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OWL CREEK
Comprehensive Plan Text Amendment
List of Exhibits by Application Section

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1. Exhibit T1 - Text Amendment Application
2. Exhibit T2 - Filing fee
3. Exhibit T3 - Pre-Application Meeting
4. Exhibit T4 - Proposed Text Changes
    a. North Olga Community Plan New Objectives and Policies
    b. Table 1(a)
    c. Table 1(b)
5. Exhibit T5 - Analysis of Impacts from Proposed Changes
    a. Traffic Circulation Analysis
    b. Public Facilities Impacts Narrative
6. Exhibits T6, T9 & T10 - Lee Plan Analysis, State Policy Plan Analysis & Strategic Policy Plan Analysis
7. Exhibit T7 - Environmental Impact Analysis
8. Exhibit T8 - Historical Resources Impact Analysis
9. Justification of Proposed Amendment

10511 Six Mile Cypress Parkway • Suite 101 • Fort Myers, Florida 33966
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Application
(Exhibit T1)

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APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT - TEXT

Project Name: Owl Creek

Project Description: Text Amendments to accompany FLUM amendment of ±342.68 acres from Rural to Sub-Outlying Suburban to add new Objective 29.10, Policies 29.10.1& 29.10.2 to provide requirements for development in Sub-Outlying Suburban areas within North Olga Planning Community, amend Table 1(a) to add footnote 20 to Sub-Outlying Suburban to limit density to 2 dwelling units per 1 acre of uplands or a gross density of 1.28 dwelling units per acre within the North Olga Planning Community, and amend Table 1(b) - Northeast Lee County to remove 343 acres from the Rural category and add 343 acres to the Sub-Outlying Suburban category

State Review Process: ☐ State Coordinated Review ☒ Expedited State Review ☐ Small-Scale Text*

***Must be directly related to the implementation of small-scale map amendment as required by Florida Statutes.**

APPLICANT – PLEASE NOTE:
A PRE-APPLICATION MEETING IS REQUIRED PRIOR TO THE SUBMITTAL OF THIS APPLICATION.

Submit 3 copies of the complete application and amendment support documentation, including maps, to the Lee County Department of Community Development.

Once staff has determined that the application is sufficient for review, 15 complete copies will be required to be submitted to staff. These copies will be used for Local Planning Agency, Board of County Commissioners hearings, and State Reviewing Agencies. Staff will notify the applicant prior to each hearing or mail out to obtain the required copies.

If you have any questions regarding this application, please contact the Planning Section at (239)533-8585.

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1. **Name of Applicant:** D.R. Horton, Inc.
   Address: 10541 Six Mile Cypress Parkway
   City, State, Zip: Fort Myers, FL 33966
   Phone Number: 239-225-2600 E-mail: JWEverett@drhorton.com

2. **Name of Contact:** Stacy Ellis Hewitt, AICP – Banks Engineering
   Address: 10511 Six Mile Cypress Parkway, Suite 101
   City, State, Zip: Fort Myers, FL 33966
   Phone Number: (239) 939-5490 E-mail: SHewitt@bankseng.com

3. **Property Information:** Provide an analysis of any property within Unincorporated Lee County that may be impacted by the proposed text amendment. **The request is to support a concurrent FLUM amendment located between North River Road and the Caloosahatchee River and provides specific development requirements for parcels in the Sub-Outlying Suburban FLU category within the North Olga Community Plan area.**

4a. **Does the proposed change affect any of the following areas?**

If located in one of the following areas, provide an analysis of the change to the affected area.

☐ Acquisition Area [Map 1 Page 4]	☐ Burnt Store Marina Village [Map 1 Page 2]	☐ Urban Infill and Redevelopment [Map 15]
☐ Agricultural Overlay [Map 30]	☐ Environmental Enhancement and Preservation Communities [Map 17]	☐ Urban Reserve Area [Map 1 Page 4]
☐ Airport Mitigation Lands [Map 3]	☐ Mixed Use Overlay [Map 1 Page 6]	☐ Water Dependent Overlay [Map 1 Page 2]
☐ Airport Noise Zone [Map 1 Page 5]	☐ Planning Communities Map [Map 1 Page 2]	☐ Private Recreational Facilities [Goal 16]

4b. Planning Communities/Community Plan Area Requirements

If located in one of the following planning communities/community plan areas, provide a meeting summary document of the required public informational session [Lee Plan Goal 17].

- ☐ N/A
- ☐ Bayshore [Goal 18]
- ☐ Boca Grande [Goal 19]
- ☐ Buckingham [Goal 20]
- ☐ Caloosahatchee Shores [Goal 21]
- ☐ Olga [Goal 22]
- ☐ Captiva [Goal 23]
- ☐ Greater Pine Island [Goal 24]
- ☐ Lehigh Acres [Goal 25]
- ☐ North Captiva [Goal 26]
- ☒ NE Lee County [Goal 27]
- ☐ Alva [Goal 28]
- ☒ North Olga [Goal 29]
- ☐ North Fort Myers [Goal 30]
- ☐ Page Park [Goal 31]
- ☐ San Carlos Island [Goal 32]
- ☐ Southeast Lee County [Goal 33]
- ☐ Tice [Goal 34]

Public Facilities Impacts

NOTE: The applicant must calculate public facilities impacts based on a maximum development scenario.

1. **Traffic Circulation Analysis**: Provide an analysis of the effect of the change on the Financially Feasible Transportation Plan/Map 3A (20-year horizon) and on the Capital Improvements Element (5-year horizon).

2. **Provide an existing and future conditions analysis for the following (see Policy 95.1.3):**
   a. Sanitary Sewer
   b. Potable Water
   c. Surface Water/Drainage Basins
   d. Parks, Recreation, and Open Space
   e. Public Schools

Environmental Impacts

Provide an overall analysis of potential environmental impacts (positive and negative).

Historic Resources Impacts

Provide an overall analysis of potential historic impacts (positive and negative).

Internal Consistency with the Lee Plan

1. Discuss how the proposal affects established Lee County population projections, Lee Plan Table 1(b) and the total population capacity of the Lee Plan Future Land Use Map.
2. List all goals and objectives of the Lee Plan that are affected by the proposed amendment. This analysis should include an evaluation of all relevant policies under each goal and objective.
3. Describe how the proposal affects adjacent local governments and their comprehensive plans.
4. List State Policy Plan goals and policies, and Strategic Regional Policy Plan goals, strategies, actions and policies which are relevant to this plan amendment.

Justify the proposed amendment based upon sound planning principles

Support all conclusions made in this justification with adequate data and analysis.

SUBMITTAL REQUIREMENTS

Clearly label all submittal documents with the exhibit name indicated below.

MINIMUM SUBMITTAL ITEMS

X	Completed application (Exhibit – T1)
X	Filing Fee (Exhibit – T2)
X	Pre-Application Meeting (Exhibit – T3)
X	Proposed text changes (in strike through and underline format) (Exhibit – T4)
X	Analysis of impacts from proposed changes (Exhibit – T5)
X	Lee Plan Analysis (Exhibit – T6)
X	Environmental Impacts Analysis (Exhibit – T7)
X	Historic Resources Impacts Analysis (Exhibit – T8)
X	State Policy Plan Analysis (Exhibit – T9)
X	Strategic Regional Policy Plan Analysis (Exhibit – T10)

Pre-Application Meeting
(Exhibit T3)

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OWL CREEK
Comprehensive Plan Amendment
Pre-Application Meeting/Teleconference Minutes
EXHIBIT "T3"

Date: June 22, 2020 at 1:30 p.m.

County Staff: Audra Ennis, Brian Roberts, Mikki Rozdolski, Brandon Dunn, Becky Sweigert, Tyler Griffin, Nic DeFilippo, John Fredyma

Applicant Representatives: Russell Schropp, Tom Lehnert, Dave Underhill, Stacy Ellis Hewitt, Wayne Everett

Meeting was requested to discuss a potential plan amendment and Residential Planned Development rezoning for ±345 acres, of which 200± are uplands. The proposal would be for a FLUM amendment from Rural to Sub-Outlying Suburban and an RPD for approximately 400 single family dwelling units. Specific properties were provided prior to the meeting.

Following items topics were discussed:

- Potential for amenities and potential single-family docks or multi-slip docks. Number of docks and manatee review is in the works
- There has been a recent amendment to Policy 6.1.2 to allow neighborhood commercial at intersection of N. River Road and S.R. 31.
- Northeast Lee County and North Olga have lots of design criteria
- Caloosahatchee riverfront - manatee and potential sawfish
- Water quality - extending water and sewer to site from civic center
- Premature for any staff recommendation
- 2 community meetings required - North Olga and Alva
- Owl Creek Boat Works is within Water Dependent Overlay and must be protected
- Concurrent planned development zoning after first comments on comp plan amendment
- Clustering, large open space areas, water and sewer - no septic
- Sub-Outlying Suburban allows 2 units per acre - possible text amendment to further limit
- Evaluate Policy 101.1.4 - hurricane evacuation times
- Address holistically such as recent Babcock with flood, storm water, septic issues
- Policies direct to look at N. River Road alternate routes
- Review Goals 27 and 29

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Proposed Text Changes
(Exhibit T4)

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OWL CREEK
Comprehensive Plan Amendment
Proposed Text Changes
Exhibit T4

The Owl Creek application includes the following requests:

- Amendment to the Future Land Use Map (Lee Plan Map 1, Page 1 of 7) to change the FLU category from Rural and Wetlands to Sub-Outlying Suburban
- Amendment to Future Water Service Areas, Lee County Utilities (Lee Plan Map 6) to place the property within the Lee County Utilities Future Water Service Area to allow for privately funded expansion of water service.
    - Note: Wastewater will be provided by Florida Governmental Utility Authority (FGUA) with privately funded expansion of sewer service.
- Associated Text Amendment to following:
    - North Olga Community Plan – New Objective 29.10 and Policies 29.10.1 and 29.10.2 to provide requirements for development with Sub-Outlying Suburban areas within North Olga Planning Community
    - Table 1(a) – add footnote 20 to Sub-Outlying Suburban to limit density to 2 dwelling units per 1 acre of uplands or a gross density of 1.28 dwelling units per gross acre within the North Olga Planning Community
    - Table 1(b) for Northeast Lee County to remove 343 acres from the Rural category and add 343 acres to the Sub-Outlying Suburban category

OBJECTIVE 29.10: SUB-OUTLYING SUBURBAN. Land designated as Sub-Outlying Suburban on the Future Land Use Map within the North Olga Community Plan area will be developed utilizing the planned development process in order to achieve conservation and enhancement of important environmental resources; initiate areawide surface water management; prevent sprawling land use patterns through clustered development; create critical hydrological and wildlife corridors and connections; and protect rural character of the surrounding community.

POLICY 29.10.1: Residential densities for land within the Sub-Outlying Suburban future land use category may be permitted up to a maximum of 2 dwelling units per upland acre or a gross density of 1.28 dwelling units per acre. In no case shall the unit count in the Sub-Outlying Suburban future land use category in North Olga exceed 440 dwelling units.

POLICY 29.10.2: Prior to development, a planned development rezoning must be approved, and include conditions and requirements that demonstrate the following:

a. Environmental Enhancements.

1. A minimum of 60% open space, inclusive of onsite preserve, to accommodate the following:

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i. Water quality enhancement areas, including but not limited to natural systems-based stormwater management facilities, filter marshes, and wetland buffers to reduce the rate of run-off and associated nutrient loads;
ii. Existing regional flow-ways;
iii. Preservation of 93% of the onsite wetlands with exotic vegetation removal;
iv. Critical wildlife connection(s) through on-site preserve areas where adjacent to conservation areas
v. Roadway setbacks and perimeter buffers or preserves; and
vi. Passive recreational areas that comply with the definition of open space, as set forth in the Land Development Code.

2. Open space areas must be platted in separate tracts, outside of privately owned lots, and dedicated to an appropriate maintenance entity. A Community Development District (CDD), Independent Special District (ISD), or a master property owners association must be created to accept responsibility for perpetually maintaining the open space areas identified in the planned development.
3. Record a conservation easement for a minimum of 48% of the planned development area benefiting a public agency acceptable to Lee County, or Lee County itself, and dedicated to an appropriate maintenance entity. Land subject to conservation easement(s) can be used for on-site mitigation and will be recorded as development orders are issued. The timing of conservation easement(s) and restoration may be phased so long as the area dedicated to conservation easement is equal to or greater than the area of land approved for development on a cumulative basis.
4. Provide a protected species management plan to address human wildlife coexistence, including educational programs and development standards.
6. Not preclude recreational connections to adjacent public and private conservation and preserve land, subject to approval by the appropriate agencies,
7. Incorporate Florida Friendly Landscaping with the low irrigation requirements in common areas.
9. Incorporate energy efficiency or other low impact development (LID) performance standards within the development.
10. Minimize impacts to natural areas and native habitat by clustering development primarily in areas previously impacted by agricultural uses and other development activities.

b. Water Quality & Hydrological Enhancements.

1. The stormwater management system must demonstrate through design or other means that water leaving the development meets current state and federal water quality standards. Outfall monitoring will be required on a quarterly basis for a minimum of 5 years from the date of acceptance of construction of the water management system by the South Florida Water Management District. Monitoring may be eliminated after 5 years if the water quality standards are met.
2. Demonstrate an additional 50% water quality treatment beyond the treatment required by the SFWMD for the on-site stormwater management basins.
3. Protect existing groundwater levels and improve existing wetland hydroperiods in onsite preserve areas, as applicable by SFWMD permits.
4. Provide a lake management plan that requires best management practices for the following:
   i. fertilizers and pesticides;
   ii. erosion control and bank stabilization; and

iii. lake maintenance requirements and deep lake management for lakes exceeding 12 feet below lake surface (BLS).

5. Provide a site-specific ecological and hydrological plan, which includes at a minimum the following: preliminary excavation and grading plans, exotic removal and maintenance plan, supplemental planting plan, and success criteria for meeting established goals.
6. Provide site-specific mitigation and enhancements to reduce discharge rates.
7. Utilize reuse and surface water generated by the development to meet the irrigation demands of the recreation and development areas, to the extent such reuse is available.
8. Demonstrate that the proposed planned development will not result in significant detrimental impacts on present or future water resources.

c. Infrastructure Enhancements.

1. All development within the planned development must connect to centralized water and sewer services, with the exception of interim facilities used on a temporary basis during construction, and for unmanned essential services on a temporary basis until water and sewer service is extended to the development.
2. Written verification as to adequate public services for the planned development from the sheriff, EMS, fire district, and Lee County School District, or via interlocal agreements with adjacent jurisdictions and/or special districts.
3. Civic space or recreational area such as a canoe/kayak launch, boardwalk, jogging path, fishing platform, or waterside park for use by the general public, to be maintained by the property owners' association or similar entity.
4. Sufficient right-of-way to accommodate an 8-foot wide multi-purpose pathway along the roadway frontages, where the planned development abuts SR 31 and CR 78.

d. Community Character.

1. Provide minimum 50 foot perimeter setback/buffer area
2. Enhanced buffers and setbacks along external roadways to preserve rural vistas and viewsheds that are at least 50% wider than the Land Development Code requirements.
3. Locate access points onto adjacent arterial roadways to minimize impact to the surrounding rural community.
4. Preservation of archaeological sites in good to excellent condition that are regarded as eligible for listing on the National Register of Historic Places within a minimum 25-foot buffer. An archaeological monitor should confirm the location of the buffer/temporary silt fencing placed around each site and confirm that the sites are avoided during construction activities.
5. Provide a minimum 100' setback from Water Dependent Overlay to proposed internal residential lot lines.

TABLE 1(a)

SUMMARY OF RESIDENTIAL DENSITIES[1]

FUTURE LAND USE CATEGORY	STANDARD OR BASE DENSITY RANGE		BONUS DENSITY
	MINIMUM[2] (Dwelling Units per Gross Acre)	MAXIMUM (Dwelling Units per Gross Acre)	MAXIMUM TOTAL DENSITY[3] (Dwelling Units per Gross Acre)
Intensive Development[14]	8	14	22
General Interchange[2]	8	14	22
Central Urban[15]	4	10	15
Urban Community[4,5,16]	1	6	10
Suburban[17]	1	6	No Bonus
Outlying Suburban	1	3	No Bonus
Sub-Outlying Suburban[20]	1	2	No Bonus
Rural[10]	No Minimum	1	No Bonus
Outer Islands	No Minimum	1	No Bonus
Rural Community Preserve[6]	No Minimum	1	No Bonus
Open Lands[7]	No Minimum	1 du/5 acres	No Bonus
Density Reduction/Groundwater Resource[13]	No Minimum	1 du/10 acres	No Bonus
Wetlands[8]	No Minimum	1 du/20 acres	No Bonus
New Community[19]	No Minimum	6	No Bonus
University Community[9]	1	2.5	No Bonus
Destination Resort Mixed Use Water Dependent[11]	6	9.36	No Bonus
Burnt Store Marina Village[12]	No Minimum	160 Dwelling Units; 145 Hotel Units	No Bonus
Coastal Rural[18]	No Minimum	1 du/2.7 acres	No Bonus

CLARIFICATIONS AND EXCEPTIONS

[1]See the glossary in Chapter XII for the full definition of "density".

[2]Except in the General Interchange future land use category adherence to minimum densities is not mandatory but is recommended to promote compact development.

[3]These maximum densities may be permitted by transferring density from non-contiguous land through the provisions of the Bonus Density Program identified in Chapter 2 of the Land Development Code.

[4]Within the Future Urban Areas of Pine Island Center, rezonings that will allow in excess of 3 dwelling units per gross acre must "acquire" the density above 3 dwelling units per gross acre utilizing TDUs that were created from Greater Pine Island (see Objective 24.6), or transfer dwelling units in accordance with Policy 24.3.4.

[5]In all cases on Gasparilla Island, the maximum density must not exceed 3 du/acre.

[6]Within the Buckingham area, new residential lots must have a minimum of 43,560 square feet.

[7]The maximum density of 1 unit per 5 acres can only be approved through the planned development process (see Policy 1.4.4), except in the approximately 135 acres of land lying east of US41 and north of Alico Road in the northwest corner of Section 5, Township 46, Range 25.

[8]Higher densities may be allowed under the following circumstances where wetlands are preserved on the subject site:

(a) If the dwelling units are relocated off-site through the provision of Transfer of Development Rights Ordinance 86-18, as amended or replaced; or

(b) Dwelling units may be relocated to developable contiguous uplands designated Intensive Development, General Interchange, Central Urban, Urban Community, Suburban, Outlying Suburban, Sub-Outlying Suburban, and New Community from preserved freshwater wetlands at the same underlying density as permitted for those uplands. Impacted wetlands will be calculated at the standard Wetlands density of 1 dwelling units per 20 acres. Planned Developments or Development Orders approved prior to October 20, 2010 are permitted the density approved prior to the adoption of CPA2008-18.

[9]Overall average density for the University Village sub-district must not exceed 2.5 du/acre.

[10]In the Rural category located in Section 24, Township 43 South, Range 23 East and south of Gator Slough, the maximum density is 1 du/2.25 acres.

[11]Overall number of residential dwelling units is limited to 271 units in the Destination Resort Mixed Use Water Dependent district.

[12]The residential dwelling units and hotel development portions of this redevelopment project must be located outside of the designated Coastal High Hazard Area in accordance with Lee Plan, Map 5.

[13]See Policies 33.3.2, 33.3.3, and 33.3.4 for potential density adjustments resulting from concentration or transfer of development rights.

[14]The maximum total density may be increased to 30 du/acre utilizing Greater Pine Island TDUs.

[15]The maximum total density may be increased to 20 du/acre utilizing Greater Pine Island TDUs.

[16]The maximum total density may be increased to 15 du/acre utilizing Greater Pine Island TDUs.

[17]The maximum total density may be increased to 8 du/acre utilizing Greater Pine Island TDUs.

[18] The standard maximum density is 1 du/2.7 acres unless the "Adjusted Maximum Density" of 1 du/acre is achieved in accordance with requirements of Policy 1.4.7 and Chapter 33 of the Land Development Code.

[19]Maximum density in the New Community future land use category is limited to 1 du/2.5 acres in the North Olga Community Plan area in accordance with Policy 1.6.1.

[20]Maximum density in the Sub-Outlying Suburban future land use category is limited to 2 du/1 acre of uplands or a gross density of 1.28 dwelling units per acre in the North Olga Community Plan area in accordance with Policy 29.10.1.

TABLE 1(b) Year 2030 Allocation

Future Land Use Category	Lee County Totals	Northeast Lee County	Boca Grande	Bonita Springs	Fort Myers Shores	Burnt Store	Cape Coral	Captiva	Fort Myers	Fort Myers Beach	Gateway/ Airport	Daniels Parkway
Residential By Future Land Use Category												
Intensive Development	1,361				5		27		250			
Central Urban	14,766				225				230			
Urban Community	16,515	520	485		637						250	
Suburban	16,623				1,810				85			
Outlying Suburban	4,113	30			310	20	2	500				1,438
Sub-Outlying Suburban	~~1,880~~2,223	343			472						227	
Commercial												
Industrial	79								39		20	
Public Facilities	1							1				
University Community	850											
Destination Resort Mixed Use Water Dependent	8											
Burnt Store Marina Village	4					4						
Industrial Interchange												
General Interchange	169										29	58
General Commercial Interchange												
Industrial Commercial Interchange												
University Village Interchange												
Mixed Use Interchange												
New Community	2,100	1,200									900	
Airport												
Tradeport	9										9	
Rural	~~8,313~~7,970	~~1,948~~1,605			1,400	636						1,500
Rural Community Preserve	3,100											
Coastal Rural	1,300											
Outer Island	202	5			1			150				
Open Lands	2,805	250				590						120
Density Reduction/ Groundwater Resource	6,905	711									94	
Conservation Lands Upland												
Wetlands												
Conservation Lands Wetland												
Unincorporated County Total Residential	81,103	4,664	485		4,860	1,250	29	651	604		1,529	3,116
Commercial	12,793	177	52		400	50	17	125	150		1,100	440
Industrial	7,527	26	3		400	5	26		300		3,100	10
Non Regulatory Allocations												
Public	82,565	7,100	421		2,000	7,000	20	1,961	350		7,752	2,477
Active AG	23,301	5,100			550	150						20
Passive AG	43,591	12,229			2,305	109					1,241	20
Conservation	81,933	2,214	611		1,142	3,236	133	1,603	748		2,947	1,733
Vacant	24,361	1,953			61	931	34		45		282	151
Total	357,174	33,463	1,572		11,718	12,731	259	4,340	2,197		17,951	7,967
Population Distribution (unincorporated Lee County)	495,000	9,266	1,531		33,348	3,270	225	530	5,744		19,358	16,375

(Amended by Ordinance No. 02-02, 03-19, 05-19, 07-13, 09-15, 09-16, 10-15, 10-16, 10-40, 10-43, 14-14, 15-10, 16-02, 16-17, 17-12, 17-23, 18-06, 19-14, 20-05)
Printed 5/28/2020

TABLE 1(b) Year 2030 Allocation

Future Land Use Category	Iona/ McGregor	San Carlos	Sanibel	South Fort Myers	Pine Island	Lehigh Acres	Southeast Lee County	North Fort Myers	Buckingham	Estero	Bayshore
Residential By Future Land Use Category											
Intensive Development				660	3	42		365		9	
Central Urban	375	17		3,140		8,179		2,600			
Urban Community	850	1,000		860	500	10,854			110	450	
Suburban	2,488	1,975		1,200	675			6,690		1,700	
Outlying Suburban	377				600			382		454	
Sub-Outlying Suburban		25						140	66		950
Commercial											
Industrial	5	5		10							
Public Facilities											
University Community		850									
Destination Resort Mixed Use Water Dependent	8										
Burnt Store Marina Village											
Industrial Interchange											
General Interchange							15	31		6	30
General Commercial Interchange											
Industrial Commercial Interchange											
University Village Interchange											
Mixed Use Interchange											
New Community											
Airport											
Tradeport											
Rural		90			190	14		500	50	635	1,350
Rural Community Preserve									3,100		
Coastal Rural					1,300						
Outer Island	1				45						
Open Lands								45			1,800
Density Reduction/ Groundwater Resource							4,000				2,100
Conservation Lands Upland											
Wetlands											
Conservation Lands Wetland											
Unincorporated County Total Residential	4,104	3,962		5,870	3,313	19,088	4,015	10,753	3,326	3,254	6,230
Commercial	1,100	1,944		2,100	226	1,300	68	1,687	18	1,700	139
Industrial	320	450		900	64	300	972	554	5	87	5
Non Regulatory Allocations											
Public	3,550	3,059		3,500	2,100	15,289	12,000	4,000	1,486	7,000	1,500
Active AG					2,400		13,445	200	411	125	900
Passive AG					815		17,521	1,532	3,619	200	4,000
Conservation	9,306	2,969		188	14,767	1,541	31,210	1,317	336	5,068	864
Vacant	975	594		309	3,781	10,385	470	2,060	1,000	800	530
Total	19,355	12,978		12,867	27,466	47,904	79,701	22,103	10,201	18,234	14,168
Population Distribution (unincorporated Lee County)	34,538	36,963		58,363	13,265	149,500	1,270	71,001	6,117	25,577	8,760

(Amended by Ordinance No. 02-02, 03-19, 05-19, 07-13, 09-15, 09-16, 10-15, 10-16, 10-40, 10-43, 14-14, 15-10, 16-02, 16-17, 17-12, 17-23, 18-06, 19-14, 20-05)
Printed 5/28/2020

Analysis of Impacts from Proposed Changes

(Exhibit T5)

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TR TRANSPORTATION CONSULTANTS, INC

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TRAFFIC ENGINEERING
TRANSPORTATION PLANNING
SIGNAL SYSTEMS/DESIGN

TRAFFIC IMPACT STATEMENT

FOR

OWL CREEK COMPREHENSIVE PLAN AMENDMENT & REZONING

(PROJECT NO. F2006.14)

RECEIVED
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COMMUNITY DEVELOPMENT

PREPARED BY:
TR Transportation Consultants, Inc.
Certificate of Authorization Number: 27003
2726 Oak Ridge Court, Suite 503
Fort Myers, Florida 33901-9356
(239) 278-3090

July 29, 2020

TRANSPORTATION CONSULTANTS, INC

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VI. ZONING ANALYSIS

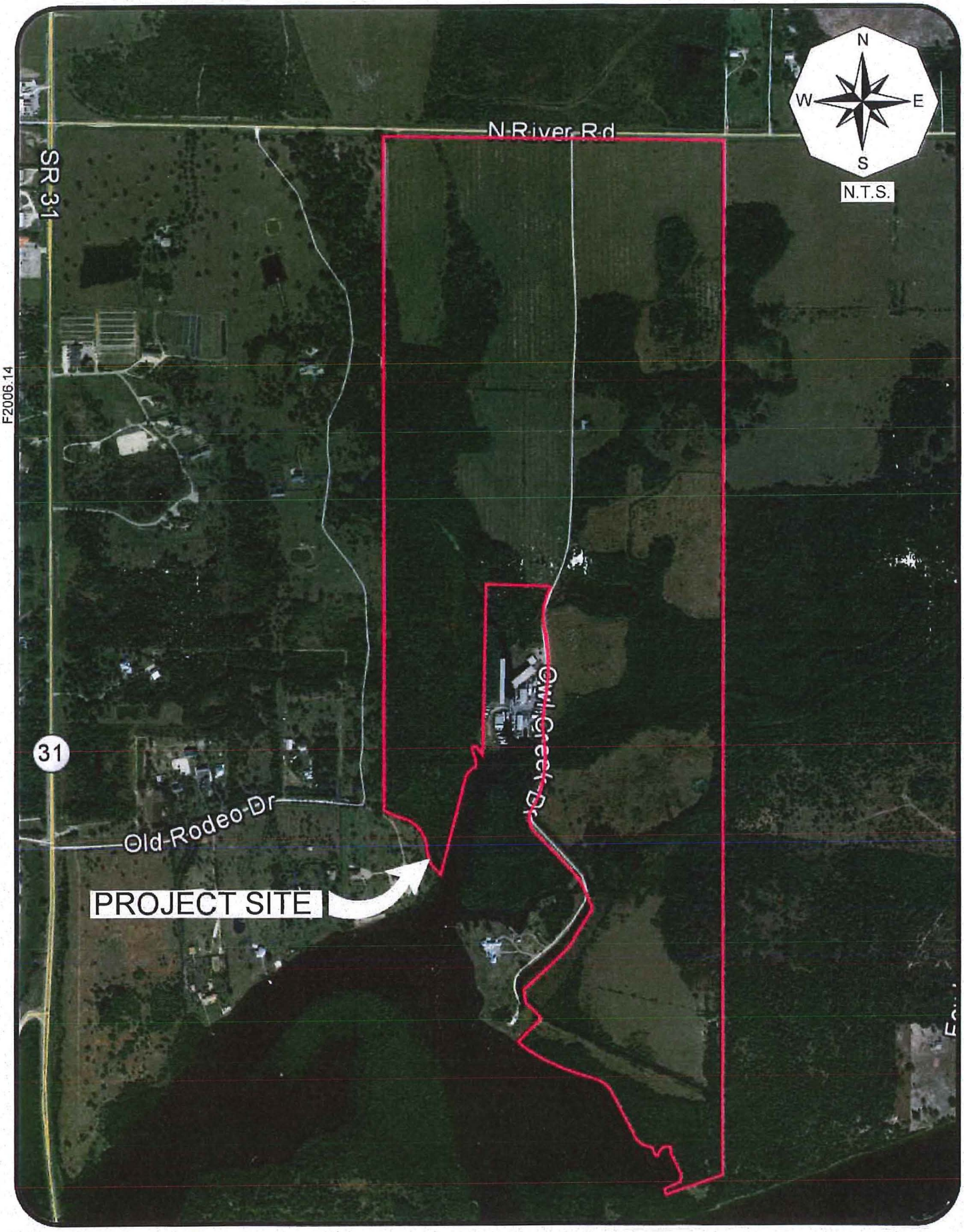
VII. CONCLUSION

I. INTRODUCTION

TR Transportation Consultants, Inc. has conducted a traffic impact statement to fulfill requirements set forth by the Lee County Department of Community Development for projects seeking amendment to the Comprehensive Land Use Plan and re-zoning approval. The subject site is located along the south side of North River Road and approximately ½ mile to the east of SR 31 in Lee County, Florida. **Figure 1** illustrates the approximate location of the subject site.

The analysis in this report will determine the impacts of change in land use designation on the approximately 348.8 acre subject site from Rural and Wetlands to a Sub-Outlying Suburban land use category to permit the development of the subject site with up to 440 single-family residential dwelling units. The analysis will also determine the impacts of the proposed rezoning from Agricultural-2 (AG-2) to a Residential Planned Development (RPD) to allow the subject site to be developed with up to 440 single-family residential dwelling units. The transportation related impacts of the proposed Comprehensive Plan Amendment will be assessed based on evaluation of the long range impact (20-year horizon) and short range impact (5-year horizon) the proposed amendment would have on the existing and future roadway infrastructure. The transportation related impacts of the proposed rezoning will be evaluated based on the estimated build-out year of the project and the impacts the proposed rezoning will have on the surrounding roadway infrastructure. Access to the subject site is proposed to North River Road and to Owl Creek Drive via multiple connections as shown on the site plan.

This report examines the impact of the development on the surrounding roadways. Trip generation and assignments to the various roadways within the study area will be completed and analysis conducted to determine the impacts of the development on the surrounding roadways.



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TR TRANSPORTATION CONSULTANTS, INC

PROJECT LOCATION MAP
OWL CREEK

Figure 1

II. EXISTING CONDITIONS

The subject site is bisected by Owl Creek Drive and is currently vacant. The site is generally bordered by North River Road to the north, vacant land to the east, Caloosahatchee River and a boat storage facility to the south, and by residential uses and vacant land to the west.

North River Road is a two lane undivided arterial that borders the subject site to the north. North River Road has a posted speed limit of 55 mph and is under the jurisdiction of the Lee County Department of Transportation.

Owl Creek Drive is a two lane undivided local roadway that bisects the subject site. Based on the Lee County's ***Find My Road*** GIS webpage, Owl Creek Drive has a speed limit of 25 mph and is privately maintained.

III. COMPREHENSIVE PLAN AMENDMENT

The Comprehensive Plan Amendment would change the future land use designation on the approximate 348.8 acre subject site from Rural and Wetlands to a Sub-Outlying Suburban land use category to permit the development of the subject site with up to 440 single-family residential dwelling units. Under the existing Rural land use category, approximately 213.2 acres of property can be developed with up to 213 residential dwelling units (1 dwelling unit/acre). The remaining of the property (135.6 acres) is under the Wetlands land use category and can be developed with up to 7 residential dwelling units (1 dwelling unit/20 acres). Therefore, under the existing Rural and Wetlands land use categories the subject site can be developed with a total of 220 residential dwelling units. **Table 1** summarizes the land uses that could be constructed under the existing land use designations and the intensity of uses under the proposed land use designation.

Table 1
Land Uses
Owl Creek

Existing/ Proposed	Land Use Category	Intensity
Existing	Rural & Wetlands	220 Dwelling Units (Rural ≈ 213.2 acres @ 1 DU/Acre & Wetlands ≈ 135.6 acres @ 1 DU/20 Acres)
Proposed	Sub-Outlying Suburban	440 Dwelling Units

IV. TRIP GENERATION

The trip generation for the permitted and proposed development was determined by referencing the Institute of Transportation Engineer's (ITE) report, titled ***Trip Generation***, 10th Edition. Land Use Code 210 (Single-Family Detached Housing) was utilized for the trip generation purposes of the permitted and proposed residential uses on the subject site. The trip generation equations utilized for from this land use are attached to the Appendix of this report for reference. **Table 2** and **Table 3** outline the anticipated weekday AM and PM peak hour trip generation based on the existing and proposed future land use category, respectively.

Table 2
Trip Generation
Based on Existing Land Use Category
Owl Creek

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily
	In	Out	Total	In	Out	Total	(2-way)
Single-Family Detached Housing (220 Dwelling Units)	40	121	161	137	80	217	2,148

Table 3
Trip Generation
Based on Proposed Land Use Category
Owl Creek

Land Use	Weekday AM Peak Hour			Weekday PM Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Single-Family Detached Housing (440 Dwelling Units)	79	238	317	265	156	421	4,064

Table 4 indicates the trip generation difference between the proposed and existing land use categories. The long range transportation impact (20-year horizon) and the short range transportation impact (5-year horizon) will be evaluated based on the resultant trip change illustrated in Table 4.

Table 4
Trip Generation – Resultant Trip Change
Owl Creek

Land Use	A.M. Peak Hour			P.M. Peak Hour			Daily (2-way)
	In	Out	Total	In	Out	Total	
Proposed Land Use Designation (440 Dwelling Units)	79	238	317	265	156	421	4,064
Existing Land Use Designation (220 Dwelling Units)	-40	-121	-161	-137	-80	-217	-2,148
Resultant Trip Change	**+39**	**+117**	**+156**	**+128**	**+76**	**+204**	**+1,916**

The resultant trip change in Table 4 indicates that the trip generation will be **increased** in the AM and PM peak hour conditions as a result of this land use change.

V. COMPREHENSIVE PLAN AMENDMENT ANALYSIS

The Comprehensive Plan Amendment would change the future land use designation on the approximately 348.8 acre subject site from Rural and Wetlands to a Sub-Outlying Suburban land use category to permit the development of the subject site with up to 440 single-family residential dwelling units. The transportation related impacts of the

proposed Comprehensive Plan Amendment were evaluated pursuant to the criteria in the application document. This included an evaluation of the long range impact (20-year horizon) and short range impact (5-year horizon) the proposed amendment would have on the existing and future roadway infrastructure.

Long Range Impacts (20-year horizon)

The Lee County Metropolitan Planning Organization's (MPO) 2040 Long Range Transportation Plan was reviewed to determine if any future roadway improvements were planned in the vicinity of the subject site. Based on the review, the only roadway improvement within the vicinity of the subject site shown on the 2040 Cost Feasible Plan is the widening of SR 31 to a four lane facility from SR 80 (Palm Beach Boulevard) to Lee/Charlotte County line. There are no other programmed improvements within the vicinity of the subject site. The 2040 Lee County MPO Highway Cost Feasible Plan is attached the Appendix of this report for reference.

The Lee County Metropolitan Planning Organization's (MPO) long range transportation plan along with the FDOT District One travel model were also reviewed in order to determine the impacts the amendment would have on the surrounding area. The base 2040 loaded network volumes were determined for the roadways within the study area and then the PM peak hour trips to be generated by additional trips shown in Table 4 were then added to the projected 2040 volumes. The Level of Service for the surrounding roadways was then evaluated. The Level of Service threshold volumes were derived based on the Lee County's *Generalized Peak Hour Directional Service Volumes* table as well as FDOT's *Generalized Peak Hour Directional Volumes*, Table 7.

The results of the analysis indicate that the addition of the trips as a result of the proposed amendment to the projected 2040 volumes will not cause any roadway links to fall below the recommended minimum acceptable Level of Service standards. Buckingham Road to the south of SR 31 was shown to operate at a poor Level of Service in the 2040 background (without project traffic) conditions. However, Buckingham Road is shown to be widened to a four-lane facility on the Lee County's 2040 Needs Plan. Buckingham

Road would to operate at acceptable Level of Service as a four-lane facility. All other roadways are shown to operate at or above the minimum recommended Level of Service in 2040 both with and without the project traffic added to the surrounding roadway segments.

A Level of Service analysis for the 2040 Existing plus Committed (E + C) roadway network is attached to this report for reference. **Table 1A** and **Table 2A** reflect the Level of Service analysis based on the 2040 conditions. The resultant land use change will not impact the results of the Level of Service analysis as reported in the adopted 2040 travel model. Therefore, no changes to the adopted long range transportation plan are required as result of the proposed land use change.

Short Range Impacts (5-year horizon)

The 2020 – 2024 Lee County Five Year Capital Improvement Programs (CIP) as well as the Florida Department of Transportation Adopted Work Programs were reviewed to determine the short term impacts the proposed land use change would have on the surrounding roadways. Based on the review, the only roadway improvement funded within the vicinity of the subject site is the widening of SR 31 to a four lane facility from SR 78 (Bayshore Road) to Cook Brown Road. There are no other programmed improvements to the roadway network identified in either work program within the vicinity of the subject site.

As can be depicted from Table 4 of this report, the proposed map amendment will increase the overall trip generation potential of the subject site by approximately 156 vehicles during the A.M. peak hour and 204 vehicles during the P.M. peak hour. **Table 3A** and **Table 4A** attached to this report indicate the projected 5-year planning Level of Service on the area roadways based on the additional trips shown in Table 4. The existing peak hour, peak season, peak direction traffic volumes on the various roadway links maintained by Lee County were obtained from the most recent Lee County ***Public Facilities Level of Service and Concurrency Report.*** The existing peak hour, peak season, peak direction traffic volumes for state maintained roadways were derived by

factoring the latest AADT volumes by appropriate K & D factors. The existing peak hour, peak season, peak direction traffic volumes were then factored by the appropriate annual growth rates in order to obtain the 2025 background traffic conditions on the area roadway network. The growth rates for each roadway were calculated based on historical traffic data obtained from the FDOT's ***Florida Traffic Online*** resource as well as the traffic data from the latest ***Lee County Traffic Count Report***. Based on the projected traffic distribution, the roadway link data was analyzed for the year 2025 without the proposed amendment and year 2025 with the proposed amendment. Traffic data obtained from the aforementioned Lee County and FDOT resources is attached to the Appendix of this report for reference.

The results of the analysis indicate that the addition of the trips as a result of the proposed amendment to the projected 2025 volumes will not cause any roadway link to fall below the minimum acceptable Level of Service standards. All analyzed roadways were shown operate within their recommended minimum Level of Service standards.

The proposed Comprehensive Plan Amendment is to change the future land use designation on the approximately 348.8 acre subject site from Rural and Wetlands to a Sub-Outlying Suburban land use category to permit the development of the subject site with up to 440 single-family residential dwelling units. Based on the analysis, no modifications will be necessary to the Lee County or FDOT short term capital improvement programs.

VI. ZONING ANALYSIS

An analysis was also completed to support the rezoning of the subject from Agricultural-2 (AG-2) to a Residential Planned Development (RPD) to allow the subject site to be developed with up to 440 single-family residential dwelling units. The zoning analysis was completed based on the trip generation shown in Table 3 of this report.

The trips the proposed development is anticipated to generate, as shown in the Table 3, were assigned to the surrounding roadway network based upon the routes drivers are anticipated to utilize to approach the subject site. Based on the current and projected population in the area and other existing or planned competing/complementary uses in the area, a distribution of the site traffic was formulated. **Figure 2** illustrates the anticipated trip distribution on North River Road as well as the assignment of the project related trips to the site access drive on North River Road and adjacent intersections.

In order to determine which roadway segments surrounding the site will be significantly impacted as outlined in the Lee County Traffic Impact Statement Guidelines, **Table 5A**, contained in the Appendix, was created. This table indicates which roadway links will experience a significant impact as a result of the added development traffic. Significant impact is defined as any roadway projected to experience greater than 10% of the Peak Hour – Peak Direction Level of Service "C" volumes.

The Level of Service threshold volumes were derived based on the Lee County's *Generalized Peak Hour Directional Service Volumes* table as well as FDOT's *Generalized Peak Hour Directional Volumes*, Table 7. Based on the information contained within Table 5A, North River Road west of Owl Creek Drive as well as SR 31 between SR 80 (Palm Beach Boulevard) and North River Road are shown to be significantly impacted due to the addition of the project traffic.

Level of Service Analysis

A horizon year analysis of 2025 was selected as the analysis year to evaluate the future impacts this project will have on the surrounding roadway network. Based on this horizon year, a growth rate was applied to the existing traffic conditions for all roadway links in the study area. Based on the project distribution illustrated on Table 5A, the link data was analyzed for the year 2025 without the development and year 2025 with the development.

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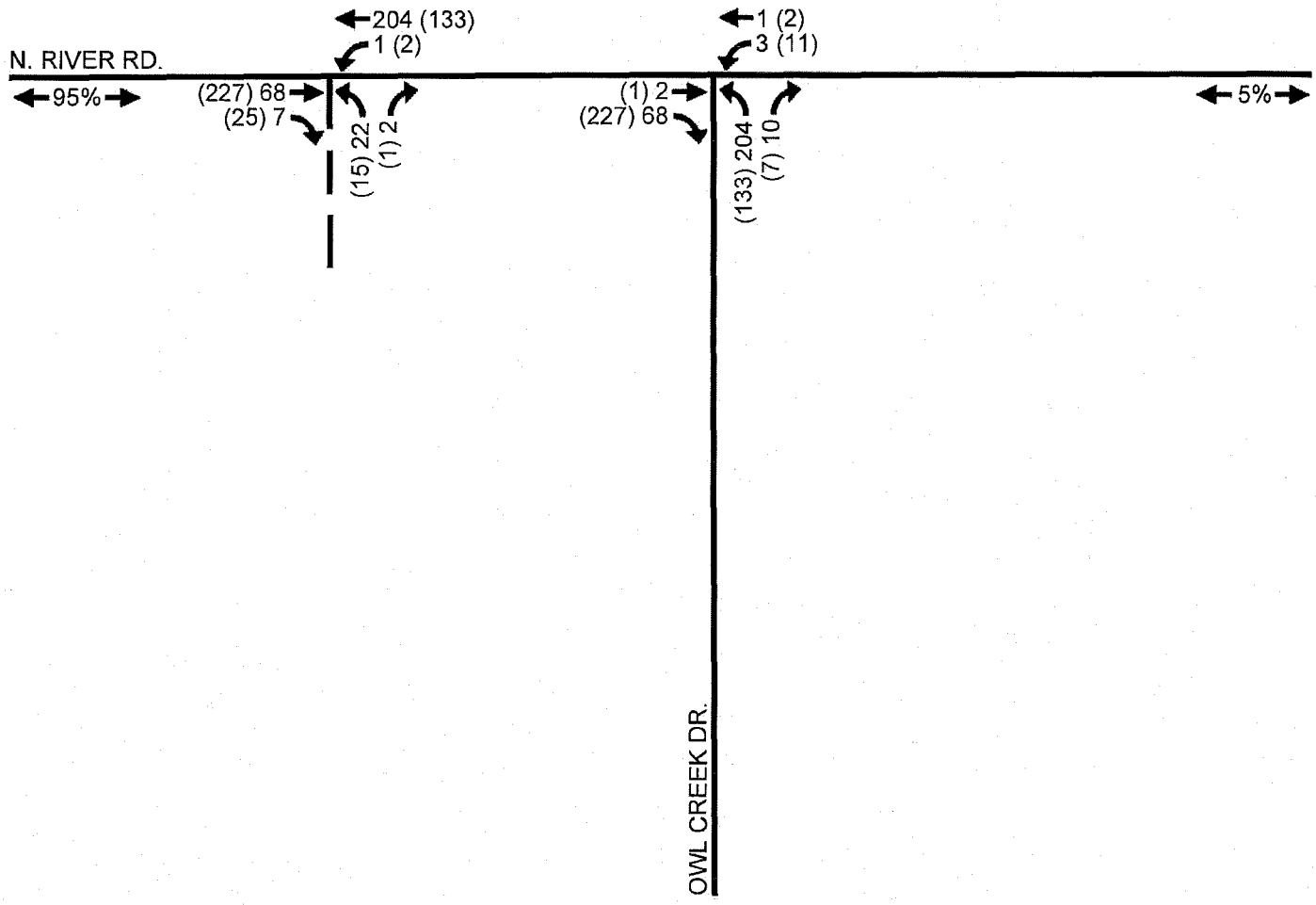

LEGEND

← 000 WEEKDAY AM PEAK HOUR SITE TRAFFIC
← (000) WEEKDAY PM PEAK HOUR SITE TRAFFIC
←20%→ PERCENT TRIP DISTRIBUTION

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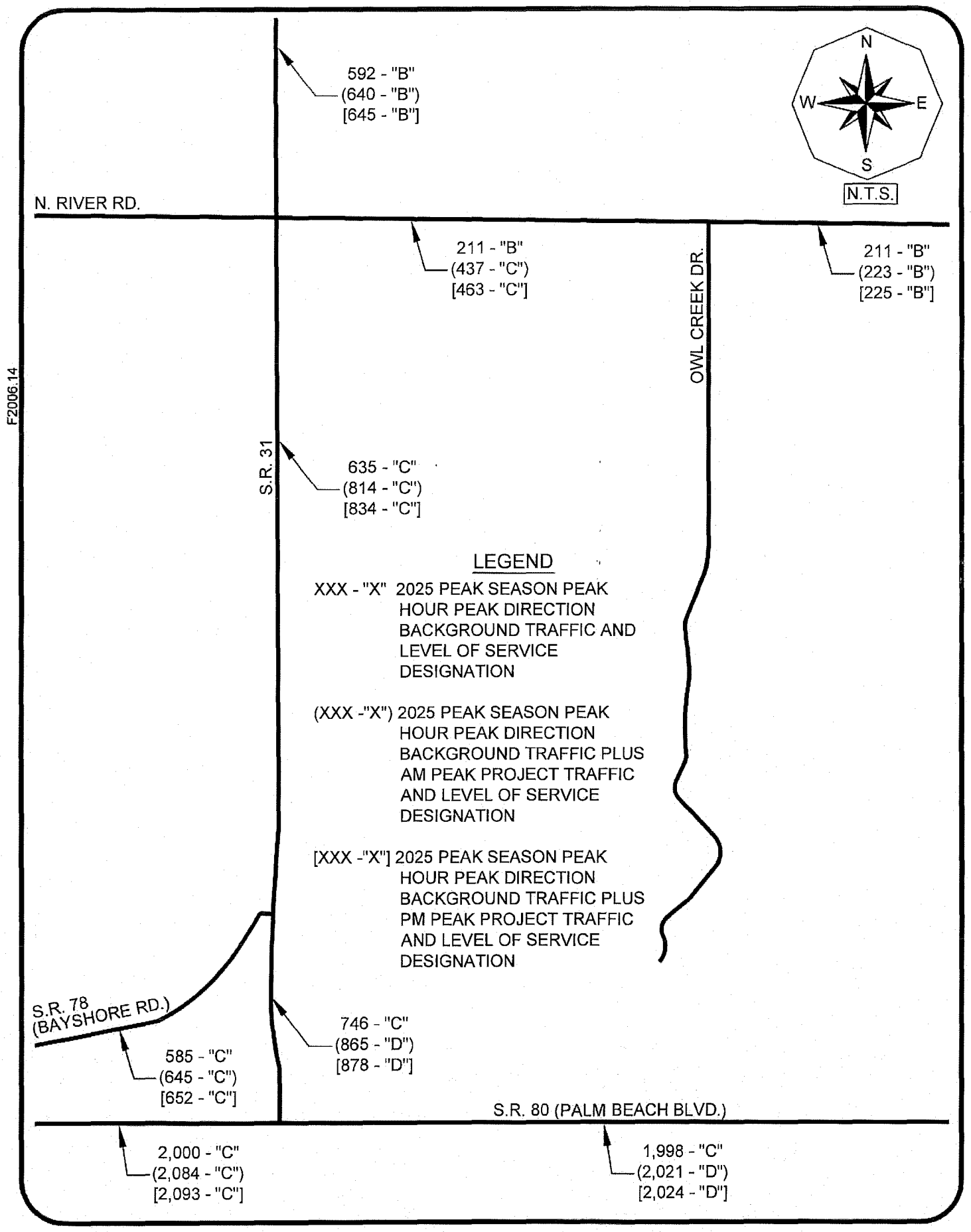
TRIP DISTRIBUTION & SITE TRAFFIC ASSIGNMENT OWL CREEK

Figure 2

Table 6A in the Appendix of the report indicates the methodology utilized to obtain the year 2025 background and build-out traffic volumes. The existing peak hour, peak season, peak direction traffic volumes on the roadway links maintained by the Lee County were obtained from the most recent Lee County ***Public Facilities Level of Service and Concurrency Report.*** The existing peak hour, peak season, peak direction traffic volumes for state maintained roadways were derived by factoring the latest AADT volumes by appropriate K & D factors. The existing peak hour, peak season, peak direction traffic volumes were then factored by the appropriate annual growth rates in order to obtain the 2025 background traffic conditions on the area roadway network. The growth rates for each roadway were calculated based on historical traffic data obtained from the FDOT's ***Florida Traffic Online*** resource as well as the traffic data from the latest ***Lee County Traffic Count Report.***

Figure 3 indicates the year 2025 peak hour – peak direction traffic volumes and Level of Service for the various roadway links within the study area. Noted on Figure 3 is the peak hour – peak direction volume and Level of Service of each link should no development occur on the subject site and the peak hour – peak direction volume and Level of Service for the weekday A.M. and P.M. peak hours with the development traffic added to the roadways. This figure is derived from Table 2A contained in the Appendix.

As can be seen from Figure 3, the roadway links analyzed as part of this report will not be adversely impacted as a result of the proposed rezoning request. All roadway segments analyzed will maintain the minimum recommended Level of Service. Therefore, roadway capacity improvements will not be warranted as a result of the additional traffic to be generated by the proposed rezoning request.



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2025 LEVEL OF SERVICE ANALYSIS
OWL CREEK

Figure 3

Intersection Analysis

Intersection analysis was performed at the unsignalized intersection of North River Road and Owl Creek Road as well as at the proposed western project's access driveway to North River Road based on the latest version of the ***Highway Capacity Software (HCS™)***. The analysis was based on the projected 2025 weekday AM and PM peak hour traffic with the project traffic conditions. The weekday AM and PM peak hour peak season through volumes on North River Road were determined from the traffic counts obtained from Lee County ***Transportation Data Management System*** webpage. The existing through traffic volumes were then increased by a growth rate factor to determine the projected 2025 background turning movement volumes. The projected project traffic volume from Figure 2 was then added to the intersections. The volumes utilized for the intersection analysis can be found in the Appendix of this report in the *Development of Future Year Background Turning Movement* volumes spreadsheets.

Based upon the results of the capacity analysis at the unsignalized intersection of North River Road and Owl Creek Road as well as at the proposed western project's access driveway to North River Road, all movements were shown to operate at acceptable Level of Service in 2025 with the proposed development traffic added to the intersections in the AM and PM peak hour conditions. Therefore, no intersection improvements are warranted as a result of this analysis.

Turn lane improvements at the site access drive intersections will be evaluated at the time the project seeks a Local Development Order approval.

VII. CONCLUSION

The proposed development is located along the south side of North River Road and approximately ½ mile to the east of SR 31 in Lee County, Florida. Based upon the roadway link Level of Service analysis conducted as a part of this report for both a Comprehensive Plan amendment and rezoning request, the development of the subject site meets the requirements set forth by the Lee County Comprehensive Plan and Land

Development Code in that there is sufficient capacity available to accommodate the new trips that will be generated by the proposed development. Therefore, no roadway capacity improvements will be warranted as a result of the additional traffic to be generated by the proposed Comprehensive Plan amendment and rezoning requests.

The 2040 Financially Feasible Roadway network and the short term 5-year Capital Improvement Program currently in place in the Lee County will not require any modification in order to accommodate the proposed Land Use Change. The rezoning analysis also indicates that the subject site will not have an adverse impact on the surrounding roadway network. Therefore, no roadway capacity improvements are necessary to accommodate the proposed development.

Based upon the results of the capacity analysis at the unsignalized intersection of North River Road and Owl Creek Road as well as at the proposed western project's access driveway to North River Road, all movements were shown to operate at acceptable Level of Service in 2025 with the proposed development traffic added to the intersections in the AM and PM peak hour conditions. Therefore, no intersection improvements are warranted as a result of this analysis.

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APPENDIX

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TABLES 1A & 2A

2040 LOS ANALYSIS

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TABLE 1A
LEVEL OF SERVICE THRESHOLDS
2040 LONG RANGE TRANSPORTATION ANALYSIS - OWL CREEK

		2040 E + C NETWORK LANES		GENERALIZED SERVICE VOLUMES				
				LOS A	LOS B	LOS C	LOS D	LOS E
ROADWAY	ROADWAY SEGMENT	# Lanes	Roadway Designation	VOLUME	VOLUME	VOLUME	VOLUME	VOLUME
N. River Rd	E. of Owl Creek Dr	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640
	W. of Owl Creek Dr	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640
SR 31	N. of N. River Rd.	4LD	Uninterrupted Flow Highway	0	1,800	2,600	3,280	3,730
	S.. of N. River Rd.	4LD	Arterial	0	0	1,910	2,000	2,000
	S.. of SR 78	4LD	Arterial	0	0	1,910	2,000	2,000
SR 78 (Bayshore Rd)	W. of SR 31	2LU	Arterial	0	0	872	924	924
SR 80 (Palm Beach Blvd)	W. of SR 31	6LD	Arterial	0	0	3,087	3,171	3,171
	E. of SR 31	4LD	Arterial	0	0	2,006	2,100	2,100
	E. of Buckingham Rd	4LD	Uninterrupted Flow Highway	0	1,800	2,600	3,280	3,730
Buckingham Rd	S. of SR 31	2LU	Arterial	0	140	800	860	860

- Denotes the LOS Standard for each roadway segment

* Level of Service Thresholds for Lee County arterials were taken from the Generalized Peak Hour Directional Service Volume tables for Urbanized Areas (dated April 2016)
* Level of Service Thresholds for state mantained roadways were taken from FDOT's Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas Table 7.

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TABLE 2A
2040 ROADWAY LINK LEVEL OF SERVICE CALCULATIONS
OWL CREEK

TOTAL PM PEAK HOUR PROJECT TRAFFIC = 204 VPH IN= 128 OUT= 76

ROADWAY	ROADWAY SEGMENT	2040 FSUTMS PSWDT	COUNTY PCS / FDOT SITE #	MOCF FACTOR [1]	AADT BACKGROUND TRAFFIC	K-100 FACTOR	100TH HIGHEST HOUR PK DIR 2-WAY VOLUME	D FACTOR	PM PK HR PEAK DIRECTION	2040 PEAK DIRECTION TRAFFIC VOLUMES & LOS VOLUME	LOS	PROJECT TRAFFIC DIST.	PK DIR PM PROJ TRAFFIC	2040 BACKGROUND PLUS PROJ PEAK DIRECTION TRAFFIC VOLUMES & LOS VOLUME	LOS
N. River Rd	E. of Owl Creek Dr	5,548	124650	0.93	5,160	0.095	490	0.549	EAST	269	B	5%	6	275	B
	W. of Owl Creek Dr	5,568	124650	0.93	5,178	0.095	492	0.549	EAST	270	B	95%	122	392	B
SR 31	N. of N. River Rd.	36,889	120273	0.94	34,676	0.095	3,294	0.521	NORTH	1,716	B	20%	26	1,742	B
	S.. of N. River Rd.	35,534	121001	0.94	33,402	0.095	3,173	0.54	NORTH	1,713	C	75%	96	1,809	C
	S.. of SR 78	29,867	120030	0.94	28,075	0.090	2,527	0.54	NORTH	1,365	C	50%	64	1,429	C
SR 78	W. of SR 31	15,365	121002	0.94	14,443	0.090	1,300	0.54	EAST	702	C	25%	32	734	C
SR 80	W. of SR 31	54,543	126005	0.94	51,270	0.090	4,614	0.54	EAST	2,492	C	35%	45	2,537	C
	E. of SR 31	30,577	120085	0.94	28,742	0.090	2,587	0.54	EAST	1,397	C	10%	13	1,410	C
	E. of Buckingham Rd	19,690	120012	0.94	18,509	0.090	1,666	0.54	EAST	900	B	3%	4	904	B
Buckingham Rd	S. of SR 31	21,036	11	0.93	19,563	0.089	1,741	0.53	NORTH	923	F	4%	5	928	F

1 Model Output Conversion Factor was utilized to obtain the AADT Volumes for all roadways.
* The K-100 and D factors for County mantained roadways were obtained from Lee County Traffic Count Report.
Note Due to insufficient traffic data in the Lee County Traffic Count Report, the K-100 and D factors for North River Road were obtained from Florida Traffic Online resource.
* The K-100 and D factors for FDOT mantained roadways were obtained from Florida Traffic Online resource.

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TABLES 3A & 4A

5-YEAR LOS ANALYSIS

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TABLE 3A
LEVEL OF SERVICE THRESHOLDS
OWL CREEK

ROADWAY	ROADWAY SEGMENT	# LANES	ROADWAY DESIGNATION	LOS A VOLUME	LOS B VOLUME	LOS C VOLUME	LOS D VOLUME	LOS E VOLUME
N. River Rd	E. of Owl Creek Dr	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640
	W. of Owl Creek Dr	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640
SR 31	N. of N. River Rd.	4LD	Uninterrupted Flow Highway	0	1,800	2,600	3,280	3,730
	S.. of N. River Rd.	4LD	Arterial	0	0	1,910	2,000	2,000
	S.. of SR 78	2LU	Arterial	0	0	830	880	880
SR 78 (Bayshore Rd)	W. of SR 31	2LU	Arterial	0	0	872	924	924
SR 80 (Palm Beach Blvd)	W. of SR 31	6LD	Arterial	0	0	3,087	3,171	3,171
	E. of SR 31	4LD	Arterial	0	0	2,006	2,100	2,100
	E. of Buckingham Rd	4LD	Uninterrupted Flow Highway	0	1,800	2,600	3,280	3,730
Buckingham Rd	S. of SR 31	2LU	Arterial	0	140	800	860	860

- Denotes the LOS Standard for each roadway segment

* Level of Service Thresholds for Lee County arterials/collectors taken from the Generalized Peak Hour Directional Service Volume tables for Urbanized Areas (dated April 2016)
* Level of Service Thresholds for State mantained roadways were taken from FDOT's Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas Table 7.

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TABLE 4A
LEE COUNTY TRAFFIC COUNTS AND CALCULATIONS
OWL CREEK

TOTAL PROJECT TRAFFIC AM =	156	VPH	IN =	39	OUT=	117
TOTAL PROJECT TRAFFIC PM =	204	VPH	IN=	128	OUT=	76

FDOT Sta. #	K	D
120273	0.095	0.521
121001	0.095	0.540
120030	0.090	0.540
121002	0.090	0.540
126005	0.090	0.540
120085	0.090	0.540
120012	0.090	0.540

ROADWAY	ROADWAY SEGMENT	LCDOT PCS OR FDOT SITE #	BASE YR ADT	2018/2019 ADT	YRS OF GROWTH. [1]	ANNUAL RATE	2018/2019 PK HR PK SEASON PEAK DIR.[2]	2025 PK HR PK SEASON PEAK DIRECTION VOLUME	LOS	V/C Ratio	PERCENT PROJECT TRAFFIC	AM PROJ TRAFFIC	PM PROJ TRAFFIC	2025 BCKGRND + AM PROJ VOLUME	LOS	V/C Ratio	2025 BCKGRND + PM PROJ VOLUME	LOS	V/C Ratio
N. River Rd	E. of Owl Creek Dr	348	2,200	2,900	8	3.51%	166	211	B	0.13	5%	6	6	217	B	0.13	218	B	0.13
	W. of Owl Creek Dr	348	2,200	2,900	8	3.51%	166	211	B	0.13	95%	111	122	323	B	0.20	333	B	0.20
SR 31	N. of N. River Rd.	120273	4,937	9,292	15	4.31%	460	592	B	0.23	20%	23	26	616	B	0.24	618	B	0.24
	S.. of N. River Rd.	121001	9,500	11,000	15	2.00%	564	635	C	0.33	75%	88	96	723	C	0.38	731	C	0.38
	S.. of SR 78	120030	9,800	13,500	15	2.16%	656	746	C	0.85	50%	59	64	804	C	0.91	810	C	0.92
SR 78 (Bayshore Rd)	W. of SR 31	121002	7,700	10,600	15	2.15%	515	585	C	0.63	25%	29	32	615	C	0.67	617	C	0.67
SR 80 (Palm Beach Blvd)	W. of SR 31	126005	26,004	35,000	11	2.74%	1,701	2,000	C	0.63	35%	41	45	2,041	C	0.64	2,045	C	0.64
	E. of SR 31	120085	29,500	36,500	15	2.00%	1,774	1,998	C	0.95	10%	12	13	2,009	D	0.96	2,010	D	0.96
	E. of Buckingham Rd	120012	19,200	28,000	15	2.55%	1,361	1,582	B	0.48	3%	4	4	1,586	B	0.48	1,586	B	0.48
Buckingham Rd	S. of SR 31	11	8,400	11,400	9	3.45%	529	671	C	0.78	4%	5	5	676	C	0.79	676	C	0.79

1 AGR for all roadways was calculated based the historical traffic data obtained from Lee County Traffic Count Report and Florida Traffic Online webpage.

2 Current peak hour peak season peak direction traffic volumes for all County roadways were obtained from the 2019 Lee County Public Facilities Level of Service and Concurrency Report

2 Current peak hour peak season peak direction traffic volumes for state mantained roadways were obtained by adjusting the 2019 AADT by the appropriate K and D factors

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TABLES 5A & 6A

REZONING ANALYSIS

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TABLE 5A
LEVEL OF SERVICE THRESHOLDS
OWL CREEK

TOTAL AM PEAK HOUR PROJECT TRAFFIC = 317 VPH IN= 79 OUT= 238

TOTAL PM PEAK HOUR PROJECT TRAFFIC = 421 VPH IN= 265 OUT= 156

ROADWAY	ROADWAY SEGMENT	# LANES	ROADWAY DESIGNATION	LOS A VOLUME	LOS B VOLUME	LOS C VOLUME	LOS D VOLUME	LOS E VOLUME	PERCENT PROJECT TRAFFIC	PROJECT TRAFFIC	PROJ/ LOS C
N. River Rd	E. of Owl Creek Dr	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640	5%	13	1.6%
	W. of Owl Creek Dr	2LU	Uninterrupted Flow Highway	130	420	850	1,210	1,640	95%	252	29.6%
SR 31	N. of N. River Rd.	4LD	Uninterrupted Flow Highway	0	1,800	2,600	3,280	3,730	20%	53	2.0%
	S.. of N. River Rd.	4LD	Arterial	0	0	1,910	2,000	2,000	75%	199	10.4%
	S.. of SR 78	2LU	Arterial	0	0	830	880	880	50%	133	16.0%
SR 78 (Bayshore Rd)	W. of SR 31	2LU	Arterial	0	0	872	924	924	25%	66	7.6%
SR 80 (Palm Beach Blvd)	W. of SR 31	6LD	Arterial	0	0	3,087	3,171	3,171	35%	93	3.0%
	E. of SR 31	4LD	Arterial	0	0	2,006	2,100	2,100	10%	27	1.3%

[ ] - Denotes the LOS Standard for each roadway segment

* Level of Service Thresholds for Lee County arterials/collectors taken from the Generalized Peak Hour Directional Service Volume tables for Urbanized Areas (dated April 2016)
* Level of Service Thresholds for State mantained roadways were taken from FDOT's Generalized Peak Hour Directional Volumes for Florida's Urbanized Areas Table 7.

TABLE 6A
LEE COUNTY TRAFFIC COUNTS AND CALCULATIONS
OWL CREEK

TOTAL PROJECT TRAFFIC AM =	317	VPH	IN =	79	OUT=	238
TOTAL PROJECT TRAFFIC PM =	421	VPH	IN=	265	OUT=	156

FDOT Sta. #	K	D
120273	0.095	0.521
121001	0.095	0.540
120030	0.090	0.540
121002	0.090	0.540
126005	0.090	0.540
120085	0.090	0.540

ROADWAY	ROADWAY SEGMENT	LCDOT PCS OR FDOT SITE #	BASE YR ADT	2018/2019 ADT	YRS OF GROWTH.[1]	ANNUAL RATE	2018/2019 PK HR PK SEASON PEAK DIR.[2]	2025 PK HR PK SEASON PEAK DIRECTION VOLUME	LOS	V/C Ratio	PERCENT PROJECT TRAFFIC	AM PROJ TRAFFIC	PM PROJ TRAFFIC	2025 BCKGRND + AM PROJ VOLUME	LOS	V/C Ratio	2025 BCKGRND + PM PROJ VOLUME	LOS	V/C Ratio
N. River Rd	E. of Owl Creek Dr	348	2,200	2,900	8	3.51%	166	211	B	0.13	5%	12	13	223	B	0.14	225	B	0.14
	W. of Owl Creek Dr	348	2,200	2,900	8	3.51%	166	211	B	0.13	95%	226	252	437	C	0.27	463	C	0.28
SR 31	N. of N. River Rd.	120273	4,937	9,292	15	4.31%	460	592	B	0.23	20%	48	53	640	B	0.25	645	B	0.25
	S.. of N. River Rd.	121001	9,500	11,000	15	2.00%	564	635	C	0.33	75%	179	199	814	C	0.43	834	C	0.44
	S.. of SR 78	120030	9,800	13,500	15	2.16%	656	746	C	0.85	50%	119	133	865	D	0.98	878	D	1.00
SR 78 (Bayshore Rd)	W. of SR 31	121002	7,700	10,600	15	2.15%	515	585	C	0.63	25%	60	66	645	C	0.70	652	C	0.71
SR 80 (Palm Beach Blvd)	W. of SR 31	126005	26,004	35,000	11	2.74%	1,701	2,000	C	0.63	35%	83	93	2,084	C	0.66	2,093	C	0.66
	E. of SR 31	120085	29,500	36,500	15	2.00%	1.774	1,998	C	0.95	10%	24	27	2,021	D	0.96	2,024	D	0.96

1 AGR for all roadways was calculated based the historical traffic data obtained from Lee County Traffic Count Report and Florida Traffic Online webpage.

2 Current peak hour peak season peak direction traffic volumes for all County roadways were obtained from the 2019 Lee County Public Facilities Level of Service and Concurrency Report.

2 Current peak hour peak season peak direction traffic volumes for state mantained roadways were obtained by adjusting the 2019 AADT by the appropriate K and D factors.

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LEE COUNTY GENERALIZED PEAK HOUR DIRECTIONAL SERVICE VOLUMES TABLE

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Lee County
Generalized Peak Hour Directional Service Volumes
Urbanized Areas

April 2016 c:\input5

Uninterrupted Flow Highway
Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	130	420	850	1,210	1,640
2	Divided	1,060	1,810	2,560	3,240	3,590
3	Divided	1,600	2,720	3,840	4,860	5,380

Arterials
Class I (40 mph or higher posted speed limit)
Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	140	800	860	860
2	Divided	*	250	1,840	1,960	1,960
3	Divided	*	400	2,840	2,940	2,940
4	Divided	*	540	3,830	3,940	3,940

Class II (35 mph or slower posted speed limit)
Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	*	330	710	780
2	Divided	*	*	710	1,590	1,660
3	Divided	*	*	1,150	2,450	2,500
4	Divided	*	*	1,580	3,310	3,340

Controlled Access Facilities
Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	160	880	940	940
2	Divided	*	270	1,970	2,100	2,100
3	Divided	*	430	3,050	3,180	3,180

Collectors
Level of Service

Lane	Divided	A	B	C	D	E
1	Undivided	*	*	310	660	740
1	Divided	*	*	330	700	780
2	Undivided	*	*	730	1,440	1,520
2	Divided	*	*	770	1,510	1,600

Note: the service volumes for I-75 (freeway), bicycle mode, pedestrian mode, and bus mode should be from FDOT's most current version of LOS Handbook.

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LEE COUNTY PUBLIC FACILITIES LEVEL OF SERVICE AND CONCURRENCY REPORT

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Table 18: Existing and Future Roadway LOS on County-Maintained Arterials in Unincorporated Areas

ROADWAY LINK				100TH HIGHEST HOUR DIRECTIONAL VOLUMES						
				STANDARD		2018		2023		
NAME	FROM	TO	TYPE	LOS	MAX	LOS	EXISTING	LOS	FUTURE	NOTES
ALABAMA RD	SR 82	MILWAUKEE BLVD	2LN	E	990	C	459	C	482	
	MILWAUKEE BLVD	HOMESTEAD RD	2LN	E	990	C	459	D	482	
ALEXANDER BELL BLVD	SR 82	MILWAUKEE BLVD	2LN	E	990	D	486	D	511	
	MILWAUKEE BLVD	LEELAND HEIGHTS	2LN	E	990	D	486	D	579	Shadow Lakes
ALICO RD	US 41	DUSTY RD	4LD	E	1,980	B	1,043	B	1,096	
	DUSTY RD	LEE RD	6LD	E	2,960	B	1,043	B	1,484	Alico Business Park
	LEE RD	THREE OAKS PKWY	6LD	E	2,960	B	1,043	B	1,209	Three Oaks Regional Center
	THREE OAKS PKWY	I-75	6LD	E	2,960	B	2,345	B	2,465	v/c = 0.79/0.83
	I-75	BEN HILL GRIFFIN BLVD	6LD	E	2,960	B	1,243	B	1,390	
	BEN HILL GRIFFIN BLVD	AIRPORT HAUL RD	2LN/ 4LD	E	1,100/ 1,840	C	366	C	770	4 Ln constr 2018, 2017 count
	AIRPORT HAUL RD	GREEN MEADOW DR	2LN	E	1,100	C	366	C	384	2017 count
	GREEN MEADOW DR	CORKSCREW RD	2LN	E	1,100	B	131	B	224	EEPCO study
BEN HILL GRIFFIN PKWY	ESTERO PKWY	FGCU ENTRANCE	4LD	E	2,000	B	1,224	B	1,287	
	FGCU ENTRANCE	COLLEGE CLUB DR	4LD	E	2,000	B	1,224	B	1,330	
	COLLEGE CLUB DR	ALICO RD	6LD	E	3,000	B	1,101	B	1,193	2017 count
	ALICO RD	TERMINAL ACCESS RD	4LD	E	1,980	A	1,033	A	1,086	2017 count
BUCKINGHAM RD	SR 82	GUNNERY RD	2LN	E	990	D	468	D	492	
	GUNNERY RD	ORANGE RIVER BLVD	2LN	E	990	D	488	D	508	
	ORANGE RIVER BLVD	SR 80	2LN	E	990	D	529	F	1,198	v/c = 0.53/1.21 Buckingham 345 & Portico
COLLEGE PKWY	McGREGOR BLVD	WINKLER RD	6LD	E	2,980	D	2,292	D	2,409	v/c = 0.77/0.81, 2016 count
	WINKLER RD	WHISKEY CREEK DR	6LD	E	2,980	D	2,031	D	2,135	
	WHISKEY CREEK DR	SUMMERLIN RD	6LD	E	2,980	D	2,031	D	2,135	
	SUMMERLIN RD	US 41	6LD	E	2,980	D	1,772	D	1,862	
CORKSCREW RD	BELLA TERRA BLVD	ALICO RD	2LN/ 4LD	E	1,140/ 1,960	B	235	C	628	4L CST FY 22/23, Corkscrew Shores, 2017 count
	ALICO RD	6 L's FARMS RD	2LN	E	1,140	B	246	C	552	The Place, 2017 count
	6 L's FARMS RD	COUNTY LINE	2LN	E	1,140	B	182	C	509	2017 count

Table 18 (cont.): Existing and Future Roadway LOS on County-Maintained Arterials in Unincorporated Areas

ROADWAY LINK				100TH HIGHEST HOUR DIRECTIONAL VOLUMES						
				STANDARD		2018		2023		
NAME	FROM	TO	TYPE	LOS	MAX	LOS	EXISTING	LOS	FUTURE	NOTES
LEELAND HEIGHTS	HOMESTEAD RD	JOEL BLVD	4LN	E	1,800	B	832	B	867	2017 count
LITTLETON RD	CORBETT RD	US 41	2LN	E	860	C	451	C	474	2017 count
	US 41	BUS 41	2LN	E	860	C	417	C	439	2017 count
LUCKETT RD	ORTIZ AVE	I-75	2LN	E	880	B	352	B	427	4 Ln design & ROW
Mc-GREGOR BLVD	SANIBEL T PLAZA	HARBOR DR	4LD	E	1,960	B	1,145	B	1,204	
	HARBOR DR	SUMMERLIN RD	4LD	E	1,960	B	1,192	B	1,253	2017 count
	SUMMERLIN RD	KELLY RD	4LD	E	1,960	A	980	B	1,030	
	KELLY RD	GLADIOLUS DR	4LD	E	1,960	A	980	B	1,030	
N RIVER RD	SR 31	FRANKLIN LOCK RD	2LN	E	1,140	A	166	B	285	2017 count
	FRANKLIN LOCK RD	BROADWAY RD	2LN	E	1,140	A	80	B	225	2017 count
	BROADWAY RD	COUNTY LINE	2LN	E	1,140	A	80	A	113	2017 count
ORANGE RIVER BLVD	SR 80	STALEY RD	2LN	E	1,000	C	418	C	440	
	STALEY RD	BUCKINGHAM RD	2LN	E	1,000	C	418	C	452	
ORTIZ AVE	SR 82	LUCKETT RD	2LN	E	900	B	787	C	828	v/c = 0.87/0.92 4 Ln design & ROW
	LUCKETT RD	SR 80	2LN	E	900	B	364	B	383	4 Ln design & ROW
PINE ISLAND RD	STRINGFELLOW RD	BURNT STORE RD	2LN	E	950	E	609	E	659	Constrained
PONDELLA RD	SR 78	ORANGE GROVE BLVD	4LD	E	1,890	B	840	B	883	2017 count
	ORANGE GROVE BLVD	US 41	4LD	E	1,890	B	1,331	B	1,399	
	US 41	BUS 41	4LD	E	1,890	B	1,018	B	1,070	2017 count
SANIBEL CAUSEWAY	SANIBEL SHORELINE	TOLL PLAZA	2LN	E	1,140	E	979	E	1,029	v/c = 0.86/0.90, 2017 count
SIX MILE CYPRESS	METRO PKWY	DANIELS PKWY	4LD	E	2,000	B	1,461	B	1,536	
	DANIELS PKWY	WINKLER EXT.	4LD	E	1,900	B	1,134	B	1,337	
SLATER RD	SR 78	NALLE GRADE RD	2LN	E	1,010	C	388	C	407	2017 count
STRING-FELLOW RD	1ST AVE	BERKSHIRE RD	2LN	E	1,060	B	315	D	672	Constrained
	BERKSHIRE RD	PINE ISLAND RD	2LN	E	1,060	B	315	C	448	Constrained
	PINE ISLAND RD	PINELAND RD	2LN	E	1,060	C	602	C	703	Constrained
	PINELAND RD	MAIN ST	2LN	E	1,060	C	602	C	699	
SUM-MERLIN RD	McGREGOR BLVD	KELLY COVE RD	4LD	E	1,980	A	1,243	A	1,306	
	KELLY COVE RD	SAN CARLOS BLVD	4LD	E	1,980	A	1,243	A	1,306	
	SAN CARLOS BLVD	PINE RIDGE RD	6LD	E	3,000	A	1,964	A	2,194	
	PINE RIDGE RD	BASS RD	6LD	E	3,000	A	1,964	A	2,064	
	BASS RD	GLADIOLUS DR	6LD	E	3,000	A	1,964	A	2,064	
	GLADIOLUS DR	CYPRESS LAKE DR	4LD	E	1,900	B	1,454	B	1,555	
	CYPRESS LAKE DR	COLLEGE PKWY	6LD	E	2,880	B	1,780	B	1,871	
	COLLEGE PKWY	PARK MEADOW DR	6LD	E	2,880	B	1,908	B	2,005	
	PARK MEADOW DR	BOY SCOUT	6LD	E	2,880	B	1,908	B	2,005	

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FDOT GENERALIZED PEAK HOUR DIRECTIONAL VOLUMES

TABLE 7

TABLE 7

Generalized **Peak Hour Directional** Volumes for Florida's Urbanized Areas

January 2020

INTERRUPTED FLOW FACILITIES

STATE SIGNALIZED ARTERIALS

Class I (40 mph or higher posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	830	880	**
2	Divided	*	1,910	2,000	**
3	Divided	*	2,940	3,020	**
4	Divided	*	3,970	4,040	**

Class II (35 mph or slower posted speed limit)

Lanes	Median	B	C	D	E
1	Undivided	*	370	750	800
2	Divided	*	730	1,630	1,700
3	Divided	*	1,170	2,520	2,560
4	Divided	*	1,610	3,390	3,420

Non-State Signalized Roadway Adjustments

(Alter corresponding state volumes by the indicated percent.)

Non-State Signalized Roadways - 10%

Median & Turn Lane Adjustments

Lanes	Median	Exclusive Left Lanes	Exclusive Right Lanes	Adjustment Factors
1	Divided	Yes	No	+5%
1	Undivided	No	No	-20%
Multi	Undivided	Yes	No	-5%
Multi	Undivided	No	No	-25%
–	–	–	Yes	+ 5%

One-Way Facility Adjustment

Multiply the corresponding directional volumes in this table by 1.2

BICYCLE MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Paved Shoulder/Bicycle Lane Coverage	B	C	D	E
0-49%	*	150	390	1,000
50-84%	110	340	1,000	>1,000
85-100%	470	1,000	>1,000	**

PEDESTRIAN MODE[2]

(Multiply vehicle volumes shown below by number of directional roadway lanes to determine two-way maximum service volumes.)

Sidewalk Coverage	B	C	D	E
0-49%	*	*	140	480
50-84%	*	80	440	800
85-100%	200	540	880	>1,000

BUS MODE (Scheduled Fixed Route)[3]

(Buses in peak hour in peak direction)

Sidewalk Coverage	B	C	D	E
0-84%	> 5	≥ 4	≥ 3	≥ 2
85-100%	> 4	≥ 3	≥ 2	≥ 1

UNINTERRUPTED FLOW FACILITIES

FREEWAYS

Core Urbanized

Lanes	B	C	D	E
2	2,230	3,100	3,740	4,080
3	3,280	4,570	5,620	6,130
4	4,310	6,030	7,490	8,170
5	5,390	7,430	9,370	10,220
6	6,380	8,990	11,510	12,760

Urbanized

Lanes	B	C	D	E
2	2,270	3,100	3,890	4,230
3	3,410	4,650	5,780	6,340
4	4,550	6,200	7,680	8,460
5	5,690	7,760	9,520	10,570

Freeway Adjustments

Auxiliary Lane	Ramp Metering
+ 1,000	+ 5%

UNINTERRUPTED FLOW HIGHWAYS

Lanes	Median	B	C	D	E
1	Undivided	580	890	1,200	1,610
2	Divided	1,800	2,600	3,280	3,730
3	Divided	2,700	3,900	4,920	5,600

Uninterrupted Flow Highway Adjustments

Lanes	Median	Exclusive left lanes	Adjustment factors
1	Divided	Yes	+5%
Multi	Undivided	Yes	-5%
Multi	Undivided	No	-25%

[1]Values shown are presented as peak hour directional volumes for levels of service and are for the automobile/truck modes unless specifically stated. This table does not constitute a standard and should be used only for general planning applications. The computer models from which this table is derived should be used for more specific planning applications. The table and deriving computer models should not be used for corridor or intersection design, where more refined techniques exist. Calculations are based on planning applications of the HCM and the Transit Capacity and Quality of Service Manual.

[2]Level of service for the bicycle and pedestrian modes in this table is based on number of vehicles, not number of bicyclists or pedestrians using the facility.

[3]Buses per hour shown are only for the peak hour in the single direction of the higher traffic flow.

* Cannot be achieved using table input value defaults.

** Not applicable for that level of service letter grade. For the automobile mode, volumes greater than level of service D become F because intersection capacities have been reached. For the bicycle mode, the level of service letter grade (including F) is not achievable because there is no maximum vehicle volume threshold using table input value defaults.

Source:
Florida Department of Transportation
Systems Implementation Office
https://www.fdot.gov/planning/systems/

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TRAFFIC DATA

FDOT FLORIDA TRAFFIC ONLINE

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

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COUNTY: 12 - LEE

SITE: 4650 - NORTH RIVER ROAD, EAST OF S.R. 31

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	3400 F	E 1700	W 1700	9.50	54.90	12.50
2018	3200 C	E 1600	W 1600	9.50	55.20	12.50
2017	3200 T	E 1600	W 1600	9.50	54.90	12.20
2016	3000 S	E 1500	W 1500	9.50	54.80	15.00
2015	2800 F	E 1400	W 1400	9.50	55.50	15.00
2014	2600 C	E 1300	W 1300	9.50	55.20	15.00
2013	1000 S	0	0	9.50	55.00	12.20
2012	1000 F	0	0	9.50	55.30	11.50
2011	1000 C	E 0	W 0	9.50	55.20	11.70

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0273 - SR-31,202' NORTH OF FOXHILL ROAD,LEE CO.

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	9292 C	N 4645	S 4647	9.50	52.10	25.30
2018	7959 C	N 4032	S 3927	9.50	54.10	26.90
2017	7337 C	N 3712	S 3625	9.50	53.40	28.20
2016	6620 C	N 3338	S 3282	9.50	53.90	26.60
2015	5216 C	N 2618	S 2598	9.50	55.60	28.00
2014	4653 C	N 2325	S 2328	9.50	55.60	27.00
2013	4195 C	N 2099	S 2096	9.50	55.90	29.00
2012	4217 C	N 2149	S 2068	9.50	56.40	26.90
2011	4126 C	N 2094	S 2032	9.50	55.10	25.60
2010	4034 C	N 2041	S 1993	9.79	54.46	26.00
2009	3964 C	N 1994	S 1970	9.81	52.26	25.10
2008	4232 C	N 2124	S 2108	9.88	55.53	23.50
2007	6039 C	N 3027	S 3012	10.95	51.84	43.50
2006	5719 C	N 2850	S 2869	10.95	51.84	43.50
2005	5532 C	N 2773	S 2759	10.30	51.10	43.80
2004	4937 C	N 2483	S 2454	9.50	53.00	34.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 1001 - SR 31, SOUTH OF CR 78/NORTH RIVER ROAD (LC393)

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	11000 C	N 5500	S 5500	9.50	54.00	25.30
2018	9400 C	N 4700	S 4700	9.50	55.20	26.90
2017	8800 C	N 4500	S 4300	9.50	54.40	20.20
2016	8600 F	N 4200	S 4400	9.50	57.70	20.20
2015	7800 C	N 3800	S 4000	9.50	57.50	20.20
2014	7200 F	N 3600	S 3600	9.50	56.80	20.50
2013	7000 C	N 3500	S 3500	9.50	56.50	20.50
2012	7500 C	N 3800	S 3700	9.50	54.20	22.60
2011	7300 F	N 3700	S 3600	9.50	56.20	17.60
2010	7300 C	N 3700	S 3600	9.91	56.34	17.60
2009	7100 C	N 3600	S 3500	9.98	55.90	19.70
2008	7700 C	N 3900	S 3800	10.16	57.01	23.50
2007	9200 C	N 4600	S 4600	10.16	54.76	32.60
2006	11100 C	N 5500	S 5600	8.81	55.95	43.90
2005	10400 C	N 5200	S 5200	9.60	53.80	33.40
2004	9500 C	N 4900	S 4600	10.00	55.10	33.40

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0030 - SR 31, NORTH OF SR 80/PALM BEACH BOULEVARD LC391

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	13500 C	N 6600	S 6900	9.00	54.00	20.80
2018	11500 C	N 5600	S 5900	9.00	55.20	18.60
2017	11200 C	N 5500	S 5700	9.00	54.40	19.00
2016	11100 F	N 5500	S 5600	9.00	57.70	12.50
2015	10100 C	N 5000	S 5100	9.00	57.50	12.50
2014	8700 F	N 4300	S 4400	9.00	56.80	14.90
2013	8500 C	N 4200	S 4300	9.00	56.50	14.90
2012	8700 C	N 4400	S 4300	9.00	54.20	13.80
2011	8500 F	N 4200	S 4300	9.00	56.20	13.70
2010	8500 C	N 4200	S 4300	9.91	56.34	13.70
2009	7800 C	N 3800	S 4000	9.98	55.90	13.40
2008	8500 C	N 4200	S 4300	10.16	57.01	12.80
2007	8700 C	N 4300	S 4400	10.16	54.76	10.80
2006	12500 C	N 6100	S 6400	10.23	54.38	33.20
2005	10500 C	N 5200	S 5300	10.30	54.10	23.30
2004	9800 C	N 4800	S 5000	9.90	54.30	23.30

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 1002 - SR 78/BAYSHORE ROAD, SOUTHWEST OF SR 31

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	10600 C	E 5500	W 5100	9.00	54.00	22.00
2018	9600 C	E 5000	W 4600	9.00	55.20	21.60
2017	9200 C	E 4600	W 4600	9.00	54.40	13.00
2016	8600 F	E 4300	W 4300	9.00	57.70	13.00
2015	7800 C	E 3900	W 3900	9.00	57.50	13.00
2014	7300 F	E 3700	W 3600	9.00	56.80	14.00
2013	7100 C	E 3600	W 3500	9.00	56.50	14.00
2012	7500 C	E 3800	W 3700	9.00	54.20	16.40
2011	6800 F	E 3500	W 3300	9.00	56.20	14.90
2010	6800 C	E 3500	W 3300	9.91	56.34	14.90
2009	6900 C	E 3500	W 3400	9.98	55.90	17.00
2008	7500 C	E 3800	W 3700	10.16	57.01	19.30
2007	8400 C	E 4300	W 4100	10.16	54.76	23.30
2006	8400 C	E 4300	W 4100	10.23	54.38	21.60
2005	8600 C	E 4400	W 4200	10.30	54.10	25.10
2004	7700 C	E 4000	W 3700	9.90	54.30	25.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
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V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 6005 - SR 80/PALM BEACH BLVD, 0.25 MI W OF SR 31. PTMS 104, LCPR 05

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	35000 F	0	0	9.00	54.00	12.30
2018	35091 C	0	0	9.00	64.90	12.60
2017	34000 F	0	0	9.00	64.90	11.10
2016	32970 C	E 16326	W 16644	9.00	64.90	10.40
2015	30167 C	E 14945	W 15222	9.00	63.20	11.00
2014	27785 C	E 13885	W 13900	9.00	62.60	5.90
2013	26228 C	E 12981	W 13247	9.00	61.80	9.50
2012	25563 C	E 12791	W 12772	9.00	61.60	10.80
2011	26888 C	E 13397	W 13491	9.00	61.60	12.40
2010	26743 C	E 13334	W 13409	9.89	61.01	8.90
2009	25939 C	E 12914	W 13025	9.90	62.73	9.60
2008	26004 C	E 12909	W 13095	10.24	63.18	9.20

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0085 - SR 80/PALM BEACH BLVD, EAST OF SR 31 LC360

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	36500 C	E 18000	W 18500	9.00	54.00	9.00
2018	33500 C	E 16500	W 17000	9.00	55.20	9.30
2017	33500 C	E 16500	W 17000	9.00	54.40	8.50
2016	35000 C	E 17500	W 17500	9.00	57.70	8.20
2015	32000 C	E 16000	W 16000	9.00	57.50	9.00
2014	29500 S	E 15000	W 14500	9.00	56.80	9.20
2013	28500 F	E 14500	W 14000	9.00	56.50	9.20
2012	28500 C	E 14500	W 14000	9.00	54.20	9.20
2011	29500 F	E 14500	W 15000	9.00	56.20	9.40
2010	29500 C	E 14500	W 15000	9.91	56.34	9.40
2009	29500 C	E 14500	W 15000	9.98	55.90	9.50
2008	30000 C	E 15000	W 15000	10.16	57.01	8.10
2007	34000 C	E 17000	W 17000	10.16	54.76	8.50
2006	36000 C	E 18000	W 18000	10.23	54.38	11.00
2005	31500 C	E 15500	W 16000	10.30	54.10	12.10
2004	29500 C	E 14500	W 15000	9.90	54.30	12.10

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

FLORIDA DEPARTMENT OF TRANSPORTATION
TRANSPORTATION STATISTICS OFFICE
2019 HISTORICAL AADT REPORT

COUNTY: 12 - LEE

SITE: 0012 - SR 80, EAST OF OLD OLGA ROAD/BUCKINGHAM ROAD LC362

YEAR	AADT	DIRECTION 1	DIRECTION 2	*K FACTOR	D FACTOR	T FACTOR
2019	28000 C	E 14000	W 14000	9.00	54.00	12.40
2018	26000 C	E 13000	W 13000	9.00	55.20	12.40
2017	24000 C	E 12000	W 12000	9.00	54.40	11.80
2016	23500 C	E 11500	W 12000	9.00	57.70	10.30
2015	21000 C	E 10500	W 10500	9.00	57.50	10.20
2014	18200 S	E 9100	W 9100	9.00	56.80	12.00
2013	17800 F	E 8900	W 8900	9.00	56.50	12.00
2012	17800 C	E 8900	W 8900	9.00	54.20	12.00
2011	21000 F	E 10500	W 10500	9.00	56.20	12.50
2010	21000 C	E 10500	W 10500	9.91	56.34	12.50
2009	21000 C	E 10500	W 10500	9.98	55.90	13.70
2008	21000 C	E 10500	W 10500	10.16	57.01	11.20
2007	23000 C	E 11500	W 11500	10.16	54.76	15.60
2006	21000 C	E 10500	W 10500	10.23	54.38	14.00
2005	21500 C	E 10500	W 11000	10.30	54.10	14.00
2004	19200 C	E 9500	W 9700	9.90	54.30	14.00

AADT FLAGS: C = COMPUTED; E = MANUAL ESTIMATE; F = FIRST YEAR ESTIMATE
S = SECOND YEAR ESTIMATE; T = THIRD YEAR ESTIMATE; R = FOURTH YEAR ESTIMATE
V = FIFTH YEAR ESTIMATE; 6 = SIXTH YEAR ESTIMATE; X = UNKNOWN
*K FACTOR: STARTING WITH YEAR 2011 IS STANDARDK, PRIOR YEARS ARE K30 VALUES

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 1203 SR80, 31 & 78 E OF I-75

MOCF: 0.94

WEEK	DATES	SF	PSCF
1	01/01/2019 - 01/05/2019	0.96	1.02
2	01/06/2019 - 01/12/2019	0.98	1.04
3	01/13/2019 - 01/19/2019	1.01	1.07
4	01/20/2019 - 01/26/2019	0.99	1.05
* 5	01/27/2019 - 02/02/2019	0.97	1.03
* 6	02/03/2019 - 02/09/2019	0.95	1.01
* 7	02/10/2019 - 02/16/2019	0.94	1.00
* 8	02/17/2019 - 02/23/2019	0.93	0.99
* 9	02/24/2019 - 03/02/2019	0.92	0.98
*10	03/03/2019 - 03/09/2019	0.92	0.98
*11	03/10/2019 - 03/16/2019	0.91	0.97
*12	03/17/2019 - 03/23/2019	0.92	0.98
*13	03/24/2019 - 03/30/2019	0.93	0.99
*14	03/31/2019 - 04/06/2019	0.94	1.00
*15	04/07/2019 - 04/13/2019	0.95	1.01
*16	04/14/2019 - 04/20/2019	0.97	1.03
*17	04/21/2019 - 04/27/2019	0.98	1.04
18	04/28/2019 - 05/04/2019	0.99	1.05
19	05/05/2019 - 05/11/2019	1.00	1.06
20	05/12/2019 - 05/18/2019	1.02	1.09
21	05/19/2019 - 05/25/2019	1.03	1.10
22	05/26/2019 - 06/01/2019	1.05	1.12
23	06/02/2019 - 06/08/2019	1.07	1.14
24	06/09/2019 - 06/15/2019	1.09	1.16
25	06/16/2019 - 06/22/2019	1.09	1.16
26	06/23/2019 - 06/29/2019	1.09	1.16
27	06/30/2019 - 07/06/2019	1.09	1.16
28	07/07/2019 - 07/13/2019	1.10	1.17
29	07/14/2019 - 07/20/2019	1.10	1.17
30	07/21/2019 - 07/27/2019	1.09	1.16
31	07/28/2019 - 08/03/2019	1.08	1.15
32	08/04/2019 - 08/10/2019	1.07	1.14
33	08/11/2019 - 08/17/2019	1.06	1.13
34	08/18/2019 - 08/24/2019	1.06	1.13
35	08/25/2019 - 08/31/2019	1.06	1.13
36	09/01/2019 - 09/07/2019	1.06	1.13
37	09/08/2019 - 09/14/2019	1.06	1.13
38	09/15/2019 - 09/21/2019	1.07	1.14
39	09/22/2019 - 09/28/2019	1.05	1.12
40	09/29/2019 - 10/05/2019	1.04	1.11
41	10/06/2019 - 10/12/2019	1.03	1.10
42	10/13/2019 - 10/19/2019	1.02	1.09
43	10/20/2019 - 10/26/2019	1.00	1.06
44	10/27/2019 - 11/02/2019	0.99	1.05
45	11/03/2019 - 11/09/2019	0.98	1.04
46	11/10/2019 - 11/16/2019	0.97	1.03
47	11/17/2019 - 11/23/2019	0.96	1.02
48	11/24/2019 - 11/30/2019	0.96	1.02
49	12/01/2019 - 12/07/2019	0.96	1.02
50	12/08/2019 - 12/14/2019	0.96	1.02
51	12/15/2019 - 12/21/2019	0.96	1.02
52	12/22/2019 - 12/28/2019	0.98	1.04
53	12/29/2019 - 12/31/2019	1.01	1.07

* PEAK SEASON

2019 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
CATEGORY: 1200 LEE COUNTYWIDE

MOCF: 0.93

WEEK	DATES	SF	PSCF
1	01/01/2019 - 01/05/2019	0.97	1.04
2	01/06/2019 - 01/12/2019	0.97	1.04
3	01/13/2019 - 01/19/2019	0.98	1.05
* 4	01/20/2019 - 01/26/2019	0.96	1.03
* 5	01/27/2019 - 02/02/2019	0.95	1.02
* 6	02/03/2019 - 02/09/2019	0.94	1.01
* 7	02/10/2019 - 02/16/2019	0.92	0.99
* 8	02/17/2019 - 02/23/2019	0.92	0.99
* 9	02/24/2019 - 03/02/2019	0.92	0.99
*10	03/03/2019 - 03/09/2019	0.91	0.98
*11	03/10/2019 - 03/16/2019	0.91	0.98
*12	03/17/2019 - 03/23/2019	0.92	0.99
*13	03/24/2019 - 03/30/2019	0.93	1.00
*14	03/31/2019 - 04/06/2019	0.94	1.01
*15	04/07/2019 - 04/13/2019	0.94	1.01
*16	04/14/2019 - 04/20/2019	0.95	1.02
17	04/21/2019 - 04/27/2019	0.97	1.04
18	04/28/2019 - 05/04/2019	0.99	1.06
19	05/05/2019 - 05/11/2019	1.00	1.08
20	05/12/2019 - 05/18/2019	1.02	1.10
21	05/19/2019 - 05/25/2019	1.04	1.12
22	05/26/2019 - 06/01/2019	1.06	1.14
23	06/02/2019 - 06/08/2019	1.07	1.15
24	06/09/2019 - 06/15/2019	1.09	1.17
25	06/16/2019 - 06/22/2019	1.10	1.18
26	06/23/2019 - 06/29/2019	1.10	1.18
27	06/30/2019 - 07/06/2019	1.11	1.19
28	07/07/2019 - 07/13/2019	1.11	1.19
29	07/14/2019 - 07/20/2019	1.12	1.20
30	07/21/2019 - 07/27/2019	1.10	1.18
31	07/28/2019 - 08/03/2019	1.09	1.17
32	08/04/2019 - 08/10/2019	1.07	1.15
33	08/11/2019 - 08/17/2019	1.06	1.14
34	08/18/2019 - 08/24/2019	1.06	1.14
35	08/25/2019 - 08/31/2019	1.07	1.15
36	09/01/2019 - 09/07/2019	1.07	1.15
37	09/08/2019 - 09/14/2019	1.07	1.15
38	09/15/2019 - 09/21/2019	1.08	1.16
39	09/22/2019 - 09/28/2019	1.06	1.14
40	09/29/2019 - 10/05/2019	1.05	1.13
41	10/06/2019 - 10/12/2019	1.03	1.11
42	10/13/2019 - 10/19/2019	1.02	1.10
43	10/20/2019 - 10/26/2019	1.01	1.09
44	10/27/2019 - 11/02/2019	1.00	1.08
45	11/03/2019 - 11/09/2019	0.99	1.06
46	11/10/2019 - 11/16/2019	0.98	1.05
47	11/17/2019 - 11/23/2019	0.97	1.04
48	11/24/2019 - 11/30/2019	0.97	1.04
49	12/01/2019 - 12/07/2019	0.97	1.04
50	12/08/2019 - 12/14/2019	0.97	1.04
51	12/15/2019 - 12/21/2019	0.97	1.04
52	12/22/2019 - 12/28/2019	0.97	1.04
53	12/29/2019 - 12/31/2019	0.98	1.05

* PEAK SEASON

RECEIVED
SEP 21 2020
COMMUNITY DEVELOPMENT

TRAFFIC DATA FROM LEE COUNTY TRAFFIC COUNT REPORT

Updated 3/13/20			Daily Traffic Volume (AADT)									
STREET	LOCATION	Sta-tion #	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
BRANTLEY RD	W OF US 41	230	2700									
BROADWAY (ESTERO)	W OF US 41	463	5300	3500		5200		5700		6200		6300
BROADWAY RD	S OF ALVA BRIDGE	231										6100
BUCKINGHAM RD	S OF PALM BEACH BLVD	11	8400	8400	8900	8800	9000	9300	9800	9800	10400	11400
BUCKINGHAM RD	S OF CEMETERY RD	227					10600		9800		9600	
BUCKINGHAM RD	E OF ALVIN AVE	232	5700				7000		8600		9200	
BURNT STORE RD	N OF PINE ISLAND RD	233	11700	11100		12600	12600	13600	14800	15300	15100	19100
BURNT STORE RD	S OF CHARLOTTE CO. LINE	12	5600	5300	5000	5200	6300	7000	7700	8000	8300	8800
BUSINESS 41 (SR 739)	N OF EDISON BRIDGE	41	26100	25500	24800	25100	27200	28000				35600
BUSINESS 41 (SR 739)	S OF PINE ISLAND RD	77						22000	25500			
BUSINESS 41 (SR 739)	N OF PONDELLA RD	397										
BUSINESS 41 (SR 739)	N OF POWELL DR	394										
BUSINESS 41 (SR 739)	N OF LITTLETON RD	76						11500	12800	13200		
BUSINESS 41 (SR 739)	N OF LAUREL DR	396										
CAPE CORAL PKWY	E OF SKYLINE BLVD	13	26200	26700	25000	26400	27700	28800	29700	28200	29600	30400
CAPE CORAL BRIDGE	W OF BRIDGE	234	39700			45600	51600					
CAPE CORAL BRIDGE	AT TOLL PLAZA	122						44000	42600	42000	43100	47800

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SEP 21 2020
COMMUNITY DEVELOPMENT

Updated 3/13/20			Daily Traffic Volume (AADT)									
STREET	LOCATION	Sta-tion #	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
NALLE RD	N OF BAYSHORE RD	344		2100		2600		2500		2500		2300
NEAL RD	S OF ORANGE RIVER BLVD	485	1800			2000						
NORTH RIVER RD	E OF SR 31	348	1400	2200		2700		2900		3100		2900
NORTH RIVER RD	W OF PARKINSON RD	346				1300						
NORTH RIVER RD	W OF HENDRY CO LINE	347	1600	1400		1400		1500		1500		2000
OLD 41 RD	N OF COLLIER CO LINE	16	11500	11700	11500	12000	13000	13700	13600	14000	14700	14900
ORANGE RIVER BLVD	S OF PALM BEACH BLVD	353	8000	7700	8000	7300	5800	8100	8400	8600	8800	9700
ORANGE RIVER BLVD	E OF STALEY RD	352	7300									
ORIOLE RD	S OF ALICO RD	462	2000									

Year 2019 K-100 Factors, D-Factors and Peak Season Factors

Station #	K-100	D-Factors	P.S Factors
1	0.090	0.62	1.067
2	0.091	0.54	1.083
3	0.099	0.52	1.187
5	0.093	0.62	1.100
6*	0.086	0.56	1.047
7	0.115	0.53	1.323
8	0.084	0.51	1.143
9*	0.086	0.51	1.057
10*	0.096	0.51	1.080
11	0.089	0.53	1.043
12	0.088	0.60	1.147
13	0.087	0.59	1.097
14	0.085	0.60	1.043
15*	0.098	0.55	1.157
16	0.102	0.63	1.143
17	0.106*	0.63	1.063
18	0.091	0.58	1.093
19*	0.102	0.55	1.240
20	0.097	0.59	1.060
21*	0.083	0.61	1.037
22	0.085	0.62	1.067
23	0.103*	0.58	1.177
25	0.095	0.58	1.097
27	0.127	0.54	1.343
28	0.081	0.56	1.067*
29	0.082	0.52	1.093
30	0.092	0.51	1.090
31	0.088	0.54	1.090
34	0.098	0.54	1.090
35	0.104	0.56	1.100
36*	0.100	0.57	1.187
37*	0.088	0.60	1.130
38	0.101*	0.60	1.163
39	0.100	0.53	1.107
40	0.090	0.52	1.023
42	0.094	0.56	1.180
43	0.090	0.61	1.100*
44*	0.085	0.51	1.083
45	0.106	0.57	1.067

Station #	K-100	D-Factors	P.S Factors
46	0.088	0.52	1.177
47	0.098	0.56	1.123
48	0.101	0.57	1.097
49	0.086	0.53	1.073
50	0.083	0.61	1.050
51*	0.082	0.71	1.107
52	0.090	0.55	1.057
53	0.099	0.52	1.260
54*	0.095	0.51	1.163
55	0.088	0.53	1.093
57*	0.100	0.52	1.130
59	0.103	0.51	1.330
60*	0.132	0.57	1.543
61	0.095	0.59	1.230
62	0.107	0.60	1.157
63	0.123	0.55	1.210
64	0.104	0.54	1.090
66	0.101	0.54	1.120
68	0.095	0.60	1.030
69	0.090	0.55	1.057
70	0.105	0.56	1.213
71*	0.105	0.53	1.150
72	0.105	0.60	1.253
73*	0.097	0.56	1.143
74	0.105*	0.60	1.037
76*	0.097	0.55	1.130
81*	0.100	0.56	1.133
82*	0.100	0.54	1.073
84*	0.094	0.51	1.107
89*	0.098	0.60	1.030
92	0.103	0.57	1.090
93	0.101	0.60	1.063
96	0.109	0.54	1.093
97*	0.086	0.52	1.030
98*	0.088	0.58	1.117
103*	0.092	0.52	1.177
104	0.101	0.52	1.103
108	0.093	0.52	1.040
120	0.099	0.64	1.267
121	0.095*	0.64	1.053
122*	0.096	0.67	1.070

* Previous Year Data

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SEP 21 2020
COMMUNITY DEVELOPMENT

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COMMUNITY DEVELOPMENT

TRAFFIC DATA FROM LEE COUNTY TRANSPORTATION DATA MANAGEMENT SYSTEM

Location Info	
Location ID	348
Type	I-SECTION
Functional Class	-
Located On	N River Rd
Between	AND
Direction	2-WAY
Community	-
MPO_ID	
HPMS ID	
Agency	Lee County

Count Data Info	
Start Date	2/13/2019
End Date	2/14/2019
Start Time	12:00 AM
End Time	12:00 AM
Direction	
Notes	lee
Count Source	348
File Name	qrtlyD021319.348.PRN
Weather	
Study	
Owner	LeeAuto
QC Status	Accepted

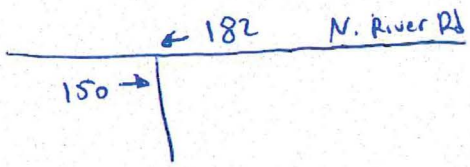
FDOT # 124650

* Using D-factor of 0.549

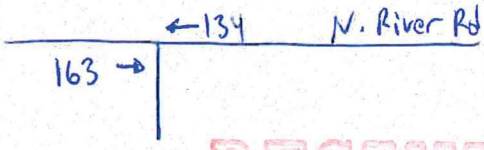
Interval: 15 mins

Time	15 Min 1st	15 Min 2nd	15 Min 3rd	15 Min 4th	Hourly Count
00:00 - 01:00	3	3	3	0	9
01:00 - 02:00	1	1	4	0	6
02:00 - 03:00	2	5	3	2	12
03:00 - 04:00	4	1	0	0	5
04:00 - 05:00	0	3	2	3	8
05:00 - 06:00	4	9	17	28	58
06:00 - 07:00	34	41	79	65	219
07:00 - 08:00	81	96	81	74	332
08:00 - 09:00	58	52	47	50	207
09:00 - 10:00	46	40	47	40	173
10:00 - 11:00	48	46	51	44	189
11:00 - 12:00	37	35	53	51	176
12:00 - 13:00	50	60	49	34	193
13:00 - 14:00	53	50	48	44	195
14:00 - 15:00	55	61	45	58	219
15:00 - 16:00	57	52	75	68	252
16:00 - 17:00	61	80	53	60	254
17:00 - 18:00	74	68	91	64	297
18:00 - 19:00	54	55	39	38	186
19:00 - 20:00	26	20	29	24	99
20:00 - 21:00	21	19	22	20	82
21:00 - 22:00	14	18	9	15	56
22:00 - 23:00	4	9	4	1	18
23:00 - 24:00	4	5	6	2	17
TOTAL					3262

AM Pk Hr



PM Pk Hr



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2040 E+C NETWORK VOLUMES

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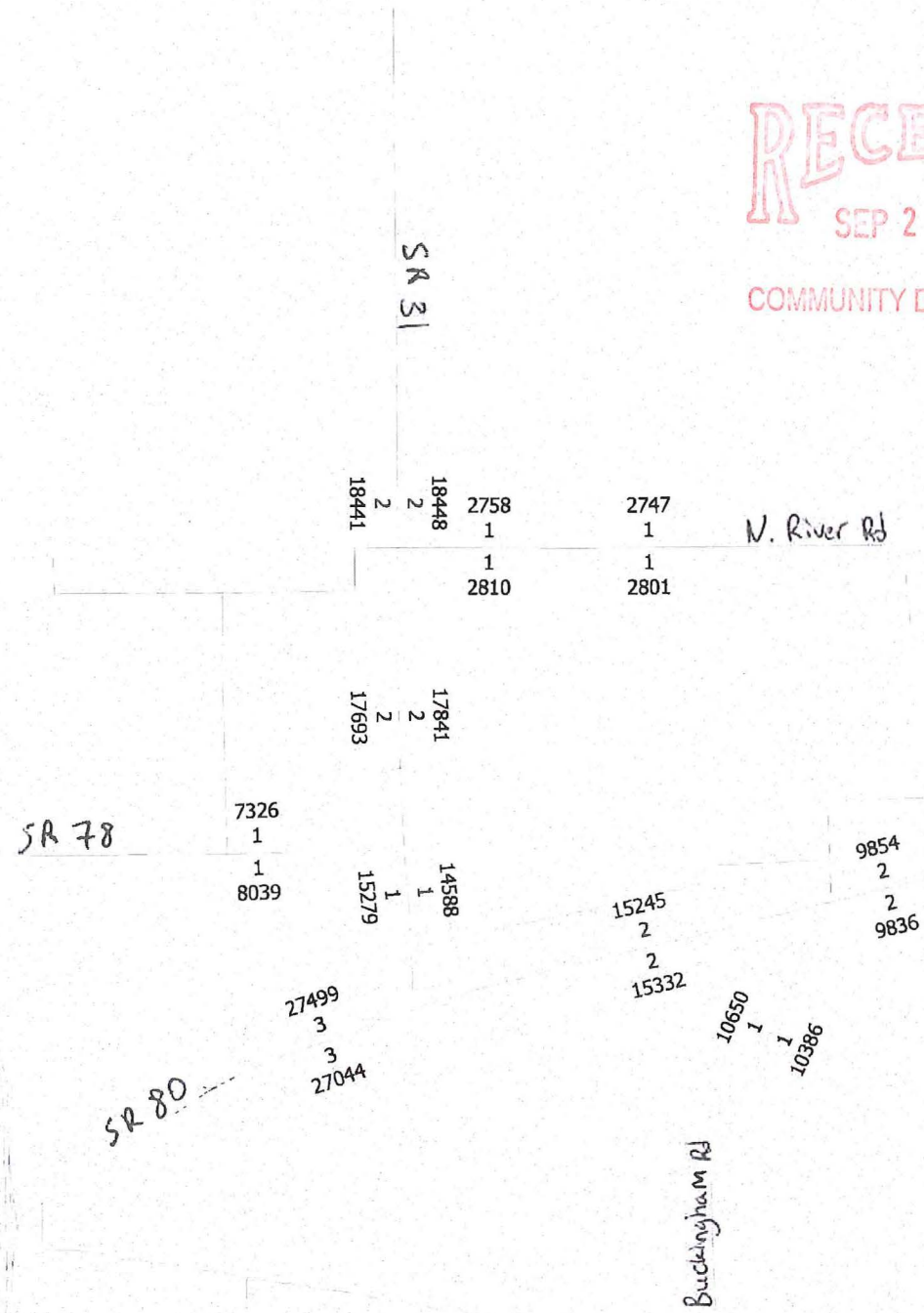

2040 LRTP COST FEASIBLE ROADWAY NETWORK LANES AND VOLUMES

cube (Licensed to TR Transportation Consultants Inc)

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LEE COUNTY MPO 2040 COST FEASIBLE HIGHWAY PLAN

LEE COUNTY 2040 HIGHWAY COST FEASIBLE PLAN

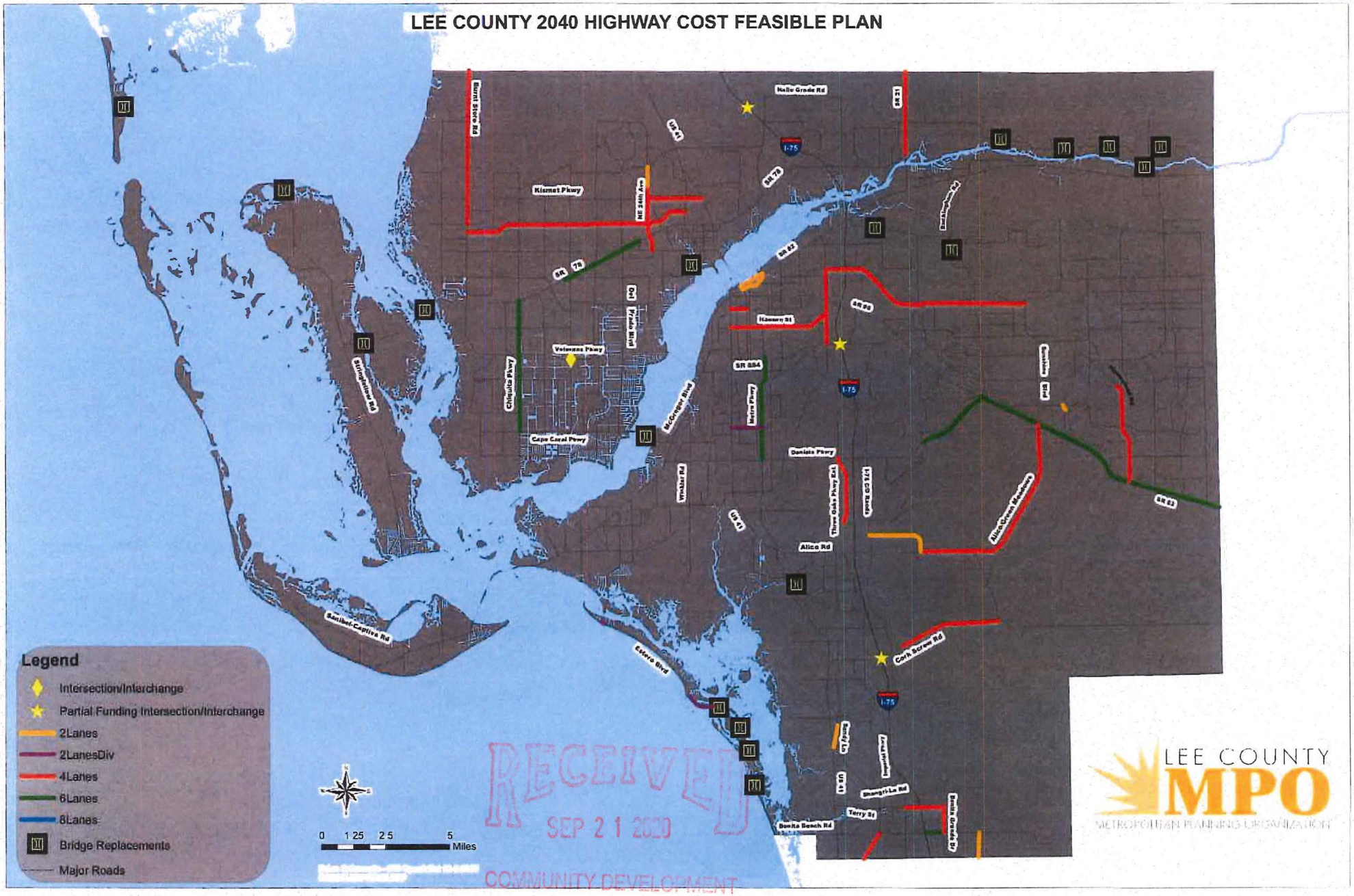

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Table 6-2: Cost Feasible Projects: Road Projects - State/Other Arterial/SU

(in $1,000)

Road Name	From	To	Improvement	Phase	2021-2025	2026-2030	2031-2040	Total Cost (YOE)	Total Cost (PDC)
Countywide Signal System Updates,			ITS	CST	$10,160	$0	$0	$10,160	$8,000
Metro Parkway	Daniels Parkway	south of Winkler Avenue	Widen 4L to 6L	CST	$0	$67,370	$0	$67,370	$44,920
Big Carlos Bridge Replacement			Reconstruct Bridge	PE	$1,530	$0	$0	$1,530	$1,250
Big Carlos Bridge Replacement			Reconstruct Bridge	CST	$32,260	$0	$0	$32,260	$25,040
I-75/Corkscrew Road Interchange	Interim Interchange Improvements		Interchange	PE/CST	$4,880	$0	$0	$4,880	$4,270
San Carlos Boulevard	Summerlin Road	Crescent Street	TBD in PD&E	ROW	$10,000	$0	$0	$10,000	$8,200
San Carlos Boulevard	Summerlin Road	Crescent Street	TBD in PD&E	CST	$10,000	$0	$0	$10,000	$8,200
Old US 41	Collier County Line	Bonita Beach Road	Add Lanes & Reconstruct	PE	$2,160	$0	$0	$2,160	$1,770
Old US 41	Collier County Line	Bonita Beach Road	Add Lanes & Reconstruct	ROW	$0	$8,820	$0	$8,820	$4,800
Old US 41	Collier County Line	Bonita Beach Road	Add Lanes & Reconstruct	CST	$0	$17,730	$0	$17,730	$11,820
SR 78	Santa Barbara Boulevard	east of Pondella	Widen 4L to 6L	PE	$0	$0	$7,490	$7,490	$4,800
SR 78	Santa Barbara Boulevard	east of Pondella	Widen 4L to 6L	CST	$0	$0	$61,130	$61,130	$32,000
Burnt Store Road	Van Buren Parkway	Charlotte County Line	Widen 2L to 4L	PE	$0	$11,480	$0	$11,480	$8,320
Burnt Store Road	Van Buren Parkway	Charlotte County Line	Widen 2L to 4L	ROW/CST	$0	$0	$70,000	$70,000	$78,370
First and Second Streets	Fowler Street	Seaboard Street	1 way to 2 way	PD&E/PE	$1,820	$0	$0	$1,820	$1,500
First and Second Streets	Fowler Street	Seaboard Street	1 way to 2 way	CST	$0	$3,000	$0	$3,000	$2,000
Fowler Street	Metro Parkway/Fowler Street	Dr Martin Luther King Jr	4LUD to 4LD	PD&E	$2,440	$0	$0	$2,440	$2,000
Fowler Street	Metro Parkway/Fowler Street	Dr Martin Luther King Jr	4LUD to 4LD	PE	$0	$4,830	$0	$4,830	$3,500
SR 31	SR 80	SR 78	Widen 2L to 4L	PD&E	$2,000	$0	$0	$2,000	$1,640
SR 31	SR 80	SR 78	Widen 2L to 4L	PE	$2,660	$0	$0	$2,660	$2,180
Cape Coral Evacuation Study			Access	Planning	$300	$0	$0	$300	$250
Del Prado Boulevard Interchange			New Interchange	IJR	$1,250	$0	$0	$1,250	$1,020
Major Intersections			Operational Studies	P/R/CST	$2,450	$12,000	$55,000	$69,450	$38,740
				Total Cost:	$83,910	$133,930	$193,620	$402,760	$259,920
				Revenues:	$100,200	$95,400	$206,640	$402,240	N/A

Project Phases - PD&E Project Development and Environment; PE: Project Engineering and Design; ROW: Right-of-way Acquisition; CST: Project Construction

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LEE COUNTY MPO
2040 NEEDS PLAN

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Table C-1: 2040 Needs Plan Projects: Road Projects

Road Name	From	To	Improvement From (# of Lanes)	Improvement To (# of Lanes)	Total Cost (PDC, in millions)
1st Street	Fowler Street	Palm Beach Boulevard	Two way		$5.50
23rd Street SW	Gunnery Road	Beth Stacey Boulevard	2	4	$85.70
2nd Street	Fowler Street	Palm Beach Boulevard	Two way		$5.50
40th Street	End of 40th Street	Alabama Road	New 2 Lanes		$4.51
Alabama Road	SR 82	Homestead Road	2	4	$70.10
SR 78	w/o Santa Barbara Boulevard	e/o Pondella Road	4	6	$36.80
Alico Connector	Alico Road	SR 82	New 4 Lanes		$51.70
Alico Road	Ben Hill Griffin Parkway	Airport Haul Road	2	4	Committed
Alico Road	Airport Haul Road	Alico Connector	2	4	$33.10
Alva Drawbridge	Bridge Replacement		Reconstruct Bridge		$26.00
Andalusia Boulevard	Pine Island Road	Tropicana Parkway	4	6	$6.90
Andalusia Boulevard	Jacaranda Parkway	Kismet Parkway	New 4 Lanes		$26.30
Bell Boulevard	SR 82	Leeland Heights Boulevard	2	4	$112.20
Beth Stacey Boulevard	23rd Street SW	Homestead Road	2	4	$21.80
Big Carlos Bridge	Bridge Replacement		Reconstruct Bridge		$30.10
Big Hickory Pass Bridge	Bridge Replacement		Reconstruct Bridge		$12.10
Bonita Beach Road	I-75	Bonita Grande Drive	4	6	$19.00
Bonita Grande Drive	Terry Street	Bonita Beach Road	2	4	$20.40
Buckingham Road	Orange River Boulevard	SR 80	2	4	$82.30
Buckingham Road Bridge	over Orange River		Reconstruct Bridge		$3.00
Burnt Store Road	Pine Island Road	Van Buren Parkway	2	4	Committed
Burnt Store Road	Van Buren Parkway	Charlotte County Line	2	4	$89.50
Cape Coral Bridge	Bridge Replacement		Reconstruct Bridge		$85.40
Chiquita Boulevard	Pine Island Road	Cape Coral Parkway	4	6	$72.60
Colonial Boulevard	at Summerlin Road		Intersection		Unknown
Constitution Circle Bridge	over Mullock Creek		Reconstruct Bridge		$1.00
Corkscrew Road	US 41	e/o Ben Hill Griffin Parkway	4	6	$62.60
Corkscrew Road	Ben Hill Griffin Parkway	Alico Road	2	4	$76.40

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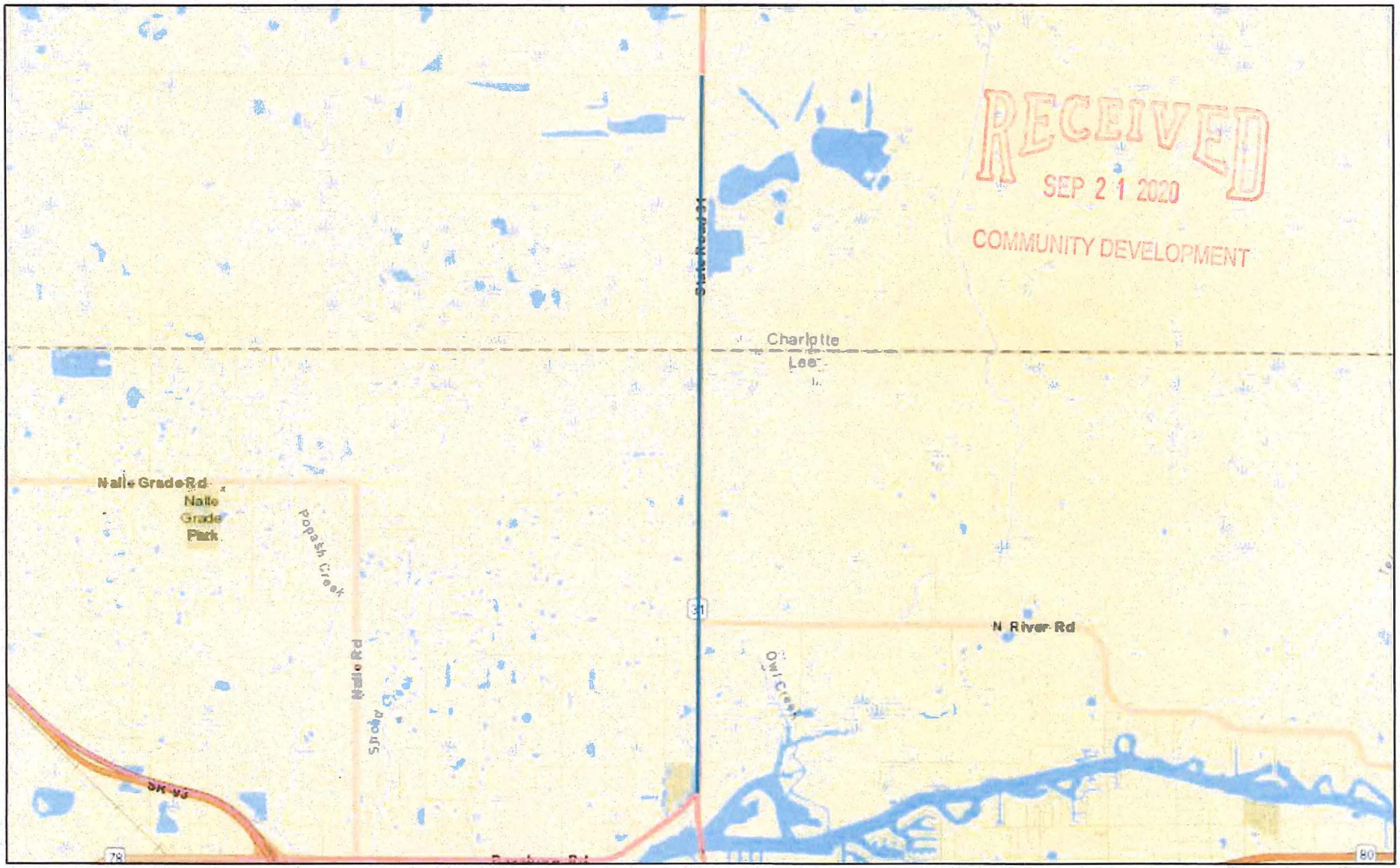
FDOT 5-YEAR ADOPTED WORK PROGRAM

ArcGIS Web Map



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7/27/2020, 11:36:20 AM

1:72,224

0 0.5 1 2 mi

0 0.75 1.5 3 km

2019 Work Program: 2019 Adopted

- CST CONSTRUCTION
- ENV ENVIRONMENTAL
- PDE P D & E
- PE PRELIMINARY ENGINEERING
- PLN PLANNING

2019 Work Program: 2020 Adopted

- CAP CAPITAL
- CST CONSTRUCTION

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan,

ArcGIS Web AppBuilder

University of South Florida, County of Lee, FL, Esri, HERE, Garmin, INCREMENT P, NGA, USGS |

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DEVELOPMENT OF FUTURE YEAR BACKGROUND TURNING VOLUMES

Development of Future Year Background Turning Volumes

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Intersection	**North River Rd @ Owl Creek Dr**
Count Date	February 2019
Build-Out Year	2025

AM Peak Hour

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	0	0	0	0	0	0	150	0	0	182	0
Peak Season Correction Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Current Peak Season Volumes	0	0	0	0	0	0	0	150	0	0	182	0
Growth Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.51%	0.00%	0.00%	3.51%	0.00%
Years to Build-out	6	6	6	6	6	6	6	6	6	6	6	6
2025 Background Turning Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**184**	**0**	**0**	**224**	**0**
Project Turning Volumes	204	0	10	0	0	0	0	2	68	3	1	0
2025 Background + Project	**204**	**0**	**10**	**0**	**0**	**0**	**0**	**186**	**68**	**3**	**225**	**0**

PM Peak Hour

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	0	0	0	0	0	0	163	0	0	134	0
Peak Season Correction Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Current Peak Season Volumes	0	0	0	0	0	0	0	163	0	0	134	0
Growth Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.51%	0.00%	0.00%	3.51%	0.00%
Years to Build-out	6	6	6	6	6	6	6	6	6	6	6	6
2025 Background Turning Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**200**	**0**	**0**	**165**	**0**
Project Turning Volumes	133	0	7	0	0	0	0	1	227	11	2	0
2025 Background + Project	**133**	**0**	**7**	**0**	**0**	**0**	**0**	**201**	**227**	**11**	**167**	**0**

Development of Future Year Background Turning Volumes

Intersection	**N. River Rd @ W. Site Access**
Count Date	February 2019
Build-Out Year	2025

AM Peak Hour

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	0	0	0	0	0	0	150	0	0	182	0
Peak Season Correction Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Current Peak Season Volumes	0	0	0	0	0	0	0	150	0	0	182	0
Growth Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.51%	0.00%	0.00%	3.51%	0.00%
Years to Build-out	6	6	6	6	6	6	6	6	6	6	6	6
2025 Background Turning Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**184**	**0**	**0**	**224**	**0**
Project Turning Volumes	22	0	2	0	0	0	0	68	7	1	204	0
2025 Background + Project	**22**	**0**	**2**	**0**	**0**	**0**	**0**	**252**	**7**	**1**	**428**	**0**

PM Peak Hour

	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
RAW Turning Movement Counts	0	0	0	0	0	0	0	163	0	0	134	0
Peak Season Correction Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Current Peak Season Volumes	0	0	0	0	0	0	0	163	0	0	134	0
Growth Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	3.51%	0.00%	0.00%	3.51%	0.00%
Years to Build-out	6	6	6	6	6	6	6	6	6	7	7	7
2025 Background Turning Volumes	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**200**	**0**	**0**	**171**	**0**
Project Turning Volumes	15	0	1	0	0	0	0	227	25	2	133	0
2025 Background + Project	**15**	**0**	**1**	**0**	**0**	**0**	**0**	**427**	**25**	**2**	**304**	**0**

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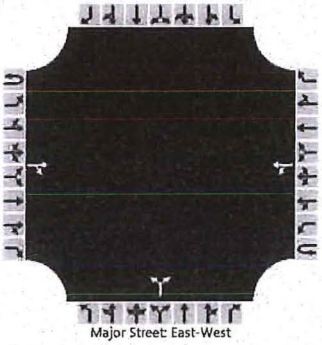
HCS RESULTS
NORTH RIVER RD @
OWL CREEK DR

HCS7 Two-Way Stop-Control Report

General Information		Site Information	
Analyst		Intersection	N. Rriver Rd/Owl Creek Dr
Agency/Co.	TR Transportation Consult	Jurisdiction	Lee County
Date Performed	7/27/2020	East/West Street	N. River Rd
Analysis Year	2025	North/South Street	Owl Creek Dr
Time Analyzed	AM Pk Hr	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	F2006.14		

Lanes



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Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			186	68		3	225			204		10				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage				Undivided												

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3					233					
Capacity, c (veh/h)						1281					542					
v/c Ratio						0.00					0.43					
95% Queue Length, Q_{95} (veh)						0.0					2.1					
Control Delay (s/veh)						7.8					16.5					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)					0.1				16.5							
Approach LOS									C							

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HCS7 Two-Way Stop-Control Report

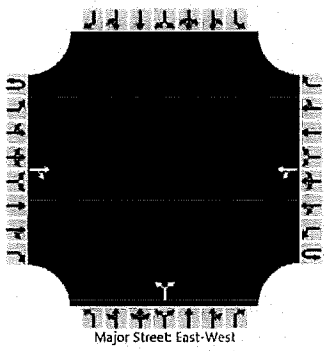
General Information

Analyst	
Agency/Co.	TR Transportation Consult
Date Performed	7/27/2020
Analysis Year	2025
Time Analyzed	PM Pk Hr
Intersection Orientation	East-West
Project Description	F2006.14

Site Information

Intersection	N. Rriver Rd/Owl Creek Dr
Jurisdiction	Lee County
East/West Street	N. River Rd
North/South Street	Owl Creek Dr
Peak Hour Factor	0.92
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	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			201	227		11	167			133		7				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						12					152					
Capacity, c (veh/h)						1091					498					
v/c Ratio						0.01					0.31					
95% Queue Length, Q_{95} (veh)						0.0					1.3					
Control Delay (s/veh)						8.3					15.4					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)					0.6				15.4							
Approach LOS									C							

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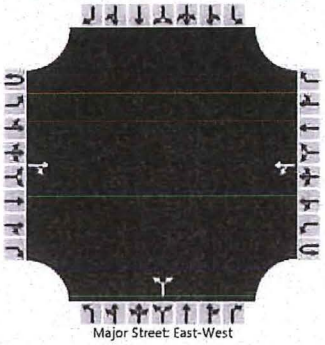
HCS RESULTS
NORTH RIVER RD @
W. SITE ACCESS

HCS7 Two-Way Stop-Control Report

General Information

Analyst		Intersection	N. Rriver Rd/Site Access
Agency/Co.	TR Transportation Consult	Jurisdiction	Lee County
Date Performed	7/27/2020	East/West Street	N. River Rd
Analysis Year	2025	North/South Street	Site Access
Time Analyzed	AM Pk Hr	Peak Hour Factor	0.92
Intersection Orientation	East-West	Analysis Time Period (hrs)	0.25
Project Description	F2006.14		

Lanes



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Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			252	7		1	428			22		2				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						1					26					
Capacity, c (veh/h)						1275					396					
v/c Ratio						0.00					0.07					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
Control Delay (s/veh)						7.8					14.7					
Level of Service (LOS)						A					B					
Approach Delay (s/veh)					0.0				14.7							
Approach LOS									B							

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HCS7 Two-Way Stop-Control Report

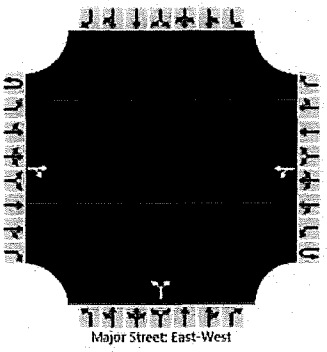
General Information

Analyst	
Agency/Co.	TR Transportation Consult
Date Performed	7/27/2020
Analysis Year	2025
Time Analyzed	PM Pk Hr
Intersection Orientation	East-West
Project Description	F2006.14

Site Information

Intersection	N. Rriver Rd/Site Access
Jurisdiction	Lee County
East/West Street	N. River Rd
North/South Street	Site Access
Peak Hour Factor	0.92
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			427	25		2	304			15		1				
Percent Heavy Vehicles (%)						3				3		3				
Proportion Time Blocked																
Percent Grade (%)									0							
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.43		6.23				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.53		3.33				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						2					17					
Capacity, c (veh/h)						1067					355					
v/c Ratio						0.00					0.05					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
Control Delay (s/veh)						8.4					15.7					
Level of Service (LOS)						A					C					
Approach Delay (s/veh)					0.1				15.7							
Approach LOS									C							

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TRIP GENERATION EQUATIONS

Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: Dwelling Units
On a: Weekday

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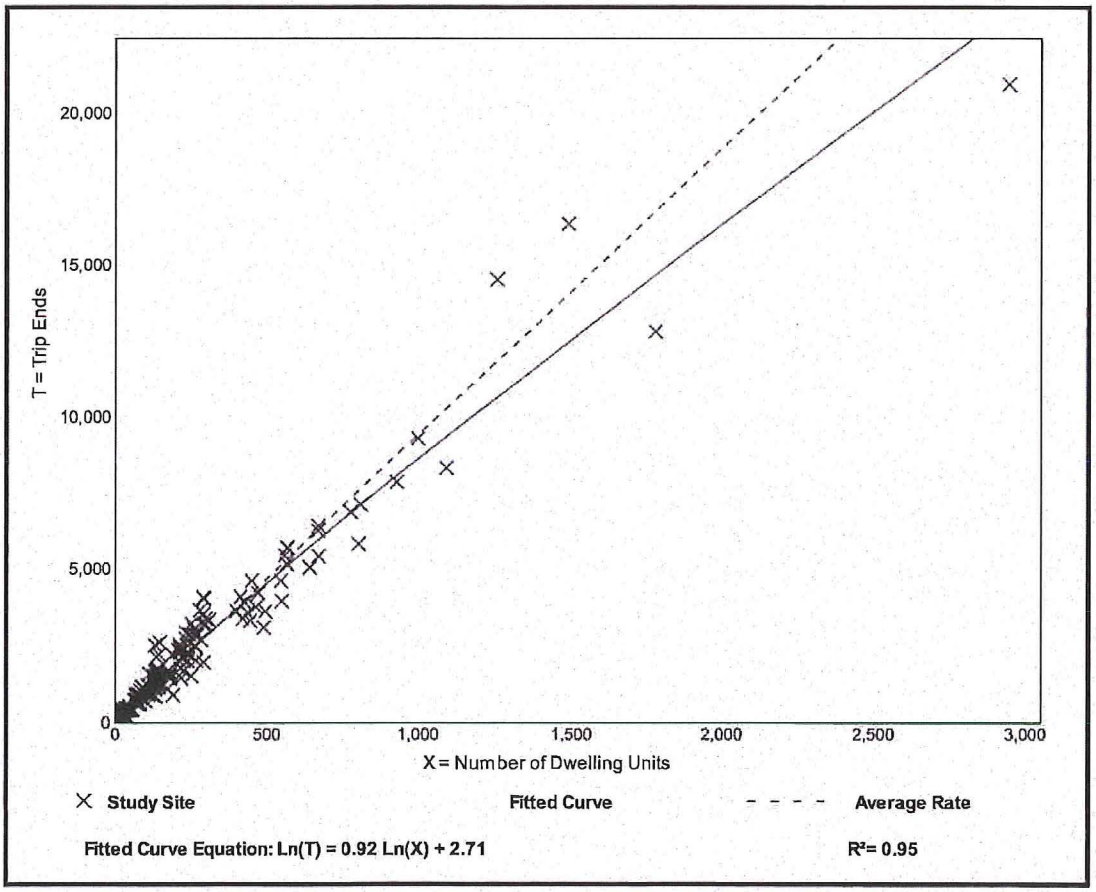
Setting/Location: General Urban/Suburban
Number of Studies: 159
Avg. Num. of Dwelling Units: 264
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.44	4.81 - 19.39	2.10

Data Plot and Equation



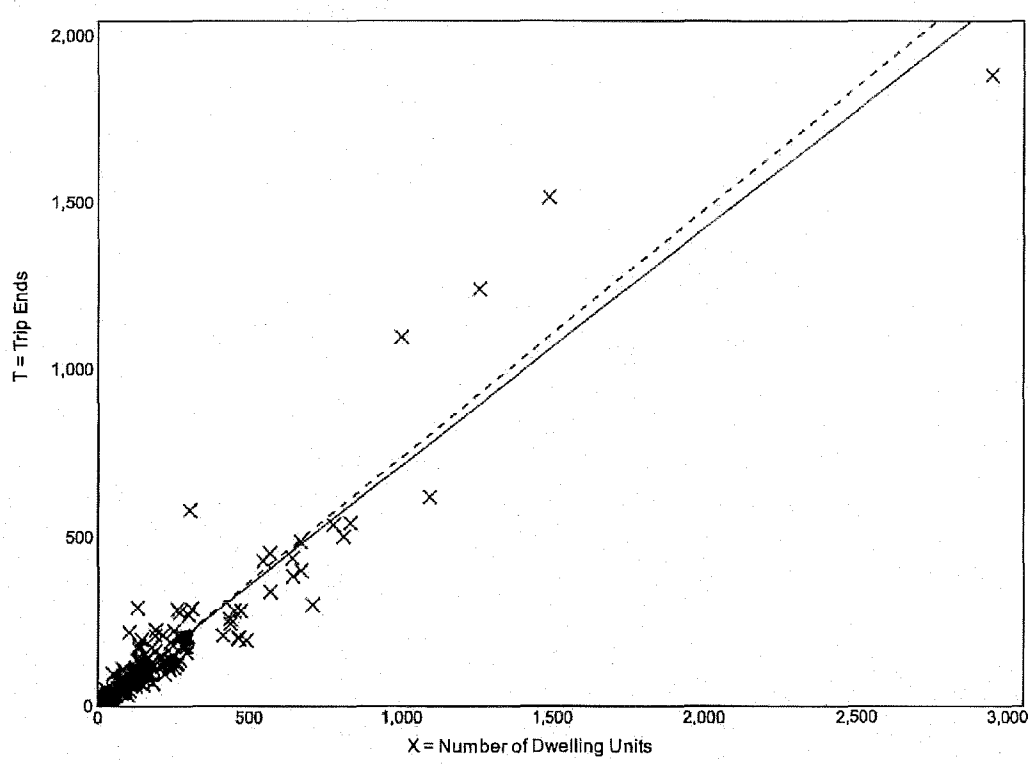
Single-Family Detached Housing
(210)

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:	173
Avg. Num. of Dwelling Units:	219
Directional Distribution:	25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.74	0.33 - 2.27	0.27

Data Plot and Equation



× **Study Site** **Fitted Curve** - - - - **Average Rate**

Fitted Curve Equation: T = 0.71(X) + 4.80 **R^2= 0.89**

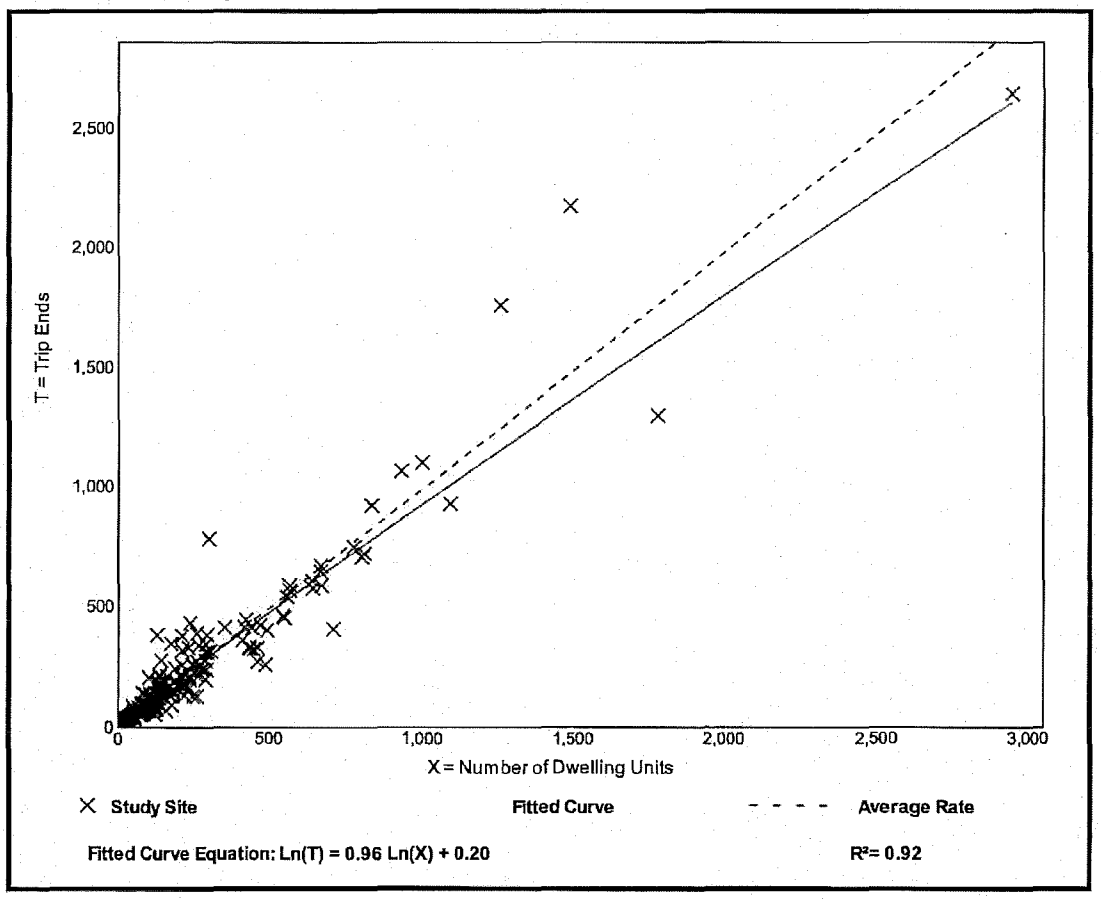
Single-Family Detached Housing
(210)

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:	190
Avg. Num. of Dwelling Units:	242
Directional Distribution:	63% entering, 37% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.99	0.44 - 2.98	0.31

Data Plot and Equation



BANKS ENGINEERING

Professional Engineers, Planners & Land Surveyors

OWL CREEK
Comprehensive Plan Text Amendment
Public Facilities Impacts Narrative
EXHIBIT "T5"

This analysis utilizes the data provided in the 2019 Lee County Public Facilities Level of Service and Concurrency Report.

The Owl Creek property is located on the south side of N. River Road approximately ½ mile east of the intersection of SR 31 and N. River Road within the North Olga area of the Northeast Lee County Planning Community. The plan amendment for Owl Creek proposes to remove the property from the existing future land use map designation of Rural and Wetlands and adopt the Sub-Outlying Suburban future land use designation and associated text amendment for properties located within the North Olga Community Plan area within this designation. The resultant density for the subject property will be a maximum of 440 single-family dwelling units which is an increase of 219 dwelling units that could be developed under the existing classifications. A concurrent Planned Development application will be filed to allow for conditions of approval. The following analysis establishes that the additional proposal will not adversely impact public services.

Sanitary Sewer

The Owl Creek property's existing and proposed density does not meet those required for connection and the site is not located within a franchised service area. Placing the Owl Creek property on centralized sanitary sewer service is a benefit to the public given the location of the adjacent waterways. Given that the Owl Creek property is not currently in a sanitary sewer service area, if single-family residences were developed on the property, each unit would have to be on an individual septic system that would be subject to individual maintenance or lack of maintenance at the whim of the individual homeowner.

The project proposes that the project area be added to the Florida Governmental Utility Authority (FGUA) service area with privately funded expansion of sewer infrastructure to serve the project. A letter of availability dated September 3, 2020 is attached demonstrating that FGUA presently has sufficient treatment capacity to accommodate the proposed flows. The letter further indicated that FGUA has wastewater lines in operation in the vicinity of the site, however, developer funded system enhancements such as line extensions may be required. The closest sewer forcemain is 16" located approximately 2.75 miles away at Bayshore Rd. & Bay Point Blvd. A letter of no objection from Lee County Utilities will be required. During design, the FGUA Utilities Operations Manual requires the project engineer to perform hydraulic computations to determine what impact, if any, this project will have on their existing water and wastewater systems.

Although Lee County Utilities has indicated in the submitted letter of availability that it presently has sufficient capacity to provide sanitary sewer service which would be provided by the City of Fort Myers North Water Reclamation Facility, the nearest wastewater mains are located on the

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south side of the Caloosahatchee River along S.R. 80 (Palm Beach Blvd). Connection to the Lee County system would require constructing facilities on the existing SR 31 bridge which is not desired by LCU. Since FGUA's wastewater facilities are located in the same vicinity of the nearest Lee County Utilities water facilities, connection to FGUA is the most economically viable option. The 2019 Concurrency Report states that all systems are operating within capacity and meet the LOS standard for unincorporated Lee County.

The plant has a permitted treatment capacity of 4.25 million gallons per day (MGD). The Level of Service (LOS) Standard, per Lee Plan Policy 95.1.3, is 200 gallons per day per Equivalent Residential Connection (ERC) or for the purposes of this analysis, per each residential dwelling unit that is connected to the system. The Owl Creek project proposes to connect a maximum of 440 residential dwelling units to the FGUA sewer system.

Existing Development Potential: 221 maximum residential
221 ERC x 200 GPD = 44,200 GPD

Proposed Development Potential: 219 additional (440 maximum residential):
219 ERC x 200 GPD = 43,800 GPD

Total: 88,000 GPD

According to the 2019 Lee County Concurrency Report, major regional central systems providing service in unincorporated Lee County includes BSU, FGUA, City of Fort Myers (FM), GIWA, and LCU and all systems are operating within capacity and meet the LOS standard for unincorporated Lee County.

The Del Prado Wastewater Treatment Plant had an actual average daily flow of 5,205,000 GPD in 2019. FGUA has programmed plant expansions and expansion of the disposal of treated effluent, including providing effluent to the City of Cape Coral for irrigation uses. These plant expansions will allow FGUA to continue to expand the sewer service they provide to North Fort Myers, including to the Owl Creek project.

Potable Water

The Owl Creek property's existing and proposed density does not meet those required for connection and the site is not located within a franchised service area. Placing the Owl Creek project on centralized potable water service is a public benefit given it would eliminate individual wells with their associated impacts. An amendment to Lee Plan Map 6 is proposed to place the property within the Lee County Utilities Future Water Service Area to allow for privately funded expansion of water infrastructure to serve the project. A letter of availability from Lee County Utilities is attached demonstrating sufficient capacity exists and that the site will be serviced by North Lee County Water Treatment Plant. The LOS standard for Potable Water is 250 gallons (per Policy 95.1.3) per residential connection or unit.

Existing Development Potential: 221 maximum residential
221 ERC x 250 GPD = 55,250 GPD

Proposed Development Potential: 219 additional (440 maximum residential):
219 ERC x 250 GPD = 54,750 GPD

Total: 110,000 GPD

According to the 2019 Concurrency report, Lee County Utilities has a capacity of 50.9 MGD and planned capacity of 55.3 MGD. In 2016, 158,611 ERCs were served by LCU. The number of ERCs projected for 2023 are 177,652 units with 223,893 units projected for 2040. Lee County

Utilities has excess capacity to accommodate the currently approved maximum dwelling units and the additional proposed 440 dwelling units. The additional units are well within the projected growth of 177,652 ERCs to be served by 2023 and 223,893 ERCs to be served by 2040. Therefore, Lee County Utilities has adequate capacity to service the proposed development.

Surface Water/Drainage Basins

Lee Plan Map 18 identifies the subject property as being within the Trout Creek and Owl Creek Watershed areas. These creeks traverse the property and are tidally influenced in the area of the project. These creeks connect to the Caloosahatchee River just south of the project area. LOS standards for surface water management are contained in Lee Plan Policy 95.1.3 which provides a system requirement to prevent the flooding of designated evacuation routes on Lee Plan Map 15 from the 25-year, 3-day storm event (rainfall) for more than 24 hours. Runoff from the developed site will continue to discharge to tidal creeks and rivers and will not cross any public road or evacuation route. The developed site will contain increased site storage and decreased discharge compared to the current site conditions. The 2019 Concurrency Report confirms that none of the evacuation routes in the studied watersheds are anticipated to be flooded for more than 24 hours, and that new developments that receive approval from the South Florida Water Management District will be deemed concurrent with the Lee Plan's surface water management LOS. The Owl Creek project will receive approval for an Environmental Resource Permit from the South Florida Water Management District and, as such, will be concurrent with the surface water management Level of Service standards of the Lee Plan.

Parks, Recreation, and Open Space

The Lee Plan measures the minimum acceptable Level of Service for Parks, Recreation, and Open Space by two standards, Regional Parks and Community Parks. Policy 95.1.3 provides the minimum acceptable levels of service. For Regional Parks, it is 6 acres of developed regional park land open for public use per 1,000 total seasonal county population. For Community Parks, it is .8 acres of developed standard community parks open for public use per 1,000 permanent population, unincorporated Lee County. The non-regulatory Desired Future Level of Service for Community Parks is two (2) acres per 1,000 permanent population.

Regional Parks

The 2019 Lee County Concurrency report states there are 3,029 acres of existing Regional Parks by Lee County, representing roughly 43% of the existing regional park acreage when considering all jurisdictions. The inventory of existing regional parks operated by local, state and federal governments totals 7,051 acres which is sufficient to meet the required standard of 6 acres per 1,000 total seasonal county population:

842,000 [seasonal county population] (6 acres/1,000) = 5,052 acres

The report further states that the existing inventory meets the regional park level of service standard in the county for the year 2018 and will continue to do so at least through the next five years of the CIP.

The requested 440 dwelling units (increase of 219 units) will not negatively impact the regional parks level of service. The non-regulatory level of service standard is 5,052 acres of Regional Parks is far exceeded with the existing 7,051 acres. There is adequate acreage within the existing Regional Parks to meet the needs of the additional 440 dwelling units.

Community Parks

The non-regulatory Level of Service Standard for Community Parks is currently eight-tenths (0.8) acres of developed standard Community Parks open for public use per 1,000 permanent population in the unincorporated area of each district. The 2019 Concurrency Report states that there are 743 acres of existing Community Parks within

unincorporated Lee County. The capacity needed to meet the Lee Plan non-regulatory level of service standard is equal to:

355,737 [permanent county population/unincorporated areas only] (0.8 acres/1,000) = 285 acres

The report further states that the existing inventory exceeds the community park level of service standard in the county for the year 2018 and will continue to do so at least through the next five years of the CIP.

The requested 440 dwelling units (increase of 219 units) will not negatively impact the community parks level of service. The non-regulatory level of service standard of 285 acres of Community Parks is far exceeded with the existing 743 acres. There is adequate acreage within the existing Community Parks to meet the needs of the additional 440 dwelling units.

Public Schools

The Owl Creek project is located within the East Zone, E2. Lee Plan Policy 67.1.1 and Policy 95.1.3(6) provide that the level of service standards for Elementary School, Middle School, High School and Special Purpose Facilities is 100% of Permanent FISH Capacity as adjusted by the School Board annually to account for measurable programmatic changes.

The 2019 Concurrency Report shows the following for the east zone: elementary schools: 448 total available capacity, middle schools: 439 deficit in available capacity, high schools: 524 deficit in available capacity on January 23, 2019 and projected capacity for 2019-2020 shows the same capacity for elementary schools, a deficit of 219 for middle schools and a deficit of 28 for high schools. Interim deficits are met by adding 220 portable middle school seats and an addition at Lehigh High which added 496 high school seats. LOS standards will be met by the construction of a new middle school to open in 2021-2022 which will add 1,210 seats and new high school to open portables in 2020-2021 with 380 freshman seats followed by opening in 2021-2022 creating 1,520 additional seats. This will result in all zones meeting the adopted LOS standard.

The School District of Lee County uses a generation rate of .297 students per each single-family dwelling unit. This rate is further broken down by school type, with a rate of .149 for elementary, .071 for middle school, and .077 for high school. Utilizing these rates results in a demand of 131 school-aged children, 66 elementary students, 31 middle school students, and 34 high school students for the Owl Creek project. The attached letter from The School District of Lee County demonstrates that although capacity is an issue within the Concurrency Service Area (CSA) at the high school level, capacity is available in the adjacent CSA. The concurrency system allows contiguous districts to provide capacity when capacity in the project's District is not available.

Solid Waste

Solid waste services for the property will be accomplished at the Lee County Resource Recovery Facility and the Lee-Hendry Regional Landfill.

LOS Standard: 7 pounds per day per capita
Current Available Capacity: 8.3 pounds per day per capita

<u>Existing Development Potential: 221 maximum residential</u>
221 dwelling units x 2.35 persons per unit = 519 persons
519 persons x 7 lbs/day = 3,633 lbs

Proposed Development Potential: 219 additional (440 maximum residential):
219 dwelling units x 2.35 persons per unit = 515 persons
515 persons x 7 lbs/day = 3,605 lbs

Total: 7,238 lbs

The 2019 Concurrency Report provides that all unincorporated areas of Lee County are concurrent with the Level of Service standard set forth in the Lee Plan for solid waste The report further states, "*At the total available system capacity of 1,134,667 tons per year, the Lee County IWMS would be capable of providing a 7.0 lb/capita/day level of service to a full-time combined Lee and Hendry County population of 888,000.*" The proposed increase in density will result in the generation of an additional 3,605 pounds per day which can be accommodated by the capacity of the Lee County Resource Recovery Facility and the Lee-Hendry Regional Landfill.

Conclusions

As this analysis demonstrates, there are adequate public facilities to support the development of the Owl Creek property as proposed. The plan amendment for Owl Creek will not cause any public facility deficiencies.

Lee Plan, State Policy Plan & Strategic Regional Policy Plan Analysis

(Exhibits T6, T9 & T10)

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OWL CREEK
Comprehensive Plan Text Amendment
Lee Plan Consistency
State & Regional Policy Plan Compliance
EXHIBITS "T6, T9 & T10"

INTRODUCTION

The Owl Creek property is ±342.68 acres located on the south side of N. River Road approximately ½ mile east of its intersection with SR 31 within the North Olga area of the Northeast Lee County Planning Community. The property is zoned Agricultural (AG-2) and is used for agricultural/grazing purposes. Lee Plan Map 1, Page 1 of 7 identifies the property as Rural and Wetlands Future Land Use Categories (FLU).

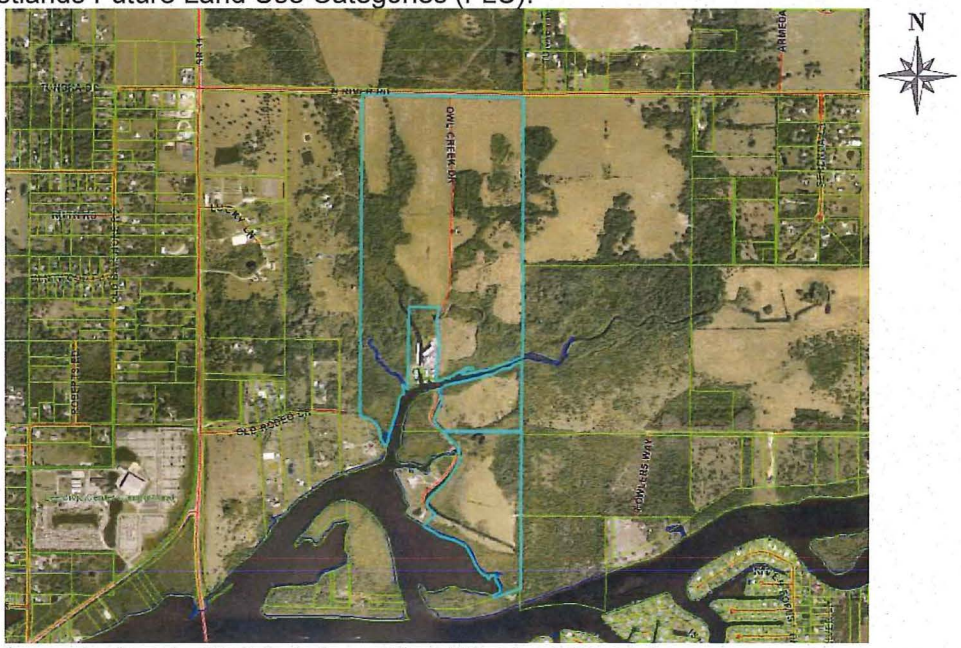

Figure 1. Location of Subject Property

This amendment proposes to change the FLU category from Rural and Wetlands to Sub-Outlying Suburban to accommodate the clustered development of up to 440 single-family dwelling units and internal amenities while providing for significant environmental, historical, storm water, water quality and infrastructure enhancements. This request will allow an increase of 219 dwelling units from the 221 dwelling units that could be developed under the existing FLU categories. The Owl Creek application includes the following requests:

- Amendment to the Future Land Use Map (Lee Plan Map 1, Page 1 of 7) to change the FLU category from Rural and Wetlands to Sub-Outlying Suburban and Wetlands
- Amendment to Future Water Service Areas, Lee County Utilities (Lee Plan Map 6) to place the property within the Lee County Utilities Future Water Service Area to allow for privately funded expansion of water service.
    - Note: Wastewater will be provided by Florida Governmental Utility Authority

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(FGUA) with privately funded expansion of sewer service.

- Associated Text Amendment to following:
  - North Olga Community Plan – New Objective 29.10 and Policies 29.10.1 and 29.10.2 to provide requirements for development with Sub-Outlying Suburban areas within North Olga Planning Community including a maximum of 440 dwelling units.
  - Table 1(a) – add footnote 20 to Sub-Outlying Suburban to limit density to 2 dwelling units per 1 acre of uplands or a gross density of 1.28 dwelling units per gross acre within the North Olga Planning Community
  - Table 1(b) – revise Northeast Lee County to remove 343 acres from the Rural category and add 343 acres to the Sub-Outlying Suburban category

The following summarizes benefits that will be accomplished by approval of this request through compliance with the proposed text amendment:

1. Provide a connection between the existing New Community FLU to the north and Caloosahatchee River to the south that will continue the environmental preservation and enhanced drainage ways that will be improved by reduced runoff rate and reduced nutrient runoff
2. Amendment will result in clustered development as encouraged in area as demonstrated by the Preliminary Development Footprint exhibit
3. Provide Wetland Protection and Enhancements including exotic removal and maintenance
4. Historical Resource preservation of the 3 recommended sites
5. ±165.6 acres (48% of property) placed into conservation easement including the convergence of two natural waterways on the Great Calusa Blueway (Owl Creek and Trout Creek) where they connect to the Caloosahatchee River
6. Wildlife/recreation connection from portion of Trout Creek located on potential Conservation 20/20 lands to Caloosahatchee River
7. Connection to adjacent SFWMD owned lands to the east and south
8. Potential public canoe/kayak launch area to Trout Creek
9. Wildlife management and co-existence plans
10. Enhanced lake management plan
11. Florida Friendly Landscaping with the low irrigation requirements in common areas
12. 60% open space
13. Preserve 93% of wetlands
14. Water Quality enhancements and monitoring
15. Remove potential for up to 221 potential septic tanks and wells
16. Removal of cattle grazing will significantly reduce onsite nutrient generation
17. Additional 50% water quality treatment
18. Reduced rate of run-off and associated nutrient loads
19. Stormwater enhancements
20. Remove potential for additional single-family driveways along Owl Creek
21. Green infrastructure
22. Privately funded expansion of water and sewer to the area (as encouraged/anticipated by existing Lee Plan policies)
23. Minimum 50' perimeter setback/buffer
24. Minimum 100' setback from Owl Creek Boat Works property line to single-family lots
25. Provide area for multi-use path along North River Road
26. Protect existing groundwater levels and improve existing wetland hydroperiods in onsite preserve areas

VISION STATEMENT

A concurrent Planned Development Application will be filed for the Owl Creek property to incorporate a specific development plan with conditions of approval to ensure compliance with environmental stewardship, enhancement of the area's historic heritage and rural character, and

proactively and appropriately plan for future growth within the area consistent with the Vision Statements for Northeast Lee County and North Olga and the implemented Goals, Objectives and Policies for these areas, including the proposed text amendments. The subject property abuts the existing Owl Creek Boat Works facility and will provide for compatible adjacent development to protect this identifying feature of the community.

FUTURE LAND USE

The 342.68± acre subject property is currently within the Rural and Wetlands FLU categories. Policy 1.4.1 provides that maximum density in the Rural category is 1 dwelling unit per acre. Policy 1.5.1 provides that the Wetlands category has a maximum density of 1 dwelling unit per 20 acres.

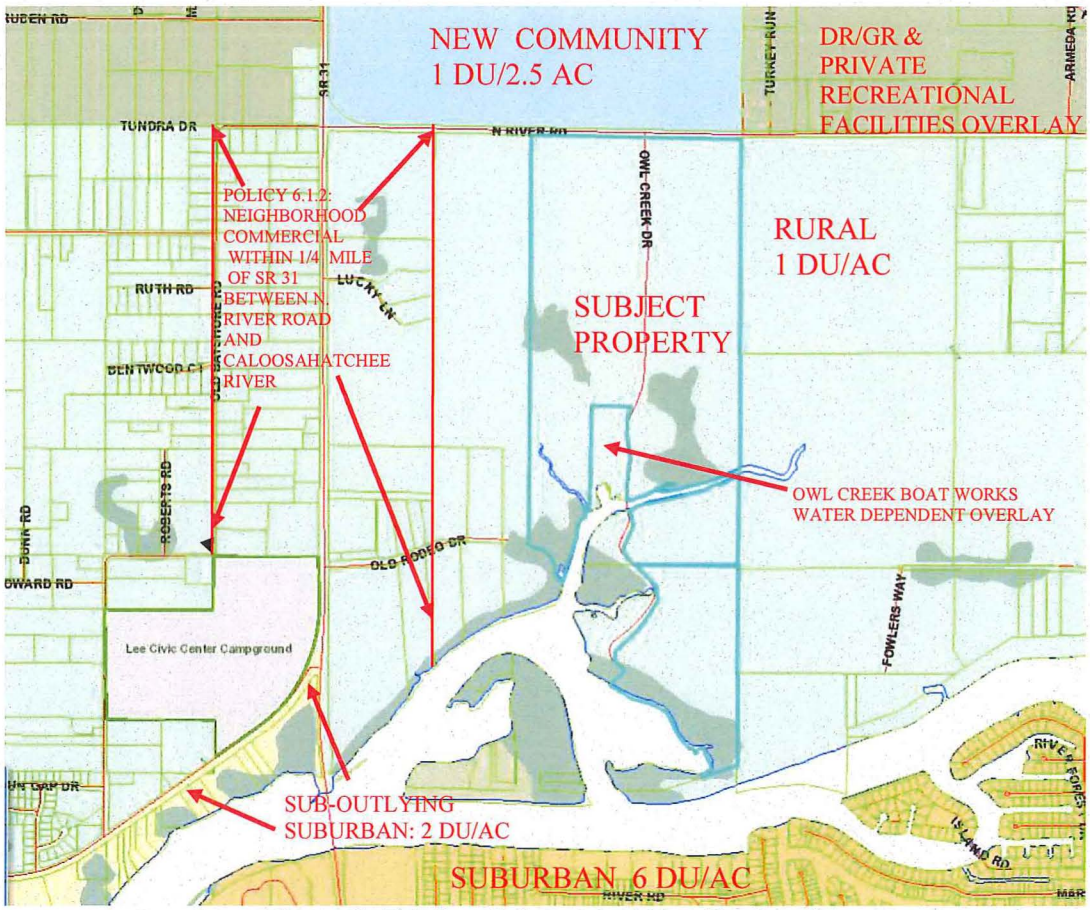

Figure 3. Existing Future Land Use Designation

The property adjacent to the west and properties adjacent to the east are also within the Rural and Wetlands FLU categories. The property to the north across North River Road is within the New Community FLU category (Babcock Mixed Use Planned Development) which allows 1 dwelling unit per 2.5 gross acres up to 1,630 dwelling units, 600 hotel rooms and 1,170,000 square feet of commercial office and retail uses. To the northeast is within the Density Reduction/Groundwater Resource (DR/GR) FLU and is within the Private Recreational Facilities Overlay. Adjacent to the south and surrounded by the property is the existing Owl Creek Boat Works and Storage marina and yacht refinishing which is within the Water Dependent Overlay. This industrial marine use was established in 1953 and is Southwest Florida's premiere yacht service center offering full service and specializing in yacht refinishing, repowering, customization and maintenance. They also offer in-water covered, uncovered and dry storage for yachts up to 100'. Individuals come from all over the region for yacht refinishing at this location. South across the Caloosahatchee River is within the Suburban FLU category which

allows a maximum density of 6 dwelling units per acre. Sub-Outlying Suburban FLU category is a little over ½ mile to the west of the property at the southwest corner of the intersection of Bayshore Road and SR 31 which allows a maximum density of 2 dwelling units per acre. There is a commercial node within ¼ mile of SR 31 between North River Road and the Caloosahatchee River described in Policy 6.1.2 that connects the New Community area at SR 31 and North River Road to the Lee Civic Center and the Sub-Outlying Suburban area. This area contains several non-residential uses such as a gas station, veterinarian office, feed store, church, SR 31 Produce market, u-pick and café. See attached Exhibits M5 and M6 for further description of the subject property and surrounding properties.

The Owl Creek property's proximity to the New Community FLU category to the north (Babcock Mixed Use Planned Development) and the commercial node to the west and the adjacent industrial marine facility furthers the appropriateness of the request which will accommodate clustered development with ample view of wooded areas, open spaces, and river fronts and will allow for the protection of environmentally sensitive lands and historic heritage. The proposed clustered project will provide a connection between the Babcock Ranch MPD to the north and the Caloosahatchee River to the south, expanding the significant environmental, historical, storm water, water quality and infrastructure enhancements required in the North Olga Community Plan New Community area. A concurrent Planned Development Application will be submitted to provide additional details regarding the development of the requested units and provide conditions of approval to ensure compliance with the stringent requirements provided in the concurrent Text Amendment for this request within the North Olga Community Plan area.

The Owl Creek property will be consistent with Sub-Outlying Suburban Policy 1.1.11 upon approval of the proposed map amendment. The forthcoming concurrent Planned Development zoning application will allow conditions to be included to ensure that the subject property is developed at a low residential density in the North Olga Community Plan area where there is a desire to retain a low-density community character. Although the Sub-Outlying Suburban FLU allows up to two dwelling units per acre, the associated Text Amendment will add further limitations to the density including a Text Amendment to Table 1(a) – add footnote 20 to Sub-Outlying Suburban to limit density to 2 dwelling units per 1 acre of uplands or a gross density of 1.28 dwelling units per gross acre within the North Olga Planning Community and new Objective 29.10 and Policies 29.10.1 and 29.10.2 to provide requirements for development with Sub-Outlying Suburban areas within North Olga Planning Community.

POPULATION PROJECTIONS & TABLE 1(B) DISCUSSION

The Owl Creek project could develop 221 dwelling units under its current land use designations. Utilizing 2.35 persons per household, the site could currently accommodate a population of approximately 519 people. The proposed plan amendment would result in a total of 440 dwelling units, an increase of 219 units or a theoretical additional 515 people.

Lee County had a population of 618,754, according to the 2010 U.S. Census. The Florida Office of Economic and Demographic Research (OEDR) projected a countywide population of 892,108 in 2030 and 999,851 in 2040. In the context of the existing and projected population for the subject property, the population increase of approximately 515 people is the minimum. The proposed population increase is estimated at less than a 1% increase beyond the OEDR projected population for Lee County. This is well within accepted error ranges and represents no real additional population increase for the Lee Plan's Future Land Use Map. The proposed amendment is consistent with the most recent growth management legislation which suggests that establishment of minimum development intensity is appropriate methodology for local government planning efforts. The development footprint for the Owl Creek property, including lots, roads, and water management lakes would be limited to ±179.81 acres.

The proposed plan amendment includes a proposed amendment to Table 1(b) for Northeast Lee County to remove 343 acres from the Rural category and add 343 acres to the Sub-

Outlying Suburban category. These revisions are demonstrated in strike-through/underline below.

TABLE 1(b) Year 2030 Allocation

	Future Land Use Category	Lee County Totals	Northeast Lee County	Boca Grande	Bonita Springs	Fort Myers Shores	Burnt Store
Residential By Future Land Use Category	Intensive Development	1,361				5	
	Central Urban	14,766				225	
	Urban Community	16,515	520	485		637	
	Suburban	16,623				1,810	
	Outlying Suburban	4,113	30			310	20
	Sub-Outlying Suburban	~~1,880~~2,223	~~343~~			472	
	Commercial						
	Industrial	79					
	Public Facilities	1					
	University Community	850					
	Destination Resort Mixed Use Water Dependent	8					
	Burnt Store Marina Village	4					4
	Industrial Interchange						
	General Interchange	169					
	General Commercial Interchange						
	Industrial Commercial Interchange						
	University Village Interchange						
	Mixed Use Interchange						
	New Community	2,100	1,200				
	Airport						
	Tradeport	9					
	Rural	~~8,313~~7,970	~~1,948~~1,605			1,400	636
	Rural Community Preserve	3,100					
	Coastal Rural	1,300					
	Outer Island	202	5			1	
	Open Lands	2,805	250				590
	Density Reduction/ Groundwater Resource	6,905	711				
	Conservation Lands Upland						
	Wetlands						
	Conservation Lands Wetland						
Unincorporated County Total Residential		81,103	4,664	485		4,860	1,250
Commercial		12,793	177	52		400	50
Industrial		7,527	26	3		400	5

Figure 2. Proposed Revisions to Lee Plan Table 1(b)

GROWTH MANAGEMENT

The request is consistent with Development Location Objective 2.1, Policies 2.1.1 and 2.1.2. The Owl Creek property is located in a transitioning area as evidenced by recent changes to the Lee Plan for New Community FLU in the North Olga Community Plan area and the commercial node along S.R. 31 encouraging privately funded utility expansion to the area. Approval of the request will result in the privately funded expansion of water and sewer to the property, minimizing the public cost of services. The proposed project promotes contiguous and compact growth pattern by providing a connection between the approved Babcock Ranch MPD to the north and the Caloosahatchee River to the south, extending the conservation of land and natural resources required in the North Olga Community Plan. The proposed project does not constitute urban sprawl which is defined in the Lee Plan Glossary as "*The uncontrolled, premature, or untimely expansion and spreading out of urban levels of density or intensity into outlying non-urban areas.*" The development will be required to be controlled by Planned Development zoning approval with conditions to ensure compliance with the stringent requirements proposed with the requested Text Amendment and compliance with the goals, objectives policies, and standards of the Lee Plan.

The request is consistent with Development Timing Objective 2.2, Policy 2.2.1. The Owl Creek development will have or assure access to all required public facilities. Please see attached

separate Public Facilities Impacts Analysis (Exhibit – M14) and Letters of Determination of the Adequacy/Provision of Existing/Proposed Support Facilities - Fire Protection, Emergency Medical Service, Law Enforcement, Solid Waste, Mass Transit, Schools (Exhibit – M17). These exhibits demonstrate that there is adequate capacity to accommodate the additional 219 dwelling units associated with this request. The proposed privately funded expansion of utilities to the area is already encouraged and anticipated by existing Lee Plan policies.

The project will comply with Historic Resources Objective 2.7. Please see attached separate Historic Resources Impact Analysis (Exhibit – M13). There are three archaeological sites in good to excellent condition (8LL2397, 8LL2398 and 8LL2399) that are eligible for listing in the National Register of Historic Places (NRHP) and should and will be avoided by future development by preserving within a minimum 25 foot buffer. A fourth site (8LL2825) that, based on the level of intense disturbance and lack of significant cultural materials or context, is not regarded as eligible for listing on the NRHP and will not be preserved.

GENERAL DEVELOPMENT STANDARDS

The request is consistent with Standard 4.1.1: Water as well as Policies 53.1.2 and 95.1.3. The Owl Creek property's existing and proposed density does not meet those required for connection and is not located within a franchised service area. The property could be developed today with up to 221 private well systems. An amendment to Lee Plan Map 6 is proposed to place the property within the Lee County Utilities Future Water Service Area to allow for privately funded expansion of water service. A letter of availability from Lee County Utilities is attached demonstrating sufficient capacity exists and that the site will be serviced by North Lee County Water Treatment Plant.

The request is consistent with Standard 4.1.2: Sewer. The Owl Creek property's existing and proposed density does not meet those required for connection and the site is not located within a franchised service area. The property could be developed today with up to 221 private septic systems. The project proposes wastewater to be provided by Florida Governmental Utility Authority (FGUA) with privately funded expansion of sewer service. A letter of availability has been submitted with the application.

The request is consistent with Standard 4.1.4: Environmental Factors. Please see attached Environmental Impacts Analysis (Exhibit – M12) demonstrating the environmentally sensitive areas of the site. The concurrent Planned Development Application will ensure that the clustered development is well integrated, properly oriented and functionally related to the natural features of the site.

RESIDENTIAL LAND USES

The northern ±51 acres of the Owl Creek property are outside of the Coastal High Hazard Area and the southern ±292 acres are within. This amendment provides Text Amendments with stringent development criteria that will allow a concurrent Planned Development application to be filed including conditions ensuring the adjusted site design and clustered density development with environmental, historical, water quality and infrastructure enhancements. Letters of Determination are attached demonstrating provision of support facilities. The site proposes to place a minimum of 48% of the site into conservation easements and provide a minimum perimeter setback/buffer of 50 feet to ensure compatibility with adjacent agricultural, single-family, preservation and marina uses. The request will be consistent with Policies 5.1.2 and 5.1.5.

The request will be consistent with Policies 5.1.6 and 5.1.7. The proposed Text Amendments included with the application and forthcoming concurrent Owl Creek Planned Development application conditions of approval will include development regulations for the clustered development to provide open space, preservation areas and recreation areas. These areas will

be appropriate for the density and design and will be functionally related to all dwelling units. No multi-family residential is proposed for the site.

GOAL 27: NORTHEAST LEE COUNTY COMMUNITY PLAN

The Owl Creek property is located in Northeast Lee County. Goal 27 of the Lee Plan is specific to this area of Lee County and represents Lee County's goal to maintain, enhance, and support the heritage and rural character and natural resources. Alva and North Olga work cooperatively toward this goal through the objectives and policies of Goal 27 and through their individual community plans.

The Owl Creek property proposes to preserve large open space areas and will retain the rural character by proposing clustered development with ample views of wooded areas, open spaces and river fronts, while balancing the removal of agricultural grazing lands and the enhancement and protection of environmentally sensitive lands, historic resources water quality and connectivity. These enhancements are required by the proposed Text Amendments and will be conditioned as part of the forthcoming concurrent Planned Development Application, consistent with Objective 27.1 and Policies 27.1.1, 27.1.5 and 27.1.6.

The Owl Creek property is located within the Northeast Lee County community plan area and is in the process of scheduling a public information meeting within both the Alva and North Olga community plan area boundaries. A meeting summary document will be submitted containing the date, time and location of each meeting, a list of attendees, a summary of any concerns raised and the applicant's response prior to the application being found complete. The applicant will comply with Objective 17.3, Policies 17.3.1, 17.3.2, 17.3.3, 17.3.4 and Policy 27.1.8.

Objective 27.2 and its attendant polices direct Lee County to work with Alva and North Olga to develop and use a rural planning toolbox of incentives, programs and regulations that enhance and maintain the sense of place and provide for long-term preservation of contiguous natural resource and open space areas. The Owl Creek property will be required to provide long-term preservation areas by placing a minimum of 48% of the site into a conservation easement.

The Owl Creek property is situated at the convergence of two waterways: Owl Creek and Trout Creek where they join the Caloosahatchee River. Although there are existing agricultural uses of cattle grazing on site, the Owl Creek amendment proposes to preserve large open space areas by proposing clustered development with ample views of wooded areas, open spaces and river fronts, while balancing the removal of agricultural grazing lands and the enhancement and protection of environmentally sensitive lands, historic resources water quality and connectivity. The request is consistent with Objective 27.3 and Policies 27.3.2 by balancing efforts to protect and enhance the community's water quality and will not preclude potential uses listed in Policy 27.3.3 from the preservation areas on site.

The Owl Creek amendment includes stringent development criteria in the proposed Text Amendments and will incorporate conditions of approval in the forthcoming concurrent Planned Development Application that accommodate the location of a multipurpose path along North River Road, consistent with Objective 27.4, Policies 27.4.1 and 27.4.4. The two creeks on the subject property are included on the blueways map and conditions of the zoning approval will not preclude potential access as part of the preservation, consistent with Policy 27.4.2.

GOAL 29: NORTH OLGA COMMUNITY PLAN

The request protects and enhances the rural character and aesthetic qualities of the area, preserves natural and historic resources and promotes clustered development areas that preserves large, contiguous tracts of open space and preservation areas, consistent with Objective 29.1 and Policy 29.1.1. The Owl Creek property is situated at the convergence of two natural waterways: Owl Creek and Trout Creek where they join the Caloosahatchee River. Although there are existing agricultural uses of cattle grazing on site, the Owl Creek property proposes to preserve large open space areas by proposing clustered development, balancing

efforts to protect and enhance the community's water quality.

The Owl Creek amendment will accommodate clustered development with ample views of wooded areas, open spaces and river fronts, offsite agricultural uses and will allow for the protection of environmentally sensitive lands and historic heritage. The proposed clustered project will provide a connection between the Babcock Ranch Mixed Use Planned Development to the north and the Caloosahatchee River to the south, expanding the significant environmental, historical, water quality and infrastructure enhancements required for this area. A concurrent Planned Development application will be submitted to provide additional details regarding the development of the requested units and provide conditions of approval to ensure compliance with the stringent development requirements included with the proposed Text Amendments within the North Olga Community Plan. There will be a minimum 50-foot perimeter setback/buffer providing separation to adjacent uses. Community gardens will be included in the schedule of uses for the forthcoming concurrent Planned Development application. The request is consistent with Objective 29.2 and Policies 29.2.1, 29.2.2 and 29.2.3 as well as Policies 29.5.1 and 29.5.2.

The Greenways Master Plan depicts a multipurpose path along North River Road and depicts Owl Creek and Trout Creek on the Great Calusa Blueway. The Owl Creek property will incorporate conditions of approval in the forthcoming concurrent Planned Development Application that accommodate the location of a multipurpose path along North River Road and a potential public kayak/canoe launch area, consistent with Objective 29.6, Policies 29.6.1, 29.6.2, 29.6.3, 29.6.4 and 29.6.6.

Through the stringent requirements associated with this request and conditioning of the forthcoming planned development, the Owl Creek project will preserve 93% of the onsite wetlands providing protection and enhancements through exotic removal and maintenance and upland buffers. A minimum of 48 percent of the property (±165.58 acres) will be placed into a conservation easement including the convergence of two natural waterways on the Great Calusa Blueway (Owl Creek and Trout Creek) where they connect to the Caloosahatchee River. The conservation area will include preservation of 3 recommended historical sites and the project will provide a potential public canoe/kayak launch area to Trout Creek. The request is consistent with Objective 29.7 and Policies 29.7.1 and 29.7.2.

The request is consistent with Objective 29.8 and the Water Dependent Overlay as the project proposes a minimum 100-foot setback from Owl Creek Boat Works property line to single-family lots within the development.

The proposed Text Amendment associated with this request are attached in Exhibit T4 and provide a new Objective 29.10 and Policies 29.10.1 and 29.10.2 to provide stringent requirements for development within Sub-Outlying Suburban areas within North Olga Community Plan area.

TRANSPORTATION AND WATERWAYS

A Traffic Impact Statement prepared by TR Transportation Consultants, Inc. is attached to the request as Exhibit M15. This analysis demonstrates that the proposed land use change will not impact the results of the Level of Service analysis as reported in the adopted 2040 travel model. Therefore, no changes to the adopted long-range transportation plan are required as a result of the proposed land use change. The additional trips caused by the request to the projected 2025 volumes will not cause any roadway link to fall below the minimum acceptable Level of Service standards. No modifications will be necessary to the Lee County or FDOT short term capital improvement programs.

Map 3D-Lee County Walkways & Bikeways shows an on-road bikeway and a multi-use path

along North River Road. The request includes providing an area for a multi-use path along North River Road as shown on Maps 3D and 22 which will accommodate pedestrian and bicycle usage consistent with Objective 39.2 and Policy 39.2.3 as well as Objective 39.6 and Policies 39.6.1, 39.6.2 and 39.6.3.

Map 22-Lee County Greenways Master Plan shows a shared use path along North River Road and Owl Creek and Trout Creek are shown on the Great Calusa Blueway. The Owl Creek Text Amendment provides development criteria required to be incorporated into conditions of approval in the forthcoming concurrent Planned Development Application that accommodate a potential public canoe/kayak launch area to Trout Creek which connects to the Caloosahatchee River, furthering Goal 80, Objective 80.1, Policies 80.1.1 and 80.1.2.

SURFACE WATER MANAGEMENT

The Owl Creek project furthers Lee County's efforts in coordinating land use on a watershed basis contained in Goal 60, Objective 60.1 and implementing Policies. The proposed clustered development provides for preservation of natural waterways and associated wetland habitats, in furtherance of Policy 60.1.2. The requirements contained in the language associated with the request and in the conditions in the forthcoming planned development will protect existing groundwater levels and improve existing wetland hydroperiods in onsite preserve areas, provide an additional 50% water quality treatment, water quality monitoring, reduced rate of runoff, remove nutrient producing grazing lands adjacent to waterways, preserve 93% of on-site wetlands, and replacing the potential 221 private well and septic systems with privately funded extensions and connection to public water and sewer.

GREEN INFRASTRUCTURE

The Lee Plan includes an objective and policies that encourage development to incorporate green infrastructure in the surface water management systems. The Owl Creek project will incorporate green infrastructure by utilizing vegetated swales and treatment areas, Florida Friendly Landscaping with the low irrigation requirements in common areas, retention/detention lakes, and preserved and enhanced wetlands. These requirements will be required as conditions of the forthcoming concurrent Planned Development application. The request is consistent with Objective 60.4, Policies 60.4.1 and 60.4.2.

CONSERVATION AND COASTAL MANAGEMENT ELEMENT

The northern ±51 acres of the Owl Creek property are outside of the Coastal High Hazard Area and the southern ±292 acres are within. This amendment provides Text Amendments with stringent development criteria that will allow a concurrent Planned Development application to be filed including conditions ensuring the adjusted site design and clustered density development with environmental, historical, water quality and infrastructure enhancements. The applicant will enter into a development agreement prior to adoption of the plan amendment to memorialize appropriate mitigation as determined by Lee County Public Safety, which may include the payment of money or construction of hurricane shelters and transportation facilities in accordance with Lee Plan Policy 101.1.4.3.

RESOURCE PROTECTION, WETLANDS AND WATER QUALITY

The Owl Creek project will further Goal 123, which seeks to manage Lee County's wetland and upland ecosystems to protect habitats, floral and faunal species, water quality and natural surface water characteristics. As previously stated, through the stringent requirements associated with this request and conditioning of the forthcoming planned development, the Owl Creek project will preserve 93% of the onsite wetlands providing protection and enhancements. A minimum of 48 percent of the property (±165.58 acres) will be placed into a conservation easement including the convergence of two natural waterways on the Great Calusa Blueway

(Owl Creek and Trout Creek) where they connect to the Caloosahatchee River. The request will provide a connection between the Babcock Ranch Mixed Use Planned Development to the north and the Caloosahatchee River to the south, consistent with Policies 123.1.5 and 123.1.7. It will also provide a connection from the adjacent SFWMD owned lands to the east and south as well as the potential Conservation 20/20 lands to the east that contain a portion of Trout Creek which will provide a connection through the subject property to the Caloosahatchee River.

The Lee Plan also seeks to preserve native plant communities in the County. The request will be consistent with Lee Plan Objective 123.2 and Policy 123.2.2. The restrictive language associated with this request as well as conditions in the forthcoming Planned Development application will protect, enhance and preserve environmentally sensitive lands and plant communities and will result in a compatible clustered development.

The Owl Creek project will preserve high-quality natural plant communities in the conservation and open space area outside of the development footprint. Please see attached Environmental Impact Analysis (Exhibit M12). The project will provide enhancement of natural systems of the property and a conservation easement will be placed over 48% of the property. The pasture areas and most heavily altered nonnative plant communities are targeted for the clustered development. The project is consistent with Policies 123.2.4, 123.2.5, 123.2.7 and 123.2.8. Long-term management (e.g., exotic vegetation removal, trash/refuse removal, signage, etc.) of the preservation areas will be in accordance with Lee County-approved plans and the conservation easement. Long-term management of the conservation areas will occur in perpetuity. Invasive exotic plants will be removed from the property, prohibited from being planted and controlled in perpetuity, consistent with Policies 123.2.9 and 123.2.11.

The Owl Creek project will minimize impacts to on-site wetlands by clustering development and limiting impacts to 7% or less and will protect, enhance and preserve the remaining 93%. The project will be permitted though the South Florida Water Management District and will be consistent with Goal 124, Objective 124.1 and Policies 124.1.1 and 124.1.2.

The proposed project will be consistent with Goal 125, Objective 125.1, and Policies 125.1.1 and 125.1.2. The stringent requirements associated with this application and the forthcoming concurrent Planned Development application conditions will provide an additional 50% water quality treatment, water quality monitoring, reduced rate of runoff, remove nutrient producing grazing lands adjacent to waterways, preserve 93% of on-site wetlands, and replacing the potential 221 private well and septic systems with privately funded extensions and connection to public water and sewer.

HOUSING

Goal 135 addresses meeting housing needs of the present and future residents of the county. Objective 135.1 provides that Lee County will work with private and public housing providers to ensure that there is an adequate supply of housing in the future in a variety of types, costs, and locations to meet the needs of the Lee County population. The Objective provides that Lee County will need 114,927 additional dwelling units, 39,637 of these units will be needed in unincorporated Lee County. The proposed amendment helps, in part, to fulfill this identified housing need. The proposed clustered development will utilize the planned development process. The proposed plan amendment for Owl Creek is consistent and furthers Goal 135, Objective 135.1 and Policy 135.1.9.

CONCLUSIONS

The plan amendment is consistent with and in furtherance of the intent of the Lee Plan as discussed in this analysis. The plan amendment for Owl Creek represents an opportunity to incentivize the preservation of significant on-site natural resources such as natural waterways

and adjacent wetlands, rare and unique upland habitat and historical resources on the property by providing a clustered development that incorporates potential public access to the Caloosahatchee River via access to Trout Creek.

ADJACENT LOCAL GOVERNMENTS & THEIR COMPREHENSIVE PLANS

The plan amendment for Owl Creek will have no affect on existing adjacent local governments and their comprehensive plans. The closest adjacent local government to the subject property is Charlotte County.

REQUESTS MOVING LANDS FROM A NON-URBAN AREA TO A SUBURBAN AREA URBAN SPRAWL

In accordance with 163.3177(6)(a)9.b, Florida Statutes, the proposed Owl Creek plan discourages the proliferation of urban sprawl by achieving the following criteria:

(I) Directs or locates economic growth and associated land development to geographic areas of the community in a manner that does not have an adverse impact on and protects natural resources and ecosystems.
(II) Promotes the efficient and cost-effective provision or extension of public infrastructure and services.
(III) Promotes walkable and connected communities and provides for compact development and a mix of uses at densities and intensities that will support a range of housing choices and a multimodal transportation system, including pedestrian, bicycle, and transit, if available.
(IV) Promotes conservation of water and energy.
(VI) Preserves open space and natural lands and provides for public open space and recreation needs.
(VII) Creates a balance of land uses based upon demands of residential population for the nonresidential needs of an area.

The proposed Owl Creek clustered development will not have an adverse impact on and protects natural resources and ecosystems and preserves open space and natural lands and provides for public open space and recreation needs. The project will remove nutrient producing cattle grazing and the potential for 221 private septic systems while preserving and enhancing the majority of the onsite wetlands, placing a minimum of 48% of the property into a conservation easement including the convergence of two natural waterways on the Great Calusa Blueway (Owl Creek and Trout Creek) where they connect to the Caloosahatchee River. The request will also provide a connection from the adjacent SFWMD owned lands to the east and south as well as the potential Conservation 20/20 lands to the east that contain a portion of Trout Creek which will provide a connection through the subject property to the Caloosahatchee River. The project will provide an area for the multi-use path along North River Road as well as a potential public canoe/kayak launch area to Trout Creek, providing public open space and recreation needs. The multi-use path along North River Road promotes walkable and connected communities and promotes multimodal transportation including pedestrian and bicycle opportunities since transit is not available in this location. The proposal provides compact development providing an alternate single-family housing choice than the existing large lots in the area. The development will promote conservation of water and energy by incorporating energy efficiency or other low impact development (LID) performance standards within the development. The amendment promotes efficient and cost-effective provision for public infrastructure by proposed privately funded expansion of water and sewer to the area which is already encouraged and anticipated by existing Lee Plan policies. The project is located in an area that provides for a balance of residential, industrial marine and commercial land uses to the west along S.R. 31 and planned to the north within the Babcock MPD, continuing to prevent urban sprawl.

STATE POLICY PLAN AND REGIONAL POLICY PLAN

State Comprehensive Plan

Although the Community Planning Act of 2011 eliminated the requirement for consistency of the local comprehensive plan with the state comprehensive plan, the following analysis is included for further justification of the request. The plan amendment for Owl Creek is consistent and furthers the adopted State Comprehensive Plan. Relevant portions are discussed below.

187.201(4) Housing

(a) Goal – The public and private sectors shall increase the affordability and availability of housing for low-income and moderate-income persons, including citizens in rural areas, while at the same time encouraging self-sufficiency of the individual and assuring environmental and structural quality and cost-effective operations.

(b) Policies – 3. Increase the supply of safe, affordable, and sanitary housing for low-income and moderate-income persons and elderly persons by alleviating housing shortages, recycling older houses and redeveloping residential neighborhoods, identifying housing needs, providing incentives to the private sector to build affordable housing, encouraging public-private partnerships to maximize the creation of affordable housing, and encouraging research into low-cost housing construction techniques, considering life-cycle operating costs.

The Owl Creek project will increase the availability of moderate-income single-family housing in this area of Lee County. The plan amendment includes stringent development criteria assuring environmental quality through significant onsite preservation of land including wetlands, rare and unique uplands and historical sites. The plan amendment seeks to incentivize these preservation activities to allow the appropriately clustered residential development to offset the cost of preservation of the property.

187.201(6) Public Safety

(a) Goal – Florida shall protect the public by preventing, discouraging, and punishing criminal behavior, lowering the highway death rate, and protecting lives and property from natural and manmade disasters.

(b) Policies –

9. *Increase crime prevention efforts to enhance the protection of individual personal safety and property.*

The Lee County Sheriff's Office, Bayshore Fire Rescue and Lee County Emergency Medical Services have reviewed the request and provided letters which are included in attached Exhibit M17. These exhibits demonstrate that there is adequate capacity to accommodate the additional 219 dwelling units associated with this request.

187.201(9) Natural Systems and Recreational Lands

(a) Goal - Florida shall protect and acquire unique natural habitats and ecological systems, such as wetlands, tropical hardwood hammocks, palm hammocks, and virgin longleaf pine forests, and restore degraded natural systems to a functional condition.

(b) Policies -

1. *Conserve forests, wetlands, fish, marine life, and wildlife to maintain their environmental, economic, aesthetic, and recreational values.*
3. *Prohibit the destruction of endangered species and protect their habitats.*
4. *Establish an integrated regulatory program to assure the survival of endangered*

and threatened species within the state.

6. *Encourage multiple use of forest resources, where appropriate, to provide for timber production, recreation, wildlife habitat, watershed protection, erosion control, and maintenance of water quality.*
7. *Protect and restore the ecological functions of wetlands systems to ensure their long- term environmental, economic, and recreational value.*
8. *Promote restoration of the Everglades system and of the hydrological and ecological functions of degraded or substantially disrupted surface waters.*
10. *Emphasize the acquisition and maintenance of ecologically intact systems in all land and water planning, management, and regulation.*

Through the stringent requirements associated with this request and conditioning of the forthcoming planned development, the Owl Creek project will preserve 93% of the onsite wetlands providing protection and enhancements. A minimum of 48 percent of the property (±165.58 acres) will be placed into a conservation easement including the convergence of two natural waterways on the Great Calusa Blueway (Owl Creek and Trout Creek) where they connect to the Caloosahatchee River. The conservation area will include preservation of 3 recommended historical sites and the project will provide a potential public canoe/kayak launch area to Trout Creek. The Owl Creek project furthers these provisions of the State Comprehensive Plan.

187.201(12) Hazardous and Nonhazardous Materials and Waste

(a) Goal. - All solid waste, including hazardous waste, wastewater, and all hazardous materials, shall be properly managed, and the use of landfills shall be eventually eliminated.

(b) Policies. -

2. *By 1994, provide in all counties a countywide solid waste collection system to discourage littering and the illegal dumping of solid waste.*

The Owl Creek project has been reviewed by the Lee County Solid Waste Division and they have provided a review letter dated August 10, 2020. This letter provides that Lee County Solid Waste Division is capable of providing solid waste collection service for the Owl Creek project.

187.201(14) Property Rights

Goal. - Florida shall protect private property rights and recognize the existence of legitimate and often competing public and private interests in land use regulations and other government action.

Policies. -

1. *Provide compensation, or other appropriate relief as provided by law, to a landowner for any governmental action that is determined to be an unreasonable exercise of the state's police power so as to constitute a taking.*
2. *Determine compensation or other relief by judicial proceeding rather than by administrative proceeding.*
3. *Encourage acquisition of lands by state or local government in cases where regulation will severely limit practical use of real property.*

The proposed preservation and conservation areas and associated comprehensive plan amendment represents a balancing of public and private interests concerning the use of the Owl Creek property. Approval of the amendment will result in significant preservation of the Owl Creek property at no cost to the public.

187.201(15) Land Use

Goal. - In recognition of the importance of preserving the natural resources and enhancing the quality of life of the state, development shall be directed to those areas which have in place, or have agreements to provide, the land and water resources, fiscal abilities, and service capacity to accommodate growth in an environmentally acceptable manner.

Policies. -

1. *Promote state programs, investments, and development and redevelopment activities which encourage efficient development and occur in areas which will have the capacity to service new population and commerce.*
2. *Develop a system of incentives and disincentives which encourages a separation of urban and rural land uses while protecting water supplies, resource development, and fish and wildlife habitats.*

There are, or will be by privately funded extensions, adequate services available to the Owl Creek property to accommodate the proposed clustered development in an environmentally acceptable manner, preserving natural resources such as wetlands, rare and unique uplands, and 3 historical sites in conservation easements. The clustered development will provide for preservation, enhancement and conservation of fish and wildlife habitats while providing perimeter separation to adjacent rural land uses.

187.201(17) Public Facilities

Goal. - Florida shall protect the substantial investments in public facilities that already exist and shall plan for and finance new facilities to serve residents in a timely, orderly, and efficient manner.

Policies. -

1. *Provide incentives for developing land in a way that maximizes the uses of existing public facilities.*
2. *Promote rehabilitation and reuse of existing facilities, structures, and buildings as an alternative to new construction.*
3. *Allocate the costs of new public facilities on the basis of the benefits received by existing and future residents.*

There are or will be adequate public facilities to provide service to the Owl Creek project. The Owl Creek project will pay all required permit and impact fees, as well as all utility connection fees. Privately funded water and sewer extensions are proposed to the property which will provide fire protection to the existing and future residents and properties, including the Owl Creek project. The plan amendment for Owl Creek is consistent with these provisions of the State Comprehensive Plan.

Conclusion

The proposed plan amendment for Owl Creek is consistent with and generally furthers the State Comprehensive Plan.

Strategic Regional Policy Plan (SRPP)

The following Strategic Regional Policy Plan goals, strategies and actions are relevant to this plan amendment.

Affordable Housing Element

Goal 1: Supply a variety of housing types in various price ranges to ensure that all residents have access to decent and affordable housing.

The proposed development will increase the supply of housing and provide additional housing type options to the area, furthering this goal.

Economic Development

Goal 2: A well-educated, well-trained work force.

Strategy: Ensure a wide range of employment for all Southwest Floridians.

Actions:

1. *Identify employment sectors that create jobs appropriate to this Region.*

Approval of the plan amendment and clustered development for Owl Creek will increase employment opportunities in the housing construction industry which is an important component of the local employment sector. The plan amendment will also result in significant environmental enhancement of the property and privately funded extension of utilities which will result in additional employment opportunities during the construction of the project.

Strategy: To identify and include within a land conservation or acquisition program, those lands identified as being necessary for the sustainability of Southwest Florida, utilizing all land preservation tools available.

Strategy: Maintain and improve the natural, historic, cultural and tourist-related resources as primary regional economic assets.

Strategy: Ensure sustainable volumes of natural resources for economic productivity.

Goal 4: Livable communities designed to improve quality of life and provide for the sustainability of our natural resources.

Strategy: Promote through the Council's review roles community design and development principles that protect the Region's natural resources and provide for an improved quality of life.

Actions:

9. *Insure that opportunities for governmental partnerships and public/private partnerships in preserving wildlife habitats are maximized.*

Through the stringent requirements associated with this request and conditioning of the forthcoming planned development, the Owl Creek project will preserve 93% of the onsite wetlands providing protection and enhancements. A minimum of 48 percent of the property (±165.58 acres) will be placed into a conservation easement including the convergence of two natural waterways on the Great Calusa Blueway (Owl Creek and Trout Creek) where they connect to the Caloosahatchee River. The conservation area will include preservation of 3 recommended historical sites and the project will provide a potential public canoe/kayak launch area to Trout Creek. The proposed preservation and conservation areas and associated comprehensive plan amendment represents a balancing of public and private interests concerning the use of the Owl Creek property. Approval of the amendment will result in significant preservation of the Owl Creek property at no cost to the public.

Conclusion

The plan amendment for Owl Creek is consistent with and generally furthers the Strategic Regional Policy Plan.

Environmental Impacts Analysis
(Exhibit T7)

RECEIVED
SEP 2 1 2020
COMMUNITY DEVELOPMENT

Owl Creek Parcel

Environmental Assessment

Sections 18 & 19, Township 43 South, Range 26 East
Lee County, Florida

RECEIVED
SEP 21 2020
COMMUNITY DEVELOPMENT

September 2020

Prepared for:

D.R. Horton Homes
10541 Six Mile Cypress Pkwy., Suite 100
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Prepared by:

DexBender
4470 Camino Real Way, Suite 101
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Introduction

The 342.68± acre Owl Creek property consists of Strap Numbers 18-43-26-00-00002.0020, 18-43-26-00-00002.0000, and 19-43-26-00-00002.1020. The parcel is located within a portion of Sections 18 & 19, Township 43 South, Range 26 East, Lee County, Florida (Exhibit A). The property is bisected by Trout Creek.

This project consists of three separate parcels. Based on a review of historic aerial photography, the property had been primarily used for row crop farming. By early 2014 farming operations had ceased. This area is currently being used as improved pasture by cattle.

The proposed residential development would be primarily located on the previously farmed and disturbed areas with approximately 39.9 acres of the indigenous habitats preserved out of approximately 41.6 existing indigenous habitats which is approximately 96%.

The analysis below addresses the character of the proposed project for residential use in light of the proposed enhancement and preservation onsite.

Existing Vegetative Communities

The predominant upland and wetland vegetation associations were mapped in the field on 2019 digital color 1" = 500' scale aerial photography. The approximate property boundary was obtained from the Lee County Property Appraiser's web site and inserted into the digital aerial. The property boundary was not staked in the field at the time of our site inspection and was, therefore, estimated based on the overlay of the approximate boundary on the aerial photography. Twenty-five vegetation associations were identified using the Florida Land Use, Cover and Forms Classification System (FLUCCS). Exhibit B depicts the approximate location and configuration of these vegetation associations and Table 1 summarizes the acreages by FLUCCS Code. A brief description of each FLUCCS Code is also provided below.

Table 1. Acreage Summary by FLUCCS Code

FLUCCS CODE	DESCRIPTION	ACREAGE
211	Improved Pastures	183.38
***211H	Improved Pastures – hydric	1.87
422	Brazilian pepper	1.18
427DE1	Live Oak, Disturbed, Invaded by Exotics (10-25%)	2.98
427DE2	Live Oak, Disturbed, Invaded by Exotics (26-50%)	6.98
427DE3	Live Oak, Disturbed, Invaded by Exotics (51-75%)	7.81
427DE4	Live Oak, Disturbed, Invaded by Exotics (76-90%)	6.68
428DE4	Cabbage Palm, Disturbed, Invaded by Exotics (76-90%)	0.74
429E	Wax Myrtle, Invaded by Exotics (5-9%)	1.88

434DE4	Hardwood – Coniferous Mixed, Disturbed, Invaded by Exotics (76-90%)	1.59
*510	Streams and Waterways	5.49
**510D	Ditches	3.69
**524	Lakes less than 10 acres which are dominant features	0.71
***618DE1	Willow, Disturbed, Invaded by Exotics (10-25%)	1.19
***618DE2	Willow, Disturbed, Invaded by Exotics (26-50%)	0.20
***618DE3	Willow, Disturbed, Invaded by Exotics (51-75%)	0.07
***618DE4	Willow, Disturbed, Invaded by Exotics (76-90%)	8.56
***619BP	Hydric Brazilian Pepper	32.55
***630DE3	Wetland Forested Mixed, Disturbed, Invaded by Exotics (51-75%)	20.52
***630DE4	Wetland Forested Mixed, Disturbed, Invaded by Exotics (76-90%)	43.88
***641DE4	Freshwater Marsh, Disturbed, Invaded by Exotics (76-90%)	2.91
740	Disturbed Land	5.93
743	Spoil Area	0.52
747	Dike	0.35
814	Roads and Highways	1.02
Upland Subtotal		**221.04**
Wetland Subtotal		**111.75**
Surface Waters		**5.49**
Other Surface Waters Subtotal		**4.4**
Total		**342.68**

* Surface Waters
** Potential jurisdictional other surface waters
*** Potential jurisdictional wetland

Surrounding Land

The lands to the east of the site consist of privately owned agricultural and undeveloped land and an undeveloped parcel owned by the South Florida Water Management District (SFWMD). These lands have large components that have been improved for crops and pasture. Much of these habitats are infested with exotic vegetation. The land to the north, across North River Road, is owned by Babcock Property Holdings LLC and also consists of agricultural and undeveloped land. The land adjacent to the northwest portion of the site is privately owned, has been improved, and appears to include residential and agricultural uses. The property to the south is occupied by Owl Creek Boat Works. See Exhibit C for the Surrounding Land Map.

Soils

6. Hallandale Fine Sand - This is a nearly level, poorly drained soil on low, broad flatwoods areas. Slopes are smooth and range from 0 to 2 percent. Typically, the surface layer is gray fine sand about 2 inches thick. The subsurface layer is light gray fine sand about 5 inches thick. The substratum is very pale brown fine sand about 5 inches thick. At a depth of 12 inches is fractured limestone bedrock that has solution holes extending to a depth of 25 inches. These solution holes contain mildly alkaline, loamy material. Included with this soil in mapping are small areas of Boca soils and soils that have yellowish horizons or a brownish stain between the subsurface layer and limestone. Also included are scattered areas of rock outcrop, which are less than 1 acre, and soils that have hard calcareous material at a depth of less than 20 inches. Included soils generally make up about 5 to 10 percent of any mapped area. In most years, under natural conditions, the water table is less than 10 inches below the surface for 1 to 3 months. It recedes below the limestone for about 7 months. The available water capacity is low. Natural fertility is low. Permeability is moderate or moderately rapid. Natural vegetation consists of saw palmetto, pineland threeawn, bluestem, panicums, and South Florida slash pine. This soil is poorly suited to cultivated crops because of wetness, shallow depth, and sandy texture.

12. Felda Fine Sand - This is a nearly level, poorly drained soil on broad, nearly level sloughs. Slopes are smooth to concave and range from O to 2 percent. Typically, the surface layer is dark gray fine sand about 8 inches thick. The subsurface layer is light gray and light brownish gray fine sand about 14 inches thick. The subsoil is light gray loamy fine sand about 16 inches thick and is underlain by gray and light gray fine sand that extends to a depth of 80 inches or more. Included with this soil in mapping are small areas of Boca, Malabar, Oldsmar, Pineda, and Wabasso soils. These inclusions rarely exceed 15 percent of any mapped area. In most years, under natural conditions, this soil has a water table within 10 inches of the surface for 2 to 4 months. The water table is 10 to 40 inches below the surface for about 6 months. It is more than 40 inches below the surface for about 2 months. During periods of high rainfall, the soil is covered by a shallow layer of slowly moving water for periods of about 7 to 30 days or more. The available water capacity is low in the surface and subsurface layers and medium in the subsoil. Natural fertility is low. Permeability is rapid in the surface and subsurface layers, moderate or moderately rapid in the subsoil, and rapid in the substratum. Natural vegetation consists of cabbage palm, pineland threeawn, South Florida slash pine, wax myrtle, and maidencane. This soil is poorly suited to cultivated crops because of wetness.

13. Boca Fine Sand - This is a nearly level, poorly drained soil on flatwoods. Slopes are smooth and range from O to 2 percent. Typically, the surface layer is gray fine sand about 3 inches thick. The subsurface layer is fine sand about 22 inches thick. The upper 11 inches is light gray and the lower 11 inches is very pale brown. The subsoil, about 5 inches thick, is gray fine sandy loam with brownish yellow mottles and calcareous nodules. At a depth of 30 inches is a layer of fractured limestone. Included with this soil in mapping are small areas of Hallandale, Wabasso, and Felda soils that have a yellowish horizon between the subsurface layer and subsoil. Also included are soils with limestone

at a depth of 40 to 72 inches and small areas where the soil is better drained than is typical. Included soils make up about 15 percent of any mapped area. In most years, under natural conditions, the water table is within 10 inches of the surface for 2 to 4 months. It recedes below the limestone for about 6 months. The available water capacity is low in the surface and subsurface layers and medium in the subsoil. Natural fertility is low. Permeability is rapid in the surface and subsurface layers and moderate in the subsoil. Natural vegetation consists of saw palmetto, pineland threeawn, South Florida slash pine, and wax myrtle. This soil is poorly suited to cultivated crops because of wetness.

33. Oldsmar Sand - This is a nearly level, poorly drained soil on low, broad flatwoods areas. Slopes are smooth to slightly convex and range from 0 to 2 percent. Typically, the surface layer is black sand about 3 inches thick. The subsurface layer is gray and light gray sand about 39 inches thick. The upper part of the subsoil is very dark gray sand about 5 inches thick. The lower part of the subsoil is yellowish brown and mixed light brownish gray and brown fine sandy loam about 11 inches thick. Pale brown sand extends to a depth of 80 inches or more. Included with this soil in mapping are small areas of Wabasso, Immokalee, and EauGallie soils. Some areas also have limestone at a depth of 70 to 80 inches below the surface. Included soils make up about 10 to 15 percent of any mapped area. In most years, under natural conditions, the water table is at a depth of less than 10 inches for 1 to 3 months. It is at a depth of 10 to 40 inches for more than 6 months, and it recedes to a depth of more than 40 inches during extended dry periods. The available water capacity is low in the surface layer and medium in the subsoil. Natural fertility is low. Permeability is rapid in the surface and subsurface layers, moderate in the upper part of the subsoil, and slow or very slow in the lower part of the subsoil. Natural vegetation consists of saw palmetto, South Florida slash pine, pineland threeawn, and meadow beauty. This soil is poorly suited to cultivated crops primarily because of wetness.

35. Wabasso Sand - This is a nearly level, poorly drained soil on flatwoods. Slopes are smooth to slightly convex and range from 0 to 2 percent. Typically, the surface layer is dark gray sand about 6 inches thick. The subsurface layer is sand to a depth of 24 inches. The upper 11 inches is light brownish gray with dark grayish brown stains along root channels, and the lower 7 inches is light gray with dark grayish brown stains. The subsoil is about 38 inches thick. The upper 4 inches is dark brown sand with few iron concretions. The next 8 inches is brownish yellow sandy clay loam with light brownish gray, light gray, and reddish-brown mottles. The lower 26 inches is light gray sandy clay loam with pale olive and olive mottles and stains along root channels. Below is light gray fine sandy loam with olive mottles extending to a depth of 80 inches *or more.* Included with this soil in mapping *are* small areas of Boca, EauGallie, Hallandale, Felda, Myakka, and Oldsmar soils. Also included *are* soils, similar to this Wabasso soil, with a surface layer that is *more* than 8 inches thick. Included soils make up about 10 to 15 percent of any mapped *area.* In most years, under natural conditions, the water table is less than 10 inches below the surface for *2* to 4 months. It is 10 to 40 inches below the surface for more than 6 months. It recedes to a depth of more than 40 inches during extended dry periods. The available water capacity is low in the surface and subsurface layers and medium in the subsoil.

Natural fertility is low. Permeability is rapid in the surface and subsurface layers, moderate in the upper part of the subsoil, and slow *or very* slow in the lower part of the subsoil. Natural vegetation consists of saw palmetto, South Florida slash pine, pineland threeawn, cabbage palm, and bluestem. This soil is poorly suited to cultivated crops because of wetness.

40. Anclote Sand, Depressional - This is a nearly level, very poorly drained soil in isolated depressions. Slopes are smooth to concave and less than 1 percent. Typically, the surface layer is about 22 inches thick. The upper 8 inches is black sand, and the lower 14 inches is black sand with common light gray pockets and streaks throughout. The substratum is sand to a depth of 80 inches or more. The upper 18 inches is light brownish gray, and the lower 40 inches is light gray. Included with this soil in mapping are small areas of Pompano and Floridiana soils. Included soils make up about 10 to 15 percent of any mapped area. In most years, under natural conditions, the soil is ponded for more than 6 months. The available water capacity is medium in the surface layer and low in the substratum. Natural fertility is medium. Permeability is rapid. A large part of the acreage is in natural vegetation consisting of cypress, leatherleaf fern, wax myrtle, pickerelweed, and greenbrier.

45. Copeland Sandy Loam, Depressional - This is a low, nearly level, very poorly drained soil in depressions. Slopes are concave and less than 1 percent. Typically, the surface layer is about 8 inches of very dark gray sandy loam. The subsoil is very dark gray sandy loam about 12 inches thick. It is underlain by 8 inches of light brownish gray sandy clay loam with soft calcium carbonate throughout. Fractured limestone bedrock is at a depth of 28 inches. Included with this soil in mapping are small areas of Chobee, Anclote, Boca, Felda, Floridana, and Pompano soils. In addition, soils similar to Copeland soils but with a mixture of fine sand and shell fragments to a depth of 60 inches or more are included. Areas with limestone at a depth of more than 40 inches are also included. Included soils generally make up less than 15 percent of any mapped area. Under natural conditions, the water table is above the surface for 3 to 6 months. It is 10 to 40 inches below the surface for about 3 to 6 months. The available water capacity is medium. Natural fertility is medium. Permeability is rapid in the surface layer and moderate in the subsoil. Natural vegetation is cypress, wax myrtle, cabbage palm, fern, redroot, and other water-tolerant plants. This soil has moderate potential for desirable range plant production. The dominant forage is maidencane and cutgrass. The depth to the water table fluctuates throughout the year.

49. Felda Fine Sand, Depressional - This is a nearly level, poorly drained soil in depressions. Slopes are concave and less than 1 percent. Typically, the surface layer is gray fine sand about 4 inches thick. The subsurface layers extend to a depth of 35 inches. The upper 13 inches is grayish brown fine sand and the lower 18 inches is light gray fine sand with yellowish brown mottles. The subsoil is about 17 inches thick. The upper 6 inches is gray sandy loam and the lower 11 inches is sandy clay loam with many yellowish brown and strong brown mottles. Below this is light gray fine sand to a depth of 80 inches or more. Included with this soil in mapping are small areas of Anclote, Boca, Malabar, Pineda, Pompano, Winder, and Floridiana soils. Included soils make up about 10 to 15

percent of any mapped area. In most years, under natural conditions, the soil is ponded for about 3 to 6 months or more. The water table is within a depth of 10 to 40 inches for 4 to 6 months. The available water capacity is low in the surface and subsurface layers and medium in the subsoil. Natural fertility is low. Permeability is rapid in the surface and subsurface layers and moderate or moderately rapid in the subsoil. Natural vegetation consists of bald cypress, wax myrtle, and water-tolerant grasses and weeds.

51. Floridiana Sand, Depressional - This is a nearly level, very poorly drained soil in depressions. Slopes are concave and less than 1 percent. Typically, the surface layer is black sand about 22 inches thick. The subsurface layer is light brownish gray sand about 17 inches thick. The subsoil is olive gray fine sandy loam to a depth of 54 inches. Below the subsoil there is light brownish gray sand with pockets of olive gray loamy sand. Included with this soil in mapping are small areas of Anclote, Felda, and Winder soils. Also included are soils similar to the Floridiana soil but with a black surface layer thicker than 24 inches or with the upper boundary of the subsoil below a depth of 40 inches. Included soils make up about 10 to 15 percent of any mapped area. In most years, under natural conditions, the water table is above the surface for 3 to 6 months. It is 10 to 40 inches below the surface during extended dry periods. The available capacity is medium in the surface layer and subsoil and low in the subsurface layer. Natural fertility is medium. Permeability is rapid in the surface and subsurface layers and slow or very slow in the subsoil. Natural vegetation is St.-Johns wort, pickerelweed, cypress, sedges, weeds, and other water tolerant plants.

144. Caloosa Fine Sand - This is a nearly level, somewhat poorly drained soil formed by dredging and filling and by earthmoving operations. Slopes are smooth to slightly convex and range from 0 to 2 percent. Typically, the surface layer is about 10 inches of light brownish gray, mixed mineral material of fine sand and lenses of silt loam with about 10 percent shell fragments. The next 17 inches is pale brown and gray, mixed mineral material of fine sand and lenses of silty clay loam. The next 11 inches is light gray silty clay with brownish yellow mottles. Below this to a depth of 80 inches or more is gray silty clay with dark gray streaks and brownish yellow mottles. Included with this soil in mapping are areas of Matlacha and St. Augustine soils and soils that are similar to Caloosa soils but that contain 10 to 35 percent limestone and shell fragments less than 3 inches in diameter or 10 percent limestone and shell fragments larger than 3 inches. In addition, there are scattered areas of soils that are sandy to a depth of 80 inches or more. Also included are areas of fill that is less than 20 inches thick over undisturbed soils. Included soils make up about 10 to 20 percent of any mapped area. The depth to the water table varies with the amount of fill material and the extent of artificial drainage within any mapped area. However, in most years, the water table is 30 to 42 inches below the surface of the fill material for 2 to 4 months. The available water capacity is variable, but it is estimated to be low to medium in the upper part of the fill material and medium to high in the lower part. Permeability is variable within short distances, but it is estimated to range from rapid to very slow depending on the soil material.

Please see Exhibit D for the Soils Map.

FEMA Flood Narrative

The Owl Creek project is shown on Firm Map 12071C0301F and 12701C0282F per community panel 125124. The site is located in flood zone AE with a base flood elevation of 7' NAVD. A portion of the project area is within the regulatory floodway. The floodway areas generally follow the tidal creeks of Owl Creek and Trout Creek. A LOMR was approved in 2019 that reduced the size of the floodway compared to what is shown on the FIRM map. The floodway has been shown on the attached map consistent with the 2019 LOMR. The current FEMA flood map with the site area shown is provided as Exhibit G - M12-4. The project will not fill within any regulatory floodway and all homes will be constructed a minimum of one foot above the base flood elevation in effect at the time of construction.

Wetlands and Rare and Unique Uplands

The property contains areas that meet the criteria to be SFWMD jurisdictional wetlands, surface waters, and other surface waters. Areas mapped as FLUCCS Codes 211H, 618DE1-4, 619BP, 630DE3&4, and 641DE4 (111.75± acres) are likely to be claimed as jurisdictional wetland by the SFWMD (Exhibit F). The areas mapped as FLUCCS Code 510 (5.49± acres) are likely to be claimed as surface waters and 510D and 524 (4.4± acres) are likely to be claimed as jurisdictional other surface waters by the SFWMD.

The wetland areas on site range from moderate quality (FLUCCS Codes 618DE1, 618DE2, 618DE3 and 630DE3) to very low quality (FLUCCS Code 211H, 618DE4, 619BP, 630DE4, and 641DE4). Almost all of the wetlands onsite are associated with natural creeks and man-made ditches that drain into Owl and Trout Creeks. The quality of the wetlands depends on the level of disturbance and infestation by exotic vegetation.

There are 0.74 acres of Rare and Unique Uplands on the subject property (FLUCCS 428DE4). Because these areas are infested with exotic vegetation at a 76-90% coverage, these areas are not considered Indigenous Habitat.

Potential Listed Species

The property has been evaluated for the potential presence of listed species. A review of the Florida Fish and Wildlife Conservation Commission (FWC) listed species occurrence database (updated June 2019) shows that there are no known state or federally listed species either on or immediately adjacent to the project area (Exhibit G).

This assessment focuses on identifying the federal and state listed species that potentially could be found within the various vegetative habitats on the project site (Table 2). Although habitat conditions are disturbed from agricultural activity, there remains suitable foraging areas for listed avian (e.g., wood stork, limpkin, sandhill crane) species.

Table 2. Listed Species That Could Potentially Occur Onsite

FLUCCS CODE	Species Name	Status
211	Florida Sandhill Crane (*Grus canadensis pratensis*)	ST
	Florida Panther (*Felis concolor coryi*)	FE
427	Eastern Indigo Snake (*Drymarchon corais couperi*)	FT
	Gopher Tortoise (*Gopherus polyphemus*)	ST
	Florida Panther (*Felis concolor coryi*)	FE
	Hand Adder's Tongue Fern (*Ophioglossum palmatum*)	FE
	Simpson's Stopper (*Myrcianthes frangrans* var. *simpsonii*)	ST
	Twisted Air Plant (*Tillandsia flexuosa*)	ST
	Florida Bonneted Bat (*Eumops floridanus*)	FE
428	Eastern Indigo Snake (*Drymarchon corais couperi*)	FT
	Audubon's Crested Caracara (*Polyborus plancus audubonii*)	FT
	Florida Panther (*Felis concolor coryi*)	FE
	Simpson's Stopper (*Myrcianthes frangrans* var. *simpsonii*)	ST
429	None	FE
434	Florida Panther (*Felis concolor coryi*)	FE
510	American Alligator (*Alligator mississippiensis*)	FT
	Little Blue Heron (*Egretta caerulea*)	ST
	Reddish Egret (*Egretta rufescens*)	ST
	Roseate Spoonbill (*Ajaia ajaja*)	ST
	Tricolored Heron (*Egretta tricolor*)	ST
	Everglades Mink (*Mustela vison evergladensis*)	ST
524	American Alligator (*Alligator mississippiensis*)	FT
	Little Blue Heron (*Egretta caerulea*)	ST
	Reddish Egret (*Egretta rufescens*)	ST
	Roseate Spoonbill (*Ajaia ajaja*)	ST
	Tricolored Heron (*Egretta tricolor*)	ST
	Everglades Mink (*Mustela vison evergladensis*)	ST
618	American Alligator (*Alligator mississippiensis*)	FT
	Little Blue Heron (*Egretta caerulea*)	ST
	Reddish Egret (*Egretta rufescens*)	ST
	Tricolored Heron (*Egretta tricolor*)	ST
	Wood Stork (*Mycteria americana*)	FT
	Big Cypress Fox Squirrel (*Sciurus niger avicennia*)	ST
	Everglades Mink (*Mustela vison evergladensis*)	ST

FLUCCS CODE	Species Name	Status
619BP	None	
630	American Alligator (*Alligator mississippiensis*) Little Blue Heron (*Egretta caerulea*) Tricolored Heron (*Egretta tricolor*) Wood Stork (*Mycteria americana*) Everglades Mink (*Mustela vison evergladensis*) Florida Panther (*Felis concolor coryi*) Florida Bonneted Bat (*Eumops floridanus*)	FT ST ST FT ST FE FE
641	American Alligator (*Alligator mississippiensis*) Florida Sandhill Crane (*Grus canadensis pratensis*) Little Blue Heron (*Egretta caerulea*) Reddish Egret (*Egretta rufescens*) Snail Kite (*Rostrhamus sociabilis*) Tricolored Heron (*Egretta tricolor*) Wood Stork (*Mycteria americana*) Everglades Mink (*Mustela vison evergladensis*)	FT ST ST ST FE ST FT ST
740	None	
743	None	
747	None	
814	None	

ST – State designated Threatened
FT – Federally designated Threatened
FE – Federally designated Endangered

The Audubon's crested caracara (*Polyborus plancus audubonii*) is a raptor that typically nests in solitary or small groups of cabbage palms within larger areas of open grasslands. This species is listed as threatened by both the FWC and FWS. While no Audubon's crested caracara or their nests were observed and the quality of the potential habitat on-site is poor, the property is located within the known breeding range of this species.

Nesting habitat for the bald eagle does occur within the property but there are no nests onsite or near the site. The closest bald eagle nest (LE-039 last active 2020) is located approximately 1,800' east of the property.

According to the FWC listed species occurrence database the property is located within the FWS designated Core Foraging Area of a wood stork colony. The wood stork (*Mycteria americana*) is listed as threatened by both the FWC and the FWS. No wood storks have been observed onsite. Colony locations provided by FWS show several

colonies within a 25 mile radius of the property, the closest being three miles away.

The property is not located within a primary or secondary zone of the 2007 Florida Panther Focus Area and is not within the 2003 Panther Consultation Area identified by the FWS. The Florida panther (*Felis concolor coryi*) is listed as endangered by both the FWS and FWC. There are no telemetry points on or near the subject property.

The Florida bonneted bat (*Eumops floridanus*) is listed as endangered by the FWS and the FWC. The FWS established a Consultation Area for this species in its October 22, 2019 letter to the COE. This letter also establishes survey protocols for determining both potential roosting and foraging activities on proposed development sites and potential Best Management Practices (BMP) to lessen the potential impacts of development on the species. The property is located within the Consultation Area. This bat typically roosts in cavities within large live or dead trees but may also roost in abandoned buildings and under bridges. Florida bonneted bats forage in a variety of upland, wetland, and open water habitats preferring open areas.

It is likely that a variety of both listed and non-listed wading bird species forage within the wetlands onsite. This foraging activity is likely concentrated in the ditches and cypress-pine habitats. The wetland areas that are heavily invaded by exotics and/or that are hydrologically altered provide reduced quality habitat for potential foraging by these species.

Proposed Site Conditions

The proposed impacts to SFWMD jurisdictional wetlands include 7.7 acres. To mitigate for these impacts a total of 165.6+/- acres of wetlands and uplands will be enhanced by the removal of exotic vegetation and preserved by the placement of a conservation easement (Exhibit H).

The proposed impacts to indigenous habitats include approximately 1.7 acres. The proposed preservation of 39.9 acres of indigenous habitats represents 93% of the existing indigenous habitat areas. Additionally, all of the existing Rare and Unique Uplands onsite (FLUCCS 428DE4) will be preserved (0.74 acres).

The habitat improvements and preservation resulting from implementation of the wetland enhancement and preservation plan are expected to encourage native species to thrive in the preserve areas onsite as well as reduce the exotic vegetation seed source for the surrounding properties.

Conclusions

If the proposed future land use map change is approved, the proposed onsite wetland enhancement and preservation will provide long-term viability for a myriad of fish and wildlife species, including potential county, state and federally listed species located onsite and on the surrounding properties.

It is expected that existing prey and forage habitat for listed and non-listed species will be enhanced through removal and maintenance of invasive exotic plants and protected by implementation of the proposed enhancement and preservation of onsite wetlands.

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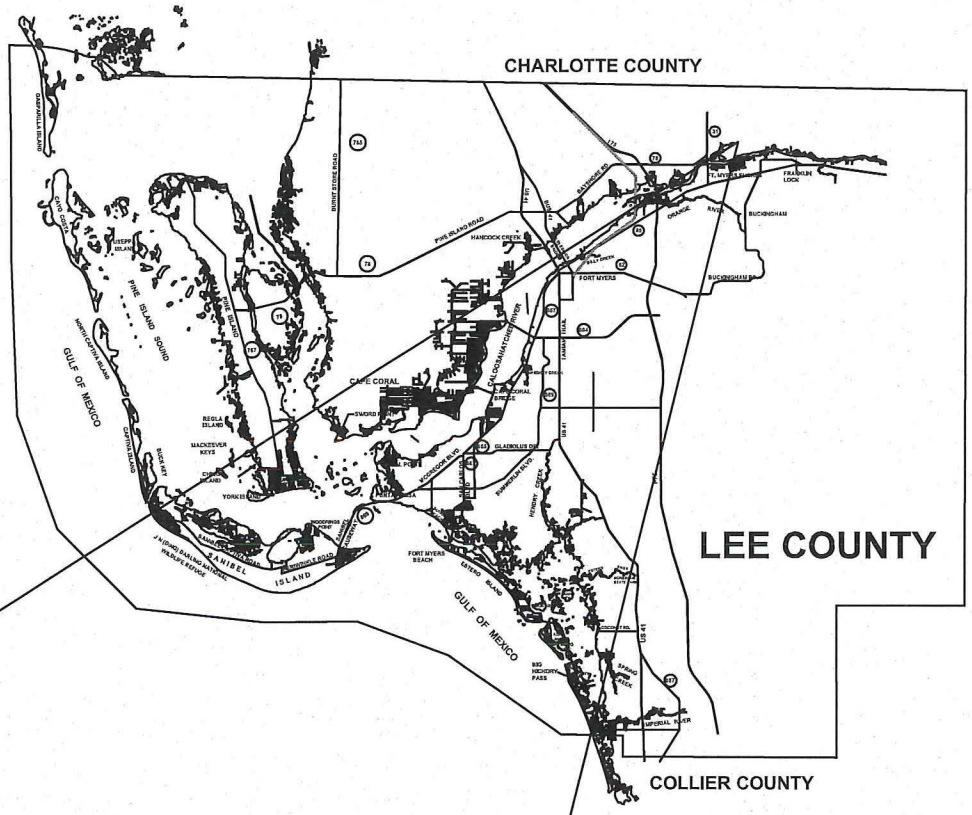
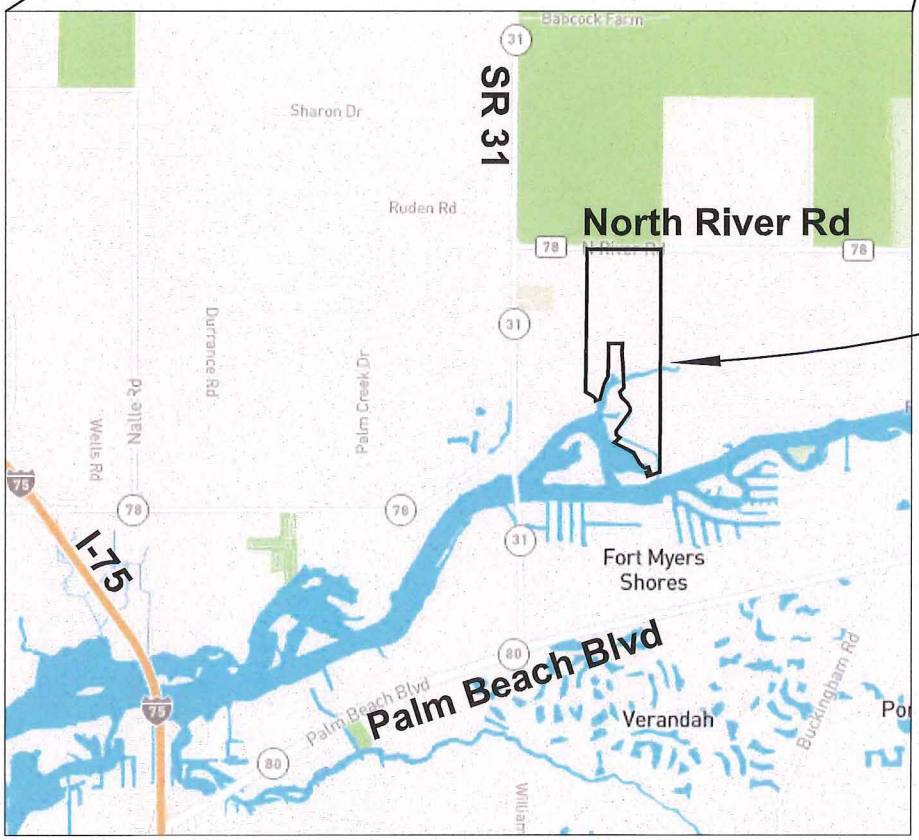
Exhibit A

Location Map

SECTION: 18 & 19
TOWNSHIP: 43 S
RANGE: 26 E

Owl Creek Parcel





Project Location

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Location Map

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Exhibit B

Vegetation Map

SECTIONS: 18 & 19
TOWNSHIP: 43 S
RANGE: 26 E

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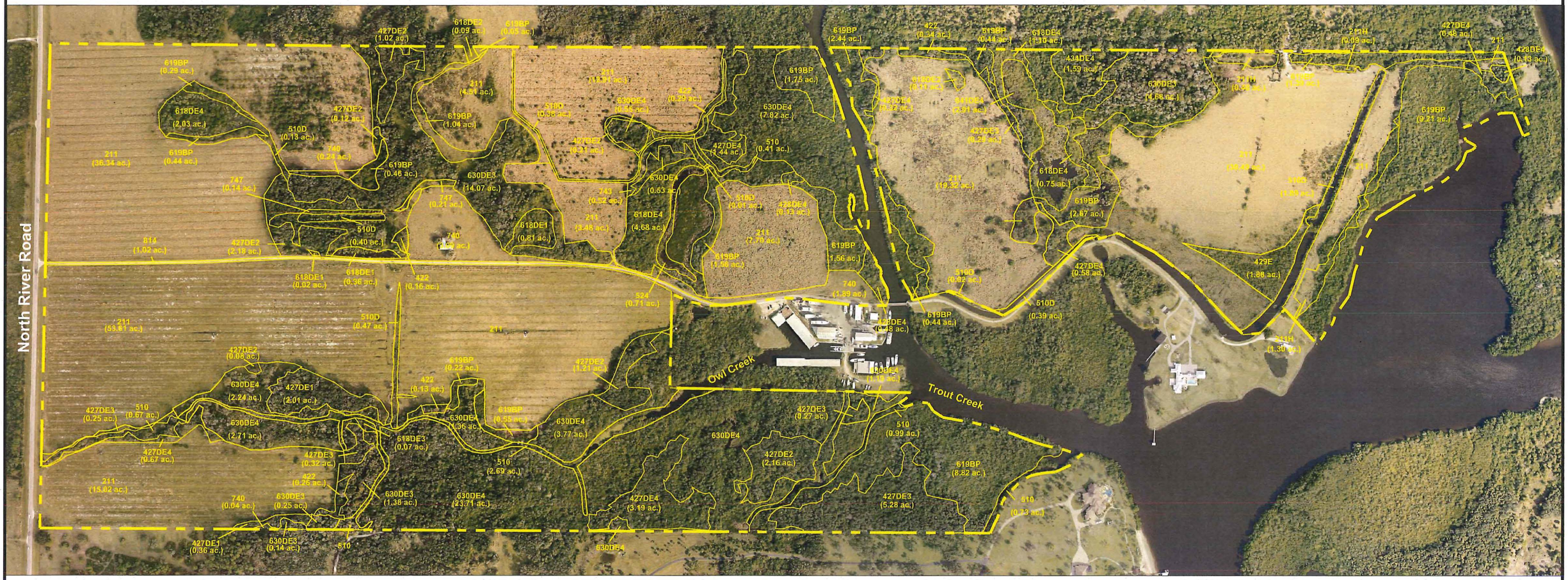
SCALE FEET



FLUCCS	Description	Acreage
211	Improved Pastures	183.38 ac.
***211H	Improved Pastures - hydric	1.87 ac.
422	Brazilian Pepper	1.18 ac.
427DE1	Live Oak, Disturbed, Invaded by Exotics (10-25%)	2.98 ac.
427DE2	Live Oak, Disturbed, Invaded by Exotics (26-50%)	6.98 ac.
427DE3	Live Oak, Disturbed, Invaded by Exotics (51-75%)	7.81 ac.
427DE4	Live Oak, Disturbed, Invaded by Exotics (76-90%)	6.68 ac.
428DE4	Cabbage Palm, Disturbed, Invaded by Exotics (76-90%)	0.74 ac.
429E	Wax Myrtle, Invaded by Exotics (5-9%)	1.88 ac.
434DE4	Hardwood- Coniferous Mixed, Disturbed, Invaded by Exotics (76-90%)	1.59 ac.
*510	Streams and Waterways	5.49 ac.
**510D	Ditches	3.69 ac.
**524	Lakes less than 10 acres which are dominant features	0.71 ac.

FLUCCS	Description	Acreage
***618DE1	Willow, Disturbed, Invaded by Exotics (10-25%)	1.19 ac.
***618DE2	Willow, Disturbed, Invaded by Exotics (26-50%)	0.20 ac.
***618DE3	Willow, Disturbed, Invaded by Exotics (51-75%)	0.07 ac.
***618DE4	Willow, Disturbed, Invaded by Exotics (75-90%)	8.56 ac.
***619BP	Hydric Brazilian Pepper	32.55 ac.
***630DE3	Wetland Forested Mixed, Disturbed, Invaded by Exotics (51-75%)	20.52 ac.
***630DE4	Wetland Forested Mixed, Disturbed, Invaded by Exotics (76-90%)	43.88 ac.
***641DE4	Freshwater Marsh, Disturbed, Invaded by Exotics (76-90%)	2.91 ac.
740	Disturbed Land	
743	Spoil Area	5.93 ac.
747	Dike	0.52 ac.
814	Roads and Highways	0.35 ac.
		1.02 ac.
	Total	342.68 ac.

* Surface Waters
** Potential jurisdictional other surface waters
*** Potential jurisdictional wetland

Notes:
1. Property boundary is approximate and was obtained from the Lee County Property Appraiser's Website.
2. Mapping based on photointerpretation of 2019 aerial photography and ground truthing in February 2020.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

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Vegetation Map

Owl Creek Parcel

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Exhibit C

Surrounding Land Map

SECTION: 18 & 19
TOWNSHIP: 43 S
RANGE: 26 E

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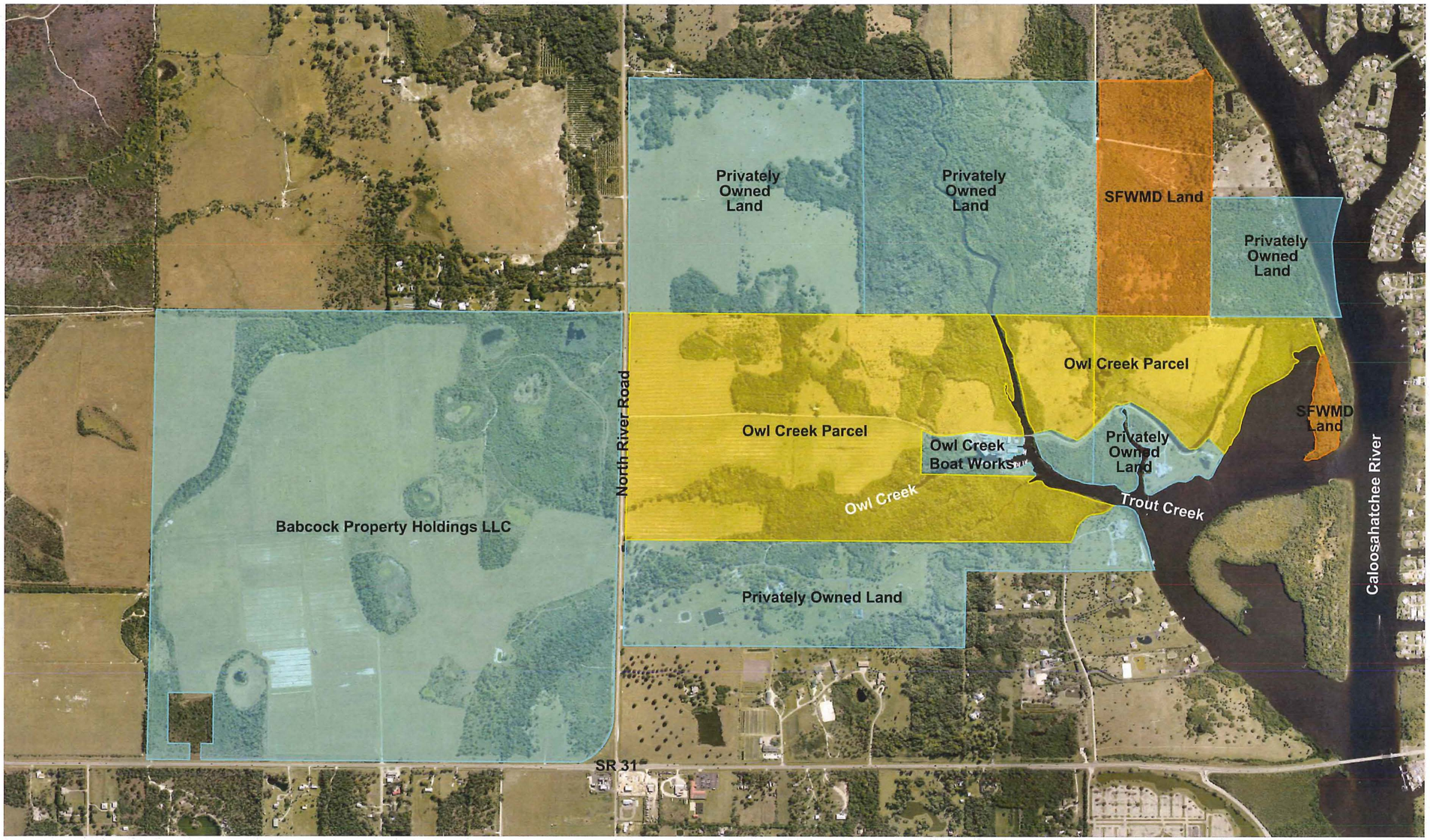
SCALE FEET



Owl Creek Parcel

Privately Owned Land

SFWMD Land

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Notes:
1. Property boundaries are approximate and were obtained from the Lee County Property Appraiser's Website.

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September 16, 2020 10:36:19 a.m.
Drawing: DRHOR455_SURROUNDING LANDS.DWG

Surrounding Land Map	Owl Creek Parcel	DEXBENDER ENVIRONMENTAL CONSULTING FORT MYERS 239-334-3680

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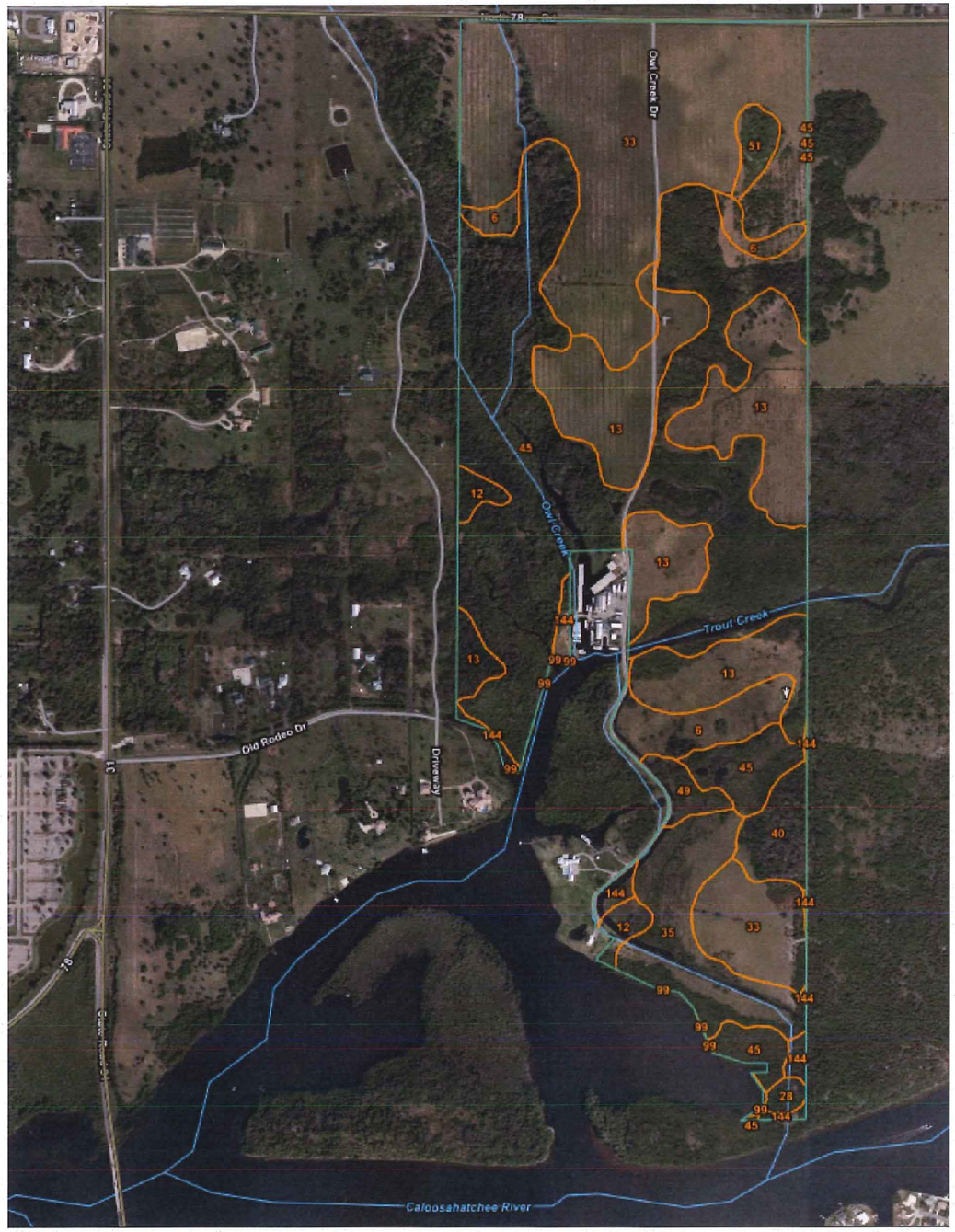
Exhibit D

Soils Map



Lee County, Florida (FL071)

Lee County, Florida (FL071)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
6	Hallandale fine sand, wet, 0 to 2 percent slopes	14.5	4.1%
12	Felda fine sand, 0 to 2 percent slopes	4.2	1.2%
13	Boca fine sand, 0 to 2 percent slopes	64.7	18.4%
28	Immokalee sand, 0 to 2 percent slopes	1.4	0.4%
33	Oldsmar sand, 0 to 2 percent slopes	99.5	28.3%
35	Wabasso sand, 0 to 2 percent slopes	22.0	6.2%
40	Anclote sand, frequently ponded, 0 to 1 percent slopes	7.4	2.1%
45	Copeland fine sandy loam, frequently ponded, 0 to 1 percent slopes	126.2	35.8%
49	Felda fine sand, frequently ponded, 0 to 1 percent slopes	3.6	1.0%
51	Floridana sand, frequently ponded, 0 to 2 percent slopes	3.3	0.9%
99	Water	0.2	0.1%
144	Caloosa fine sand, 0 to 2 percent slopes	5.2	1.5%
Totals for Area of Interest		**352.2**	**100.0%**

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NOTES:

*SOILS INFORMATION IS FROM THE USDA WEB SOIL SURVEY WEBSITE. ACREAGE IS APPROXIMATED AND INCLUDES THE SUBMERGED LANDS IN THE CREEKS THAT ARE NOT PART OF THE PROJECT SITE.

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SOILS MAP AND DESCRIPTION OF SOILS EXHIBIT-M12-2

OWL CREEK

LEE COUNTY, FLORIDA

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08/31/2020	8504	_EXHIBIT	KG	KG	DRU	N.T.S.	01

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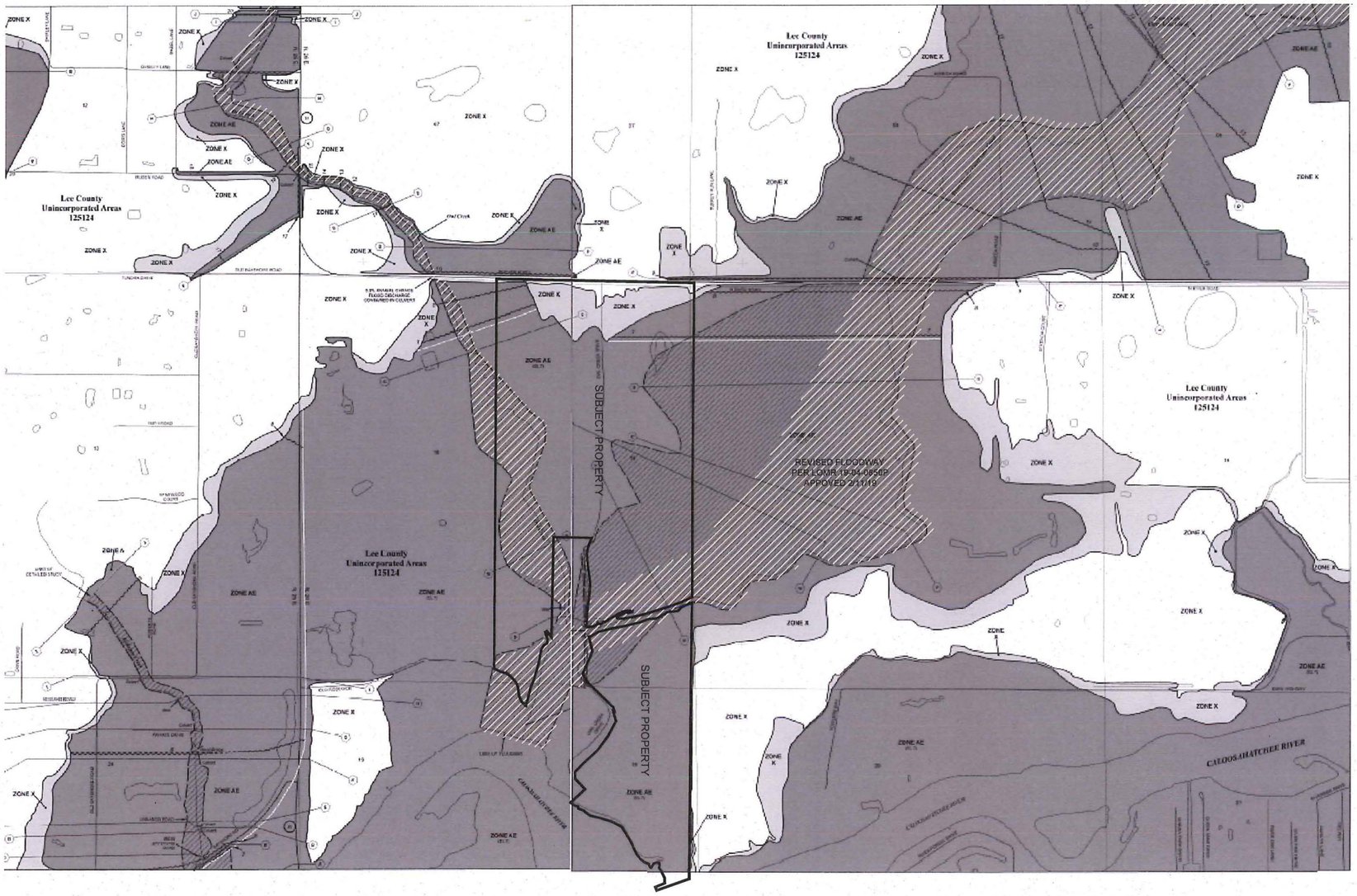
Exhibit E

FEMA Map



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LEGEND

SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD

The 1% annual flood (100-year flood), also known as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. The Special Flood Hazard Area is the area subject to flooding by the 1% annual chance flood. Areas of Special Flood Hazard include Zones A, AE, AH, AO, AR, A99, V, and VE. The Base (1%) Flood Elevation is the water-surface elevation of the 1% annual chance flood.

ZONE A	No Base Flood Elevations determined.
ZONE AE	Base Flood Elevations determined.
ZONE AH	Flood depths of 1 to 3 feet (usually areas of ponding); Base Flood Elevations determined.
ZONE AO	Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding, velocities also determined.
ZONE AR	Special Flood Hazard Area formerly protected from the 1% annual chance flood by a flood control system that was subsequently decertified. Zone AR indicates that the former flood control system is being restored to provide protection from the 1% annual chance or greater flood.
ZONE A99	Area to be protected from 1% annual chance flood by a Federal flood protection system under construction; no Base Flood Elevations determined.
ZONE V	Coastal flood zone with velocity hazard (wave action); no Base Flood Elevations determined.
ZONE VE	Coastal flood zone with velocity hazard (wave action); Base Flood Elevations determined.

FLOODWAY AREAS IN ZONE AE

The floodway is the channel of a stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without substantial increases in flood heights.

OTHER FLOOD AREAS

ZONE X	Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.

OTHER AREAS

ZONE X	Areas determined to be outside the 0.2% annual chance floodplain.
ZONE D	Areas in which flood hazards are undetermined, but possible.

COASTAL BARRIER RESOURCES SYSTEM (CBRS) AREAS

OTHERWISE PROTECTED AREAS (OPAs)

CBRS areas and OPAs are normally located within or adjacent to Special Flood Hazard Areas.

- Floodplain boundary
- Floodway boundary
- Zone D boundary
- CBRS and OPA boundary
- Boundary dividing Special Flood Hazard Area zones and boundary dividing Special Flood Hazard Areas of different Base Flood Elevations, flood depths or flood velocities.
- 513 — Base Flood Elevation line and value; elevation in feet*
- (EL 987) — Base Flood Elevation value where uniform within zone; elevation in feet*

* Referenced to the North American Vertical Datum of 1988

- (A)———(A) Cross Section Line
- (B)- - - - - -(B) Transect line
- 87°07'45", 32°22'30" — Geographic coordinates, referenced to the North American Datum of 1983 (NAD 83), Western Hemisphere
- 7576000FT N — 1000-meter Universal Transverse Mercator grid values, zone 17
- 600000 FT — 5000-foot grid ticks: Florida State Plane coordinate system, West zone (FIPSZONE 0902), Transverse Mercator projection
- DX5510 x M1.5 — Bench mark (see explanation in Notes to Users section of this FIRM panel)
- River Mile

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MAP DELINEATING MOST RECENT FLOOD INSURANCE EXHIBIT-M-12-4

OWL CREEK

LEE COUNTY, FLORIDA

DATE	PROJECT	DRAWING	DESIGN	DRAWN	CHECKED	SCALE	SHEET
08/24/2020	8504	_EXHIBIT	KG	KG	DRU	N.T.S.	01

Exhibit F

Wetland Map

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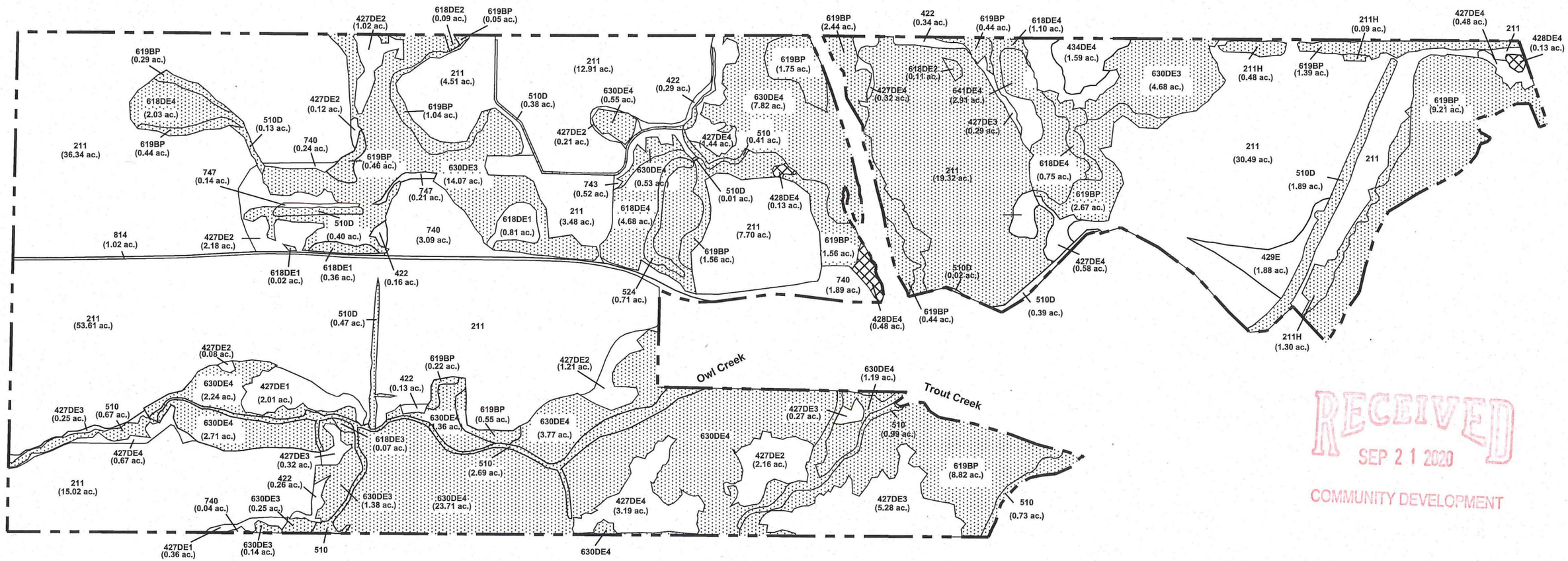
SECTIONS: 18 & 19
TOWNSHIP: 43 S
RANGE: 26 E

0 250 500
SCALE FEET



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Potential Jurisdictional Wetland Surface Waters and Other Surface Waters (121.64 ac.)

Rare and Unique Uplands (0.74 ac.)

* Surface Waters
** Potential jurisdictional other surface waters
*** Potential jurisdictional wetland

FLUCCS	Description	Acreage
211	Improved Pastures	183.38 ac.
***211H	Improved Pastures - hydric	1.87 ac.
422	Brazilian Pepper	1.18 ac.
427DE1	Live Oak, Disturbed, Invaded by Exotics (10-25%)	2.98 ac.
427DE2	Live Oak, Disturbed, Invaded by Exotics (26-50%)	6.98 ac.
427DE3	Live Oak, Disturbed, Invaded by Exotics (51-75%)	7.81 ac.
427DE4	Live Oak, Disturbed, Invaded by Exotics (76-90%)	6.68 ac.
428DE4	Cabbage Palm, Disturbed, Invaded by Exotics (76-90%)	0.74 ac.
429E	Wax Myrtle, Invaded by Exotics (5-9%)	1.88 ac.
434DE4	Hardwood- Coniferous Mixed, Disturbed, Invaded by Exotics (76-90%)	1.59 ac.
*510	Streams and Waterways	5.49 ac.
**510D	Ditches	3.69 ac.
**524	Lakes less than 10 acres which are dominant features	0.71 ac.

FLUCCS	Description	Acreage
***618DE1	Willow, Disturbed, Invaded by Exotics (10-25%)	1.19 ac.
***618DE2	Willow, Disturbed, Invaded by Exotics (26-50%)	0.20 ac.
***618DE3	Willow, Disturbed, Invaded by Exotics (51-75%)	0.07 ac.
***618DE4	Willow, Disturbed, Invaded by Exotics (75-90%)	8.56 ac.
***619BP	Hydric Brazilian Pepper	32.55 ac.
***630DE3	Wetland Forested Mixed, Disturbed, Invaded by Exotics (51-75%)	20.52 ac.
***630DE4	Wetland Forested Mixed, Disturbed, Invaded by Exotics (76-90%)	43.88 ac.
***641DE4	Freshwater Marsh, Disturbed, Invaded by Exotics (76-90%)	2.91 ac.
740	Disturbed Land	5.93 ac.
743	Spoil Area	0.52 ac.
747	Dike	0.35 ac.
814	Roads and Highways	1.02 ac.
	Total	342.68 ac.

Notes:
1. Property boundary is approximate and was obtained from the Lee County Property Appraiser's Website.
2. Mapping based on photointerpretation of 2019 aerial photography and ground truthing in February 2020.
3. Delineation of jurisdictional wetlands is preliminary and subject to field review/approval by applicable regulatory agencies.

FOR CONCEPTUAL PLANNING PURPOSES ONLY

September 17, 2020 2:43:03 p.m.
Drawing: DRHOR455PLAN.DWG

Wetland Map | **Owl Creek Parcel**

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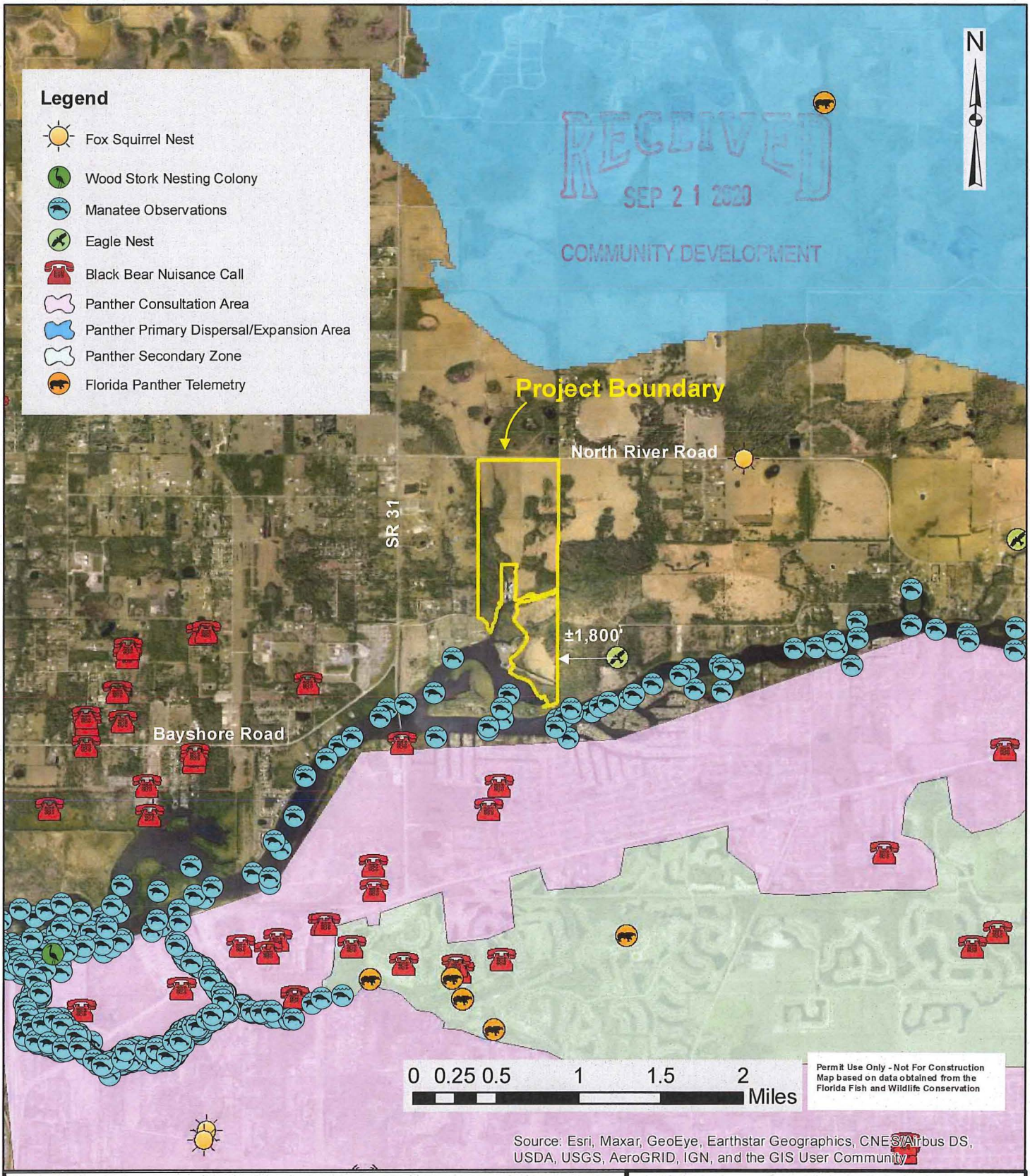
Exhibit G

Protected Species Database Map

Sections: 18 and 19
Township: 43
Range: 26

Owl Creek Parcel



Listed Species Database Map

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Document Path: Y:\DRHOR-455\GIS_GPS\Listed Species Map.mxd

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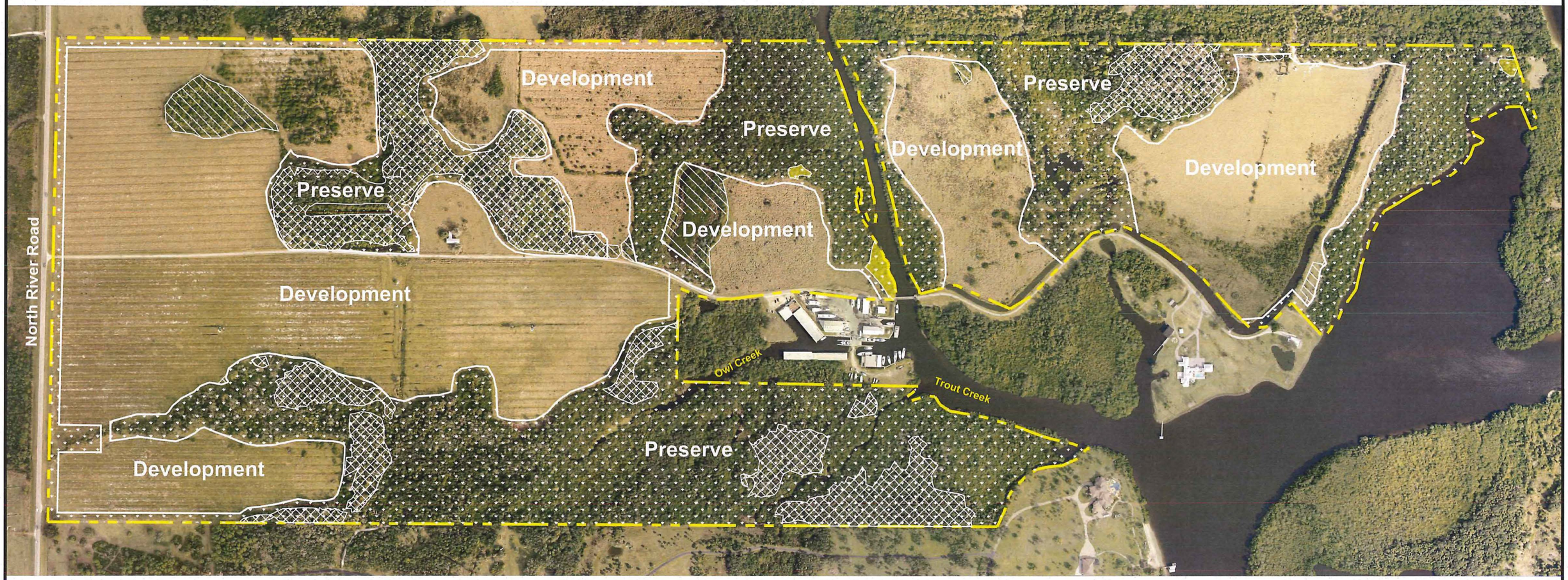
Exhibit H

Enhancement and Preservation Map

SECTIONS: 18 & 19
TOWNSHIP: 43 S
RANGE: 26 E

0 250 500
SCALE FEET



Development Footprint (179.81 ac.)

Upland & Wetland Preservation Footprint (165.58 ac.)

Wetland Impact Footprint (7.69 ac.)

Indigenous Habitat Preservation (39.92 ac.)

Rare and Unique Uplands Preservation (0.74 ac.)

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Notes:
1. Property boundary is approximate and was obtained from the Lee County Property Appraiser's Website.
2. Development footprint provided by Banks Engineering.

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Drawing: DRHOR455PLAN.DWG

Enhancement & Preservation Map	Owl Creek Parcel	DEXBENDER ENVIRONMENTAL CONSULTING FORT MYERS 239-334-3680

Historic Resources Impacts Analysis
(Exhibit T8)

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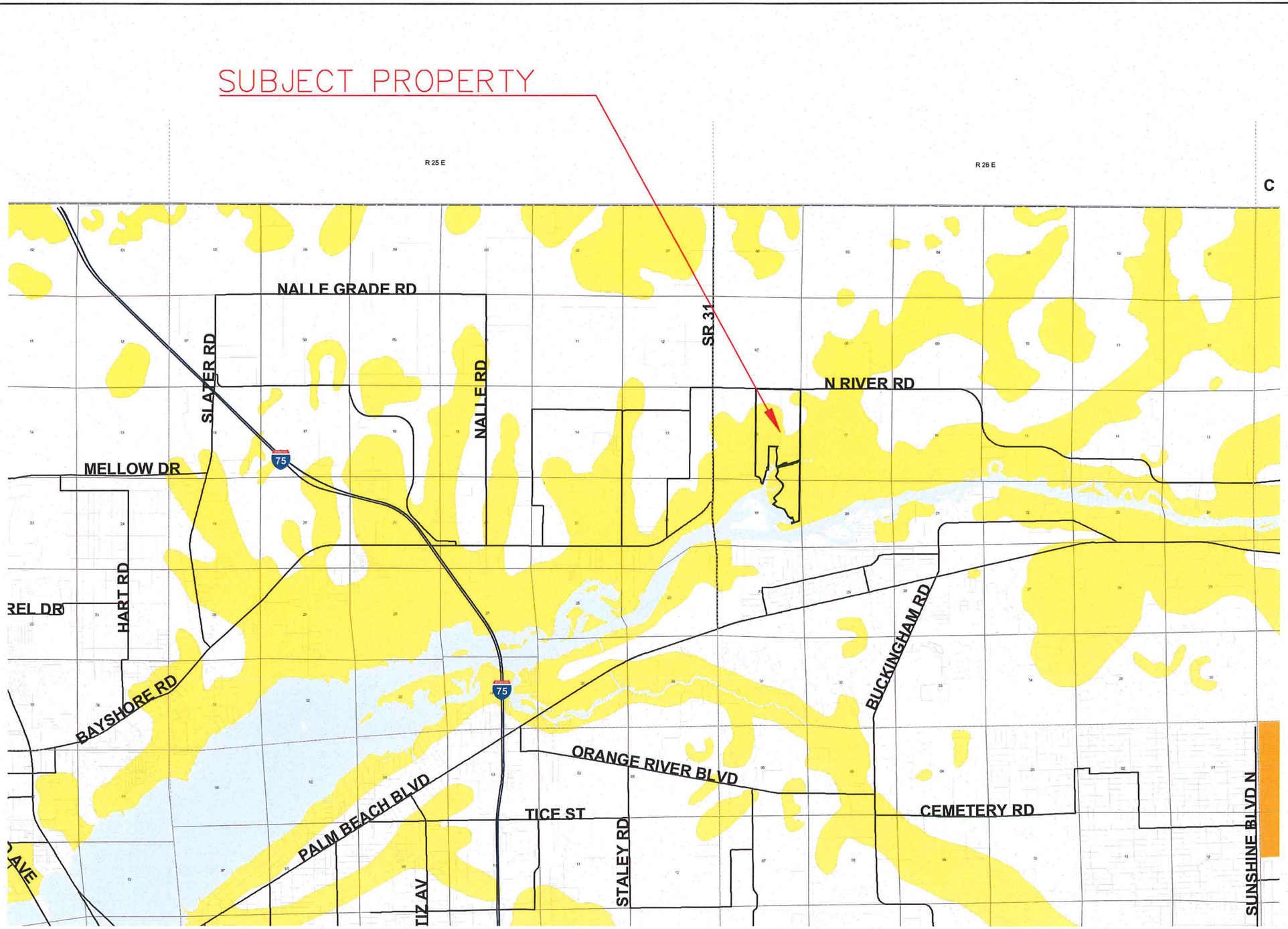

Lee County Archaeological Sensitivity Map

Legend

- Sensitivity Level 1
- Sensitivity Level 2
- Previously Surveyed

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ARCHAEOLOGICAL SENSITIVITY MAP EXHIBIT-M13-2

OWL CREEK

LEE COUNTY, FLORIDA

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AN ANALYSIS OF POTENTIAL IMPACTS TO CULTURAL RESOURCES ON THE OWL CREEK PARCEL, LEE COUNTY, FLORIDA

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By:
Robert S. Carr, M.S.
John Wesley White, B.A.

ARCHAEOLOGICAL AND HISTORICAL CONSERVANCY, INC.
4800 SW 64th Avenue, Suite 107
Davie, Florida 33314
archlgcl@bellsouth.net
(954) 792-9776

For:

BANKS ENGINEERING

AHC PROJECT NO. 2020.94
AHC TECHNICAL REPORT NO. 1294
AUGUST, 2020

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CONSULTANT SUMMARY

In August, 2020, the Archaeological & Historical Conservancy, Inc. (AHC) conducted an analysis of potential impacts to any known or potential cultural resources on the Owl Creek parcel. The 350 acre parcel is located in Sections 18 and 19 in Township 43S, Range 26E immediately south of County Road 78 in north central Lee County (Figure 1).

The Owl Creek parcel is located within what was once called the North River Assemblage Parcel (NRAP). The NRAP was much larger (1300-acres) and was first subject to a phase I cultural resource assessment in 2007 (Carr et al. 2007), resulting in the discovery of three archaeological sites within what is now the Owl Creek parcel boundaries, 8LL2397, 8LL2398, and 8LL2399.

Sites 8LL2397 and 8LL2398 were described as prehistoric midden sites, containing a mixture of prehistoric ceramics, faunal bone, and marine shell. Site 8LL2399 was identified as a constructed mound, 60-70cm above surrounding grade. Some oyster shell was found, but the site was considered a possible burial mound.

All three archaeological sites were considered potentially eligible for listing on the National Register of Historic Places (NRHP) under Criterion D, and were recommended for preservation.

This analysis concludes that all of the previously recorded archaeological sites: 8LL2397, 8LL2398, and 8LL2399 have not changed in their preservation quality nor have been altered by any development activities. The sites remain eligible for listing in the NRHP and should be avoided by future development.

In addition to the review of the previously recorded sites, one newly recorded prehistoric site, 8LL2825 was discovered during the course of this assessment. Site 8LL2825 is located in a plowed agricultural field, and has been intensely disturbed and is not regarded as eligible for listing on the National Register of Historic Places.

The developer proposes to preserve sites 8LL2397, 8LL2398, and 8LL2399. It is recommended that each of the sites be preserved within a minimum 25 foot buffer, and that a temporary silt fence be placed around each site prior to any ground disturbing activities. An archaeological monitor should confirm the location of the buffer/fencing and should confirm that the sites are avoided during construction activities.

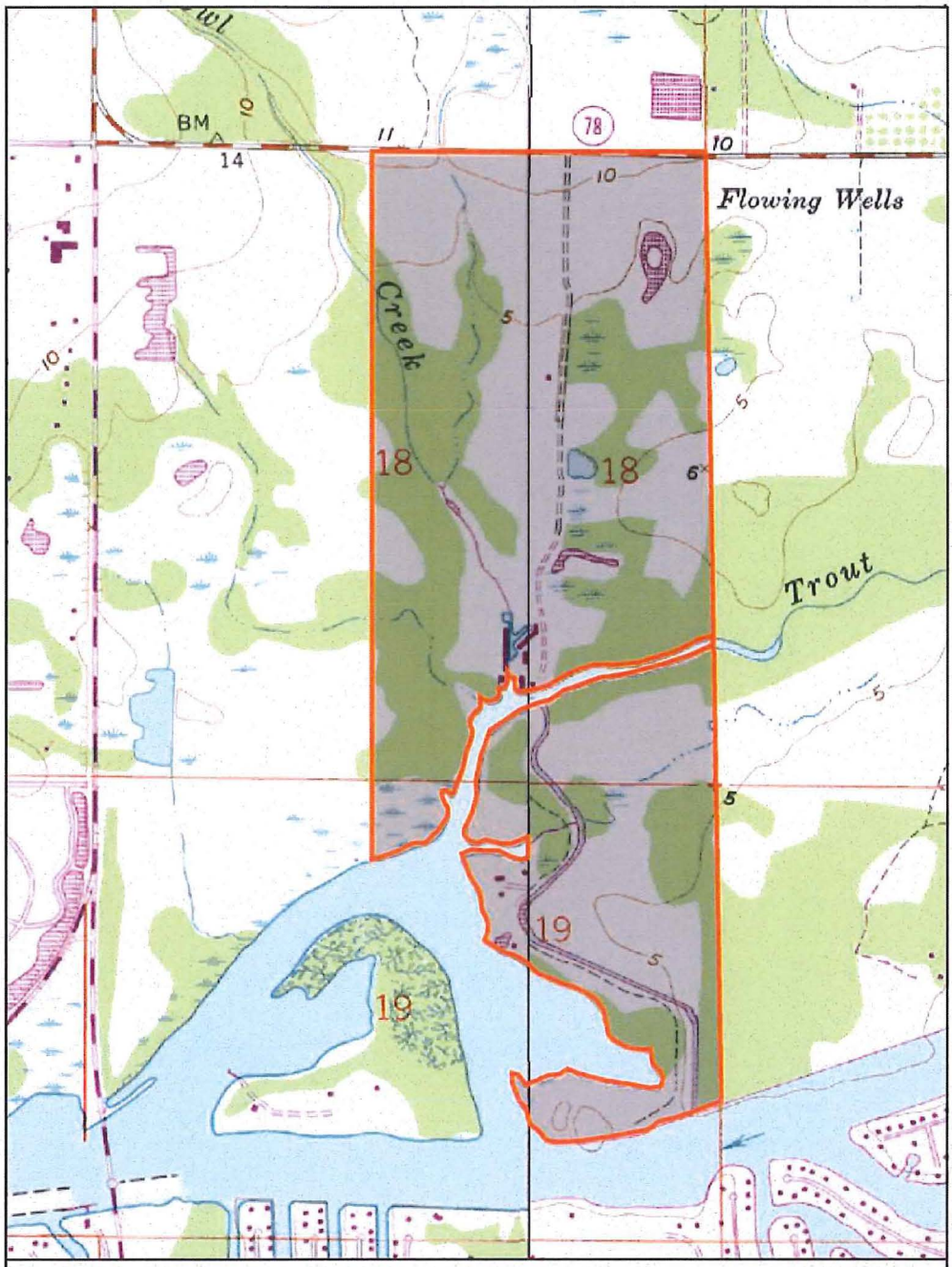


Figure 1. USGS Map of the Owl Creek parcel.

N

TOWNSHIP 43S, RANGE 26E, SECTION 18. 19

USGS Map: FORT MYERS, REV. 1991

0	750	1500	3000 Feet
0	270	450	900 Meters

PROJECT SETTING

The Owl Creek Parcel is located in parts of Sections 18 and 19 in Township 43S, Range 26E immediately south of County Road 78 in north central Lee County (Figure 1). The ±141.6 hectare (±350 acre) project area is bordered by State Road 78 to the north, and on the other sides by cleared fields, undeveloped woodland, the Caloosahatchee River and Trout and Owl Creeks. The relevant USGS maps are Olga and Fort Myers, Fla.

The subject parcel encompasses portions of both the Trout and Owl Creeks. It includes improved areas such as citrus groves and cattle range as well as natural areas of palmetto and slash pine flat woods, oak/cabbage palm hammocks, and several creeks that drain southward into the Caloosahatchee River. Prior land alterations include clearing, grading and ditching. Many portions of the parcel have been previously farmed with winter vegetables and are currently citrus groves.

The project area is low-lying to moderately elevated (5-10 feet, NGVD) vegetated in slash pine/saw palmetto flatwoods with grassy marshes. Slash pine flatwoods communities are usually situated on high ground in much of western Lee County. Historically, floral communities that contain a dense, often head-high understory of saw palmetto, were subject to and maintained by periodic forest fires. Fires either began naturally through lightning strikes or were started by prehistoric Indians or by early settlers to aid hunting or cattle grazing. Among the plants typically found in the slash pine/saw palmetto flatland/prairie environments are: slash pine, saw palmetto, gallberry, shiny lyonia, rusty lyonia, staggerbush, dahoon holly, ground oak, wire grass, broom sedges, shiny blueberry, xyris, and a variety of annual and perennial herbs and wildflowers blooming seasonally.

The geology of the central Lee County area is characterized fine-grained wind and wave born sands overlying shelly marls. Most of the surfacial sands are characterized in the *Lee County Soil Survey* as "hydric, level, poorly drained" and are fine-grained wind and water-born deposits from the late Pleistocene/early Holocene. Among the soils present on the subject parcel are: Myakka fine sand, Pompano Fine Sand, Hallandale Fine Sand, Isles Fine Sand and Immokalee sands. A soil category designed as Peckish Mucky Fine Sand is a mangrove sand/peat formation present in tidally flooded mangrove swamps.

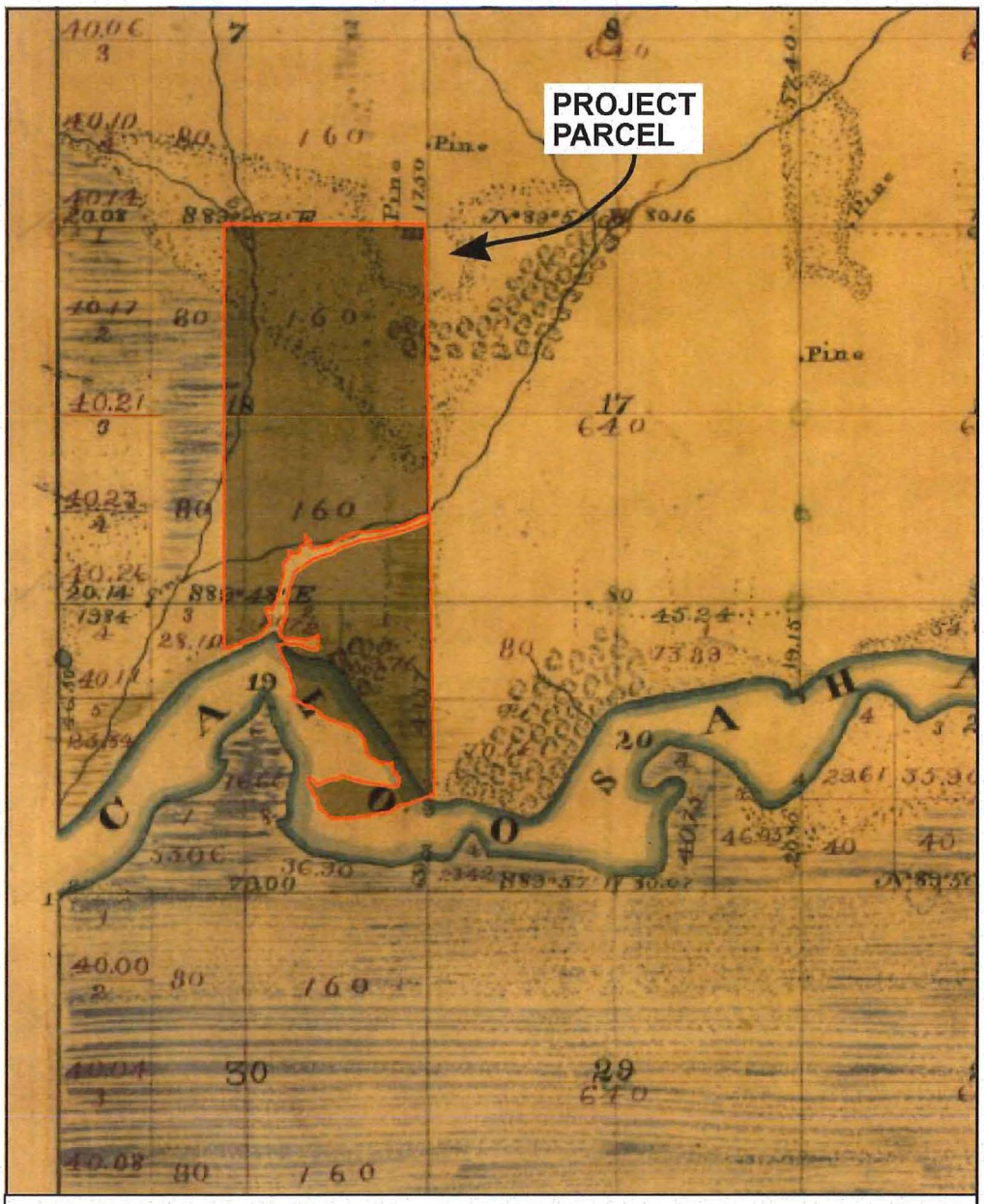
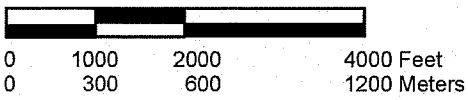


Figure 2. Portion of the 1873 plat map for Township 43S, Range 26E with the project parcel boundaries superimposed.

0 1500 3000 6000 Feet
0 450 900 1800 Meters

N

Figure 3. 1944 black and white aerial photograph of the project parcel.



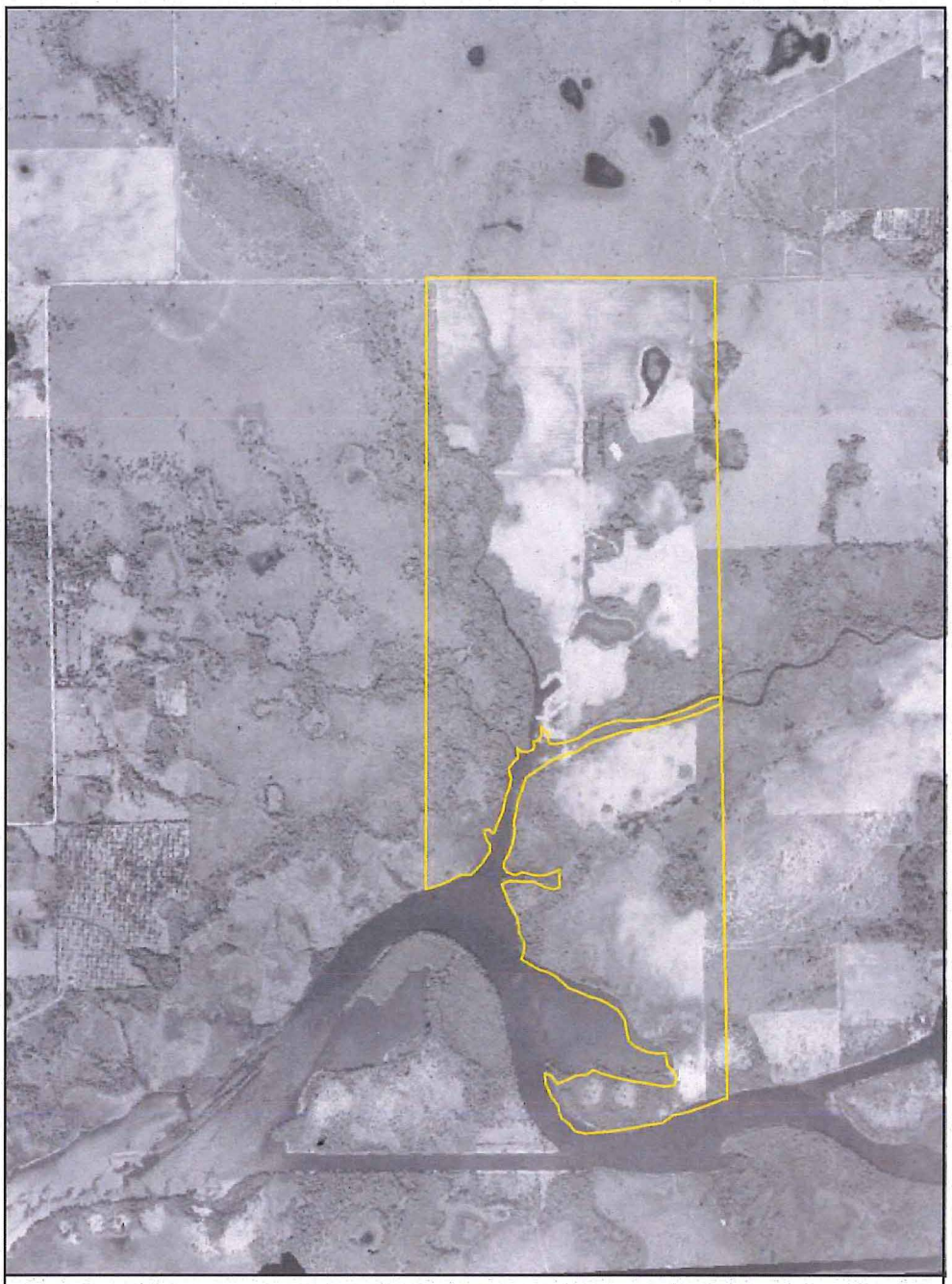
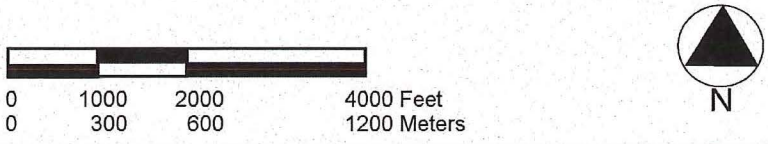


Figure 4. 1953 black and white aerial photograph of the project parcel.



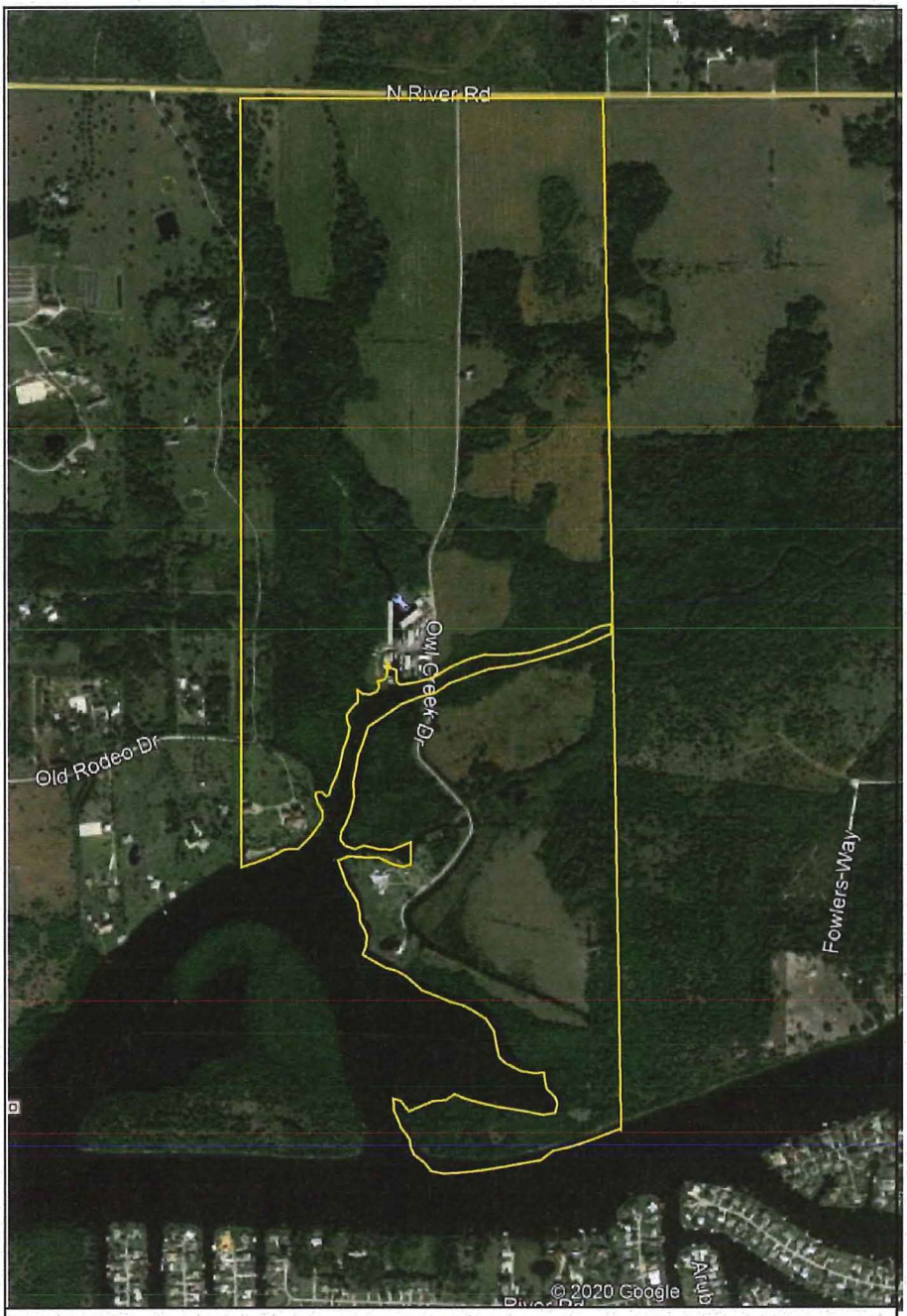
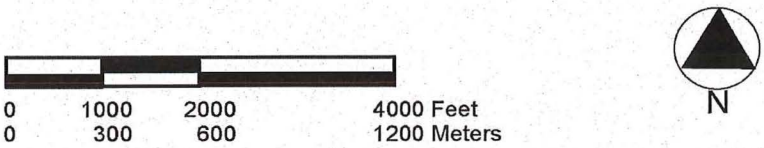


Figure 5. 2019 color aerial orthophotograph of the project parcel.



METHODOLOGY

ARCHIVAL REVIEW

Prior to conducting fieldwork, relevant archives and literature were reviewed. This included, but was not limited to, studying the previous archaeological reports for sites in Lee County, reviewing information from the Master Site File in Tallahassee concerning nearby sites, and examining USGS maps of the project area.

RESEARCH DESIGN

This assessment was conducted primarily to assess the site integrity of three previously recorded NRHP eligible sites on the subject parcel, and to document any changes to the sites since their discovery in 2007. Additionally, the assessment included due diligence testing to determine if any previously unrecorded cultural resources occur within the Owl Creek parcel. This incorporated the use of certain predictive archaeological site models. These models postulate that elevated hammocks adjacent to wetlands (i.e. creeks an rivers) and elevated sand hill features are medium- to high-probability areas for being associated with prehistoric archaeological sites. These features can be identified by examining vintage aerial photographs taken prior to modern development.

FIELDWORK

The three known archaeological sites were revisited and documented. No additional testing was conducted within the known resources. A pedestrian survey was conducted on the rest of the parcel with judgmental shovel tests dug in any higher probability areas. All test holes were 50cm in diameter and dug to a one meter depth. All sediments were screened through ¼"-mesh hardware cloth and all cultural materials were collected. Shovel test forms were completed and a handheld GPS unit was used to record the location of all test holes and surface finds. A single test was positive for prehistoric material and was delineated in cardinal directions at __m intervals.

COLLECTIONS

Recovered cultural materials were bagged in self-sealing bags. Field notes and maps repose at the AHC offices.

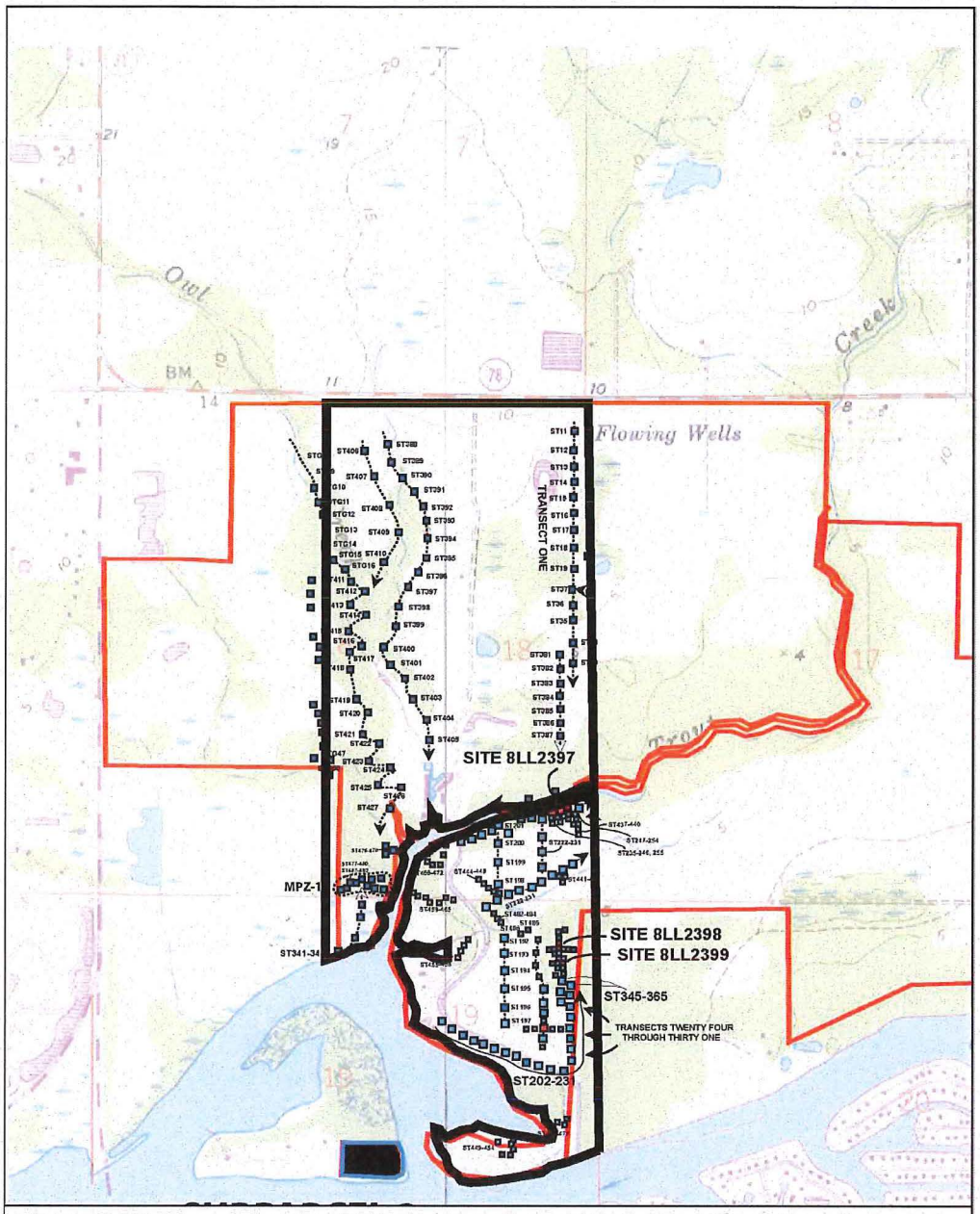


Figure 6. USGS map showing 2007 shovel testing within the Owl Creek Parcel (black outline), within the overall North River Assemblage Parcels (red outline)

= POSITIVE SHOVEL TEST

= NEGATIVE SHOVEL TEST

USGS MAPS: FORT MYERS, REV. 1991
OLGA, REV. 1987
TOWNSHIP 43S, RANGE 26E, SECTIONS
16, 17, 18, 19, 20

0 660 1320 2640 Feet approx.
0 400 800 800 Meters approx.

N

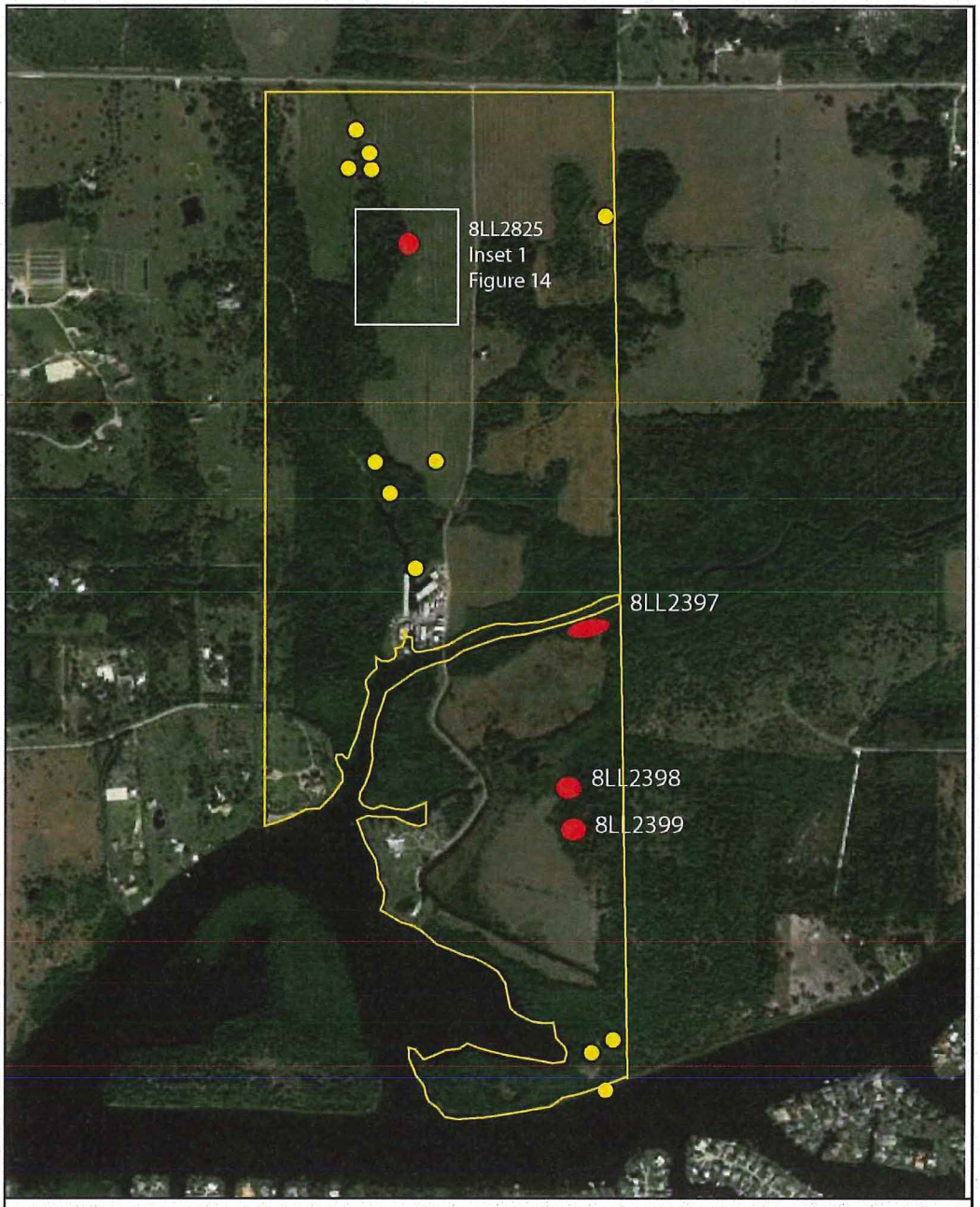


Figure 7. Aerial photograph showing archaeological site locations and 2020 shovel test locations.

= Archaeological Site

= Negative shovel test

0 305 609 1220 Meters

0 1000 2000 4000 Feet

N

SUMMARY OF SITES

Site Name:	Trout Creek Hunt Camp
Site Number:	8LL2397
Location:	T. 43S., R. 26E., Section 18
Environmental Setting:	Cleared field / live oak grove near lower course of Trout Creek
Site Type:	Midden
Site Function:	Habitation, resource extraction
Description:	This small site occupies a slightly elevated but distinct linear ridge south of and paralleling Trout Creek. The flood plain near the lower course of Trout Creek is an extensive low-lying brackish marsh/swamp, and the site occupies the high ground interface on the south bank of the creek. The site area is located in a live oak grove with open understory. The site is characterized as a 20 to 30 cm thick lens of cultural material beginning at surface. Material recovered includes a sparse amount of ceramics, faunal bone (including deer antler and tooth), lithic debitage and abundant Carolina marsh clams. Site size is estimated at 100 feet on an east-west axis and 50 feet on a north-south axis. The site tends to center on a small elevated ridge.
Chronology:	Prehistoric: Late Archaic Period to Glades I-II
Collections (2007):	Faunal bone, sand tempered plain ceramics, marine shell
Ownership:	Private
Preservation Quality 2007:	Good to excellent. The site is near a cleared field, but there is little disturbance of the site's cultural strata.
Preservation Quality 2020:	Unchanged
Significance:	Based on available data the site appears to meet criteria for listing on the NRHP based on Criterion D.

Figure 8. View of site 8LL2397 (2020).

Figure 9. Interior of site 8LL2397 (2020).

Site Name:	Intrigue
Site Number:	8CH2398
Location:	T. 43S., R. 26E., Section 19
Environmental Setting:	Tropical hardwood hammock within tall cypress head / slough feature
Site Type:	Midden
Site Function:	Habitation, resource extraction
Description:	The site occupies a slightly elevated linear ridge within the western area of a climax cypress head. The site is west of the central depressional pond of the cypress head. The site is characterized by a 30 cm thick deposit of shell refuse largely consisting of oyster that begins at the surface. Material recovered includes oyster shell and a sparse amount of ceramics and faunal bone. Site size is estimated at 18 meters on an east-west axis and 50 meters on a north-south axis. The site tends to center on the small elevated ridge. This is an unusual site both in terms of the marine shell content and its location in a cypress head feature. The site is heavily vegetated in camphorwood with some moderate-sized gumbo-limbos.
Chronology:	Prehistoric: Glades I-II
Collections (2007):	Faunal bone, marine shell
Ownership:	Private
Preservation Quality 2007:	Excellent. The site is undisturbed.
Preservation Quality 2020:	Unchanged
Significance:	Based on available data the site appears to meet criteria for listing on the NRHP based on Criterion D.

Figure 10. View of site 8LL2398 (2020).

Figure 11. Interior of site 8LL2398 (2020).

Site Name:	Majestic Gumbo-Limbo
Site Number:	8LL2399
Location:	T. 43S., R. 26E., Section 19
Environmental Setting:	Tropical hardwood hammock within western area of tall cypress head
Site Type:	Constructed mound, possibly burial mound
Site Function:	Habitation, possible mortuary
Description:	The site is characterized by a moderately elevated knoll or mound well within the western area of a climax cypress head/slough. The site area is located west of the central depressional area of the cypress head and approximately 200 feet south of the Intrigue Site, 8LL2398. Site elevation is approximately 60-70cm above the surrounding low marshy cypress swamp. Site size is estimated at 15 meters (50 feet) on an east-west axis and 25 meters (80 feet) on a north-south axis. The site likely centers on the elevated knoll. It is possible the mound is constructed and may represent a burial area or house mound. One piece of oyster shell was recovered from a shovel test. This is an unusual site both in terms of the configuration and location in a cypress head feature. The site is heavily vegetated in camphorwood with one large gumbo-limbo at the south end of the site.
Chronology:	Prehistoric: unknown
Collections:	Marine shell
Ownership:	Private
Preservation Quality 2007:	Excellent
Preservation Quality 2020:	Unchanged
Significance:	Based on available data the site appears to meet criteria for listing on the NRHP based on Criterion D.

Figure 12. View of site 8LL2399 (2020).

Figure 13. Interior of site 8LL2399 (2020).

Site Name:	Owl Creek 1
Site Number:	8LL2825
Location:	T. 43S., R. 26E., Section 18
Environmental Setting:	Tropical hardwood hammock within western area of tall cypress head
Site Type:	Midden
Site Function:	Habitation, resource extraction
Description:	The site is characterized by a slightly elevated sandy knoll abutting the bend in a small tributary to Owl Creek. The site is small, measuring approximately 25m in diameter, and has been cleared for agriculture. Four shovel tests were poisitive for sand tempered plain ceramics and one angular chert flake. All cultural material was recovered from 0-50cmbs.
Chronology:	Prehistoric: Period unknown
Collections:	Sand tempered plain ceramics, chert flake
Ownership:	Private
Preservation Quality:	Poor
Significance:	Based on available data the site does not appear to meet eligibility criteria for listing on the NRHP due to disturbances and lack of significant cultural material or context.

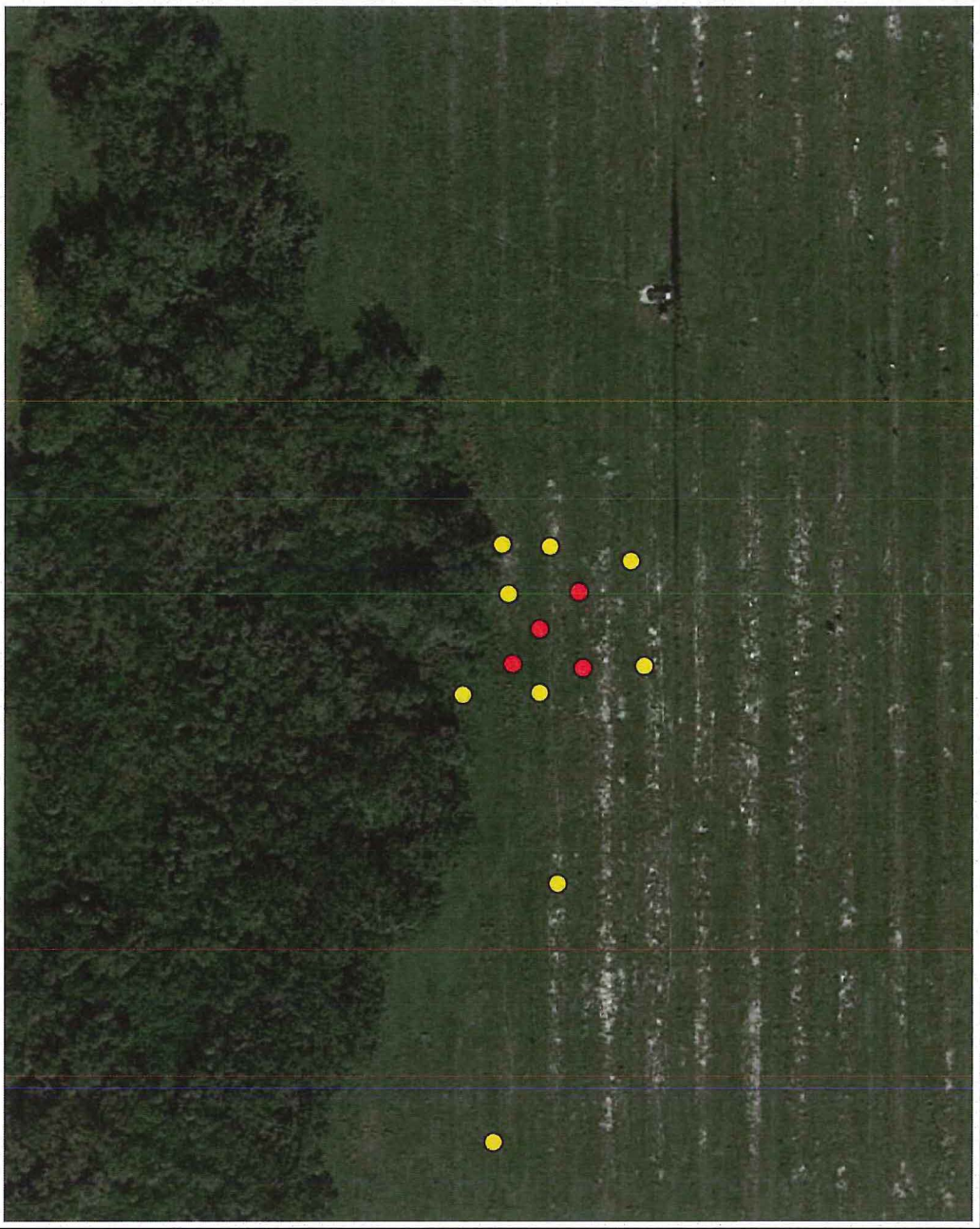


Figure 14. Aerial photograph showing 8LL2825 shovel test locations.

= Positive shovel test

= Negative shovel test

0 25 50 100 Meters
0 82 164 328 Feet

N

Figure 15. Site 8LL2825, looking north.

Figure 16. Sample of cultural material recovered from 8LL2825. Left - Sand tempered plain ceramic sherds; Right - lithic flake.

RESULTS AND RECOMMENDATIONS

The three previously recorded archaeological sites were successfully relocated and subject to pedestrian survey and assessment of current conditions. It was determined that all of the previously recorded archaeological sites: 8LL2397, 8LL2398, and 8LL2399 have not changed in their preservation quality nor have they been altered by any development activities. The sites retain their integrity in good to excellent condition and remain eligible for listing in the NRHP and should be avoided by future development.

In addition to the review of the previously recorded sites, one newly recorded prehistoric site, 8LL2825 was discovered during the course of this assessment. Site 8LL2825 is located in a plowed agricultural field (figure 15), and has been intensely disturbed. Cultural materials were sparse, and included very small ceramic sherds and a lithic flake (Figure 16). Based on the level of disturbance and lack of significant cultural materials or context, the site is not regarded as eligible for listing on the National Register of Historic Places.

The developer proposes to preserve sites 8LL2397, 8LL2398, and 8LL2399. It is recommended that each of the sites be preserved within a minimum 25 foot buffer, and that a temporary silt fence be placed around each site. An archaeological monitor should confirm the location of the buffer/fencing and confirm that the sites are avoided during construction activities.

REFERENCES CITED

Carr, Robert S., Beriault, John, G.,and J. F. Mankowski
2007 A Phase I Cultural Resource Assessment of the North River Assemblage Parcels, Lee County, Florida. *AHC Technical Report # 814*

Ent D (FMSF only) _____

Survey Log Sheet

Florida Master Site File
Version 4.1 1/07

Survey # (FMSF only) _____

Consult *Guide to the Survey Log Sheet* for detailed instructions.

Identification and Bibliographic Information

Survey Project (name and project phase) Owl Creek Parcel - Analysis of Potential Impacts 2020.94

Report Title (exactly as on title page) An Analysis of Potential Impacts to Cultural Resources on the Owl Creek Parcel, Lee County, Florida

Report Authors (as on title page, last names first) 1. Carr, Robert S. 2. White, John wesley 3. _____ 4. _____

Publication Date (year) 2020 **Total Number of Pages in Report** (count text, figures, tables, not site forms) 22

Publication Information (Give series, number in series, publisher and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*.)
AHC Technical Report #1294

Supervisors of Fieldwork (even if same as author) Names Robert S. Carr

Affiliation of Fieldworkers: Organization Archaeological and Historical Conservancy, Inc. City Davie, Florida

Key Words/Phrases (Don't use county name, or common words like *archaeology, structure, survey, architecture, etc.*)
1. Owl Creek 2. _____ 3. _____ 4. _____ 5. _____ 6. _____ 7. _____ 8. _____

Survey Sponsors (corporation, government unit, organization or person directly funding fieldwork)
Name _____ Organization _____
Address/Phone/E-mail _____

Recorder of Log Sheet Ryan Franklin **Date Log Sheet Completed** 8-20-2020

Is this survey or project a continuation of a previous project? ☒ No ☐ Yes: Previous survey #s (FMSF only) _____

Mapping

Counties (List each one in which field survey was done; attach additional sheet if necessary)
1. Lee 2. _____ 3. _____ 4. _____ 5. _____ 6. _____

USGS 1:24,000 Map Names/Year of Latest Revision (attach additional sheet if necessary)
1. Name FORT MYERS Year 1991
2. Name _____ Year _____
3. Name _____ Year _____
4. Name _____ Year _____
5. Name _____ Year _____
6. Name _____ Year _____

Description of Survey Area

Dates for Fieldwork: Start 7-29-2020 End 7-31-2020 **Total Area Surveyed** (fill in one) _____ hectares 350 acres

Number of Distinct Tracts or Areas Surveyed 1

If Corridor (fill in one for each) **Width:** _____ meters _____ feet **Length:** _____ kilometers _____ miles

Survey Log Sheet

Survey #_____

Research and Field Methods

Types of Survey (check all that apply): ☒ archaeological ☐ architectural ☐ historical/archival ☐ underwater ☐ damage assessment ☐ monitoring report ☐ other(describe): _____

Scope/Intensity/Procedures A total of 25 judgmental shovel tests were dug within higher probability areas and as delineations of a positive test.

Preliminary Methods (check as many as apply to the project as a whole)

- ☒ Florida Archives (Gray Building)
- ☐ Florida Photo Archives (Gray Building)
- ☒ Site File property search
- ☒ Site File survey search
- ☐ library research- *local public*
- ☐ library-special collection - *nonlocal*
- ☒ Public Lands Survey (maps at DEP)
- ☐ local informant(s)
- ☐ local property or tax records
- ☐ newspaper files
- ☒ literature search
- ☐ Sanborn Insurance maps
- ☐ other historic maps
- ☒ soils maps or data
- ☐ windshield survey
- ☒ aerial photography
- ☐ other (describe): _____

Archaeological Methods (check as many as apply to the project as a whole)

☐ Check here if **NO** archaeological methods were used.

- ☐ surface collection, controlled
- ☐ surface collection, uncontrolled
- ☒ shovel test-1/4"screen
- ☐ shovel test-1/8" screen
- ☐ shovel test 1/16"screen
- ☐ shovel test-unscreened
- ☐ shovel test-other screen size
- ☐ water screen
- ☐ posthole tests
- ☐ auger tests
- ☐ coring
- ☐ test excavation (at least 1x2 m)
- ☐ block excavation (at least 2x2 m)
- ☐ soil resistivity
- ☐ magnetometer
- ☐ side scan sonar
- ☐ pedestrian survey
- ☐ unknown
- ☐ other (describe): _____

Historical/Architectural Methods (check as many as apply to the project as a whole)

☒ Check here if **NO** historical/architectural methods were used.

- ☐ building permits
- ☐ commercial permits
- ☐ interior documentation
- ☐ demolition permits
- ☐ exposed ground inspected
- ☐ local property records
- ☐ neighbor interview
- ☐ occupant interview
- ☐ occupation permits
- ☐ subdivision maps
- ☐ tax records
- ☐ unknown
- ☐ other (describe): _____

Survey Results (cultural resources recorded)

Site Significance Evaluated? ☒ Yes ☐ No

Count of Previously Recorded Sites 3 **Count of Newly Recorded Sites** 1

Previously Recorded Site #'s with Site File Update Forms (List site #'s without "8". Attach additional pages if necessary.) LL2397, LL2398, LL2399

Newly Recorded Site #'s (Are all originals and not updates? List site #'s without "8". Attach additional pages if necessary.) LL2825

Site Forms Used: ☒ Site File Paper Form ☐ Site File Electronic Recording Form

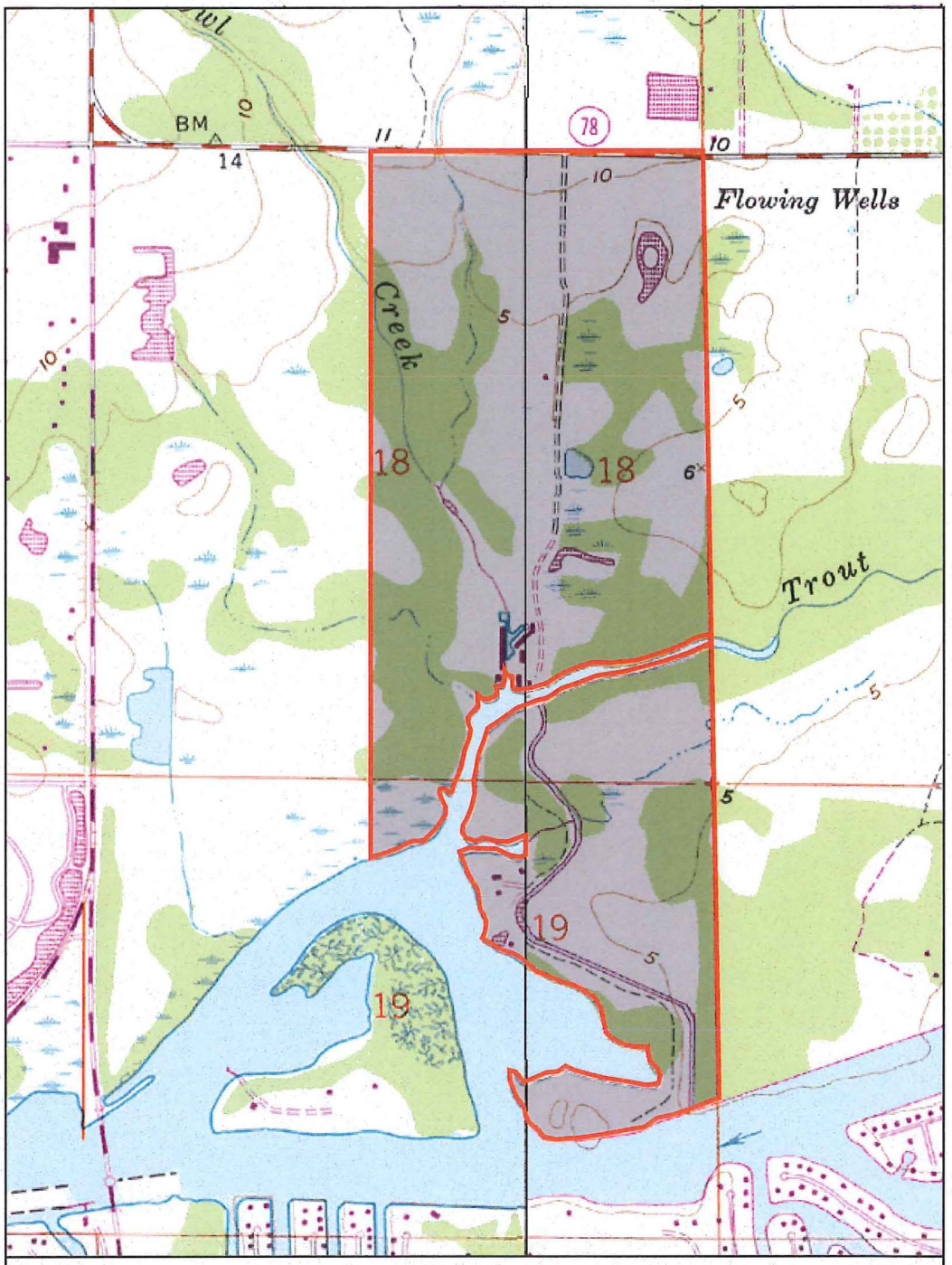
*****REQUIRED: ATTACH PLOT OF SURVEY AREA ON PHOTOCOPY OF USGS 1:24,000 MAP(S)*****

SHPO USE ONLY **SHPO USE ONLY** **SHPO USE ONLY**

Origin of Report: ☐ 872 ☐ CARL ☐ UW ☐ 1A32 # _____ ☐ Academic ☐ Contract ☐ Avocational ☐ Grant Project # _____ ☐ Compliance Review: CRAT # _____

Type of Document: ☐ Archaeological Survey ☐ Historical/Architectural Survey ☐ Marine Survey ☐ Cell Tower CRAS ☐ Monitoring Report ☐ Overview ☐ Excavation Report ☐ Multi-Site Excavation Report ☐ Structure Detailed Report ☐ Library, Hist. or Archival Doc ☐ MPS ☐ MRA ☐ TG ☐ Other: _____

Document Destination: _____ **Plotability:** _____



USGS Map of the Owl Creek parcel.

N

TOWNSHIP 43S, RANGE 26E, SECTION 18. 19

USGS Map: FORT MYERS, REV. 1991

0	750	1500	3000 Feet
0	270	450	900 Meters

☒Original
☐Update

ARCHAEOLOGICAL SITE FORM
FLORIDA MASTER SITE FILE
Version 5.0 3/19

Consult *Guide to Archaeological Site Form* for detailed instructions

Site #8 LL02825
Field Date 7-29-2020
Form Date 9-7-2020
Recorder # _____

Site Name(s) Owl Creek - 1 Multiple Listing (DHR only) _____
Project Name Owl Creek Analysis of Potential Impacts Survey # (DHR only) _____
Ownership: ☒private-profit ☐private-nonprofit ☐private-individual ☐private-nonspecific ☐city ☐county ☐state ☐federal ☐Native American ☐foreign ☐unknown

LOCATION & MAPPING

USGS 7.5 Map Name FORT MYERS USGS Date 1991 Plat or Other Map _____
City/Town (within 3 miles) N/A In City Limits? ☐yes ☐no ☐unknown County _____
Township 43S Range 26E Section 18 ¼ section: ☐NW ☐SW ☐SE ☐NE Irregular-name: _____
Township _____ Range _____ Section _____ ¼ section: ☐NW ☐SW ☐SE ☐NE
Landgrant _____ Tax Parcel # _____
UTM Coordinates: Zone ☐16 ☐17 Easting ☐☐☐☐☐☐ Northing ☐☐☐☐☐☐☐
Other Coordinates: X: 81°45'1.07" Y: 26°44'12.26" Coordinate System & Datum _____
Address / Vicinity / Route to:

345m south and 145m west on Owl Creek Drive, south of N River Road.

Name of Public Tract (e.g., park) _____

TYPE OF SITE (select all that apply)

SETTING

☒Land (*terrestrial*)
☐Lake/Pond (*lacustrine*)
☐River/Stream/Creek (*riverine*)
☐Tidal (*estuarine*)
☐Saltwater (*marine*)
☐Wetland (*palustrine*)
- ☐usually flooded
- ☐usually dry

☐Cave/Sink (*subterranean*)
- ☐terrestrial
- ☐aquatic

STRUCTURES OR FEATURES

☐log boat
☐agric/farm building
☐burial mound
☐building remains
☐cemetery/grave
☐dump/refuse
☐earthworks (historic)
☐fort
☒midden
☐mill
☐mission
☐mound, nonspecific
☐plantation
☐platform mound
☐road segment
☐shell midden
☐shell mound
☐shipwreck
☐subsurface features
☐surface scatter
☐well

FUNCTION

☐campsite
☐extractive site
☒habitation (prehistoric)
☐homestead (historic)
☐farmstead
☐village (prehistoric)
☐town (historic)
☐quarry (prehistoric)

Other Features or Functions (Choose from the list or type a response.)
1. _____ 2. _____

CULTURE PERIODS (select all that apply)

ABORIGINAL

☐Alachua
☐Archaic (nonspecific)
☐Archaic, Early
☐Archaic, Middle
☐Archaic, Late
☐Belle Glade
☐Cades Pond
☐Caloosahatchee
☐Deptford
☐Englewood
☐Fort Walton
☐Glades (nonspecific)
☐Glades I
☐Glades II
☐Glades III
☐Hickory Pond
☐Leon-Jefferson
☐Malabar I
☐Malabar II
☐Manasota
☐Mississippian
☐Mount Taylor
☐Norwood
☐Orange
☐Paleoindian
☐Pensacola
☐Perico Island
☐Safety Harbor
☐St. Augustine
☐St. Johns (nonspecific)
☐St. Johns I
☐St. Johns II
☐Santa Rosa
☐Santa Rosa-Swift Creek
☐Seminole (nonspecific)
☐Seminole: Colonization
☐Seminole: 1st War To 2nd
☐Seminole: 2nd War To 3rd
☐Seminole: 3rd War & After
☐Swift Creek (nonspecific)
☐Swift Creek, Early
☐Swift Creek, Late
☐Transitional
☐Weeden Island (nonspecific)
☐Weeden Island I
☐Weeden Island II
☒Prehistoric (nonspecific)
☐Prehistoric non-ceramic
☐Prehistoric ceramic

NON-ABORIGINAL

☐First Spanish 1513-99
☐First Spanish 1600-99
☐First Spanish 1700-1763
☐First Spanish (nonspecific)
☐British 1763-1783
☐Second Spanish 1783-1821
☐American Territorial 1821-45
☐American Civil War 1861-65
☐American 19th Century
☐American 20th Century
☐American (nonspecific)
☐African-American

Other Cultures (Choose from the list or type a response. For historic sites, give specific dates.)
1. _____ 3. _____
2. _____ 4. _____

OPINION OF RESOURCE SIGNIFICANCE

Potentially eligible individually for National Register of Historic Places? ☐yes ☒no ☐insufficient information
Potentially eligible as contributor to a National Register district? ☐yes ☒no ☐insufficient information
Explanation of Evaluation (required if evaluated; use separate sheet if needed)

The site is very disturbed by agriculture and lacks significant cultural materials or context.

Recommendations for Owner or SHPO Action

No additional actions.

DHR USE ONLY	OFFICIAL EVALUATION	DHR USE ONLY
NR List Date _____ ☐Owner Objection	SHPO – Appears to meet criteria for NR listing: ☐yes ☐no ☐insufficient info Date _____ Init. _____ KEEPER – Determined eligible: ☐yes ☐no Date _____ NR Criteria for Evaluation: ☐a ☐b ☐c ☐d (see *National Register Bulletin 15*, p. 2)	

Florida Master Site File / Div. of Historical Resources / R. A. Gray Bldg / 500 S Bronough St., Tallahassee, FL 32399-0250
Phone 850.245.6440 / Fax 850.245.6439 / E-mail SiteFile@dos.myflorida.com

ARCHAEOLOGICAL SITE FORM

Site #8 LL02825

FIELD METHODS (select all that apply)

SITE DETECTION

- ☐ no field check
- ☐ literature search
- ☐ informant report
- ☐ remote sensing
- ☐ exposed ground
- ☐ posthole tests
- ☐ auger tests
- ☐ unscreened shovel
- ☐ screened shovel
- ☒ screened shovel-1/4"
- ☐ screened shovel-1/8"
- ☐ screened shovel-1/16"

SITE BOUNDARY

- ☐ bounds unknown
- ☐ none by recorder
- ☐ literature search
- ☐ informant report
- ☐ remote sensing
- ☐ exposed ground
- ☐ posthole tests
- ☐ auger tests
- ☐ unscreened shovel
- ☒ screened shovel
- ☐ block excavations
- ☐ estimate or guess

Other methods; number, size, depth, pattern of units; screen size (attach site plan)

Total of four (4) positive shovel tests.

SITE DESCRIPTION

Extent/Size (m^2) 490 Depth/stratigraphy of cultural deposit (describe below)

Average assemblage depth is 0 to ~50cm below surface

Temporal Interpretation - Components (check one): ☐ single component ☐ multiple component ☒ uncertain

Describe each occupation in plan (refer to attached large scale map) and stratigraphically. Discuss temporal and functional interpretations:

Integrity - Overall disturbance: ☐ none seen ☐ minor ☐ substantial ☒ major ☐ redeposited ☐ destroyed-**document!** ☐ unknown

Disturbances / threats / protective measures

Cleared for agriculture. some site soils are preserved but cultural materials are fragmented and poorly preserved.

Surface collection: area collected _____ m^2 # collection units_____ | Excavation: # noncontiguous blocks _____

ARTIFACTS

Total Artifacts # 7 ⊙count ○estimate | Surface #_____ | Subsurface #_____

COLLECTION SELECTIVITY

- ☐ unknown
- ☒ unselective (all artifacts)
- ☐ selective (some artifacts)
- ☐ mixed selectivity

SPATIAL CONTROL

- ☐ uncollected
- ☐ unknown
- ☐ general (not by subarea)
- ☒ controlled (by subarea)
- ☐ variable spatial control
- ☐ other (describe in comments below)

ARTIFACT CATEGORIES and DISPOSITIONS

- A - Lithics
- A - Aboriginal ceramics
- ____ -
- ____ -
- ____ -
- ____ -
- ____ -
- ____ -

select a disposition from the list below for each artifact category selected at left

- A - category always collected
- S - some items in category collected
- O - observed first hand, but not collected
- R - collected and subsequently left at site
- I - informant reported category present
- U - unknown

Artifact Comments

artifacts were sparse and highly fragmented and contained small Sant Tempered Plain crumb flakes and a single chert flake.

DIAGNOSTICS (type or mode, and frequency: e.g., *Suwanee ppk, heat-treated chert, Deptford Check-stamped, ironstone/whiteware*)

1. _____ N=____ 4. _____ N=____ 7. _____ N=____
2. _____ N=____ 5. _____ N=____ 8. _____ N=____
3. _____ N=____ 6. _____ N=____ 9. _____ N=____

ENVIRONMENT

Nearest fresh water: Type Small Stream Name Owl Creek Distance from site (m) 60

Natural community MESIC FLATWOODS Topography Stream shore Elevation: Min ____m Max 2 m

Local vegetation _____

Present land use Cattle grazing

SCS soil series _____ Soil association _____

DOCUMENTATION

Accessible Documentation Not Filed with the Site File - including field notes, analysis notes, photos, plans and other important documents

1) Document type _____ Maintaining organization _____
Document description _____ File or accession #'s _____

2) Document type _____ Maintaining organization _____
Document description _____ File or accession #'s _____

RECORDER & INFORMANT INFORMATION

Informant Information: Name _____

Address / Phone / E-mail _____

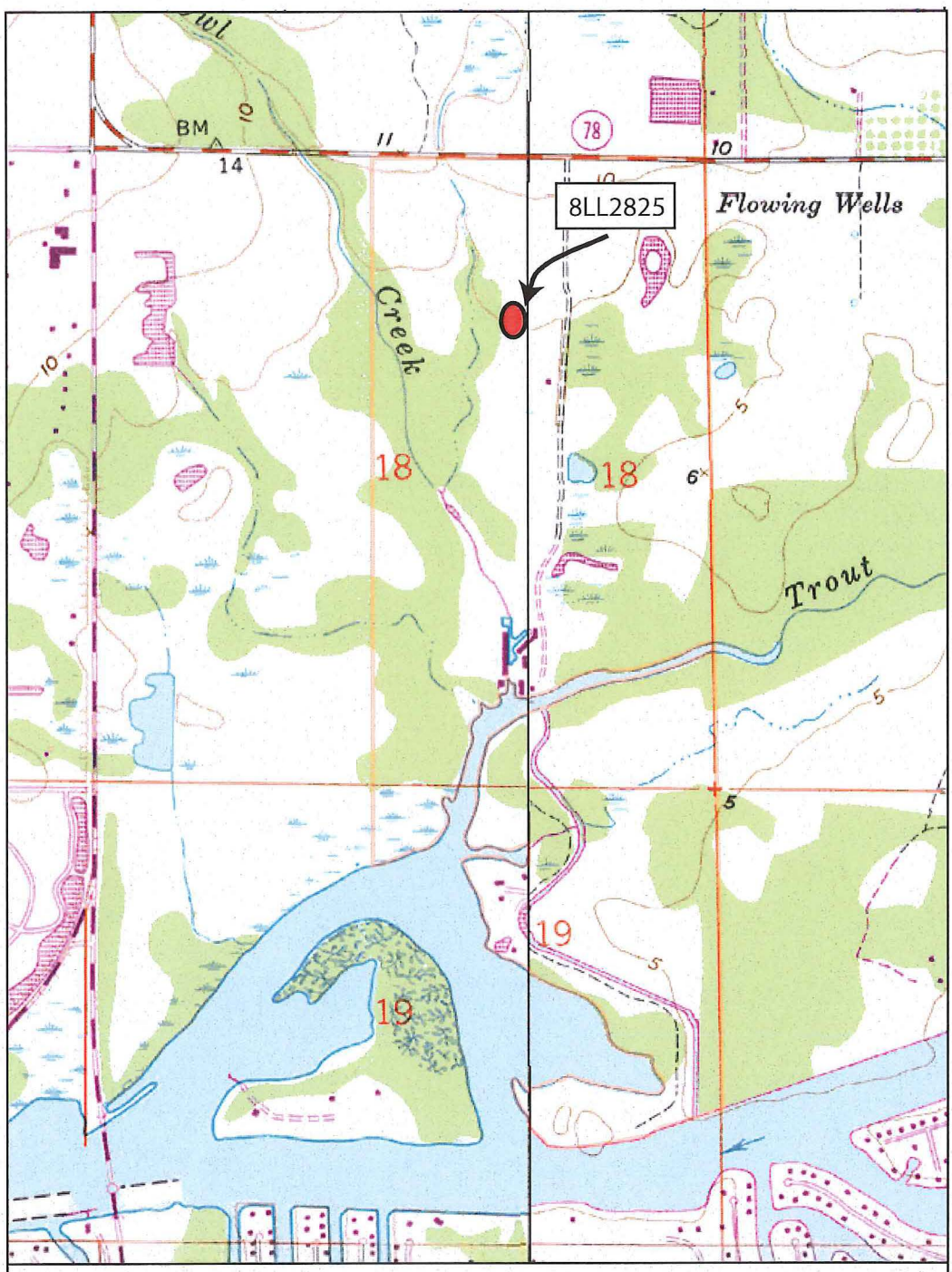
Recorder Information: Name Alan Noe, Wes White Affiliation Archaeological & Historical Conservancy, Inc.

Address / Phone / E-mail 4800 SW 64th Ave Suite 107, Davie, Fl 33314 / (954) 792-9776 / archgcl@bellsouth.net

Required Attachments

❶ **PHOTOCOPY OF 7.5' USGS QUAD MAP WITH SITE BOUNDARIES MARKED *and* SITE PLAN**

Plan at 1:3,600 or larger. Show boundaries, scale, north arrow, test/collection units, landmarks and date.



USGS Map showing the location of 8LL2825.

N

TOWNSHIP 43S, RANGE 26E, SECTION 18. 19

USGS Map: FORT MYERS, REV. 1991

0	750	1500	3000 Feet
0	270	450	900 Meters

Justification of Proposed Amendment

RECEIVED
SEP 21 2020
COMMUNITY DEVELOPMENT

BANKS ENGINEERING

Professional Engineers, Planners & Land Surveyors

RECEIVED
SEP 21 2020
COMMUNITY DEVELOPMENT

OWL CREEK
Comprehensive Plan Text Amendment
Justification of Proposed Amendment

The plan amendment and the environmental, water quality, hydrological, infrastructure, and community character enhancement criteria to allow for the clustered development of the Owl Creek property represents sound planning principles.

The following summarizes benefits that will be accomplished by approval of this request through compliance with the proposed text amendment:

1. Provide a connection between the existing New Community FLU to the north and Caloosahatchee River to the south that will continue the environmental preservation and enhanced drainage ways that will be improved by reduced runoff rate and reduced nutrient runoff
2. Amendment will result in clustered development as encouraged in area as demonstrated by the Preliminary Development Footprint exhibit
3. Provide Wetland Protection and Enhancements including exotic removal and maintenance
4. Historical Resource preservation of the 3 recommended sites
5. ±165.6 acres (48% of property) placed into conservation easement including the convergence of two natural waterways on the Great Calusa Blueway (Owl Creek and Trout Creek) where they connect to the Caloosahatchee River
6. Wildlife/recreation connection from portion of Trout Creek located on potential Conservation 20/20 lands to Caloosahatchee River
7. Connection to adjacent SFWMD owned lands to the east and south
8. Potential public canoe/kayak launch area to Trout Creek
9. Wildlife management and co-existence plans
10. Enhanced lake management plan
11. Florida Friendly Landscaping with the low irrigation requirements in common areas
12. 60% open space
13. Preserve 93% of wetlands
14. Water Quality enhancements and monitoring
15. Remove potential for up to 221 potential septic tanks and wells
16. Removal of cattle grazing will significantly reduce onsite nutrient generation
17. Additional 50% water quality treatment
18. Reduced rate of run-off and associated nutrient loads
19. Stormwater enhancements
20. Remove potential for additional single-family driveways along Owl Creek
21. Green infrastructure
22. Privately funded expansion of water and sewer to the area (as encouraged/anticipated by existing Lee Plan policies)
23. Minimum 50' perimeter setback/buffer
24. Minimum 100' setback from Owl Creek Boat Works property line to single-family lots
25. Provide area for multi-use path along North River Road
26. Protect existing groundwater levels and improve existing wetland hydroperiods in

10511 Six Mile Cypress Parkway • Suite 101 • Fort Myers, Florida 33966
Phone 239-939-5490 • www.bankseng.com • Fax 239-939-2523
Engineering License No. EB 6469 • Surveying License No. LB 6690

onsite preserve areas

The Lee Plan recognizes that enhancement and conservation of environmental, historical, stormwater, public water access and enhanced water quality is a public priority. The plan amendment balances this public interest with those of the property owner. The plan amendment represents a kind of public-private partnership. The public interests for Owl Creek outlined above will be conditioned in the concurrent Planned Development Zoning application. The private interest in utilizing and developing the property is satisfied in a responsible environmental manner. This represents sound planning.

The plan amendment utilizes the planning principle of clustered development. Clustered development is a development arrangement that stresses people living in harmony with nature and locates buildings in concentrated portions of a site, leaving the remainder of the site undeveloped. Typically this form of development is utilized to limit sprawling development patterns while protecting such things as open space, environmentally sensitive areas and natural resources. The project design protects a least 93% of the wetlands, provides preservation of a minimum of 48% of the site including areas along Owl Creek and Trout Creek and provides enhanced setbacks to adjacent uses.

The Owl Creek project also utilizes the planning principle of conservation design or designing with nature. The process of selecting the appropriate preservation and development scenario for the property utilized an analysis of the property's attributes such as property location and location of adjacent uses, soils, topography, previous uses and associated impacts and natural resources. One guiding principle of conservation design is that environmentally sensitive areas must be first identified and designated as non-buildable. The analysis of the property identified the location of wetlands, rare and unique uplands and 3 historical sites recommended for listing and preservation on the property and incorporated these areas into the project's preservation and open space plan. Through the stringent requirements associated with this request and conditioning of the forthcoming planned development, the Owl Creek project will preserve 93% of the onsite wetlands providing protection and enhancements through exotic removal and upland buffers. A minimum of 48 percent of the property (±165.6 acres) will be placed into a conservation easement including the convergence of two natural waterways on the Great Calusa Blueway (Owl Creek and Trout Creek) where they connect to the Caloosahatchee River. The conservation area will include preservation of 3 recommended historical sites and the project will provide a potential public canoe/kayak launch area to Trout Creek. This process represents sound planning for the subject site, its natural resources and existing surrounding uses.

The Owl Creek project represents compatible land uses with existing surrounding uses which include agricultural uses, preservation and single family uses. The project's residential uses will be clustered inside the property with enhanced setbacks/buffers to adjacent uses and properties. The project's open spaces and preservation areas compliment and enhance adjacent existing and pending public and private preserve areas. The Owl Creek project residential uses are clustered and separated from the perimeter by a minimum 50 foot setback/buffer area. The project's compatibility with nearby land uses represents sound planning for the region in which the property is located.

The Owl Creek project will be connected to and serviced by a centralized water and sewer system via privately funded extensions. Connecting this property to a centralized water and sewer system represents sound planning with the removal of potential for 221 septic systems and private wells will provide fire protection to the existing and future residents and properties, including the Owl Creek project. The proposed privately funded expansion of utilities to the area is already encouraged and anticipated by existing Lee Plan policies.

The Owl Creek project represents a high quality master planned project. The applicant respectively asks that the proposed plan amendment for the Owl Creek property be approved to realize these regional benefits.

The Lee County Sheriff's Office has reviewed the request and has provided a review letter dated August 4, 2020 that provides that the proposed development does not affect their ability to provide core services and that they have no objection to the requested increase in density. The Sheriff's Office letter states that law enforcement services will be provided from their North District substation in North Fort Myers. This letter also provides that the applicant provide a Crime Prevention Through Environmental Design (CPTED) report at the time of application for a development order.

Bayshore Fire Rescue reviewed the request and provided a letter dated August 11, 2020. This letter provides that Bayshore Fire Rescue will be able to adequately serve the development as proposed and that the District will require residential sprinklers within homes if the area is not serviced by an adequate pressurized fire hydrant system. Privately funded potable water will be extended to the site to provide adequate pressurized fire hydrant system.

The Lee County Division of Emergency Medical Services reviewed the request and provided a review letter dated August 19, 2020 indicating that the service availability for the proposed development of this property is adequate at this time. Lee County Emergency Medical Services is the primary EMS transport agency responsible for coverage at the address you have provided. Because we currently serve this area and have a sufficient response data sample, we evaluated response times in this vicinity to simulate the anticipated demand and response. The primary ambulance for this location is Medic 11, located 5.1 miles southwest; there is a second EMS station within six miles of the proposed location. These locations are projected to be able to meet existing service standards, as required in County Ordinance 08-16, and no additional impacts are anticipated at this time.

The Owl Creek project represents a high quality master planned project. The applicant respectively asks that the proposed plan amendment for the Owl Creek property be approved to realize these regional benefits.