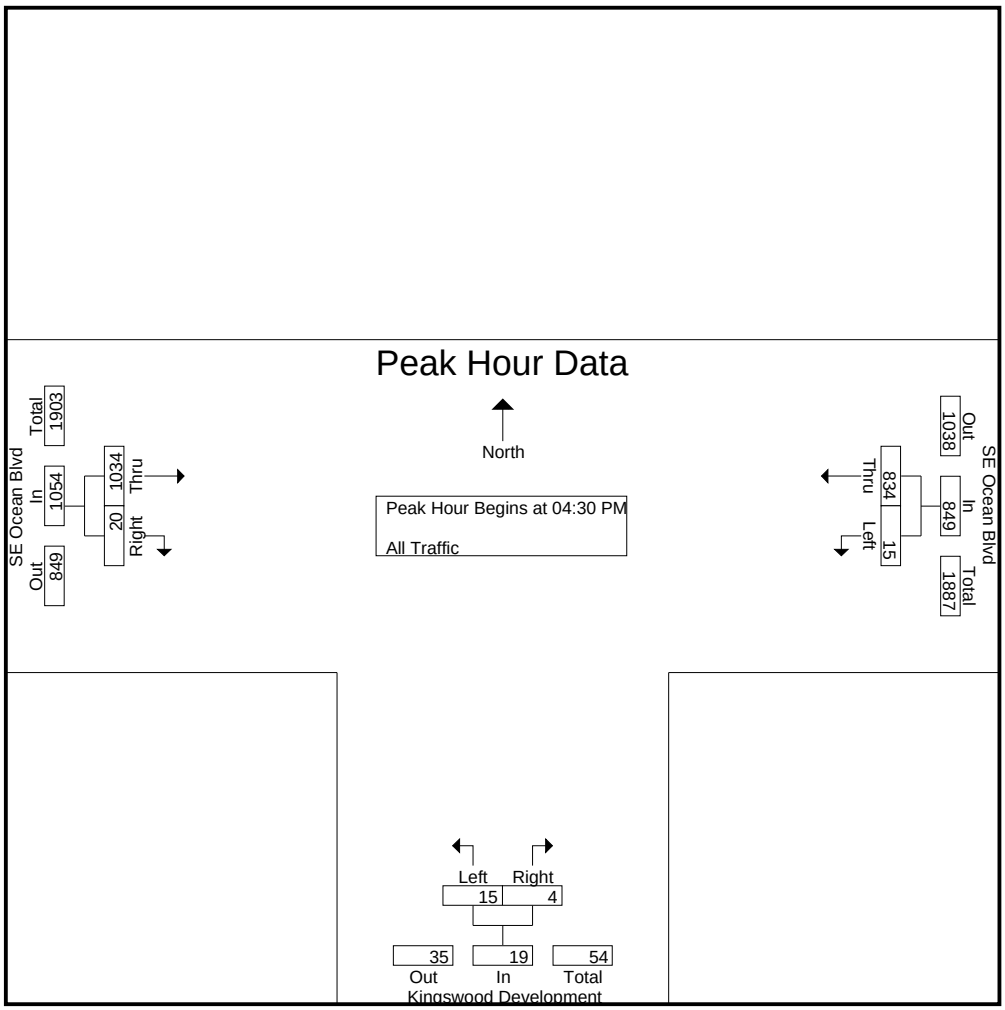


KMF Traffic Group, LLC
Stuart, FL
(772) 221-7971

Manual Traffic Count - All Traffic
SE Ocean Blvd and Kingwood Development
Stuart, FL

File Name : OCAMPM
Site Code : JO1920
Start Date : 4/12/2019
Page No : 3

	Kingswood Development NB			SE Ocean Blvd EB			SE Ocean Blvd WB			
Start Time	Right	Left	App. Total	Right	Thru	App. Total	Thru	Left	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	3	6	9	5	248	253	209	3	212	474
04:45 PM	1	4	5	9	266	275	255	6	261	541
05:00 PM	0	0	0	5	255	260	177	2	179	439
05:15 PM	0	5	5	1	265	266	193	4	197	468
Total Volume	4	15	19	20	1034	1054	834	15	849	1922
% App. Total	21.1	78.9		1.9	98.1		98.2	1.8		
PHF	.333	.625	.528	.556	.972	.958	.818	.625	.813	.888



2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 8900 EAST- A1A TO US1

MOCF: 0.87

WEEK	DATES	SF	PSCF
1	01/01/2018 - 01/06/2018	1.02	1.17
2	01/07/2018 - 01/13/2018	0.98	1.13
3	01/14/2018 - 01/20/2018	0.94	1.08
* 4	01/21/2018 - 01/27/2018	0.91	1.05
* 5	01/28/2018 - 02/03/2018	0.89	1.02
* 6	02/04/2018 - 02/10/2018	0.86	0.99
* 7	02/11/2018 - 02/17/2018	0.84	0.97
* 8	02/18/2018 - 02/24/2018	0.84	0.97
* 9	02/25/2018 - 03/03/2018	0.84	0.97
*10	03/04/2018 - 03/10/2018	0.84	0.97
*11	03/11/2018 - 03/17/2018	0.84	0.97
*12	03/18/2018 - 03/24/2018	0.85	0.98
*13	03/25/2018 - 03/31/2018	0.87	1.00
*14	04/01/2018 - 04/07/2018	0.88	1.01
*15	04/08/2018 - 04/14/2018	0.90	1.03
*16	04/15/2018 - 04/21/2018	0.92	1.06
17	04/22/2018 - 04/28/2018	0.96	1.10
18	04/29/2018 - 05/05/2018	1.01	1.16
19	05/06/2018 - 05/12/2018	1.06	1.22
20	05/13/2018 - 05/19/2018	1.11	1.28
21	05/20/2018 - 05/26/2018	1.11	1.28
22	05/27/2018 - 06/02/2018	1.10	1.26
23	06/03/2018 - 06/09/2018	1.10	1.26
24	06/10/2018 - 06/16/2018	1.09	1.25
25	06/17/2018 - 06/23/2018	1.09	1.25
26	06/24/2018 - 06/30/2018	1.09	1.25
27	07/01/2018 - 07/07/2018	1.09	1.25
28	07/08/2018 - 07/14/2018	1.09	1.25
29	07/15/2018 - 07/21/2018	1.10	1.26
30	07/22/2018 - 07/28/2018	1.10	1.26
31	07/29/2018 - 08/04/2018	1.10	1.26
32	08/05/2018 - 08/11/2018	1.11	1.28
33	08/12/2018 - 08/18/2018	1.11	1.28
34	08/19/2018 - 08/25/2018	1.11	1.28
35	08/26/2018 - 09/01/2018	1.12	1.29
36	09/02/2018 - 09/08/2018	1.12	1.29
37	09/09/2018 - 09/15/2018	1.12	1.29
38	09/16/2018 - 09/22/2018	1.12	1.29
39	09/23/2018 - 09/29/2018	1.12	1.29
40	09/30/2018 - 10/06/2018	1.12	1.29
41	10/07/2018 - 10/13/2018	1.12	1.29
42	10/14/2018 - 10/20/2018	1.12	1.29
43	10/21/2018 - 10/27/2018	1.10	1.26
44	10/28/2018 - 11/03/2018	1.09	1.25
45	11/04/2018 - 11/10/2018	1.07	1.23
46	11/11/2018 - 11/17/2018	1.05	1.21
47	11/18/2018 - 11/24/2018	1.04	1.20
48	11/25/2018 - 12/01/2018	1.03	1.18
49	12/02/2018 - 12/08/2018	1.02	1.17
50	12/09/2018 - 12/15/2018	1.02	1.17
51	12/16/2018 - 12/22/2018	0.99	1.14
52	12/23/2018 - 12/29/2018	0.96	1.10
53	12/30/2018 - 12/31/2018	0.94	1.08

* PEAK SEASON

25-FEB-2019 16:26:26 830UPD 4_8900_PKSEASON.TXT

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Kimley»Horn

To: Tom Reetz
Senior Planner
City of Stuart Development Department

From: Nicholas J. Mora, P.E.
Kimley-Horn and Associates, Inc.

Alexander R. Memering, E.I.T.
Kimley-Horn and Associates, Inc.

Date: October 14, 2019

Re: **Stuart Ocean Townhomes – City of Stuart, Florida**
Review of Traffic Impact Analysis

Kimley-Horn has reviewed the Traffic Impact Analysis (dated August 31, 2019) prepared by JFO Group Inc. related to the above-mentioned project. Please find below our review comments pertaining to the development's impacts to adjacent transportation facilities.

1. Based on the City of Stuart's Land Development Code, "An analysis of all project driveways shall be performed which includes, at a minimum, projected turning movements in and out of the project during the AM and PM peak hours. A capacity analysis of the proposed driveways shall be performed to determine the need for separate turning lanes and/or any other necessary improvement." Please evaluate the project driveway during the AM and PM peak hours and detail the project Level of Service and whether an eastbound ingress right-turn lane is warranted along SE Ocean Boulevard. Please also evaluate the storage length of the westbound left-turn lane to determine if the storage length is sufficient for project traffic.

2. A peak season correctional factor was not used within the intersection volume development sheets for the intersection of SE Ocean Boulevard & Site Driveway. Please update the volume development sheet to incorporate the appropriate peak season correctional factor.

3. Figure 3 conflicts with the intersection volume development sheet for SE Ocean Boulevard & Site Driveway. Please clarify the proposed project driveway assignment for the site.

Thank you for the opportunity to assist the City of Stuart in reviewing the noted project. Please contact us if you have any questions or need additional information.

Kimley Horn
October 14, 2019
Re: Stuart Ocean Townhomes – City of Stuart, Florida
Review of Traffic Impact Analysis

1. Based on the City of Stuart's Land Development Code, "An analysis of all project driveways shall be performed which includes, at a minimum, projected turning movements in and out of the project during the AM and PM peak hours. A capacity analysis of the proposed driveways shall be performed to determine the need for separate turning lanes and/or any other necessary improvement." Please evaluate the project driveway during the AM and PM peak hours and detail the project Level of Service and whether an eastbound ingress right-turn lane is warranted along SE Ocean Boulevard. Please also evaluate the storage length of the westbound left-turn lane to determine if the storage length is sufficient for project traffic.

[JFO->] *Traffic analysis has been revised accordingly. Exhibit 6 includes detailed driveway analysis.*

2. A peak season correctional factor was not used within the intersection volume development sheets for the intersection of SE Ocean Boulevard & Site Driveway. Please update the volume development sheet to incorporate the appropriate peak season correctional factor.

[JFO->] *Traffic analysis has been revised accordingly.*

3. Figure 3 conflicts with the intersection volume development sheet for SE Ocean Boulevard & Site Driveway. Please clarify the proposed project driveway assignment for the site.

[JFO->] *Traffic analysis has been revised. The intersection volume development sheet for SE Ocean Boulevard & Site Driveway included in Exhibit 5 of the traffic analysis dated August 31, 2019 was the driveway analysis submitted to F-DOT to obtain the driveway pre-approval letter. The conceptual approval from F-DOT assumed all project traffic on the Ocean Boulevard driveway. To avoid confusion, the FDOT analysis was removed from the revised traffic analysis and a revised driveway analysis matching FDOT conservative assumptions has been provided in Exhibit 6 including the feedback from comment #1 above.*

Kimley»Horn

To: Tom Reetz
Senior Planner
City of Stuart Development Department

From: Kevin Roberson, P.E.
Kimley-Horn and Associates, Inc.

Date: January 29, 2020

Re: **Stuart Ocean Townhomes – Stuart, Florida**
RPUD Rezoning and Major Development Site Plan Review - Engineering

---

Dear Mr. Reetz,

Kimley-Horn has reviewed the 3rd submittal of the RPUD Rezoning and Major Development Site Plan Application and associated documents, dated January 17, 2019, provided to Kimley Horn on January 24, 2019, prepared by HJA Design Studio for the proposed Stuart Ocean Townhomes development in Stuart, Florida. Please find below our review comments pertaining to the following items listed within the application:

We have completed our review of the applicant's submittal and have no further comments at this time.

Thank you for the opportunity to assist the City of Stuart in reviewing the noted project. Please contact us if you have any questions or need additional information.

Sincerely,

Kimley-Horn and Associates, Inc.

Kevin M. Roberson, P.E.
Vice President

Bowman CONSULTING

STORMWATER MANAGEMENT REPORT

FOR

Pulte Homes Stuart Ocean

SE Ocean Boulevard, Stuart, FL 34996

September 20, 2019
December 5, 2019
Revised: January 16, 2020

Justin Thompson, P.E.
Florida License No. 84595
Bowman Consulting Group, LTD.
Board of Professional Engineers –
Certificate of Authorization No. 30462

PROJECT #010655-01-001

13450 W Sunrise Blvd, Suite 320
Sunrise, FL 33323
954.314.8480
www.bowmanconsulting.com

Bowman CONSULTING

Stormwater Management Report

Pulte Homes Stuart Ocean, SE Ocean Blvd, Stuart Fl

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Conclusion……6

Appendix……...7

Justin Thompson, P.E.
Florida License No. 84595
Bowman Consulting Group, LTD.
Board of Professional Engineers –
Certificate of Authorization No. 30462

Introduction

Project Information

The project area consists of two (2) parcels of land, and two satellite parcels south of the project area known as Parcel A and B, abutting the Kingswood Condominium apartments on SE Ocean Boulevard in the City of Stuart, Martin County, Florida. The folio numbers are 02-38-41-000-000-00050-9 and 02-38-41-000-000-00020-6, which contains +/- 11.03 acres, and is currently zoned R-3 Residential (Multi-Family/Duplex). The proposed project consists of an eighty (80) unit townhome residential community development with pedestrian trails, lush landscaped tree preservation areas and lake area for drainage purposes.

Site Conditions

Existing Conditions

The existing +/- 11.03-acre site is currently vacant consisting of an existing private asphalt road that traverses the site connecting the communities south of the project area to SE Ocean Boulevard. There are two (2) existing lift stations, connecting to existing private force mains, that services the abutting communities service by the City of Stuart Utilities. The site is approximately eighty-nine percent (89%) pervious and 11% impervious, generating a Runoff Curve Number (RCN) of 74.

Proposed Conditions

The proposed improvements include demolishing the existing site, and private asphalt road, to construct an eighty (80) unit townhome residential community development, with pedestrian trials and lush landscaped preservation areas. A new drainage system will be constructed consisting of catch basins, to keep runoff from leaving the site, that will be directed to detention areas onsite to meet water quality requirements. A wet retention pond is proposed to provide attenuation of the larger storm events including the 100 year storm event. Under proposed conditions, the site will be forty-three percent (43%) impervious and fifty-seven percent (57%) pervious grass and open space, which generates an RCN of 74.

Water Table

The geotechnical report enclosed describes the water table elevations encountered during the soil borings and exfiltration rate studies done on the site. On average, the water table was encountered at a depth of two and a half (2.5') to seven and a half (7.5') feet below ground surface, or elevation 3.0' (NGVD).

Flood Elevations

The FEMA FIRM 12085C0154H indicates the site to be in FEMA Flood Zone X, which has determined areas to be outside the 0.2% annual chance floodplain. FEMA panel number 12085C0154H has been enclosed for reference.

Land Use Calculations

Existing Conditions

Area Description	Square Feet	Acreage	%
Building	-	-	-
Sidewalk / Paving	52,771	1.21	11
Grass / Open Area	428,332	9.83	89
Total Area	**481,103**	**11.04**	**100**

Proposed Conditions

Area Description	Square Feet	Acreage	%
Building	83,230	1.91	17
Sidewalk / Paving / Rear Patios	58,463	1.34	12
Vehicular Use Area	66,670	1.53	14
Native Pres./Dry Ret./Other Grass	232,255	5.33	49
Wet Pond	40,485	0.93	8
Total Area	**481,103**	**11.04**	**100**

Soil Storage and Runoff Calculations:

Existing Conditions

The existing soils are comprised of an even mix of class A and D soils; therefore, flatwoods soils will be used. According to the SFWMD Manual, Page F-1, a depth to the water table of 3.0' corresponds to a developed available storage of 4.05".

%Impervious = $\frac{1.21}{11.04}$

%Impervious = 0.11

$$S = S_{Uncomp}(1 - \%\,Impervious)$$
$$S = 4.05"(1 - 0.11)$$
$$\therefore \boldsymbol{S = 3.60}$$

$$CN = \frac{1000}{S + 10}$$

$$CN = \frac{1000}{(3.60 + 10)}$$

$$\therefore \boldsymbol{CN = 73.53}$$

Proposed Conditions

The existing soils are comprised of an even mix of class A and D soils; therefore, flatwoods soils will be used. Due to the site being raised considerably from existing conditions, a depth to water table of 4.0' will be used. According to the SFWMD Manual, Page F-1, a depth to the water table of 4.0' corresponds to a developed available storage of 6.75".

%Impervious = $\frac{4.78}{11.04}$

%Impervious = 0.43

$$S = S_{Comp}(1 - \%\,Impervious)$$
$$S = 6.75"(1 - 0.48)$$
$$\therefore \boldsymbol{S = 3.85}$$

$$CN = \frac{1000}{S + 10}$$

$$CN = \frac{1000}{(3.85 + 10)}$$

$$\therefore \boldsymbol{CN = 72.20}$$

Stage/Storage

Tabulation

"SITE"
NODE

	PONDS					SITE						
WSEL	Area (ft^2)	Average Area (ft^2)	Change in Head (ft)	Change in Volume (ft^3)	Total Volume (ft^3)	Area (ft^2)	Average Area (ft^2)	Change in Head (ft)	Change in Volume (ft^3)	Total Volume (ft^3)	Total Σ Volume (ft^3)	Total Volume (ac-ft)
3.00	40,484				0	0				0	0	0.00
		47,244	1.00	47,244			0	0.00	0			
4.00	54,003				47,244	0				0	47,244	1.08
		58,426	1.00	58,426			0	1.00	0			
5.00	62,849				105,670	0				0	105,670	2.43
		67,846	1.00	67,846			0	1.00	0			
6.00	72,842				173,515	0				0	173,515	3.98
		78,181	1.00	78,181			29,563	1.00	29,563			
7.00	83,519				251,696	59,125				29,563	281,258	6.46
		83,519	1.00	83,519			245,185	1.00	245,185			
8.00	83,519				335,215	431,244				274,747	609,962	14.00

METHODOLOGY

Water Quality

Per South Florida Water Management District design criteria for commercial properties, water quality treatment is required for wet detention areas. The wet detention volume shall be provided for the first inch of runoff from the developed project, or the total runoff of 2.5 inches times the percentage of imperviousness, whichever is greater. The required water quality volume of 0.97 ac-ft will be met in the proposed on-site retention ponds, which provide 4.845ac-ft. of storage.

- **1 in. x Site**

  $\left(1\ in.\ \times\ 11.04\ ac.\ \div 12\ \frac{in}{ft}\right) = 0.92\ ac.-ft$

  ∴ 0.92 ac.-ft. Required Water Quality

- **2.5 in. x (% Impervious)**
  - Site Area for Water Quality Calculations

    = (Total Site – Roof Area)

    $= (11.04\ ac - 1.91\ ac)$

    $= 9.13\ ac$
  - Impervious Area for Water Quality Calculations

    = (Site Area for Water Quality – Pervious)

    $= (9.13\ ac - 5.33\ ac)$

    $= 3.80\ ac$
  - Percentage of Impervious for Water Quality Calculations

    = (Impervious Area for WQ / Site Area for WQ) × 100%

    $= (3.80\ ac.\ \div\ 9.13\ ac) \times 100\% = 42\%$

    $= (2.5\ in.\ \times 0.42) = 1.05\ inches\ to\ be\ treated$
  - Inches to Be Treated × Total Site Area = Treatment Volume

    $= (1.05\ in.\ \times 11.04\ ac.) = 11.59 ac.-in.$

    $= \left(11.59\ ac.-in.\ \div\ 12\ \frac{in}{ft}\right) = 0.966\ ac.-ft.$

    ∴ 0.966 ac.-ft. Required Water Quality

- **0.966 ac.-ft. > 0.92 ac.-ft.**
  0.966 ac.-ft ← Controls

Water Quality Treatment Required = 0.97 ac-ft

Water Quality Treatment Provided = 1.08 ac-ft @ elevation 4.00 NAVD

Pre vs. Post Analysis

A Pre vs. Post analysis has been performed to model the existing conditions and compare it to the proposed conditions. Please see Appendix B for the Stage Storage tabulations and ICPR Model outputs. Cascade Models account for the difference as follows:

SFWMD Rainfall Used for Modeling Purposes

Storm Event	Rainfall (Inches)
10-year, 1-day	7
25-year, 3-day	11.5
100-year, 3-day	14

Maximum Stage

Storm Event	Pre (NGVD)	Post (NGVD)
10-year - 1-day	5.82’	5.69’
25-year - 3-day	6.61’	6.78’
100-year – 3day	6.98’	7.16’

CONCLUSION

In summary, the proposed dry detention areas and wet retention pond will provide adequate storm water management to construct the proposed eighty (80) unit townhome residential community development. Water quality volume is being met by providing 0.97 ac-ft of storage volume. In addition, the ICPR model run for the 10-Year, 1-day and the 25-Year, 3-Day storm events demonstrate that staging is not increased over all storm events.

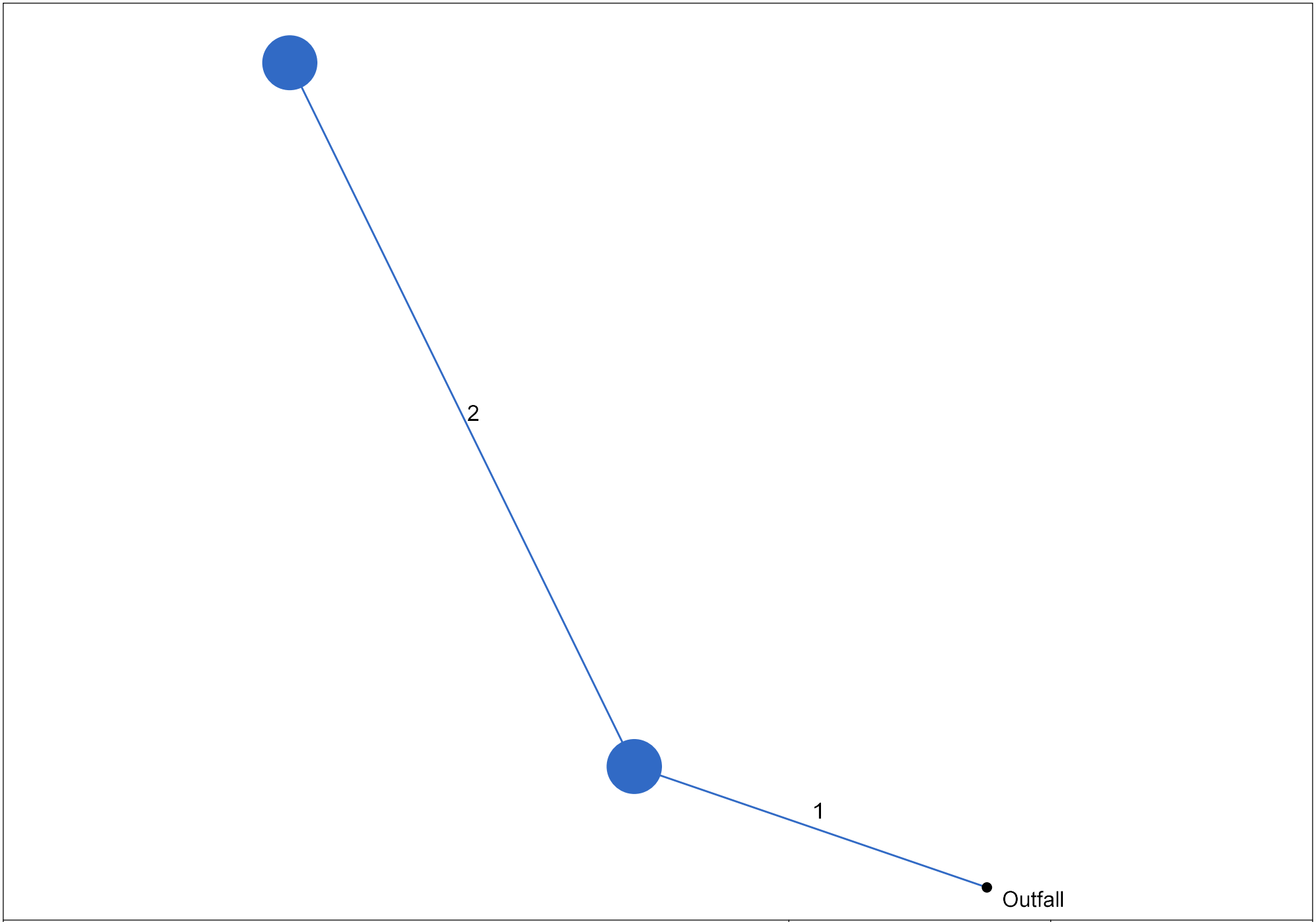
Appendix

Appendix

ICPR Model

Storm Pipe Analysis

Hydraflow Storm Sewers Extension for Autodesk® AutoCAD® Civil 3D® Plan



Project File: Model.stm	Number of lines: 2	Date: 12/5/2019

Storm Sewer Summary Report

10-Year Event

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1		24.73	24	Cir	28.0	3.00	3.00	0.000	4.87*	5.24*	0.72	5.96	End	Manhole
2		0.07	24	Cir	59.0	3.00	3.00	0.000	5.96*	5.96*	0.00	5.96	1	DropGrate

Project File: Model.stm | Number of lines: 2 | Run Date: 12/5/2019

NOTES: Return period = 10 Yrs. ; *Surcharged (HGL above crown).

Hydraulic Grade Line Computations

Line	Size (in)	Q (cfs)	Downstream Invert elev (ft)	Downstream HGL elev (ft)	Downstream Depth (ft)	Downstream Area (sqft)	Downstream Vel (ft/s)	Downstream Vel head (ft)	Downstream EGL elev (ft)	Downstream Sf (%)	Len (ft)	Upstream Invert elev (ft)	Upstream HGL elev (ft)	Upstream Depth (ft)	Upstream Area (sqft)	Upstream Vel (ft/s)	Upstream Vel head (ft)	Upstream EGL elev (ft)	Upstream Sf (%)	Check Ave Sf (%)	Check Enrgy loss (ft)	JL coeff (K)	Minor loss (ft)
1	24	24.73	3.00	4.87	1.87	3.05	8.10	1.02	5.89	1.033	28.0	3.00	5.24	2.00	3.14	7.87	0.96	6.20	1.196	1.115	0.312	0.75	0.72
2	24	0.07	3.00	5.96	2.00	3.14	0.02	0.00	5.96	0.000	59.0	3.00	5.96	2.00	3.14	0.02	0.00	5.96	0.000	0.000	0.000	1.00	0.00

Project File: Model.stm | Number of lines: 2 | Run Date: 12/5/2019

; c = cir e = ellip b = box

Storm Sewer Summary Report

25-Year Event

Line No.	Line ID	Flow rate (cfs)	Line Size (in)	Line shape	Line length (ft)	Invert EL Dn (ft)	Invert EL Up (ft)	Line Slope (%)	HGL Down (ft)	HGL Up (ft)	Minor loss (ft)	HGL Junct (ft)	Dns Line No.	Junction Type
1		30.74	24	Cir	28.0	3.00	3.00	0.000	4.87*	5.44*	1.12	6.55	End	Manhole
2		0.08	24	Cir	59.0	3.00	3.00	0.000	6.55*	6.55*	0.00	6.55	1	DropGrate

Project File: Model.stm | Number of lines: 2 | Run Date: 12/5/2019

NOTES: Return period = 25 Yrs. ; *Surcharged (HGL above crown).

Hydraulic Grade Line Computations

Line	Size	Q	Downstream								Len	Upstream								Check		JL coeff	Minor loss
	(in)	(cfs)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	(ft)	Invert elev (ft)	HGL elev (ft)	Depth (ft)	Area (sqft)	Vel (ft/s)	Vel head (ft)	EGL elev (ft)	Sf (%)	Ave Sf (%)	Enrgy loss (ft)	(K)	(ft)
1	24	30.74	3.00	4.87	1.87	3.06	10.05	1.57	6.44	1.596	28.0	3.00	5.44	2.00	3.14	9.78	1.49	6.93	1.847	1.721	0.482	0.75	1.12
2	24	0.08	3.00	6.55	2.00	3.14	0.03	0.00	6.55	0.000	59.0	3.00	6.55	2.00	3.14	0.03	0.00	6.55	0.000	0.000	0.000	1.00	0.00

Project File: Model.stm | Number of lines: 2 | Run Date: 12/5/2019

; c = cir e = ellip b = box

ICPR Model - Existing

Manual Basin: Watershed

Scenario: Scenario1
Node: Existing Site
Hydrograph Method: Santa Barbara Urban Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 999999.00 cfs
Time Shift: 0.0000 hr
Area: 11.0300 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
1.2100	Impervious	A/D	A		
9.8200	Pervious	A/D	A		

Comment:

Node: Existing Site

Scenario: Scenario1
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 3.00 ft
Warning Stage: 5.35 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
3.00	0.00	0
4.00	0.38	16553
5.00	1.49	64904
6.00	4.99	217364
7.00	10.53	458687

Comment:

Simulation: 100YR-72HR

Scenario: Scenario1
Run Date/Time: 12/5/2019 9:47:36 AM
Program Version: ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	80.0000

Hydrology [sec]	Surface Hydraulics	Groundwater [sec]

	[sec]		
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72

		Rainfall Amount:	14.00 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	113 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 10YR-24HR

Scenario: Scenario1
Run Date/Time: 12/5/2019 9:49:21 AM
Program Version: ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources		Lookup Tables	
Rainfall Folder:		Boundary Stage Set:	
Reference ET Folder:		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	1
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	1
		Roughness Set:	
		Crop Coef Set:	
		Fillable Porosity Set:	
		Conductivity Set:	
		Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	7.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	113 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 25YR-72HR

Scenario:	Scenario1
Run Date/Time:	12/5/2019 9:49:59 AM
Program Version:	ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	80.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False
Smp/Man Basin Rain Opt: Global

Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	11.50 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	113 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 5YR-1HR

Scenario:	Scenario1
Run Date/Time:	12/5/2019 9:51:44 AM
Program Version:	ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources		Lookup Tables	
Rainfall Folder:		Boundary Stage Set:	
Reference ET Folder:		Extern Hydrograph Set:	
Unit Hydrograph Folder:		Curve Number Set:	1
		Green-Ampt Set:	
		Vertical Layers Set:	
		Impervious Set:	1
		Roughness Set:	
		Crop Coef Set:	
		Fillable Porosity Set:	
		Conductivity Set:	
		Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	6.00 in
Edge Length Option:	Automatic	Storm Duration:	1.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	113 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Existing Site	100YR-72HR	5.35	6.98	0.0010	70.38	0.00	283743
Existing Site	10YR-24HR	5.35	5.82	0.0010	41.91	0.00	179157
Existing Site	25YR-72HR	5.35	6.61	0.0010	56.82	0.00	251353
Existing Site	5YR-1HR	5.35	5.60	0.0010	129.52	0.00	158016

ICPR Model - Proposed

Manual Basin: Total Site Basin

Scenario: Scenario1
Node: Total Site
Hydrograph Method: NRCS Unit Hydrograph
Infiltration Method: Curve Number
Time of Concentration: 10.0000 min
Max Allowable Q: 0.00 cfs
Time Shift: 0.0000 hr
Unit Hydrograph: UH256
Peaking Factor: 256.0
Area: 11.0400 ac

Area [ac]	Land Cover Zone	Soil Zone	Rainfall Name	Crop Coefficient Zone	Reference ET Station
5.7100	Impervious	A			
5.3300	Pervious	A			

Comment:

Node: Total Site

Scenario: Scenario1
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 3.00 ft
Warning Stage: 8.20 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
3.00	0.00	0
4.00	1.08	47045
5.00	2.43	105851
6.00	3.98	173369
7.00	6.46	281398
8.00	14.00	609840

Comment:

Simulation: 100YR-72HR

Scenario: Scenario1
Run Date/Time: 1/16/2020 8:29:17 PM
Program Version: ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000

End Time:	0	0	0	80.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False
Smp/Man Basin Rain Global

		Opt:	
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	14.00 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	113 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 10YR-24HR

Scenario: Scenario1
Run Date/Time: 1/16/2020 8:31:43 PM
Program Version: ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	30.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart:	False

Resources & Lookup Tables

Resources

Rainfall Folder:	
Reference ET Folder:	
Unit Hydrograph Folder:	

Lookup Tables

Boundary Stage Set:	
Extern Hydrograph Set:	
Curve Number Set:	1
Green-Ampt Set:	
Vertical Layers Set:	
Impervious Set:	1
Roughness Set:	
Crop Coef Set:	
Fillable Porosity Set:	
Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~FLMOD
		Rainfall Amount:	7.00 in
Edge Length Option:	Automatic	Storm Duration:	24.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	113 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 25YR-72HR

Scenario:	Scenario1
Run Date/Time:	1/16/2020 8:32:38 PM
Program Version:	ICPR4 4.05.02

General

Run Mode:	Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	80.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight 0.5 dec

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False

Fact:			
dZ Tolerance:	0.0010 ft	Smp/Man Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	11.50 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	113 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Simulation: 5YR-1HR

Scenario:	Scenario1
Run Date/Time:	1/16/2020 8:35:01 PM
Program Version:	ICPR4 4.05.02

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	24.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:
Conductivity Set:
Leakage Set:

Tolerances & Options

Time Marching: SAOR
Max Iterations: 6
Over-Relax Weight Fact: 0.5 dec
dZ Tolerance: 0.0010 ft
Max dZ: 1.0000 ft
Link Optimizer Tol: 0.0001 ft
Edge Length Option: Automatic
Dflt Damping (2D): 0.0050 ft
Min Node Srf Area (2D): 100 ft2
Energy Switch (2D): Energy

IA Recovery Time: 24.0000 hr
ET for Manual Basins: False
Smp/Man Basin Rain Opt: Global
OF Region Rain Opt: Global
Rainfall Name: ~FLMOD
Rainfall Amount: 6.00 in
Storm Duration: 1.0000 hr
Dflt Damping (1D): 0.0050 ft
Min Node Srf Area (1D): 113 ft2
Energy Switch (1D): Energy

Comment:

Curve Number: 1 [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
Impervious	A	98.0
Pervious	A	39.0

Impervious: 1 [Set]

Land Cover Zone	% Impervious	% DCIA	% Direct	Ia Impervious [in]	Ia Pervious [in]
Impervious	0.00	0.00	0.00	0.000	0.000
Pervious	0.00	0.00	0.00	0.000	0.000

Node Max Conditions [Scenario1]

Node Name	Sim Name	Warning Stage [ft]	Max Stage [ft]	Min/Max Delta Stage [ft]	Max Total Inflow [cfs]	Max Total Outflow [cfs]	Max Surface Area [ft2]
Total Site	100YR-72HR	8.20	7.16	0.0010	50.94	0.00	253268
Total Site	10YR-24HR	8.20	5.69	0.0010	25.10	0.00	80236
Total Site	25YR-72HR	8.20	6.78	0.0010	39.44	0.00	190097
Total Site	5YR-1HR	8.20	5.34	0.0010	78.01	0.00	71503

Curve Number: 1 [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
Impervious	A	98.0
Pervious	A	39.0

Weir Cross Section: Cross Section 1

Scenario: Scenario1

Lid: No

Bottom Point Table

Order	Station [ft]	Elevation [ft]
0	0.00	11.00
1	300.00	11.00
2	600.00	11.00

Comment:

Node: Ground

Scenario: Scenario1
Type: Time/Stage
Base Flow: 0.00 cfs
Initial Stage: 3.00 ft
Warning Stage: 3.00 ft
Boundary Stage:

Year	Month	Day	Hour	Stage [ft]
0	0	0	0.0000	3.00
0	0	0	999.0000	3.00

Comment:

Node: Total Site

Scenario: Scenario1
Type: Stage/Volume
Base Flow: 0.00 cfs
Initial Stage: 3.80 ft
Warning Stage: 3.80 ft

Stage [ft]	Volume [ac-ft]	Volume [ft3]
3.00	0.00	0
4.00	1.08	47045
5.00	2.43	105851
6.00	3.98	173369
7.00	6.46	281398
8.00	14.00	609840

Comment:

Percolation Link: PERC

Scenario: Scenario1
From Node: Total Site
To Node: Ground
Link Count: 1
Flow Direction: Both
Aquifer Base Elevation: -50.00 ft
Water Table Elevation: 2.50 ft
Annual Recharge Rate: 0 ipy
Horizontal Conductivity: 38.000 fpd
Vertical Conductivity: 25.000 fpd
Fillable Porosity: 0.400
Layer Thickness: 0.00 ft

Surface Area Option: Vary Based on Stage/Area Table
Vertical Flow Termination: Horizontal Flow Algorithm
Perimeter 1: 4239.00 ft
Perimeter 2: 8478.00 ft
Perimeter 3: 21195.00 ft
Distance P1 to P2: 50.00 ft
Distance P2 to P3: 450.00 ft
# of Cells P1 to P2: 10
# of Cells P2 to P3: 45

Comment:

Simulation: Recovery

Scenario: Scenario1
Run Date/Time: 1/17/2020 12:23:19 AM
Program Version: ICPR4 4.03.02.00

General

Run Mode: Normal

	Year	Month	Day	Hour [hr]
Start Time:	0	0	0	0.0000
End Time:	0	0	0	100.0000

	Hydrology [sec]	Surface Hydraulics [sec]	Groundwater [sec]
Min Calculation Time:	60.0000	0.1000	900.0000
Max Calculation Time:		30.0000	

Output Time Increments

Hydrology

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Surface Hydraulics

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	60.0000

Groundwater

Year	Month	Day	Hour [hr]	Time Increment [min]
0	0	0	0.0000	360.0000

Restart File

Save Restart: False

Resources & Lookup Tables

Resources

Rainfall Folder:
Reference ET Folder:
Unit Hydrograph Folder:

Lookup Tables

Boundary Stage Set:
Extern Hydrograph Set:
Curve Number Set: 1
Green-Ampt Set:
Vertical Layers Set:
Impervious Set: 1
Roughness Set:
Crop Coef Set:
Fillable Porosity Set:

Conductivity Set:	
Leakage Set:	

Tolerances & Options

Time Marching:	SAOR	IA Recovery Time:	24.0000 hr
Max Iterations:	6	ET for Manual Basins:	False
Over-Relax Weight Fact:	0.5 dec		
dZ Tolerance:	0.0010 ft	Manual Basin Rain Opt:	Global
Max dZ:	1.0000 ft	OF Region Rain Opt:	Global
Link Optimizer Tol:	0.0001 ft	Rainfall Name:	~SFWMD-72
		Rainfall Amount:	11.50 in
Edge Length Option:	Automatic	Storm Duration:	72.0000 hr
Dflt Damping (2D):	0.0050 ft	Dflt Damping (1D):	0.0050 ft
Min Node Srf Area (2D):	100 ft2	Min Node Srf Area (1D):	113 ft2
Energy Switch (2D):	Energy	Energy Switch (1D):	Energy

Comment:

Impervious: 1 [Set]

Land Cover Zone	% Impervious	% DCIA	% Direct	Ia Impervious [in]	Ia Pervious [in]
Impervious	0.00	0.00	0.00	0.000	0.000
Pervious	0.00	0.00	0.00	0.000	0.000

Curve Number: 1 [Set]

Land Cover Zone	Soil Zone	Curve Number [dec]
Impervious	A	98.0
Pervious	A	39.0

1D Nodes - Volume 1-1

Sim	Node Name	Relative Time [hrs]	Stage [ft]
Recovery	Total Site	0.0000	3.80
Recovery	Total Site	1.0011	3.26
Recovery	Total Site	2.0081	3.10
Recovery	Total Site	3.0081	3.01
Recovery	Total Site	4.0081	3.00
Recovery	Total Site	5.0081	3.00
Recovery	Total Site	6.0081	3.00
Recovery	Total Site	7.0081	3.00
Recovery	Total Site	8.0081	3.00
Recovery	Total Site	9.0081	3.00
Recovery	Total Site	10.0081	3.00
Recovery	Total Site	11.0081	3.00
Recovery	Total Site	12.0081	3.00
Recovery	Total Site	13.0081	3.00
Recovery	Total Site	14.0081	3.00
Recovery	Total Site	15.0081	3.00
Recovery	Total Site	16.0081	3.00
Recovery	Total Site	17.0081	3.00
Recovery	Total Site	18.0081	3.00
Recovery	Total Site	19.0081	3.00
Recovery	Total Site	20.0081	3.00
Recovery	Total Site	21.0081	3.00
Recovery	Total Site	22.0081	3.00
Recovery	Total Site	23.0081	3.00
Recovery	Total Site	24.0081	3.00
Recovery	Total Site	25.0081	3.00
Recovery	Total Site	26.0081	3.00
Recovery	Total Site	27.0081	3.00
Recovery	Total Site	28.0081	3.00
Recovery	Total Site	29.0081	3.00
Recovery	Total Site	30.0081	3.00
Recovery	Total Site	31.0081	3.00
Recovery	Total Site	32.0081	3.00
Recovery	Total Site	33.0081	3.00
Recovery	Total Site	34.0081	3.00
Recovery	Total Site	35.0081	3.00
Recovery	Total Site	36.0081	3.00
Recovery	Total Site	37.0081	3.00
Recovery	Total Site	38.0081	3.00
Recovery	Total Site	39.0081	3.00
Recovery	Total Site	40.0081	3.00
Recovery	Total Site	41.0081	3.00

November 13, 2019

Dr. Thomas Reinert, Regional Director
Florida Fish & Wildlife Conservation Commission
8535 Northlake Boulevard
West Palm Beach, FL 33412

Re: Listed Species Data Base Search For Stuart Ocean Townhomes
Section 2, Township 38 South, Range 41 East

Dear Dr. Reinert:

As the registered environmental consultant for the project known as Stuart Ocean Townhomes located on the south side of SE Ocean Boulevard, west of SE St. Lucie Boulevard, Stuart, Martin County (Section 2, Township 38 South, Range 41 East), I respectfully request a search of the Florida Fish & Wildlife Conservation Commission data base files in order to determine the potential existence of threatened and endangered species on the subject property. The parcel control identification numbers for the project site are as follows: 27-37-41-033-000-00040-2 and 27-37-41-033-000-00050-9.

The project site is comprised of native and non-native canopy coverage with some intact native habitats including pine flatwoods and sand live oak as well as existing paved roads and other amenities. The project site is completely surrounded by residential and commercial development.

Please let me know if you require any additional information in order to make this determination.

Sincerely,
Ecotone Services, Inc.

Jerry Renick

Jerry Renick, MS, CEP
Principal Environmental Scientist

Ecotone Services, Inc. 13945 89th Street Fellsmere, FL 32948 Phone: 772-453-3339
Email: ecotoneservices@gmail.com

November 13, 2019

Ms. Ashley Blackford
U. S. Fish & Wildlife Service
South Florida Ecological Services Office
1339 20th Street
Vero Beach, FL 32960

Re: Listed Species Data Base Search For Stuart Ocean Townhomes
Section 2, Township 38 South, Range 41 East

Dear Ms. Blackford:

As the registered environmental consultant for the project known as Stuart Ocean Townhomes located on the south side of SE Ocean Boulevard, west of SE St. Lucie Boulevard, Stuart, Martin County (Section 2, Township 38 South, Range 41 East), I respectfully request a search of the U. S. Fish & Wildlife Service data base files in order to determine the potential existence of threatened and endangered species on the subject property. The parcel control identification numbers for the project site are as follows: 27-37-41-033-000-00040-2 and 27-37-41-033-000-00050-9.

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Sincerely,
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Ecotone Services, Inc. 13945 89th Street Fellsmere, FL 32948 Phone: 772-453-3339
Email: ecotoneservices@gmail.com

Residential PUD

Project:	Stuart Ocean RPUD
Date	2.20.2020

Adjacent N	Martin County Multifamily
Adjacent S	Kingswood Multifamily
Adjacent E	Institutional The Point ALF
Adjacent W	Kingswood Multifamily
Total Floor Space (sq.ft)	**83,230 sq. ft.**

LDR Reference	Land Development Regulations	RPUD REVIEW STATUS
2.07.00 D.1	Land Use Designation	COMPLY
2.07.00 D.2 a	Uses	COMPLY
2.07.00 D.2 b	Compatible Residential Uses	COMPLY
2.07.00 D.2 c	Commercial (<30%)	NOT APPLICABLE
2.07.00.D.2.d	Commercial Uses (<30%) vertical	NOT APPLICABLE
2.07.00.D.3	Density	COMPLY
2.07.03 D.4.b	Open Space (>30%)	COMPLY
2.07.03 D.4.c	FAR	COMPLY
2.07.03.D.4.d	Native Vegetaion (>25%)	NOT APPLICABLE

AREA, IMPERVIOUS SURFACE, SETBACK AND HEIGHT

2.04.03	Supplemental impervious surface	COMPLY
2.04.04	Supplemental setback requirements	COMPLY
2.04.05	Waterfront setbacks	NOT APPLICABLE
2.04.06	Certain street setbacks	NOT APPLICABLE
2.04.07	Supplemental building height	COMPLY
2.06.00	Supplemental Use standards	NOT APPLICABLE

4.04.01	Traffic Concurrency	COMPLY
4.09.00	School Concurrency	TO BE REVIEWED

RESOURCE PROTECTION

5.02.00	Environmental Assessment	COMPLY
5.03.02	Wetland Protection	COMPLY
5.04.00	Evironmentally sensitive lands	COMPLY
5.04.03	Monitoring & Maintenance	REVIEWED AT SITE PLAN
5.05.01	Tree Survey	COMPLY
5.05.02	Tree removal	COMPLY

5.06.00	Mangrove & Shoreline	NOT APPLICABLE
5.07.00	Floodplain Management	COMPLY
Comp Plan	Comprehensive Plan	COMPLY

TRANSPORTATION

6.01.04	Sidewalks/bikeways	COMPLY
6.01.05	Bike Ped (LCD)	COMPLY
6.01.06	Access	COMPLY
6.01.07	Drive-through	NOT APPLICABLE
6.01.08	Vehicular Access	NOT APPLICABLE
6.01.09	Parking Code	COMPLY
6.01.18	Off-Street Loading	NOT APPLICABLE
6.01.19	PILOP	NOT APPLICABLE

STORMWATER

6.03.01	Generally	TO BE REVIEWED
6.03.04	Management	TO BE REVIEWED
6.03.08	Erosion	TO BE REVIEWED

LANDSCAPING

6.04.02	General Standards	COMPLY
6.04.02 A.1	Native Landscaping	COMPLY
6.06.02 A.2	Shade Trees Required	COMPLY
6.06.02 A.4	Banyan, Fiscus & Rubber Trees	NOT APPLICABLE
6.06.02 A.5	Proximity to power lines	COMPLY
6.06.02 A.6	Shrubs	COMPLY
6.06.02 A.7	Hedges	COMPLY
6.06.02 A.8	Vines	NOT APPLICABLE
6.06.02 A.9	Ground cover	COMPLY
6.06.02 A.10	Grass Area	COMPLY
6.06.02 B	Irrigation	REVIEWED AT SITE PLAN

LANDSCAPE DESIGN

6.04.03 A	Utility Lines (Existing and Proposed)	COMPLY
6.04.03 B.1	Landscaped Area >20%	COMPLY
6.04.03 B.2	Interior landscaping >50%	COMPLY
6.04.03 B.3	location of impervious	COMPLY
6.04.03 B.4	Mulch	COMPLY
6.04.03 B.5	Shoreline protection	NOT APPLICABLE
6.04.03 B.8	Visibility triangles	TO BE REVIEWED

6.04.06	Land Use Transitions	COMPLY

LANDSCAPING - PARKING AREAS

6.04.07 A.1	Landscaped strip adjacent to street	COMPLY
6.04.07 A.2	Landscaped strip length linear feet	COMPLY
6.04.07 A.2a	Parking area adjacent to street	COMPLY
6.04.07 A.2b	Hedge/wall/berm on outside of strip	COMPLY
6.04.07 A.2c	Other Landscaping	COMPLY
6.06.07 A.2d	Grass	COMPLY
6.04.07 A.3	Shrubs/ground cover	COMPLY
6.04.07 B	parking screened from private propery	NOT APPLICABLE
6.04.07 B.1	Landscaped strip adjacent to private property	NOT APPLICABLE
6.04.07 B.2a	Parking area adjacent to private property	NOT APPLICABLE
6.04.07 B.2b	Hedge/wall/berm on outside of strip	NOT APPLICABLE
6.04.07 B.2c	Other Landscaping	NOT APPLICABLE
6.04.07 B.2d	Grass	NOT APPLICABLE
6.04.07 B.3	Shrubs/ground cover	NOT APPLICABLE
6.04.07 C.1	Parking Area (Major Dev't only)	COMPLY
6.04.07 C.2	Parking area rear and sides of building	COMPLY
6.04.07 C.3	Interior trees	COMPLY
6.04.07 C.4	Vechicle encroachment	COMPLY
6.04.07 C.5	Interior landscaped islands	COMPLY
6.04.07 C.6	Terminal landscaped islands	COMPLY
6.04.07 C.7	Interior landscaped medians	COMPLY
6.04.07 C.8	Interior shade trees	COMPLY
6.04.07 D	Visability triangles	REVIEWED AT SITE PLAN
6.04.08	Tree Requirements	COMPLY
6.04.10	Loading Storage	NOT APPLICABLE

COMMERCIAL DEVELOPMENT STANDARDS

6.05.02 B	Building Location	NOT APPLICABLE
6.05.02 C	Building Orientation	NOT APPLICABLE
6.05.02 D	Façade Design	NOT APPLICABLE
6.05.02 E	Massing	NOT APPLICABLE
6.05.02 F	Other Features	NOT APPLICABLE
6.05.02 G	Transitional Elevations	NOT APPLICABLE
6.05.03 B	Blank Wall Area	NOT APPLICABLE
6.05.03 C	Repeating Façade	NOT APPLICABLE
6.05.04	Additional Façade	NOT APPLICABLE

6.05.05	Roof Treatments	NOT APPLICABLE
6.05.06	Entryways and customer entrance	NOT APPLICABLE
6.05.07	Materials and Color	NOT APPLICABLE
6.06.00	Green Development	NOT APPLICABLE
6.07.00	Lighting	NOT APPLICABLE
6.08.00	Dumpster & Recycling	NOT APPLICABLE
6.09.05	Fences	COMPLY
6.11.00	Signs	TO BE REVIEWED

Trees

	Shade or Canopy
	Palm
	Flowering
	Accent

Tree Species	Name	number	interior
(Ptychosperma elegans)	Alexander Palm*		
(Ilex opaca)	American Holly		
(Cordia boissieri)	Anacahuita, White Corda*		
(Phoenix canariensis)	Canary Island Date Palm*		
(Prunus caroliniana)	Cherry Laurel		
(Livistonia chinensis)	Chinese Fan Palm*		
(Ilex cassine)	Dahoon Holly		
(Ilex attenuata 'EastPalatka')	East Palatka Holly		
(Plumeria acuminata)	Frangipani Plumeria*		
(Cordia sebestena)	Geiger Tree		
(Cassia surattensis)	Glaucous Cassia*		
(Duranta repens)	Golden Dewdrop		
(Koelreuteria formosana)	Golden Rain Tree*		
(Bauhinia blakeana)	Hong Kong Orchid*		
(Capparis cynophallophora)	Jamaica Caper		
(Parkinsonia aculeata)	Jerusalem Thorn*		
(Quercus laurifolia)	Laurel Oak		
(Callistemon lanceolata)	Lemon Bottlebrush*		
(Quercus virginiana)	Live Oak		
(Gordonia lasianthus)	Loblolly Bay		
(Ptychosperma macarthuri)	MacArthur Palm*		
(Swietenia mahagoni)	Mahogany		
(Washingtonia robusta)	Mexican Washington Palm*		
(Myrsine guianensis)	Myrsine		
(Simaruba glauca)	Paradise Tree		
(Acoelorrhaphe wrightii)	Paurotis Palm		
(Tabebuia heterophylla)	Pink Tab or Trumpet Tree*		
(Tibouchina grandiflora)	Princess Flower Tree*		
(Tibouchina grandiflora)	Princess Flower Tree1*		
(Arecastrum romanzoffianum)	Queen Palm*		
(Lagerstromia speciosa)	Queens Crepe Myrtle*		
(Persea borbonia)	Red Bay		
(Acer rubrum)	Red Maple		

(Cocothrinax argentata)	Silver Palm		
(Tabebuia caraiba)	Silver Trumpet*		
(Pinus elliottii)	Slash Pine		
(Magnolia grandiflora)	Southern Magnolia		
(Magnolia virginiana)	Sweet Bay		
(Liquidambar styraciflua)	Sweet Gum		
(Plantanus occidentalis)	Sycamore		
(Myrica cerifera)	Wax Myrtle		
(Callistemon viminallis)	Weeping Bottlebrush*		
(Tecoma stans)	Yellow Elder		
Other			
	TOTALS	**0**	**0**

Shrubs/ground cover

	Shrub
	Ground Cover
	Vine

Shrub/Ground cover Species	Name	number	native
(Antigonon Leptopus)	Coral Honeysuckle		0
(Blechnum serrulatum)	Swamp Fern		0
(Catharanthus roseus)	Periwinkle		0
(Chrysobalanus icaco)	Cocoplum		0
(Conocarpus erectus sericeus)	Silver Buttonwood		0
(Conocarpus erectus)	Buttonwood		0
(Crinum americanum)	Swamp Lilly		0
(Forestiera segregata)	Florida Privet		0
(Glesminum Sempervirens)	Carolina Jessamine		0
(Hamelia patens)	Firebush		0
(Helianthus debilis)	Beach Sunflower		0
(Hymenocallis latifolia)	Spider Lily		0
(Ilex glabra)	Gallberry		0
(Lantana spp.)	Lantana species		0
(Lonicera)	Trumpet Honeysuckle		0
(Myrcianthes fragrans)	Simpson's Stopper		0
(Myrica cerifera)	Wax Myrtle		0
(Myrsine guianensis)	Myrsine		0
(Nephrolepis cordifolia)	Erect Swordfern		0
(Prunus caroliniana)	Cherry Laurel		0
(Spartina bakerii)	Cordgrass		0
(Sysirinchium)	Blue Eyed Grass		0
(Urechites lutea)	Wild Allamanda		0

(Vaccinium myrsinites)	Shiny Blueberry		0
(Viburnum obovatum)	Walter's Virburnum		0
(Zamia floridana)	Coontie		0
Other			0
	TOTALS	0	0

	tree	shrub	shade tree	palms	tree+shrub	Interior Shade
native	0	0	0	0	0	
other	0	0	0	0	0	
Total	0	0	0	0	0	0
interior	0		0			
Perimeter	0		0			

	%
Native	#DIV/0!
Shade	#DIV/0!
Int Shade	#DIV/0!

STUART OCEAN RPUD.

COMPREHENSIVE PLAN REVIEW

FUTURE LAND USE ELEMENT

Objective A5. - Residential development.

Ensure land use compatibility by grouping complementary land use activities, including mixed-use land use developments in appropriate areas of the City. Work with the developers to integrate vehicular and pedestrian circulation systems, bike paths, parking, building location, and architectural design into a cohesive development.

Policy A5.1. The Future Land Use Element of the City's adopted Comprehensive Plan shall provide land for future residential use to promote a more compact development pattern. This shall include sufficient land suitable for the public utility facilities needed to support the projected level and pattern of development.

The proposed project is compact in form by being clustered in order to project and provide upland and preservation areas, while providing a low-density development of approximately 7.25 dwelling units per acre.

Policy A5.2. Development on all vacant, un-platted areas designated as residential should be compatible with any surrounding existing homes.

In order to consider the compatibility of a proposal we need to assess whether the existing residential development adjacent to the proposed development are able to exist together without problems or conflict. The proposed development proposes an entirely residential development. The proposed buffers and preserve areas within the site, provide sufficient distance and visual shielding to project the surrounding existing residential development. The 2-storey height of the proposed development is adequately shielded from view. In respect of traffic impacts and safety the applicants' traffic study address volume and safety impacts in that respect. Overall, this proposal is considered to be compatible with the adjacent uses.

Policy A5.3. Wherever possible, medium density residential and recreation/open space areas should serve as buffers between higher and lower intensity residential uses to achieve an orderly land use transition.

The proposed project is of lower density (7.25 du/ac) than adjacent residential uses of the Kingswood condominiums (15 du/ac). The existing and proposed open space and preserve areas provide substantial area to provide transition zones between the existing higher density and the lower density proposal.

Policy A5.5. The City shall market itself as a community for families.

The development forms part of an inventory that widens housing options for existing and new residents of the City.

Policy A5.6. The City shall maintain a height limitation of the greater of 45 feet or four stories of occupiable space for all buildings. The City shall require landscaping of all new development and redevelopment to promote an aesthetic streetscape. The City shall require landscape buffers between single family residential and non-residential uses.

The proposal complies with the height limitation and incorporates substantial landscaping fronting the streetscape. The proposed development incorporates landscape buffers to the adjacent multi-family residential uses.

GOAL STATEMENT B

Minimize costs to current residents of growth, new development, and redevelopment, and encourage future land uses that maintain or enhance economical and efficient delivery of government utilities and services.

Objective B1. - Compact urban form. Discourage urban sprawl by facilitating urban redevelopment and infill development of properties and planning for urban infill and redevelopment of lands located within Stuart in order to achieve a compact urban form.

The proposal is considered to be a good example of a compact urban form of residential infill as this particular site is primarily surrounded by established 2-storey residential condominium development and the property has remained vacant for a number of years.

Objective B3. - Desirable pattern of land uses.

Promote and enhance a pattern of land uses that are compatible; that are convenient to City residents, businesses, and visitors; that avoid inappropriate or wasteful use of land; and that encourage efficient use of land, resources and facilities. Future land uses shall be designated to support the existing or planned community character, thereby prohibiting the development or expansion of uses which are inconsistent with the community's character. Reduce blighted areas through redevelopment. Land development and use regulations shall include provisions to ensure consistency with this Comprehensive Plan.

The proposal is considered to be a good use of vacant and underutilized land within the community characteristics of the City.

Policy B3.2. All development shall be compatible with and complementary to surrounding land uses and shall not unduly affect existing approved activities

The proposed development, by reason of proposed use, density and buffers is considered to be compatible with and complementary to surrounding activities.

Policy B1.4. Annexation and redevelopment strategies for infill development and redevelopment should be formulated to produce a future viable economy for the City.

The proposed development site is an infill development which adds to the local economy through the increased demand for commercial, entertainment and retail services/products by new residential occupiers. The housing units will increase the spectrum and variety of residential accommodation in the City, therefore adding to a balanced housing supply.