

# LEE COUNTY BOARD OF COUNTY COMMISSIONERS ZONING and COMPREHENSIVE PLAN AMENDMENT HEARING AGENDA

Wednesday, April 19, 2023

### 9:30AM

DCI2022-00019	
Z-23-005	

**RESURGENCE BREWERY & ROCK GYM** 

DCI2021-00053 Z-23-006

RACETRAC AT BAYSHORE CPD

DCI2022-00034 Z-23-002

RACETRAC BONITA MINOR RPD

CPA2021-00017 & CPA2021-00018 DANIELS PARKWAY SOUTH - TRANSMITTAL

CPA2022-00001

**ECONOMIC ELEMENT - ADOPTION** 

#### NOTICE OF PROPOSED AMENDMENT TO THE LEE COUNTY COMPREHENSIVE LAND USE PLAN (TRANSMITTAL HEARING)

The Lee County Board of County Commissioners will hold a public hearing to consider proposed amendments to the Lee County Comprehensive Land Use Plan (Lee Plan) on Wednesday, April 19, 2023. The hearing will commence at 9:30 a.m., or as soon thereafter as can be heard, in the Board Chambers, 2120 Main Street in Downtown Fort Myers. At the hearing, the Board will consider the proposed amendments for transmittal to the Florida Department of Economic Opportunity:

CPA2021-00017 and CPA2021-00018 Daniels Parkway South Text and Map Amendments: Amend Lee Plan Map 1A to redesignate 153.7 acres from Density Reduction/Groundwater Resource (DR/GR) future land use category to the Sub-Outlying Suburban future land use category; add 1,148 acres of the subject property to Map 4A, Future Water Service Area; add 1,148 acres of the subject property to Map 4B, Future Sewer Service Area; remove 515.4 acres of the subject property from Map 1F, Private Recreation Facilities Overlay; amend Policy 33.2.2 to allow a density transition in Southeast Lee County adjacent to Mixed Use Communities within Lehigh Acres, as identified on Map 2D; and, amend Table 1(b) to accommodate residential development on the subject site. The subject property is located at the southeast corner of Daniels Parkway and SR82 intersection.

This transmittal hearing is the first step in a two step public hearing process to amend the Lee Plan. A second hearing will follow the Department of Economic Opportunity's review of the application.

Documentation for the Proposed Comprehensive Plan Amendment is available at <u>https://www.leegov.com/dcd/planning/cpa</u> or at the Department of Community Development located at 1500 Monroe Street, Fort Myers, Florida. This meeting is open to the public. Interested parties may appear at the meeting and be heard with respect to the proposed plan amendment. A verbatim record of the proceeding will be necessary to appeal a decision made at this hearing.

It is the intent of the Board of County Commissioners that the provisions of this Comprehensive Plan Amendment may be modified as a result of consideration that may arise during Public Hearing(s). Such modifications shall be incorporated into the final version.

Lee County will not discriminate against individuals on the basis of race, color, national origin, sex, age, disability, religion, income or family status. To request language interpretation, document translation or an ADA-qualified reasonable modification at no charge to the requestor, contact Joan LaGuardia, (239) 839-6038, Florida Relay Service 711, at least five business days in advance. El Condado de Lee brindará servicios de traducción sin cargo a personas con el idioma limitado del inglés.

# CPA2021-00017 & CPA2021-00018

# Daniels Pkwy. South Text & Map Amendments

#### SUMMARY SHEET CPA2021-00017 and CPA2021-00018, DANIELS SOUTH TRANSMITTAL HEARING

**Note:** Summary sheet redistributed on 4-14-2023 to provide supplemental Division of Natural Resources Memo dated 4-12-2023, including attachments, to be further discussed at the transmittal hearing.

**REQUESTS:** Amend the following in the Lee Plan:

- Map 1-A to redesignate 153.7 acres from the Density Reduction/Groundwater Resource (DR/GR) to the Sub-Outlying Suburban future land use category
- Map 4-A to add 1,148 acres to the Future Water Service Area
- Map 4-B to add 1,148 acres to the Future Sewer Service Area
- Map 1-F to remove 515.4 acres from the Private Recreation Facilities Overlay
- Policy 33.2.2 and Table 1(b) to allow a transition in residential development between the Lehigh Acres and Southeast Lee County Community Plan areas

**SUMMARY:** The proposed Lee Plan amendments will support a mixed use development on 1,233 acres located southeast of the intersection of Daniels Parkway and SR 82. The concurrent Mixed Use Planned Development (MPD) rezoning limits the residential density to 1,600 dwelling units and, at the intersection of Daniels Parkway and SR 82, will allow 350,000 square feet of commercial uses. The commercial uses are within the Lehigh Acres Community Plan Area.

**LPA PUBLIC HEARING:** The LPA discussed the proposed amendments, including density, proximity to airport, impacts to groundwater, design of stormwater management lakes, surrounding uses, transportation impacts and consistency with the Lee Plan.

**LPA PUBLIC INPUT:** No members of the public addressed the LPA concerning the proposed amendments.

**LPA MOTION:** A motion was made to recommend that the Board of County Commissioners <u>transmit</u> CPA2021-00017 and CPA2021-00018. The motion passed 5 to 2.

RAYMOND BLACKSMITH	AYE
KEITH DEAN	AYE
DUSTIN GARDNER	AYE
DAWN RUSSELL	AYE
DON SCHROTENBOER	AYE
STAN STOUDER	NAY
HENRY ZUBA	NAY

**STAFF RECOMMENDATION:** Staff recommends that the Board of County Commissioners *transmit* the requested amendments shown in Attachment 1 of the staff report.

#### MEMORANDUM

#### FROM

#### **PUBLIC WORKS**

#### **Natural Resources Division**

Date: April 12, 2023

TO: Brandon Dunn

From: Phil Gillogly, P.E.

Principle Planner, Planning Section

Interim Operations Manager, Natural Resources Division

SUBJECT: CPA2021-00017 and CPA2021-00018 Daniels South Text and Map Amendments

Lee County staff held a meeting with the applicant to discuss concerns of the Daniels South project adding stress to the Sandstone aquifer and potentially affecting the surrounding domestic self-supply wells to the north and to the west of the project. The applicant has offered to construct the two northernmost proposed irrigation wells to the Mid-Hawthorn aquifer, as shown on the attached letter from the applicant. As stated in the initial memo, like the Lower Hawthorn, the Mid Hawthorn Aquifer does not have the prolific use that is seen within the Sandstone Aquifer. By increasing the distance of the Sandstone Aquifer use south away from the existing users, no significant impacts on present or future water resources will result.

Based on this information provided by the applicant, the Division of Natural Resources staff finds that no significant impacts on present or future water resources will result from the change. The Division of Natural Resources staff recommends that the Board of County Commissioners make a formal finding that no significant impacts on present or future water resources will result from changing the Future Land Use Category, as required in Lee Plan Policy 2.3.1 and Policy 2.3.2.



STEVEN C. HARTSELL Florida Bar Board Certified Attorney in Condominium and Planned Development Law Direct dial: (239) 336-6244 Email: <u>SteveHartsell@PaveseLaw.com</u>

1833 Hendry Street, Fort Myers, Florida 33901 | P.O. Box 1507, Fort Myers, Florida 33902 | (239) 334-2195 | Fax (239) 332-2243

April 12, 2023

Ms. Rebecca Sweigert, Principal Planner Lee County Department of Community Development 1500 Monroe Street Fort Myers, FL 33901 Via email: <u>rsweigert@leegov.com</u>

RE: Daniels Parkway South – CPA2021-00017 and CPA2021-00018 (Our File #91150.004)

Dear Becky:

Thank you for the time that you and the other staff took to meet with us on April 3, 2023. We all felt the meeting was productive and wanted to confirm that the applicant has agreed to change two of the proposed Sandstone Aquifer wells to become Mid-Hawthorn Aquifer wells. David Brown has prepared a conceptual exhibit which shows those two Mid-Hawthorn wells as well as the proposed Sandstone Aquifer wells that he described during our meeting, and these will be the wells proposed for the RPD.

If you have any questions, please feel free to contact Tina or me.

ery truly yours,

Steven C. Hartsell

SCH:llp Enclosure: Conceptual Layout Well Location Exhibit

cc: Lee Werst via email <u>LWerst@leegov.com</u> Dirk Danley via email <u>DDanleyJr@leegov.com</u> Brandon Dunn via email <u>BDunn@leegov.com</u> Phil Gillogly via email <u>PGillogly@leegov.com</u> Tina Ekblad via email <u>TEkblad@stearnsweaver.com</u> Barry Ernst via email <u>Barry.Ernst@Lennar.com</u> Scott Edwards via email <u>Scott.Edwards@Lennar.com</u> Nic DeFilippo via email <u>NDeFilippo@leegov.com</u> David Brown via email <u>David.Brown@respec.com</u>



STAFF REPORT FOR CPA2021-00017 & CPA2021-00018:

**Daniels South Map & Text Amendments** 



<u>Recommendation</u> Transmit

Applicant Lennar Corporation

<u>Representative</u> Tina M. Ekblad, AICP Sterns Weaver Miller

Project Size 1,233.1 acres

Map Amendment Area Map 1-A: 153.7 acres Map 1-F: 515.4 acres Map 4-A: 1,148 acres Map 4-B: 1,148 acres

Community Plan Areas Southeast Lee County

Commissioner District District 2

Hearing Dates LPA: 3/27/2023 BoCC #1: 4/19/2023 BoCC #2: TBD

Attachment(s): 1: Proposed Amendments

#### REQUEST:

- Map amendments to allow a mixed use development on the subject property as follows: Amend Map 1-A to redesignate 153.7 acres from Density Reduction/Groundwater Resource (DR/GR) future land use category to the Sub-Outlying Suburban future land use category; add 1,148 acres of the subject property to Map 4-A, Future Water Service Area; add 1,148 acres of the subject property to Map 4-B, Future Sewer Service Area; and remove 515.4 acres of the subject property from Map 1-F, Private Recreation Facilities Overlay.
- Text amendments to Policy 33.2.2 and Table 1(b) to accommodate residential development between Lehigh Acres Mixed Use Community identified on Map 2-D and existing residential development within the Southeast Lee County Plan Area.

**SUMMARY:** The amendments to the Lee Plan will allow a mixed use development on 1,233.1+/- acres with 1,600 dwelling units on the entire property and commercial uses located near the intersection of Daniels Road and SR 82.

**PROJECT LOCATION:** Located generally south of State Road 82 and east of Daniels Parkway, south of Lehigh Acres and northeast of the Southwest Florida International Airport (RSW).



**RECOMMENDATION:** Staff recommends the Board of County Commissioners *transmit* the amendments as provided in Attachment 1 based on the analysis and findings in this staff report.

#### PART 1 STAFF DISCUSSION AND ANALYSIS

#### CONCURRENT APPLICATION REVIEW

The applicant has filed a companion rezoning application (DCI2022-00002) that is being reviewed concurrently with this plan amendment application. The applicant is seeking to rezone the subject property from AG-2 to a Mixed Use Planned Development (MPD) to allow up to 350,000 square feet of commercial and a maximum of 1,600 dwelling units.

Florida Statutes Chapter 163.3184(12) provides "At the request of an applicant, a local government shall consider an application for zoning changes that would be required to properly enact any proposed plan amendment transmitted pursuant to this subsection." This requires Lee County provide concurrent review of the rezoning request. Even with the recommended transmittal of the proposed amendments, the applicant must demonstrate consistency with the Lee Plan, including the proposed amendments, in order for the companion rezoning to receive a favorable recommendation.

#### SUBJECT PROPERTY

The subject property contains 1,233.1+/- acres. The property is currently in the DR/GR, Wetlands, and Central Urban future land use categories and is zoned AG-2. The lands within the Central Urban future land use category are within the Lehigh Acres Community Plan Area, subject to Goal 25. The lands within the DR/GR and Wetlands future land use categories are within the Southeast Lee County Community Plan area, subject to Lee Plan Goal 33. All lands are either currently vacant or consist of agricultural uses.



Figure 1: Subject Property in relation to Community Plan Areas as shown on Map 2-A

#### SURROUNDING PROPERTIES

The subject property is bounded on the <u>north</u> by State Road 82. On the north side of SR 82 is the platted Lehigh Acres community. This portion of Lehigh Acres is within the Central Urban and Urban Community future land use categories. The Central Urban future land use category has a standard density range of up to 10 dwelling units per acre and the Urban Community future land use category has a standard density of up to 6 dwelling units an acre. Both of these land use categories are considered to be Future Urban Areas. These are areas "that are designated for urban activities, allow for bonus density, and encourage a mixture of uses." The properties to the north are within commercial (C-2), and multi-family residential (RM-2) zoning districts.

Immediately <u>south</u> of the subject property are lands within the Tradeport, DR/GR, and Wetlands future land use categories. These properties are owned by the Jared Holes Trust, the current owner of the subject property. Further to the south are lands within the Airport and Conservation Lands future land use categories. These lands are owned by Lee County and consist of the Southwest Florida International Airport, zoned AOPD and the Lee County Wild Turkey Strand Preserve, zoned AG-2

<u>East</u> of the subject property is an existing large acreage residential and agricultural subdivision identified on Lee Plan Map 2-D as Existing Acreage Subdivision. These properties are in the AG-2 zoning district and range in size from approximately 1 acre to 10 acres but are most commonly 2.5 to 5 acres in size. Lee County also owns lands to the east, near the southern end of the subject property. Lands to the east are within the DR/GR and Wetlands future land use categories and within the Southeast Lee County Community Plan area.

<u>West</u> of the subject property, on the west side of Daniels Parkway, are lands within the Sub-Outlying Suburban, Central Urban, and Wetlands future land use categories. These lands, zoned Residential Planned Development and Mixed Use Planned Development, are part of the Timber Creek development which has an allowed density of approximately 2 dwelling units an acre.

### DISCUSSION AND ANALYSIS - MAP AMENDMENTS

Future Land Use Map – Map 1-A

#### **Current Future Land Use Categories**

The requested amendments to the Future Land Use Map would redesignate 153.7 upland acres of the property from the DR/GR future land use category to the Sub-Outlying Suburban future land use category, which is described by Policy 1.4.5 of the Lee Plan.

**Policy 1.4.5** states that the Density Reduction/Groundwater Resource (DR/GR) future land use category "includes upland areas that provide substantial recharge to aquifers most suitable for future wellfield development." Permitted uses in the DR/GR include agriculture, natural resource extraction and related facilities, conservation uses, public and private recreation facilities, and residential uses. All uses requiring a zoning or development order must demonstrate compatibility with maintaining groundwater levels at their historic levels utilizing hydrologic modeling showing no adverse impacts will result to surrounding properties.

Lee County's goal in the creation of the DR/GR future land use category was to protect Lee County's water resources, including aquifers that supply much of Lee County's public water supply. The category was

incorporated into the Lee Plan as part of the implementation of the 1990 Stipulated Settlement Agreement. The Settlement Agreement required that the Future Land Use Map be amended to change density in the new water resource category to one dwelling unit per ten acres in three areas of the County in order to align the capacity of the future land use map with the population projected to be in Lee County by the planning horizon at that time, 2010. One of these specified areas include southeast Lee County. In southeast Lee County the DR/GR lands were described as: most non-urban land east of Interstate-75, southeast of the airport, and south of State Route 82. The 153.7 acres were included in the DR/GR future land use category because it was contiguous, located in a non-urban land use category, east of I-75, and south of State Route 82. Since that time, additional information taking into account specific property characteristics has become available. Due to updated data and changing conditions several properties have been redesignated from the DR/GR future land use category.

Using the unified state delineation methodology and the administrative process described in Policy 1.5.2 the applicant has demonstrated that there are 519.1± acres of Wetlands on the subject site. The areas delineated as wetlands using the unified state delineation methodology will remain in the Wetlands future land use category.

#### Community Plan Area

The map amendment area is subject to the Southeast Lee County Community Plan as shown on Map 2-A of the Lee Plan. The goal of the Southeast Lee County Community Plan Area is described in Lee Plan Goal 33, as follows:

**GOAL 33: SOUTHEAST LEE COUNTY.** Protect Southeast Lee County's natural resources through public and private acquisition and restoration efforts. Development incentives will be utilized as a mechanism to preserve, enhance, and protect natural resources, such as regional flow-ways and natural habitat corridors in the development of privately owned land. Allowable land uses will include conservation, agriculture, public facilities, low density or clustered residential, natural resource extraction operations, and private recreation facilities; allowable land uses must be compatible with protecting Southeast Lee County's environment.

Including the subject property, there are approximately 35,600 acres of DR/GR future land use category within the Southeast Lee Community Plan Area currently. Other future land use categories within the Southeast Lee County Community Plan Area include Wetlands, Conservation (Uplands and Wetlands), Public Facilities, and General Interchange.

#### Watersheds

The 153.7 acres subject to the Future Land Use Map amendment are within the Six Mile Cypress watershed sub-basin, and does not have any significant surface water connection to the Estero River or Flint Pen watershed sub-basins. Unlike the majority of properties within the Southeast Lee County Community Plan Area designated DR/GR, the portion of the subject property that is proposed to be redesignated from DR/GR to Sub-Outlying Suburban, does not lie within the Imperial or Estero River watersheds (See Figure 2).

According to the 2008 Dover Kohl Study, Prospects for Lee County, the restoration of the Estero River and the Flint Pen/Imperial River watersheds is an important aspect of the DR/GR future land use category and Southeast Lee County Plan Area. The Flint Pen Strand is part of the Imperial River Watershed and the

Stewart Cypress Slough is part of the Estero River Watershed. Policy 33.2.4 addresses the Flint Pen Strand and Stewart Cypress Slough and Policy 126.1.8 provides that Lee County should protect the Flint Pen as an area for water retention and aquifer recharge. While The Lee Plan does include policies to address the importance of the Six-Mile Cypress sub-watershed<sup>1</sup>, the watershed is not identified as an important aspect or characteristic that makes up the DR/GR future land use category or the Southeast Lee County Community Plan Area.



Figure 2: Lee County Watershed Sub-Basins in relation to the subject property and Southeast Lee County Community Plan Area.

As previously stated, the DR/GR future land use category within the Southeast Lee County Community Plan Area is partly intended to protect water resources and the ability to provide recharge areas for groundwater resources and potential locations of wellfields. The existing and historic agricultural operations on-site have established internal drainage ditches that reduce water table elevations and the opportunity for groundwater recharge on the subject property. These existing conditions have negatively impacted nearby wetlands and significantly limited the opportunity for recharge as compared to the lands typically designated DR/GR. The subject property also has an internal berm/ agricultural road generally

<sup>&</sup>lt;sup>1</sup> See Objective 60.3

running north to south that has existed since at least 1958 as demonstrated by aerial photography. This man-made feature has altered the flow and drainage of water on-site for an extended period of time. As such, surface water west of the farm road drains into the Six Mile Cypress Sub-watershed rather than into the Estero River watershed as is typical for lands within the Southeast Lee County Community Plan Area.

The characteristics and conditions of the subject property limits the groundwater recharge and wellfield development potential on the 153.7 acres subject to the proposed future land use category amendment. Redesignating 153.7 acres from DR/GR to Sub-Outlying Suburban requires consideration of Lee Plan Policies 2.3.1 and 2.3.2. A specific finding by the Board of County Commissioners "that no significant impacts on present or future water resources will result from the change" is necessary per Policy 2.3.1.

The subsequent development will be required to connect to Lee County Utilities for potable water needs based on the proposed text amendments. Policy 61.1.6 provides that all other potential water sources must be eliminated prior to selecting potable water as the sole source for meeting irrigation needs of a development. Reuse water for irrigation is not available to the subject site, therefore other sources must be explored. As part of the required review, staff analyzed the potential irrigation sources and the impact of using each potential source for irrigation purposes. This analysis also considers Policy 61.1.1, which provides "that all fresh waters are a resource to be managed and allocated wisely, and will support allocations of the resource on the basis of 1) ensuring that sufficient water is available to maintain or restore valued natural systems, and of 2) assigning to any specified use or user the lowest quality fresh water compatible with that use, consistent with financial and technical constraints."

Currently the site is permitted through South Florida Water Management District (SFWMD) to utilize the Surficial Aquifer for livestock water supply. Utilizing the on-site lakes (Surficial Aquifer) for irrigation of the proposed uses could have a negative effect on the surrounding wetland systems and will require an additional recharge source. There are two potential recharge sources analyzed. First the Sandstone Aquifer, the primary source for domestic self-supply wells within Lehigh Acres. This source has been experiencing additional stresses from development of the existing platted lots within the Lehigh Acres Community Plan Area. There are concerns regarding the maximum developmental level (MDL) within this aquifer. MDL is defined as twenty feet above the top of the geologic strata of the respective aquifer. This rule was established by SFWMD (40E-8) to prevent harmful drawdown, or mining of the aquifers. The MDL is important for keeping aquifer levels at the minimum flow and levels established in the Florida Administrative Code. The Lee County monitoring well approximately 2 miles north of this property has come within 10 feet of reaching the MDL. Monitoring wells within the Sandstone Aquifer have shown a downward trend in the water levels year over year (See Figure 3).



Figure 3: From SFWMD presentation to Lee County DNR Staff on 1/20/22

Based on the downward trend, utilizing the Sandstone Aquifer for irrigation may have an adverse impact on the potable water supply of the surrounding community, including already approved residential uses.

The second makeup source is from the Lower Hawthorn aquifer. The Lower Hawthorn is listed as an alternative water supply source in the SFWMD's Lower West Coast Water Supply Plan. The Lower Hawthorn does not have the prolific use that is seen within the Sandstone aquifer as the water quality and depth to the aquifer make this an unattractive source for domestic self-supply. As a makeup source use of the Lower Hawthorn aquifer poses no impact on the surrounding community. Mixing the water from this source with the proposed onsite water management system overcomes the lower water quality, making it appropriate for irrigation use.

The following conditions (to be included in the concurrent rezoning) are necessary and appropriate in order to make a formal finding "that no significant impacts on present or future water resources will result from the change."

- 1. Irrigation will be through a master controlled system and no individual homeowner irrigation systems will be allowed. The master controlled system will be designed to meet the water conservation ordinance.
- 2. No irrigation water will be drawn from the Sandstone Aquifer.

3. Withdraw pumps from the surficial aquifer and Lower Hawthorn will be equipped with a water meter. The metered amounts from both aquifers will be reported to the County quarterly.

With these conditions as well as the information provided by the applicant and review of other available data, a finding that no significant impacts on present or future water resources will result from the change can be made. Therefore, the **Board of County Commissioners can make a formal finding that no significant impacts on present or future water resources will result from changing the Future Land Use Category, as required in Lee Plan Policy 2.3.1 and 2.3.2.** 

#### Proposed Future Land Use Category – Sub-Outlying Suburban:

Sub-Outlying Suburban, is described in Lee Plan Policy 1.1.11 and provided in part below:

**POLICY 1.1.11:** The Sub-Outlying Suburban future land use category is characterized by low density residential areas. Generally the infrastructure needed for higher density development is not planned or in place. This future land use category will be placed in areas where higher densities would be incompatible or where there is a desire to retain a low-density community character. Industrial land uses are not permitted. The standard density range is from one dwelling unit per acre (1 du/acre) to two dwelling units per acre (2 du/acre). Bonus densities are not allowed.

As previously discussed, the subject property is bordered on the north by State Road 82 and land in the Lehigh Acres Community Plan Area designated Urban Community and Central Urban. Both of these categories are considered future urban areas with maximum standard densities of 6 and 10 dwelling units per acre respectively. West of the subject property is Daniels Parkway, a divided arterial roadway, and the Timber Creek development. Similar to the development proposed on the subject property, Timber Creek includes a residential portion within the Sub-Outlying Suburban future land use category, and a commercial portion within the Central Urban future land use category.

The characteristics of the lands proposed to be redesignated from DR/GR to Sub-Outlying Suburban, including surrounding land uses, land development patterns, and public facilities, are consistent with the Sub-Outlying Suburban future land use category. The relatively low density of the Sub-Outlying Suburban future land use category will be compatible with residential uses to the east and provide a transition from the higher density properties within Lehigh Acres. Additionally, since the subject property is within the Southeast Lee County Community Plan Area, Policy 33.1.7 will continue to require an analysis of ground and surface water impacts for all future development.

Policy 2.3.2 provides that changes to the Future Land Use Map involving DR/GR must address urban sprawl. The proposed amendments will accommodate a mixed use development near the intersection of two major arterial roads: SR 82 and Daniels Parkway. The subject property has access to public water and sewer and is immediately adjacent to developed Future Urban and Future Suburban Areas. The proposed amendments do not include lands in areas that are substantial distances from existing urban areas while bypassing undeveloped lands that are available and suitable for development. Additionally the Lee Plan continues to direct and encourage economic growth and associated land development to areas of the county that do not have an adverse impact on natural resources. The proposed amendments are consistent with Policies 2.3.1 and 2.3.2.

#### **Airport Noise Zones:**

The proposed amendments do not introduce residential uses to the subject property, but they will allow additional dwelling units consistent with the density of the Sub-Outlying Suburban future land use category, therefore it is appropriate to analyze consistency with **Policy 5.1.2** of the Lee Plan. Policy 5.1.2 provides that Lee County will *"Prohibit residential development where physical constraints or hazards exist, or require the density and design to be adjusted accordingly. Such constraints or hazards include but are not limited to flood, storm, or hurricane hazards; unstable soils or geologic conditions; environmental limitation; aircraft noise; or other characteristics that may endanger the residential community."* 

While the subject property does contain lands within Airport Noise Zone B, which does not permit any residential units, places of worship, libraries, schools or hospitals according to Policy 1.6.1, the concurrent planned development demonstrates that no residential or other prohibited use is proposed to be located within Airport Noise Zone B. There are no other constraints or hazards that preclude residential development on the subject site. Therefore the proposed amendments are consistent with Policies 1.6.1 and 5.1.2.

Based on the analysis above, redesignating the approximately 153.7 acres of uplands within the Six Mile Cypress Watershed from the DR/GR to the Sub-Outlying Suburban future land use category, as proposed by the applicant, is found to be appropriate and consistent with the Lee Plan.

#### LCU Future Water and Sewer Service Areas – Maps 4-A and 4-B

The applicant is requesting to add the property to the Lee County Future Water Service Area, Map 4-A and Lee County Future Sewer Service Area, Map 4-B. LCU has indicated there is capacity to serve the proposed project with both water and sewer service and has water and sewer infrastructure in close proximity to the subject property.

Amending the Lee Plan to allow for connection to LCU's potable water is consistent with **Policy 126.1.4** of the Lee Plan, which requires development designs maintain groundwater levels at or above existing levels. Connecting to the LCUs potable water system, will reduce stress on the shallow aquifer and help to maintain groundwater levels near the subject property. Connection to LCU water services is also important to demonstrate consistency with Policies 2.3.1, 2.3.2 and 33.1.7 as previously discussed.

Amending the Lee Plan to allow for connection to LCU's sanitary sewer service is consistent with numerous policies encouraging developments provide enhanced water quality and connection to a sanitary sewer service, including those policies **Goal 56**.

#### Private Recreational Facilities Overlay – Map 1-F

The Private Recreation Facilities Overlay (PRFO) as identified on Map 1-F is located on approximately 515.35 acres of the subject property. The PRFO is described in Goal 13. As provided in Policy 13.1.1, the PRFO "shows those locations that are appropriate for the development of Private Recreation Facilities in the DR/GR future land use category." Lands within the PRFO have the ability to request the development of a private recreation facility within the DR/GR, but are not required to be developed with private recreational facilities. The PRFO is intended for property in the DR/GR category. Therefore, removing lands from the DR/GR, but leaving those lands within the PRFO would create an internal inconsistency. Additionally, removing lands from the PRFO that are not intended to be developed with private recreation facilities is not inconsistent with the Lee Plan.

#### Transportation:

Access to the property is anticipated from Daniels Parkway which is a paved, county-maintained, arterial roadway. Lee Plan amendments require both a short range (5 years) and long range (20+ years) level of service (LOS) analysis. Based on the information provided in the application materials:

The 5-year analysis indicates the following road segments are projected to operate at LOS "F" with and without the project in the Year 2026.

- Daniels Pkwy
- Gunnery Road (N. of Lee Blvd)
- Lee Blvd

The Long Range 2045 Horizon LOS analysis indicates the following road segments are projected to operate at LOS "F" with and without the project.

- Daniels Pkwy
- Gunnery Road (N. of Lee Blvd)
- Lee Blvd
- Alico Rd Ext. (S. of SR 82)

Transportation concurrency is non regulatory per Florida Statutes Section 163.3180 and Lee Plan Policy 95.1.3, which provides "Compliance with non-regulatory LOS standards will not be a requirement for continued development permitting, but will be used for facility planning purposes."

#### Service Availability:

Consistent with Objective 2.2, there are adequate potable water, sanitary sewers, solid waste, police, fire/EMS, and schools services and facilities to accommodate the proposed map amendments.

**Mass Transit:** The subject property is not within one-quarter mile of a fixed-route corridor, the closest bus stop is not within one-quarter mile of a bus stop, and the 2020 TDP does not identify the need for enhanced or additional transit services in the area.

**Utilities:** The subject property has access to water and sewer services from Lee County Utilities. Potable water is available from the Corkscrew Water Treatment Plant. Sanitary Sewer Service will be provided by the Gateway Water Reclamation Facility. The proposed amendments will add the subject property to Lee Plan Map 4-A: Future Water Service Areas and Map 4-B: Future Sewer Service Areas

**Solid Waste**: The subject property has access to solid waste services. Solid waste collection services will be provided by Lee County using the Lee County Resource Recovery Facility and the Lee-Hendry Regional Landfill.

**Fire:** The Lehigh Acres Fire Control and Rescue District provided a letter on March 30, 2021 stating they are capable of providing fire protection to areas of the property within their service area. The South Trail Fire Protection and Rescue Service District provided a letter on March 30, 2021 stating they are capable of providing fire protection services to areas of the property within their service area.

**EMS:** The subject property has access to EMS services. In a letter dated February 6, 2022, Lee County Emergency Medical Services indicates they will be able to serve the property.

**Police:** The Lee County Sheriff will provide law enforcement services primarily from the Central District office in Fort Myers. The Sheriff indicated in a letter dated March 31, 2021 that the development of the subject property will not affect the ability of the Lee County Sheriff's Office to provide core services at this time.

**Schools:** There is adequate school seat capacity to serve the subject property and the project's generation of middle and high school students. Capacity is an issue within the Concurrency Service Area (CSA) at the elementary school, however, capacity is available in the adjacent CSA.

#### **DISCUSSION AND ANALYSIS – TEXT AMENDMENT**

In addition to the proposed map amendments, a text amendment to Lee Plan Policy 33.2.2 is proposed. Policy 33.2.2 currently describes how Mixed-Use Communities as identified on Map 2-D may be developed if a potential developer wishes to pursue that form of development. Map 2-D identifies four potential Mixed-Use Communities along the south side of State Road 82 (See Figure 4). Three of the Mixed-Use Communities are within the Southeast Lee County Community Plan Area, while the fourth area, located over approximately 84 acres of the subject property, is within the Lehigh Acres Community Plan Area. All four of the Mixed-Use Communities were incorporated into the Lee Plan by Ordinance 10-19.



Figure 4: Northern Extent of Map 2-D, showing Mixed-Use Communities and Existing Acreage Subdivisions

Policy 33.2.2 identifies all four Mixed-Use Communities through its reference to Map 2-D. However, it only describes development of the Mixed-Use Communities and adjacent lands within Southeast Lee County. The policy provides the Southeast Lee County Mixed-Use Communities are to concentrate development rights from contiguous property under single ownership. The Policy also provides the maximum gross density is 5 dwelling units an acre, development may utilize the property development regulations for the C-2A zoning district, and the Mixed-Use Community may extend 400 feet beyond the boundary identified on Map 2-D. Policy 33.2.2 does not describe development characteristics for the

Mixed-Use Community within the Lehigh Acres Community Plan Area or the contiguous property that is within the Southeast Lee County Community Plan Area.

The Lehigh Acres Mixed-Use Community is also identified on Map 2-B: Lehigh Acres Community Plan Overlay as a Specialized Mixed Use Node and is within the Central Urban future land use category. The Central Urban future land use category allows for a standard density of 10 dwelling units an acre and up to 15 dwelling units an acre using bonus density. Policy 25.1.3 provides the specialized mixed use nodes in Lehigh Acres are "expected to develop at the higher end of the density and intensity ranges, including bonus density." Policy 25.1.7 provides "Development within Specialized Mixed Use Nodes may use the development standards allowed within the Mixed Use Overlay." Based on Policies 25.1.3 and 25.1.7 as well as the Central Urban future land use category, it should be anticipated that this property would be intensely developed with minimal buffers and setbacks as well as having reduced open space.

To address the direct interface of lands within Southeast Lee County that are contiguous to, and under the same ownership as the lands in the Central Urban future land use category and identified on Map 2-B as a Specialized Mixed Use Node, the applicant has proposed amendments to Policy 33.2.2, to allow for a density transition from the Lehigh Acres Mixed-Use Community to the lower density residential development allowed in Southeast Lee County. Policy 33.2.2 as proposed to be amended is shown is strike-through and underline formatting below.

**POLICY 33.2.2:** Map 2-D identifies future locations for Mixed-Use Communities where development rights can be concentrated from large Southeast Lee County tracts<u>into</u><u>Traditional</u><u>Neighborhood</u><u>Developments</u>. The preferred pattern for residential development is to cluster density within Mixed-Use Communities along existing roads and away from Future Limerock Mining areas.

- 1. Southeast Lee County Mixed-Use Communities must be concentrated from contiguous property owned under single ownership or control. Residential density is calculated from the upland and wetland acreage of the entire contiguous Southeast Lee County property. Increases in residential densities may be approved through incentives as specified in the LDC for permanent protection of indigenous native uplands on the contiguous tract (up to one extra dwelling unit allowed for each five acres of preserved or restored indigenous native uplands) and through the acquisition of TDUs from TDR sending areas within Southeast Lee County as provided in Objective 33.3.
  - a. The maximum gross density is 5 dwelling units per acre of total land designated as a Mixed-Use Community when TDUs are used.
  - b. Properties that concentrate development rights and/or use TDUs created from Southeast Lee County within the Mixed-Use Communities identified on Map 2-D will be allowed to develop using permitted uses and the property development regulations for the C-2A zoning district.
  - 2<u>c</u>. Contiguous property under the same ownership may be developed as part of a Mixed-Use Community, provided it does not extend more than 400 feet beyond the perimeter of the Mixed-Use Community as designated on Map 2-D.
  - d. Commercial uses developed as part of a Mixed-Use Community will be consistent with Policy 33.2.5 and will not exceed the allowable total square footage for commercial uses in Southeast Lee County.

- 2. Contiguous property adjacent to the Mixed-Use Community located within the Lehigh Acres Community Plan Area may sum allowable dwelling units for entire property. The resulting allowable dwelling units may be allocated across the project regardless of the underlying future land use category, provided:
  - a. the project is developed as a Planned Development, and
  - b. the project maintains a minimum of 60 percent open space.
- 3. Central water and wastewater services are required to develop a Mixed-Use Community.
- 4. Commercial uses developed as part of a Mixed-Use Community will be consistent with Policy 33.2.5 and will not exceed the allowable total square footage for commercial uses in Southeast Lee County.

As drafted, paragraph 1 will apply to the development of Mixed-Use Communities and contiguous lands that are entirely within Southeast Lee County, whereas paragraph 2 will be applied to lands within Southeast Lee County that are contiguous to the Mixed-Use Community located within the Lehigh Acres Community Plan Area. All uses associated with the development of a Mixed-Use Community will be required to connect to public potable water and sanitary sewer services.

Staff has reviewed the proposed language and finds that based on the criteria provided the proposed amendments will only be applicable to the subject property. Staff also finds the proposed transition area created by the policy to be appropriate for the property's location. The Lehigh Acres Mixed-Use Community is allowed and expected to develop much more intensely than the three Mixed-Use Communities in Southeast Lee County and on property designated DR/GR. As proposed by the applicant the area contiguous to the Lehigh Acres Mixed-Use Community, within the Southeast Lee County Community Plan Area, will allow for a density transition between the higher densities in the Lehigh Acres Community Plan Area.

As previously stated, east of the subject property is an area identified on Map 2-D as Existing Acreage Subdivision. Lee Plan Policy 33.2.1 states these areas should be protected from adverse external impacts. Additionally, Objective 33.2: Residential and Mixed-Use Development provides that Existing Acreage Subdivisions should be "protected from adverse impacts of mining." The DR/GR future land use category allows for agriculture, natural resource extraction and related facilities, conservation uses, public and private recreation facilities, and residential uses. The residential uses proposed west of the Existing Acreage Subdivision identified on Map 2-D will preclude other allowable uses, including mining, which may not be compatible with the Existing Acreage Subdivision to the east. In addition to the proposed amendments encouraging a compatible use of the property, the planned development will be required to provide 60 percent open space and connect to public water and sewer services. This is consistent with other residential projects located in Southeast Lee County that are also adjacent to Existing Acreage Subdivisions identified on Map 2-D.

Staff has reviewed the Lee Plan and has not identified any Goals, Objectives, or Policies that would be internally inconsistent with the proposed amendments.

In addition to the amendments requested by the applicant, staff recommends an amendment to <u>Table</u> 1(b). This amendment is necessary to maintain internal consistency with the 2045 Lee County population

accommodations and Policy 1.6.5 of the Lee Plan at time of development order. Table 1(b) is recommended to be amended to provide residential acres in the Sub-Outlying Suburban future land use category, consistent with Lee Plan Goal 5 which is to provide sufficient land in appropriate locations on the Future Land Use Map to accommodate the 2045 projected population of Lee County. The proposed amendments include adding 55 acres of residential development to Planning District 18 (Southeast Lee County) and to decrease the residential acres in the Planning District 17 (Lehigh Acres) and Planning District 10 (Gateway/Airport) in order to make the population balance countywide. The proposed changes to Table 1(b) are identified in Attachment 1.

#### COMMUNITY MEETING REQUIREMENTS

Community information meetings, meeting the requirements of **Objective 17.3**, were held within the Lehigh Acres Community Plan Area on April 4, 2022 and within Southeast Lee County Community Plan Area on April 5, 2022. The proposed amendments are consistent with Objective 17.3 of the Lee Plan.

#### CONCLUSIONS

The proposed amendments to the Lee Plan are consistent with the Lee Plan as discussed in the report and summarized below.

- The subject property has physical different characteristics than properties typically found in the DR/GR future land use category.
- Consistent with Objective 2.2, there are adequate potable water, sanitary sewer, solid waste, police, fire/EMS, and school services and facilities to accommodate the proposed amendment.
- With conditions recommended for the concurrent rezoning, staff recommends Board of County Commissioners make a formal finding that no significant impacts on present or future water resources will result from changing the Future Land Use Category, as required in Lee Plan Policy 2.3.1 and Policy 2.3.2.
- The proposed amendments will not change any wetlands areas. The areas delineated as wetlands using the unified state delineation methodology will remain in the Wetlands future land use category.
- The proposed text amendments address the interface of future urban and future non-urban areas and encourage development of uses compatible with existing nearby uses.
- Connection to LCU's potable water and sanitary sewer services is consistent with Policy 126.1.4 and Policy 56.1.4 of the Lee Plan, which requires development designs must maintain groundwater levels water quality at or above existing levels.
- The proposed amendments are consistent with Objective 17.3 of the Lee Plan.
- The Amendments to table 1(b), as recommended by staff, are necessary to maintain internal consistency with the 2045 Lee County population accommodations and Policy 1.6.5 of the Lee Plan at time of development order.

Staff recommends that the Board of County Commissioners make a formal finding that no significant impacts on present or future water resources will result from changing the Future Land Use Category, as required in Lee Plan Policy 2.3.1.

Staff also recommends the Board of County Commissioners *transmit* the proposed amendments as provided in Attachment 1.

#### PART 2

#### LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

#### DATE OF PUBLIC HEARING: March 27, 2023

#### A. LOCAL PLANNING AGENCY REVIEW

The applicant's representatives provided a presentation addressing the requested amendments, the subject and surrounding properties, environmental analysis, transportation analysis, compatibility with surrounding uses, proximity to Southwest Florida International Airport, public facilities impacts, concurrent rezoning, and consistency with the Lee Plan.

Following the applicant's presentation members of the LPA asked for clarification about impacts to future plans of the Lee County Port Authority, design considerations due to the 10,000 foot hazardous wildlife buffer around the airport, how the area subject to the Future Land Use Map amendment is different than other properties in the DR/GR in Southeast Lee County, and how maximum density was calculated.

Following the applicant's presentation and questions from members of the LPA, staff made a presentation addressing the requested map and text amendments, subject property, compatibility with adjacent uses, availability of public infrastructure, consistency with the Lee Plan, and staff recommendation.

Members of the LPA asked additional questions about transportation impacts, lake bank slopes, impacts to ground water, and the required finding that the proposed amendments will not significantly impact present or future groundwater resources.

No members of the public addressed the LPA concerning the proposed amendments.

#### B. LOCAL PLANNING AGENCY RECOMMENDATION

A motion was made to recommend that the Board of County Commissioners <u>transmit</u> CPA2021-00017 and CPA2021-00018. The motion passed 5 to 2.

RAYMOND BLACKSMITH	AYE
KEITH DEAN	AYE
DUSTIN GARDNER	AYE
DAWN RUSSELL	AYE
DON SCHROTENBOER	AYE
STAN STOUDER	NAY
HENRY ZUBA	NAY

#### C. STAFF RECOMMENDATION

Staff recommends the Board of County Commissioners *transmit* the amendments as provided in Attachment 1, based on the analysis and findings in this staff report.

# **ATTACHMENT 1**

- Policy 33.2.2
- > Table 1(b): Year 2045 Allocations
- Map 1-A: Future Land Use Map (Existing)
- Map 1-A: Future Land Use Map (Proposed)
- Map 1-F: Private Recreation Facilities Overlay
- > Map 4-A: LCU Future Water Service Area
- > Map 4-B: LCU Future Sewer Service Area

#### PROPOSED TEXT AMENDMENTS

#### FUTURE LAND USE ELEMENT

**POLICY 33.2.2:** Map 2-D identifies future locations for Mixed-Use Communities where development rights can be concentrated from large Southeast Lee County tracts<u>into</u><u>Traditional</u><u>Neighborhood</u><u>Developments</u>. The preferred pattern for residential development is to cluster density within Mixed-Use Communities along existing roads and away from Future Limerock Mining areas.

- 1. Southeast Lee County Mixed-Use Communities must be concentrated from contiguous property owned under single ownership or control. Residential density is calculated from the upland and wetland acreage of the entire contiguous Southeast Lee County property. Increases in residential densities may be approved through incentives as specified in the LDC for permanent protection of indigenous native uplands on the contiguous tract (up to one extra dwelling unit allowed for each five acres of preserved or restored indigenous native uplands) and through the acquisition of TDUs from TDR sending areas within Southeast Lee County as provided in Objective 33.3.
  - a. The maximum gross density is 5 dwelling units per acre of total land designated as a Mixed-Use Community when TDUs are used.
  - b. Properties that concentrate development rights and/or use TDUs created from Southeast Lee County within the Mixed-Use Communities identified on Map 2-D will be allowed to develop using permitted uses and the property development regulations for the C-2A zoning district.
  - 2<u>c</u>. Contiguous property under the same ownership may be developed as part of a Mixed-Use Community, provided it does not extend more than 400 feet beyond the perimeter of the Mixed-Use Community as designated on Map 2-D.
  - d. Commercial uses developed as part of a Mixed-Use Community will be consistent with Policy 33.2.5 and will not exceed the allowable total square footage for commercial uses in Southeast Lee County.
- 2. Contiguous property adjacent to the Mixed-Use Community located within the Lehigh Acres Community Plan Area may sum allowable dwelling units for entire property. The resulting allowable dwelling units may be allocated across the project regardless of the underlying future land use category, provided:
  - a. the project is developed as a Planned Development, and
  - b. the project maintains a minimum of 60 percent open space.
- 3. Central water and wastewater services are required to develop a Mixed-Use Community.
- 4. Commercial uses developed as part of a Mixed Use Community will be consistent with Policy 33.2.5 and will not exceed the allowable total square footage for commercial uses in Southeast Lee County.

## Table 1(b) Year 2045 Allocations

				Planning District										
Future Land Use Category		Unincorporated County		District 1	District 2	District 3	District 4	District 5	District 6	District 7	District 8	District 9	Distri	ict 10
				Northeast	Воса		Fort Myers					Fort Myers	Gateway	/ Airport
		Existing	Proposed	Lee County	Grande	Bonita	Shores	Burnt Store	Cape Coral	Captiva	Fort Myers	Beach	Existing	Proposed
	Intensive Development	<del>1,483</del>	1,483	-	-	-	17	-	21	-	238	-		
	Central Urban	<del>13,838</del>	13,760	-	-	-	207	-	-	-	230	-	25	25
	Urban Community	<del>22,739</del>	22,704	813	453	-	475	-	-	-	-	-	<del>150</del>	150
	Suburban	<del></del>	14,913	-	-	-	1,950	-	-	-	80	-		-
	Outlying Suburban	<del></del>	3,648	25	-	-	490	13	3	429	-	-		-
2	Sub-Outlying Suburban	<u> </u>	1,786	-	-	-	330	-	-	-	-	-	227	227
10	Commercial			-	-	-	-	-	-	-	-	-		-
63	Industrial		15	-	-	-	-	-	-	-	-	-	6	6
at	Public Facilities	<u> </u>		-	-	-	-	-	-	-	-	-		
	University Community	<del></del>	503	-	-	-	-	-	-	-	-	-		-
JSE	Destination Resort Mixed Use Water Dependent		8	-	-	-	-	-	-	-	-	-		
1	Burnt Store Marina Village	<del>2</del>	2	-	-	-	-	2	-	-	-	-		
20	Industrial Interchange	<u>-</u>	-	-	-	-	-	-	-	-	-	-		
۲a	General Interchange	114	114	-	-	-	-	-	-	-	-	-	<u> </u>	15
re	General Commercial Interchange			-	-	-	-	-	-	-	-	-		
tu	Industrial Commercial Interchange	<u>-</u>	-	-	-	-	-	-	-	-	-	-		
μ	University Village Interchange	<u>-</u>	-	-	-	-	-	-	-	-	-	-	<u>-</u>	
X	New Community	<del>2,104</del>	2,075	1,115	-	-	-	-	-	-	-	-	<del>989</del>	960
	Airport	<u>-</u>	-	-	-	-	-	-	-	-	-	-		
ia	Tradeport	3	3	-	-	-	-	-	-	-	-	-	3	3
nt	Rural	<del>7,764</del>	7,764	2,431	-	-	800	730	-	-	-	-		
de	Rural Community Preserve	<del>3,517</del>	3,517	-	-	-	-	-	-	-	-	-	<u>-</u>	
ssi	Coastal Rural	<del>1,338</del>	1,338	-	-	-	-	-	-	-	-	-	<u>-</u>	-
Re	Outer Island	<del>233</del>	233	2	4	-	1	-	-	169	-	-		-
	Open Lands	<del>2,186</del>	2,186	153	-	-	-	257	-	-	-	-		
	Density Reduction/ Groundwater Resource	<del>6,97</del> 4	6,974	131	-	-	-	-	-	-	-	-		
	Conservation Lands Upland			-	-	-	-	-	-	-	-	-		
	Wetlands			-	-	-	-	-	-	-	-	_		
	Conservation Lands Wetland			-	-	-	-	-	-	-	-	-		-
Uni	ncorporated County Total Residential	83,113	83,027	4,669	457	-	4,270	1,002	24	598	548	-	<u> </u>	1,386
Cor	nmercial	<del></del>	8,916	300	53	-	450	27	9	125	150	-	<del>1,216</del> _	1,216
Ind	ustrial	<u> </u>	4,787	30	3	-	300	10	15	70	315	-	<u> </u>	2,134
Non Regulatory Allocations														
Public		<u> </u>	120,240	14,191	622	-	4,864	7,323	6	2,340	583	-	<del>9,660</del>	9,689
Active AG		21,944	21,889	5,500	-	-	240	90	-	-	-	-	2	2
Passive AG		13,685	13,685	5,500	-	-	615	100	-	-	-	-	485	485
Conservation		87,746	87,746	2,458	297	-	1,163	3,186	67	1,595	926	-	2,206	2,206
Vac	ant	26,118	26,230	1,145	28	-	733	766	8	103	17	-		88
Tot	al	366,520	366,520	33,793	1,460	-	12,634	12,505	129	4,831	2,538	-	17,205	17,205
Рори	lation Distribution (unincorporated Lee County)	584,331	584,331	8,235	1,470	-	35,253	2,179	152	725	5,273	-	22,281	21,926

## Table 1(b) Year 2045 Allocations

		Planning District													
	Future Land Use Category	District 11	District 12	District 13	District 14	District 15	District 16	Distri	ict 17	Distr	ict 18	District 19	District 20	District 21	District 22
		Daniels	Iona /			South Fort Myers Pine Island Ex	Lehigh Acres		Southeast Lee County		North Fort				
		Parkway	McGregor	San Carlos	Sanibel		Pine Island	Existing	Proposed	Existing	Proposed	Myers	Buckingham	Estero	Bashore
	Intensive Development	-	-	-	-	801	1	<del>30</del>	30		-	376	-	-	-
	Central Urban	-	656	20	-	3,113	-	<del>7,362</del>	7,284		-	2,225	-	-	-
	Urban Community	-	978	1,318	-	863	540	<del>17,034</del>	17,000		-	-	115	-	-
	Suburban	-	2,566	2,069	-	1,202	659		-			6,387	-	-	-
	Outlying Suburban	1,253	438	-	-	-	502	<u>-</u>			-	406	-	90	-
>	Sub-Outlying Suburban	-	-	13	-	-	-				55	145	66	-	950
01	Commercial	-	-	-	-	-	-				-	-	-	-	-
eg	Industrial	-	3	3	-	3	-		_		-	-	-	-	-
at	Public Facilities	-	-	-	-	-	-		-		-	-	-	-	-
	University Community	-	-	503	-	-	-		-		-	-	-	-	-
JSE	Destination Resort Mixed Use Water Dependent	-	8	-	-	-	-				-	-	-	-	-
1 1	Burnt Store Marina Village	-	-	-	-	-	-		-		-	-	-	-	-
ind	Industrial Interchange	-	-	-	-	-	-		-		-	-	-	-	-
10	General Interchange	58	-	-	-	-	-				8	14	-	-	20
re	General Commercial Interchange	-	-	-	-	-	-	. <u> </u>				-	-	-	-
tu	Industrial Commercial Interchange	-	-	-	-	-	-				-	-	-	-	-
Fu	University Village Interchange	-	-	-	-	-	-					-	-	-	-
3	New Community	-	-	-	-	-	-				-	-	-	-	-
I E	Airport	-	-	-	-	-	-					-	-	-	-
tia	Tradeport	-	-	-	-	-	-		-		-	-	-	-	-
S U	Rural	1,573	-	99	-	-	227		14		-	454	50	-	1,387
ide	Rural Community Preserve	-	-	-	-	-	-		-		-	-	3,517	-	-
es	Coastal Rural	-	-	-	-	-	1,338					-	-	-	-
R	Outer Island	-	2	-	-	-	55					-	-	-	-
	Open Lands	80	-	-	-	-	-					30	-	-	1,667
	Density Reduction/ Groundwater Resource	-	-	-	-	-	-			4,742	4,742	-	-	-	2,101
	Conservation Lands Upland	-	-	-	-	-	-				-	-	-	-	-
	Wetlands	-	-	-	-	-	-	<u>-</u>				-	-	-	-
	Conservation Lands Wetland	-	-	-	-	-	-	<u>-</u>	-			-	-	-	-
Uni	ncorporated County Total Residential	2,964	4,650	4,024	-	5,982	3,322	<u> </u>	24,327	4,750	4,805	10,035	3,748	90	6,125
Cor	nmercial	326	774	938	-	2,012	288	<del></del>	900	<u> </u>	118	1,121	19	18	72
Industrial		5	198	387		566	67	218_	218	<u>215</u>	215	244	4	2	4
Non Regulatory Allocations															
Public		3,214	4,898	6,364	-	5,883	4,831	<u> </u>	20,267	<u> </u>	17,992	10,117	3,052	653	3,351
Active AG		5	13	5	-	-	2,780		35	<u> </u>	11,945	90	630	4	550
Passive AG		10	•	5	-	-	70	<del>50_</del>	50	<u> </u>	2,500	250	2,000	•	2,100
Conservation		1,677	9,786	2,232	-	211	15,489	<u> </u>	1,077	41,028	41,028	1,607	382	1,465	895
Vacant		20	55	158	-	4	2,200	<u> </u>	14,917	<u> </u>	2,400	1,183	850	130	1,425
Total		8,221	20,374	14,114	-	14,658	29,047	<del>61,791</del>	61,791	<u> </u>	81,003	24,649	10,684	2,362	14,523
Ρορι	Ilation Distribution (unincorporated Lee County)	14,322	44,132	54,615	-	76,582	13,431	<del></del>	161,430	<del>17,369</del>	18,540	110,722	5,951	741	8,653





Attachment 1





Attachment 1

Map Generated: March 2023

Page 1 of 2

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Map Generated: March 2023



# **ATTACHMENT 2**

#### MEMORANDUM

#### FROM

#### **PUBLIC WORKS**

#### Natural Resources Division

Date: March 10, 2023

TO: Brandon Dunn

Principal Planner, Planning Section

From: Phil Gillogly, P.E.

Interim Operations Manager,

Natural Resources Division

SUBJECT: CPA2021-00017 and CPA2021-00018 Daniels South Text and Map Amendments

Natural Resources staff has reviewed the revised application materials and request from the applicant, which, in part, includes an amendment to the Future Land Use Map to redesignate approximately 153.7 acres from the DR/GR future land use category to the Sub-Outlying Suburban future land use category. Along with the proposed amendment to the Future Land Use Map other Map and Text amendments are proposed that will facilitate the development of a mixed use project with approximately 350,000 square feet of commercial uses and 1,600 residential dwelling units. The commercial uses will primarily be built within existing future urban areas in the Lehigh Acres Community Plan area. The residential uses are primarily planned within the areas proposed to be in the Sub-Outlying Suburban future land use category as well as lands that are to remain within the DR/GR future land use category. These residential areas are within the Southeast Lee County Community Plan area.

The subject property has historically been used for agricultural operations. A surface water management system, including an extensive network of ditches and berms have been constructed on the property which has led to the partitioning of wetland systems within the site. The berm system includes a historic farm road that bisects the site and precludes hydrologic connectivity between wetland systems located in the northern and southern portions of the property. Today, this road represents the dividing line between the Estero River and Six Mile Cypress sub-watersheds, based on data from the SFWMD.

Because the request includes proposed changes to the Future Land Use Map that include redesignating 153.7 acres of DR/GR to Sub-Outlying Suburban Lee Plan Policies 2.3.1 and 2.3.2 must be addressed. Policy 2.3.1 requires a specific finding by the Board of County Commissioners "that no significant impacts on present or future water resources will result from the change." These Policies are provided below.

**POLICY 2.3.1:** All proposed changes to the Future Land Use Map in critical areas for future potable water supply (Lehigh Acres as described in Policy 54.1.9 and all land in the DR/GR land use category) will be subject to a special review by the staff of Lee County. This review will analyze the proposed land uses to determine the short-term and long-term availability of irrigation and domestic water sources, and will assess whether the proposed land uses would cause any significant impact on present or future water resources. If the Board of County Commissioners wishes to approve any such changes to the Future Land Use Map, it must make a formal finding that no significant impacts on present or future water resources will result from the change. (Ord. No. 92- 47, 94-30, 00-22, 02-02, 14-10, 18-05)

**POLICY 2.3.2:** Future Land Use Map amendments to the existing DR/GR areas south of SR 82 east of I-75, excluding areas designated by the Port Authority as needed for airport expansion, which increase the current allowable density or intensity of land use will be discouraged by the County. It is Lee County's policy not to approve further urban designations there for the same reasons that supported its 1990 decision to establish this category. In addition to satisfying the requirements in Ch. 163, Part II, Fla. Stat., the Strategic Regional Policy Plan, the State Comprehensive Plan, and all of the criteria in the Lee Plan, applicants seeking such an amendment must:

- analyze the proposed allowable land uses to determine the availability of irrigation and domestic water sources; and,
- identify potential irrigation and domestic water sources, consistent with the Regional Water Supply Plan. Since regional water suppliers cannot obtain permits consistent with the planning time frame of the Lee Plan, water sources do not have to be currently permitted and available, but they must be reasonably capable of being permitted; and,
- present data and analysis that the proposed land uses will not cause any significant harm to present and future public water resources; and,
- 4. supply data and analysis specifically addressing urban sprawl.

During the transmittal and adoption process, the Board of County Commissioners must review the application for all these analytical requirements and make a finding that the amendment complies with all of them. (Ord. No. 97-05, 16-01, 18-05)

All proposed uses will connect to Lee County Utilities for potable water needs. Policy 61.1.6 provides that all other potential water sources must be eliminated prior to selecting potable water as the sole source for meeting irrigation needs of a development. Reuse water for irrigation is not available to the subject site, therefore other sources must be explored. As part of the required review, staff analyzed the available irrigation sources availability and the impact of using that source for irrigation purposes. Currently, the site is permitted through South Florida Water Management District (SFWMD) to utilize the Surficial Aquifer for livestock water supply. Utilizing the Surficial Aquifer for the proposed use could have a negative effect on the surrounding wetland systems and will require an additional "make up" source. This source is from a confined aquifer to replenish the water withdrawn from the Surficial, or unconfined, aquifer. At a 1 to 1 ratio, there is no net change in the Surficial Aquifer levels and thus ensure no negative impacts.

There are two potential make up sources that were analyzed. First the Sandstone Aquifer, which is a protected resource, is the source for domestic self-supply wells within Lehigh Acres. This source has been

experiencing additional stresses from development of the existing platted lots within Lehigh Acres. SFWMD has been discussing concerns since 2021 with Lee County regarding reaching the maximum developmental level (MDL) within this aquifer. MDL is defined as twenty feet above the top of the geologic strata of the respective aquifer. This rule was established by SFWMD (40E-8) to prevent harmful drawdown, or mining, the aquifers. The MDL is a key prevention for keeping aquifer levels with the minimum flow and levels established in the Florida Administrative Code. The Lee County monitoring well approximately 2 miles north of this property has come within 10 feet of reaching the MDL. Monitoring wells within the Sandstone Aquifer have shown a downward trend in the water levels year over year.



Source: SFWMD presentation 1/20/22 by Robert Verrastro

This trend concerns staff that utilizing the Sandstone Aquifer for irrigation will have an effect on the potable water supply of the surrounding community.

The second makeup source is from the Lower Hawthorn that is listed as an alternative water supply source in the Lower West Coast Water Supply Plan. This source does not have the prolific use that is seen within the Sandstone. The water quality and depth to the aquifer make this an unattractive source for domestic self-supply. As a makeup source this poses no impact on the surrounding community. Mixing the water from this source with the proposed onsite water management system overcomes the lower water quality for irrigation use. Policy 61.1.1 provides "that all fresh waters are a resource to be managed and allocated wisely, and will support allocations of the resource on the basis 1) of ensuring that sufficient water is available to maintain or restore valued natural systems, and 2) of assigning to any specified use or user the lowest quality fresh water compatible with that use, consistent with financial and technical constraints."

Based on the data above as well as the Policies discussed in this memo staff finds that the following conditions are necessary in order to make a formal finding "that no significant impacts on present or future water resources will result from the change."

#### **Proposed Conditions**

- 1. Irrigation will be through a master controlled system and no individual homeowner irrigation systems will be allowed. The master controlled system will be designed to meet the water conservation ordinance.
- 2. No irrigation water will be utilized from the Sandstone Aquifer.
- 3. Withdraw pumps from the surficial aquifer and Lower Hawthorn will be equipped with a water meter. The metered amounts from both aquifers will be reported to the County quarterly.

Based on the information provided by the applicant as well as the conditions identified in this memorandum, the Division of Natural Resources staff finds that no significant impacts on present or future water resources will result from the change. The Division of Natural Resources staff recommends that the Board of County Commissioners make a formal finding that no significant impacts on present or future water resources will result from changing the Future Land Use Category, as required in Lee Plan Policy 2.3.1 and Policy 2.3.2.

This memo does not intend to relieve the applicant from complying with any part of the Lee Plan. The applicant may be required to confirm their findings through additional data and a detailed numerical modeling process at a later stage of plan development. Upon receipt of further information during plan development stage, staff reserves the right to review and disagree with any or all of the water resources analysis. Lee County staff also reserves the right to deny the application for plan amendment or subsequent applications for zoning changes or development, if it is found that the project as proposed is not consistent with the Lee Plan.


# APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT - MAP

Projec	t Description: Amendments to the Future Land Use Map, Lee County Utilities Service Area Maps and the Private				
Recre	ation Facilities Overlay for a 1,233 ac property. Approximately 153.7 acres of DR/GR FLU will be amended to Sub-				
Outlyi	ng Suburban FLU. Approximately 1,148.5 acres will be added to the Lee County Utilities Service Area. Any portion of				
he pr	operty within the Private Recreation Facilities Overlay will be removed.				
Ma	p(s) to Be Amended: <u>1-A, 1-F, 4-A, 4-B</u>				
Sta	te Review Process: Small-Scale Review State Coordinated Review Expedited State Review				
	•••••••••••••••••••••••••••••••••••••••				
1.	Name of Applicant: Lennar Corporation, Inc. c/o Barry Ernst				
	Address: 1042 Six Mile Cypress Parkway				
	City, State, Zip: Fort Myers, FL 33966				
	Phone Number:E-mail: <u>Barry.Ernst@Lennar.com</u>				
2.	Name of Contact: <u>Tina M. Ekblad, MPA, AICP</u>				
	Address: 106 E Collage Ave, Suite 700				
	Phone Number: 850 254 7624				
	E-mail: lekblad(wstearnsweaver.com				
3	Owner(s) of Records Jared Holes Trust for Land Trust Number 5018				
5.	Address: 2500 Tamiami Trail N Suite 214				
	City State Zin: Naples FL 34103				
	Phone Number: E-mail:				
	COMMUNITY DEVELOPMENT				
4.	Property Location:				
	1. Site Address: Please see attached Property Location Chart				
	2. STRAP(s): Please see attached Property Location Chart				
5.	Property Information:				
	Total Acreage Included in Request: 1 233				
	Total Unlands: 714 seres Total Watlands: 510 seres Current Zoning: AG 2				
	Current Future Land Use Category/jee): Central Urban DP/GP Wetland				
	Area in Each Future Land Use Category Central Urban 84.5 acres DR/GR 629.5 acres Wetland 519 acres				
	Existing Land Use: Agriculture				
6	Calculation of maximum allowable development under current Lee Plan-				
<b>v</b> .	Pagidantial Units/Dengity 024.1				
	Residential Onits/Delisity. <u>234.1</u> Commercial Intensity: <u>1 Mill SF</u> Industrial Intensity:				
-					
1	Calculation of maximum allowable development with proposed amendments:				

#### **Public Facilities Impacts**

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

- Traffic Circulation Analysis: The analysis is intended to determine the effect of the land use change on the Financially Feasible Highway Plan Map 3A (20-year plus horizon) and on the Capital Improvements Element (5-year horizon). Toward that end, an applicant must submit a Traffic Impact Statement (TIS) consistent with Lee County Administrative Code (AC)13-17.
  - a. Proposals affecting less than 10 acres, where development parameters are contained within the Traffic Analysis Zone (TAZ) or zones planned population and employment, or where there is no change in allowable density/ intensity, may be eligible for a TIS requirement waiver as outlined in the Lee County TIS Guidelines and AC-13-17. Identification of allowable density/intensity in order to determine socio-economic data for affected TAZ(s) must be coordinated with Lee County Planning staff. Otherwise a calculation of trip generation is required consistent with AC-13-17 and the Lee County TIS Guidelines to determine required components of analysis for:
    - i. Total peak hour trip generation less than 50 total trip ends trip generation.
    - ii. Total peak hour trip generation from 50 to 300 total trip ends trip generation, trip distribution and trip assignment (manual or Florida Standard Urban Transportation Modeling Structure (FSUTMS) analysis consistent with AC-13-17 and TIS Guidelines), short-term (5 year) and long-range (to current Lee Plan horizon year) segment LOS analysis of the nearest or abutting arterial and major collector segment(s) identified in the Transportation Inventory based on the trip generation and roadway segment LOS analysis criteria in AC-13-17. A methodology meeting is recommended prior to submittal of the application to discuss use of FSUTMS, any changes to analysis requirements, or a combined CPA and Zoning TIS short term analysis.
    - iii. Total peak hour trip generation is over 300 total trip ends trip generation, mode split, trip distribution and trip assignment (manual or FSUTMS analysis consistent with AC-13-17 and TIS Guidelines), short-term (five-year) and long-range (to current Lee Plan horizon year) segment LOS analysis of arterial and collector segments listed in the Transportation Inventory. LOS analysis will include any portion of roadway segments within an area three miles offset from the boundary of the application legal description metes and bounds survey. LOS analysis will also include any additional segments in the study area based on the roadway segment LOS analysis criteria in AC-13-17. A methodology meeting is required prior to submittal of the application.
  - b. Map amendment greater than 10 acres -Allowable density/intensity will be determined by Lee County Planning staff.

#### 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

# Analysis for each of the above should include (but is not limited to) the following (see the Lee County Concurrency Management Report):

- a Franchise Area, Basin, or District in which the property is located
- b. Current LOS, and LOS standard of facilities serving the site
- c. Projected 2030 LOS under existing designation
- d Projected 2030 LOS under proposed designation
- e Existing infrastructure, if any, in the immediate area with the potential to serve the subject property
- f Improvements/expansions currently programmed in 5 year CIP, 6-10 year CIP, and long range improvements
- g. Provide a letter of service availability from the appropriate utility for sanitary sewer and potable water

Lee County Comprehensive Plan Map Amendment Application Form (12/2022)

#### In addition to the above analysis, provide the following for potable water:

- a. Determine the availability of water supply within the franchise area using the current water use allocation (Consumptive Use Permit) based on the annual average daily withdrawal rate.
- b. Include the current demand and the projected demand under the existing designation, and the projected demand under the proposed designation.
- c. Include the availability of treatment facilities and transmission lines for reclaimed water for irrigation.
- d. Include any other water conservation measures that will be applied to the site (see Goal 54).

# 3. Provide a letter from the appropriate agency determining the adequacy/provision of existing/proposed support facilities, including:

- a. Fire protection with adequate response times
- b. Emergency medical service (EMS) provisions
- c. Law enforcement
- d. Solid Waste
- e. Mass Transit
- f. Schools

In reference to above, the applicant must supply the responding agency with the information from application items 5, 6, and 7 for their evaluation. This application must include the applicant's correspondence/request to the responding agency.

#### **Environmental Impacts**

Provide an overall analysis of the character of the subject property and surrounding properties, and assess the site's suitability for the proposed change based upon the following:

- 1. A map of the Plant Communities as defined by the Florida Land Use Cover and Classification system (FLUCCS).
- 2. A map and description of the soils found on the property (identify the source of the information).
- 3. A topographic map depicting the property boundaries and 100-year flood prone areas indicated (as identified by FEMA).
- 4. A map delineating the property boundaries on the most recent Flood Insurance Rate Map.
- 5. A map delineating wetlands, aquifer recharge areas, and rare & unique uplands.
- 6. A table of plant communities by FLUCCS with the potential to contain species (plant and animal) listed by federal, state or local agencies as endangered, threatened or species of special concern. The table must include the listed species by FLUCCS and the species status (same as FLUCCS map).

#### Impacts on Historic Resources

List all historic resources (including structure, districts, and/or archaeologically sensitive areas) and provide an analysis of the proposed change's impact on these resources. The following should be included with the analysis:

- 1. A map of any historic districts and/or sites listed on the Florida Master Site File which are located on the subject property or adjacent properties.
- 2 A map showing the subject property location on the archaeological sensitivity map for Lee County.

#### 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 or that affect the subject property. 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.

#### State Policy Plan and Regional Policy Plan

List State Policy Plan and Regional Policy Plan goals, strategies and 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.

#### Planning Communities/Community Plan Area Requirements

If located within a planning community/community plan area, provide a meeting summary document of the required public informational session [Lee Plan Goal 17].

Lee County Comprehensive Plan Map Amendment Application Form (12/2022)

#### Sketch and Legal Description

The certified legal description(s) and certified sketch of the description for the property subject to the requested change. A metes and bounds legal description must be submitted specifically describing the entire perimeter boundary of the property with accurate bearings and distances for every line. The sketch must be tied to the state plane coordinate system for the Florida West Zone (North America Datum of 1983/1990 Adjustment) with two coordinates, one coordinate being the point of beginning and the other an opposing corner. If the subject property contains wetlands or the proposed amendment includes more than one land use category a metes and bounds legal description, as described above, must be submitted in addition to the perimeter boundary of the property for each wetland or future land use category.

#### SUBMITTAL REQUIREMENTS

#### Clearly label all submittal documents with the <u>exhibit name</u> indicated below.

# For each map submitted, the applicant will be required to submit a 24"x36" version and 8.5"x11" reduced map for inclusion in public hearing packets.

#### MINIMUM SUBMITTAL ITEMS (3 Copies)

	Completed Application (Exhibit – M1)
	Disclosure of Interest (Exhibit – M2)
	Surrounding Property Owners List, Mailing Labels, and Map For All Parcels Within 500 Feet of the Subject Property (Exhibit – M3)
14	Existing Future Land Use Map (Exhibit – M4)
	Map and Description of Existing Land Uses (Not Designations) of the Subject Property and Surrounding Properties (Exhibit – M5)
	Map and Description of Existing Zoning of the Subject Property and Surrounding Properties (Exhibit - M6)
	Signed/Sealed Legal Description and Sketch of the Description for Each FLUC Proposed (Exhibit - M7)
	Copy of the Deed(s) of the Subject Property (Exhibit - M8)
	Aerial Map Showing the Subject Property and Surrounding Properties (Exhibit - M9)
	Authorization Letter From the Property Owner(s) Authorizing the Applicant to Represent the Owner (Exhibit - M10)
1.1	Proposed Amendments (Exhibit - M11)
	Lee Plan Analysis (Exhibit – M12)
	Environmental Impacts Analysis (Exhibit – M13)
	Historic Resources Impact Analysis (Exhibit – M14)
	Public Facilities Impacts Analysis (Exhibit - M15)
	Traffic Circulation Analysis (Exhibit - M16)
	Existing and Future Conditions Analysis - Sanitary Sewer, Potable Water, Surface Water/Drainage Basins, Parks and Rec, Open Space, Public Schools (Exhibit – M17)
	Letter of Determination For the Adequacy/Provision of Existing/Proposed Support Facilities - Fire Protection, Emergency Medical Service, Law Enforcement, Solid Waste, Mass Transit, Schools (Exhibit – M18)
	State Policy Plan and Regional Policy Plan (Exhibit - M19)
	Justification of Proposed Amendment (Exhibit - M20)
	Planning Communities/Community Plan Area Requirements (Exhibit – M21)

#### APPLICANT - PLEASE NOTE:

Changes to Table 1(b) that relate directly to and are adopted simultaneously with a future land use map amendment may be considered as part of this application for a map amendment.

Once staff has determined 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 hearings, 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.

Lee County Comprehensive Plan Map Amendment Application Form (12/2022)

# AFFIDAVIT

I,\_\_\_\_\_\_, certify that I am the owner or authorized representative of the property described herein, and that all answers to the questions in this application and any sketches, data, or other supplementary matter attached to and made a part of this application, are honest and true to the best of my knowledge and belief. I also authorize the staff of Lee County Community Development to enter upon the property during normal working hours for the purpose of investigating and evaluating the request made through this application.

Signature of Applicant

Date

Printed Name of Applicant

STATE OF FLORIDA COUNTY OF LEE

The foregoing instrument was sworn to (or affirmed) and subscribed before me by means of  $\Box$  physical presence or  $\Box$  online notarization on \_\_\_\_\_(date) by \_\_\_\_\_

(name of person providing oath or affirmation), who is personally known to me or who has produced \_\_\_\_\_\_(type of identification) as identification.

Signature of Notary Public

(Name typed, printed or stamped)



# APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT - TEXT

Froject Name: Dameis South	Pro	ject Name:	Daniels	South
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Project Description: <u>An amendment to Policy 33.2.2 to permit lands in Southeast Lee adjacent to a Community Mixed-</u> Use Activity Center in Lehigh Acres to aggregate and reallocate density across the entire 1,233 acre property.

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.

# <u>APPLICANT – PLEASE NOTE:</u>

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.

1.	Name of Applicant: Lennar Corporation, Inc. c/o Barry Ernst					
	Address:	10482 Six Mile Cypress Parkway Fort Myers, FL 33966				
	City, State, Zip:					
	Phone Number:	239-278-1177		E-m	ail: Barry.Ernst@Lennar.com	
2.	Name of Contact:	Tina M. Ekbl	ad, MPA, AICP			
	Address:	106 E. College /	Avenue, Suite 700			
	City, State, Zip: Tallahassee, FL 32301					
	Phone Number:	850-354-7624		E-mail:	tekblad@stearnsweaver.com	
4a.	Does the proposed	nendment. <u>See</u>	attached supporting narra	ives. areas?	COMMUNITY DEVELOPMENT	
	If located in one o	f the following a	reas, provide an analysis	of the chang	e to the affected area.	
	Public Acquisition [Map 1-D]					
_	Agricultural Overlay [Map 1-G] Airport Mitigation La		Southeast Lee County I	Residential	Urban Reserve [Map 1-D]	
			Overlay [Map 2-D]		Water-Dependent Overlay	
П		inds	Mixed Use Overlay [Map 1-C]		[Map 1-H]	
-	[Map 1-D]			Private Recreational Facilities		
Airport Noise Zones			[Map 2-A]		Overlay [Map 1-F]	

#### 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 3-A (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

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

Lee County Comprehensive Plan Text Amendment Application Form (11/2021)

# STEARNS WEAVER MILLER WEISSLER ALHADEFF & SITTERSON, P.A.

Tina M. Ekblad, MPA, AICP Highpoint Center 106 E. College Avenue, Suite 700 Tallahassee, FL 32301 (850) 354-7624 tekblad@stearnsweaver.com

# Daniels Parkway South Comprehensive Plan Amendment Project Narrative & Comprehensive Plan Consistency

# March 9, 2023

The Property subject to the Comprehensive Plan Amendment is approximately 1,233 acres including STRAPS: 09-45-26-00-00003.0000, 08-45-26-00-00001.0030, 17-45-26-00-00001.0010, 16-45-26-00-00001.0000, 21-45-26-00-00001.0000, located at the southeast corner of Daniels Parkway and SR 82 (the "Property"). Currently the Property is within the DR/GR, Wetlands and Central Urban future land use categories as well as the Southeast Lee County and Lehigh Acres Community Planning Areas, which govern future development of the Property. This location is adjacent to two arterial roadways, the platted neighborhood of Lehigh Acres, and the Southwest Florida International Airport. As a result of the Property's size and configuration, the Property is within urban service boundaries for Lehigh Acres and Southeast Lee County.

# SUMMARY OF AMENDMENTS

- Amend the Future Land Use Map to allocate 153.7 acres into the Sub-Outlying Suburban Category.
- Amend the Lee County Utilities Future Water and Sanitary Sewer Areas (Maps 4-A & 4-B) to add 1,148 acres to the Lee County Utilities Service Area.
- Amend the Private Recreational Facilities Overlay (Map 1-F) to remove the portion within the Property boundary.
- Amend Lee Plan Policy 33.2.2 to add language permitting property adjacent to a Lehigh Acres Community Mixed Use Activity Center to aggregate and allocate density across multiple FLU categories when a Planned Development is used and 60% open space is provided.

# **PROJECT LOCATION**

- The proposed text amendment to Policy 33.2.2 will apply to the Southeast Lee County Community Plan area.
- The proposed amendment to the Future Land Use Map is specific to the property shown on the map below.
- The proposed amendment to the Lee County Utilities Future Water & Sanitary Sewer Service Areas (Lee Plan Maps 4A and 4B) is specific to property shown below.
- The proposed amendment to the Private Recreational Facilities Overlay (Lee Plan Map 1-F) is specific to the Property shown on the map below.

Daniels South CPA Project Narrative Page | 2



Figure 1. Aerial of Subject Property

# CONCURRENT APPLICATION REVIEW

The applicant has filed a companion rezoning application (DCI2022-00002) that is being reviewed concurrently with this plan amendment application pursuant to Chapter 163.33184(12), F.S,

The concurrent rezoning required is to rezone 1,233 acres from Agricultural (AG-2) to Mixed Use Planned Development (MPD) to allow the development of a clustered mixed use development containing up to 350,000 square feet of commercial uses and 1,600 dwelling units.

If the Board of County Commissioners amends the Lee Plan to incorporate the proposed amendments, the requested MPD must demonstrate consistency with the Lee Plan, as amended, prior to approval of the rezoning.

# SURROUNDING PROPERTIES

The Property is surrounded by a mix of uses in an area of Lee County that has significant residential and airport related development as well as vacant land and preservation areas.

#### Southwest

Immediately to the southwest of the subject property is a  $\pm 485$ -foot wide FPL easement on lands owned by the Jared Holes Trust which abut county-owned lands servicing Southwest Florida International Airport. The airport occupies a majority of land southeast of Daniels Parkway and the I-75 exchange. According to the Airport Layout Plan, the development of the airport will take place in two phases and is expected to extend into the year 2025. The Airport Layout Plan indicates that, at some point in the future, an expansion will occur for a second runway to be located south of the current runway. In addition, commercial, retail and industrial flex uses are proposed to be added to the airport in the future. Most of these services will be located along the northern boundary of the airport adjacent to Daniels Parkway, with a minor amount located adjacent to the Daniels Preserve center north of Daniels Parkway. As a result of the airport's proximity to the subject property, the existing 10,000' Hazardous Wildlife Buffer around the airport encumbers part of the south end of the subject property. Within this area only specifically approved species of vegetation may be utilized and water management lakes must be constructed to specific standards to discourage wildlife and reduce habitat in proximity to the airport.

## Northwest

Immediately to the northwest is Daniels Parkway, a controlled access roadway from the segment commencing at US 41 and terminating at SR 82 per Resolution 16-04-08. This designation restricts the number and location of permanent access points along the roadway. The concurrent master concept plan accounts for this designation and aligns the proposed access points of the subject property with the approved access points as demonstrated in Resolution 16-04-08. Further northwest, across Daniels Parkway, is Timber Creek RPD and MPD which is currently under construction. Timber Creek is located within the Six Mile Cypress watershed and was approved via Resolution #Z-17-019 for up to 1,315 dwelling units within the RPD portion, as well as 50 multi-family dwelling units, 250,000 square feet of commercial floor area, and 150 hotel rooms to be located within the MPD portion of the project.

## North

The subject property is bounded to the north by SR 82, a 200-foot wide state-maintained arterial roadway. The SR 82 and Daniels Parkway intersection is the location of Florida's first Continuous Flow Interchange (CFI). North of SR 82, is the platted community of Lehigh Acres. A majority of the properties adjacent to SR 82 are zoned for commercial uses but have not been constructed. The remaining portion of Lehigh in this general vicinity is scattered residential development on the existing platted lots.

# URBAN SERVICES

The Property is within an area of the County that has been designated for urban services. A majority of the urban services are adjacent to or within the vicinity and available to serve the proposed development.

#### Utilities (Public sewer and water)

The Property is partially within the service area for Lee County Utilities and adequate capacity is available to serve the Property and companion proposed development. A map amendment is requested to extend the Lee County Utilities Service area across the entire property to provide central water and sewer services to the proposed development. Existing utility infrastructure exists along Daniels Parkway and is currently extended to service the Timber Creek community.

#### Public Safety (Police, Fire, and EMS)

The Property is able to be served by multiple providers for Emergency Medical Services, Fire and Police. Lee County Emergency Medical Services is the primary EMS transport for the subject property. However, the Property is also within the Lehigh Acres Fire District which provides

medical transport as well. Both service providers would work together to serve the subject property. Lee County EMS does not have a resource in this area, but the concurrent planned development includes land area to facilitate future expansion of service.

The Property is served by two Fire Districts, the South Trail and Lehigh Acres Fire Districts. The South Trail Fire District would serve the southern portion of the Property from Station 63 located at 5531 Halifax Ave. The Lehigh Acres Fire District would serve the northern portion of the Property from the location at 636 Thomas Sherwin Ave. S.

The Property is located wholly within the service area for the Lee County Sheriff. The Central District Station located at 14750 Six Mile Cypress Parkway is responsible for providing service to the subject property.

#### Schools

The Property is within the Lee County School District East Zone, E2. There is capacity within the entire school district to accommodate the additional children.

## Solid Waste

The Property is within the Lee County Solid Waste Franchise and is served through Lee County's franchised hauling contractor. Disposal of waste generated from the subject property will be accomplished at the Lee County Resource Recovery Facility and the Lee-Hendry Regional Landfill. Service is available to the subject property and plans have been established that target growth and long-term disposal capacity for this particular area.

# MAP AMENDMENT

The Property is within two community planning areas and three future land use categories. The portion of the Property within the Southeast Lee County community planning area has uplands within the DR/GR future land use category. The Property's wetlands are within the Wetlands future land use category. The DR/GR future land use category is described in Policy 1.4.5 provided in part, below.

**POLICY 1.4.5:** The <u>Density Reduction/Groundwater Resource (DR/GR)</u> future land use category includes upland areas that provide substantial recharge to aquifers most suitable for future wellfield development. These areas also are the most favorable locations for physical withdrawal of water from those aquifers. Only minimal public facilities exist or are programmed.

The underlying objective for creating the DR/GR future land use category was to protect the County's shallow aquifers. The category was incorporated into the Lee Plan as part of the implementation of the 1990 Stipulated Settlement Agreement between Lee County and the Florida Department of Community Affairs (now known as Department of Economic Opportunity). The Settlement Agreement required that the Future Land Use Map be amended to change density in the new water resource category to one dwelling unit per ten acres in three specified areas of the County. In Southeast Lee County the DR/GR lands were described as: most non-urban land east of Interstate-75, southeast of the airport, and south of State Route 82. Since the Property was

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contiguous, under one ownership and located in a non-urban land use category, east of I-75 and south of State Route 82, it was included in the DR/GR future land use category. This general location descriptor did not take into account specific property characteristics and whether or not the properties truly aligned with the DR/GR FLU category. Since the original implementation of the DR/GR, several similarly situated properties have been removed from the DR/GR FLU within Southeast Lee County. Currently there are 82,560 acres of DR/GR FLU within the Southeast Lee Community Planning Area, including the Property. However, due to the existing physical conditions of the Property, only the eastern portion (as delineated by the existing north/south farm road) demonstrates the necessary characteristics to be within the DR/GR FLU in Southeast Lee County. As described below, the western portion of this Property was part of the Six Mile Cypress sub-basin watershed and was historically connected physically and hydrologically to the property adjacent to the west side of Daniels Parkway, now the Timber Creek community.

The Property has been significantly disturbed over the last several decades by the on-going agricultural use. As noted, like the property making up the Timber Creek community, the western portion of the Property is separated from the majority of the DR/GR future land use category by an internal farm road as well as berms and other improvements on the western portion of the property. These improvements ensure that water does not freely flow to provide larger regional hydrological connections across the Property into the larger Southeast Lee Community Planning Area and the DR/GR and Wetlands future land use categories to the southeast. In recognition of the separation of the Property by these existing features and characteristics, the applicant is requesting 153.7 acres of the upland property be reallocated to the Sub-Outlying Suburban Future Land Use category.

The Sub-Outlying Suburban future land use category is described in the Lee Plan as follows:

**POLICY 1.1.11:** The <u>Sub-Outlying Suburban</u> future land use category is characterized by low density residential areas. Generally the infrastructure needed for high density development is not planned or in place. This future land use category will be placed in areas where higher densities would be incompatible or where there is a desire to retain a low-density community character. Industrial land uses are not permitted. The standard density range is from one dwelling unit per acre (1du/acre) to two dwelling units per acre (2 du/acre). Bonus densities are not allowed.

The Wetlands future land use category is described in the Lee Plan as follows:

**OBJECTIVE 1.5: WETLANDS.** Designate on the Future Land Use Map those lands that are identified as Wetlands in accordance with 373.019(27), F.S. through the use of the unified state delineation methodology described in Fla. Admin, Code R. 62-340, as ratified and amended in 373.4211, F.S.

**POLICY 1.5.1:** Permitted land uses in <u>Wetlands</u> consist of very low density residential uses and recreational uses that will not adversely affect the ecological functions of wetlands. All development in Wetlands must be consistent with Goal 124. The maximum density is one

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dwelling unit per twenty acres (1 du/20 acres) except as otherwise provided in Table 1(a) and Chapter XII.

A formal determination of wetlands and other surface waters on-site was requested of the South Florida Water Management District (SFWMD) pursuant to Rule 62-330.201 Florida Administrative Code. A site visit and wetland limits were verified on January 14, 20 and 21, 2022 by the SFWMD and established 532.51 acres of wetlands. The SFWMD issued a jurisdictional determination in May of 2022. Using the unified state delineation methodology and the administrative process described in Objective 1.5, there are 519.1 acres of Wetlands on the Property. The requested amendments only redesignate the upland portions of the property from DR/GR to Sub-Outlying Suburban west of the internal farm road and associated with the Six Mile Cypress sub-basin watershed similar to the Timber Creek property. The areas delineated as wetlands using the unified state delineation methodology will remain in the Wetlands future land use category. Lee Plan Policy 1.5.1 permits low-density residential and recreational uses within the Wetland Future Lane Use category. However, development may not negatively affect ecological functions and the maximum permitted density is on dwelling unit per 20 acres (1 DU/20 AC).

A Text Amendment to Policy 33.2.2 is proposed to accompany the map amendments to permit the density to be aggregated and allocated across the multiple future land use categories across the property to implement the companion Mixed Use Planned Development.

#### LEE PLAN ANALYSIS

The applicant is requesting to add approximately 153.7 acres to the Sub-Outlying Suburban future land use category and amend Policy 33.2.2 for the Property within the Southeast Lee Community Planning Area.

#### Southeast Lee County

The Property has been included within the Southeast Lee County Community Planning Area since the Planning Community was originally acknowledged in the June 1998 Lee Plan. Goal 33 establishes the vision for this planning community.

**GOAL 33:** SOUTHEAST LEE COUNTY. Protect Southeast Lee County's natural resources through public and private acquisition and restoration efforts. Development incentives will be utilized as a mechanism to preserve, enhance and protect natural resources, such as regional flow-ways and natural habitat corridors in the development of privately owned land. Allowable land uses will include conservation, agriculture, public facilities, low density or clustered residential, natural resource extraction operations, and private recreation facilities; allowable land uses must be compatible with protecting Southeast Lee County's environment.

One of the primary functions of the DR/GR future land use category within the Southeast Lee County Community Planning area is the ability to provide recharge areas for groundwater resources and potential development of wellfields. The Property has an internal farm road running north to south that has existed on-site since at least 1958, altering the flow and drainage of water on-site for an extended period of time. Currently, surface water west of the farm road drains into the Six Mile Cypress Sub-watershed rather than the Estero River watershed shared with the greater Southeast Lee County.



Figure 1. 1958 Aerial of Subject Property with Historic Farm Road

The existing and historic agricultural operations on-site have established internal drainage ditches that also reduce water table elevations and the opportunities for recharge on-site. Additionally, the Property does not have a high potential for wellfield development, nor does it provide substantial recharge benefits similar to other areas of Southeast Lee County due to differences in the Property's hydrogeology as compared to the areas in closer proximity to the existing Lee County wellfields. The existing conditions of the Property have negatively impacted nearby wetlands and significantly limited the opportunity for recharge as compared to the larger DR/GR and Southeast Lee County.

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Amending the Future Land Use Map from DR/GR to another land use category requires evaluation of Policies 2.3.1 and 2.3.2.

**POLICY 2.3.1**: All proposed changes to the Future Land Use Map in critical areas for future potable water supply (Lehigh Acres as described in Policy 54.1.9; and all land in the Density Reduction/Groundwater Resource land use category) will be subject to a special review by the staff of Lee County. This review will analyze the proposed land uses to determine the short-term and long-term availability of irrigation and domestic water sources, and will assess whether the proposed land uses would cause any significant impact on present and future water resources. If the Board of County Commissioners wishes to approve any such changes to the Future Land Use Map, <u>it must make a formal finding that no significant impacts on present or future water resources will result from the change. [Emphasis Added]</u>

**POLICY 2.3.2:** Future Land Use Map amendments to the existing DR/GR areas south of SR 82 east of I-75, excluding areas designated by the Port Authority as needed for airport expansion, which increase the current allowable density or intensity of land use will be discouraged by the county. It is Lee County's policy not to approve further urban designations there for the same reasons that supported its 1990 decision to establish this category. In addition to satisfying the requirements in 163 Part II Fla Stat., the Strategic Regional Policy Plan, the State Comprehensive Plan, and all of the criteria in the Lee Plan, applicants seeking such an amendment must:

- 1. analyze the proposed allowable land uses to determine the availability of irrigation and domestic water sources; and,
- 2. identify potential irrigation and domestic water sources, consistent with the Regional Water Supply Plan. Since regional water suppliers cannot obtain permits consistent with the planning time frame of the Lee Plan, water sources do not have to be currently permitted and available, but they must be reasonably capable of being permitted; and,
- 3. present data and analysis that the proposed land uses will not cause any significant harm to present and future public water resources; and,
- 4. supply data and analysis specifically addressing the urban sprawl.

During the transmittal and adoption process, the Board of County Commissioners must review the application for these analytical requirements and make a finding that the amendment complies with all of them.

The 2022 Lower West Coast Water Supply Plan (LWCWSP) encourages a number of water supply strategies to help conserve and sustain traditional groundwater supplies within Lee County. To protect water resources in fast growing regions, the LWCWSP promotes the implementation of alternative water supply sources such as the use of reclaimed water, seasonal surface water usage, and water conservation measures to reduce overall demand. Because reclaimed water for irrigation is unavailable, the proposed amendment (along with the concurrent rezoning) will satisfy many of the LWCWSP's goals and objectives through the following methods:

- The conjunctive use of surface water (storm water) and seasonal use of groundwater for irrigation reduces stress to the water resources. During periods of high demand and/or the dry season, the temporary and limited use of groundwater for pond augmentation (i.e., from the Sandstone Aquifer) is anticipated to also improve overall surface water quality. Similar practices are being implemented in the vicinity of the subject property.
- The centralized master control of the irrigation delivery system that prevents individual homeowners from initiating irrigation events (water conservation/demand management). Irrigation demands are expected to be met using withdrawals from the internal storm water management system ponds by a master-controlled irrigation system. This system will regulate both the timing and duration of irrigation events in order to maximize conservation of water supplies. The withdrawal and recycling of storm water for irrigation is also anticipated to reduce nutrient loading of the County's MS4 system.

Further benefits to the water resources will be achieved by plugging and abandoning the flowing artesian well onsite. Plugging of the existing wells is anticipated to reduce the potential for adverse impacts to nearby wetlands, environmental systems, and improve groundwater recharge potential to the Surficial Aquifer System. The future development of the Property will also promote the removal of the existing agricultural ditches and berms to match adjacent grade, removal of exotic vegetation and planting of native vegetation.

To demonstrate that future development will not have an adverse impact on water resources and natural systems within Southeast Lee County an integrated surface and groundwater model specific to the Property is required as part of the comprehensive plan amendment and rezoning applications.

**POLICY 33.1.7:** Impacts of proposed land disturbances on surface and groundwater resources will be analyzed using integrated surface and groundwater models that utilize site-specific data to assess potential adverse impacts on water resources and natural systems within Southeast Lee County. Lee County Division of Natural Resources will determine if the appropriate model or models are being utilized, and assess the design and outputs of the modeling to ensure protection of Lee County's natural resources.

Due to the existing internal farm road, there are no indigenous habitat or wetland connections across the watershed basin divide in the current condition. Additionally, the Property's proximity to the SWFIA and the 10,000' Hazardous Wildlife Buffer prohibits the creation of wetland habitat to provide a wetland interconnection. As a result, to continue to mimic the historic flow patterns across the Property a physical infrastructure improvement is proposed to recreate more historic flow patterns between the two watershed basins during periods of high rainfall. This physical connection will interconnect two short hydroperiod wetland habitat types (i.e., hydric pine and mixed wetland hardwoods). Reflecting historic hydrology, the overflow will only occur during peak wetland water levels or after large storm events. When combined with the proposed removal of the existing agricultural berms and filling of the agricultural ditches on-site to match existing grade, these activities will maintain existing water levels and eliminate exotic vegetation while achieving the objective of interconnecting wetlands, re-establishing historic flow patterns and improving water flow off-site. A detailed Drainage Report with the required integrated model has

been included in the concurrent applications demonstrating the conditions of the current and proposed surface and groundwater systems and that no adverse impacts will occur.

Specifically the physical hydrological connection is proposed as a 24-inch piped connection is proposed to restore the historic interaction between the 2 on-site watershed basins. This buried connection is specifically designed to eliminate wildlife attractants. On the west side of the property (Six Mile Cypress Watershed) a water control structure, i.e., weir, will be constructed on the upstream side of the 24" buried pipe in order to selectively convey stormwater towards the Estero River Watershed only during high rainfall events. High rainfall events, for purposes of this application, are defined as those in excess of a 10-year, 1-day storm. Multiple scenarios are included in the integrated model analysis to demonstrate the existing and proposed conditions expected. Specifically, 4 design storms are provided:

- 2.33-year, 1-day
- 10-year, 1 day
- 25-year, 3-day
- 100-year, 3-day

These design storms demonstrate that the man-made hydraulic connection proposed to interconnect the existing two on-site watershed basis will only occur during high rainfall events. A control structure wier is proposed and is set at an elevation above the Wet Season Water Table (WSWT) to ensure drawdown does not occur in nearby wetland habitat and prevents surface water discharging to the west (Six Mile Cypress basin) during low rainfall events. Note that the water elevation of the Six Mile Cypress Basin is slightly higher than the Estero Basin, again ensuring the flow of surface water only occurs during high rainfall events.



# Figure 5. Typical Cross-Section for Man-man Hydraulic Connection

The proposed design accomplishes a several important objectives:

- Sets the control structure weir at an elevation that ensures that surrounding wetland areas do not experience adverse drawdown.
- Addresses varying wet season elevations within the on-site wetlands

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- Prevents surface water from discharging into the Six Mile Cypress during low rain fall events.
- Connects the watersheds during high rainfall events to interconnect the on-site wetlands and re-establish historic flow patterns across the property.
- Controls the flow of surface water across the property to ensure that no adverse impacts to adjacent properties occurs.

While not a natural flowway (due to the constraints of the SWFIA proximity), the proposed improvements take into account the unique conditions of the property necessary to achieve the overall objective of interconnecting wetlands, re-establishing historic flow patterns, while ensuring that no adverse impacts to adjacent properties will occur, as compared to existing conditions consistent with the DR/GR Future Land Use, Policy 33.1.7 and the proposed map amendment to Sub-Outlying Suburban.

# Based on the information provided, it is demonstrated that no significant impacts on present or future water resources will result from the proposed map amendment to Sub-Outlying Suburban.

# Six Mile Cypress Watershed:

The restoration of the Estero River and the Flint Pen/Imperial River watersheds is an important aspect of the DR/GR future land use category and Southeast Lee County community planning area. Lee Plan Policy 126.1.8 provides that Lee County should protect the Flint Pen as an area for water retention and aquifer recharge. However, unlike the majority of properties within Southeast Lee County, the subject property does not lie entirely within the Imperial or Estero River watersheds. The Property has been hydrologically divided into east and west sections due to the existing north/south internal farm road that supports the existing agricultural operations. As part of the management of surface water related to the existing and historical agricultural operations, an extensive network of ditches and berms have been constructed on the property leading to division of the existing on-site wetlands. These features promote drainage for the agricultural operations but reduce water table elevations and lower recharge potential. Due to the north/south internal farm road and internal agricultural ditches and berms, the historical path of surface water across the Property is bifurcated. This same internal farm road has been used by the SFWMD to represent the division between the Estero River and Six Mile Cypress watershed sub-basins.



Figure 3. Basin Divide and Property Boundary

The Property west of the internal farm road exhibits generally higher topographic elevations and is bisected by a historic, north-south farm road which coincides with the sub-basin divide. An analysis of historical aerial photographs (1944 and 1958), National Resources Conservation Service soils data, and LiDAR Digital Elevation Model imagery of the historic flow-way connections demonstrates this western portion of the Property is isolated from the balance of the DR/GR and Southeast Lee Community Planning area to the east. Removing the 153.7 acres from the DR/GR future land use category will not impact the surface water flow on the eastern portion of the Property and the remainder of Southeast Lee County.

# Proposed Future Land Use Category - Sub-Outlying Suburban:

The subject property is bordered on three sides by Future Urban and Suburban land use categories. These include Lehigh Acres within the Central Urban future land use category which permits up to 15 units per acre including bonus density. Along the eastern property boundary is Daniels Parkway and the Timber Creek development in Central Urban and Sub-Outlying Suburban which permits 15 and 2 dwelling units per acre respectively. A portion of the third boundary is adjacent to the Tradeport future land use. In light of the characteristics of the surrounding land uses,

hydrogeology and public facilities, the 153.7 acres subject to the map amendment are not consistent with the existing DR/GR future land use category.

Approximately 153.7 acres are proposed to be reallocated to the Sub-Outlying Suburban future land use; which is described as:

**POLICY 1.1.11:** The <u>Sub-Outlying Suburban</u> future land use category is characterized by low density residential areas. Generally the infrastructure needed for high density development is not planned or in place. This future land use category will be placed in areas where higher densities would be incompatible or where there is a desire to retain a low-density community character. Industrial land uses are not permitted. The standard density range is from one dwelling unit per acre (1du/acre) to two dwelling units per acre (2 du/acre). Bonus densities are not allowed.

The descriptor policy clarifies that the areas subject to this FLU category contain predominately low-density residential development as is being proposed by the applicant in the companion MPD rezoning. The Sub-Outlying Suburban FLU will provide a transition from the Central Urban FLU (15 du/ac) in Lehigh Acres to the north and the existing Sub-Outlying Suburban FLU (2 du/ac) to the west to the lower density DR/GR FLU (1du/10ac) to the east and southeast.

The development patterns that can be promoted by each future land use category are dramatically different. The Central Urban area, which is also within one of the mixed use overlays, can establish a clustered development pattern with higher densities and intensities served by central water and sewer. Only the Central Urban portion of the property is within the Lee County Utilities Future Service Area. Conversely, the DR/GR area can only establish 88.2 large lot single family development with well and septic. The pattern of development and use of 88 individual wells and septic systems conflicts with the desire to maintain the quality and quantity of surface and groundwater as envisioned by Lee Plan policy 1.4.5 for the Density Reduction/Groundwater Resource future land use. Additionally the property is within the Private Recreational Facilities Overlay. This Overlay is for properties that are located in areas characterized as "predominately impacted with agricultural, mining or other permitted uses, large lot single or limited ownership patterns and with direct access to existing roadways" in addition to being outside prioritized preservation areas. This Overlay precludes residential uses but permits ancillary commercial uses to a golf course, horse stable and camping facility. These uses also seem to conflict with the desire to maintain the quality and quantity of surface and groundwater as envisioned by Lee Plan policy 1.4.5.

As a result of these dramatically different development patterns for the subject property if developed independently, a map and text amendment with a concurrent planned development are proposed to establish a development strategy and design that promote a comprehensive master plan with unified commercial and residential development enhancing the vision and goals of each planning community, preserves and restores 676.10 acres of wetland and upland habitat (including 58 acres of Rare and Unique Uplands), establishes historic flow paths across the Property and promotes the responsible development of the Property in a manner that cannot be achieved under the existing Lee County requirements.

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# TEXT AMENDMENT

As part of an evolving regulatory strategy for the Southeast Lee Community Planning Area, an amendment to the Lee Plan was adopted in 2010 that established Objectives 33.2 and 33.3 with their supporting polices and adopted Map 2-D identifying existing development types within the Southeast Lee Community Planning Area. An accompanying amendment was made to the Lee County Utilities Service Area to bring central utilities to specific locations. Map 2-D and Objective 33.3 identified existing residential areas and concentrated existing development rights on large tracts of land identified as Mixed Use Communities.

Since the initial implementation of the Mixed Use Communities, Map 2-D and associated utility service areas, along with Objectives 33.2 and 33.3 and their supporting policies have been amended. Today there are 5 types of residential communities described in the Lee Plan and depicted on Map 2-D. Collectively, the strategies associated with these various communities have established a framework for development in the Southeast Lee Community Planning Area balancing residential and commercial development with environmental preservation and hydrologic improvements.

The intent of the amendment to Policy 33.2.2 is to balance the development that can occur on the Property within the Future Urban and Suburban land use categories and the remaining DR/GR. The Property is under unified ownership adjacent to a mixed use community within the Lehigh Acres Community Planning Area. As a result, it is permitted to aggregate the available density across the multiple future land use categories to promote a consistent and clustered development design that achieves 60% open space. While the amendment permits density to be aggregated and allocated across the contiguous future non-urban area, the overall maximum cannot exceed the total of the dwelling units for each land use category.

**POLICY 33.2.2:** Map 2-D identifies future locations for Mixed-Use Communities where development rights can be concentrated from large Southeast Lee County tracts into Traditional Neighborhood Developments. The preferred pattern for residential development is to cluster density within Mixed-Use Communities along existing roads and away from Future Limerock Mining areas.

- 1. Southeast Lee County Mixed-Use Communities must be concentrated from contiguous property owned under single ownership or control. Residential density is calculated from the upland and wetland acreage of the entire contiguous Southeast Lee County property. Increases in residential densities may be approved through incentives as specified in the LDC for permanent protection of indigenous native uplands on the contiguous tract (up to one extra dwelling unit allowed for each five acres of preserved or restored indigenous native uplands) and through the acquisition of TDUs from TDR sending areas within Southeast Lee County as provided in Objective 33.3.
  - a. The maximum gross density is 5 dwelling units per acre of total land designated as a Mixed-Use Community when TDUs are used.
  - b. Properties that concentrate development rights and/or use TDUs created from Southeast Lee County within the Mixed-Use Communities identified on Map 2-D will be allowed to

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develop using permitted uses and the property development regulations for the C-2A zoning district.

- Contiguous property under the same ownership may be developed as part of a Mixed-Use Community, provided it does not extend more than 400 feet beyond the perimeter of the Mixed-Use Community as designated on Map 2-D.
- 3. Central water and wastewater services are required to develop a Mixed-Use Community.
- Commercial uses developed as part of a Mixed-Use Community will be consistent with Policy 33.2.5 and will not exceed the allowable total square footage for commercial uses in Southeast Lee County.
- 5. Southeast Lee County property adjacent to and including a Lehigh Acres Mixed-Use Activity Center may sum density across the entire property. Density may be allocated across the property regardless of the underlying future land use category when:
- i. the project is developed as a Planned Development;
- ii. the project develops with central water and wastewater services;
- iii. a minimum of 60 percent open space is provided; and
- *iv. the number of dwelling units for the entire project does not exceed the sum of the allowable dwelling units from all land use categories.*

In support of the primary Map and Text Amendments, additional Map Amendments are proposed to extend the Lee County Utilities Service area across the 1,148 acres within Southeast Lee County. The requested extension of the service area will permit the future development on the property to connect to central water and sewer, eliminating individual potable water wells and septic systems. This will further the protection of groundwater resources consistent with the intent of the DR/GR FLU and Southeast Lee County community planning area. Reclaimed water is not currently available in this area of the County; however when available, infrastructure can be extended.

A companion MPD application (DCI2022-00002) has been filed and is being reviewed by Lee County Staff concurrent with the proposed comprehensive plan amendments. The property is within 3 future land use categories that would yield 1,626 dwelling units. The MPD limits the residential density to 1,600 dwelling units; which are proposed to be clustered throughout the property. At the intersection of Daniels Parkway and SR 82 the proposed development plan includes 350,000 square feet of commercial uses are proposed to support the future residents as well as the existing residents in the surrounding communities. The MCP promotes a clustered development pattern enabling the preservation of 60% of the Property as open space. A significant portion of the provided open space, approximately 55%, is indigenous upland and wetland habitat that will be preserved and restored consistent with the intent of the DR/GR FLU.

The supporting map amendments and companion planned development application is consistent with the proposed text amendment to Policy 33.2.2

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# Additional Lee Plan Consistency Analysis

#### **Growth Management**

The proposed amendments promote a contiguous and compact growth pattern and transition density consistent with the existing residential neighborhoods in the surrounding area, including Lehigh Acres, Timber Creek and Shawnee Road as desired by Lee Plan Objective 2.1 and 2.2.

**GOAL 2: GROWTH MANAGEMENT.** To provide for an economically feasible plan which coordinates the location and timing of new development with the provision of infrastructure by government agencies, private utilities, and other sources.

**OBJECTIVE 2.1: DEVELOPMENT LOCATION.** Contiguous and compact growth patterns will be promoted through the rezoning process to contain urban sprawl, minimize energy costs, conserve land, water, and natural resources, minimize the cost of services, and prevent development patterns where large tracts of land are by-passed in favor of development more distant from services and existing communities.

**OBJECTIVE 2.2: DEVELOPMENT TIMING.** Direct new growth to those portions of the future urban areas where adequate public facilities exist or are assured and where compact and contiguous development patterns can be created. Development orders and permits (as defined in Section 163.3164(7), F.S.) will be granted only when consistent with the provisions of Sections 163.3202(2)(g) and 163.3180, F.S. and the concurrency requirements in the Land Development Code.

The Property is located along a unique stretch of Daniels Parkway – the *only* property abutting Daniels Parkway with a Non-Urban future land use. All other properties abutting Daniels Parkway are within Future Urban land use categories. The request utilizes the map and text amendments to establish a density (1.3 DU/AC) which is less than the existing surrounding residential developments and provides a transition between the exiting communities within the Future Urban land use categories, the 2 to 5 acre residential lots to the east, and undeveloped lands to the south. The proposed text amendment will promote the establishment of a master planned mixed use community through the concurrent planned development. The master concept plan clusters the residential density on the Property in a pattern that is consistent with the other properties within Urban FLU categories along Daniels Parkway and the compatible with estate residential lots to the east.

#### Compatibility – Southwest Florida International Airport

The future development to occur on the Property will be located in an area with supporting urban services, access to two arterial roadways and provide variety in the type of housing as well as commercial and light industrial uses consistent with Lee Plan Goal 5 Residential and Goal 6 Commercial. As part of the companion mixed use planned development, the requested 1,600 dwelling units and 350,000 square feet of commercial uses meets the threshold requirements for a Development of County Impact and requires a planned development rezoning. A concurrent mixed use planned development (MPD) has been submitted with the requested comprehensive plan amendments consistent with Policies 5.1.1 and 6.1.3.

In consideration of the Property's location near the Southwest Florida International Airport, the Master Concept Plan demonstrates the proposed development has been clustered away from the airport property in consideration of Policy 5.1.2 and Objective 47.2 and its supporting policies.

**POLICY 5.1.2:** Prohibit residential development where physical constraints or hazards exist, or require the density and design to be adjusted accordingly. Such constraints or hazards include but are not limited to flood, storm, or hurricane hazards; unstable soils or geologic conditions; environmental limitation; aircraft noise; or other characteristics that may endanger the residential community.

Goal 5 requires sufficient land be provided in appropriate locations on the Future Land Use Map to accommodate the projected population of Lee County. The requested amendments and concurrent planned development allow a suburban level of density consistent with the existing surrounding residential developments as well as the provisions of Policy 5.1.1. Additionally, no residential development is proposed within an area which is deemed a hazard or physically constraining – the residences proposed are to be located outside of Airport Noise Zone B consistent with Policies 5.1.2 and 5.1.4.

**OBJECTIVE 47.2:** DEVELOPMENT COMPATIBILITY IN VICINITY OF AIRPORTS. Evaluate development proposals for property located within the vicinity of existing or planned aviation facilities to ensure land use compatibility, to preclude hazards to aircraft operations, and to protect airport capacities and facilities.

**POLICY 47.2.1:** Land use compatibility will be considered when reviewing development proposals within the vicinity of existing or planned aviation facilities.

**POLICY 47.2.3:** Utilize the currently adopted Airport Master Plans, rules of Chapter 333, F.S., and the Southwest Florida International Airport FAR Part 150 Study, including updates, as a basis to amend the Lee Plan and the Land Development Code to prohibit development that is incompatible with the Southwest Florida International Airport or Page Field Airport; and, to ensure future economic enhancement consistent with Objective 47.1.

**POLICY 47.2.5:** The safety of aircraft operators, aircraft passengers, and persons on the ground will guide the Port Authority's airports operations. Hazardous wildlife attractants within 10,000 feet of a Port Authority airport's Air Operations Area (AOA) will be avoided by minimizing and correcting any wildlife hazards arising from wetlands or water bodies in accordance with FAA AC 150/5200-33B, or as otherwise amended. Site improvements on or near the Port Authority's airports must be designed to minimize attractiveness to wildlife of natural areas and man-made features such as detention/retention ponds, landscaping, and wetlands, which can provide wildlife with ideal locations for feeding, loafing, reproduction and escape.

The concurrent planned development includes a detailed master concept plan that identifies the various land use restrictions related to the Southwest Florida International Airport (SWFIA). These restrictions have been taken into account with the Schedule of Deviations, Property Development Regulations, and Schedule of Uses as well as the layout of the development footprint. Of particular note are the Airport Noise Zones and 10,000' Hazardous Wildlife Buffer. Since the initial submittal of the planned development, the proposed area for residential development has been significantly reduced, no residential lots occur in Noise Zone B, and several deviations are requested to promote compatibility with the lake bank slope construction and littoral plantings due to the proximity of the airport. Consistent with the requirements of the Land Development Code, the applicant acknowledges the property's proximity to the SWFIA and a required disclosures will be provided on plats and association documents. Finally, the applicant has drafted and submitted proposed conditions as part of the planned development requiring landscape plans at the time of Development Order to reflect 100% native vegetation and compliance with the Lee County Port Authority recommended planting list and outlining additional best management practices to be considered during construction to address site related improvements and residential construction. Given the commitments the applicant has made to continue to work with the Lee County Port Authority, to notify future property owners, and inform the County and LCPA of construction standards, the project is consistent with Policy 5.1.2., Objective 47.2 and Policies 47.2.1, 47.2.3 and 47.2.5.

The portion of the Property within the Central Urban FLU is proposed through the MPD to have 350,000 square feet of commercial uses and a multi-family unit types. This commercial/multi-family portion of the property is within the Lehigh Acres community planning area and is identified for intense community supporting commercial uses and has access to all urban services consistent with Policies 6.1.4 and 6.1.7. Locating these proposed uses at the intersection of Daniels Parkway and SR 82 will promote internal capture for the future residences of the proposed development as well as walkable services to the existing and future residential use of the surrounding area including the communities of Gateway, Timber Creek, Lehigh Acres and Shawnee Road. Consistent with Policy 6.1.5 providing commercial uses in a location east of I-75 within Lehigh Acres will reduce vehicular trips heading west past I-75 for goods and services.

The Property's eastern boundary is adjacent to existing estate residential lots along Shawnee Road the Lee Plan seeks to protect this community from external impacts via Policy 33.2.1.

**POLICY 33.2.1:** Existing acreage subdivisions are shown on Map 2-D. These subdivisions should be protected from adverse external impacts.

Future development of the Property is proposed to utilize the Sandstone Aquifer for irrigation wells to prevent adverse impacts to the nearby existing residential wells. A Sandstone Aquifer monitoring well has been installed across Daniels Parkway on the Timber Creek property and the applicant has agreed to a second monitoring well on the Daniels South property. Groundwater level readings will be taken from each well. When combined with the existing USGS Sandstone Monitoring well L-729, Lee County will have significant data to monitor groundwater levels and ensure the proposed development has no negative and adverse impacts to the existing subdivisions relying upon wells.

The existing monitoring of the Sandstone Aquifer at Timber Creek demonstrates groundwater elevation levels are increasing with the onset of the rainy season. Therefore, while Sandstone Aquifer groundwater levels in certain areas of Lee County have been impacted due to over extraction, the area in which the subject property is located appears to have significantly better water resource conditions.

It is important to note that the nearest irrigation well is approximately 3,000 feet (0.6 miles) from Lehigh Acres. Additionally, the irrigation system is proposed to combine the use of surface and groundwater sources to reduce overall reliance on groundwater supplies, consistent with Policy 33.2.1. As a result of this design, the overall use of groundwater is anticipated to be greatly reduced, and at times intermittent to nonexistent, since the primary source of irrigation supplies is stormwater. The irrigation demands used in a groundwater modeling analysis were based on a 1-in-10 drought frequency, i.e., drought conditions and assumes zero surface water quantities being derived from the project's stormwater wet detention lakes, a condition considered virtually impossible since it is predicated upon the wet detention lakes being completely empty for a duration of 90 days; these assumptions are considered highly conservative. Despite these conservative assumptions, the modeling indicates that the maximum month (dry season) drawdown from the operation of the irrigation running continuously for 90-days, with no recharge, is less than 1 foot at the project's eastern property boundary. *As a result, there are no adverse impacts anticipated to occur to nearby existing legal users*.

It is expected that a Water Use Permit (WUP) will be requested from the South Florida Water Management District (SFWMD) meeting the criteria of Chapter 373.223(1) Florida Statutes. This section of Statute establishes that WUP applicants must demonstrate any requested use of water is reasonable and beneficial and will not interfere with any existing legal use of water and is consistent with the public interest. Therefore, adverse interference to existing Sandstone Aquifer users will not be authorized.

#### Surface Water Management

The Property will have a centralized surface water management system that takes into account the existing natural features. Restoration of these features is proposed to promote interconnectivity and address the impacts of on-going agricultural activities on-site.

**GOAL 60:** COORDINATED SURFACE WATER MANAGEMENT AND LAND USE PLANNING ON A WATERSHED BASIS. To protect or improve the quality of receiving waters and surrounding natural areas and the functions of natural groundwater aquifer recharge areas while also providing flood protection for existing and future development.

**POLICY 60.1.1:** Require design of surface water management systems to protect or enhance the groundwater.

**POLICY 60.1.2:** Incorporate, utilize, and where practicable restore natural surface water flowways and associated habitats.

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**POLICY 60.1.3:** Examine steps necessary to restore principal flow-way systems to assure the continued environmental function, value, and use of natural surface water flow-ways and associated wetland systems.

The Property's existing conditions has created a hydrological separation between the lands west of the basin divide (internal farm road) making it an orphan from the balance of the DR/GR. Natural flows from the west also appear constrained from Daniels Parkway. In contrast to the historical imagery of the Property from the 1950s, Lee County's Historic Flowways Map indicates historic flow-way connections existing internal to the property. Due to the Property's location proximate to the Southwest Florida International Airport the creation of additional wetland habitat to restore the historic flowway identified by Lee County cannot be accommodated. To provide an interconnection between the two watershed basins as identified on the historic flowway map, an underground physical infrastructure improvement is proposed as part of the companion mixed use planned development. A 24-inch buried piped connection is proposed to interconnect the two onsite watershed basins and associated wetlands. While not a natural flowway, the proposed improvements take into account the unique conditions of the property to achieve the overall objective of interconnecting wetlands, re-establishing historic flow patterns across the property and ensuring no adverse impacts to adjacent properties will occur, (compared to existing conditions) and is consistent with Objective 60.1 and Policies 60.1.1, 60.1.2 and 60.1.3.

**OBJECTIVE 60.3:** CRITICAL AREAS. The Six Mile Cypress Basin (as defined in Chapter 10 of the Land Development Code) and the Density Reduction/Groundwater Resource land use category are both identified as "critical areas for surface water management." The county will maintain existing regulations to protect the unique environmental and water resource values of these areas.

A surface water quality monitoring program is proposed to ensure that surface water entering and exiting the future development meets all SFWMD ERP guidelines as well as all applicable requirements of Chapter 62-302, FAC. The program includes a single set of background samples after the completion of the surface water management lakes, three sampling events during the wet season, and continuous monitoring for 5 years. Monitoring is proposed to be discontinued after 5 years if surface water quality is demonstrated as being consistent with State standards. An annual report summarizing all monitoring activity will be provided by March 1 of each year. The proposed conditions included in the concurrent planned development outline the timing of the sampling, the parameters to be tested during sampling and the requirement for continuous monitoring for 5 years. Additionally all data will be provided to Lee County Division of Natural Resources in electronic format for utilization in larger countywide studies. Additional coordination is expected through the review of the requested comprehensive plan amendments and planned development applications to ensure the project's consistency with Objective 60.3.

**GOAL 61:** PROTECTION OF WATER RESOURCES. To protect the county's water resources through the application of innovative and sound methods of surface water management and by ensuring that the public and private construction, operation, and maintenance of surface water management systems are consistent with the need to protect receiving waters.

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**POLICY 61.1.6:** When and where available, reuse water should be the first option for meeting irrigation needs of a development. Where reuse water is not available, surface water or low quality groundwater should be utilized for irrigation. All other potential water sources must be eliminated prior to selecting potable water as the sole source for meeting the irrigation needs of a development. New developments will coordinate with county staff regarding the source of irrigation water.

Reclaimed water lines are not available in proximity to the Property. Therefore, a mix of surface water from the on-site management system and supplies from the confined Sandstone Aquifer are proposed to be utilized consistent with Objective 61 and Policy 61.16. Additionally, the Draft Enhanced Lake Monitoring Plan outlines a proposed Water Quality Monitoring program to ensure that surface water entering and leaving the subject property meet State standards and protect receiving waters consistent with Goal 61.

#### Lehigh Acres Community Plan

The Lehigh Acres Community Plan is outlined by Goal 25; establishing the future vision for the entire community of Lehigh Acres, including the 84.5 acres of the Property within the Central Urban FLU at the intersection of Daniels Parkway and SR 82. The concurrent Mixed Use Planned Development proposes 350,000 square feet of commercial uses and multi-family residential unit types to be located within this area further fostering the development of a vibrant commercial area consistent with Goal 25.

**GOAL 25:** LEHIGH ACRES COMMUNITY PLAN. Ensure that continued development and redevelopment converts this largely single use, antiquated pre-platted area into a vibrant residential and commercial community consisting of: safe and secure single family and multi-family neighborhoods; vibrant commercial and employment centers; pedestrian friendly mixed use activity centers and neighborhood nodes; and, adequate green space and recreational opportunities.

**OBJECTIVE 25.1:** SPECIALIZED MIXED USE NODES. To create mixed use nodes that contribute the uses needed to support the Lehigh Acres Community Plan area shown on Map 1, Page 7.

**POLICY 25.1.2:** New development and redevelopment are encouraged to integrate a mixture of at least two or more varied uses, such as retail, office, residential, or public. All developments within the Specialized Mixed Use Nodes must be consistent with Table 1(c).

**POLICY 25.1.3:** In order to promote a sustainable urban form, these areas are expected to develop at the higher end of the density and intensity ranges, including bonus density.

**POLICY 25.1.4:** Developments in these areas are encouraged to share required features such as parking, stormwater detention and management areas, open space and other civic areas.

**POLICY 25.1.8:** Establish comprehensive stormwater management areas within the Specialized Mixed Use Nodes to achieve an efficient use of property.

The potion of the Property within Lehigh Acres is also within the Specialized Mixed Use node that has been designated for the property. The companion Master Concept Plan demonstrates a higher concentration of both density and intensity within the node consistent with Policies 25.1.2 and 25.1.3. The master concept plan demonstrates shared features such as unified parking, stormwater management areas, and open space which is consistent with policies 25.1.4 and 25.1.8. The stormwater management lakes proposed within the Lehigh Acres community planning area will be interconnected with the larger system in the Southeast Lee community planning area. The conclusions of the required integrated model confirm the proposed project "will attenuate the 25-year, 3-day rainfall event within the proposed onsite water management system and reduce peak runoff discharge rates from the project limits." As a result of reducing the peak runoff rate, downstream properties will receive surface water flow at a slower rate, reducing the potential of flood conditions and demonstrating consistency with the DR/GR Future Land Use and the Lehigh Acres community planning area.

The Lehigh Acres community plan further breaks down the mixed use nodes into types. The 84.5 acres of the Property in Central Urban is within a Community Mixed Use Activity Center demonstrated on Lee Plan Map 2-B and outlined by Objective 25.3 and its supporting policies.

**OBJECTIVE 25.3:** COMMUNITY MIXED USE ACTIVITY CENTERS. To provide the uses needed to support all of the Lehigh Acres Community Plan area including: residential; public and private education; live-work; retail; office; medical; entertainment; light industrial; commercial/public parking; parks; and, other civic uses.

**POLICY 25.3.1:** Identify those areas within Lehigh Acres that have sufficient vacant or undeveloped land to accommodate the community-scale development that will balance the land uses and provide opportunities to diversify the economic base of the community.

**POLICY 25.3.2:** Future developments that provide employment opportunities mixed with facilities offering goods and services that support the wider community are encouraged.

The area will feature a mixture of commercial uses which are identified in the companion schedule of uses which furthers the intent of Objective 25.3. Additionally, the Property is one of only a handful of large properties in Lehigh Acres with a single entity owner; and therefore one of the few areas able to accommodate community-scale development that will diversify the community's economic base consistent with Policies 25.3.1. and 25.3.2.

**OBJECTIVE 25.8:** TRANSPORTATION, PARKING, AND TRAFFIC CIRCULATION. To improve transportation, parking, and circulation within the Lehigh Acres Community Plan area.

**POLICY 25.8.2:** All connections to SR 82 must be consistent with the Florida Department of Transportation Corridor Access Management Plan for SR 82.

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**POLICY 25.8.7:** New single-family model homes are prohibited within 300 feet of arterial and collector roads.

The concurrent planned development demonstrates consistency with the transportation policies of the Lehigh Acres community plan outlined by Objective 25.8 and its supporting policies. The Master Concept Plan (MCP) features a concentration of commercial uses at the intersection of SR 82 and Daniels Parkway significantly reducing the need for residents of the surrounding area to travel further west to meet their commercial needs. No access to SR 82 is proposed. Connections to Daniels Parkway are consistent with the Corridor Access Management Plan. Therefore the proposed site design is consistent with Policy 25.8.2. The proposed MCP also demonstrates no single family residential within the Lehigh community ensuring consistency with Policy 25.8.7.

**OBJECTIVE 25.9:** SEWER AND WATER. Expedite the staged extension of water and sewer systems, connect lots previously served by on-site septic and wells, and discourage additional development that is reliant upon on-site well and septic systems.

**POLICY 25.9.2:** Direct new development and redevelopment in Lehigh Acres to areas that can be reasonably expected to receive urban services and infrastructure during the planning horizon.

The 84 acres of the subject property within Lehigh Acres is already within the Lee County Utilities Service Area for central water and sewer service consistent with Objective 25.9 and 25.9.2. The proposed map amendments include a request to extend this service area to the remainder of the property to establish the entire future community on central water and sanitary sewer service.

**POLICY 25.10.1:** Lee County will encourage on-site preservation of indigenous plant communities and listed species habitat. Any required mitigation will be of similar habitat, and provided, whenever possible, within the Lehigh Acres Community Plan area. Development must also be consistent with Goal 77 and Objective 77.3.

The portion of the property within Lehigh Acres has been cleared and utilized for agricultural activities. The Protected Species Survey submitted with the concurrent planned development demonstrates the northern portion of the property is disturbed lands, ditches, berms and cow pond. Therefore there are no on-site indigenous plant communities or listed species habitat on-site within the Lehigh Acres Community Planning Area to preserve. However, there are indigenous plant communities and listed species habitat within the Southeast Lee Community Planning Area, of which 55% is proposed to be preserved and restored. The restoration activities proposed will promote the historic flow of surface water while also addressing historical impacts associated with decades of historical agricultural ditching and draining. The Master Concept Plan for the concurrent planned development does commit to providing 10% open space at the time of local development order within the Lehigh Acres community planning area ensuring consistency with Goal 77 and Objective 77.3.

## **Transportation**

The Property is adjacent to Daniels Parkway and SR 82. Recently this intersection was improved with a continuous flow intersection and Daniels Parkway is subject to a Continuous Access Management Plan. The transportation analysis submitted to support the requested comprehensive plan amendments included long term (20-year horizon) and short term (5-year horizon) impacts of the proposed development.

**OBJECTIVE 37.1: GENERAL STANDARDS.** Monitor non-regulatory LOS standards outlined in Policy 95.1.3. on county and state transportation facilities within Lee County. Cooperate with municipalities on the facilities maintained by Lee County within the municipalities and with FDOT on state transportation facilities.

**POLICY 37.1.1:** Lee County will develop multi-modal service volumes (capacities) based on local Lee County conditions for determination of the LOS of transportation facilities.

SR 82 and Daniels Parkway will not fall below the recommended minimum acceptable Level of Service thresholds and therefore is consistent with Objective 37.1 and Policy 37.1.1.

**OBJECTIVE 39.2: TRANSPORTATION AND LAND USE PLANNING.** Develop and maintain transportation planning tools and strategies to coordinate land use development with planned transportation facilities appropriate to future urban areas, future suburban areas, or future non-urban areas as defined. Include road designs and street modifications to accommodate significant truck traffic on freight corridors identified in the MPO Freight Mobility Study and for transit, bicycle and pedestrian facilities where indicated on the transportation map series and Map 4-E, Lee County Greenways Master Plan.

**POLICY 39.2.1:** Future urban areas will have a balanced emphasis on automobile, freight, transit, pedestrian, and bicycle modes of transportation by:

- Promoting safe and convenient street, bicycle and pedestrian facilities connectivity for easy access between modes.
- Utilizing short block lengths within urban Mixed Use Overlay areas.
- Providing transit service within an emphasis on urban Mixed Use Overlay areas.
- Incentivizing infill and redevelopment, mixed uses, pedestrian friendly design, and higher density in areas served by transit.
- Providing sidewalks along all roads and streets in urban areas, except where prohibited.

**POLICY 39.2.3:** Future non-urban areas are planned primarily for motor vehicle transportation by:

• Limiting transit service and provision of separate pedestrian facilities in the Mixed Use Overlay areas unless otherwise stated in the LDC.

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# Accommodating bicycle usage on bicycle lanes, paved shoulder or multi-use recreational trail facilities.

The Property is within a Future Urban and a Future Non-Urban land use location at the intersection of two major arterial roadways in Lee County, Daniels Parkway and State Road 82. The traffic analysis demonstrates adequate capacity to serve the proposed development. Sidewalks are provided along the SR 82 frontage and will be provided consistent with LDC Chapter 10 along Daniels Parkway during construction of the residential development. The concurrent planned development will demonstrate internal roadway cross sections consistent with LDC Chapter 10 with pedestrian facilities internal to the proposed development for connectivity across the 1,233 acre property. The future proposed development will be consistent with Objective 39.2 and Policies 39.2.1 and 39.2.3

**POLICY 39.2.5:** Establish connection separation standards in the LDC based on functional classification and future urban, suburban, or non-urban area designation. Designate by Board action, certain roadways as "controlled access," to which permanent access points are restricted to locations established and set by a specific access plan adopted by Board resolution.

The Property fronts on SR 82 (which is a controlled access facility) and Daniels Parkway. The concurrent planned development will demonstrate access to the proposed subdivision consistent with the appropriate locations for each roadway and Policy 39.2.5.

# Daniels Parkway South Comprehensive Plan Amendment Proposed Text Amendment

## March 9, 2023

**POLICY 33.2.2:** Map 2-D identifies future locations for Mixed-Use Communities where development rights can be concentrated from large Southeast Lee County tracts into Traditional Neighborhood Developments or contiguous Lehigh Acres Community Mixed-Use Activity Center clustered development according to Policy 33.2.2.3 below. The preferred pattern for residential development is to cluster density within Mixed-Use Communities along existing roads and away from Future Limerock Mining areas.

- Southeast Lee County Mixed-Use Communities must be concentrated from contiguous property owned under single ownership or control. Residential density is calculated from the upland and wetland acreage of the entire contiguous Southeast Lee County property. Increases in residential densities may be approved through incentives as specified in the LDC for permanent protection of indigenous native uplands on the contiguous tract (up to one extra dwelling unit allowed for each five acres of preserved or restored indigenous native uplands) and through the acquisition of TDUs from TDR sending areas within Southeast Lee County as provided in Objective 33.3.
  - a. The maximum gross density is 5 dwelling units per acre of total land designated as a Mixed-Use Community when TDUs are used.
  - b. Properties that concentrate development rights and/or use TDUs created from Southeast Lee County within the Mixed-Use Communities identified on Map 2-D will be allowed to develop using permitted uses and the property development regulations for the C-2A zoning district.
- Contiguous property under the same ownership may be developed as part of a Mixed-Use Community, provided it does not extend more than 400 feet beyond the perimeter of the Mixed- Use Community as designated on Map 2-D.
- 3. Central water and wastewater services are required to develop a Mixed-Use Community.
- Commercial uses developed as part of a Mixed-Use Community will be consistent with Policy 33.2.5 and will not exceed the allowable total square footage for commercial uses in Southeast Lee County.
- 5. <u>Southeast Lee County property adjacent to and including a Lehigh Acres Mixed-Use Activity Center</u> <u>may sum density across the entire property. Density may be allocated across the property regardless of</u> the underlying future land use category when:
  - i. the project is developed as a Planned Development;
  - ii. the project develops with central water and wastewater services;
  - iii. a minimum of 60 percent open space is provided; and
  - iv. the number of dwelling units for the entire project does not exceed the sum of the allowable dwelling units from all land use categories.

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Daniels Parkway South Comprehensive Plan Amendment Public Facilities Impact Analysis – Exhibit M14 Existing and Future Conditions Analysis – Exhibit M16

June 10, 2022

The Property for the proposed development is located in Future Urban and Non-Urban Area. More specifically an amendment from Central Urban to Intensive Development is proposed with the remainder of the property staying within the DR/GR and Wetlands categories. However, the property is within an area of the County that has been designated for urban services. A majority of the urban services are adjacent to or within the vicinity of the subject property and available to serve the property and its residents/occupants. Copies of all Letters of Availability from each service provider are attached to the application for reference. The impacts of the requested amendments on public facilities are evaluated by comparing the existing development to the proposed development per the comprehensive plan amendments and concurrent rezoning.

#### Utilities (Public sewer and water)

The subject property is partially within the service area for Lee County Utilities and a Letter of Availability has been included in the application materials to demonstrate adequate capacity is available to serve the proposed development and will be provided by the Corkscrew Water Treatment Plant and Gateway Water Treatment Plant. A map amendment is requested to extend the Lee County Utilities Service area across the entire property to provide central water and sewer services to the proposed development. While the proposed amendments would increase the available density on the subject property, the requested commercial square footage is currently permissible within the existing Central Urban FLU.

Per Lee Plan Policy 95.1.3, an average treatment and disposal capacity of 250 gallons per day per Equivalent Residential Connection (ERC) for potable water is required. The 2021 Concurrency Report indicated that Potable Water is available at a capacity of 314 gallons per day per ERC; which exceeds the required LOS. The 2021 Concurrency Report also confirms that all wastewater systems are operating within capacity and meet the LOS standard for unincorporated Lee County.

#### **Potable Water**

Existing Maximum Residential per Central Urban, DR/GR and Wetlands FLUs: 933.4ERC X 250 GPD = 233,350 GPD

Proposed Impact of Residential within Overlay: 1,859ERC X 250 GPD = 464,750 GPD

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## Sanitary Sewer

Existing Maximum Residential per Central Urban, DR/GR and Wetlands FLUs: 933.4 ERC X 200 GPD = 186,680 GPD

Proposed Impact of Additional Residential within Overlay 1,859 ERC X 200 GPD – 371,800 GPD

## Public Safety (Police, Fire, and EMS)

The subject property is able to be served by multiple providers for Emergency Medical Services, Fire and Police. Lee County Emergency Medical Services is the primary EMS transport for the subject property. However, the property is also within the Lehigh Acres Fire District which provides medical transport as well. Both service providers would work together to serve the subject property. Lee County EMS does not have a resource in this area, but the concurrent planned development includes land area for future expansion of service.

The subject property is also served by two Fire Districts, the South Trail and Lehigh Acres Fire Districts. The South Trail Fire District would serve the southern portion of the property from Station 63 located at 5531 Halifax Ave. The Lehigh Acres Fire District would serve the northern portion of the property from the located at 636 Thomas Sherwin Ave. S. The agency is capable of providing services to the subject property as it falls within the boundaries of the fire district.

The subject property is located wholly within the service area for the Lee County Sheriff. The Central District Station located at 14750 Six Mile Cypress Parkway is responsible for providing service to the subject property.

#### Schools

The subject property is within the Lee County School District East Zone, E2. According to the Letter of Availability from the Lee County School District the proposed development will generate 475 school-age children. There is capacity within the entire school district to accommodate the additional children.

Any deficit created at the middle school level will be addressed via the opening of the new LAMS campus (middle school MM) in the 2021-2022 school year which will add 1,210 seats of permanent capacity.

1,210 [proposed new seats in MM] – 1,108 [existing deficit] = 102 seats [capacity].

Any deficit created at the high school level will be addressed via the opening of the Gateway High School campus during the 2021-2022 school year which will add 1,475 seats in additional capacity. 1,475 [proposed new seats at Gateway High] – 469 [existing deficit] = 1,006 seats [capacity]

#### Solid Waste

The property is within the Lee County Solid Waste Franchise and is served through Lee County's franchised hauling contractor. Disposal of waste generated from the subject property will be accomplished at the Lee County Resource Recovery Facility and the Lee-Hendry Regional Landfill. Service is available to the subject property and plans have been established that target growth and long term disposal capacity for this particular area.

LOS Standard = 7 lbs/day/capita OR 990,405 tons/year Current Capacity = 7.9 lbs/day/capita OR 1,134,667 tons/year

Existing Maximum Residential Impact per DR/GR & Wetlands FLUs

88.9 dwelling units X 2.64 persons per unit = 234.69 persons 234.7 persons X 7lbs./day = 1,642.8 lbs./day 1,642.8 lbs./day X 365 days = 599,648.28 lbs./year 599,648.28 lbs./year = 299.8 tons/year

## Proposed Impact of Additional Residential per Overlay

1,600 dwelling units X 2.64 persons per unit = 4,224 4,224 persons X 7lbs./day = 29,568 lbs./day 29,568 lbs./day X 365 days = 10,792,320 lbs./year 10,792,320 lbs./year = 5,396.16 tons/year

#### Surface Water/Drainage Basins

The regulatory standards described in Policy 95.1.3(4)(c) require new development to be designed to South Florida Water Management District (SFWMD) standards to detain or retain excess stormwater to match the predevelopment discharge rate for the 25-year, 3-day storm event. Additionally, it requires that the stormwater system must prevent the flooding of designated evacuation routes on the Lee Plan Map 15 from the 25-year, 3-day storm event for more than 24 hours. (The Lee Plan no longer has a Map 15 and the current evacuation routes are identified in Lee Plan Map 3J which identifies both Daniels Parkway and SR 82 as being evacuation routes.) The proposed text amendment and concurrent planned development will be consistent with the requirements of Lee Plan Policy 95.1.3 (including Map 3J) and an ERP permit is required to be obtained for the proposed development prior to construction commencement.

## Parks, Recreation, and Open Space

The non-regulatory standards described in Policy 95.1.3(6)(a & b) require six (6) acres of developed regional park land open for public use per 1,000 total seasonal county population for all of Lee County and .8 acres of developed community park land open for public use per 1,000 unincorporated Lee County permanent population.

#### **Regional Parks Level of Service**

867,000 [seasonal county population] X (6 acres/1,000 population) = 5,202 acres The 2020 Lee County Concurrency Report indicates that there are a total required 5,202 acres of regional parks and that the available capacity lists 7,051 acres of regional parks therefore there is available capacity to meet the adopted LOS standard.

Additionally, the 2021 Concurrency Report states that the existing inventory meets the regional park level-of-service standard in the County for the year 2020 and will continue to do so at least through the next five years of the capital improvement plan (CIP).
Daniels South CPA Public Facilities Page | 4

#### **Community Parks Level of Service**

361,315 [permanent unincorporated county population] X (0.8 acres/1,000 population) = 289 acres

The 2021 Lee County Concurrency Report indicates that there are a total required 289 acres of community parks and that the available capacity lists 832 acres of community parks therefore there is available capacity to meet the adopted LOS standard.

Additionally, the 2021 Concurrency Report states that the existing inventory meets the regional park level-of-service standard in the County for the year 2020 and will continue to do so at least through the next five years of the capital improvement plan (CIP).

## **Ground and Surface Water Resources Due Diligence**

Daniels Road South – Lennar Corporation Lee County, Florida

June 2022





6561 Palmer Park Circle Suite D Sarasota, Florida 34238 (941) 552-5657

Ground and Surface Water Resources Due Diligence Daniels Road South - Lennar Corporation Page 2 of 10

#### **Executive Summary**

Lennar Corporation is interested in the potential purchase and subsequent development of a property, herein referred to as "Daniels Road South", located south of State Highway 82 (Immokalee Road) and east of Daniels Parkway, approximately five miles east of Interstate 75 in Lee County, Florida. The property is northeast of the Southwest Florida International Airport and is bounded on the south by a Florida Power & Light (FP&L) powerline easement. According to the Lee County Property Appraiser, the subject property is owned by Jared F. Holes, Trustee of Land Trust Number 5018. The proposed project area encompasses approximately 1,215 acres, as indicated in the preliminary conceptual layout provided by Morris Depew Associates, Inc. An analysis of recent aerial imagery indicated that approximately 495 acres (approximately 41 percent) of improved pasture, currently utilized for livestock grazing, exist within the project boundary. The subject property has been used for farming over the last several decades and is bisected by numerous agricultural ditches and historic farm roads.

The remainder of the property is composed of pine and oak forest, palmetto prairie, hydric pine, wet prairies and cypress heads. Onsite observations indicate some areas the property are heavily infested with invasive plants, namely Melaleuca and Brazilian Pepper. The northern section of the property includes a raised earthen berm, associated with historic military training exercises, that was subsequently bisected by the construction of Daniels Parkway. Similar earthen berm features were located on Lennar's Timber Creek property, located west of Daniels Parkway. Approximately 1,132 acres (93 percent) of the subject property is located within Lee County's Density Reduction/Groundwater Resource (DR/GR) area. The remaining 83 acres, outside of the DR/GR and south of State Highway 82, are within the Central Urban Land Use Category.

The entirety of the subject property is within the South Florida Water Management District (SFWMD) and currently has a Water Use Permit (WUP), No. 36-08396-W, for livestock water supply. One of the WUP's authorized withdrawals, a single 6-inch diameter well [District Identification (DID) No. 3], is located on the northern section of the site. DID No. 3 is currently capped and appears to have no pumping infrastructure, as observed during recent site investigations. Evidence observed onsite indicated that the well has been historically used to fill an excavated cattle-watering hole adjacent to the raised earthen berm referenced above.

Lennar Corporation is considering transitioning the site into a residential development, and a preliminary conceptual layout provided by Morris Depew Associates, Inc. indicates a desire for single-family and multi-family residences, residential amenity areas, and commercial development. The conceptual plan, along with the assumption that 50 percent of the plan's single-family, multi-family, amenity, and commercial areas will be landscaped, indicates that approximately 162.75 acres would need to be irrigated. Using the estimated landscaped area, SFWMD's irrigation allocation spreadsheet yields a demand of approximately 209.03 million gallons per year, or approximately 572,700 gallons per day. The current permit for livestock water supply authorizes a total of 1.31 million gallons per year, however only one (1) of the WUP's three (3) wells is located within the proposed project boundary. Consequently, one-third of the permitted

Ground and Surface Water Resources Due Diligence Daniels Road South - Lennar Corporation Page 3 of 10

quantities, or 0.43 million gallons per day, are allocated to the project location. Therefore, a significant portion of the proposed landscape irrigation quantities will be considered new quantities and will require groundwater flow modeling to ascertain if the requested irrigation use will adversely impact existing legal users, largely composed of nearby domestic self-supply wells.

In order to meet the proposed irrigation demands it may be necessary to seasonally offset groundwater supplies with an integrated ground and surface water irrigation system, whereby groundwater quantities would be used to supplement surface water supplies within dedicated stormwater-irrigation supply ponds. Irrigation quantities could then be withdrawn from the ponds by a centrally-controlled irrigation system and used to irrigate the proposed development. The conjunctive use of both ground and surface water supplies could significantly reduce groundwater withdrawals and reduce impacts to nearby wells, particularly when adequate surface water supplies are available (i.e., post-rainy season).

The subject property exhibits generally higher topographic elevations in the northern section of the site, near Highway 82, and is bisected by a historic, north-south trending farm road that constitutes the surface water divide between the Six Mile Cypress Sub-Watershed and Estero River Sub-Watershed. The western side of the site flows westerly and is therefore isolated from the balance of the DR/GR by the aforementioned basin divide and is further restricted by Daniels Parkway to the west. East of the basin divide, Lee County's Historic Flow-Ways Map indicates three (3) historic flow-way connections along the eastern and southeastern sections of the property. The map therefore depicts hydraulic connections between the eastern portion of the property and the balance of the DR/GR to the east and southeast.

Given that the subject property is within the DR/GR, requirements within the Lee Plan will necessitate the restoration or reconnection of historic surface water flow-ways, connections and features. However, an analysis of historical aerial photographs (1944 and 1958), National Resources Conservation Service soils data, and LiDAR Digital Elevation Model imagery of the historic flow-way connections does not appear to support the features as depicted on Lee County's Historic Flow-Ways map. It may be possible to use these combined data sources to collaboratively work with Lee County staff in order to more accurately depict historic flow-way connections to advantageously influence the level of hydraulic restoration necessary to support the desired residential and commercial development. It also may be possible to leverage the isolated, western portion of the property (west of the basin divide) to enhance restoration opportunities and help streamline the development entitlement process.

#### 1.0 Introduction

Lennar Corporation is interested in the potential purchase and subsequent development of the Daniels Road South property, located south of State Highway 82 (Immokalee Road), east of Daniels Parkway and approximately five miles east of Interstate 75 in Lee County, Florida. More specifically, the site is located within Sections 8, 9, 16, 17 and 21, Township 45 South, Range 26 East and encompasses approximately 1,215 acres, of which approximately 495 acres (41 percent) are currently utilized as improved pasture. The project site has a long history of farming and has been used for agricultural purposes since the late Ground and Surface Water Resources Due Diligence Daniels Road South - Lennar Corporation Page 4 of 10

1950s. In addition, the northern section of the site was also part of a large World War II military training facility that constructed multiple triangularly-shaped bermed areas south of Highway 82. These features, along with those associated with historic farming operations, contribute to the highly-disturbed nature of the site.

As shown in **Figure 1**, the subject property is located within the DR/GR, or Density Reduction/Groundwater Resource land-use category, which was applied to Lee County's Comprehensive Plan (The Lee Plan) in 1990. In accordance with The Lee Plan, proposed Planned Developments within the DR/GR must demonstrate the protection, preservation and enhancement of groundwater resources and environmental (wetland) systems. The term "Groundwater Resource" was included in the land use category to emphasize the need to protect the County's Surficial Aquifer System (i.e., the Water Table Aquifer or shallow aquifer), particularly in regards to existing and future drinking water supplies. However, the DR/GR designation has been applied to areas which exhibit significantly different hydrogeologic characteristics, particularly near its boundaries.

Approximately 538 acres of the project site are located within the northwestern corner of the DR/GR, 594 acres are within wetlands and the remaining 83 acres are included in the Central Urban Land Use Category, as shown in **Figure 2**. Please note these areas were derived from the Lee County Future Land Use classification. It is important to note that a surface water basin divide bisects the subject property from north to south, with the western section of the property within the Six Mile Cypress Sub-Watershed and the eastern side within the Estero River Sub-Watershed, as shown in **Figure 3**. The boundary between these Sub-Watersheds roughly aligns with a historic, elevated farm road, as shown on **Figure 4**. Lennar is exploring the possibility of transitioning the property into a Planned Development, therefore it is critical to understand the property's past and current land use as well as associated water resource characteristics in order to ascertain the presumed difficulty of the entitlement process.

#### 2.0 Property Setting

Prior to agricultural development, the subject property was predominately characterized as open rangeland and pine flatwoods, interspersed with shallow freshwater forested/shrub and emergent wetlands. Review of historic aerial photographs from 1944 indicate the site as undisturbed and exhibiting multiple isolated and semi-connected wetland features, as shown in **Figure 5**. Development of agricultural operations at the project site began in the early 1950s, as evidenced in the historic aerial photography provided in **Figure 6**, and featured the construction of several northeast-southwest and northwest-southeast oriented drainage ditches, as well as a historic elevated farm road (basin divide) that bisects the property in a north-south fashion. Such drainage features are typical of agricultural operations in south Florida as they expedite the removal of excess surface water and enable the cultivation of crops that are vulnerable to overly-saturated soils. Several historical connecting ditches are evident in onsite wetland areas and were presumably used to reduce standing water and further facilitate drainage. The existing onsite drainage ditches thereby reduce water table elevations and subsequently lower recharge potential. Depending on the ditch characteristics, such features can negatively impact nearby

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environmental features (wetlands) and consequently the water resources of the DR/GR. A Florida Land Use Cover and Classification System (FLUCCS) map obtained from the SFWMD is provided as Figure 7.

The project site generally exhibits a flat topographic relief, with the highest naturally occurring land surface elevation of approximately 27 feet NAVD88 located on the northeastern portion of the property, immediately south of Highway 82. The lowest land surface elevations within the project boundary are located to the south and southeast and are associated with isolated wetlands at approximately 21 feet NAVD88. A Digital Elevation Model (DEM) produced by Lee County LiDAR data is included as **Figure 8** and portrays the gentle southeastern topographic gradient of the subject property. Although research indicates that detailed flood maps have not yet been produced for the project site, the Federal Emergency Management Agency's (FEMA) National Flood Hazard Map indicates that the property lies within Flood Zone X, as shown in **Figure 9**, which is defined as an area of minimal flood hazard. As shown on **Figures 5**, **6** and **7**, numerous shallow depressional and interconnected wetlands occur onsite which are further illustrated by the National Wetland Inventory (NWI) classified wetland locations included as **Figure 10**.

The subject property is located within the Immokalee Rise Physiographic Province, which has been described as a submarine shoal with weak relict shoreline features due to the low energy conditions that existed as the shoal emerged under receding sea levels. The location of the subject property within the Immokalee Rise Physiographic Province is illustrated on **Figure 11**. The lack of relict shoreline features contributes to the site's generally flat topographic expression. The site exhibits many different soil types with the predominant soil type identified as *Pompano Fine Sand* followed by *Immokalee Sand*, as shown on the soils map provided as **Figure 12**. The National Resources Conservation Service (NRCS) defines *Pompano Fine Sand* and *Immokalee Sand* both as very deep, very poorly-drained soils commonly found in flatwoods, low broad flats and, to a lesser extent, depressions, drainageways and flood plains. These soils exist primarily within the wetland features depicted in **Figure 10**.

The subject property is located within the State of Florida's Water Body Identification (WBID) No. 3258C, as shown in **Figure 13.** A WBID represents a sub-watershed delineated by the Florida Department of Environmental Protection (FDEP) and is based on the United States Geological Survey (USGS) Hydrologic Use Code (HUC). Through evaluation of surface water quality data collected within WBID No. 3258C, the FDEP has determined that the WBID is verified impaired for Chlorophyll-a, which is associated with excessive algal growth and eutrophication, typically caused by excess nutrients. Given heightened concerns with surface water quality, the Chlorophyll-a impairment may require a net water quality improvement (i.e., nutrients are presumed as the causative agent) for the proposed development.

#### 3.0 Existing Groundwater Resources

There are three (3) principal aquifer systems underlying the subject property: 1) the unconfined Surficial Aquifer System (SAS), 2) the confined Intermediate Aquifer System (IAS), and 3) the confined Upper Floridan Aquifer System (UFAS). Please note that, in order to simplify the nomenclature used in this report, the colloquial term "Water Table Aquifer" will be used interchangeably to describe the SAS, and the term

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"Sandstone Aquifer" will be used to describe the upper producing unit of the IAS. In central Lee County, groundwater quality decreases rapidly with depth and potable supplies are generally found less than 300 feet below land surface (bls). Below these depths, groundwater becomes highly mineralized, saline, and is typically artesian. Consequently, groundwater is primarily withdrawn above a depth of 300 feet bls.

Suitable water quality for agricultural or residential irrigation at the project location is available from both the Water Table Aquifer and Sandstone Aquifer. Yield in the Water Table Aquifer is considered low and may only be acceptable for low volume livestock watering. As indicated on the SFWMD livestock-watering Water Use Permit included in **Appendix A**, the onsite 6-inch diameter well is believed to be finished into the shallow Water Table Aquifer. Please note that the well's depth has not been confirmed to definitively identify the aquifer system in which it penetrates. Since the well does not exhibit artesian flow, it can be surmised that it does not penetrate into the lower Intermediate Aquifer or underlying Floridan Aquifer Systems.

#### 3.1 Surficial Aquifer System (Water Table Aquifer)

The unconfined SAS (Water Table Aquifer) originates at land surface, with its uppermost portion composed of approximately 8 to 17 feet of unconsolidated surficial deposits consisting of gray to darkbrown finely grained silty quartz sand with minor shell content. Below the surficial sands, thin discontinuous deposits of clayey sands can sometimes overlay the uneven upper contact of limestones associated with the Tamiami Formation. Consistent with the stratigraphic delineations in the Florida Geological Survey (FGS) Open File Report No. 37, the Tamiami Formation includes the Ochopee and Buckingham Limestone Members as well as the Pinecrest Sand Member.

In some areas of Lee County, sediments of the Tamiami Formation can be subdivided into "Upper" and "Lower" units that are separated by low permeability (i.e. clayey) sediments. When present, only the Upper unit is described as occurring within the Water Table Aquifer. Please note that review of Well Completion Reports and stratigraphic descriptions of cores, proximal to the property, from the Florida Geological Survey (FGS) does <u>not</u> indicate the presence of a consistent confining unit separating the Upper and Lower units of the Tamiami Formation.

Where present onsite, the sands and marls of the Tamiami Formation extend from approximately 17 to 30 feet bls, which is significantly thinner than the Formation's vertical extent found throughout the DR/GR areas located to the south and southeast (FGS Information Circular Report No. 103). Further indication of the differences of the geology onsite as compared to DR/GR areas located to the south and southeast is the lack of nearby active mining operations which excavate the thicker sequences of the upper Tamiami Formation's limestone to depths of approximately 100 feet below land surface (bls). These observations support the aforementioned contrast of the relatively thin nature of both the Tamiami Formation and the Water Table Aquifer at the project location as compared to the bulk of the DR/GR.

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The limestones of the Tamiami Formation can serve as a major regional source of groundwater supply in Lee County due to its shallow depth and high transmissivity. Historically, agricultural operations and other water users have taken advantage of the ease at which water supplies can be developed in the near-surface Tamiami Formation when thick limestones are present. However, due to its relatively thin vertical extent onsite, groundwater withdrawals from the unconfined Water Table Aquifer are more likely to have a greater impact on wetlands and existing legal users than withdrawals from deeper sources. The proposed groundwater withdrawals which utilize the deeper, confined Sandstone Aquifer have been found to exhibit virtually no impact on Water Table Aquifer water levels and environmental systems and therefore provide protection to the shallow water resources of the DR/GR.

The Lee Plan's DR/GR Land Use Category also includes areas that have been designated as important recharge areas for the shallow Water table Aquifer. As shown on **Figure 14**, the reported recharge rate to the SAS is estimated to be between one and ten inches per year (Source: USGS/SFWMD report entitled *Recharge to the Surficial Aquifer System in Lee and Hendry Counties, Florida, 1995*). However, given the existing onsite internal drainage ditches, the opportunity for recharge to the underlying SAS at the project location is considered relatively low. If residential and commercial development are pursued, the stormwater management system necessary for the new land use is anticipated to enhance recharge potential for the Water Table Aquifer.

#### 3.2 Intermediate Aquifer System (Sandstone Aquifer)

Immediately beneath the Tamiami Formation are relatively thick sequences of low permeability clayey sediments that separate the Water Table Aquifer from the underlying Sandstone Aquifer. Based upon well construction reports and geological logs proximal to the project site, the top of the Sandstone Aquifer occurs at depths of approximately 70 feet. However, the extent of the sandstone unit appears to be highly variable, with thickness ranging from approximately 30 to 230 feet. Locally, the producing zone of the Sandstone Aquifer appears to occur between approximately 70 and 120 feet bls.

The Sandstone Aquifer is comprised of predominantly clastic sediments consisting of sandy limestone, cemented sands (sandstone), sandy dolomite and calcareous sands. These sediments are associated with the Peace River Formation of the Hawthorn Group (FGS Information Circular No. 103, 1986). Due to the occurrence of low permeability sediments separating the Sandstone Aquifer from the overlying Water Table Aquifer, the potential for groundwater withdrawals from the Sandstone Aquifer to produce drawdown in the Water Table Aquifer is substantially reduced as compared to those that would occur from direct Water Table Aquifer withdrawals. Due to the reduction in potential withdrawal-related impacts, the SFWMD prefers that new wells be completed into the Sandstone Aquifer in order to reduce or potentially eliminate drawdown upon wetland systems. It is important to note that records indicate that a majority of the residential domestic self-supply wells in Lehigh Acres and areas to the east are finished into the Sandstone Aquifer.

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A flowing artesian well was identified within the FP&L easement, approximately 4,600 feet southeast of Daniels Parkway, and appears to also be used for livestock watering. However, uncontrolled (un-valved) artesian wells are forbidden by Chapter 373.209 Florida Statutes, which states "No owner, tenant, occupant, or person in control of an artesian well shall knowingly and intentionally allow the well to flow continuously without a valve or mechanical device for checking or controlling the flow." Given that the well is artesian indicates that it may penetrate into the lower IAS or possibly the underlying upper Floridan Aquifer.

### 4.0 Regulatory Authorizations

#### 4.1 Water Use Permit No. 36-08396-W

Water Use Permit (WUP) No. 36-08396-W was issued by the SFWMD and relates to the project site. The WUP boundary extends both north and south of Daniels Parkway and encompasses approximately 2,775 acres, extending beyond the limits of the Daniels Road South project site as shown in **Figure 15**. WUP No. 36-08396-W was issued on June 2, 2015 to Jeff Flint of Flint Cattle to supply water to 300 head of beef cattle. The permit was corrected by SFWMD staff on March 31, 2017 to reduce permitted quantities, but retained the expiration date of June 2, 2035. As shown, the WUP area still covers the Timber Creek project to the west of Daniels Parkway and should be updated and modified to exclude that property since development activities have commenced. The total permitted quantities for WUP No. 36-08396-W are presented below in **Table 1**.

WUP Area	2,775 acres		
Permitted Groundwater Quantities	1.31 million gallons (mg) annually / 3,589 gpd		
Aquifer System	Water Table Aquifer		

Table 1 – Summary of Permitted Quantities for WUP No. 36-083
--

WUP No. 36-08396-W authorizes the use of groundwater for agricultural purposes from three (3) existing withdrawal facilities that reportedly utilize the Water Table Aquifer, with 6-inch casing diameters and reported total depths of approximately 35 feet bls. DID Nos. 2 and 3 are reportedly cased to 10 feet and Well No. 1 is cased to an unknown depth. One (1) of the three (3) groundwater wells associated with the WUP is located within the Daniels Road South project boundary (DID No. 3). DID No. 1 is located on the Timber Creek project to the west and is listed as the primary well, while DID Nos. 2 and 3 are categorized as standby withdrawals. Please note that the reported well construction characteristics (well casing and total depths) may not be correct based on field observations and the onsite well (DID No. 3) may actually extend into the underlying Sandstone Aquifer.

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#### 5.0 Preliminary Groundwater Flow Analysis

In order to preliminarily review possible groundwater withdrawal related drawdowns, a single layer groundwater flow model was run utilizing the same aquifer parameters as in the analyses performed for Timber Creek. The preliminary conceptual site plan provided as **Figure 16**, as well as an assumption that 50 percent of the plan's single-family, multi-family, amenity, and commercial areas will be landscaped, indicates that approximately 162.75 acres would need to be irrigated. Using the estimated landscaped area, SFWMD's Blaney-Criddle irrigation allocation spreadsheet yields a demand of approximately 209.03 million gallons per year, or approximately 572,700 gallons per day. A copy of the Blaney-Criddle output is provided in **Appendix B**.

Assuming a minimum of three (3) equally spaced Sandstone Aquifer irrigation wells and the maximum month irrigation quantity of 28.09 million gallons, as determined by the SFWMD's irrigation allocation spreadsheet, the total approximate drawdown resulting from the 90-day model simulation is provided in **Figure 17.** As shown, the predicted drawdown at the adjacent existing legal users to the east resulting from the total Maximum Month irrigation quantities is between approximately 1.25 and 1.5 feet and is not anticipated to cause adverse impacts. However, similar to Timber Creek, it is anticipated that Lee County may require monitoring of water levels to provide additional assurance that drawdowns will not be adverse.

#### 6.0 Consistency with the Lee Plan

The proposed Planned Development, including single-family and multi-family residences as well as amenity and commercial areas, will require that a rigorous set of criteria be successfully met as outlined in the Lee Plan. In respect to this Ground and Surface Water Resources Due Diligence report, the aspect of flow-ways and flow-way connections appears to be a primary consideration. As shown on **Figure 18**, three (3) flow-way connections have been identified on Lee County's Major Flow-Ways Map: two (2) historic flow-way connections are identified on the eastern side of the property and a single (1) historic connection on the south side which transects the FP&L easement.

A detailed review of historical aerial imagery (1944 and 1958), NRCS identified soils, and LiDAR imagery does not support the connections as shown by Lee County. Historic aerials appear to indicate that the Lee County flow-way connections are inconsistent with identifiable sloughs or conveyances. In addition, the features appear to cross upland areas between wetlands. LiDAR imagery and soils data further discounts the presence of the flow-way connections identified by Lee County.

Given the Lee Plan's importance of re-establishing historic hydrologic connections in the DR/GR, it is recommended that basic discussions be timely initiated with Lee County staff to gauge the ability to clarify the inconsistences described herein. It may be possible to utilize the data sources described above to collaboratively work with Lee County staff to more accurately depict historic flow-way connections and features in order to advantageously influence the level of hydraulic restoration necessary to support the desired residential and commercial development. It also may be possible to leverage the isolated, western

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portion of the property (west of the basin divide) to enhance restoration opportunities and further assist the residential development entitlement process.

#### 7.0 Recommendations and Conclusion

Lennar is considering transitioning the subject property into a residential development and the preliminary conceptual layout provided by Morris Depew Associates, Inc. indicates a desire for single-family and multi-family residences, residential amenity areas, and commercial development. Given that a majority of the property is within the DR/GR with two (2) sub-watersheds (Six Mile Cypress and the Estero River), numerous wetlands, and up to three (3) identified flow-way connections, this presents challenges that will likely result in an extremely detailed and rigorous review by Lee County Natural Resources Staff. It is highly probable that these water resource elements, in addition to other aspects of the Lee Plan, will increase the timeframe and complexity of obtaining entitlements and influence the overall design and developable acreage of the site.

Figures





Figure 2 Lee County Future Land Use Daniels Parkway South Lennar Corporation Lee County, Florida

Progressive Water Resources

Integrated Water Resource Consultants







Figure 5 1944 Historic Aerial Imagery Daniels Parkway South Lennar Corporation Lee County, Florida





Figure 6 1958 Historic Aerial Imagery Daniels Parkway South Lennar Corporation Lee County, Florida









Figure 9 LIDAR Imagery Daniels Parkway South Lennar Corporation Lee County, Florida





Lennar Corporation Lee County, Florida

Professional Surveyor licensed by the State of Florida

**Progressive** Water Resources Integrated Water Resource Consultants





Ы	Daniels Parkway South - Project Boundary
Soil	Гуре
C	22.7% - Pompano fine sand, frequently ponded, 0 to 1 percent slopes
CS	18.6% - Immokalee sand, 0 to 2 percent slopes
CS	16.1% - Malabar fine sand, 0 to 2 percent slopes
S	10.5% - Pineda-Pineda, wet, fine sand, 0 to 2 percent slopes
66	10% - Valkaria fine sand, 0 to 2 percent slopes
8	8.6% - Oldsmar sand, 0 to 2 percent slopes
65	8% - Pompano fine sand, 0 to 2 percent slopes
CS	3.6% - Floridana sand, frequently ponded, 0 to 2 percent slopes
C	1% - Valkaria fine sand, frequently ponded, 0 to 1 percent slopes
CS	0.4% - Pineda fine sand, frequently ponded, 0 to 1 percent slopes
66	0.3% - Hallandale fine sand, wet, 0 to 2 percent slopes
-	0.1% - Malabar fine sand frequently ponded, 0 to 1 percent slopes

Figure 13 NRCS Soils Map Daniels Parkway South Lennar Corporation Lee County, Florida

Image: ESRI World Imagery



0.25

0.125

0



Daniels Parkway South - Project	boundary	
Daniels Parkway South - Project Proposed Flow Pathways Amenity Areas Roads Lot Areas Lakes	t Boundary	
Scale: 1:20,000 11/1/2021 Progressive Water Resources has provided the images or data presented in this map for informational purposes only. This data is not intended to be used in lieu of official survey data provided by a Professional Surveyor licensed by the State of Florida	Image: 1999 Google Earth Imagery Figure 15 Conceptual Development Layout Daniels Parkway South Lennar Corporation Lee County, Florida	0 0.125 0.25 0.5 Miles Progressive Water Resources Integrated Water Resource Consultants



Drainage Report Amended August 2022

# Daniels South Fort Myers Florida, Florida

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- 9. Peak Flow Model Discharge Comparison
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- 11. 2.33 Year Peak Stage Comparison



#### APPENDICES

Appendix A – Master Drainage Plan

Appendix B - Existing Conditions Node Map

Appendix C – Existing Conditions ICPR4 Input Report

Appendix D – Existing Conditions ICPR4 Node Max

Appendix E – Existing Conditions ICPR4 Link Max

Appendix F – Existing Conditions ICPR4 Manual Basin Max

Appendix G – Proposed Conditions Node Map

Appendix H - Proposed Conditions ICPR4 Input Report

Appendix I – Proposed Conditions ICPR4 Node Max

Appendix J – Proposed Conditions ICPR4 Link Max

Appendix K - Proposed Conditions ICPR4 Manual Basin Max

Appendix L – Progressive Water Resources Integrated Model Analysis



## EXECUTIVE SUMMARY

Daniels South is a proposed 1,233-acre residential and commercial development located southeast of the intersection of Daniels Parkway and SR 82. The property spans multiple future land use categories and community planning areas. As a result, a text and map amendment to the Lee Plan and concurrent Mixed Use Planned Development are proposed to establish a uniform development pattern for the overall project.

Due to the proposed amendments within the Density Reduction/Groundwater Resource Future Land Use and Southeast Lee Community Planning Area an integrated surface and groundwater model has been developed to evaluate the current conditions of the property and proposed development. Historic flow patterns in this area were altered by the construction of a farm road during previous agricultural operations on the property. The farm road is a basin divide that hydrologically bisects the property into basins either heading west towards Six Mile Cypress or east and south towards the Estero River. As detailed in the following report, the proposed development provides a hydrologic benefit to the region by providing a man-made conveyance connection between the Six Mile Cypress and Estero River Watersheds. This connection will restore historic surface water flow patterns during high rainfall events, which is consistent with Policy 33.1.4 of the Lee County Comprehensive Plan. The connection will be made via a proposed control structure and 24" conveyance pipe between the two watersheds.

Due to the proximity of the property to the Southwest Florida International Airport and their prohibition on wildlife attractants, large scale flow-way restoration is not proposed. Rather, the existing and extensive network of ditches and berms that partition the wetland systems on-site and a historic farm road which bisects the property and reduces hydrologic connectivity are proposed to be removed within the development area. After removal of the berms and ditches, the former farming infrastructure will be regraded to match the adjacent natural grade and planted with native vegetation.

To evaluate the surface water conditions for the project, pre-development and post development surface water analysis were developed for 2.33 year, 10 year, 25 year, and 100 year rainfall events. The conclusions of the integrated model demonstrate that there is capacity for the project to convey stormwater during events that exceed the SFWMD 10-year 1-day storm event and in a direction that reflects historic flow patterns. Historic flow patterns would have allowed the surface flow to cross watershed basin divides during high rainfall events. The maximum discharge rate of the entire site will be reduced while maintaining historic flow patterns ensuring no adverse impacts to nearby properties. The 2.33-year 1-day modeling shows that wetland hydroperiods will not be impacted by the proposed project. Additionally, the recharge conditions of the integrated model for the proposed project are greater than Existing Conditions by 94 acre-feet; enhancing water resources through increased groundwater recharge. Therefore, the project is consistent with Lee Plan Policy 1.4.5 and 33.1.7.



## INTRODUCTION

Daniels South is a proposed 1,233-acre property located southeast of the intersection of Daniels Parkway and SR82 in Lee County, Florida. At full buildout, the project will consist of a residential community, multiple commercial properties, amenity areas and supporting infrastructure. The existing parcels are composed of existing agricultural lands. Approximately 679.10 acres will be preserved and/or restored to natural upland and wetland habitat. The property is bordered on the north by SR82 which is a defined as an upper end watershed boundary for both the Six Mile Cypress and Estero River watersheds. An existing farm road within the project defines the watershed divide between the two watersheds. The project is further bounded on the west by Daniels Parkway, the east by existing residential lots, and the south by Southwest Florida International Airport.

As a requirement of the concurrent Comprehensive Plan Amendment (CPA2021-00017 & 2021-00018) and Mixed Use Planned Development (DCI2022-00002) applications and to demonstrate consistency with Density Reduction Groundwater Resources Future Land Use, the project must be designed to provide a hydrologic model and report demonstrating interconnecting basins to re-establish historical hydraulic flow-ways. Per Policies 1.45 and 33.1.7 of the Lee Plan, the project must demonstrate potential impacts on surface and groundwater resources have been analyzed utilizing an integrated surface and groundwater model with site specific data. This integrated model has been prepared by Progressive Water Resources and is included as Appendix L of this report.

The design of the proposed development includes a man-made hydraulic connection at the middle of the project's basin divide line between Six Mile Cypress and Estero River Basins. The connection is intended to partially restore flow patterns that were altered by the construction of a farm road used for agricultural activities in the project area. The farm road was constructed along a slightly higher land feature that divided the two watersheds and altered the elevations of the area from historic natural ground conditions. In natural ground conditions, surface water would have the ability to flow across the higher land feature thereby connecting the watersheds during larger rainfall events. This improvement will provide additional flow to the Estero Basin during high run off rainfall events by installing a control structure with a conveyance pipe that will allow surface water to flow across the watershed basin divide. The control structure is set at an elevation above the wet season water table to ensure that wetland surface elevations do not decrease from existing conditions in compliance with policy 126.1.4.

The detailed analysis for the proposed flow-path system considers this man-made hydraulic connection, which is discussed in the Daniels South Proposed Conditions Flow Path Analysis. To evaluate the proposed hydrologic and hydraulic condition of a flow path and the proposed design for those areas, the following hydrological models were conducted:

MORRIS	/	
4	DEF	PEW

#### Existing Conditions Hydrologic/Hydraulic 1D Model:

The purpose of this model was to determine the existing surface water that discharges off the existing site to the current outfall locations (Six Mile Cypress & Estero River). The Existing Conditions model was established using the Interconnected Channel and Pond Routing, Version 4.07.08, software and simulates the following design storms:

- o 2.33-year 1-day
- o 10-year, 1 day
- o 25-year, 3-day
- o 100-year, 3-day

#### Proposed Conditions Hydrologic/Hydraulic 1D Model:

The purpose of this model is to determine the effects of the proposed development to the existing parameters established in the existing model. The model will compare its results to the Existing Conditions model which include max discharge rates, max stages, and flow path conveyance from the Six Mile Cypress Basin to Estero River Basin. The Proposed Conditions model simulates the following design storms:

- o 2.33-year 1-day
- o 10-year, 1 day
- o 25-year, 3-day
- o 100-year, 3-day

## MODELING SOFTWARE AND HYDRAULIC/HYDROLOGIC PARAMETERS

The software used to create the hydrologic and hydraulic models is Interconnected Channel and Pond Routing, Version 4.07.08, known as ICPR4. ICPR4 is a fully integrated 1D/2D surface and groundwater modeling platform. ICPR4 is widely used and accepted modeling platform throughout Florida for simulating hydrologic and hydraulic analyses. The ICPR4 platform is not limited with the number of model elements and is therefore well suited to utilize for a detailed model of the existing and proposed infrastructure systems within the Daniels South project boundaries.



#### **Topographic Data Existing Conditions**

The first parameter for review is the topographic data available and used for the modeling application. The Existing Conditions model relied on both field surveying using GPS equipment and the latest LIDAR available from Lee County GIS. Elevations within the project boundaries range from 20.24 to 29.08 NAVD. Higher elevations occur on the north side of the project that runs adjacent to SR82 and lower elevations occur in the wetlands. Topographic data indicates that the project area conforms with the watershed delineation for the project area and that the project does not receive discharge from the SR 82 which is the common upstream watershed boundary for the Estero River and Six Mile Cypress watersheds. The topographic data also shows an existing farm road bisecting the project area, which acts as a basin divide between the Estero River and Six Mile Cypress watersheds.

For the Proposed Conditions model, proposed grading for the basins was utilized along with the preliminary grading for the development ponds, including the internal lake excavation areas and detention areas within the development ponds.

#### Land Use/Land Cover Data

Currently, Daniels South's existing drainage basin is comprised mostly of agricultural fields and as well as forested wetland and indigenous areas which are included with the land use calculations and determination. Overall, the total Existing Conditions basin contains homogenous land use/land cover.

For the Proposed Conditions ICPR model, the land use/land cover data file was defined by the proposed land used based upon the Master Concept Plan for the Daniels South Mixed Use Planned Development Application. The land use/land cover categories include Residential, Commercial, Right-of-Way, Wetlands, Lakes, and Uplands. Although the commercial areas are included within the model, it should be noted that the commercial areas are proposed within the Intensive Development Future Land Use category, which does not require an integrated surface and groundwater model,

#### **Runoff Curve Number**

A curve number, which represents the ability of soil to store water, was developed for each existing and proposed drainage basin. The curve number method is a product of the SCS runoff equation, developed by the US Soil Conservation Service, which is the predecessor of the NRCS. The runoff equation takes the total rainfall depth and removes the soil storage using an empirically derived formula to predict how much water will run off of a defined basin. It has many parameters including the depth of the water table with respect to average ground elevation, soil type, compaction and the inclusion of impervious areas. TR-55 is a document produced by SCS that equates certain land uses to certain Curve Numbers based on four categories of soil types and is typically used in most of the country to predict generalized soil storage estimates. In areas governed by the South Florida Water Management District, however, SCS and the District realized that the relatively high water tables encountered in Florida meant that the CN by landuse method from TR-55 was not adequate estimate soil storage. This method normally produced higher values for water storage in soil than were actually being encountered. This lead SCS to develop an alternate method to determine a local CN value that relies on a series of soil storage curves to be used within SFWMD service areas instead. These include soil storage curves for "sandy soils". "flatwoods soils" and "depressional soils". The current process of determining soil storage therefore involves determining the average elevation of that portion of existing ground above the wet season high water table, subtracting that elevation from the WSHWT elevation and applying the resulting depth to one of



three soil storage curves. The resultant curve number from this exercise is then further evaluated against totally impervious areas within the basin to achieve a weighted value that averages areas in the basin that are both pervious and impervious.

Daniel's South Existing and Proposed Conditions curve numbers can be found in Tables 1 & 2 below:

DANIELS SOUTH EXISTING CONDITIONS CURVE NUMBERS					
BASIN NAME	SOIL STORAGE (INCHES)	CURVE NUMBER			
WETLAND 1	0.03	99.71			
WETLAND 2	0.01	99.95			
WETLAND 3	0.00	99.98			
WETLAND 4	0.00	99.99			
WETLAND 5	0.00	99.97			
WETLAND 6	0.00	99.96			
WETLAND 7	0.05	99.48			
DS NORTH	0.08	99.16			
DS WEST	0.02	99.79			
DS EAST	0.11	98.94			

#### **Table 1: Daniels South Existing Conditions Curve Numbers**

#### **Table 2: Daniels South Proposed Conditions Curve Numbers**

CONDIT	ONS CURVE N	UMBERS
BASIN NAME	SOIL STORAGE (INCHES)	CURVE NUMBER
BASIN CN	0.56	94.67
BASIN 1	0.83	92.32
BASIN 2	0.94	91.43
BASIN 3	0.94	91.43
BASIN 4	0.82	92.41
BASIN 5	0.90	91.70
BASIN 6	0.86	92.07
BASIN 7	0.91	91.66
BASIN 8	0.97	91.20
BASIN 9	0.84	92.26
BASIN 10	0.75	93.02
BASIN 11	0.88	91.92
BASIN 12	1.17	89,54
BASIN 13	0.77	92.83
BASIN 14	0.74	93.11
BASIN 15	0.00	99.98
PRESERVE 1A	0.07	99.28
PRESERVE 1B	0.10	98.99
BASIN 15	0.00	99.98
PRESERVE 2	0.31	96.99
PRESERVE 2+3	0.41	96.05
PRESERVE 3	0.22	97.83
PRESERVE 4	0.22	97.83
PRESERVE 5+6+7	0.22	97.83
PRESERVE 5	1.26	88.83

In Table 1 of the Existing Conditions, soil storage of the existing wetlands was defined by first determining the area above the wet season water table (WSWT) within the Wetland Basin. This area was



then defined with an average elevation which then was used to define the available soil storage per the USDA's Method. In Table 2 of the Proposed Conditions, since it is assumed, the soil will be compacted, soil storage has been reduced by 25% which is consistent with the methodology requested by SFWMD applicant's handbook.

#### Time of Concentration

Time of Concentration is another parameter needed to establish the stormwater characteristics of the Project. Time of Concentration is the time required for runoff to travel hydraulically from the most distant point in the watershed to the outlet. Time of concentration vary depending on land characteristics within the respective basin which includes, slope and character of the defined flow path. Time of concentration was established using the Kirpich Equation which studies the flow path length and slope. The Kirpich Equation is as follows:

$$T_{\rm c} = \frac{0.0078L^{0.77}}{S^{0.385}}$$

#### Where: Tc = Time of Concentration (minutes) L = Length of Flow Path (feet) S = Slope

Using the above equation Time of Concentration was established for both the Existing and Proposed Conditions and can be shown in Tables 3 & 4:

BASIN	KIRPICH CONSTANT	LENGTH OF FLOW	UPSTREAM	DOWNSTREAM	SLOPE	TIME OF
		PATH	ELEVATION	ELEVATION	(616)	CONCENTRATION
N/A	UNITLESS	(feet)	(feet)	(feet)	(1011)	(minutes)
BASIN NORTH	0.0078	5,387	26.54	25.31	0.00023	147.00
DS WEST	0.0078	3,413	26.21	25.64	0.00017	116.87
DES EAST	0.0078	5,506	25.67	25.36	0.00006	257.81
WETLAND 1	0.0078	5,954	225.14	24.77	0.03365	23.22
WETLAND 2	0.0078	1,715	25.70	24.25	0.00085	36.74
WETLAND 3	0.0078	2,557	25.25	24.12	0.00044	64.16
WETLAND 4	0.0078	1,854	25.31	24.98	0.00018	70.73
WETLAND 5	0.0078	2,364	25.05	24.59	0.00019	83.22
WETLAND 6	0.0078	1,226	25.62	24.89	0.00059	32.57
BASIN 15	0.0078	2,593	25.00	24.89	0.00004	158.89
WETLAND 7	0.0078	3,426	24.65	23.59	0.00031	92.39

#### Table 3: Existing Conditions Time of Concentration

#### Table 4: Proposed Conditions Time of Concentration

BASIN	KIRPICH CONSTANT	LENGTH OF FLOW PATH	UPSTREAM ELEVATION	DOWNSTREAM ELEVATION	SLOPE	TIME OF CONCENTRATION
N/A	UNITLESS	(feet)	(feet)	(feet)	(ft/ft)	(minutes)
PRESERVE 1A	0.0078	2,129	25.47	25.31	0.00007	111.37
PRESERVE 1B	0.0078	3,265	25.49	25.29	0.00006	165.86
BASIN 15	0.0078	1,070	25.67	25.36	0.00029	38.87
PRESERVE 2	0.0078	1,187	24.92	24.77	0.00013	57.44
PRESERVE 2+3	0.0078	2,304	24.51	24.25	0.00011	100.38
PRESERVE 3	0.0078	1,837	24.27	24.12	0.00008	94.87
PRESERVE 4	0.0078	2,653	25.12	24.98	0.00005	147.70
PRESERVE 5+6+7	0.0078	5,201	24.72	24.59	0.00002	335.20
PRESERVE 5+6+7	0.0078	2,593	25.00	24.89	0.00004	158.89

MDA Job # 21021-00

August 2022


#### **Rainfall Data and Design Storms**

Precipitation depths for the 10-year 1 day, 25-year 3 day and 100-year 3-day storm events were obtained specifically for the subject watershed area using the South Florida Water Management Districts Applicants Handbook and applicable Isohyet Curves. The design storm rainfall amounts are shown in the following table:

MODELED RAINFALL DEPTHS			
100y-3d Storm	13.90	inches	
25y-3d Storm	10.60	inches	
10y-1d	6.50	inches	
2.33y-1d	4.50	inches	

MDA Job # 21021-00



## DANIELS SOUTH EXISTING CONDITIONS MODELING ANALYSIS

As mentioned above, the Project is comprised of existing wetlands and agriculture fields. The various agriculture fields include dividing berms and irrigation ditches that both isolate wetland areas and direct runoff through the site. The Project's existing hydrology conveys stormwater from North to South with the North/South basin divide delineating the stormwater west or east to their respective basin, Six Mile Cypress and Estero River Watersheds.

Using field data, LIDAR data, current aerial photographs, on-site observations and SFWMD permit files, the existing property was delineated into sub-basins. A total of 10 sub-basins were established via delineation.

Once the sub-basins were defined, hydrologic characteristics of each basin were defined and quantified, which included land use, curve numbers, time of concentration and surface storage capacity. All the listed items along with rainfall depths were used to establish a rainfall-runoff model for each basin using Interconnected Pond Routing (ICPR4) Software.

#### **ICPR4** Modeling

The ICPR4 software was utilized to perform the hydrologic analysis of Daniels South Existing Conditions drainage basin. The modeled rainfall events include the 2.33-year 1-day, 10-year, 1-day, 25-year, 3-day and 100-year, 3-day. Each of the (10) basins were modeled as sperate nodes and were characterized by their determined properties: area, CN, and Time of Concentration. In review of the existing topographic data, it was determined that the sub-basins had areas of run-off storage at specific elevations. The stage-storage volumes were input into the basin characteristics of each of the nodes. Figure 1 provides a graphic of the digital elevation model (DEM) used for the Existing Conditions Analysis where blue colors represent areas below the WSWT, and greens represent areas above the WSWT:



Drainage Report Daniels South Fort Myers, Florida



Figure 1: Existing Conditions DEM Model (NAVD 88)

To further analyze the hydrologic conditions of the project, routings were incorporated into the ICPR4 model. Previous SFWMD files for the surrounding parcels along with field reconnaissance and current survey data was used to establish hydraulic networks between each of the sub-basins. Figure 2 below shows the Existing Conditions Node Map (also included in Appendix B):



Drainage Report Daniels South Fort Myers, Florida



Figure 2: Existing Conditions Node Map

#### **Outfall Tailwater Conditions**

The Existing Conditions model includes (12) offsite connection of which (2) connect to Estero River Watershed and the remaining (10) connect to Six Mile Cypress Watershed. The 2 connections to Estero River Watershed occur on the Southern property line with (1) just east of the basin divide line and the



other at the eastern most point of the property. The connections to Estero River Watershed include existing reinforced concrete pipes that convey stormwater to the offsite wetlands, where stormwater is ultimately conveyed to Estero River.

The Six Mile Cypress Watershed connections consist of existing reinforced concrete pipes and control structures currently in place. The conveyance structures discharge both to the western side of Daniels Parkway to improvements provided by Timber Creek and south to the Airport Basin. From these connection points, the stormwater ultimately discharges to Six Mile Cypress Watershed through a series of existing conveyance ditches and storm pipes.

The boundary nodes for each outfall were set as Time/Stage nodes. The boundary conditions for each Time/Stage node were defined by the Existing Conditions established in existing SFWMD permits for both the Estero River Watershed and the Six Mile Cypress Watershed. The features for the boundary nodes will remain the same in the post development conditions. As such, the defined Time/Stage node for the outfalls will remain consistent in the Proposed Conditions.

#### **ICPR Modeling 1D Results**

Based on the modeling results of the Existing Conditions of Daniels South, the peak discharge leaving the site for the 25-year, 3-day storm event was defined as 1019.15 cfs. The maximum discharge rate equates to 921.06 cfs discharging to Estero River Watershed and 98.08 cfs discharging to Six Mile Cypress Watershed. Results are shown in Table 6:

Watershed	Peak Discharge Rate (cfs)
Six Mile Cypress	98.08
Estero River	921.06
Total Peak Discharge	1019.15

#### **Table 6: Existing Conditions Model Discharge Results**

The actual peak discharge from the existing property may vary from the modeled results due to the nature of the available data for analysis. In additional, the capacity of the downstream conveyance systems must be a considered factor when evaluating and estimating the existing flows leaving the Project.

## DANIELS SOUTH PROPOSED CONDITIONS FLOW PATH ANALYSIS

The surface water management system is designed based on the criteria of the South Florida Water Management District (SFWMD) Environmental Resource Permit (ERP) program and is consistent with the criteria of Part IV of Chapter 373 of the Florida Statutes. The proposed master drainage plan (Appendix A) consists of 14 lakes interconnected to each to other totaling 117 acres of surface area. The proposed lakes attenuate water quantity within the site and provide water quality treatment including reducing nutrient loading of the proposed development. The water quality treatment provide by the lakes will prevent the project from degrading surface water quality and reduce nutrient loading from Existing Conditions which meet the requirements of Policy 125.1.2 and Policy 125.1.3 of the Lee County Comprehensive Plan. The lake elevations have been designed to match or exceed the existing wet season



water elevations as determined by the consulting ecologist for the project, so as to not impact adjacent onsite wetland preserve areas. The water management system discharges in 5 locations into the onsite wetland preserve areas through weirs that control the maximum discharge rate from the developed areas.

The five lakes within the 10,000-foot airport wildlife buffer have been designed to incorporate hardened shorelines and 4:1 slopes without littoral plantings, to minimize wildlife attractive vegetation in those areas which benefits the Southwest Florida International Airport (SWFIA). These five lakes will discharge to lakes outside the 10,000-foot wildlife buffer to ensure that adequate water quality treatment is provided for all areas of the site prior to discharging to the onsite wetlands.

In addition to the water management system, an onsite flow path is proposed for the project area. The proposed flow-path creation plan consists of a piped connection to be located approximately in the middle of the project area currently defined as an existing farm road that divides the Six Mile Cypress watershed from the Estero River watershed. The 24" pipe connection is intended to reestablish a historic flow path that interconnects the two watersheds as identified Lee County's Comprehensive Plan, connecting the two watersheds.

The proposed man-made flow-path connection will allow flow to occur from Six Mile Cypress Watershed to Estero River Watershed in storm events that exceed the 10-year, 1-day storm event. The proposed flow-path connection will allow (restore) stormwater flows from the Six Mile Cypress watershed into the Estero River Watershed during high rainfall events.

The initial step of the analysis involved designing sub-basins within each of the watersheds and identifying where a connection point could occur based on the varying WSWT elevations within each of the Wetlands. The sub-basins that were identified for connection are from "Wetland Preserve 1B" (See Appendix G Proposed Node Map for node locations) in the Six Mile Cypress Watershed to "Preserve 2+3" in the Estero River Watershed in the Proposed Conditions. Wetland Preserve 1B has a control elevation of 25.50" while Preserve 2+3 has a control elevation of 25.32".

The proposed connection of the man-made flow-path will consist of a control structure weir set at elevation 25.84' on the Six Mile Cypress Watershed side. The proposed connection will be a closed system (i.e. piped), consistent with the request of the SWFIA/Port Authority. The control structure will discharge via a 24" buried pipe to Preserve 2+3 which is on the Estero River watershed side of the project. This proposed buried pipe will not create habitat that could attract wildlife and be aesthetic in character. The control structure elevation is set above the WSWT so as to not draw down the wetland areas (thereby maintaining the wetland hydroperiod) and to prevent surface water from discharging into the Six Mile Cypress basin in low volume rain events. In high rain fall events, the Six Mile Cypress Basin water elevation stages to an elevation slightly higher than the Estero Basin water elevation of 25.84', was determined as the defined elevation of the 10-year, 1 day storm event for the proposed project in Preserve 1B. Figure 4 -Wetland Connection Exhibit, is a schematic depiction of the pipe connection between the watersheds.



Per the above provided information, the proposed flow-path connection discharges when storm events exceed the 10-year, 1 day storm event of elevation of 25.84'. ICPR4 routings of the 25-year, 3-day storm event define a discharge rate of 3.46 cfs of peak flow discharged from the 24" conveyance pipe

## DANIELS SOUTH PROPOSED CONDITIONS MODELING ANALYSIS

ICPR4 software was used to perform hydrologic and hydraulic analysis of the Daniels South Proposed Conditions for the various basins. The modeled rainfall events include the 10-year 1-day, 25-year 3-day, and 100-year, 3-day storm events. Water elevation stages were evaluated for all the above storm events, as well as the peak flow discharge rates of the 25-year, 3-day storm event, which is the criteria of the South Florida Water Management District.

To determine Stage/Storage relationships in each of the defined basins, the environmental professional involved with the project provided wetland elevation data to ensure the proposed project's storage is starting at or above a water elevation consistent with the adjacent wetlands. The onsite portion of the project discharges via 5 discharge points to the various offsite wetlands. Two locations will discharge to the Six Mile Cypress Watershed and three locations discharge to the Estero River Watershed. Various ponds on site within their respective sub-basins will be interconnected by reinforced concrete pipes. Due to the design the lakes within 10,000 Foot airport wildlife buffer, not having littoral plantings, the southern 2 control structures that discharge to Estero River will not begin to discharge to the offsite wetlands until water quality requirements for the project are met in the other lakes of the system.

A Proposed conditions Node Map of Daniels South is shown in Figure 3 (Also included in Appendix G) to better displays the above information:



Drainage Report Daniels South Fort Myers, Florida





As shown in Figure 3, the proposed system incorporates, reinforced concrete pipe, control structures, channels and overland weirs to accurately define the proposed hydrologic and hydraulic conditions.

#### **ICPR Modeling 1D Results**

Based on the modeling results of the Proposed Conditions of Daniels South, the peak discharge leaving the site for the 25-year, 3-day storm event was defined as 420.26 cfs. The maximum discharge rate equates to 350.09 cfs discharging to Estero River Watershed and 70.17 cfs discharging to Six Mile Cypress Watershed. Results are shown in the following table:



Drainage Report Daniels South Fort Myers, Florida

## Table 7: Proposed Conditions Model Discharge Results

Watershed	Peak Discharge Rate (cfs)	
Six Mile Cypress	70.17	
Estero River	350.09	
Total Peak Discharge	420.26	

The discharge rates in the above table include the wetlands that will remain outside of the proposed developments stormwater management system. Additionally, stages were defined as part of the ICPR4 modeling effort, and the results can be shown in the following table:

	<b>Critical Storm</b>	Event Stages	
1	0 YEAR 1-DAY	STORM EVENT	
Basin Name	Peak Stage (ft. NAVD)	Comment	
BASIN 1-9	27.13	MIN. ROAD CROWN 27.14'	
BASIN 10	27.65	MIN. ROAD CROWN 27.65'	
<b>BASIN 11-12</b>	26.97	MIN. ROAD CROWN 26.97'	
<b>BASIN 13-14</b>	27.56	MIN. ROAD CROWN 27.56'	
2	5 YEAR 3-DAY	STORM EVENT	
Basin Name	Peak Stage (ft. NAVD)	Comment	
BASIN 1-9	27.79	MIN. BERM ELEV. 27.79'	
BASIN 10	28.06	MIN. BERM ELEV. 28.06'	
<b>BASIN 11-12</b>	27.67	MIN. BERM ELEV. 27.67'	
<b>BASIN 13-14</b>	27.93	MIN. BERM ELEV. 27.93'	
1(	0 YEAR 3-DAY	Y STORM EVENT	
Basin Name	Peak Stage (ft. NAVD)	Comment	
BASIN 1-9	28.15	MIN. FF ELEV. 28.38'	
BASIN 10	28.31	MIN. FF ELEV. 28.67'	
<b>BASIN 11-12</b>	28.04	MIN. FF ELEV. 28.38'	
<b>BASIN 13-14</b>	28.23	MIN. FF ELEV. 28.45'	

#### Table 8: Proposed Conditions Model Stages

As shown in Table 8, the Proposed Conditions of the onsite development remain consistent with similar projects within the respective Basins the site discharges to. The required elevations shown in Table 8 are consistent with the requirements set forth by South Florida Water Management District and Lee County Land Development Code. The Proposed Project is located within FEMA Flood Zone X; therefore, no minimum elevation is required for the Finish Floors of the future proposed buildings.



## EXISTING / PROPOSED CONDITION RESULTS COMPARISON PEAK FLOWS

As indicated previously, the project area is located at the upper end of both the Six Mile Cypress and Estero River watersheds and does not receive flows from upstream properties. As such the proposed project will not cause flooding or other negative impacts to upstream areas consistent with Policies 1.4.5 and 33.1.7.

To evaluate downstream potential impacts, a peak discharge comparison for the Existing Conditions and Proposed Conditions is shown in Table 9 below. The comparison shows that the proposed project will attenuate the 25-year 3-day rainfall event within the proposed onsite water management system and reduce the peak runoff discharge rate from the project limits. By reducing the peak runoff rate, downstream properties from the project will receive flow from the project limits at a slower rate, thereby decreasing the potential of flood conditions and demonstrating consistency with Policies 1.4.5 and 33.1.7

Watershed	Existing Project Limits - Peak Discharge Rate (cfs)	Proposed Project Limits - Peak Discharge Rate (cfs)
Six Mile Cypress	98.08	70.17
Estero River	921.06	350.09
Total Peak Discharge	1019.15	420.26

#### **Table 9: Peak Flow Model Discharge Comparison**

To further demonstrate the proposed project will not increase the potential of flood conditions downstream of the project, a comparison of the 25 year- 3-day peak stage elevations on locations of wetlands area at the south end of the project limits is presented in Table 10 below. The elevations show that stages will not increase in the post development condition and that peak stages in wetland areas near the site discharge location on the site will not increase prior to discharging off site which meets policy 126.1.4.

#### **Table 10: Peak Stage Comparison**

Node**	Existing Project Limits Stage Elev (NAVD)	Proposed Project Limits -Stage Elev (NAVD)
Wetland 7 (Exist) Preserve 5+6+7 (Prop)	25.92	25.92

\*\* Note - wetland areas were relabeled in the model from the Existing Conditions and Proposed Conditions due to Proposed Conditions design creating wetland subbasins. The descriptions in the Table 10 represent the same location on the site.



## WETLAND HYDROPERIOD MODELING

A comparison of wetland hydroperiod stages analysis was prepared based on methodology accepted by the SFWMD. The SFWMD allows for the analysis of wetland areas based on a 2.33 year – 1 day design storm. This storm is intended to more closely mimic the frequent rainfall events that occur annually during the rainy season of this vicinity of Florida. A comparison of pre-development wetland basin peak storm elevations was made with the post-development conditions in the undeveloped wetland areas. The results indicate that a negligible change in peak elevation (less than 0.1 feet) in the post development conditions and this change will not increase the hydroperiod of the wetland system. Wetland hydroperiods for different types of wetlands have durations of 30-180 days. Small changes in the stages of wetland peak storm events will not affect the long hydroperiod of the wetland systems as the peak stages recover to wet season water table over a period of 24-48 hours and the each actual rainfall event varies from year to year.

As previously indicated, the proposed weir that controls surface water discharge between watersheds via a proposed 24" pipe, is set at the stage of the 10-year 1- day storm event. This stage is higher than the 2.33 year 1-day hydroperiod model. As such, runoff will not discharge via the proposed weir for lower rainfall events and therefore the proposed 24" pipe watershed connection will not affect the wetland hydroperiods.

A comparison for peak stages of the wetland areas is in Table 11 below

Node**	Existing 2.33-Year 1-ay Peak Elev (NAVD)	Proposed 2.33 Year-1-Day Stage Elev (NAVD)
Wetland 1 (Exist) Preserve 1A (Prop)	25.75	25.69
Wetland 1 (Exist) Preserve 1B (Prop)	25.75	25.67
Wetland 2 (Exist) Preserve 2-3 (Prop)	25.65	25.56
Wetland 3 (Exist) Preserve 3 (Prop)	25.56	25.53
Wetland 4 (Exist) Preserve 4 (Prop)	25.55	25.49
Wetland 5 (Exist) Preserve 5 (Prop)	25.56	25.48
Wetland 6 (Exist) Preserve 5+6+7 (Prop)	25.55	25.46
Wetland 7 (Exist) Preserve 5+6+7 (Prop)	25.52	25.46
Basin 15 (Exist) Basin 15 (Prop)	25.65	25.68

Table 11: 2.33	Year	<b>Peak Stage</b>	Comparison	Wetland	Areas
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## INTEGRATED MODEL ANALYSIS Daniels South

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Prepared for: Lennar Homes, LLC 700 N.W. 107<sup>th</sup> Avenue Suite 400 Miami, FL 33172

Prepared by: Progressive Water Resources, a Division of RESPEC Company, LLC 6561 Palmer Park Circle, Suite D Sarasota, FL 34238



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## Appendix B

Proposed conditions input data Proposed conditions recharge volume summary Proposed conditions recharge volume vs time graph





## TECHNICAL MEMORANDUM

Date:	May 20	2022
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To: Russell Smith, Division Manager Lennar Homes, LLC

From: Peter A. Brown, P.E. & David J. Brown, P.G.

Re: Daniels South Integrated Model Analysis

#### BACKGROUND

Progressive Water Resources (PWR), a division of RESPEC Company, LLC was engaged by Lennar Homes, LLC (Client) to develop an integrated groundwater / surface water model to assess pre- and postdevelopment groundwater recharge for the proposed Daniels South residential development project. The integrated model is a requirement of The Lee Plan Policy 33.1.7 which states that impacts of proposed land use disturbances on surface and groundwater resources will be analyzed by means of an integrated surface and groundwater model that utilizes site-specific data to assess potential adverse impacts on water resources and natural systems.

The subject property on which the modeling was performed encompasses approximately 1,230-acres and is located at the intersection of Daniels Parkway and State Road 82. Please note that where appropriate, input data used in the integrated model is consistent with the stormwater design parameters utilized by the Engineer of Record (Morris Depew).

#### ANALYSIS METHODOLOGY

ICPR Version 4.07.08 software was utilized to compare existing and proposed conditions for the project to demonstrate that no adverse impacts on water resources are anticipated to occur. The Existing Conditions model consists of a mixture of upland and wetland areas with no impervious area. Onsite soil parameters were obtained from the Natural Resources Conservation Service (NRCS) soil survey for Lee County with topographic information included in the model based on Lee County LIDAR.

The Proposed Conditions model assumes that 70% of the developable area will be impervious with 29.8% being Directly Connected Impervious Area (DCIA). The Lee County Lidar was updated in the Proposed Model to incorporate the conceptual grading of the stormwater lakes and developable area. As previously stated, the input data for nodes and links are based on the 1D ICPR model developed by the Engineer of Record.

The Green Ampt Method was utilized for onsite basins to integrate surface and groundwater characteristics for both existing and proposed conditions. Simplifications were made to the recharge areas (i.e., stormwater ponds and wetlands) as recommended by the software developer (Streamline Technologies) in order to optimize the triangulation mesh of the 2D overland and 2D groundwater regions. Figure 1A below depicts the triangulation mesh for both overland (blue mesh) and groundwater (pink mesh) regions for the Existing Conditions Model along with the onsite ICPR basins and LIDAR terrain. Similarly, Figure 1B illustrates the corresponding information for the Proposed Conditions Model. Please note that LIDAR symbology differs in Figure 1B due to the incorporation of proposed onsite regrading. However, elevations of undisturbed areas

#### **TECHNICAL MEMORANDUM**

Daniels South Integrated Model Analysis Page 2 of 3

are the same as Existing Conditions. A 25-year, 3-day event was used to model both conditions (i.e., pre- and post- development) for a simulation time period of 360 hours. ICPR input and summary results are provide in **Appendices A** and **B**.



Figure 1A - Existing Conditions Triangulation Mesh



Figure 1B - Proposed Conditions Triangulation Mesh

#### RESULTS

Based on the results of the ICPR 4 Green Ampt analysis for a 25-year, 3-day rainfall event, the groundwater recharge volume simulated in the Proposed Conditions model is greater than existing conditions. This result indicates a beneficial increase in recharge to the underlying Water Table Aquifer. The existing conditions model simulates approximately 1,403 acre-ft over a duration of 360 hours, while the Proposed Conditions Model anticipates 1,497 acre-ft (net increase of 94 acre-ft). A comparison hydrograph is provided in Figure 1 below. The results of this integrated analysis demonstrate that over time, the addition of stormwater lakes (wet detention areas) associated with the Daniels South project will enhance water resources by providing a net benefit in groundwater recharge.

TECHNICAL MEMORANDUM Daniels South Integrated Model Analysis Page 3 of 3







August 2022

## Enhanced Lake Management Plan Daniels Road South Lee County, Florida

Wintertall State and M. J. Barris



Prepared By: *Progressive Water Resources, a Division of RESPEC Company, LLC* 

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## Introduction

The proposed Daniels Road South residential development encompasses approximately 1,233 acres and offers a unique opportunity to enhance water resource benefits within the highly disturbed project site. Currently, approximately 553 acres (45 percent) of the property was historically used for farming but is currently characterized as improved pasture and is currently utilized for livestock grazing, while the remainder of the property is composed of pine and oak forest, palmetto prairie, hydric pine, wet prairies and cypress heads. Onsite observations indicate many areas are heavily infested with invasive plants, namely Melaleuca and Brazilian Pepper. Of the 1,233-acre property, approximately 1,149 acres (93 percent) is located within Lee County's Density Reduction/Groundwater Resource (DR/GR) area, as shown in **Figure 1**. The remaining 84 acres, outside of the DR/GR and south of State Highway 82, are within the Central Urban Land Use category. The property is also located north and west of Lee County's Wild Turkey Strand Preserve.

The property has a long history of farming and has been used for agricultural purposes since the late 1950s, resulting in the creation of numerous historic farm roads and agricultural ditches which facilitated drainage of wetlands and other low-lying areas. In addition, the northern section of the site was part of a large World War II military training facility (Buckingham Army Airfield) that constructed multiple triangular-shaped earthen berms located south of Highway 82 that were part of facility's aerial gunnery ranges. One of the earthen WWII features occurs on the northern section of property and, along with alterations associated with historic farming operations, contributes to the highly-disturbed nature of the site.

As part of the historic farming operations, a prominent northeast-southwest trending elevated dirt road was constructed that resulted in bifurcating the property's drainage, with the western side of the site draining towards the Six Mile Cypress watershed and the eastern side draining towards the Estero River watershed. Onsite observations indicate that the area west of the divide, constituting approximately 415 acres, or 34 percent, remains hydrologically separated from lands to the east and can conceivably be considered as "orphaned" from the balance of the DR/GR. Natural surface water flows originating from the western section of the property also appear constrained by Daniels Parkway. Given the totality of hydrologic alterations that have occurred onsite, the proposed Daniels Road South development offers a unique opportunity to re-establish hydrologic connections that will facilitate hydrologic communication between the orphaned western section of the property with the balance of DR/GR to the east.

Consistent with the proposed hydrologic restoration of the site, the development's proposed irrigation system will seasonally offset proposed groundwater use with surface water stored in dedicated stormwater-wet detention lakes. Irrigation quantities are proposed to be regulated by a centrally-controlled irrigation system whereby individual homeowners are prevented from altering the initiation and duration of irrigation events. The conjunctive use of both ground and surface water supplies significantly reduces groundwater demands when adequate surface water supplies are available (i.e., post-rainy season). Achieving the hydrologic restoration of the property, while conserving water resources, is consistent with Lee Plan policies and goals, and when coupled with the management practices proposed herein, provides a framework of protection measures that enhance and safeguard the water resources of the DR/GR.

In accordance with Lee County's Comprehensive Plan (The Lee Plan), proposed developments within the DR/GR must demonstrate the protection, preservation, and enhancement of groundwater resources and environmental (wetland) systems. As demonstrated herein, the Daniels Road South project offers several important water resource protection measures that will result in the following Water Resource Benefits to the DR/GR:

## Water Resource Benefits

- The total proposed lawn and landscape area within the Daniels Road South development is approximately 95 acres and represents a decrease of approximately 458 acres (79 percent reduction) as compared to existing livestock areas.
- The Daniels Road South development will utilize both groundwater and captured stormwater for irrigation, whereby groundwater quantities from the Sandstone Aquifer are used to supplement surface water irrigation supplies within the project's stormwater management system lakes. Irrigation quantities will then be withdrawn from the lakes to irrigate lawn and landscaped areas. The proposed conjunctive use of both ground and surface water is anticipated to conserve groundwater supplies that would otherwise have to be withdrawn from the Sandstone Aquifer. When adequate surface water supplies are available, groundwater usage will be reduced, or possibly eliminated, thereby furthering the project's resource benefits within the DR/GR.
- The project includes a master-controlled irrigation system that will regulate the initiation and overall duration of irrigation events in order to increase irrigation water use efficiency and enhance water conservation (i.e., no individual homeowner will have access to irrigation timers). Evapotranspiration sensors are also proposed for each irrigation pump station and future plans may include an integrated communication system between the controller clocks and the irrigation pump station(s).
- Currently there is little, if any, stormwater attenuation or treatment onsite. Improved surface
  water quality is anticipated through the creation of numerous interconnected stormwater
  management system lakes.
- Integrated surface and groundwater modeling indicates that the proposed stormwater management system enhances recharge to the underlying aquifers thereby improving hydrologic conditions within the DR/GR.
- Only professional landscape businesses registered with Lee County will be allowed to perform their services at the Daniels Road South development. Proof of completion of a Lee Countyapproved Best Management Practices (BMP) training program will be required.
- To further protect the water resources, the Daniels Road South project includes surface water quality monitoring of the proposed internal stormwater lakes to document that no adverse surface water quality conditions will occur as a result of the proposed change in land use.

Collectively, these Water Resource Benefits represent a high level of water resource and environmental protection and, in many cases, exceeds the future land use requirements contemplated by Lee County's Comprehensive Plan. For ease of use and understanding, the contents of the Daniels Road South ELMP contain Sections that address key water resource protection elements, with each of the main ELMP Sections in turn having Subsections that provide specificity regarding the management actions necessary to safeguard the water resources. Where applicable, BMPs are provided to highlight specific water resource protection measures.

## **Proposed Deviations from Lee County Land Development Code**

A portion of the subject property is within the 10,000-foot Airport Wildlife Hazard Protection Zone for the Southwest Florida International Airport. FAA Advisory Circular 150/5200-33B, published August 28, 2007, provides guidance on land uses that have the potential to attract hazardous wildlife on or near public airports and requires 10,000 feet of separation are provided from hazardous wildlife attractants. The advisory also states under the summary for "New storm water management facilities" that "to facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap lines, and narrow, linearly shaped water detention basins." In addition, the summary states "all vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated." Therefore, the following deviations are incorporated into the ELMP.

- 1. Deviation from Section 10-329(d)(4) which requires the shorelines of excavations for retention and detention areas to be sloped at a ratio not greater than six horizontal to one vertical from the top of bank to a water depth of two feet below the dry season water table TO PERMIT the shorelines of excavations for retention and detention areas within the Airport Wildlife Hazard Protection Zone ("AWHPZ") to be sloped at a ratio of four horizontal to one vertical from the top of bank to a water depth two feet below the dry season water table with enhanced slope protection measures to be proposed by the project engineer at the time of development order to prevent erosion and scouring. Within the AWHPZ acceptable enhanced slope protection measures may include, but are not limited to, use of an appropriate geosynthetic turf reinforcement mat or similar shoreline stabilization technique and might include hardened structures such as those identified in Section 10-418(3). The design technique(s) used will be determined at the time of development order by the project engineer upon approval by the Director based upon evaluation of site-specific conditions at that time.
- Deviation from Section 10-418(2) & (3) which require a planted littoral shelf for all surface water management systems to mimic the function of natural systems TO PERMIT those surface water management systems within the Airport Wildlife Hazard Protection Zone to eliminate the planted littoral shelf requirement.
- Deviation from Section 10-418(2)(d)(3) which limits substitution of native wetland trees to 25 percent of the required number of herbaceous plants TO PERMIT substitution for 100 percent of the required number of herbaceous plants to be native wetland shrubs.
- 4. Deviation from Section 10-418(3) which limits Bulkheads, Geo-textile tubes, riprap revetments or other similar hardened shoreline structures to 20 percent of an individual lake shoreline and these structures cannot be used adjacent to single-family residential uses TO PERMIT that Bulkheads, Geo-textile tubes, riprap revetments or other similar hardened structures may be used for 100 percent of an individual lake shoreline and may be used adjacent to single-family uses.

## Section 1. Historic Surface Water Hydrology

To better understand the proposed water resource management actions contained within this ELMP, it is important to provide a basic context of the historic, pre-development surface water flows on the property. The project site generally exhibits a relatively flat topographic relief, with the highest naturally-occurring land surface elevation of approximately 27 feet NAVD88 located on the northeastern portion of the property, immediately south of Highway 82. The lowest land surface elevations are located to the south and southeast at approximately 21 feet NAVD88.

Prior to agricultural development, the subject property was predominantly characterized as open rangeland and pine flatwoods, interspersed with shallow freshwater forested/shrub and emergent wetlands. Prior to any anthropogenic disturbances, 1944 historic aerials indicate the presence of semiconnected wetland features as shown in **Figure 2**. Development of agricultural operations at the project site began in the early 1950s and farming activities necessitated the construction of a grid pattern of drainage ditches that eliminated the naturally occurring surface water flow paths as shown in **Figure 3**. In addition, a well-defined access road was constructed to provide year-round access to the farm fields and was significant enough to be identified by the South Florida Water Management District (SFWMD) as a surface water basin divide.

In addition, several historical connecting ditches are evident in and around onsite wetlands and were presumably used to shorten hydroperiods and further facilitate drainage. The existing onsite drainage ditches were used to reduce water table elevations and subsequently lower recharge potential. Depending on the ditch characteristics, such features can negatively impact nearby environmental features (wetlands) and consequently the water resources within the DR/GR. Hydrologic alterations can also favor the growth of exotic and nuisance plant species.

Please note that the Daniels Road South property occurs within a single Water Body Identification (WBID) No. 3258D<sub>3</sub> (Estero River), which is not impaired as reported by the Florida Department of Environmental Protection (FDEP). It is important to note that the FDEP places the entire property within the Estero River WBID and does not differentiate the site into eastern and western sections.

Given the totality of hydrologic alterations that have occurred onsite, the proposed Daniels Road South development offers a unique opportunity to re-establish hydrologic connections that will facilitate hydrologic communication of the orphaned western section of the property with the balance of DR/GR. The proposed flow-pathway will preferentially allow movement of seasonally high surface waters to be conveyed towards the southeast corner of the property as occurred historically. In addition, the Daniels Road South project aims to eliminate wetland rim-ditching to help restore the wetland systems' hydroperiods.

## Section 2. Proposed Water Resources Best Management Practices

As the Daniels Road South project evolves from predominately a "construction phase" to "partial construction" and ultimately to a "post-construction" residential phase, the BMPs must also evolve to maintain water resource protection. Construction completion of the proposed development may take between 5 and 10 years, depending on market conditions. However, the initiation of construction is anticipated to commence prior to the end of 2023. At the onset of development construction, all cattle are proposed to be removed from the site.

#### A. <u>Construction Phase BMPs</u>

During construction of the proposed development, the greatest potential for impacts is associated with increased turbidity and/or potential spills of fuels/oils (hydrocarbons), otherwise known as Volatile Organic Compounds (VOCs) used to power earthmoving equipment, etc. Specific BMPs associated with the construction phase are provided below. The Developer will be responsible for maintaining compliance with all ELMP BMP requirements until such time that control of the development is transitioned to the Homeowner's Association (HOA) and/or Community Development District (CDD).

- The site's general contractor shall be responsible for assuring that each contractor or subcontractor evaluates the work area before construction is initiated to determine if site conditions may pose particular problems for the safe and secure handling of any regulated substances.
- If any regulated substances are stored on the construction site during the construction process, they shall be stored in a location and manner which will minimize any possible risk of release to the environment. There will be no intention to use, handle, produce or store regulated substances in violation of the Lee County Land Development Code Section 14-477, Stormwater Pollution Prevention Plan (SWP3) criteria.
- 3. Each contractor/subcontractor shall familiarize themselves with the manufacturer's safety data sheet supplied with each material containing a regulated substance and shall be familiar with procedures required to contain and clean up any releases of a regulated substance. Any tools or equipment necessary to accomplish the same shall be available in case of an accidental release.
- 4. In the event of a spill of a regulated substance, the contractor/subcontractor will immediately notify the Developer, who will in turn notify the Lee County Division of Natural Resources Director at (239) 533-8109 and the Florida Department of Environmental Protection (FDEP) South District Office at (239) 344-5600. Additional measures, such as those described in this ELMP's Section 4 (Part A), may also apply.
- Upon completion of construction, all unused quantities of regulated substances and their containment systems shall be completely removed from the construction site.
- Proper turbidity abatement measures, as required by the SFWMD, the Florida Stormwater Sedimentation Control Inspector's Manual standards, and the FDEP National Pollutant Discharge Elimination System (NPDES) permit criteria, will be maintained while construction is ongoing or

until adequate vegetation or other stabilization measures have been established.

#### B. <u>Post-Construction Phase BMPs</u>

After the Lee County Certificate of Compliance or the SFWMD stormwater management system certification is completed for a particular phase of the development, the primary focus of the ELMP will be maintaining the stormwater management system lakes since all internal runoff will be routed to these features for treatment. It is also anticipated that the Developer will establish and create an HOA and/or a CDD that will be responsible for the operation and maintenance of all aspects of the stormwater management system including the lakes, associated stormwater conveyance and control components, and the flow-path connection in perpetuity. At a minimum, the operation and maintenance of the stormwater management and flow-path system will require compliance with the terms and conditions contained within this ELMP. Additional details on BMPs, including monitoring of surface water, are provided in **Section 3** below.

## Section 3. Lake Maintenance

## A. <u>General Provisions</u>

Proper lake maintenance is an integral aspect of this ELMP since internal stormwater runoff is directed to these features for treatment and attenuation. As an added protection to underlying groundwater resources, the excavation of the lakes will not penetrate any continuous impervious layer of clay or rock. In addition, the groundwater withdrawn from the proposed (new) onsite Sandstone Aquifer wells will be used to replenish a subset of stormwater lakes as needed for use in the master irrigation system.

As shown in the conceptual layout provided as **Figure 4**, surface water irrigation pumps will "repump" groundwater supplies and retained stormwater (surface water) for the irrigation of the residential development. The recycling of surface water quantities is expected to further improve water quality on the property and maintain high water quality in the lakes. The stormwater lakes must be maintained in perpetuity and the following management actions are proposed. Specific post-construction BMPs are also provided.

## B. <u>Deep Lake Management</u>

If any of the Daniels Road South stormwater management lakes are proposed to be constructed deeper than 12 feet in depth. In accordance with Lee County Land Development Code Section 10-329(d) (3), these lakes are designated as "deep lakes" and are subject to specific criteria. Based on Lee County Code, the proposed deep lakes will satisfy the following criteria:

- 1. The stormwater management deep lakes will not exceed a maximum water depth of 20 feet and will not penetrate any continuous impervious layer of clay or rock.
- A destratification (i.e., aeration) system will be installed in any lake that exceeds a 12-foot water depth. Documentation that the proposed destratification system is adequatelysized and designed for each lake deeper than 12 feet will be submitted to Lee County for approval. An example of a deep lake aeration device is provided as Appendix A.
- 3. Native shade trees meeting the specifications of Lee County Land Development Code Section 10-420 will be planted around each deep lake perimeter at approximately one tree per 100 feet of lake shoreline measured at the detention lake's water level control elevation. Trees and other plants may be grouped or clustered together around the lake perimeter.
- 4. The deep lake management techniques, including operation of the destratification system, will be maintained for the life of the stormwater management system and will be recorded in the development's covenants, in accordance with the County Attorney's Office.
- A post-construction bathymetric survey verifying each deep lake's finished water depth, sealed by a professional surveyor and mapper, will be submitted to Lee County for approval.

## C. <u>Nuisance and Exotic Vegetation Control</u>

The HOA and/or CDD will be responsible for the removal (in perpetuity) of all nuisance and exotic vegetation from the stormwater management system as defined by the Lee County Land Development Code.

- 1. Lakes must be inspected annually and any prohibited vegetation must be removed by the use of hand-clearing or appropriate chemical treatment. Only aquatic- approved compounds may be utilized in the stormwater management system lakes.
- Herbicides and/or algaecides may only be applied by a licensed professional applicator who meets the requirements of Lee County, and in accordance with manufacturer specifications. All applicable local, state and/or federal guidelines and requirements will also be followed.

#### D. Littoral Vegetation Preservation

Littoral zone vegetation is required to be installed by the Developer and maintained by the HOA and/or CDD (in perpetuity). Littoral zones provide habitats for wading birds, fish and aquatic invertebrates and also help to stabilize shorelines and reduce lake bank erosion.

- 1. Littoral plants that die will be replaced in accordance with Lee County Land Development Code requirements. The presence of littoral plants throughout the lakes is desirable and may also help to improve the water quality within the lakes.
- 2. The spread of littoral plants will be encouraged throughout the designated littoral areas.
- 3. Mechanical trimming or the use of land-based herbicides on desirable littoral plants is prohibited. Any trimming or removal of vegetation required to promote the survival and viability of littoral vegetation will be performed by hand or by approved aquatic herbicides and methods.

## E. <u>Fertilizer Application</u>

Strict adherence will be maintained with Lee County's Fertilizer Ordinance. Individual lot owners are prohibited from applying fertilizer to their lots. Any person(s) applying fertilizers must have received a limited certification in compliance with Florida Statute 482.1562 prior to application of any and all fertilizers. Additionally, fertilizer content and application rate must be in compliance with Lee County's Fertilizer Ordinance. The Lee County Fertilizer Ordinance No. 08-08 is provided as **Appendix B**.

- 1. All professional landscape businesses must register with Lee County prior to performing landscape fertilization services within unincorporated Lee County.
- 2. At least one (1) employee of a firm employed to perform landscape fertilization services must be a Certified Professional Landscaper.

- 3. Proof of completion of a Lee County-approved BMP training program must be provided to the Division of Lee County Natural Resources.
- 4. At least one (1) BMP-trained employee must be onsite while fertilizers are applied. A registration decal provided by the division must be displayed on all company vehicles.

## F. Erosion Protection and Lake Bank Maintenance

Lake banks are susceptible to erosion due to overland flow of stormwater runoff, wave action, and the natural seasonal fluctuation of water levels. Accordingly, lake banks within the project are designed to minimize this potential for erosion.

- 1. Lake banks will be inspected annually to identify areas of erosion. Once identified, the erosion will be repaired and the source of erosion shall be eliminated, if possible.
- 2. Where excessive erosion occurs, repair of the lake banks and/or enhancement of stabilization measures may be necessary.
- 3. No motorized boats will be allowed within any of the onsite stormwater management lakes.

#### G. Lake Education Program

A narrative explaining the benefits of littoral vegetation, lake maintenance and surface and groundwater quality will be made available to residents.

- 1. Lake experts will be encouraged to attend the HOA and/or CDD meetings annually to discuss the lake system operation and maintenance requirements.
- Homeowners will be informed that they are prohibited from removing or trimming littoral vegetation.
- 3. Additionally, the homeowners will be made aware of the extreme importance regarding any introduction of hazardous materials or substances into the lakes.

## H. Pesticide, Herbicide or Fungicide Applications

All applications of pesticides, herbicides, algaecides and/or fungicides shall be applied by a licensed professional applicator, meet the requirements of Lee County, be applied in accordance with the manufacturer's specifications, and shall meet all applicable local, state and/or federal guidelines and requirements. Only approved aquatic herbicides may be used to treat the stormwater management system.

- Homeowners shall be prohibited from applying pesticides, herbicides and/or fungicides to their lots. These activities will only be performed by certified contractors approved by the HOA and/or CDD.
- 2. The use of any chemical product in a manner that will allow airborne or waterborne entry of such products into the stormwater management system is prohibited. This requirement shall not apply to the use of chemical agents by certified lake management specialists for the control of algae and nuisance vegetation within the stormwater management system lakes. However, application of such agents shall be in compliance with the requirements of Lee County, applied in accordance with the manufacturer's specifications, and meet all applicable local, state and/or federal guidelines and requirements.
- 3. Pesticides, fungicides and herbicides will be used only in response to a specific problem and in the manner and amount recommended by the manufacturer. Broad application of pesticides, fungicides and herbicides as a preventative measure is prohibited.

#### I. Southwest Florida International Airport Land Use Restrictions

As mandated by Lee County Land Development Code, no proposed land use changes can interfere with the safe operation of aircraft originating from, or flying into, the Southwest Florida International Airport, located to the southwest of the subject property. (See the proposed deviations from Lee County's Land Development Code included herein).

- No land use alterations are allowed within the designated airport exclusion zone that will produce a wildlife attractant hazard that is considered greater than the existing, historic conditions. If such an attractant is identified by the Lee County Port Authority, the landowner will have the full and sole responsibility of eliminating the hazardous situation at their expense.
- All stormwater management ponds, lakes, canals, conveyances, and other features are to be designed and constructed in accordance with Federal Aviation Administration (FAA) recommendations that discourages wildlife.
- 3. The use of rock-lined, steep-sided stormwater basins is required within the airport exclusion zone to facilitate the control of potentially hazardous wildlife. The rocks help to hide the water during periods of low inundation and help discourage shoreline vegetation and wildlife foraging along shorelines. Stormwater lakes located within Southwest Florida International Airport's 10,000-foot Hazardous Wildlife Buffer will be maintained free of emergent and submergent vegetation. Vegetation management techniques may include, but are not limited to, hand pulling of vegetation, herbicide application and removal with mechanical equipment.

#### J. Commercial Area Adjacent to State Highway 82

The lake maintenance requirements and BMPs described within this Section also pertain to the commercial development area located along State Highway 82.

## Section 4. Wellfield Protection

## A. Green Meadows Wellfield Protection

The Daniels Road South development is located approximately 0.1 miles north of the nearest Lee County Wellfield Protection Zone associated with the Green Meadows Wellfield, located adjacent to the Florida Rock Properties, Inc.'s mining operation, as shown in **Figure 5**. Therefore, additional measures regarding Wellfield Protection are not applicable to this ELMP. The level of water quality assurance offered by this ELMP offers abundant assurance that, in the unlikely event that degradation of water quality or contamination occurs, ample time exists to initiate remedial measures and safeguard Lee County's nearest wellfield. In addition, surface water quality monitoring is also proposed for the Daniels Road South project, as shown in **Figure 6**.

## Section 5. Surface Water Quality Monitoring Program

## A. General Data Quality Objectives

All surface water quality samples will be collected in accordance with Chapter 62-160, Florida Administrative Code (F.A.C.), and the FDEP's Standard Operating Procedures (SOPs) DEP-SOP-001/01 FQ 1000 Field Quality Control Requirements and FDEP-SOP-001/01 FS 2100 Surface Water Sampling. A summary of the proposed surface water sampling schedule is provided in the attached **Table 1**.

## B. Surface Water Monitoring Goals

The purpose of the surface water monitoring program is to assure that surface water coming onto, originating within, and leaving the project meet all applicable requirements of the SFWMD Environmental Resource Permit (ERP) program authorized pursuant to Part IV of Chapter 373, F.S. and all applicable requirements of Chapter 62-302, F.A.C., Surface Water Quality Standards. Additionally, water quality monitoring of the designated stormwater management lakes will verify the efficiency of the ELMP management actions and assure the lakes' health for the residents' enjoyment. Additional surface water quality parameters may be required if the FDEP determines that the sub- watershed or FDEP WBID No. 3258D<sub>3</sub> becomes impaired. Please note that a single set of project background samples are proposed once the stormwater lakes are constructed and rehydrated. Future monitoring of the proposed stormwater lakes will be compared to and contrasted with the initial background testing results.

## C. Surface Water Quality Monitoring

Surface water quality grab samples will be collected per FDEP protocol and analyzed by a NELAC/TNIcertified laboratory. The surface water quality parameters to be tested are listed below and summarized in the attached **Table 2.** In addition, the attached **Table 2** also includes the laboratory's Accuracy, Precision and minimum Method Detection Limit (MDL). Please note that the Practical Quantitation Limit (PQL) for each parameter varies between laboratories, however the PQL typically equates to four times the MDL.

- Field Parameters Depth of Water, Dissolved Oxygen, pH, Temperature, Total Dissolved Solids, Turbidity and Specific Conductivity
- Lab Parameters Total Nitrogen, Nitrate and Nitrite, Ammonium, Ammonia, Total Kjeldahl Nitrogen, Total Phosphorus, Chlorophyll-a, and Ortho-phosphate.

Surface water quality monitoring shall be continued for a minimum of five (5) years after operational completion of the stormwater management system. After five (5) consecutive years of testing, a request for discontinuation or reduction in the monitoring requirements will be proposed to the Lee County Natural Resources Department if it can be demonstrated that the surface water quality is being maintained within applicable State standards.

## Section 6. Water Quality Data Reporting and Analysis

Surface water quality data will be submitted to the Lee County Natural Resources Department staff in an approved electronic format within 30 days of receiving results from the contract laboratory if an issue has been detected. Otherwise, data will be submitted annually. The submittal will include all field notes, field and laboratory water quality data results and all previously collected (i.e., period of record) water quality data. The submittals will also include a brief narrative on the most recent sample collection, sample chain of custody, descriptions of any re-testing of erroneous values, and any water quality exceedances.

By March 1 of each year, a Water Quality Summary Report for the preceding calendar year shall be supplied to Lee County Natural Resources staff which summarizes the surface water testing results for the development. The results will include a summary table that lists all the field and laboratory parameters for the monitoring locations. Laboratory parameter concentrations that fall below the PQL for that parameter will be reported with no value; however, a value qualifier of "I" (i.e., between the MDL and PQL) or "U" (below the MDL) will be included in the summary table.

All water quality data for the analytes listed in the attached **Table 2** that are detected in concentrations above the laboratory PQL will be reviewed, graphed and statistically analyzed for trends and exceedances above two (2) standard deviations of the mean of all values. Any reported concentrations above the MCL will be clearly identified, as well as remedial actions which were used to timely reduce that particular analyte's concentration. Where appropriate, testing results for constituents already proposed, i.e., Dissolved Oxygen, pH, and Specific Conductance can be compared to Chapter 62-302.530 criteria for Class III waters.

## Section 7. Remedial Actions

In the unforeseen event that any significant surface and/or groundwater impacts are identified as a result of a hydrocarbon spill or pesticide/herbicide application at the subject property, the Developer or designee of the HOA and/or CDD will notify the Director of the Lee County Natural Resources Division within no more than 12 hours (or next business day). If a spill or release "presents an immediate threat to human health and/or the environment" then the FDEP Office of Emergency Response (OER) will be contacted within 24 hours. Guidance outlining the definition of a release as well as reporting procedures is presented in the OER webpage located at:

#### http://www.dep.state.fl.us/per/reportable incident.htm.

The Developer or their successor(s) will coordinate contamination assessment and remediation efforts with Lee County and will comply with applicable local, state and federal permitting requirements. The initial phase of the remediation plan will consider the actions outlined in Section 4 and may consist of additional temporary monitoring wells installed for the short-term temporal monitoring of potential subsurface impacts and to evaluate the horizontal and the vertical distribution of the impacted area. Based on the findings of the initial phase, if necessary, a more comprehensive assessment may be required.

## Section 8. In Conclusion

The information and technical requirements in this ELMP are provided to the Developer or designee of the HOA and/or CDD to assist with understanding the importance of a well-maintained and fully-functioning stormwater management system. The stormwater management system lakes within the development are not only required by State law but can also be a source of beauty and enjoyment for the residents while maintaining the value and integrity of the water resources. The Daniels Road South recreated flow-path will enhance and promote increased recharge to the shallow Water Table Aquifer. Therefore, the groundwater resource benefits and the management actions required herein demonstrate an exceptional level of protection, preservation and enhancement of groundwater and surface water resources within the DR/GR.

Date	Sample Type	Sample Location		
January-31	N/A	N/A		
February-28	N/A	N/A		
March-31	N/A	N/A		
April-30	N/A	N/A		
May-31	Surface Water	6 Locations		
June-30	N/A	N/A		
July-31	Surface Water	6 locations		
August-31	N/A	N/A		
September-30	Surface Water	6 locations		
October-31	N/A	N/A		
November-30	N/A	N/A		
December-31	N/A	N/A		

Table 1Water Quality Sampling Schedule

\*See Figure 6 for surface water quality sampling locations

Field Parameters									
Parameter	Units	Precision (%RPD)	Accuracy (%Recovery)	MDL	Sampling Frequency				
Depth of Water	Feet	0.01	NA	NA	3 times per year				
Dissolved Oxygen	mg/L	FT 1000-1	FT 1000-1	NA	3 times per year				
pH	SU	FT 1000-1	FT 1000-1	NA	3 times per year				
Temperature	Deg C	FT 1000-1	FT 1000-1	NA	3 times per year				
Total Dissolved Solids	mg/L	FT 1000-1	FT 1000-1	NA	3 times per year				
Specific Conductivity	µS/cm	FT 1000-1	FT 1000-1	NA	3 times per year				
	Labora	atory Parame	ters (Nutrie	nts)					
Total Nitrogen	mg/L	CALC	CALC	CALC	3 times per year				
Nitrite + Nitrate	mg/L	5	90-110	0.004	3 times per year				
Ammonium	mg/L	CALC	CALC	CALC	3 times per year				
Ammonia	mg/L	17	90-110	0.008	3 times per year				
Total Kjeldahl Nitrogen	mg/L	11	90-110	0.05	3 times per year				
Total Phosphorus	mg/L	10	90-110	0.008	3 times per year				
Chlorophyll-a	mg/L	20	93-108	0.25	3 times per year				
Ortho-phosphate	mg/L	10	88-118	0.002	3 times per year				

# Table 2Surface Water Quality Analytes
Notes:













# <u>APPENDIX A</u> Example of Deep Lake Aeration Device





Cabinet shown is representative, actual system may be different.

# AIR3 XL2™

The Vertex Air3 XL2<sup>TM</sup> pond aerator is a super-efficient, affordable and safe system. In a typical pond, an Air3 XL2<sup>TM</sup> can aerate approximately 3-4 acres depending on shape, slope, oxygen demand and other factors. A 1/2hp (0.37kW) Brookwood<sup>TM</sup> SafeStart<sup>TM</sup> compressor, housed in our rustproof aluminum outdoor cabinet, feeds three bottom mounted CoActive AirStations<sup>TM</sup> utilizing Vertex's MicronBubble<sup>TM</sup> technology. The rising force of millions of bubbles circulates the entire water column, entraining bottom water up to the surface allowing vital oxygen to be absorbed and poisonous gasses expelled. With no electricity in the water, Vertex's aeration systems are safe for any type of water recreation.

Our systems have a full 3-year Vertex warranty, excluding wearable parts (air filters and compressor maintenance kits) plus a Limited Lifetime warranty against rust and corrosion on the cabinet, 5-year warranty on the AirStations<sup>™</sup> and a 15-year warranty on BottomLine<sup>™</sup> supply tubing.



# FEATURES

#### AIRSTATIONXL2TM

- Total pumping capacity of up to 11,400 GPM
- Six 9" flexible membrane discs with MicronBubble<sup>™</sup> technology
- Shallow water Airstation optional for depths lower than 8'
- Self-cleaning, low maintenance
- Powder-coated stainless steel selfsinking base unit designed to prevent sinking into soft bottom sediments
- 5-year "No Questions" warranty

#### BROOKWOOD<sup>TM</sup> COMPRESSOR

- 3-year Vertex warranty, excluding wearable parts (air filters and compressor maintenance kits)
- Vertex SafeStart<sup>TM</sup> Technology
- UL, 115v or 230v, 35 Max PSI
- Thermal overload protection
- \* 1/2hp (0.37kW): low electrical costs
- 2-3 year extended duty cycle between scheduled maintenance

#### **QUIETAIR™ CABINET**

- Class "A" GFCI protection on all 115v circuits
- Powder coated aluminum for a durable attractive finish
- \* High capacity 290 CFM fan
- Easy access design with cam lock
- Easy plug-in connection to waterside electrical service
- Disconnect switch
- Heavy duty, light weight mounting pad included
- Sound dampening kit optional
- Limited lifetime warranty against rust

#### BOTTOMLINE<sup>TM</sup> TUBING

- Over-sized I.D. for high flow
- \* Self-weighted for easy installation
- \* Available in 100' and 500' increments
- 15-year Vertex warranty

#### BENEFITS TO THE LAKE

- High pumping rate easily penetrates stratification layers
- Circulates entire water column
- Increases oxygen levels throughout water column
- Promotes beneficial bacteria growth
- \* Prevents low oxygen fish kills
- Reduces nutrient levels and associated algae growth
- Oxidizes/reduces bottom muck
- Expands oxygenated habitat for improved fisheries
- Reduces aquatic midge and mosquito insect hatches
- Eliminates foul odors from undesirable dissolved gases
- Safe entry no electricity in the water
- \* Extremely energy efficient

# SPECIFICATIONS: AIR3 XL2™ LAKE AERATION SYSTEM

#### **BROOKWOOD™ COMPRESSOR**

1/2hp (0.37kW), 115v or 230v, Single Phase piston type compressor. Built for continuous 24/7 operation and equipped with Vertex SafeStart<sup>TM</sup> technology allowing auto restart under maximum rated pressure without motor damage. Super-duty Brookwood<sup>TM</sup> compressors incorporate upgraded rotors, stators, valve plates, bearings and capacitors and are thermally protected, oil-free, and require no lubrication; just periodic cleaning of included washable air filter. Extended duty cycle is approximately 2 to 3 years for compressor maintenance, about 2 to 3 times the duty cycle of ordinary piston and rotary vane compressors. All Brookwood<sup>TM</sup> SafeStart<sup>TM</sup> compressors carry a 3-year Vertex warranty, excluding wearable parts (air filters and compressor maintenance kits).



#### QUIETAIR<sup>™</sup> CABINET

Enclosure comes equipped with cam lock for security, fully gasketed and constructed of aluminum with gray electrostatically-bonded powder coating to provide Limited Lifetime warranty against cabinet rust and corrosion. Enclosure furnished with stamped ventilation grills to insure forced air circulation and an integral cooling fan with thermal protection, producing 290 CFM to guard against excessive compressor operating temperatures. Cabinet provided with HDPE mounting pad. Enclosure comes with class a GFCI protection on both the compressor and fan circuits. Quick disconnect switch included. Side mounted muffler box and additional insulation optional for quiter operation.



#### AIRSTATION XL2<sup>™</sup> ASSEMBLY

Diffuser station consists of two self-cleaning, 9" diameter, flexible membrane diffusers of EPDM compound with 100% rebound memory, each producing millions of fine 500 to 3000 micron bubbles – the majority 500 to 1000 microns. Each diffuser station base unit is made of powder-coated stainless steel and designed to prevent settling into soft bottom sediments. AIRSTATION<sup>TM</sup> is designed with adjustable diffuser riser to accommodate any site requirements. AirStations are independently tested and verified to provide stated pumping rates. 5-year warranty.



#### BOTTOMLINE<sup>™</sup> SUPPLY TUBING

Self-weighted, direct burial submersible tubing for connection from compressor to diffuser stations. Tubing is flexible PVC composite construction for use with standard PVC solvent weld cement and insert fittings. Tubing has 0.58" I.D. and high wall thickness for long term durability and protection against punctures. Remains flexible in cold temperatures.





<sup>(844) 432-4303 •</sup> info@vertexwaterfeatures.com www.vertexwaterfeatures.com

Install all electrical equipment in accordance with Article 682 of the National Electrical Code and all local codes. Vertex Water Features reserves the right to improve and change our designs and/or specifications of our aerators without notice or obligation. ©Vertex Water Features rev.051116

# <u>APPENDIX B</u> Lee County Fertilizer Ordinance No. 08-08

# **LEE COUNTY FERTILIZER ORDINANCE (08-08)**

**APPLICATION:** This ordinance applies to anyone performing lawn care and maintenance on turf and/or landscape plants within unincorporated Lee County as a "professional landscape business" or an "institutional landscaper". This ordinance does not apply to individual homeowners who perform their own landscape maintenance.

EFFECTIVE DATE: This ordinance goes in to effect on May 13, 2009.

#### **REGISTRATION:**

All professional landscape businesses must register with Lee County prior to performing landscaping within unincorporated Lee County. At least one (1) employee must be a Certified Professional Landscaper. Proof of completion of a Lee County approved BMP training program must be provided to the Division of Lee County Natural Resources. At least one (1) BMP trained employee must be on site while fertilizers are applied. A registration decal provided by

the division must be displayed on all company vehicles. NOTE: An example of a professional landscape business is any company you hire to perform landscaping at your home.

 All institutional landscapers must follow the same registration guidelines as professional landscape businesses with the exception of displaying a registration decal on company vehicles. NOTE: An example of an institutional landscaper is the in-house landscape maintenance staff at Shadow Wood.

#### **TRAINING & CERTIFICATION:**

- Florida Green BMP training & certification can be completed through the Lee County Extension Service. This must be done prior to registration.
- Non-professional landscapers are not required to complete the Florida Green BMP training & certification, but are strongly encouraged to participate in the University of Florida IFAS Florida Yards & Neighborhoods Outreach & Public Education Program. This applies to individual owners of single-family residential units who perform lawn care and maintenance on turf and/or landscape plants.

**TIMING OF FERTILIZER APPLICATION:** Fertilizers containing Nitrogen (N) and/or Phosphorus (P) may not be applied on turf and/or landscape plants from June 1 through September 30.

#### FERTILIZER CONTENT/APPLICATION RATE:

- Phosphorus (P) in any fertilizer may not exceed a rate of 0.25 lb. per 1,000 sq. ft. per application.
- · Phosphorus (P) in any fertilizer may not exceed a rate of 0.50 lbs. per 1,000 sq. ft. per year.
- All fertilizers applied must contain at least 50% slow release nitrogen (N).
- Nitrogen (N) in any fertilizer may not exceed a rate of 4 lbs. per 1,000 sq. ft. per year.

**IMPERVIOUS SURFACES:** No fertilizers should be deposited, intentionally or accidentally, on an impervious surface such as a driveway, sidewalk or street.

**BUFFER ZONES:** No fertilizers shall be applied on turf and/or landscape plants within ten (10) feet of a water body, seawall or wetland. (See Florida DEP chapter 62-340)

**MODE OF FERTILIZER APPLICATION:** When using a rotary spreader, use of a deflector shield is required to deflect fertilizers away from water bodies, seawalls and wetlands.

**LOW MAINTENANCE ZONES (NO MOW):** A voluntary six (6) foot low maintenance zone is strongly recommended from any water body, seawall or wetland.

**GRASS CLIPPINGS/VEGETATIVE MATERIAL:** No grass clippings or vegetative materials shall be deposited into storm drains, ditches, water bodies, roadways or other impervious surfaces.

#### EXEMPTIONS (ordinance does not apply to):

- New landscaping in place for less than sixty (60) days.
- · Vegetable gardens as long as they are not within fifteen (15) feet of a water body, seawall or wetland.
- · Yard waste, compost or mulches applied to improve the soil.
- · Reclaimed water used for irrigation which usually contains high amounts of nitrogen and phosphorus.
- · Farm operations.
- Pastures used for grazing livestock.
- Golf courses.
- Specialized turf areas (parks, cemeteries, athletic fields, golf practice areas).

#### **ENFORCEMENT & PENALTIES:**

- This ordinance shall be enforced by designated Lee County officials and/or inspectors.
- First violation...\$100.00
- Second violation...\$250.00
- Third and subsequent violations...\$500.00

### DANIELS PARKWAY SOUTH INDIGENOUS PRESERVATION, RESTORATION, AND MANAGEMENT PLAN

**Revised September 2022** 

Prepared For:

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Project No. 19LLL3192

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#### 1.0 INTRODUCTION

The following outlines the Lee County Indigenous Preservation, Restoration, and Management Plan for Daniels Parkway South (Project). The Project site totals  $1,233.08\pm$  acres and is located in Sections 8, 9, 16, 17, and 21; Township 45 South; Range 26 East; Lee County (Appendix A). The Project proposes to establish on-site conservation areas totaling approximately  $679.10\pm$  acres. The proposed conservation areas will contain the following elements:

- Preservation and enhancement of 295.80± acres of indigenous wetlands and uplands (existing forested and herbaceous habitats with less than 75 percent exotics);
- Restoration of 359.60± acres of indigenous wetlands and uplands through the removal of exotic vegetation (existing forested and herbaceous habitats with greater than 75 percent exotics) and supplemental planting;
- Backfilling 6.90± acres of Other Surface Waters (OSW) and replanting with native wetland and upland vegetation; and
- Removal of 16.80± acres of berms and planting with native wetland and upland vegetation.

Thus, the Project proposes  $679.10\pm$  acres of conservation area that will be placed under conservation easement with inspection, enforcement, and approval rights granted to Lee County and the South Florida Water Management District (SFWMD). The preserve areas utilized to meet the buffer requirements are depicted on Morris Depew's Master Concept Plan (MCP) which is provided under separate cover. A discussion of the buffer planting requirement is provided in Section 6.0 below. The preservation and enhancement areas include 58.1± acres of mature pine flatwoods (Florida Land Use, Cover and Forms Classification System (FLUCFCS) Codes 4119 E1 and E2) which is considered a rare and unique upland habitat type according to the Lee County Comprehensive Plan. A map showing the location of the 58.1± acres of rare and unique upland habitat is included as Appendix B.

A portion of the Project is located within the Southwest Florida International Airport (SWFIA) 10,000-Foot Hazardous Wildlife Buffer (Buffer) which includes  $543.90\pm$  acres of preserve area. Table 1 below provides a summary of the preserve acreages that are within and outside of the Buffer.

A 41-24 T	Acreage			
Activity Type	Within Buffer	Outside Buffer	Total	
Indigenous Wetland Preserve and Enhancement	181.05	24.65	205.70	
Indigenous Wetland Restoration	229.79	71.71	301.50	
Indigenous Upland Preserve and Enhancement	60.79	29.31	90.10	
Indigenous Upland Restoration	53.88	4.22	58.10	
OSW to be Restored to Indigenous Wetlands	1.77	0.73	2.50	
OSW to be Restored to Indigenous Uplands	4.03	0.37	4.40	
Berms to be Restored to Indigenous Wetlands	7.84	3.36	11.20	

#### Table 1. Preserve Acreage Summary

#### Table 1. (Continued)

		Acreage	
Activity Type	Within Buffer	Outside Buffer	Total
Berms to be Restored to Indigenous Uplands	4.75	0.85	5.60
Totals	543.90	135.20	697.10

Due to the Project's proximity to SWFIA, two specific management activities will be applied to preserve areas within the Buffer that are not required for preserve areas located outside the Buffer. This includes like-for-like habitat restoration and adhering to Lee County Port Authority's (LCPA) Compatible Native Landscape List. Details of these management activities are provided in Section 5.0.

#### 2.0 EXISTING INDIGENOUS VEGETATION HABITATS

Pursuant to Land Development Code (LDC) Section 10-1, indigenous native vegetation means those plant species that are characteristic of the major plant communities of the County. Native habitats where invasive exotic vegetation has exceeded 75 percent coverage are not considered to be indigenous vegetation.

The proposed conservation areas include 295.80± acres (combined pre-development wetland and upland acres) of existing indigenous native vegetation. The indigenous areas to be preserved consist of wetland and upland forested and herbaceous habitats with less than 75 percent coverage by exotics. These indigenous areas are adjacent to improved pasture that has a perimeter berm and ditch system. An aerial with Florida Land Use, Cover, and Forms Classification System (FLUCFCS) is attached as Appendix C and depicts the existing indigenous wetland and upland vegetation communities.

The indigenous wetland habitats within the conservation areas total  $205.70\pm$  acres and consist mostly of remnant cypress, hydric pine, mixed wetland hardwood habitats, and freshwater marsh. Hydric cabbage palm, wetland shrub, and wet prairies occur to a lesser extent. The indigenous uplands within the conservation areas total 90.1± acres and consist mostly of palmetto prairie, pine flatwoods, pine, cabbage palm, and hardwood/conifer, mixed habitats adjacent to the on-site wetland areas. Listed below are the FLUCFCS (Florida Department of Transportation 1999) descriptions of the indigenous wetland and upland habitats proposed for preservation and enhancement.

#### 2.1 Indigenous Wetland Habitats

Cabbage Palm, Hydric (50-75% Exotics) (FLUCFCS Code 4281 E3)

The canopy of this habitat type includes cabbage palm (Sabal palmetto). The sub-canopy contains cabbage palm, wax myrtle (Morella cerifera), and scattered melaleuca (Melaleuca quinquenervia). The ground cover includes torpedograss (Panicum repens), Wright's nutrush (Scleria lacustris), little blue maidencane (Amphicarpum muehlenbergianum), saw palmetto (Serenoa repens), swamp flatsedge (Cyperus ligularis), Asiatic pennywort

(Centella asiatica), marsh pennywort (Hydrocotyle umbellata), broomsedge (Andropogon virginicus), and dog fennel (Eupatorium capillifolium).

<u>Mixed Wetland Hardwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 6179 E1)</u> The canopy of this habitat type includes laurel oak (*Quercus laurifolia*), cabbage palm, slash pine (*Pinus elliottii*), and scattered bald cypress (*Taxodium distichum*). The subcanopy contains laurel oak, myrsine (*Myrsine cubana*), wax myrtle, Brazilian pepper (*Schinus terebinthifolia*), saltbush (*Baccharis halimifolia*), cabbage palm, and buckthorn (*Sideroxylon reclinatum*). The ground cover includes marsh pennywort, sawgrass (*Cladium jamaicense*), frog fruit (*Phyla nodiflora*), witchgrass (*Dichanthelium* sp.), false fennel (*Eupatorium leptophyllum*), broomsedge, little blue maidencane, climbing hempvine (*Mikania scandens*), earleaf greenbrier (*Smilax auriculata*), Asiatic pennywort, Wright's nutrush, and gulfdune paspalum (*Paspalum monostachyum*).

Mixed Wetland Hardwoods, Disturbed (25-49% Exotics) (FLUCFCS Code 6179 E2) This habitat type is similar to FLUCFCS Code 6179 E1, but with 25 to 49 percent melaleuca in the canopy and Brazilian pepper in the sub-canopy.

Mixed Wetland Hardwoods, Disturbed (50-75% Exotics) (FLUCFCS Code 6179 E3) This habitat type is similar to FLUCFCS Code 6179 E2, but with 50 to 75 percent melaleuca in the canopy and Brazilian pepper in the sub-canopy.

#### Cypress, Disturbed (0-24% Exotics) (FLUCFCS Code 6219 E1)

The canopy of this habitat type includes bald cypress. The sub-canopy contains bald cypress, wax myrtle, and scattered Brazilian pepper and melaleuca. The ground cover includes sawgrass, marsh pennywort, little blue maidencane, and scattered West Indian marsh grass (*Hymenachne amplexicaulis*), and torpedograss.

#### Cypress, Disturbed (25-49% Exotics) (FLUCFCS Code 6219 E2)

This habitat type is similar to FLUCFCS Code 6219 E1 but contains 25 to 49 percent Brazilian pepper in the sub-canopy and torpedograss and West Indian marsh grass in the ground cover.

#### Cypress, Disturbed (50-75% Exotics) (FLUCFCS Code 6219 E3)

This habitat type is similar to FLUCFCS Code 6219 E2 but contains 50 to 75 percent Brazilian pepper and melaleuca in the canopy and sub-canopy and torpedograss and West Indian marsh grass in the ground cover.

#### Pine, Hydric, Disturbed (0-24% Exotics) (FLUCFCS Code 6259 E1)

The canopy of this habitat type includes slash pine and widely scattered cabbage palm and melaleuca. The sub-canopy contains slash pine, wax myrtle, melaleuca, and scattered cabbage palm. The ground cover includes rush fuirena (*Fuirena scirpoidea*), little blue maidencane, gulfdune paspalum, Asiatic pennywort, sawgrass, Wright's nutrush, corkwood (*Stillingia aquatica*), jointed spikerush (*Eleocharis interstincta*), musky mint (*Hyptis alata*), yellow-eyed grass (*Xyris sp.*), Southern beaksedge (*Rhynchospora microcarpa*), rayless goldenrod (*Bigelowia nudata*), and torpedograss.

#### Pine, Hydric, Disturbed (25-49% Exotics) (FLUCFCS Code 6259 E2)

This habitat type is similar to FLUCFCS Code 6259 E1, but with 25 to 49 percent melaleuca in the canopy and sub-canopy and Wright's nutrush and torpedograss in the ground cover.

#### Pine, Hydric, Disturbed (50-75% Exotics) (FLUCFCS Code 6259 E3)

This habitat type is similar to FLUCFCS Code 6259 E2, but with 50 to 75 percent melaleuca in the canopy and sub-canopy and Wright's nutrush in the ground cover.

#### Wetland Shrub, Disturbed (25-49% Exotics) (FLUCFCS Code 6319 E2)

The canopy of this habitat type includes scattered melaleuca. The sub-canopy contains wax myrtle, saltbush, and scattered bald cypress and melaleuca. The ground cover includes little blue maidencane, spreading beaksedge (*Rhynchospora divergens*), slender spikerush (*Eleocharis baldwinii*), Tracy's beaksedge (*Rhynchospora tracyi*), and rush (*Juncus sp.*).

#### Freshwater Marsh, Disturbed (0-24% Exotics) (FLUCFCS Code 6419 E1)

The canopy of this habitat type is primarily open with scattered bald cypress and scattered melaleuca on the edges. The sub-canopy contains scattered wax myrtle, corkwood, bald cypress, melaleuca, and widely scattered Carolina willow (*Salix caroliniana*). The ground cover includes dotted smartweed (*Persicaria punctata*), shortleaf spike sedge (*Cyperus brevifolius*), witchgrass, spikerush (*Eleocharis cellulosa*), sawgrass, maidencane (*Panicum hemitomon*), fireflag (*Thalia geniculata*), soft rush (*Juncus effusus*), Wright's nutrush, and West Indian marsh grass.

<u>Freshwater Marsh, Disturbed (25-49% Exotics) (FLUCFCS Code 6419 E2)</u> This habitat type is similar to FLUCFCS Code 6419 E1, but with 25 to 49 percent torpedograss, Wright's nutrush, and West Indian marsh grass in the ground cover.

<u>Freshwater Marsh, Disturbed (50-75% Exotics) (FLUCFCS Code 6419 E3)</u> This habitat type is similar to FLUCFCS Code 6419 E2, but with 50 to 75 percent torpedograss, Wright's nutrush, and West Indian marsh grass in the ground cover.

<u>Wet Prairies</u>, Disturbed (50-75% Exotics) (FLUCFCS Code 6439 E3) The canopy and sub-canopy of this habitat type include scattered melaleuca. The ground cover contains torpedograss, Wright's nutrush, broomsedge, and Southern beaksedge.

#### 2.2 Indigenous Upland Habitats

Palmetto Prairie, Disturbed (0-24% Exotics) (FLUCFCS Code 3219 E1)

The canopy of this habitat type is primarily open with scattered melaleuca on the edges. The sub-canopy contains saw palmetto and scattered Brazilian pepper. The ground cover includes carpetgrass (*Axonopus* sp.), chocolateweed (*Melochia spicata*), saw palmetto, and grass-leaved goldenrod (*Euthamia graminifolia*).

Palmetto Prairie, Disturbed (25-49% Exotics) (FLUCFCS Code 3219 E2) This habitat type is similar to FLUCFCS Code 3219 E1, but with 25 to 49 percent melaleuca in the sub-canopy.

<u>Palmetto Prairie, Disturbed (50-75% Exotics) (FLUCFCS Code 3219 E3)</u> This habitat type is similar to FLUCFCS Code 3219 E2, but with 50 to 75 percent Brazilian pepper and melaleuca in the sub-canopy.

#### Pine Flatwoods, Disturbed (0-24% Exotics) (FLUCFCS Code 4119 E1)

The canopy of this habitat type includes slash pine and live oak (*Quercus virginiana*). The sub-canopy contains saw palmetto, muscadine grapevine (*Vitis rotundifolia*), slash pine, scattered laurel oak, and widely scattered wax myrtle and melaleuca. The ground cover includes bahiagrass (*Paspalum notatum*), false fennel, chocolateweed, live oak, little blue maidencane, muscadine grapevine, spermacoce (*Spermacoce verticillata*), broomsedge, and scattered saw palmetto.

<u>Pine Flatwoods</u>, <u>Disturbed (25-49% Exotics) (FLUCFCS Code 4119 E2)</u> This habitat type is similar to FLUCFCS Code 4119 E1, but with 25 to 49 percent Brazilian pepper in the sub-canopy.

<u>Pine Flatwoods</u>, <u>Disturbed (50-75% Exotics) (FLUCFCS Code 4119 E3)</u> This habitat type is similar to FLUCFCS Code 4119 E2, but with 50 to 75 percent melaleuca and Brazilian pepper in the canopy and sub-canopy.

#### Pine, Disturbed (0-24% Exotics) (FLUCFCS Code 4159 E1)

The canopy of this habitat type contains slash pine and scattered cabbage palm, live oak, and melaleuca. The sub-canopy consists of slash pine, cabbage palm, laurel oak, and widely scattered melaleuca and Brazilian pepper. The ground cover is primarily open with widely scattered spermacoce, muscadine grapevine, and carpetgrass.

#### Pine, Disturbed (25-49% Exotics) (FLUCFCS Code 4159 E2)

This habitat type is similar to FLUCFCS Code 4159 E1, but with 25 to 49 percent melaleuca and Brazilian pepper in the canopy and sub-canopy and spermacoce in the ground cover.

#### Pine, Disturbed (50-75% Exotics) (FLUCFCS Code 4159 E3)

This habitat type is similar to FLUCFCS Code 4159 E2, but with 50 to 75 percent earleaf acacia (*Acacia auriculiformis*), Java plum (*Syzgium cumini*), and Brazilian pepper in the sub-canopy and caesarweed (*Urena lobata*) in the ground cover.

#### Live Oak, Disturbed (0-24% Exotics) (FLUCFCS Code 4279 E1)

The canopy of this habitat type includes live oak and widely scattered slash pine. The subcanopy contains scattered saw palmetto, live oak, and American beautyberry (*Callicarpa americana*). The ground cover is primarily open with scattered basketgrass (*Oplismenus* sp.) and caesarweed. Hardwood/Conifer Mixed, Disturbed (0-24% Exotics) (FLUCFCS Code 4349 E1) The canopy of this habitat type includes slash pine, live oak, laurel oak, cabbage palm, and widely scattered melaleuca. The sub-canopy contains laurel oak, wax myrtle, Java plum, cabbage palm, slash pine, saw palmetto, live oak, Brazilian pepper, rusty staggerbush (Lyonia ferruginea), and widely scattered melaleuca. The ground cover includes carpetgrass, cabbage palm, muscadine grapevine, Asiatic pennywort, caesarweed, earleaf greenbrier, saw palmetto, dog fennel, broomsedge, and spermacoce.

<u>Hardwood/Conifer Mixed, Disturbed (25-49% Exotics) (FLUCFCS Code 4349 E2)</u> This habitat type is similar to FLUCFCS Code 4349 E1, but with 25 to 49 percent Brazilian pepper in the sub-canopy.

<u>Hardwood/Conifer Mixed, Disturbed (50-75% Exotics) (FLUCFCS Code 4349 E3)</u> This habitat type is similar to FLUCFCS Code 4349 E2, but with 50 to 75 percent Brazilian pepper in the sub-canopy and caesarweed in the ground cover.

<u>Mixed Hardwoods</u>, <u>Disturbed (0-24% Exotics) (FLUCFCS Code 4389 E1)</u> The canopy of this habitat type includes live oak, laurel oak, and scattered cabbage palm. The sub-canopy contains live oak, laurel oak, cabbage palm, and scattered myrsine (*Myrsine cubana*). The ground cover is primarily open with scattered live oak.

#### 3.0 EXISTING NON-INDIGENOUS VEGETATION

Approximately  $359.60\pm$  acres (53.2 percent) of the proposed conservation areas consist of vegetation communities that do not meet the LDC's definition of indigenous vegetation. Existing non-indigenous wetlands within the conservation areas total  $301.50\pm$  acres and consist primarily of disturbed native wetland habitats with greater than 75 percent coverage by exotics, such as Brazilian pepper, melaleuca, torpedograss, and Wright's nutrush. Non-indigenous uplands within the conservation areas total  $58.10\pm$  acres and consist primarily of improved pasture. Non-indigenous areas also include  $6.90\pm$  acres of OSW and  $16.80\pm$  acres of berms that will be removed and replanted with native wetland and upland plantings. The non-indigenous wetland and upland vegetation communities and surface waters are identified in Appendix C. Listed below are the FLUCFCS descriptions of the non-indigenous habitats on the Project site.

#### 3.1 Non-Indigenous Wetland Habitats

#### Low Pasture (FLUCFCS Code 262)

The canopy and sub-canopy of this land use type are open. The ground cover includes torpedograss, witchgrass, dog fennel, marsh pennywort, Wright's nutrush, yellow-eyed grass, melaleuca, and Asiatic pennywort.

#### Melaleuca, Hydric (FLUCFCS Code 4241)

The canopy of this habitat type includes melaleuca. The sub-canopy contains melaleuca, Brazilian pepper, and cabbage palm. The ground cover includes little blue maidencane, broomsedge, torpedograss, sawgrass, swamp fern (*Telmatoblechnum serrulatum*), swamp

flatsedge, Southern beaksedge, Wright's nutrush, false hop sedge (*Carex lupuliformis*), and widely scattered maidencane.

Mixed Wetland Hardwoods, Disturbed (76-100% Exotics) (FLUCFCS Code 6179 E4) This habitat type is similar to FLUCFCS Code 6179 E3, but with 76 to 100 percent Peruvian primrose willow (*Ludwigia peruviana*) in the sub-canopy.

#### Cypress, Disturbed (76-100% Exotics) (FLUCFCS Code 6219 E4)

This habitat type is similar to FLUCFCS Code 6219 E3, but with 76 to 100 percent melaleuca in the canopy and sub-canopy and torpedograss and West Indian marsh grass in the ground cover.

<u>Pine, Hydric, Disturbed (76-100% Exotics) (FLUCFCS Code 6259 E4)</u> This habitat type is similar to FLUCFCS Code 6259 E3, but with 76 to 100 percent melaleuca and Brazilian pepper in the canopy and sub-canopy.

# <u>Freshwater Marsh, Disturbed (25-49% Exotics) (FLUCFCS Code 6419 E4)</u> This habitat type is similar to FLUCFCS Code 6419 E3, but with 76 to 100 percent torpedograss, Wright's nutrush, and West Indian marsh grass in the ground cover.

Wet Prairies, Disturbed (76-100% Exotics) (FLUCFCS Code 6439 E4) This habitat type is similar to FLUCFCS Code 6439 E3, but with 76 to 100 percent torpedograss and Wright's nutrush in the ground cover.

#### Disturbed Land, Hydric (FLUCFCS Code 7401)

The canopy of this land use type includes scattered melaleuca, slash pine, and laurel oak. The sub-canopy contains scattered melaleuca and wax myrtle. The ground cover includes torpedograss, yellow-eyed grass, and acute spikerush (*Eleocharis acutangula*).

#### 3.2 Non-Indigenous Upland Habitats

#### Improved Pasture (FLUCFCS Code 211)

The canopy of this land use type is primarily open with scattered cabbage palm and melaleuca. The sub-canopy contains scattered wax myrtle, live oak, cabbage palm, and Brazilian pepper. The ground cover consists of bahiagrass, carpetgrass, broomsedge, dog fennel, grass-leaved goldenrod, bermudagrass (*Cynodon dactylon*), and tropical soda apple (*Solanum viarum*).

<u>Palmetto Prairie, Disturbed (76-100% Exotics) (FLUCFCS Code 3219 E4)</u> This habitat type is similar to FLUCFCS Code 3219 E3, but with 76 to 100 percent Brazilian pepper and melaleuca in the canopy and sub-canopy.

<u>Pine Flatwoods, Disturbed (76-100% Exotics) (FLUCFCS Code 4119 E4)</u> This habitat type is similar to FLUCFCS Code 4119 E3, but contains 76 to 100 percent melaleuca and Brazilian pepper in the canopy and sub-canopy.

#### Pine, Disturbed (FLUCFCS Code 4159 E4)

This habitat type is similar to FLUCFCS Code 4159 E3 but with 76 to 100 percent melaleuca in the canopy and sub-canopy.

#### Brazilian Pepper (FLUCFCS Code 422)

The canopy and sub-canopy of this habitat type contain Brazilian pepper and scattered melaleuca. The ground cover is primarily open and includes earleaf greenbrier and muscadine grapevine.

#### Melaleuca (FLUCFCS Code 424)

The canopy of this habitat type includes melaleuca and scattered Java plum. The subcanopy contains Brazilian pepper, melaleuca, Java plum, and widely scattered slash pine, wax myrtle, and cabbage palm. The ground cover includes broomsedge, bahiagrass, dog fennel, spermacoce, cabbage palm, little blue maidencane, and scattered saw palmetto.

#### Hardwood/Conifer Mixed, Disturbed (76-100% Exotics) (FLUCFCS Code 4349 E4)

This habitat type is similar to FLUCFCS Code 4349 E3, but with 76 to 100 percent earleaf acacia in the canopy and Brazilian pepper in the sub-canopy.

#### Disturbed Land (FLUCFCS Code 740)

The canopy of this land use type is primarily open with scattered slash pine and cabbage palm. The sub-canopy contains scattered wax myrtle, slash pine, saw palmetto, and Brazilian pepper. The ground cover includes bahiagrass, chocolateweed, lovegrass (*Eragrostis* sp.), broomsedge, and dog fennel.

#### Spoil Area (FLUCFCS Code 743)

The canopy of this land use type is open. The sub-canopy contains Brazilian pepper. The ground cover includes bahiagrass, dog fennel, and spermacoce.

#### Berm (FLUCFCS Code 747)

The canopy of this land use type includes live oak, cabbage palm, slash pine, melaleuca, and Brazilian pepper. The sub-canopy includes live oak, slash pine, Brazilian pepper, and saw palmetto. The ground cover contains caesarweed, muscadine grapevine, dog fennel, cabbage palm, and broomsedge.

#### 3.3 Non-Indigenous Surface Waters

#### Ditch (FLUCFCS Code 514)

The canopy of this land use type is open. The sub-canopy contains Brazilian pepper, cabbage palm, live oak, and slash pine along the edges. The ground cover includes dotted smartweed (*Persicaria punctata*), torpedograss, Asiatic pennywort, Gulf Coast spikerush, dwarf papyrus (*Cyperus haspan*), frog fruit, Mexican clover (*Richardia* sp.), and small-fruit primrose willow (*Ludwigia microcarpa*).

#### Ditch, Hydric (FLUCFCS Code 514 H)

This habitat type is similar to FLUCFCS Code 514 H with a higher prevalence of wetland vegetation species such as torpedograss.

#### Cow Pond (FLUCFCS Code 525)

The canopy and sub-canopy of this land use type are open. The ground cover includes scattered torpedograss along the edges.

#### 4.0 INDIGENOUS VEGETATION PRESERVATION AND ENHANCEMENT

A total of  $295.80\pm$  acres ( $205.70\pm$  acres of wetlands and  $90.10\pm$  acres of uplands) with less than 75 percent existing exotic vegetation will be preserved and enhanced by the hand-removal/treatment of exotic and nuisance vegetation. The locations of the indigenous preservation areas are shown on Appendix D.

#### 4.1 Methods to Remove and Control Exotic and Nuisance Plants

Exotics to be eradicated include, but are not limited to, the 21 species of prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

Common Name	Scientific Name
Air potato	Dioscorea alata
Australian pines	All Casuarina species
Bishopwood	Bischofia javanica
Brazilian pepper	Schinus terebinthifolia
Carrotwood	Cupaniopsis anacardioides
Chinese tallow	Sapium sebiferum
Cork tree	Thespesia populnea
Cuban laurel fig	Ficus microcarpa
Downy rose-myrtle	Rhodomyrtus tomentosus
Earleaf acacia	Acacia auriculiformis
Japanese climbing fern	Lygodium japonicum
Java plum	Syzygium cumini
Melaleuca	Melaleuca quinquenervia
Murray red gum	Eucalyptus camaldulensis
Old World climbing fern	Lygodium microphyllum
Rose apple	Syzygium jambos
Rosewood	Dalbergia sissoo

#### Table 2. Prohibited Invasive Exotics

#### Table 2. (Continued)

Common Name	Scientific Name
Tropical soda apple	Solanum viarum
Wedelia	Wedelia trilobata
Weeping fig	Ficus benjamina
Woman's tongue	Albizia lebbeck

Exotic and nuisance vegetation removal will be conducted primarily by hand methods. Hand treatment will be either by the felling of exotic trees, hand-removal, and herbicide treatment of the tree stumps; or by hand-pulling and removal. The treatment of exotic and nuisance vegetation will include one or more of the following methods: (1) cut exotics within 12 inches of ground elevation, hand-remove cut vegetation, and treat the remaining stump with approved herbicide; (2) foliar application of approved herbicide or hand pulling of exotic seedlings; and (3) foliar application of approved herbicide to nuisance grasses.

#### 4.2 Debris Removal

Exotic vegetative debris that is cut will be removed from the indigenous preserve areas. Exotic debris may be stacked in the adjacent agricultural lands for disposal but shall not be burned. The preserve areas will be inspected annually for trash/garbage. Any trash/garbage located within the preserve areas will be removed and disposed of by hand.

#### 4.3 Method and Frequency of Pruning and Trimming

Exotic removal within the existing indigenous habitats is scheduled to begin after development order approval. After completing the initial exotic removal, semi-annual inspections of the preserves will occur for the first two years. During these inspections, the conservation areas will be traversed by a qualified ecologist. Locations of nuisance and/or exotic species will be identified for immediate treatment with an appropriate herbicide. Any additional potential problems will also be noted, and corrective actions will be taken. Once exotic/nuisance species levels have been reduced to acceptable limits, inspections of the conservation areas will be conducted a minimum of once every two years.

After the initial exotic removal, all subsequent exotic maintenance will be hand-removal only. Maintenance will be conducted in perpetuity to ensure that the conservation areas are free of exotic vegetation, including the prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

#### 5.0 INDIGENOUS VEGETATION RESTORATION

Restoration and re-establishment of indigenous vegetation communities will be conducted in areas with greater than 75 percent coverage by exotic vegetation within the conservation areas. Restoration activities will include 359.60± acres of exotic removal and supplemental plantings in

existing forested and herbaceous habitats with greater than 75 percent exotics. Additionally,  $6.90\pm$  acres of OSW will be backfilled and  $16.80\pm$  acres of berms within the conservation areas will be removed and replanted with native wetland and upland vegetation. The locations of the various types of restoration areas are shown on Appendix D.

The restoration activities will result in the re-establishment of indigenous vegetation communities throughout the Project site. Due to the proximity to SWFIA, the restoration activities within the Buffer will include like-for-like habitat restoration to maintain similar structural characteristics within the preserve areas and minimize wildlife attractants. For example, a melaleuca forest will be replaced with native trees and an exotic-infested marsh will be replanted with herbaceous vegetation. Photographs providing examples of like-for-like habitat restoration are included as Appendix E. Plantings within the Buffer will be consistent with LCPA's Compatible Native Landscape List (Appendix F). The location of the Buffer is shown on Appendix D. In addition to the re-establishment of indigenous vegetation, extensive berm removal activities will restore the hydrologic connectivity that historically existed among the on-site wetland communities.

#### 5.1 Removal of Exotics and Supplemental Plantings

Approximately  $359.60\pm$  acres (301.50 $\pm$  acres of wetlands and  $58.10\pm$  acres of uplands) with greater than 75 percent exotics will be enhanced by removing exotic species and supplemental plantings of native vegetation. This includes 229.79± acres of wetlands and 53.88± acres of upland located within the Buffer that will be subjected to like-for-like habitat restoration and compliance with LCPA's Compatible Native Landscape List. Mechanical equipment may be utilized to assist in the removal of exotic species in these areas. The mechanical removal areas will be flagged in the field and approved by Lee County Department of Community Development (DCD) staff prior to issuance of a vegetation removal permit. Cut vegetative debris will be removed from these areas to allow for successful supplemental plantings. All efforts will be made to preserve native trees when conducting the exotic removal with mechanized equipment. To minimize adverse impacts to the ground surface, machinery that exerts a relatively low impact on the ground surface (i.e., tracked skid steer, feller-buncher) will be utilized within the mechanical removal areas. To prevent ground disturbance, mechanical equipment will not be utilized in areas of the preserve that are saturated or inundated. If rutting occurs, the ground surface will be restored to natural grade with the use of low impact equipment or by hand methods such as raking.

Following the removal of exotics, supplemental wetland plantings will be installed in the  $301.50\pm$  acres of wetland habitats. Wetland plantings will be selected based on the type of native vegetation that occurs in the adjacent or nearby wetland habitats. Tree and ground cover species will be planted according to the specifications in Table 2. A minimum of three tree species and three ground cover species will be planted. The species selected for planting will depend on market availability at the time the plantings are to occur. Additional tree and ground cover species may be included in the planting table with approval from Lee County staff.

Plant material installed in wetland restoration areas located within the Buffer (229.79± acres) will adhere to the LCPA Compatible Native Landscape List (Appendix F).

Common Name	Scientific Name	Minimum Height	Container Size	Planting Instruction (On Center)
	Trees (minimum t	hree species)	1	
Bald cypress*	Taxodium distichum	2 to 5 ft.	BR to 3 gal.	20 ft.
Dahoon holly (male only)*	Ilex cassine	2 to 5 ft.	BR to 3 gal.	20 ft.
Laurel oak*	Quercus laurifolia	2 to 5 ft.	BR to 3 gal.	20 ft.
Pond apple	Annona glabra	2 to 5 ft.	BR to 3 gal.	20 ft.
Pop ash	Fraxinus caroliniana	2 to 5 ft.	BR to 3 gal.	20 ft.
Red maple	Acer rubrum	2 to 5 ft.	BR to 3 gal.	20 ft.
Slash pine*	Pinus elliottii var. densa	2 to 5 ft.	BR to 3 gal.	20 ft.
Swamp bay*	Persea palustris	2 to 5 ft.	BR to 3 gal.	20 ft.
	Ground Cover (minim	um three spec	ties)	
Alligator flag*	Thalia geniculata	12 in.	2 in.	3 to 5 ft.
Arrowhead	Sagittaria lancifolia	12 in.	2 in.	3 to 5 ft.
Blue maidencane	Amphicarpum muhlenbergianum	12 in.	2 in.	3 to 5 ft.
Dense-flower knotweed	Polygonum glabrum	12 in.	2 in.	3 to 5 ft.
Fakahatchee grass*	Tripsacum dactyloides	12 in.	2 in.	3 to 5 ft.
Golden canna	Canna flaccida	12 in.	2 in.	3 to 5 ft.
Gulfdune paspalum	Paspalum monostachyum	12 in.	2 in.	3 to 5 ft.
Maidencane	Panicum hemitomon	12 in.	2 in.	3 to 5 ft.
Muhly grass*	Muhlenbergia capillaris	12 in.	2 in.	3 to 5 ft.
Pickerelweed	Pontederia cordata	12 in.	2 in.	3 to 5 ft.
Sand cordgrass*	Spartina bakeri	12 in.	2 in.	3 to 5 ft.
Sawgrass	Cladium jamaicense	12 in.	2 in.	3 to 5 ft.
Soft-stem bulrush	Scirpus validus	12 in.	2 in.	3 to 5 ft.
Spikerush*	Eleocharis interstincta	12 in.	2 in.	3 to 5 ft.
Swamp lily	Crinum americanum	12 in.	2 in.	3 to 5 ft.
Wiregrass*	Aristida stricta	12 in.	2 in.	3 to 5 ft.

Table 5. Supplemental wettand Flanting	Table 3.	Supplemental Wetland Plantings <sup>1</sup>
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BR - Bare root

<sup>1</sup>Plantings to be installed in Indigenous Wetland Restoration (301.50± acres) \*Compatible with LCPA plant list.

Following the removal of exotic vegetation, supplemental upland plantings will be installed in 58.10± acres of upland habitats. Upland plantings will be selected to replace the type of native vegetation that occurs in the adjacent or nearby upland habitats. Tree plantings will include primarily slash pine, although other tree species listed in Table 3 may be utilized. Upland tree and ground cover plantings will be installed according to the specifications listed in Table 3. A minimum of two tree species and three ground cover species will be planted. The species selected for planting will depend on market availability at the time the plantings are to occur. Additional tree and ground cover species may be included in the planting table with approval from Lee County staff.

Plant material installed in upland restoration areas located within the Buffer (53.88± acres) will adhere to the LCPA Compatible Native Landscape List (Appendix F).

Common Name	Scientific Name	Minimum Height	Minimum Container Size	Planting Instruction (On Center)
	Trees (minimum	two species)		
Laurel oak*	Quercus laurifolia	2 to 5 ft.	BR to 3 gal.	20 ft.
Live oak	Quercus virginiana	2 to 5 ft.	BR to 3 gal.	20 ft.
Slash pine*	Pinus elliottii var. densa	2 to 5 ft.	BR to 3 gal.	20 ft.
	Ground Cover (minim	um three spee	cies)	
Blue maidencane	Amphicarpum muhlenbergianum	12 in.	2 in.	3 to 5 ft.
Broomsedge	Andropogon virginicus	12 in.	2 in.	3 to 5 ft.
Fakahatchee grass*	Tripsacum dactyloides	12 in.	2 in.	3 to 5 ft.
Gulfdune paspalum	Paspalum monostachyum	12 in.	2 in.	3 to 5 ft.
Muhly grass*	Muhlenbergia capillaris	12 in.	2 in.	3 to 5 ft.
Sand cordgrass*	Spartina bakeri	12 in.	2 in.	3 to 5 ft.
Saw palmetto*	Serenoa repens	12 in.	l gal.	8 ft.
Wiregrass*	Aristida stricta	12 in.	2 in.	3 to 5 ft.

#### Table 4. Supplemental Upland Plantings<sup>1</sup>

<sup>1</sup>Plantings to be installed in Indigenous Upland Restoration (58.10± acres) \*Compatible with LCPA planting list. BR – Bare root

#### 5.2 OSW Backfilling, Berm Removal, and Supplemental Plantings

Historic aerials show the property was formerly used for agricultural operations. As part of the historic agricultural surface water management, an extensive network of ditches and berms have been constructed on the property which has led to the partitioning of wetland systems within the site. This includes a historic farm road that bisects the site and precludes hydrologic connectivity between wetland systems located in the northern and southern portions of the property. This road has been used by the SFWMD to represent the dividing line between the Estero River and Six Mile Cypress sub-watersheds.

To restore the hydrologic connectivity that historically existed among the on-site wetland communities,  $16.80\pm$  acres of berms will be removed and  $6.90\pm$  acres of OSW (i.e., agricultural ditches) will be backfilled using the berm material. This includes  $13.7\pm$  acres of OSW and berm material that will be restored to wetlands and  $10\pm$  acres of OSW and berm material that will be restored to uplands. Of the  $13.7\pm$  acres of OSW and berm that will be restored to uplands. Of the  $13.7\pm$  acres of OSW and berm that will be restored to uplands. Of the  $13.7\pm$  acres of OSW and berm that uplands,  $9.61\pm$  acres are located within the Buffer and will be subjected to like-for-like habitat restoration and compliance with LCPA's Compatible Native Landscape List (Appendix F). Similarly, of the  $10\pm$  acres of OSW and berm that will be

restored to uplands,  $8.78\pm$  acres located within the Buffer will be subjected to like-for-like habitat restoration and compliance with LCPA's Compatible Native Landscape List (Appendix F). These areas will be regraded to match adjacent natural grade and planted with native vegetation according to the specifications listed in Tables 2 and 3.

The proposed hydrologic restoration activities are designed to reconnect the Project's wetland systems and are not anticipated to increase wetland hydroperiods. Activities that could increase wetland hydroperiods, such as excavating/lowering the ground surface or creating impoundments, are not proposed as they could potentially attract hazardous wildlife. The main objective of the hydrologic restoration is to facilitate the north to south flow of water through the Project site that existed historically while maintaining existing wetland hydroperiods. It is anticipated that cypress and freshwater marsh systems will maintain long hydroperiods (approximately 180-270 days) while hydric pine and mixed wetland hardwood hammocks will maintain short hydroperiods (approximately 30-60 days), consistent with SFWMD habitat characterizations (SFWMD 2007).

A flow path will be established in the central portion of the site which will facilitate a hydrologic connection between the Estero River and Six Mile Cypress sub-watersheds. Per coordination with LCPA staff, the flow path was designed to be a closed (i.e., piped with no open standing water) system so it would not function as a wildlife attractant. The location of the flow path is shown on Appendix D. A cross-section showing how the flow path is intended to function is provided as Appendix G. The flow path will connect two short hydroperiod wetland habitat types (i.e., hydric pine and mixed wetland hardwoods); therefore, hydrologic connection between these systems is anticipated to occur only during peak wetland water levels or after large storm events.

#### 6.0 BUFFER REQUIREMENTS

The MCP indicates that portions of the indigenous preserve and restoration areas will be utilized to meet Type D buffer requirements. The Type D buffer area is approximately 1,320 linear feet; therefore, this area must contain 66 trees and 872 shrubs per LDC requirements. If sufficient native vegetation does not exist within the preserve area to meet the Type D requirement, tree and shrub plantings will be installed in accordance with Table 5. Plant material installed will adhere to the LCPA Compatible Native Landscape List (Appendix F).

	Table 5.	Buffer	Plantings
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Common Name	Scientific Name	Minimum Height	Container Size
	Wetland Trees1		
Bald cypress*	Taxodium distichum	10 ft.	15 gal.
Dahoon holly (male only)*	Ilex cassine	10 ft.	15 gal.
Laurel oak*	Quercus laurifolia	10 ft.	15 gal.
Pond apple	Annona glabra	10 ft.	15 gal.
Pop ash	Fraxinus caroliniana	10 ft.	15 gal.

Table 5. (	Continued)

Common Name	Scientific Name	Minimum Height	Container Size
	Wetland Trees <sup>1</sup>		
Red maple	Acer rubrum	10 ft.	15 gal.
Slash pine*	Pinus elliottii var. densa	10 ft.	15 gal.
Swamp bay*	Persea palustris	10 ft.	15 gal.
	Wetland Shrubs		
Pitchapple*	Clusia rosea	24 in.	3 gal.
Wax myrtle	Myrica cerifera	24 in.	3 gal.
Gallberry*	Ilex glabra	24 in.	3 gal.
Myrsine*	Myrsine cubana	24 in.	3 gal.
Buttonbush	Cephalanthus occidentalis	24 in.	3 gal.
Cocoplum	Chrysobalanus icaco	24 in.	3 gal.
	Upland Trees		
Laurel oak*	Quercus laurifolia	10 ft.	15 gal.
Live oak	Quercus virginiana	10 ft.	15 gal.
Slash pine*	Pinus elliottii var. densa	10 ft.	15 gal.
	Upland Shrubs		
Wax myrtle	Myrica cerifera	24 in.	3 gal.
Pitchapple*	Clusia rosea	24 in.	3 gal.
Bahama cassia*	Cassia bahamensis	24 in.	3 gal.
Gallberry*	Ilex glabra	24 in.	3 gal.
Rusty lyonia*	Lyonia ferruginea	24 in.	3 gal.
Firebush*	Hamelia patens	24 in.	3 gal.
Saw palmetto*	Serenoa repens	24 in.	3 gal.
Myrsine*	Myrsine cubana	24 in.	3 gal.
Cocoplum	Chrysobalanus icaco	24 in.	3 gal.

<sup>1</sup>Tree Plantings must have a minimum four-foot spread and two-inch caliper width. \*Compatible with LCPA planting list.

#### 7.0 RESTORATION ACTIVITY SCHEDULE

Site development and restoration may occur in phases. Details of phasing will be addressed at the time of Development Order. Restoration activities in each phase (e.g., Phases 1, 2, etc.) will be completed within ten years or sooner from the date of issuance of the first development order for that phase. The initial Development Order must include all indigenous vegetation preservation, enhancement, and restoration, and hydrologic restoration to support the phased site plan and corresponding density.

#### 8.0 SUCCESS CRITERIA

#### 8.1 Indigenous Wetland and Upland Preservation and Enhancement

The following are the success criteria for the indigenous preserve areas:

- 1) Initial eradication of exotic and nuisance vegetation will be completed; and
- 2) The preserve areas will be maintained free from exotic vegetation. Exotic vegetation species include, but are not limited to, the 21 species of prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

#### 8.2 Indigenous Wetland and Upland Restoration

The following are the success criteria for the indigenous wetland and upland restoration areas:

- 1) Initial eradication of exotic and nuisance vegetation will be completed;
- 2) Removal of berms and backfilling of ditches will be completed;
- 3) Supplemental plantings will be completed in the indigenous restoration areas;
- 4) A minimum 80 percent survival of tree and ground cover plantings after five years; and
- 5) The preserve areas will be maintained free from exotic vegetation. Exotic vegetation species include, but are not limited to, the 21 species of prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

#### 9.0 MAINTENANCE

After completing the initial exotic removal, semi-annual inspections of the conservation areas will occur for the first two years. During these inspections, the conservation areas will be traversed by a qualified ecologist. Locations of nuisance and/or exotic species will be identified for immediate treatment with an appropriate herbicide. Any additional potential problems will also be noted, and corrective actions will be taken. Once exotic/nuisance species levels have been reduced to acceptable limits, inspections of the conservation areas will be conducted annually.

After the initial exotic removal, all subsequent exotic maintenance will be hand-removal only. Maintenance will be conducted in perpetuity to ensure that the conservation areas are free of exotic vegetation, including the prohibited invasive exotic species listed in Section 10-420(h) of the LDC (Table 1).

#### **10.0 MONITORING REPORTS**

Monitoring will be conducted annually for the conservation areas. Annual reports documenting the achievement of the success criteria outlined in Section 8.0 will be submitted to Lee County DCD staff. Annual monitoring reports will be provided for five years after the Certificate of Compliance has been issued by the DCD or until 80 percent survivability is reached. Monitoring

will typically be conducted during the height of the growing season (August to October), with annual reports submitted by January 15. The timing of monitoring may be adjusted based on environmental conditions.

Annual monitoring reports will be provided as described above. The monitoring reports will include documented exotic and nuisance species, mortality of vegetation, estimated causes of mortality, growth of the vegetation, wildlife observed, photographs, and factors that demonstrate the functional health of the conservation areas. A brief description of anticipated maintenance work to be conducted over the next year will also be included. Periodic inspections will be conducted by DCD staff to ensure the accuracy of the monitoring reports.

#### 11.0 LONG-TERM MANAGEMENT AND MONITORING

The conservation areas will be placed in a conservation easement granted to Lee County and the SFWMD with third-party enforcement rights to the Florida Department of Environmental Protection and U.S. Fish and Wildlife Service. The conservation easement will prevent the encroachment of future development as well as activities that are incompatible with the goal of sustaining the preserved and restored conservation areas in good ecological health. Responsibility for long-term management of the conservation areas will shift to the Community Development District or Homeowners' Association following the completion of enhancement and restoration activities on-site. Long-term management of exotic and nuisance vegetation, debris removal, and methods and frequency of trimming and pruning will adhere to the requirement outlined in Section 4.0 of this plan.

#### 12.0 PRESERVE SIGNAGE AND COMMUNITY EDUCATION PLAN

Signs identifying the preserve as a "nature preserve area" will be installed along the boundary of the conservation areas. The signage will include language stating, "No dumping allowed." The signs will be spaced a maximum of 300 feet apart. The signs will be no closer than ten feet from residential property lines and be limited to a maximum height of four feet and a maximum size of two square feet. A typical preserve sign is attached as Appendix H.

Community informational and educational brochures, such as those describing the benefits of preserve areas, may be created and provided as needed to keep residents in compliance with conservation easements, wildlife regulations, etc. Continued education will ensure that the community is well-informed regarding the preserves and wildlife coexistence. A separate Protected Species Management and Human-Wildlife Coexistence Plan has been prepared to address human-wildlife conflicts.

#### **13.0 REFERENCES**

Florida Department of Transportation. 1999. Florida Land Use, Cover and Forms Classification System (FLUCFCS). Procedure No. 550-010-001-a. Third Edition. Florida Natural Areas Inventory. 2010. Guide to the Natural Communities of Florida: 2010 Edition. Florida Natural Areas Inventory, Tallahassee, Florida.

South Florida Water Management District. 2007. Pre-Development Vegetation Communities of Southern Florida. Technical Publication HESM-02.

## APPENDIX A

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# PROJECT LOCATION MAP

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### **APPENDIX B**

# RARE AND UNIQUE UPLAND PRESERVE MAP



#### NOTES:

PROPERTY BOUNDARY AND PRESERVE AREA PER MORRIS DEPEW DRAWING NO. PRESERVE BOUNDARIES & PROPERTY BOUNDARY.DWG DATED MAY 2, 2022.

SITE PLAN PER MORRIS DEPEW DRAWING NO. 21008-01 PARCELS.DWG DATED MAY 3, 2022.

SWFIA 10.000" HAZARDOUS WILDLIFE BUFFER PER MORRIS DEPEW DRAWING No. 21008-01 X-102 OPEN SPACE.DWG DATED APRIL 25, 2022.

FLUCFCS LINES ESTIMATED FROM I\*200' AERIAL PHOTOGRAPHS AND LOCATIONS APPROXIMATED.

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

UPLAND/WETLAND LIMITS WERE FIELD REVIEWED AND APPROVED BY SFWMD STAFF ON JANUARY 14, 20, AND 21, 2022.

DRAWN BY	DATE	13620 Metropolis Avenue	the second s		DRAWING No.
1.S. REVIEWED BY	8/12/22 DATE 8/12/22	Suite 200 Fort Myers, Florida 33912	Passarella	DANIELS PARKWAY SOUTH	19LLL3192
S.J. REVISED	8/12/22 DATE	Phone (239) 274-0067 Fax (239) 274-0069	Consulting & ASSOCIATES	RARE AND UNIQUE UPLAND PRESERVE MAP	SHEET No. APPENDIX B

L3192/GIS

# APPENDIX C

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# AERIAL WITH SFWMD FLUCFCS AND WETLANDS MAP





SFWMD WETLANDS (532.51 Ac.±) SFWMD "OTHER SURFACE WATERS" (30.93 Ac. $\pm$ )

SURVEYED WETLAND LINE

CODES	DESCRIPTIONS	ACREAGE	TOTAL			- A REPART
211	IMPROVED PASTURE	473,76 Ac. +	38.4%	1 All and the second		The state of the state
262	LOW PASTURE	27.96 Ac. +	2.3%			The second second
3219 E1	PALMETTO PRAIRIE, DISTURBED (0-24% EXOTICS)	3.13 Ac. +	0.3%		·	With the second second
3219 E2	PALMETTO PRAIRIE, DISTURBED (25-49% EXOTICS)	415 Ac.+	0.3%		A STATE OF A	V. BERNET
3219 E3	PALMETTO PRAIRIE, DISTURBED (50-75% EXOTICS)	2.11 Ac.+	0.2%			AND DEPARTMENT
3219 E4	PALMETTO PRAIRIE, DISTURBED (76-100% EXOTICS)	0.73 Ac. +	0.1%	the second second		CONTRACTOR
4119E1	PINE FLATWOODS, DISTURBED (0-24% EXOTICS)	53.32 Ac +	4.3%		Contraction of the second s	Heren Land
4119 E2	PINE FLATWOODS, DISTURBED (25-49% EXOTICS)	2879 Ac +	2.3%	the provide the		
4119E3	PINE FLATWOODS, DISTURBED (50-75% EXOTICS)	264 Ac +	0.2%		A AB AN A A A A A A A A A A A A A A A A	a formate de store
4119 E4	PINE FLATWOODS, DISTURBED (76-100% EXOTICS)	2.87 Ac. +	0.2%	Contraction In the second		I String Box B
4159 E1	PINE DISTUBBED (0-24% EXOTICS)	11 18 Ac +	0.9%		A State of the second second second	10000000000000000000000000000000000000
4159 E2	PINE, DISTUBBED (25-49% EXOTICS)	276 Ac +	0.2%			A Startes
4159 E3	PINE, DISTUBBED (50-75% EXOTICS)	207 Ac +	0.2%			
4159 E4	PINE DISTUBBED (76-100% EXOTICS)	1.51 Ac +	0.1%			AND A CONTRACTOR
422	BRAZILIAN PEPPER	3.67 Ac +	0.1%			
424	MELALEUCA	203 Ac +	0.0%	Br. Annum St. Com		
1011	MELALEUCA HYDRIC	2.90 AC. 1	10.270			New House Parts
1070 =1	LIVE OAK DISTUBBED (0.24% EVOTION)	100.24 AC. ±	0.40			Ches Here
42/9E1	CARRAGE RALM HVDRIG (60 75% EVOTION)	1.20 AC.±	0.1%			
4201 E3		11.15 AC.±	0.9%	R AND I THE REAL		
1349 E1		0.52 AC.±	0.5%			Pier approx
4049 52	HARDWOOD/CONIFER MIXED, DISTURBED (25-49% EXOTICS)	6.05 AC.±	0.5%	There all the state of the second		<b>建设的</b> 中的社会在2013年,
4049 20	HARDWOOD/CONIFER MIXED, DISTURBED (30-75% EXOTICS)	7.39 AC.±	0.0%			and play the
4349 E4	HARDWOOD/CONIFER WIXED, DISTORBED (76-100% EXOTICS)	2.49 AC.±	0.2%			The second second
4389 E1	MIXED HARDWOODS, DISTURBED (0-24% EXOTICS)	4.51 AC.±	0.4%			
514		30.71 Ac.±	2.5%	NOTES:		AND DESCRIPTION
514 H	DITCH, HYDRIC	8.14 AC.±	0.7%			MEAN PLANT
525	COW PUND	0.22 Ac.±	0.0%	AERIAL PHOTOGRAPHS WERE ACQUIRE	D	A State of the state
61/9E1	MIXED WEILAND HARDWOODS, DISTURBED (0-24% EXOTICS)	30.69 Ac.±	2.5%	THROUGH THE LEE COUNTY PROPERTY		C C
61/9E2	WIXED WETLAND HARDWOODS, DISTURBED (25-49% EXOTICS)	1.77 Ac.±	0.1%	APPRAISER'S OFFICE WITH FLIGHT		
6179E3	MIXED WETLAND HARDWOODS, DISTURBED (50-75% EXOTICS)	1.48 Ac.±	0.1%	DATES OF JANUARY - MARCH 2021.		STATE OF THE
6179E4	MIXED WETLAND HARDWOODS, DISTURBED (76-100% EXOTICS)	3.35 Ac.±	0.3%			
6219 E1	CYPHESS, DISTURBED (0-24% EXOTICS)	17.46 Ac.±	1.4%	PROPERTY BOUNDARY PER MORRIS DEF	PEW AND ALL MARKED AND ALL AND	國國著自己的自己
6219 E2	CYPHESS, DISTURBED (25-49% EXOTICS)	48.22 Ac.±	3.9%	DRAWING No. PRESERVE BOUNDARIES.	DWG	A AND
6219E3	CYPHESS, DISTURBED (50-75% EXOTICS)	11.90 Ac.±	1.0%	DATED MARCH 15, 2022.		
6219 E4	CYPHESS, DISTURBED (76-100% EXOTICS)	8.66 Ac.±	0.7%	SUBVEYED WETLAND LINES DED MODE		
6259 E1	PINE, HYDRIC, DISTURBED (0-24% EXOTICS)	1.37 Ac.±	0.1%	SURVETED WEILAND LINES PER MORR	07	SAN ROLLE
6259 E2	PINE, HYDRIC, DISTURBED (25-49% EXOTICS)	11.69 Ac.±	0.9%	WETLAND ELAG LOCATION TO		
6259 E3	PINE, HYDRIC, DISTURBED (50-75% EXOTICS)	25.38 Ac.±	2.1%	PASSARELLA DWG DATED FERDUARY		
6259 E4	PINE, HYDRIC, DISTURBED (76-100% EXOTICS)	1.72 Ac.±	0.1%	II 2022		A REAL PROPERTY.
6319 E2	WETLAND SHRUB, DISTURBED (25-49% EXOTICS)	5.63 Ac.±	0.5%			
6419E1	FRESHWATER MARSH, DISTURBED (0-24% EXOTICS)	15.59 Ac.±	1.3%	FLUCECS LINES ESTIMATED FROM I"=2	00'	THE ALL STREET
6419 E2	FRESHWATER MARSH, DISTURBED (25-49% EXOTICS)	2.67 Ac.±	0.2%	AERIAL PHOTOGRAPHS AND LOCATION	S	(in Acre)
6419 E3	FRESHWATER MARSH, DISTURBED (50-75% EXOTICS)	17.65 Ac.±	1.4%	APPROXIMATED.		
6419 E4	FRESHWATER MARSH, DISTURBED (76-100% EXOTICS)	126.88 Ac. ±	10.3%	and the second se		Contraction of the second
6439 E3	WET PRAIRIES, DISTURBED (50-75% EXOTICS)	7.24 Ac.±	0.6%	FLUCFCS PER FLORIDA LAND USE. COV	/ER	
6439 E4	WET PRAIRIES, DISTURBED (76-100% EXOTICS)	3.37 Ac.±	0.3%	AND FORMS CLASSIFICATION SYSTEM		TEN ST
740	DISTURBED LAND	6.47 Ac.±	0.5%	(FLUCFCS) (FDOT 1999).		The strait
7401	DISTURBED LAND, HYDRIC	9.30 Ac.±	0.8%	2000-19-10-19-24 30-2-40 AB-9-242	and the second se	
743	SPOIL AREA	0.21 Ac.±	0.0%	UPLAND/WETLAND LIMITS HAVE NOT E	BEEN	
747	BERM	39.18 Ac.±	3.2%	REVIEWED BY ANY REGULATORY AGEN	ICY AND	A ALLEN
	TOTAL	1233.08 Ac.±	100.0%	ARE SUBJECT TO CHANGE.	「「大学」では、「「「「「学校」」	ALL PROVIDE
						a fin
PF/TS	DATE 13620 Metropolis Avenue	-	-		DANIELC DOAD COUTU	DRAWING No.
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.1./ D.1.	S/LL/LL Phone (230) 274.0067	Consultin	W C	10000LATTON	AERIAL WITH SFWMD FLUCFCS AND	SHEET No.
ISED	DATE Fax (230) 274 0060	beologis	a de 1	ISSOCIATESZ	WETLANDS MAP	APPENDIX
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### APPENDIX D

# INDIGENOUS VEGETATION PRESERVATION, RESTORATION, AND MANAGEMENT PLAN



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	e	e
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### **APPENDIX E**

# LIKE-FOR-LIKE HABITAT RESTORATION EXAMPLES



Pre-restoration forested habitat containing dense exotic melaleuca trees.



Post-restoration forested habitat containing LCPA-compatible native cypress trees.



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Pre-restoration freshwater marsh habitat containing a monoculture of exotic torpedograss.



Post-restoration freshwater marsh habitat containing a mixture of LCPA-compatible native ground cover species (e.g., alligator flag, spikerush, cordgrass).

### **APPENDIX F**

# LCPA COMPATIBLE AND NON-COMPATIBLE PLANT LIST

# LCPA Compatible and Non-Compatible Plant List

LCPA worked in conjunction with a Federal Aviation Administration (FAA) Qualified Airport Wildlife Biologist and local landscape architects to develop compatible and incompatible plant lists. In general, the goal is to reduce or eliminate landscaping materials that would provide food, water, or shelter and/or a combination of these basic needs that attract either large flocks of birds or birds that pose a high risk to aviation. For example, flocks of blackbirds, large raptors, flocks of ducks, large wading birds, or flocks of shorebirds could pose a high risk to aviation.

The landscape list categories are described below and a list of species for each category is provided in Table 1. The table provides a breakdown of each category by native and non-native trees/palms, shrubs, and grasses/groundcovers that are suitable for the southwest Florida environment. Please note that this list is provided for guidance only. Exception may be warranted due to additional requirements or site specific constraints.

### **Compatible - Group 1**

Plant materials listed under this category are not known to attract high risk species or flocking birds. While all plants have the ability to provide some type of attractant to wildlife (including prey base for hazardous species), Group 1 species are considered compatible and can be used in any number, density, or arrangement. If a wildlife hazard attractant arises that could pose a threat to aviation, LCPA will work with Lee County staff and the landowner to determine if measures could be put in place to reduce the attractant.

### **Compatible - Group 2**

Plant materials listed under this category may attract high risk species or flocking birds under certain circumstances. No large groupings of these species should be utilized in an effort to minimize their attractiveness to wildlife. The allowable size grouping of these species will vary based on the site setting and should be reviewed on a case by case basis. The corresponding note to the Group 2 species in Table 1 will explain restrictions or guidance on using the plant materials. If these plants are planned for use, LCPA staff should be included in review of the landscape plan. If a wildlife hazard attractant arises that could pose a threat to aviation, LCPA will work with Lee County staff and the landowner to determine if measures could be put in place to reduce the attractant.

### **Non-Compatible**

Plant materials listed under this category are known to attract high risk species or flocking birds. Species on this list are not recommended for use.

Common Nomo	Scientific Name	Comp	atible	Incompatible
common Name		Group 1	Group 2	
Native Trees / Palms				
Gumbo Limbo	Bursera simaruba	Х		
Green Buttonwood	Conocarpus erectus	Х		
Silver Buttonwood	Conocarpus erectus var. sericeus	Х		
Orange Geiger	Cordia sebestena	Х		
Loblolly Bay	Gordonia lasianthus	Х		
Florida Anise	Illicum floridanum	Х		
Swamp Bay	Persea palustris	X		
Jamaican Dogwood	Piscidia piscipula	X		
Mahogany	Swietenia mahogany	X		
Paurotis Palm	Acoelorrhaphe wrightii	X		
Royal Palm	Roystonea regia	X		
Jamacia caper	Capparis cynophallophora	X		
Sweetgum	Liquidambar styraciflua	Х		
Florida Soapberry	Sapindus saponaria	X	N	
Florida Thatch Palm	Thrinax radiata	X		
Dahoon Holly (male only)	llex cassine		Х	
Yaupon Holly (male only)	llex vomitoria		Х	
Sweetbay Magnolia	Magnolia virginiana		X	
South Florida Slash Pine	Pinus elliottii var. densa		x	
Laurel Oak	Quercus laurifolia		X	
Cypress	Taxodium spp.		x	
Cabbage Palm	Sabal palmetto		Х	
Red Maple	Acer rubrum			X
Pond Apple	Annona glabra			X
Satin Leaf	Chrysophyllum oliviforme			X
Pigeon Plum	Coccoloba diversifolia			X

Common Nama	Scientific Name	Comp	atible	Incompatible
common Name	Sciencific Nume	Group 1	Group 2	
Sea Grape	Coccoloba uvifera			X
Florida Silver Palm	Coccothrinax argentata			X
Pop Ash	Fraxinua caroliniana			X
Southern Red Cedar	Juniperus silicicola			X
Mastic	Mastichodendron foetidissimum			X
Wax Myrtle	Myrica cerifera			X
Live Oak	Quercus virginiana			X
American Elm	Ulmus americana			X
Non-Native Trees/Palm	S			
Shady Lady / Black Olive	Bucida buceras	Х		
Crapemyrtle	Lagerstoemia spp.	Х		
Verawood	Bulnesia arborea	Х		
Bismark Palm	Bismarchia nobilis	Х		
Orange Geiger	Cordia sebestena	Х		
Floss Silk Tree	Chorisia speciosa	Х		
Gold Tabebuia	Tabebuia chrysotricha	Х		
Purple Tabebuia	Tabebuia impetiginosa	X		
Montgomery palm	Veitchia montgomeryana	X		
Silver Thatch Palm	Thrinax morrissi	X		
Blue Atlas Cedar	Cedrus atlantica 'Glauca'	X		
Royal poinciana	Delonix regia	X		
Yellow Elder	Tecoma stans	Х		
White Bird of Paradise	Strelitzia reginae	X		
Jaboticaba Tree	Myrciaria cauliflora	X		
Lignum Vitae	Guaiacum sanctum	Х	-	
Bottlebrush	Callistemon spp.	X		
Chinese Fan Palm	Livistona chinensis	Х		
Macarthur Palm	Ptychosperma macarthurii	Х		
Native Shrubs				
Small Leaf Clusia	Clusia guttifera	Х		
Blue Porterweed	Statytarpheta urticifolia	Х	S	

Common Name	Scientific Name	Comp	atible	Incompatible
common Name		Group 1	Group 2	
Bahama Cassia	Cassia bahamensis	Х		
Pitch Apple	Clusia rosea	Х		
Adam's Needle	Yucca filamentosa	X		
Coastal Sea Rocket	Cakile lanceolata	Х		
Jamacia caper	Capparis cynophallophora	Х		
Golden Dewdrop	Duranta erecta	X		
Coral Bean	Erythrina herbacea	Х		
Wild Cotton	Gossypium hirsutum	Х		
Wild Sage	Lantana involucrate	Х		
Rusty Lyonia	Lyonia ferruginea	X		
Gallberry/Inkberry	llex glabra	Х		
Maidenbush	Heterosavia bahamaensis	X		
Dwarf Yaupon Holly (male only)	llex vomitoria		Х	
Firebush	Hamelia patens		X	
Yellow Necklacepod	Sophora tomentosa var. truncata		X	
Green Saw Palmetto	Serenoa repens		X	
American Beautyberry	Callicarpa americana			X
Cocoplum	Chrysobalanus icaco			X
Spanish Stopper	Eugenia foetida			Х
Florida Privet	Forestiera segregata			Х
Simpson Stopper	Myrcianthes fragrans			X
Myrsine	Myrsine cubana			Х
Wild Coffee	Psychotria nervosa			X
Shiny Blueberry	Vaccinium myrsinites			X
Wild Lime	Zanthoxylum fagara		1	X
Walter's Viburnum	Viburnum obovatum			X
Non-Native Shrubs				
Golden Thryallis	Galphimia gracillis	Х		
Ixora "Nora Grant"	Ixora "Nora Grant"	Х		
Jatropha	Jatropha integerrima	X		

Common Namo	Scientific Name	Comp	atible	Incompatible
common Name		Group 1	Group 2	
Dwarf Poinciana	Caesalpinia pulcherrima	Х		
Green Pitosporum	Pittosporum tobira 'Wheeleri'	Х		
Blue Plumbago	Plumbago auriculata	Х		
Yesterday-Today-Tomorrow	Brunfelsia grandiflora	Х		
Native Grasses & Groundo	cover			
Sword Fern	Nephrolepis exaltata	X		
Leather fern	Acrostichum danaeifolium	Х		
Sunshine mimosa, powderpuff	Mimosa strigillosa	Х		in (
Coontie	Zamia pumila	Х		
Chalky Bluestem	Andropogon virginicus var. glaucu	Х		
Wiregrass	Aristida beyrichiana	Х		
Muhlygrass	Muhlenbergia capillaris	Х		
Grassleaf Golden Aster	Pityopsis graminifolia	Х		
Dwarf Blue Porterweed	Statytarpheta jamaicensis	Х		
Narrowleaf Blue-Eyed Grass	Sisyrinchium angustifolium	х		
Fakahatchee Grass	Tripsacum dactyloides		Х	
Sand Cordgrass	Spartina bakeri		x	
Golden Creeper	Ernodea littoralis			X
Purple Love Grass	Eragrostis spectabilis			X
Gopher Apple	Licania michauxii			X
Non-Native Grasses & Gro	oundcover			
Orange Bromeliad	Aechmea blanchetiana	Х		
Imperial Bromeliad	Aechmea imperialis	Х		
Dwarf Bougainvillea	Bougainvillea sp.	Х		
Crinum Lily	Crinum asiaticum	Х		
Purple Lantana	Lantana montevidensis	Х		
Yellow Lantana	Lantana camara	Х		
Variegated Ginger	Alpinia zerumbet "Variegata"	Х		
Liriope "Emerald Goddess"	Liriope muscari	Х		

Common Nomo	Scientific Name	Comp	atible	Incompatible
common Name	Sciencific Nume	Group 1	Group 2	
Crown of Thorns	Euphorbia milii	X		
African Iris	Dietes spp	Х		
Bulbine	Bulbine frutescens	Х		
Lily of the Nile	Agapanthus orientalis	Х		
Society Garlic	Tulbaghia violacea	Х		
Blueberry Flax Lily	Dianella tasmanicata 'Variegata'	X		
Yellow Alder	Turnera ulmifolia	Х		
Gulf Croton	Croton punctatus	X		
Ligustrum	Ligustrum japonicum			Х
Fountain grass	Pennisetum setaceum			X
Indian hawthorn	Rhaphiolepsis indica			X
Parson's juniper	Juniperus squamata expansa			X
Perennial Peanut	Arachis glabrata			X
Native Wildflowers				
Butterfly Weed	Asclepias tuberosa	Х		
Leavenworth's Tickseed	Coreopsis leavenworthii	Х		
Button Snakeroot	Eryngium yuccifolium	Х		
Blanket Flower	Gaillardia pulchella	Х	1	
Florida Pennyroyal	Piloblephis rigida	Х		
Wild Petunia	Ruellia caroliniensis	Х		
Tropical Sage	Salvia coccinea	X		
Adam's Needle	Yucca filamentosa	Х		
Beach Sunflower	Helianthus debilis		X	
Native Wetland Plants				
Lemon Bacopa	Bacopa caroliniana	х		
Water Hyssen	Bacona manniari	Y		
Ctring Like		X		
String Lily	Crinum americanum	X		
Knotted Spikerush	Eleocharis interstincta	Х		

Common Name	Scientific Name	Comp	atible	Incompatible
common Name	Sciencific Nume	Group 1	Group 2	
Perfumed Spiderlily	Hymenocallis latifolia	Х		
Cinnamon Fern	Osmunda cinnamomea	Х		
Alligator Flag	Thalia geniculata	X		
Black Needle Rush	Juncus roemerianus			X
Pickerelweed	Pontederi cordata			X
Arrowhead, Duck Potato	Sagittaria spp.			X

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# **APPENDIX G**

# **CROSS-SECTION OF PROPOSED FLOW PATH**



### **APPENDIX H**

# TYPICAL PRESERVE SIGNAGE



### DANIELS PARKWAY SOUTH PROTECTED SPECIES MANAGEMENT AND HUMAN-WILDLIFE COEXISTENCE PLAN

**Revised September 2022** 

Prepared For:

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Prepared By:

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Project No. 19LLL3192

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#### 1.0 INTRODUCTION

This report documents the Protected Species Management and Human-Wildlife Coexistence Plan for Daniels Parkway South (Project). The management plan contained in this report pertains to the Eastern indigo snake (*Drymarchon corais couperi*), gopher tortoise (*Gopherus polyphemus*), American alligator (*Alligator mississippiensis*), crested caracara (*Caracara cheriway*), listed wading birds, Big Cypress fox squirrel (*Sciurus niger avicennia*), Florida black bear (*Ursus americanus floridanus*), and Florida panther (*Puma concolor coryi*).

The Project totals 1,233.08± acres and is located in Sections 8, 9, 16, 17, and 21; Township 45 South; Range 26 East; Lee County (Appendix A). The site is bordered to the north by Daniels Parkway, to the east by single-family residential development and undeveloped land, to the west by a Florida Power & Light (FPL) transmission line and undeveloped land, and to the south by Lee County's Wild Turkey Strand Preserve.

The property consists of large, continuous portions of herbaceous and forested upland and wetland habitats. These habitats include hydric melaleuca, freshwater marsh, pine flatwoods, cypress, and hydric pine with varying degrees of exotic vegetation. Improved pasture comprises the remaining balance of the property. Historic aerials show the property was formerly used for agricultural operations. As part of the historic agricultural surface water management, an extensive network of ditches and berms have been constructed on the property which has led to the partitioning of wetland systems within the site. This includes a historic farm road that bisects the site and precludes hydrologic connectivity between wetland systems located in the northern and southern portions of the property. This road has been used by the South Florida Water Management District (SFWMD) to represent the dividing line between the Estero River and Six Mile Cypress subwatersheds.

### 2.0 LISTED SPECIES SURVEYS

Passarella & Associates, Inc. (PAI) conducted a Lee County protected species survey (PSS) on the Project site for ten days between May 11 and June 24, 2021. The survey was conducted to meet Lee County Land Development Code (LDC) Chapter 10, Article III, Division 8 (Protection of Habitat) standards. Six Lee County protected species and their signs (e.g., scat, tracks, nests, etc.) were documented during the PSS and other fieldwork conducted by PAI. The protected wildlife species directly observed by PAI included gopher tortoise, crested caracara, Florida sandhill crane (*Grus canadensis pratensis*), wood stork (*Mycteria americana*), and Big Cypress fox squirrel. In addition, a crested caracara nest was previously documented in the northern portion of the Project, and Florida panther tracks were also documented on the property. No other listed species nests or nesting activity were observed on the Project during the PSS or other fieldwork.

No Lee County protected plant species were observed on the property during the protected species survey. However, the giant wild pine (*Tillandsia utriculata*), common wild pine (*Tillandsia fasciculata*), Northern needleleaf (*Tillandsia balbisiana*), butterfly orchid (*Encyclia tampensis*), and rigid orchid (*Epidendrum rigidum*) were documented on the site. Although not listed as Lee

County protected species, these species are listed by the Florida Department of Agriculture and Consumer Services.

Table 1 summarizes the listed wildlife species that have been documented during the PSS and other fieldwork on the Project site.

C N		Listing Status	
Common Name	Scientific Name	FWCC	USFWS
	Reptiles		
Gopher tortoise	Gopherus polyphemus	ST	*
	Birds		
Crested caracara	Caracara cheriway	FT	T
Florida sandhill crane	Grus canadensis pratensis	ST	
Wood stork	Mycteria americana	FE	E
	Mammals		
Big Cypress fox squirrel	Sciurus niger avicennia	ST	e e
Florida panther (tracks)	Puma concolor coryi	FE	E

### Table 1. Listed Wildlife Species Documented

FWCC - Florida Fish and Wildlife Conservation Commission

USFWS - U.S. Fish and Wildlife Service

E - Endangered

FE - Federally Endangered

FT - Federally Threatened

ST - State Threatened

T - Threatened

### 3.0 CONSERVATION AREAS

The proposed conservation areas total 679.10± acres. The conservation areas will be maintained in accordance with the Indigenous Preservation, Restoration, and Management Plan (IPRMP) provided under separate cover. The conservation areas will be managed to provide habitat for listed species.

The Project has been designed to minimize impacts to the listed species that have been identified on the property and other listed wildlife species that could potentially utilize the site. The site plan minimizes impacts to existing native vegetation habitats and concentrates development primarily within the existing agricultural lands.

The indigenous vegetation enhancement and restoration activities within the conservation areas include:

 Preservation and enhancement of 295.80± acres of indigenous wetlands and uplands (existing forested and herbaceous habitats with less than 75 percent exotics);

- Restoration of 359.60± acres of indigenous wetlands and uplands through the removal of exotic vegetation (existing forested and herbaceous habitats with greater than 75 percent exotics) and supplemental planting;
- Backfilling 6.9± acres of other surface waters and replanting with native wetland and upland vegetation; and
- Removal of 16.8± acres of berms and planting with native wetland and upland vegetation.

The preservation, enhancement, and restoration of indigenous vegetation and removal of agricultural berms will facilitate the interconnection of historic flow-ways and wetland communities within the Project site. This includes a hydrologic connection between the two historically severed basins (i.e., Six Mile Cypress Sub-Watershed and Estero River Sub-Watershed), similar to what existed prior to the intensive agricultural land uses.

Due to the proximity to Southwest Florida International Airport (SWFIA), the restoration activities will include like-for-like habitat restoration to minimize wildlife attractants. For example, a melaleuca forest will be replaced with native trees and an exotic-infested marsh will be replanted with herbaceous vegetation. Plantings within the SFWIA 10,000-foot Hazardous Wildlife Buffer (Buffer) will be consistent with Lee County Port Authority's (LCPA) Compatible Native Landscape List. The planting details are provided in the IPRMP provided under separate cover.

The conservation areas will be managed for the listed species observed during the PSS and for listed species that could potentially utilize the Project site. Target listed species include the Eastern indigo snake, gopher tortoise, American alligator, crested caracara, listed wading birds, Big Cypress fox squirrel, Florida black bear, and Florida panther. To minimize potential wildlife attractants, enhancement and restoration activities will adhere to the hazardous wildlife protection measures included in Section 7.0 of this plan.

The conservation areas will be placed in a conservation easement with inspection, enforcement, and approval rights granted to Lee County and the SFWMD. The total preserve area to be placed under a conservation easement is  $679.10\pm$  acres.

### 4.0 WILDLIFE CROSSINGS

1

To maintain internal connectivity for wildlife and promote the restoration of historic flow-ways through the property, wildlife crossings will be installed where the proposed internal roads cross the conservation areas. An aerial depicting the proposed location of the wildlife crossings is provided as Appendix B. The wildlife crossings will generally be designed to accommodate the passage of small mammals, reptiles, and amphibians. However, engineering and construction plans at the time of the Lee County Development Order application may reflect larger crossings designed to facilitate movement through the Project site by larger wildlife. As currently proposed, the wildlife crossing will be a culvert pipe or similar structure with the invert at natural grade. A section of low-level chain link fencing (i.e., three to four feet tall), or other structures approved by the Department of Community Development (DCD), will be installed on either side of the invert

to direct wildlife through the crossings. If utilized, larger crossings may consist of a bridge, large box culvert, or similar structure.

### 5.0 PERIMETER BUFFER LAKES AND FENCING

The Project site design includes perimeter buffer lakes and fencing between the residential development and conservation areas. The goal of the buffer lakes and fencing is to effectively deter Florida panther prey species (i.e., white-tailed deer (*Odocoileus virginiana*) and hog (*Sus scrofa*)) from entering residential areas. Deterring prey species form entering the development area will minimize the incentive for Florida panther to enter the Project area and reduce the potential for human-wildlife interactions. The wildlife fence and buffer lakes will also serve to accommodate the movement of wildlife among the conservation areas as described in Section 4.0 above.

The wildlife fencing will consist of a six-foot chain link fence which has previously been approved by the Florida Fish and Wildlife Conservation Commission (FWCC) for projects in Southwest Florida. The locations of the proposed buffer lakes and fencing are depicted on Appendix B.

### 6.0. COMMERCIAL USES

The Daniels Parkway South Master Plan includes dedicated commercial use adjacent to Daniels Parkway and State Road 82. To minimize potential human-wildlife interaction, educational brochures provided in this plan will be provided to commercial tenants. Commercial development will be required to minimize wildlife attractants by securing all exterior food and water sources.

Commercial uses, including restaurants, must secure exterior trash containers with locking lids and periodically clean cans to reduce residual odors. Grease traps will be located underground. Bear-resistant dumpsters will be used in areas where communal garbage is collected. A list of companies obtained from the FWCC that provide bear-resistant garbage containers for commercial use is provided as Appendix C. In consultation with the local waste disposal company, bearresistant dumpsters will be purchased from one of the listed companies or another company that is able to provide bear-resistant dumpsters which are compatible with local equipment. The bearresistant dumpsters will be incorporated at the time Lee County's waste collection sub-contractor makes them available for use.

### 7.0 HAZARDOUS WILDLIFE PROTECTION MEASURES

Due to the proximity to SWFIA, reducing human-wildlife interactions within the SWFIA Buffer is of paramount importance to the Project's restoration plan. Per communications with LCPA Staff and guidance from the Federal Aviation Administration (FAA) Advisory Circular (AC) No. 150/5200-33C regarding hazardous wildlife attractants on or near airports, the Project has incorporated multiple minimization measures within the Buffer, as described below.

Lakes developed for the Project's stormwater management system will incorporate a hardened shoreline (e.g., rip-rap) and/or steep slopes to minimize wading bird attractants. These lakes will also be maintained in a manner that keeps them free of both emergent and submergent vegetation such as pickerelweed (*Pontederia cordata*) and red ludwigia (*Ludwigia repens*). As required by the Lee Plan, the Project must preserve, enhance, and restore indigenous habitats. However, to avoid inconsistency with the LCPA's wildlife hazard deterrence efforts, the Project will not create wetlands within the Buffer. Existing wetland and upland habitats will be managed such that they are restored, where applicable, in a "like-for-like" manner as described in Section 3.0 above. In addition, plantings installed within the Buffer will adhere to the LCPA Compatible Native Plant List. Furthermore, the hydrologic restoration proposed within the conservation areas will be focused on interconnecting wetland systems and is not anticipated to increase wetland hydroperiods within the site.

Prior to construction, the applicant will coordinate a wildlife monitoring program with the LCPA and DCD staff. The monitoring program will consist of periodic observations within the development footprint and preserve areas by a qualified biologist to help identify and reduce potential wildlife hazards during construction activities, dewatering, exotic vegetation removal, and other site preparation activities. In addition, the monitoring plan will include specific construction-related Best Management Practices (BMPs) similar to what has been implemented for projects at Southwest Florida International Airport. The BMPs that will be incorporated into the wildlife monitoring program include, but are not limited to:

- Construction contractors must carefully control and continuously remove waste or loose material that might attract wildlife.
- Construction personnel must be aware of and avoid construction activities that can create wildlife hazards on airports.
- Trash and food scraps from construction personnel activity must be collected and properly disposed of.
- Except for stormwater management lakes and areas specifically designated for dewatering, large pools of water that collect within the development area shall be eliminated at the earliest opportunity to minimize wildlife attractants.
- 5. All turf grass replacement shall be completed via sodding. Seeding shall not be utilized.
- 6. Construction contractor shall communicate with the project biologist at least five days in advance prior to making any changes to hydrology in the construction area. Initiation of hydrologic changes shall be timed to minimize the attractiveness for dusk and dawn scavengers.
- 7. Construction and fill activities that turn-up organic materials, vegetation, or soils that contain food (crustaceans, invertebrates, fish, or others) should be minimized to the extent possible. Construction areas shall minimize the time that turned-up material is left exposed to the extent practicable.
- 8. Construction contractor shall allow wildlife the opportunity to move out of harm's way.
- Construction contractor or another designated observer shall immediately dispose of carcasses found on site. This may occur by burying them at a depth of 36-inches or by another acceptable means of disposal.

Wildlife monitoring will occur a minimum of once per week during dewatering and initial exotic vegetation removal activities. However, monitoring may occur more frequently if potential wildlife hazards are identified. If wildlife hazards are identified within the Project, the Project team will coordinate with LCPA staff to immediately correct the issue(s). This may also involve coordination with local, state, and federal permitting agencies.

### 7.1 Lee Plan Consistency

Lee Plan Policy 47.2.5 states that "Hazardous wildlife attractants within 10,000 feet of a Port Authority airport's Air Operation Area (AOA) will be avoided by minimizing and correcting any wildlife hazards arising from wetlands or water bodies in accordance with FAA AC 150/5200-33B, or as otherwise amended. Site improvements on or near the Port Authority's airports must be designed to minimize attractiveness to wildlife of natural areas and man-made features such as detention/retention ponds, landscaping, and wetlands, which can provide wildlife with ideal locations for feeding, loafing, reproduction, and escape." Thus, Policy 47.2.5 is focused on compliance with the FAA AC on hazardous wildlife attractants on or near airports. The following demonstrates how the Project complies with the specific sections of the current FAA AC (150/5200-33C) with respect to minimizing wildlife attractants within the Buffer:

### FAA AC 150/5200-33C

#### Section 2.3.2 – New Stormwater Management Facilities

This section of the AC states: "To facilitate the control of hazardous wildlife, the FAA recommends the use of steep-sided, rip-rap or concrete-lined, narrow, linear-shaped water detention basins." In addition, this section states that "All vegetation in or around detention basins that provide food or cover for hazardous wildlife should be eliminated." Furthermore, this section of the AC recommends designing surface water management features "so as not to create above-ground standing water". As outlined in Section 7.0 of this plan and in the IPRMP, the Project has incorporated the following design modifications to address these issues: 1) Stormwater management lakes located within the Buffer will incorporate hardened shorelines (e.g., rip-rap) and/or steep slopes (i.e., 4:1); 2) stormwater lakes will be maintained in a manner that keeps them free of both emergent and submergent vegetation; and 3) the open water flow path previously proposed to connect the Six Mile Cypress and Estero drainage basins within the Project has been redesigned to be a closed system (i.e., piped with no open standing water). Therefore, the proposed design modifications are consistent with Section 2.3.2 of the AC.

#### Section 2.4.1 – Existing Wetlands on or near Airport Property

This section of the AC states: "At public-use airports, the FAA recommends immediately correcting, in cooperation with local, state, and Federal regulatory agencies, any wildlife hazards arising from existing wetlands located on or near airports within five miles of the

aircraft operations area." As stated in Section 7.0, wildlife hazards identified within the Project will be coordinated with LCPA staff to immediately correct the issue(s). This may also involve coordination with local, state, and federal permitting agencies.

### Section 2.4.3.2 – Off-Site Mitigation of Wetland Functions

This section of the AC states that "The FAA encourages landowners or communities supporting the restoration or enhancement of wetlands to do so only after critically analyzing how those activities would affect aviation safety. To do so, landowners or communities should contact the affected airport sponsor..." "Those parties should work cooperatively to develop restoration or enhancement plans that would not worsen existing wildlife hazards or create such hazards." "If parties develop a mutually acceptable restoration or enhancement plan, the landowner or community proposing the restoration or enhancement must monitor the restored or enhanced site. This monitoring must verify that efforts have not worsened or created hazardous wildlife attraction or activity. If such attraction or activity occurs, the landowner or community should work with airport sponsor...to reduce the hazard to aviation."

The applicant has had several meetings with LCPA staff to thoroughly vet the conceptual site plan and discuss opportunities to minimize wildlife attractants within the site. Based on these meetings, the applicant has incorporated multiple measures in this plan and in the IPRMP to minimize wildlife attractants per LCPA recommendations.

As demonstrated above, the Project is consistent with Sections 2.3.2, 2.4.1, and 2.4.3.2 of FAA AC 150/5200-33C; therefore, the Project is consistent with Lee Plan Policy 47.2.5.

### 8.0 EASTERN INDIGO SNAKE MANAGEMENT PLAN

The Eastern indigo snake has not been documented on-site; however, the following plan outlines the protection guidelines that will be implemented for the Eastern indigo snake during clearing operations for the Project. The plan provides educational material and guidelines for construction personnel to follow in the event they encounter an Eastern indigo snake. The plan has been prepared following the guidelines established by the U.S. Fish and Wildlife Service (USFWS). The Eastern indigo snake is a federally threatened species and is listed by the Endangered Species Act (ESA). It is unlawful for anyone to injure, harm, harass, or kill this species. Persons who knowingly violate provisions of the ESA that afford this species protection may be subject to a fine and/or imprisonment.

### 8.1 Biology

The Eastern indigo snake is a large, non-poisonous, glossy black snake with smooth iridescent scales. The chin and throat may be rusty or white-blotched. The juvenile snakes are similar to the adults, but may be lighter and exhibit a blotched dorsal pattern. Adults

can grow to lengths over eight feet. The Eastern indigo snake might be confused with the black racer (*Coluber constrictor*), but the black racer exhibits a white or brown throat and is smaller and lighter in build.

The Eastern indigo snake inhabits a range of habitat types including pine flatwoods and wet prairies. Individuals are wide ranging and may utilize an area of 250 acres or more. Eastern indigo snakes are known to shelter in gopher tortoise burrows. The Eastern indigo snake is diurnal (active only during the daytime) and will actively search for prey. Prey may include frogs, snakes, birds, and small mammals. Very little is known of the reproduction of this species in the wild. Breeding is believed to occur during the winter and early spring months with up to 11 large white eggs being deposited in late spring and early summer.

### 8.2 Management Plan

The USFWS' Standard Protection Measures for the Eastern Indigo Snake (2013) will be followed prior to and during construction activities. The Standard Protection Measures include the placement of posters at strategic locations on the construction site and along proposed access roads clearly visible to construction staff. The posters include a description and photograph of the Eastern indigo snake, its protection status, and instructions in the event that one is observed. In addition, informational brochures will be provided to all construction staff.

The Project will preserve, enhance, and restore  $679.10\pm$  acres of existing vegetation onsite through the removal of exotic vegetation. The preserve areas will be maintained per the Project's IPRMP and will provide habitat for the Eastern indigo snake.

Problematic encounters between future residents and Eastern indigo snakes are not anticipated. Construction personnel, maintenance staff, and homeowners will be informed that the Eastern indigo snake is a protected species.

### 9.0 GOPHER TORTOISE MANAGEMENT PLAN

One gopher tortoise was observed on the Project site during the PSS. The following plan outlines the management activities that will be implemented for the gopher tortoise prior to the implementation of site clearing. The gopher tortoise is listed as threatened by the FWCC.

### 9.1 Biology

The gopher tortoise is a large, terrestrial turtle averaging 23 to 28 centimeters (9 to 11 inches) in shell length. Maximum length is around 38 centimeters (15 inches). The gopher tortoise is characterized by stumpy, elephantine hind feet and flattened, shovel-like forelimbs adapted for digging. The tan, brown, or gray carapace (top portion of the shell) is domed and oblong. The plastron (bottom portion of the shell) is somewhat concave in

males. Growth annuli may be conspicuous, particularly in juveniles. Hatchlings are approximately 4.4 centimeters (1.7 inches) in length and are yellowish orange in color.

The gopher tortoise occurs in the Southeastern Coastal Plain of the United States from Eastern Louisiana to Southeastern South Carolina and throughout Florida. In Florida, gopher tortoises occur in portions of all 67 counties. Gopher tortoises inhabit a wide variety of upland vegetative communities. Three environmental conditions are especially important for gopher tortoises: well-drained, sandy soil in which to burrow; adequate low-growing herbaceous ground cover for food; and relatively open, sunlit areas for nesting. The gopher tortoise is primarily associated with longleaf pine-scrub oak woodlands (sandhills), but it is also found in sand pine scrub, coastal strands, live oak hammocks, dry prairies, pine flatwoods, and mixed hardwood-pine communities. Disturbed habitats, such as roadsides, fencerows, clearings, and old fields, often support relatively high tortoise densities.

Gopher tortoises excavate burrows averaging 4.5 meters (14.8 feet) in length and 2 meters (6.6 feet) in depth and wide enough to allow them to turn around at any point. These burrows provide protection from temperature extremes, desiccation, and predators and serve as refuges for a variety of other animals. The placement and depth of burrows vary with the soil type, geographic location, and ground water levels. An individual tortoise may use more than one burrow and may excavate new burrows at any time during its life.

Gopher tortoise densities and movements are affected by the amount of herbaceous ground cover present. Generally, feeding activity is confined to within 50 meters (164 feet) of the burrow. Principal foods include grasses, legumes, and grass-like plants of the sedge and aster families. Legumes appear to be particularly important in the diet of juveniles. Fruits such as blackberries, pawpaws, gopher apples, and saw palmetto (*Serenoa repens*) berries are also consumed.

#### 9.2 Management Plan

After construction is completed, the Project may not contain suitable gopher tortoise habitat within the conservation areas necessary for the long-term survivability of the species. No gopher tortoise burrows were located within the Project site during the PSS. However, if gopher tortoise burrows are located within the development footprint and it is not feasible to provide a minimum 25-foot buffer to the burrows, the applicant will obtain a permit from the FWCC to relocate gopher tortoise(s) to a protected recipient site prior to initiating construction activities. The recipient site will be approved by the FWCC and managed in perpetuity, consistent with FWCC's Gopher Tortoise Management Plan (2012).

#### 10.0 AMERICAN ALLIGATOR MANAGEMENT PLAN

No American alligators were observed on-site during the PSS; however, potential nesting and foraging habitat (i.e., wetlands, and freshwater marshes) exists on-site. The following plan outlines the protection guidelines that will be implemented for the American alligator during clearing
operations for the Project. The American alligator is listed as threatened (due to similarity of appearance) by the USFWS and the FWCC.

### 10.1 Biology

The American alligator is a reptile with an elongated, armored, lizard-like body with a muscular flat tail. Adult alligators are dark with a pale underside while juveniles have bright yellow stripes and blotches. The average size for adults is 8.2 feet for females and 11.2 feet for males. The body weight can reach up to a half ton. American alligators inhabit all counties in the State of Florida and are most common in the major river drainage basins and large lakes in the central and southern portions of the state. They also can be found in marshes, swamps, ponds, drainage canals, phosphate-mine settling ponds, and ditches. Alligators are tolerant of poor water-quality and occasionally inhabit brackish marshes along the coast. A few even venture into saltwater. Individuals are wide ranging, and some males may utilize an area of two square miles or more. Individuals of both sexes are most likely to become more active and extend their ranges during the April to May courtship and breeding season. Prey may include frogs, snakes, birds, and small mammals, although alligators are opportunistic feeders and may prey on what is readily available. Larger individuals often prefer carrion to fresh meat.

### 10.2 Management Plan

The proposed Project will not impact the alligator. Alligators commonly move from water body to water body in response to factors such as season, disturbances, food supply, etc. The American alligator is listed as a federally threatened species due to similarity of appearance to the American crocodile (*Crocodylus acutus*). Only representatives of the FWCC are authorized to handle nuisance alligators. If an alligator is present within the limits of construction at the time of clearing, work within the immediate vicinity of the alligator will be halted and the animal will be allowed to move out and into safer territory. Once the alligator has moved, work can be restarted. If an active alligator nest is found, it will be temporarily protected with an adequate buffer zone until the hatchlings leave the nest.

Extensive, high quality American alligator habitat will be provided throughout the property through wetland preservation, enhancement, and restoration. This includes the removal of exotics in approximately 507.2± acres of existing wetlands on the property. These wetlands are predominantly hardwood/conifer, mixed, mixed wetland hardwoods, cypress forest, hydric pine forest, and freshwater marshes habitat types. Invasive exotic removal will result in wetland preserves that are more suitable to alligators and their prey species. The preserve areas will be maintained per the Project's IPRMP.

To avoid problematic encounters between future residents and American alligators, the FWCC's educational brochure entitled "A Guide to Living with Alligators" (Appendix D) will be provided to homeowners and maintenance staff (see Section 16.2).

### 11.0 CRESTED CARACARA MANAGEMENT PLAN

Two crested caracara were observed on the Project site during the PSS. In addition, a crested caracara nest was previously documented in the northern portion of the property. This nest was active during the 2020-2021 caracara nesting season. The following management plan outlines the protection guidelines that will be implemented for the crested caracara prior to clearing activities on the Project and addresses habitat enhancement and restoration on the site. The crested caracara is listed as threatened by the USFWS and the FWCC.

### 11.1 Biology

The crested caracara is a large, non-migratory raptor that feeds both on prey and carrion and is often found with flocks of turkey vultures (*Cathartes aura*) and black vultures (*Coragyps atratus*). The population of crested caracara found in peninsular Florida is genetically isolated from other populations of crested caracara subspecies found in the Southwestern United States and portions of Central and South America (USFWS 1999). While other subspecies of crested caracara are not listed as threatened or endangered, the crested caracara subspecies found in Florida was listed in July 1987 as threatened under the ESA.

Crested caracaras primarily use open habitats including native prairies; grasslands and pastures with their associated freshwater marshes; and small clumps of cabbage palms (*Sabal palmetto*), live oak (*Quercus* spp.) hammocks, and cypress (*Taxodium* spp.). Cabbage palms in open habitats are of high importance for nesting (Rodgers *et al.* 1996, Morrison 2001). The primary nesting season for the crested caracara is November through April. Egg laying typically occurs December through February. Clutch size is one to three eggs and incubation ranges from 28 to 32 days. Caracara young fledge at age seven to eight weeks, mostly in March and April (Wood 2001).

### 11.2 Management Plan

Since a caracara nest has been documented in the northern portion of the Project site, it is anticipated that removal of the nest tree(s) will be negotiated with the USFWS as part of the State 404 permitting process. Prior to clearing activities, a qualified ecologist will survey the construction impact area and adjacent habitats for the presence of crested caracara nests. The removal of any caracara nests located within the Project site will be coordinated with USFWS and DCD staff prior to initiation of construction activities.

The completed Project will preserve, enhance, and restore  $679.10\pm$  acres of native habitat. The conservation areas will contain open freshwater marsh and pine habitat that will provide potential foraging opportunities caracaras.

Problematic encounters between future residents and crested caracaras are not anticipated. Should a caracara choose to nest adjacent to the community or close to approved access areas within the preserves, the nest will be left undisturbed. If unanticipated nest disturbance is noted, then an appropriate no-entry buffer zone will be established around the nest with signage until the young fledge.

### 12.0 WADING BIRD AND FLORIDA SANDHILL CRANE MANAGEMENT PLAN

Although no nesting activity was observed, wood storks were observed on-site during the PSS. In addition, a Florida sandhill crane was also observed utilizing the Project site. It is anticipated that these birds and others, including limpkin (*Aramus guarauna*), little blue heron (*Egretta caerulea*), tri-colored heron (*Egretta tricolor*), and roseate spoonbill (*Platalea ajaja*) may utilize the wetlands and other native habitats on the property. The following management plan has been prepared for the purpose of addressing the management of potential wading bird and Florida sandhill crane habitat on the site.

### 12.1 Management Plan

Prior to clearing activities, a qualified ecologist will survey the construction impact area and adjacent habitats for the presence of Florida sandhill crane and state-listed wading bird nests. If there is evidence of Florida sandhill crane or listed wading bird nesting, the appropriate FWCC-recommended buffer will be provided around the nest site(s) to avoid disturbance by human activities. If Florida sandhill crane or listed wading bird nesting is discovered after construction has begun or if maintaining the buffers is not possible, the applicant will contact the FWCC staff to discuss potential permitting requirements.

The Project proposes preservation and enhancement of wading bird habitat. Foraging areas will be provided through the preservation, enhancement, and restoration of  $507.2\pm$  acres of existing wetlands. To minimize potential wildlife attractants, enhancement and restoration activities will adhere to the hazardous wildlife protection measures included in Section 7.0 of this plan.

Problematic encounters between future residents and Florida sandhill cranes and wading birds are not anticipated. Construction personnel, maintenance staff, and homeowners will be informed that the wading birds are protected species. Additionally, informational pamphlets will be provided to homeowners and maintenance staff (Appendix E) (see Section 16.2).

### 13.0 BIG CYPRESS FOX SQUIRREL MANAGEMENT PLAN

During the PSS, the Big Cypress fox squirrel was observed utilizing forested and disturbed areas on-site. The following management plan has been prepared for the purpose of addressing the conservation of Big Cypress fox squirrel habitat on the Project site and outlines the protection guidelines that will be implemented for the Big Cypress fox squirrel prior to, during, and after construction of the Project. The Big Cypress fox squirrel is listed as threatened by the FWCC. There is no federal listing for the Big Cypress fox squirrel in Florida.

### 13.1 Biology

The Big Cypress fox squirrel lives and breeds in varied habitats in Southwest Florida including cypress swamps, pine flatwoods, tropical hardwood forests, live oak woods, mangrove forests, and suburban habitats, including golf courses, city parks, and residential areas in native vegetation (Humphrey 1992). Dense cypress/hardwood swamps are avoided. This may be due to the competition for food and habitat with the Eastern gray squirrel (*Sciurus carolinensis*). Little data is available on the preferred forage habitat of the Big Cypress fox squirrel. Big Cypress fox squirrels prefer to feed on the male and female cones of slash pine. Cabbage palm fruits, bromeliad (*Bromeliaceae* sp.) buds, and acorns are also important food items. A smaller percentage of the diet may consist of seasonal fruits, berries, and seeds (Humphrey 1992).

Big Cypress fox squirrels often form platform nests in pines and hardwoods, and moss and stick nests in cypress, tops of cabbage palms, and large clumps of bromeliads. Cabbage palms and bromeliads are especially important because they can provide immediate shelter, which allows the squirrel to travel over large areas without requiring a daily return to a permanent nesting facility (Humphrey 1992).

Big Cypress fox squirrels are solitary animals. Interaction between animals occurs primarily during mating season. Mating chases occur frequently throughout the months of May through August. During the non-mating season, interactions are infrequent and often occur around food sources. Young remain in the nest for approximately 90 days. Home ranges are 40 hectares (approximately 100 acres) for males and 20 hectares (approximately 50 acres) for females (Humphrey 1992).

### 13.2 Pre-Construction Surveys

A qualified ecologist will be on-site to supervise Big Cypress fox squirrel management and monitoring activities as detailed in this plan. Prior to clearing activities, the preserve areas will be staked in the field and clearly identified with silt fencing or an equivalent barrier. The fencing will be inspected by the preserve manager prior to clearing activities. The operation and storage of construction equipment and the stock-piling of fill and construction material will be prohibited within the fenced preserve areas. The fencing identifying the limits of the preserves will be maintained for the duration of construction activities.

Also, prior to commencement of clearing activities in the development area and removal of exotic trees within the preserve areas, a survey will be conducted by a qualified ecologist to identify potential Big Cypress fox squirrel nests. If potential nests are identified within the clearing limits or within the preserve areas, observations will be conducted to determine if the nests are being utilized by Big Cypress fox squirrels. The FWCC will be notified of nests determined to be utilized by Big Cypress fox squirrels. Active nests will be temporarily protected from clearing by a 125-foot radius undisturbed buffer until juvenile fox squirrels have vacated the nest(s), as confirmed by a qualified ecologist. After completion of nesting and observations documenting that juvenile fox squirrels have

vacated the nest(s), a written request to remove the nest tree(s) will be made to the FWCC. After receipt of the written authorization from the FWCC, the nest tree and buffer can then be cleared.

### 13.3 Management Plan

Enhancement and restoration of the preserve areas will be conducted as detailed in the IPRMP. The preserve areas will provide foraging and nesting habitats for Big Cypress fox squirrels.

Problematic encounters between future residents and Big Cypress fox squirrels are not anticipated. The typical nest location, high within the tree canopy, will ensure against disturbance to fox squirrel nests. Construction personnel, maintenance staff, and homeowners will be informed that the Big Cypress fox squirrel is a protected species.

### 14.0 FLORIDA BLACK BEAR MANAGEMENT PLAN

Though no Florida black bear or sign of Florida black bear was documented on the Project site during the PSS, it is anticipated that Florida black bears are within the general vicinity of the Project. The following habitat management plan has been prepared for the purpose of addressing the conservation of Florida black bear habitat on the Project site. The Florida black bear is not listed by the FWCC or the USFWS. However, the FWCC and the Lee County LDC have specific management activities for this species.

### 14.1 Biology

The Florida black bear is a subspecies of the American black bear (*Ursus americanus*). The Florida black bear is a solitary animal that inhabits heavily wooded terrain and is most often found in large tracts of swamp forest and undisturbed upland forest. Some of the most important habitat types for the Florida black bear include pine flatwoods, hardwood swamps, cypress swamps, cabbage palm forests, sand pine scrub, and mixed hardwood hammocks. Denning often occurs in remote swamps or thickets with dense vegetation. Adult females breed in alternating years during the months of June and July. In Florida, hibernation may be restricted to females producing cubs. Hibernation most often occurs during the winter months. The diet of Florida black bears is highly variable and includes both plants and animals including saw palmetto berries, honeybees (*Apis* sp.), ants (*Formicidae* sp.), armadillo (*Dasypus novemcinctus*), feral hog (*Sus scrofa*), and white-tailed deer (*Odocoileus virginianus*) (Humphrey 1992).

### 14.2 Management Plan

In order to deter the potential for interactions between humans and large mammals such as the Florida black bear, perimeter buffer lakes and fencing will be utilized between development and the conservation areas to deter large mammals from accessing the development areas. The preserved, enhanced, and restored habitat within the conservation areas will provide habitat for the Florida black bear and associated prey species. Enhancement activities will provide higher quality habitat for the Florida black bear than what currently exists within the site.

To avoid problematic encounters between future residents and Florida black bears, the FWCC's educational brochure entitled "A Guide to Living in Bear Country" (Appendix F) will be provided to homeowners and maintenance staff (see Section 16.4).

### 15.0 FLORIDA PANTHER MANAGEMENT PLAN

No Florida panthers were observed on-site during the PSS; however, panther tracks were observed on-site. The property is located within both the USFWS' Primary and Secondary Zones for the Florida panther. In addition, FWCC Florida panther telemetry has been recorded on the Project site and adjacent properties. The following habitat management plan has been prepared for the purpose of addressing the conservation of Florida panther habitat on the Project site. The Florida panther is listed as endangered by the FWCC and the USFWS.

### 15.1 Biology

The Florida panther is a large, long-tailed cat with a great deal of color variation: pale brown or rusty upper parts; dull white or buff-colored under parts; and dark brown or blackish tail tip, back of ears, and sides of the nose. Mature males have an average weight range between 100 to 150 pounds and measure nearly seven feet from nose to tip of the tail. Females are considerably smaller with a weight range of 50 to 100 pounds and measuring about six feet (USFWS 1987). Panthers subsist on a variety of mammalian prey dominated by white-tailed deer, feral hog, and in some areas raccoon (*Procyon lotor*) (Maehr 1988*a*). Existing data on Florida panther reproduction indicates that breeding occurs throughout the year with a peak in the winter/spring period, a gestation period of around 90 to 95 days, litter sizes of one to four kittens, and a breeding cycle of two years for females successfully raising young to dispersal (which occurs around 18 to 24 months) (Belden 1988, Maehr 1988*b*).

In terms of population size and occupied range, the Florida panther population is at least stable, and at best expanding, as evidenced by natality rates exceeding mortality rates and by recent dispersals north of the Caloosahatchee River (Land *et al.* 2000). According to Maehr *et al.* (1991), home ranges average 200 square miles for resident adult males, 75 square miles for adult females, 241 square miles for transient males, and 69 square miles for sub-adult females. Florida panthers inhabit large remote tracts of land with adequate prey and cover and occupy a variety of habitat types including hardwood hammocks, pine flatwoods, mixed hardwood swamps, and cypress swamps. Appropriate cover is an important component of habitats used, especially during hunting, denning, and daybedding. Recent information based on global positioning system (GPS) telemetry data collected during nocturnal and diurnal periods indicate that forests are the habitats selected by panthers (Land *et al.* 2008).

### 15.2 Management Plan

In order to deter the potential for interactions between humans and large mammals such as the Florida panther, perimeter buffer lakes and fencing will be utilized between development and the conservation areas to deter large mammals from accessing the development areas.

The preserved, enhanced, and restored habitat within the conservation areas will provide habitat and a wildlife corridor for the Florida panther and associated prey species. Enhancement activities will provide higher quality habitat for the Florida panther than what currently exists within the site.

To avoid problematic encounters between future residents and Florida panthers, the educational brochure entitled "A Guide to Living with Florida Panthers" (Appendix G), prepared by the FWCC and the USFWS, will be provided to homeowners and maintenance staff (see Section 16.5).

### 16.0 HUMAN-WILDLIFE COEXISTENCE PLAN

The following Human-Wildlife Coexistence Plans will be incorporated into the declaration of covenants of the Project's Homeowners Association or Community Development District documents.

### 16.1 Eastern Indigo Snake

As previously noted, the USFWS' Standard Protection Measures for the Eastern Indigo Snake (2013) will be followed prior to and during construction activities. The USFWS's Standard Protection Measures, including the poster and brochure, can be found at http://www.fws.gov/verobeach/listedspeciesreptiles.html. A copy of the brochure is provided as Appendix H.

### 16.2 American Alligator

Signs will be posted on the subject property to instruct on-site workers and homeowners not to feed or harass the American alligator. The signs will indicate that the offense is punishable by law. The typical signage is provided as Appendix I. The FWCC's educational brochure entitled "A Guide to Living with Alligators" (Appendix D) will be provided to homeowners and maintenance staff. The brochure can be found at http://myfwc.com/media/152524/Alligator\_Brochure.pdf. Construction personnel and homeowners will be instructed that in the event there is a problem with a persistent nuisance alligator, they should contact the FWCC's Nuisance Alligator Hotline at 866-FWC-GATOR (866-392-4286). The FWCC is the only agency empowered to handle nuisance alligators.

### 16.3 Wading Bird

A wading bird informational brochure entitled "Wading Bird Informational Pamphlet" (Appendix E) will be provided to homeowners and maintenance staff. The brochure provides wading bird information and methods to prevent human-wading bird interactions. In addition, the brochure informs residents of the need to avoid disturbance around a nest(s), should a wading bird nest(s) be identified on the property in the future.

### 16.4 Florida Black Bear

Residents will be educated about the presence of black bears in their community. FWCC's educational brochure entitled "A Guide to Living in Bear Country" (Appendix F) will be provided to homeowners and maintenance staff. This brochure can be found at http://myfwc.com/wildlifehabitats/managed/bear/brochures/.

Garbage and recyclables will be stored in bear-resistant containers with appropriate locking mechanisms, and bear-resistant dumpsters will be used in areas where communal garbage is collected. A list of companies obtained from the FWCC that provide bear-resistant garbage containers for commercial and residential use is provided as Appendix C. Bear resistant receptacles will be required for each residential unit. Please note that Lee County Ordinance No. 11-27 requires individual trash receptacles for residential units of 40 gallons or less in size. In consultation with the local waste disposal company, bear-resistant dumpsters will be purchased from one of the listed companies or another company that is able to provide bear-resistant dumpsters which are compatible with local equipment. They will be incorporated at the time Lee County's waste collection sub-contractor makes them available for use. Units that have curbside garbage service will be required to place garbage containers curbside no earlier than the morning of the days of garbage pickup, and garbage containers will be returned to their permitted location no later than the evening of the days of garbage pickup. For units with curbside garbage service, all garbage, trash refuse, or rubbish will be required to be placed in appropriate garbage containers and stored inside an enclosed area except for the days when there is curbside garbage pickup service. For units without curbside garbage service, all garbage, trash refuse, or rubbish will be placed in bear-resistant dumpsters with the lid closed and secured.

### 16.5 Florida Panther

Residents will be educated about the presence of Florida panthers in their community. The educational brochure entitled "A Guide to Living with Florida Panthers" (Appendix G), prepared by the FWCC and the USFWS, will be provided to homeowners and maintenance staff. This brochure provides safety tips and instructions for panther encounters. The brochure can be found on the FWCC website located at http://myfwc.com/conservation/you-conserve/wildlife/panthers/.

### 17.0 PRESERVE SIGNAGE AND COMMUNITY EDUCATION PLAN

Signs identifying the conservation areas as a "nature preserve area" will be installed along the boundary of the preserve. The signage will include language stating, "No dumping allowed" (Appendix I). The signs will be spaced a maximum of 300 feet apart, will be no closer than ten feet from residential property lines, and will be limited to a maximum height of four feet and a maximum size of two square feet.

Periodic seminars may be held to further educate the community about the conservation areas, wetland benefits, and coexistence with and protection of wildlife. Continued education will ensure that the community is well informed regarding the preserves and wildlife coexistence.

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### **APPENDIX A**

### PROJECT LOCATION MAP



### **APPENDIX B**

t C .

### AERIAL WITH CONSERVATION AREAS AND PROPOSED LOCATIONS OF WILDLIFE CROSSINGS AND FENCING



### APPENDIX C

-i -ii

### BEAR RESISTANT CONTAINER LIST



### **Residential Poly Carts and Cans**



BearProofInc

234 S. Golden Dr. Silt, CO 81652 Ph: (970) 309-2460 Fax: (970) 876-0420 E-mail: <u>Info@BearProofInc.com</u> Website: <u>http://www.bearproofinc.com/</u> Metal Roll Away Container 95 gallon

\* Metal food and trash lockers also available



Bear Proofing-R-US (no address available) Ph: (865) 430-8902 E-mail: <u>akruk@charter.net</u> Website: <u>http://www.bearproofing-r-us.com/</u>

### Residential Street-side Trash Can 96 gallon \*dumpster lids, loaders, and bird feeders also available





### **Bear Proof Systems, LLC**

7855 E. Lark Dr. Parker, CO 80138 Phone: (303) 840-3390/1-800-944-7973 Fax: (303) 840-3460 E-mail: <u>solidws@comcast.net</u> Website: <u>http://www.bearproofsystems.com/</u>

### Curbside Carts 64 gallon 94 gallon \*Also make various metal

containers

### BearSaver – USA Sales

Steve Thompson

Ph: 1-800-851-3887 Fax: 909-605-7780 E-mail: <u>sales@bearsaver.com</u> Website: <u>http://www.bearsaver.com/</u> Bear Resistant Residential Poly Carts <u>Model PC-95</u> 95 gallon (min order 24) <u>Model PC-65</u> 65 gallon (min order 20) <u>Model PC-32</u>

32 gallon (min order 20) \*Commercial Yard Dumpsters also available





**Cascade Industries** 

The Learning Community 3400 Innovation Court SE Grand Rapids, MI 49512-2085 Ph. (616)-975-4800

Fax: (616) 254-4174 E-mail: info@cascadeng.com http://www.cascadeng.com/markets/waste/index.htm "Cascade Cart" 35 gallons 64 gallons 96 gallons Bear Resistant Cascade Cart 96 gallons



DAWG, Inc. 25 Lassy Court Terryville, CT 06786 Phone: 1-800-YEL-DAWG (935-3294) Fax: 1-800-LIL-PAWS (545-7297) website: www.dawginc.com Bearicuda Bin "Critter Can" Model Mobile Screw Top Model Mobile Bearicuda Bin BEARier Bins

### **Residential Trash Storage Containers**





BearGuard Co. Ltd. P.O. Box 89 Tahoe City, CA. 96145-0089 Phone/Fax (530) 581-2211 E-mail: <u>sales@BearGuardInfo.com</u> Website: <u>http://www.bearguardinfo.com/index.html</u>

Carson Valley Welding

1046 Mallory Way Carson City NV. 89701 PH: (775) 884-9353 Cell: (530) 318-1136 Fax: (775) 884-9354 Email:Don@nobearcan.com Website: http://www.nobearcan.com/index.html

See also the following companies: Bear Proof Inc. Bear Proofing-R-US Bear Proof Systems Green and Brown Containers Various sizes

"No Bear Can" Model B-5030 \$999.00 Model B-5036 \$1149.00

Info. above



### **Animal Resistant Dumpsters**



### Capital Industries, Inc.

5801 Third Avenue South Seattle WA 98108 Phone: (206) 762-8585/1-800-967-8585 FAX: (206) 762-5455 E-mail: <u>sales@capitalind.com</u> Website: <u>http://www.capitalind.com/main/</u> Bear Resistant Metal Containers & Lids Various designs



### Haul-All Equipment Systems

(no address available) Phone: 1-888-428-5255 Fax: (403) 328-9956 E-mail: <u>solutions@haulall.com</u> Website: <u>http://www.haulall.com/index.htm</u>

### See also the following companies:

Bear Proof Inc. Bear Proofing-R-US Bear Proof Systems BearSaver-USA Sales

### Hyd-A-Way Model Several options available for garbage disposal and storage

Info. above

### Recreational Storage Containers Panniers (for cooler storage)



### **Bear-Aware**

(no address available) Phone: 800-568-8990 / 818-504-3518 Contact Jeff Berns E-mail: <u>imberns@bear-aware.comor</u> Website: <u>http://www.bear-aware.com/</u>





### **Outfitters Supply**

7373 US Highway 2E Columbia Falls, MT 59912 Phone: 888-467-2256/ 406-892-3650 Fax: 406-892-4234 E-mail: gopackn@outfitterssupply.com Website: http://www.outfitterssupply.com/

Pack Saddle Shop 3071 West Twin Rd Moscow Idaho 83843 Phone: 208-882-1791 E-mail: <u>support@packsaddleshop.com</u> Website: http://www.packsaddleshop.com/Bearpan.html

### **Dry & Ice Panniers**

24" Medium Dry 28" Large Dry 28" Slim Dry 24" Medium Ice 28" Large Ice

**Pack Panniers** 

Aluminum Panniers Medium Large Sold with and without hardware



### Food Storage Lockers



See the following companies: BearProofInc BearSaver – USA Sales Haul-All Equipment Systems (product shown) Info. above

Ask your local waste service provider if they offer wildlife resistant canisters. For example, Waste Pro Inc. and Waste Management Inc. have offered wildlife resistant containers for both residential and commercial locations. In some areas the Waste Service Provider has retrofitted the existing dumpster to a wildlife resistant design.

All images/photos are copyright of their respective company/website.

### APPENDIX D

### AMERICAN ALLIGATOR INFORMATIONAL PAMPHLET

Never feed alligators – it's dangerous and illegal. When fed, alligators can overcome their natural wariness and learn to associate people with food. When this happens, some of these alligators have to be removed and killed.

Dispose of fish scraps in garbage cans at boat ramps and fish camps. Do not throw them into the water. Although you are not intentionally feeding alligators when you do this, the result can be the same.

Seek immediate medical attention if you are bitten by an alligator. Alligator bites can result in serious infections.

Observe and photograph alligators only from a distance. Remember, they're an important part of Florida's natural history as well as an integral component of aquatic ecosystems.



Janice Plai

To report nuisance alligators call 866-FWC-GATOR (866-392-4286).





MyFWC.com/Alligator



A Guide to Living with





Call 866-FWC-GATOR (392-4286) to report nuisance alligators.

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02/2012

# Alligators

lamie Feddersen

Florida Fish and Wildlife **Conservation Commission** 

MyFWC.com



Do not swim outside of posted swimming areas or in waters that may be inhabited by alligators.

### **Living with Alligators**

In Florida, the growing number of people living and recreating near water has led to a steady rise in the number of alligator-related complaints. The majority of these complaints relate to alligators being where they simply aren't wanted. Because of these complaints, the Florida Fish and Wildlife Conservation Commission's Statewide Nuisance Alligator Program permits the killing of approximately 7,000 nuisance alligators each year. Using this approach, and through increased public awareness, the rate of alligator bites on people has remained constant despite the increased potential for alligator-human interactions as Florida's human population has grown.

Alligators are an important part of Florida's landscape and play a valuable role in the ecology of our state's wetlands. Alligators are predators and help keep other aquatic animal populations in balance. A better understanding of the facts and information presented in this brochure will help ensure that people and alligators can continue to coexist.

Visit MyFWC.com/Gators for more information about alligators and the latest nuisance alligator program statistics.



### **Alligators and People**

Alligators are a fundamental part of Florida's wetlands, swamps, rivers and lakes, and they are found in all 67 counties. Florida continues to experience human population growth. Many new residents seek waterfront homes, resulting in increased interactions between people and alligators.

Although most Floridians understand that we have alligators living in our state, the potential for conflict exists. Because of their predatory nature, alligators may target pets and livestock as prey. Unfortunately, people also are occasionally bitten. Since 1948, Florida has averaged about five unprovoked bites per year. During that period, a little more than 300 unprovoked bites to people have been documented in Florida, with 22 resulting in deaths.

In the past 10 years, the Florida Fish and Wildlife Conservation Commission has received an average of nearly 16,000 alligator-related complaints per year. Most of these complaints deal with alligators occurring in places such as backyard ponds, canals, ditches and streams, but other conflicts occur when alligators wander into garages, swimming pools and golf course ponds. Sometimes, alligators come out of the water to bask in the sun or move between wetlands. In many cases, if left alone, these alligators will eventually move on to areas away from people.

### **Safety Tips**

Generally, alligators less than four feet in length are not large enough to be dangerous unless handled. However, if you encounter any alligator that you believe poses a threat to people, pets or property, call the Nuisance Alligator Hotline at 866-FWC-GATOR (866-392-4286). Please be aware, nuisance alligators are killed, not relocated.

Be aware of the possibility of alligators when you are in or near fresh or brackish water. Bites may occur when people do not pay close enough attention to their surroundings when working or recreating near water.

Do not swim outside of posted swimming areas or in waters that might be inhabited by large alligators.

Alligators are most active between dusk and dawn. Therefore, avoid swimming at night.

Dogs and cats are similar in size to the natural prey of alligators. Don't allow pets to swim, exercise or drink in or near waters that may contain alligators. Dogs often attract an alligator's interest, so do not swim with your dog.

• Leave alligators alone. State law prohibits killing, harassing or possessing alligators. Handling even small alligators can result in injury.



A young alligator wan neighborhood.

A young alligator wanders onto a porch in a residential

### APPENDIX E

1

### WADING BIRD INFORMATIONAL PAMPHLET

Action to be taken if you observe someone harassing a wading bird:

### Promptly notify the FWCC 1-888-404-FWCC

### <u>Tips for living with</u> <u>wading birds</u>

- Do not feed wading birds.
- Keep out of vegetated areas surrounding lakes and marshes.
- Keep pets leashed to avoid coming into contact with wading birds.
- Properly dispose of fishing line to avoid bird entanglement.





### **Description:**

Wading birds are a diverse group of birds which utilize shallow marsh areas as foraging and breeding habitats. They are typically characterized as having long necks, legs and bills, which allows them to feed in shallow water. Wading birds can be found in Florida year round. Examples of wading birds include: great egrets, great blue herons, white ibis', little blue herons and snowy egrets.

### Habitat:

Wading birds inhabit all counties in the state of Florida and are most common in the shallow marsh or wetland areas throughout the state. They can also be found in both coastal and inland areas, salt marshes, swamps, ponds, drainage canals, and ditches. Wading birds breed and nest in colonies which consist of various species of other wading birds. Breeding generally occurs just prior to or during the wet season. Stick nests are built in trees or bushes near wetland areas and above the water line.

Wading birds feed in shallow water areas where prey is most concentrated. They feed by spearing prey with their bills or by straining small species out of the water and sediment. Prey may include small fish, invertebrates or other aquatic organisms. Wading birds have also been known to consume snakes, frogs and small rodents.

### **Protection:**

Most wading birds are listed as species of special concern by the State of Florida. Some species such as wood storks are listed as endangered by both the State of Florida and the U.S. Fish and Wildlife Service. It is unlawful for anyone to disturb or take nests or eggs, feed, injure, harm, harass, or kill any wading birds species. Persons who knowingly violate the law may be subject to fines and/or jail time.

If wading birds form a nesting colony on the property in the future, avoid activities within 330 feet of the colony during the nesting season (March 1 to August 1).

### **APPENDIX F**

### FLORIDA BLACK BEAR INFORMATIONAL PAMPHLET



Eglin Af

### Secure your garbage

- Store garbage in a secure area, such as a sturdy shed or garage, until the morning of pickup, or
- Build a small shed to store trash cans. Be sure there are no gaps along the shed's edges and use screws. If the shed is curbside, call your waste service provider to ensure it will still service your trash cans, or
- Modify your regular trash can to make it bear-resistant by adding hardware. To be successful, the lid must not be flexible and the can must not collapse when you stand on its side. Call your waste service provider to ensure it will service a modified trash can, or
- Request a commercially manufactured bearresistant trash can from your waste service provider. If they do not provide these cans, you can special order one from a hardware store, but ensure your waste service provider will service it.



Funds from Florida's "Conserve Wildlife" license plate help conserve bears and reduce human-bear conflicts. Buy one today through your local tax collector's office or online at BuyAPlate.com.



### **How FWC responds to conflicts**

The FWC addresses human-bear conflicts in a variety of ways, including providing technical assistance over the phone, conducting an in-person visit with the resident, using deterrents (such as an electric fence), attempting to scare the bear away, or, in rare cases, attempting to trap the bear.

While most conflicts can be avoided by securing attractants, biologists assess each situation on a case-by-case basis and use FWC policies and guidelines to help decide on the most appropriate response.

The earlier the FWC is notified, the more response options are available.

The longer a conflict situation continues, the more likely the bear will develop behaviors that present a risk to public safety, such as entering a dwelling, harming a leashed dog or injuring a person.

Once this happens, it is too late to try to change the bear's behavior and it must be humanely killed.

Warning! It is illegal to take, possess, injure, shoot, collect or sell black bears under Florida state law unless authorized by an FWC-issued permit. If you are found guilty, you could face fines and/or jail time.

### Where bears live in Florida



If you are experiencing bear conflicts, please contact the nearest FWC regional office. The sooner the FWC knows about bear activity, the more options are available to prevent a bear from becoming a public safety risk.

North Central	Lake City	(386) 758-0525	
Northeast	Ocala	(352) 732-1225	
Northwest	Panama City	(850) 265-3676	
South	West Palm Beach	(561) 625-5122	
Southwest	Lakeland	(863) 648-3200	

In an emergency or if you suspect illegal activity, call the Wildlife Alert Hotline at 888-404-FWCC (3922). Follow us on:





Florida Fish and Wildlife Conservation Commission MyFWC.com/Bear

printed on recycled paper

8/2018

# A guide to living in **bear country**



Ashley Hockenberry



Florida Fish and Wildlife Conservation Commission MyFWC.com/Bear



### The bear facts

- Black bears are the only species of bear in Florida.
- Biologists estimate approximately 4,000 black bears roam Florida today, compared to as few as 300 bears in the 1970s.
- Bears can pick up scents from over a mile away: that's seven times better than a bloodhound and the best of any land mammal.
- Adult bears typically weigh between 150 to 400 pounds, with males often twice the size of females.
- Females have their first litter around 3 years of age, with one to three cubs born every other year.
- Breeding occurs from June to August, with cubs born around February 1.
- On average, females range over 15 square miles and males range over 60 square miles.

### A bear's diet





### **Bear behavior and you**

Black bears are shy and generally not aggressive. When seen near homes or workplaces, bears are often just passing through. When frightened, bears typically run away or climb a tree. If a bear is in a tree, it is either feeding or trying to escape danger. Keep people and pets away, and the bear will leave on its own, usually after dark.

When a bear stands on its hind legs, it is trying to get a better view or scent. Black bears may huff, snap their jaws, swat the ground or "bluff charge" when cornered, threatened or defending food or young. If this happens, stop, hold your ground and then slowly back away.

Remember bears are large, powerful, wild animals that can act unpredictably and become dangerous. Bears who receive food from people may lose their natural fear of them and are more likely to damage property or become a public safety risk. NEVER feed or attract bears. If a bear is eating something on your property, take note of what it is and secure it after the bear has left the area.

Carry bear spray and learn how to use it properly, paying attention to wind direction, distance to bear (20-30 ft.) and your escape route. Make sure to buy spray designed for use on bears. Learn all about Florida's bears and being BearWise at MyFWC.com/BearWise.

### **BearWise tips:**

- Never approach a bear. Keep as much distance between you and the bear as possible.
- If a bear changes its behavior because you're there, you are too close.
- If you encounter a bear at close range, stand with arms raised, back up slowly and speak to the bear in a calm, assertive voice.
- Do not turn your back, play dead or run from a black bear.
- Make sure you are in a secure area, such as a car or building, and the bear has a clear escape route, then scare the bear away with loud noises, like yelling, blowing a whistle, or using an air or car horn.
- Install a motion-activated device, such as flood lights, a water sprinkler or audio alarm, to scare a bear away from a location when you are not present.
- Report any bear threatening the safety of people, pets or livestock, or causing property damage, to the FWC (see back cover).
- Walk dogs on a non-retractable leash and be aware of your surroundings. Dogs can trigger defensive behaviors from bears.

Encourage your school system to use the Florida Black Bear Curriculum Guide. The guide is designed for grades 3 to 8 and is correlated to state education standards.



### **Avoid attracting bears**

Bears do not hang around people if they do not find food. Properly storing or securing garbage and other attractants is a proven method of preventing bear conflicts. However, it takes a community-wide effort to keep bears wild and away from neighborhoods.

Use electric fencing to protect gardens, garbage, compost piles, beehives, fruit trees and livestock.



John Bailey

- Keep garage doors closed when not in use.
- Feed pets indoors or bring food dishes (even empty ones) inside at night.
- Store pet and livestock feed in bear-resistant containers or inside a secure area.
- Remove or modify bird and wildlife feeders and ensure the ground is free of all feed debris.
- Properly harvest ripe nuts, fruits, and vegetables and remove rotten fruits and vegetables.
- Create an "unwelcome" mat by driving finishing nails, heads up, into a sheet of anchored plywood to keep bears away from a specific area, such as under a window, door or fence.
- Keep outdoor refrigerators and freezers in a secure location or lock up with super-adhesive anchors, like Marine Locks<sup>™</sup>.
- Clean meat smokers and barbeque grills with a degreasing detergent and store in a secure area. Dispose of food remnants/grease after each use.

### A screened-in porch will not keep bears out!

### **APPENDIX G**

### FLORIDA PANTHER INFORMATIONAL PAMPHLET

### You live in Florida panther country

1.15

Florida panthers are reclusive and rarely seen by people. They normally live in remote, undeveloped areas. However, as the number of people in southern Florida grows, there is an increased chance of an encounter with a Florida panther.

This brochure contains some guidelines to help you live safely in Florida panther country.



Keep children within sight and close to you, especially outdoors between dusk and dawn.

If you feel threatened by a panther, or have lost pets or livestock to a panther, please call the Florida Fish and Wildlife Conservation Commission's Wildlife Alert Hotline at 1-888-404-FWCC (3922).

### If you see a Florida panther

The Florida panther moves primarily at night. The chances of seeing a panther are slim. But if you live in Florida panther country, you need to know what to do if you see one.

- Keep children within sight and close to you. Pick up any small children so they don't panic and run. Try to do this without bending over or turning away from the Florida panther.
- **Give them space.** Florida panthers typically will avoid a confrontation. Give them a way to escape.
- **Do not run.** Running may stimulate a panther's instinct to chase. Stand and face the animal. Make eye contact to let the panther know you are aware of its presence.
- Avoid crouching or bending over. Squatting or bending makes you look smaller, resembling a preysized animal.
- Appear larger. Make gestures that indicate you are not prey and that you may be a danger to the panther. Raise your arms. Open your jacket. Throw stones, branches or whatever you can reach without crouching or turning your back. Wave your arms slowly and speak firmly in a loud voice.
- **Fight back if attacked.** There has never been a reported panther attack in Florida. In western states, where attacks by cougars have occurred very rarely, potential victims have fought back successfully with rocks, sticks, caps, jackets, garden tools and their bare hands. Since large cats usually try to bite the head or neck, try to remain standing and face the animal.





A REAL PLANE



# A guide to living with Florida Panthers



C Lynn Stone

**MyFWC.com/Panther** 

### 7 ways to live safely in Florida panther country

While these guidelines are meant to help you live safely in Florida panther habitat, they also apply to living with more commonly encountered wildlife, including raccoons, snakes, bears and alligators.

# 1. Be alert from dusk 'til dawn (and whenever deer are active)

Florida panthers primarily are active at night. Exercise more caution at dawn, dusk or dark.

### 2. Keep panther prey away

Y 1810 G

Deer, raccoons, rabbits, armadillos and wild hogs are prey for the Florida panther. By feeding deer or other wildlife, people inadvertently may attract panthers. Do not leave potential wildlife food outside, such as unsecured garbage or pet food. Consider fencing vegetable gardens.

### 3. Keep pets secure

Free-roaming pets, or pets that are tethered and unfenced, are easy prey for predators, including panthers. Bring pets inside or keep them in a secure and covered kennel at night. Feeding pets outside also may attract raccoons and other panther prey; do not leave uneaten pet food available to wildlife.



Keep your pets safe and secure. Bring pets inside or keep them in a secure and covered kennel at night.



### 4. Keep domestic livestock secure

Where practical, place chickens, goats, hogs or other livestock in enclosed structures at night. Electric fencing can be an effective predator deterrent.

### 5. Landscape for safety

Remove dense or low-lying vegetation that would provide hiding places for panthers and other predatory animals near your house.

- Remove plants that deer like to eat.
- Choose plants that do not attract deer or other panther prey species. For information on plants that deer do not like to eat, visit edis.ifas.ufl.edu/UW137.
- Appropriate fencing will make your yard or play area uninviting to prey animals such as deer.

### 6. Consider other deterrents

Outdoor lighting, motion sensors and electric fencing also may deter prey animals and panthers from entering your yard. Outdoor lighting also will make approaching prey and panthers more visible to you.

### 7. Hike or bike with a friend

When recreating outdoors, it's a good practice to let friends or family know your whereabouts and when you expect to return. Better yet, take a friend with you!

### **Florida panther facts**

- The Florida panther is a subspecies of puma, also known as a mountain lion or cougar. It is the last subspecies still surviving in the eastern United States.
- Biologists estimate roughly 100-160 adult and subadult Florida panthers remain in the wild. Most panthers live in southwest Florida, south of the Caloosahatchee River, although some panthers have been documented traveling as far north as central Georgia.
- The Florida panther's decline occurred prior to 1950, when it still was legal to hunt panthers. It was listed as endangered in 1967 and is protected under federal and state laws.
- Florida panther numbers declined to roughly 30 cats by the early 1980s. Severe inbreeding resulted in many health and physical problems. A genetic restoration project in 1995 was successful in improving the genetic health and vigor of the panther population.
- Florida panthers are found primarily in the Big Cypress/Everglades ecosystem in Collier, Lee, Hendry, Monroe and Miami-Dade counties.
- Florida panthers' home range sizes vary by sex and by individual. Female home ranges are typically 60-75 square miles whereas males' are typically 160-200 square miles.



There is no record of a Florida panther attacking a person. Florida panthers are rarely seen.

The biggest threat to the future of the Florida panther is habitat loss. A number of panthers also die each year due to vehicle strikes on roadways.

The Florida panther was chosen as the State Animal of Florida in 1982 by a vote of elementary school students throughout the state.





This brochure was produced through a partnership of the Audubon Society of Florida, Conservancy of Southwest Florida, Defenders of Wildlife, Florida Fish and Wildlife Conservation Commission, Florida Wildlife Federation, Friends of the Florida Panther Refuge, Mountain Lion Foundation, National Park Service, National Wildlife Federation, Seminole Tribe of Florida, University of Florida and the U.S. Fish and Wildlife Service.

Funding provided by the Florida Fish and Wildlife Conservation Commission, Friends of the Florida Panther Refuge and the National Fish and Wildlife Foundation.

### APPENDIX H

1 33 3

### EASTERN INDIGO SNAKE INFORMATIONAL PAMPHLET

Killing, harming, or harassing indigo snakes is strictly prohibited and punishable under State and Federal Law.

Only individuals currently authorized through an issued Incidental Take Statement in association with a USFWS Biological Opinion, or by a Section 10(a)(1)(A) permit issued by the USFWS, to handle an eastern indigo snake are allowed to do so.

LEGAL STATUS: The eastern indigo snake is classified as a Threatened species by both the USFWS and the Florida Fish and Wildlife Conservation Commission. "Taking" of eastern indigo snakes is prohibited by the Endangered Species Act without a permit. "Take" is defined by the USFWS as an attempt to kill, harm, harass, pursue, hunt, shoot, wound, trap, capture, collect, or engage in any such conduct. Penalties include a maximum fine of \$25,000 for civil violations and up to \$50,000 and/or imprisonment for criminal offenses, if convicted.



August 12, 2013

# ATTENTION: THREATENED EASTERN INDIGO SNAKES MAY BE PRESENT ON THIS SITE!!!



Please read the following information provided by the U.S. Fish and Wildlife Service to become familiar with standard protection measures for the eastern indigo snake.

### IF YOU SEE A <u>LIVE</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and allow the eastern indigo snake sufficient time to move away from the site without interference.
- Personnel must NOT attempt to touch or handle snake due to protected status.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Immediately notify supervisor or the applicant's designated agent, and the appropriate U.S. Fish and Wildlife Service (USFWS) office, with the location information and condition of the snake.
- If the snake is located in a vicinity where continuation of the clearing or construction activities will cause harm to the snake, the activities must halt until such time that a representative of the USFWS returns the call (within one day) with further guidance as to when activities may resume.

### IF YOU SEE A <u>DEAD</u> EASTERN INDIGO SNAKE ON THE SITE:

- Cease clearing activities and immediately notify supervisor or the applicant's designated agent, and the appropriate USFWS office, with the location information and condition of the snake.
- Take photographs of the snake, if possible, for identification and documentation purposes.
- Thoroughly soak the dead snake in water and then freeze the specimen. The appropriate wildlife agency will retrieve the dead snake.

USFWS Florida Field Offices to be contacted if a live or dead eastern indigo snake is encountered:

North Florida ES Office – (904) 731-3336 Panama City ES Office – (850) 769-0552 South Florida ES Office – (772) 562-3909 DESCRIPTION: The eastern indigo snake is one of the largest non-venomous snakes in North America, with individuals often reaching up to 8 feet in length. They derive their name from the glossy, blue-black color of their scales above and uniformly slate blue below. Frequently, they have orange to coral reddish coloration in the throat area, yet some specimens have been reported to only have cream coloration on the throat. These snakes are not typically aggressive and will attempt to crawl away when disturbed. Though indigo snakes rarely bite, they should NOT be handled.

SIMILAR SNAKES: The black racer is the only other solid black snake resembling the eastern indigo snake. However, black racers have a white or cream chin, thinner bodies, and WILL BITE if handled.

LIFE HISTORY: The eastern indigo snake occurs in a wide variety of terrestrial habitat types throughout Florida. Although they have a preference for uplands, they also utilize some wetlands and agricultural areas. Eastern indigo snakes will often seek shelter inside gopher tortoise burrows and other below- and aboveground refugia, such as other animal burrows, stumps, roots, and debris piles. Females may lay from 4 - 12 white eggs as early as April through June, with young hatching in late July through October.

### **APPENDIX I**

### AMERICAN ALLIGATOR MANAGEMENT AND PRESERVE SIGNAGE


# **ZTR** TRANSPORTATION CONSULTANTS, INC

2726 OAK RIDGE COURT, SUITE 503 FORT MYERS, FL 33901-9356 OFFICE 239.278.3090 FAX 239.278.1906

> TRAFFIC ENGINEERING TRANSPORTATION PLANNING SIGNAL SYSTEMS/DESIGN

MEMORANDUM

- TO: Mr. Barry Ernst Lennar HomesFROM: Yury Bykau, P.E. Transportation Consultant
- DATE: Revised: March 9, 2023
- RE: Daniels South Lee County Comprehensive Plan/Text Amendment Lee County, Florida

TR Transportation Consultants, Inc. has completed a traffic circulation analysis for the proposed Comprehensive Plan/Text Amendment for approximately 1,233 acres of property located at the southeast corner of Daniels Parkway and SR 82 in Lee County, Florida. Based on the discussion with Morris-Depew Associates, approximately 84.5 acres of the site that is within the Central Urban Future Land Use (FLU) Category. A Map Amendment is being proposed to approximately 154.02 acres from DR/GR to Sub-Outlying Suburban (SOS) FLU. A companion Text Amendment is also being proposed for 1,148 acres of property that is within the Southeast Lee County Community Planning Area to permit a unified development using the maximum density from the Central Urban, Sub-Outlying Suburban, DR/GR and Wetlands Future Land Use Categories. The result of the proposed changes and companion Mixed Use Planned Development will be to permit up to 1,600 residential dwelling units.

This analysis will determine the impacts of the proposed Comprehensive Plan/Text Amendment to permit the development of entire subject property with up to 1,600 residential dwelling units. It is important to note that the proposed Text Amendment includes the ability to share density across multiple future land use categories on the subject site.

The transportation related impacts of the proposed Amendment to the Lee Plan 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.



Methodology meeting notes were exchanged with the Lee County Staff to discuss the requirements of the traffic study. The initial methodology meeting notes are attached to this Memorandum for reference.

Under the existing Central Urban Future Land Use Category (FLU), approximately 84.5 acres of property can be developed with up to 845 residential dwelling units (10 DU/Acre). It is important to note that a commercial development is also permitted within the Central Urban FLU. At 84.5 acres, the site may possibly yield up to 1 million square feet of commercial uses. The proposed Map Amendment to Sub-Outlying Suburban will permit up to 739 residential dwelling units (154.02 acres under SOS FLU at a density of 2 DU/AC and 215.52 acres under Wetlands FLU at the preservation density of 2 DU/AC).

Under the existing DR/GR and Wetlands Future Land Use Categories, the remaining 778.46 acres of property can be developed with up to 61 residential dwelling units ( $\pm$ 461.47 acres under DR/GR FLU at a density of 1 DU/10 Acres &  $\pm$ 316.99 acres under Wetlands FLU at a density of 1 DU/20 Acres).

The Applicant is proposing a Text Amendment to permit properties adjacent to a Mixed Use Community in Lehigh Acres with the above mentioned Map Amendment to sum density across multiple future land use categories to support 1,600 residential dwelling units on the subject property.

**Table 1** summarizes the residential intensities that could be developed under the existing land use designations and residential intensities as a result of the proposed Map and Text Amendment.



	Land Daniels	Uses South				
Existing/ Proposed	Land Use Category	Intensity				
	Central Urban (±84.5 Acres)	845 Dwelling Units <sup>1</sup> (84.5 acres @ 10 DU/Acre)				
Existing	DR/GR & Wetlands (±1,148 Acres)	89 Dwelling Units (DR/GR ±630 Acres @ 1 DU/10 Acres & Wetlands ±518 Acres @ 1 DU/20 Acres				
Total		934 Dwelling Units				
Proposed	Central Urban (±84.5 Acres) Sub-Outlying Suburban & Wetlands (±369.54 Acres) DR/GR & Wetland (778.46 Acres)	Total 1,600 Dwelling Units <sup>2</sup>				

Table 1

1. At 84.5 acres, the site may also possibly yield up to 1 million square feet of commercial uses.

2. The proposed Text Amendment includes the ability to share density across multiple future land use categories on the subject site.

The trip generation for the with and without amendment scenarios was determined by referencing the Institute of Transportation Engineer's (ITE) report, titled Trip Generation Manual, 11th Edition. Land Use Code 210 (Single-Family Detached Housing) was utilized for the trip generation purposes of the residential uses on the site. Note, the site may still be permitted to be developed with other residential options such multi-family as long as the total unit count does not exceed 1,600 dwelling units. However, to be conservative in terms of trip generation, the site was assumed to consist of all singlefamily residential uses. 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 categories, respectively. The daily trip generation is also indicated in both tables. The trip generation equations utilized are attached to this Memorandum for reference.

<b>Trip Generation</b>	
Based on Existing Land Use Categor	ies

		Daniek	Journ				
	Weekday A.M. Peak Hour			Weekday P.M. Peak Hour			Daily
Land Use	In	Out	Total	In	Out	Total	(2-way)
Single-Family Housing (934 Dwelling Units)	148	421	569	511	301	812	7,882



### Table 3 Trip Generation Based on Proposed Land Use Categories Daniels South

	Weekday A.M. Peak Hour		Weekda	Daily			
Land Use	In	Out	Total	In	Out	Total	(2-way)
Single-Family Housing (1,600 Dwelling Units)	241	688	929	848	498	1,346	12,933

**Table 4** indicates the trip generation difference between the proposed and existing land use categories (Table 2 vs Table 3). The resultant trip change in Table 4 indicates that the trip generation will be <u>increased</u> in the AM and PM peak hour conditions as a result of the proposed amendment.

Land Has	Weekda	y A.M. Pe	ak Hour	Weekda	Daily		
Land Use	In	Out	Total	In	Out	Total	(2-way)
Proposed Land Use Designations (1,600 Dwelling Units)	241	688	929	848	498	1,346	12,933
Existing Land Use Designation (934 Dwelling Units)	-148	-421	-569	-511	-301	-812	-7,882
Resultant Trip Change	+93	+267	+360	+337	+197	+534	+5,051

Table 4
<b>Frip Generation – Resultant Trip Change (Table 2 vs Table 3)</b>
Daniels South

### Long Range Impacts (20-year horizon)

The Lee County Metropolitan Planning Organization's (MPO) 2045 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, roadway improvements within the vicinity of the subject site shown on the 2045 Financially Feasible Plan were the widening of Daniels Parkway to a six-lane facility from SR 82 to Gateway Boulevard, widening of Sunshine Boulevard to a four-lane facility from SR 82 to Lee Boulevard as well as extension of Alico Road (new four-lane facility) from Green Meadow Road to SR 82. The Lee County 2045 Highway Cost Feasible Plan map is attached to this Memorandum for reference.

The subject property is encompassed by Traffic Analysis Zone (TAZ) No. 4426. The current 2045 FSUTMS District One Regional Planning Model accounted for approximately 250,000 square feet of industrial uses, 300,000 square feet of retail uses, and 445,000 square feet of office uses (total of  $\pm$ 995,000 square feet of commercial) as well as up to 1,019 single-family residential uses in this TAZ. Note, the aforementioned



floor areas were formulated based on the attached employment conversion factors provided by the Lee County Staff.

As initially discussed with the County Staff, since the existing TAZ No. 4426 already accounted for 1,019 single-family residential dwelling units and the proposed request is for up to 1,600 dwelling units, the analysis on the surrounding roadway network will be based on the net change of 581 dwelling units. Therefore, the long range transportation impact (20-year horizon) and the short range transportation impact (5-year horizon) will be evaluated based on the trip generation shown in **Table 5** below.

	Table 5	
Additional	Trips Added to TAZ No. 442	6
	Daniels South	

	Weekda	y A.M. Pe	ak Hour	Weekda	y P.M. Pe	eak Hour	Daily
Land Use	In	Out	Total	In	Out	Total	(2-way)
Single-Family Housing (581 Dwelling Units)	96	273	369	327	192	519	5,093

The Lee County Metropolitan Planning Organization's (MPO) long range transportation travel model was also reviewed in order to determine the impacts the amendment would have on the surrounding area. The base 2045 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 in Table 5 were added to the projected 2045 volumes. The Level of Service for the surrounding roadways was then evaluated. The Level of Service threshold volumes were derived based on the attached *Lee County 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 2045 volumes will not cause any roadway link to fall below the recommended minimum acceptable Level of Service thresholds as recommended in Policy 37.1.1 of the Lee County Comprehensive Plan. Therefore, no changes to the adopted long range transportation plan are required as result of the proposed land use change. Attached **Table 1A** and **Table 2A** reflect the Level of Service analysis based on the 2045 conditions.

#### Short Term Impacts Analysis (2025)

The 2020/2021-2024/2025 Lee County Transportation Capital Improvement Plan and the 2022-2026 Florida Department of Transportation Adopted Work Program were reviewed to determine the short term impacts the proposed land use change would have on the surrounding roadways. The only project funded for construction in the Study Area is the extension of Alico Road (new four-lane facility) from Green Meadow Road to SR 82. There are no other programmed improvements in the vicinity of the subject site.



**Table 4A** and **Table 5A** attached to this report indicate the projected 5-year planning Level of Service on the surrounding roadways based on the additional trips shown in Table 5. The existing peak hour, peak season, peak direction traffic volumes on the various roadway links were obtained from the most recent Lee County *Public Facilities Level of Service and Concurrency Report*. Due to insufficient traffic data for Griffin Parkway in the aforementioned report, the existing peak hour, peak season, peak direction traffic volume for this roadway was derived from the traffic count obtained from the Lee County's *Traffic Count Database System* (TCDS). Note, for the new Alico Road extension from Green Meadow Road to SR 82, the existing peak hour, peak season, peak direction traffic volume was assumed based on the volume for Alico Road segment from Ben Hill Griffin Parkway to Green Meadow Road as shown on the County's Concurrency Report.

The existing peak hour, peak season, peak direction traffic volumes were then factored by the appropriate annual growth rates in order to obtain the 2026 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 *Florida Traffic Online* resource as well as the traffic data from the latest *Lee County Traffic Count Report*. Note, due to lack of historical traffic data for Gateway Boulevard and Griffin Parkway, a minimum annual growth rate of 2% was assumed. Based on the project traffic distribution illustrated within Table 4A, the roadway link data was analyzed for the year 2026 without the proposed amendment and year 2026 with the proposed amendment. Traffic data obtained from the aforementioned Lee County and FDOT resources is attached to this Memorandum for reference.

The results of the analysis indicate that the addition of the trips as a result of the proposed amendment to the projected 2026 volumes will not cause any roadway link to fall below the minimum acceptable Level of Service standards. It is important to note that there were several roadway segments that were shown to operate at a poor Level of Service in 2026 background (without the proposed amendment) traffic conditions. These roadway segments Daniels Parkway, Gunnery Road north of Lee Boulevard, and Lee Boulevard east and west of Gunnery Road. These roadways are considered as future pre-existing deficiencies that this project should not be held responsible for. Therefore, based on this analysis no modifications will be necessary to the Lee County or FDOT short term capital improvement programs.



### Conclusion

The proposed Comprehensive Plan/Text Amendment is for approximately 1,233 acres of property located at the southeast corner of Daniels Parkway and SR 82 in Lee County, Florida. Based upon the roadway link Level of Service analysis conducted as a part of this Memorandum, the proposed amendment will not cause any roadway link to fall below the recommended minimum acceptable Level of Service thresholds as recommended in Policy 37.1.1 of the Lee County Comprehensive Plan. Therefore, no roadway capacity improvements will be warranted as a result of the additional traffic to be generated by the proposed amendment.

No modifications are necessary to the Short Term Capital Improvement Plan or the Long Range Transportation Plan to support the proposed Amendment. In addition, the proposed amendment will not significantly alter the socio-economic data forecasts that were utilized in the development of the Long Range Transportation Plan.

Attachments

## **METHODOLOGY MEETING NOTES**

### Yury Bykau

From: Sent: To: Subject: Yury Bykau Monday, January 24, 2022 1:57 PM Wu, Lili RE: Traffic Study Methodology - SEC of Daniels Pkwy/SR 82

Wu,

As discussed today, we will be revising our CPA analysis for this one to be consistent with our application. Since the existing TAZ No. 4426 already accounted for 1,019 single-family residential dwelling units and the proposed request is for up to 1,600 dwelling units on the entire site, the long range and short range analysis on the surrounding roadway network will be based on the net change of 581 dwelling units as shown below.

### Additional Trips Added to TAZ No. 4426

**Daniels South** 

	Weekday A.M. Peak Hour			Weekda	Daily		
Land Use	In	Out	Total	In	Out	Total	(2-way)
Single-Family Housing (581 Dwelling Units)	96	273	369	327	192	519	5,093

Thanks,



Yury Bykau, P.E. TR Transportation Consultants, Inc. 2726 Oak Ridge Ct. STE 503 Fort Myers, FL 33901 239-692-0589 (c) 239-278-3090 (o) ext. 3 239-278-1906 (f) yury@trtrans.net

From: Yury Bykau Sent: Thursday, October 14, 2021 9:04 AM To: Wu, Lili <LWu@leegov.com> Cc: Ted Treesh <tbt@trtrans.net> Subject: RE: Traffic Study Methodology - SEC of Daniels Pkwy/SR 82

Wu,

The client is changing their request for this CPA application. The request is now to change the future land use on 84.5 acres portion of the property within Central Urban FLU (see below FLU map) to Intensive Development FLU to allow up to 1,183 residential units. We're going to assume these 1,183 units are all multi-family since you can't realistically fit that many SF units on this 84.5 acre tract. We are also proposing a text amendment on the 1,148 acres portion of the property that is currently within DR/GR & Wetlands to allow for 417 dwelling units (we will assume all single-family). So grand total of 1,600 Units will be permitted with this CPA application. See property boundary below (Figure 1). The trip gen for 1,600 units (1,183 MF + 417 SF) is also shown below for reference based on ITE Trip Generation Manual, 11<sup>th</sup> Edition.

	Weekd	Daily		
Land Use	In	Out	Total	(2-way)
Single-Family Detached Housing – 1,148 Acre (417 Dwelling Units)	239	141	380	3,753
Multi-Family Housing – 84.5 Acre (1,183 Dwelling Units)	333	196	529	7,658
<b>Total</b> (1,600 Dwelling Units)	572	337	909	11,411

Table 1 Trip Generation - Proposed

Under the existing Central Urban FLU the 84.5 acres could be developed with up to 845 units (again going to assume all multi-family). Under existing DR/GR & Wetlands FLU the 1,148 acres could be developed with up to 89 units (again going to assume all units are SF). A total of 934 units (845 MF + 89 SF) is currently permitted based on County's FLU entitlements. Trip Gen for the currently permitted residential uses is shown Table 2. The net increase in trips is shown in Table 3 (Table 1 vs Table 2).

	Weekd	Daily		
Land Use	In	Out	Total	(2-way)
Single-Family Detached Housing – 1,148 Acre (89 Dwelling Units)	56	33	89	906
Multi-Family Housing – 84.5 Acre (845 Dwelling Units)	242	142	384	5,492
Total (934 Dwelling Units)	298	175	473	6,398

 Table 2

 Trip Generation - Permitted

Table 3	
Trip Generation - Proposed vs Permitted	(Table 1 vs Table 2)

	Weekda	ak Hour	Daily		
Land Use	In	Out	Total	(2-way)	
Proposed Residential (1,600 Dwelling Units)	572	337	909	11,411	
Permitted Residential (934 Dwelling Units)	-298	-175	-473	-6,398	
Trip Change	+274	+162	+436	+5,013	

However, this site is located within TAZ# 4426 (see TAZ boundary below which is labeled at TAZ #962 in Figure 2). The current 2045 District One Model already accounted for 474 industrial employees (250k SF), 759 commercial employees

(300k SF) and 1,477 service employees (445k SF per General Office – Average conversion) and up to 1,019 SF units in this TAZ. The only area in this TAZ that can be really developed with the 250k SF industrial, 300k SF retail and 445k SF office is the 84.5 acres under Central Urban FLU, which would generate more trips than the 1,183 units we're proposing on this portion of the site. So we're not technically increasing the intensity that was assumed in the model for the 84.5 acre portion.

Therefore the only trips that will be added to the roadway network in our CPA analysis (long range and short range) are those shown in Table 4, which is associated with the text amendment on the 1,148 acre portion of the property. Do you agree with this approach for our CPA TIS? Sorry if this is a little convoluted. Call me if you have questions.

	Weekd	Daily			
Land Use	In	Out	Total	(2-way)	
Proposed FLU 417 SF Dwelling Units – 1,148 acres)	239	141	380	3,753	
Current FLU DR/GR & Wetlands (89 SF Dwelling Units – 1,148 acres)	-56	-33	-89	-906	
Trip Change *	+183	+108	+291	+2,847	

Table 4
Trip Generation - Proposed vs Permitted on 1,148 acre

\*Trips to be added to our 2045 and 2026 link LOS analysis.

Figure 1: Property

Boundary



Figure 2: TAZ # 4426 Boundary



Thanks, TRANSPORTATION CONSULTANTS, INC Yury Bykau, E.I. TR Transportation Consultants, Inc. 2726 Oak Ridge Ct. STE 503 Fort Myers, FL 33901 239-692-0589 (c) 239-278-3090 (o) ext. 3

## TABLES 1A & 2A 2045 LOS ANALYSIS

### TABLE 1A LEVEL OF SERVICE THRESHOLDS 2045 LONG RANGE TRANSPORTATION ANALYSIS - DANIELS SOUTH

				GI	ENERALIZI	ED SERVIC	E VOLUM	ES
		2045 E	+ C NETWORK LANES	LOS A	LOS B	LOS C	LOS D	LOS E
ROADWAY	ROADWAY SEGMENT	# Lanes	Roadway Designation	VOLUME	VOLUME	VOLUME	VOLUME	VOLUME
SR 82	E. of Sunshine Blvd	6LD	Arterial	0	2,700	3,900	4,920	5,600
	E. of Daniels Pkwy	6LD	Arterial	0	2,700	3,900	4,920	5,600
	W. of Daniels Pkwy	6LD	Arterial	0	0	3,087	3,171	3,171
	W. of Griffin Drive	6LD	Arterial	0	0	3,087	3,171	3,171
Daniels Pkwy	S. of SR 82	6LD	Controlled Access Facility	0	430	3,050	3,180	3,180
	S. of Gateway Blvd	6LD	Controlled Access Facility	0	430	3,050	3,180	3,180
Gunnery Rd	N. of SR 82	4LD	Arterial	0	250	1,840	1,960	1,960
	N. of Lee Blvd	2LU	Arterial	0	140	800	860	860
Sunshine Blvd	N. of SR 82	4LD	Arterial	Ō	250	1,840	1,960	1,960
Lee Blvd	W. of Gunnery Rd	6LD	Arterial	0	250	1,840	1,960	1,960
	E. of Gunnery Rd	6LD	Arterial	0	250	1,840	1,960	1,960
Alico Rd Ext.	S. of SR 82	4LD	Controlled Access Facility	0	270	1,970	2,100	2,100
Gateway Blvd	W. of Daniels Pkwy	4LD	Arterial	o	0	710	1,590	1,660
Griffin Dr	S. of SR 82	2LU	Collector	0	o	310	660	740

- Denotes the LOS Standard for each roadway segment

\* Level of Service Thresholds for Lee County roadways 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.

### TABLE 2A 2045 ROADWAY LINK LEVEL OF SERVICE CALCULATIONS DANIELS SOUTH

TOTAL PM PEAK H	OUR PROJECT TRAFFIC =	519	VPH	IN=	327	OUT=	192							
		2045 ESUTMS	COUNTY PCS /	AADT	K 400	100TH HIGHEST		PM PK HR	PEAK	2045 DIRECTION	PROJECT	PK DIR	2045 BACKG PEAK	ROUND PLUS PROJ DIRECTION
ROADWAY	ROADWAY SEGMENT	AADT	FDOT SITE #	TRAFFIC	FACTOR	2 WAY VOLUME	EACTOR	PEAK	TRAFFIC V	OLUMES & LOS	TRAFFIC	PM PROJ	TRAFFIC	OLUMES & LOS
SR 82	E of Sunshine Blvd	62.607	120058	62 607	0.090	5 635	D 54	EAST	3 042	LOS	DIST.	TRAFFIC	VOLUME	LOS
	E. of Daniels Pkwy	66,063	126021	66.063	0.000	5 946	0.54	EAST	3,045	c	170 EP/	3	3,046	C
	W of Daniels Pkwy	25,743	120108	25.743	0.090	2 317	0.54	WEST	1.066	č	070	121	3,227	C
	W. of Griffin Drive	32,674	120107	32,674	0.090	2,941	0.54	WEST	1,353	c	35%	114	1,467	c
Daniels Pkwy	S. of SR 82	67,923	48	67,923	0.107	7,268	0.63	NORTH	4,579	F	45%	147	4 726	F
	S. of Gateway Blvd	61,802	48	61,802	0.107	6,613	0.63	NORTH	4,166	F	35%	114	4,280	F
Gunnery Rd	N. of SR 82	39,412	124104	39,412	0.090	3,547	0.534	NORTH	1,894	D	10%	33	1.927	D
	N. of Lee Blvd	21,799	124104	21,799	0.090	1,962	0.534	NORTH	1,048	F	5%	16	1,064	F
Sunshine Blvd	N of SR 82	29,145	124182	29,145	0.090	2,623	0.593	NORTH	1,555	c	2%	7	1,562	с
Lee Blvd	W of Gunnery Rd	70,112	22	70,112	0.090	6,310	0.62	EAST	3,912	F	2%	7	3.919	F
	E. of Gunnery Rd	76,513	22	76,513	0.090	6,886	0.62	EAST	4,269	F	3%	10	4,279	F
Alico Rd Ext	S. of SR 82	44,682	53	44,682	0 101	4,513	0.52	NORTH	2,347	F	3%	10	2,357	F
Gateway Blvd	W of Daniels Pkwy	14,709	48	14,709	0.107	1,574	0.63	WEST	582	с	5%	16	598	с
Griffin Dr	S of SR 82	9,448	48	9,448	0.107	1,011	0.63	SOUTH	374	D	5%	16	390	D

\* The K-100 and D factors for County mantained roadways were obtained from Lee County Traffic Count Report.

\* The K-100 and D factors for FDOT mantained roadways were obtained from Florida Traffic Online resource.

\* Due to lack of traffic data in the Lee County Traffic Count Report, the K-100 and D factors for Gunnery Road & Sunshine Boulevard were obtained from FDOT's Florida Traffic Online Webpage.

\* Due to lack of traffic data for Gateway Boulevard and Griffin Drive, the K and D factors were used from Lee County's PCS #48.

Note: Remaining 5% of project traffic was assigned to/from Paul J. Doherty Pkwy.

## TABLES 3A & 4A 5-YEAR LOS ANALYSIS

## TABLE 3A LEVEL OF SERVICE THRESHOLDS DANIELS SOUTH

				GI	ENERALIZI	ED SERVIC	E VOLUM	ES
				LOS A	LOS B	LOS C	LOS D	LOS E
ROADWAY	ROADWAY SEGMENT	# LANES	ROADWAY DESIGNATION	VOLUME	VOLUME	VOLUME	VOLUME	VOLUME
SR 82	E. of Sunshine Blvd	6LD	Arterial	0	2,700	3,900	4,920	5,600
	E. of Daniels Pkwy	6LD	Arterial	0	2,700	3,900	4,920	5,600
	W. of Daniels Pkwy	6LD	Arterial	0	0	3,087	3,171	3,171
	W. of Griffin Drive	6LD	Arterial	٥	0	3,087	3,171	3,171
Daniels Pkwy	S. of SR 82	4LD	Controlled Access Facility	0	270	1,970	2,100	2,100
	S. of Gateway Blvd	6LD	Controlled Access Facility	0	430	3,050	3,180	3,180
Gunnery Rd	N. of SR 82	4LD	Arterial	0	250	1,840	1,960	1,960
	N. of Lee Blvd	2LU	Arterial	0	140	800	860	860
Sunshine Blvd	N. of SR 82	2LU	Arterial	o	140	800	860	860
Lee Blvd	W. of Gunnery Rd	6LD	Arterial	0	250	1,840	1,960	1,960
	E. of Gunnery Rd	6LD	Arterial	O	250	1,840	1,960	1,960
Alico Rd Ext.	S. of SR 82	4LD	Controlled Access Facility	0	270	1,970	2,100	2,100
Gateway Blvd	W. of Daniels Pkwy	4LD	Arterial	0	0	710	1,590	1,660
Griffin Dr	S. of SR 82	2LU	Collector	0	O	310	660	740

- 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 4A LEE COUNTY TRAFFIC COUNTS AND CALCULATIONS DANIELS SOUTH

												273	OUT=	96	IN =	VPH	369	TOTAL PROJECT TRAFFIC AM =
												192	OUT=	327	IN=	VPH	519	TOTAL PROJECT TRAFFIC PM =
0.25	2026			2026						2026	2019							
CPND	BCKCP		ND	BCKGRN			PERCENT		EASON	PKHRPKS	PKHR							
PROL VIC	A DM DE	Vic	01	+ AM PPC	PM PRO I	AM PROL	PROJECT	V/C	CTION	PEAK DIRE	PK SEASON	ANNUAL	YRS OF	2020	BASE YR	LCDOT PCS OR		
ME LOS Patio	VOLUME	Ratio	1.05	VOLUME	TRAFFIC	TRAFFIC	TRAFFIC	Ratio	LOS	VOLUME	PEAK DIR.2	RATE	GROWTH. 1	ADT	ADT	FDOT SITE #	ROADWAY SEGMENT	ROADWAY
B 038	1.881	0.38	B	1.881	3	3	1%	0.38	B	1,878	1,635	2.00%	15	11,600	10,300	120068	E. of Sunshine Blvd	SR 82
B 0.41	2.031	0.41	в	2.029	16	14	5%	0.41	в	2,015	1.635	3,03%	12	28,500	19,921	126021	E. of Daniels Pkwy	
C 0.54	1 728	0.54	c	1,706	131	109	40%	0.50	C	1.597	1,166	4.60%	15	21,000	10,700	120108	W. of Daniels Pkwy	
C 0.54	1,705	0.53	c	1,686	114	96	35%	0.50	С	1,590	1,166	4.53%	15	24,500	12,600	120107	W. of Griffin Drive	
F 1.22	2.553	1.20	F	2.529	147	123	45%	1.15	F	2,405	1.726	4.86%	9	37,400	24,400	524	S. of SR 82	Daniels Pkwy
F 1.09	3,477	1.09	F	3,458	114	96	35%	1,06	F	3,362	2,412	4.86%	9	37,400	24,400	524	S. of Gateway Blvd	
C 0.70	1,369	0.70	c	1,364	33	27	10%	0.68	С	1,337	965	4.76%	9	26,300	17,300	290	N. of SR 82	Gunnery Rd
F 1.05	904	1.05	F	902	16	14	5%	1.03	F	868	773	2.00%	9	16,700	14,700	289	N. of Lee Blvd	
C 0.69	591	0.69	с	590	7	5	2%	0.68	С	584	369	6.78%	9	7,400	4,100	124182	N. of SR 82	Sunshine Blvd
F 1.34	2,619	1.34	F	2,618	7	5	2%	1.33	F	2,612	2,161	2.75%	9	36,500	28,600	22	W. of Gunnery Rd	Lee Blvd
F 1.32	2,586	1.32	F	2,584	10	8	3%	1.31	F	2,576	2,131	2.75%	9	36,500	28,600	22	E. of Gunnery Rd	
C 0.22	452	0.21	С	450	10	8	3%	0.21	с	442	385	2.00%	9	20,200	26,200	53	S. of SR 82	Alico Rd Ext.
D 0.85	1,404	0.84	D	1,401	16	14	5%	0.84	D	1,388	1,208	2.00%	N/A	N/A	N/A	536	W. of Daniels Pkwy	Gateway Blvd
D 0.69	511	0.69	D	509	16	14	5%	0.67	D	495	431	2.00%	N/A	N/A	N/A	534	S. of SR 82	Griffin Dr
9	591 2,611 2,584 452 1,40	0.69 1.34 1.32 0.21 0.84 0.69	C F C D	590 2,618 2,584 450 1,401 509	7 7 10 10 16 16	5 8 14 14	2% 2% 3% 3% 5%	0.68 1.33 1.31 0.21 0.84 0.67	C F C D	584 2,612 2,576 442 1,388 495	369 2,161 2,131 385 1,208 431	6.78% 2.75% 2.75% 2.00% 2.00% 2.00%	9 9 9 9 N/A N/A	7,400 36,500 36,500 20,200 N/A N/A	4,100 28,600 28,600 26,200 N/A N/A	124182 22 53 536 534	N. of SR 82 W. of Gunnery Rd E. of Gunnery Rd S. of SR 82 W. of Daniels Pkwy S. of SR 82	Sunshine Blvd i Lee Blvd i Alico Rd Ext. Gateway Blvd i Griffin Dr

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

\* Due to lack of historical traffic data for Gateway Blvd and Griffin Dr, a minimum 2% AGR was assumed.

2 Current peak hour peak season peak direction traffic volumes for all County roadways were obtained from the 2020 Lee County Public Facilities Level of Service and Concurrency Report,

\* For new Alico Road extension, the current peak hour peak season peak direction traffic volume was assumed based on the volume for Alico Road segment from Ben Hill Griffin Pkwy to Green Meadows Road as shown on the County's Public Facilities Level of Service and Concurrency Report.

\* Due to lack of traffic data for Griffin Dr, the current peak hour peak season peak direction traffic volume was obtained from the traffic count from Lee County's Traffic Count Database System (TCDS).

## LEE COUNTY GENERALIZED SERVICE VOLUME TABLE

## Lee County Generalized Peak Hour Directional Service Volumes

Deil 204	C		Construction of the local	cas	adiment.	
April 201	0	11-1-4-	1.1.51	10.1	c:\input5	
		Uninterr	Level of Se	rvice		
Lane	Divided	A	В	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
Class I (4	0 mph or high	er posted s	Arterials peed limit) Level of Se	rvice		
Lane	Divided	A	B	C	D	F
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 (3 Lane 1	5 mph or slow Divided Undivided	A *	speed limit) Level of Se B *	rvice C 330	D 710	E 780
Class II (3 Lane 1 2 3 4	5 mph or slow Divided Undivided Divided Divided Divided	A * * * *	speed limit) Level of Se * * * *	rvice C 330 710 1,150 1,580	D 710 1,590 2,450 3,310	E 780 1,660 2,500 3,340
Class II (3 Lane 1 2 3 4	5 mph or slow Divided Undivided Divided Divided Divided	A * * * Controll	speed limit) Level of Se B * * * * ed Access Level of Se	rvice C 330 710 1,150 1,580 Facilities rvice	D 710 1,590 2,450 3,310	E 780 1,660 2,500 3,340
Lane 1 2 3 4 Lane	5 mph or slow Divided Undivided Divided Divided Divided	A * * * Controll A	speed limit) Level of Se B * * * ed Access Level of Se B	rvice C 330 710 1,150 1,580 Facilities rvice C C	D 710 1,590 2,450 3,310 D	E 780 1,660 2,500 3,340 E
Class II (3 Lane 1 2 3 4 Lane 1	5 mph or slow Divided Undivided Divided Divided Divided Divided	A * * Controll	speed limit) Level of Se * * * ed Access Level of Se B 160	C           330           710           1,150           1,580           Facilities           rvice           C           880           1,570	D 710 1,590 2,450 3,310 D 940	E 780 1,660 2,500 3,340 E 940
Class II (3 Lane 1 2 3 4 Lane 1 2	5 mph or slow Divided Divided Divided Divided Divided Divided Undivided	A * * * Controll A * *	speed limit) Level of Se * * * ed Access Level of Se B 160 270	C           330           710           1,150           1,580           Facilities           rvice           C           880           1,970	D 710 1,590 2,450 3,310 D 940 2,100	E 780 1,660 2,500 3,340 E 940 2,100
Lane 1 2 3 4 Lane 1 2 3	5 mph or slow Divided Divided Divided Divided Divided Undivided Divided Divided	A * * * Controll A * * *	speed limit) Level of Se * * * ed Access Level of Se B 160 270 430	C           330           710           1,150           1,580           Facilities           rvice           C           880           1,970           3,050	D 710 1,590 2,450 3,310 D 940 2,100 3,180	E 780 1,660 2,500 3,340 3,340 E 940 2,100 3,180
Lane 1 2 3 4 Lane 1 2 3	5 mph or slow Divided Divided Divided Divided Divided Undivided Divided Divided	A * * * Controll A * *	speed limit) Level of Se B * * * ed Access Level of Se B 160 270 430 Collectors Level of Se	C           330           710           1,150           1,580           Facilities           rvice           C           880           1,970           3,050	D 710 1,590 2,450 3,310 D 940 2,100 3,180	E 780 1,660 2,500 3,340 E 940 2,100 3,180
Lane 1 2 3 4 Lane 1 2 3 Lane	5 mph or slow Divided Divided Divided Divided Divided Divided Divided Divided Divided	A * * * Controll A * * *	speed limit) Level of Se B * * ed Access Level of Se B 160 270 430 Collectors Level of Se B	rvice C 330 710 1,150 1,580 Facilities rvice C 880 1,970 3,050 rvice C	D 710 1,590 2,450 3,310 D 940 2,100 3,180 D	E 780 1,660 2,500 3,340 E 940 2,100 3,180 E
Lane 1 2 3 4 Lane 1 2 3 Lane 1	Divided Undivided Divided Divided Divided Divided Divided Undivided Divided Divided Divided	A * * * Controll A * * *	speed limit) Level of Se B * * * ed Access Level of Se B 160 270 430 Collectors Level of Se B *	C           330           710           1,150           1,580           Facilities           rvice           C           880           1,970           3,050           rvice           C           310	D 710 1,590 2,450 3,310 D 940 2,100 3,180 D 660	E 780 1,660 2,500 3,340 E 940 2,100 3,180 E 740
Lane 1 2 3 4 Lane 1 2 3 4 Lane 1 2 3	Divided Undivided Divided Divided Divided Divided Undivided Divided Divided Divided Divided Divided	A * * * * Controll A * * * *	speed limit) Level of Se B * * * ed Access Level of Se B 160 270 430 Collectors Level of Sel B * *	rvice C 330 710 1,150 1,580 Facilities rvice C 880 1,970 3,050 rvice C 310 330	D 710 1,590 2,450 3,310 D 940 2,100 3,180 D 660 700	E 780 1,660 2,500 3,340 E 940 2,100 3,180 E F 740 780
Class II (3 Lane 1 2 3 4 Lane 1 2 3 Lane 1 1 2 3	Divided Undivided Divided Divided Divided Divided Undivided Divided Divided Divided Divided Undivided Undivided Undivided	A * * * Controll A * * * A * *	speed limit) Level of Se B * * * ed Access Level of Se B 160 270 430 Collectors Level of Se B * * *	rvice C 330 710 1,150 1,580 Facilities rvice C 880 1,970 3,050 rvice C 310 330 730	D 710 1,590 2,450 3,310 D 940 2,100 3,180 D 660 700 1,440	E 780 1,660 2,500 3,340 E 940 2,100 3,180 E 740 780 1,520

## FDOT GENERALIZED PEAK HOUR DIRECTIONAL VOUMES TABLE 7

TABLE 7

## Generalized Peak Hour Directional Volumes for Florida's

					Urbar	nized Are	as				January 2
2 and	INTER	RUPTED F	LOW FAC	ILITIES	S 115	E	UNINTE	RUPTED	FLOWF	ACILITIES	
	STATE S	IGNALIZ	LED ART	TERIALS	S			FREE	WAYS		
	Class I (40 r	nph or high	ner posted	speed limi	it)	K		Core U	banized		
Lanes	Median	B	C	D	E	Lanes	в	(	3	D	E
1	Undivided	*	830	880	**	2	2.230	3.1	00	3.740	4.080
2	Divided	*	1.910	2.000	**	3	3,280	4.5	70	5.620	6.130
3	Divided	*	2.940	3.020	**	4	4.310	6.0	30	7 490	8.170
4	Divided	*	3,970	4.040	**	5	5 390	74	30	9 370	10 220
	Difficu		5,770	1,010		6	6 380	80	90	11 510	12 76
	Class II (35)	mph or slow	wer posted	speed lim	nit)	U	0,000	0,5	20	11,510	12,70
Lanes	Median	В	С	D	E			Urba	nized		
1	Undivided	*	370	750	800	Lanes	В	(	1	D	E
2	Divided	*	730	1,630	1,700	2	2,270	3,1	00	3,890	4,23
3	Divided	*	1,170	2,520	2,560	3	3,410	4.6	50	5,780	6.34
4	Divided	*	1.610	3,390	3,420	4	4.550	6.2	00	7.680	8.46
				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		5	5,690	7,7	60	9,520	10,570
			i bad								
	Non-State Si	ignalized h	toadway A	Adjustme	nts		F	reeway A	djustmen	its	
	(Alte	r correspondu	ng state volu	mes			Auxiliary			Ramp	
	Non-State	Signalized H	Roadways	- 10%			+ 1.000			Metering + 5%	
	Madian	& Turn I	ana Adius	tmante			. 1,000		-	1 570	
	Wiedian	Exclusive	Exclu	sive A	diustment	τ	ININTERR	UPTED	FLOW	HIGHWA	YS
anes	Median	Left Lanes	Right I	anes	Factors	Lanes	Median	В	С	D	E
1	Divided	Yes	No	)	+5%	1	Undivided	580	890	1.200	1.61
1	Undivided	No	No	)	-20%	2	Divided	1.800	2.600	3,280	3.73
Multi	Undivided	Yes	No	3	-5%	3	Divided	2 700	3 900	4.920	5 60
Multi	Undivided	No	No	)	-25%		Sintere	2,100	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1,720	2,00
-	-	-	Ye	s ·	+ 5%		Uninterrupt	ed Flow I	lighway	Adjustmen	ts
				1.22	1	Lanes	Median	Exclusive	e left lanes	Adjustm	ent facto
	One-	Way Facili	ty Adjusti	ment		1	Divided	Y	es	+	5%
	Multiply t	he correspon	ding directio	onal		Multi	Undivided	Y	es	4	5%
	Vo	olumes in this	table by 1.2	2		Multi	Undivided	Ν	ło	-2	5%
c	(Multiply v directional roadw	BICYCLE vehicle volum vay lanes to de volum	es shown bel etermine two- tes )	ow by numb way maxim	er of um service	<sup>1</sup> Values a are for th constitute computer planning	hown are presented e automobile/truck e a standard and sho models from which applications. The ta-	as peak hour modes unless uld be used or h this table is o ble and derivi	directional vo specifically st ily for general ferived should ng computer r	lumes for levels ated. This table of I planning applic I be used for more models should no	of service a does not ations. The re specific of be used f
	Paved					based on	planning applicatio	as of the HCM	and the Tran	isit Capacity and	Quality of
Shoul	der/Bicycle		~	1	_	Service N	fanual.				
Lane	Coverage	В	C	D	E	<sup>2</sup> Level of	service for the bic	cle and nedes	trian modes in	n this table is bas	ed on
(	0-49%	*	150	390	1,000	number o	f vehicles, not num	ber of bicyclis	ts or pedestria	ans using the faci	lity.
5	0-84%	110	340	1,000	>1,000	J Buses ne	r hour shown are on	for the neal I	our in the cina	ale direction of the	higher traff
85	5-100%	470	1,000	>1,000	**	flow.		y p			moon am
	PE	DESTRIA	N MODE	2		* Cannot	be achieved using	able input valu	ue defaults.		
(Mu dired	ultiply vehicle vo ctional roadway l	lumes shown lanes to detern volum	below by nu nine two-way es )	mber of y maximum s	service	** Not ap volumes been reac	plicable for that level of preater than level of hed. For the bicycle	el of service l service D bec mode, the lev	etter grade. Fo come F becaus vel of service l	or the automobile se intersection ca letter grade (incl	e mode, pacities ba uding F) is
idewa	lk Coverage	В	С	D	E	value def	e because there is n sults.	o maximum v	enicle volume	: unreshold using	able input
(	)-49%	*	*	140	480	Courses	200				
5	0-84%	*	80	440	800	Florida D	epartment of Trans	portation			
85	5-100%	200	540	880	>1,000	Systems I	mplementation Off	ice			
	BUS MOI	DE (Schedu	uled Fixed	Route)3	and a	insparie wy		-D ay avenua			
	(Buses	in peak hour	in peak direc	tion)							
Sidewa	lk Coverage	В	С	D	E						
C	)-84%	>5	≥4	≥3	≥2						
85	5-100%	>4	>3	>2	>1						

QUALITY/LEVEL OF SERVICE HANDBOOK

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## TRAFFIC DATA FDOT FLORIDA TRAFFIC ONLINE

COUNTY: 12 - LEE

YEAR	AADT	DI	RECTION 1	DII	RECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	11600 S	E	5700	W	5900	9.00	54.00	13.90
2019	11800 F	E	5800	W	6000	9.00	57.60	13,90
2018	11400 C	E	5600	W	5800	9.00	58.50	13.90
2017	12200 C	E	6100	W	6100	9.00	58.20	11.20
2016	10200 C	E	5100	W	5100	9.00	58.20	9.70
2015	10100 C	E	5000	Ŵ	5100	9.00	62.20	11.40
2014	10300 C	E	5200	W	5100	9.00	63.40	9.20
2013	8600 F	E	4300	¥7	4300	9.00	64.30	11.60
2012	8400 C	E	4200	19	4200	9.00	60.20	11.60
2011	9000 F	E	4500	W	4500	9.00	61.10	13.10
2010	8800 C	E	4400	57	4400	10.06	63.11	13.10
2009	9100 C	E	4600	W	4500	10.54	62.17	11.20
2008	8000 C	E	4000	W	4000	10.50	66.40	14.60
2007	10100 C	E	5200	597	4900	9.62	58.02	15.70
2006	10600 C	E	5400	W	5200	8.81	55.95	16.70
2005	10300 C	E	5300	W	5000	9.60	53.80	18.90

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 1.00

COUNTY: 12 - LEE

SITE: 6021 - SR 82/IMMOKOLEE RD, 500' E OF GUNNERY RD, PTMS 101, LCPR 21

YEAR	AADT	DI	RECTION 1	DI	RECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	28500 X		0		0	9 00	54 00	7 70
2019	30000 T		Ó		õ	9.00	57.60	9.50
2018	29000 S		0		0	9.00	58.50	9.40
2017	28500 F		0		0	9.00	65.10	7.30
2016	28137 C	E	14317	W	13820	9.00	65.10	6.00
2015	26771 C	E	13569	W	13202	9.00	65.10	7.70
2014	25227 C	E	12754	W	12473	9.00	66.20	8.40
2013	23844 C	E	12596	W	11248	9.00	68.60	5.40
2012	22000 F	E	0	W	0	9.00	66.60	7.40
2011	22182 C	E	11177	W	11005	9.00	66.60	9.10
2010	21207 C	E	10845	W	10362	9.51	66.56	6.80
2009	19500 F		0		0	9.96	65.45	7.80
2008	19921 C	E	10020	W	9901	9.96	65.45	9.90

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

COUNTY: 12 - LEE

SITE: 0108 - SR 82, EAST OF COMMERCE LAKES DRIVE LC 222

YEAR	AADT	AADT DIRECTION 1		DIRECTION 2		*K FACTOR	D FACTOR	T FACTOR
2020 2019	21000 C 19800 S	E 10 E 9	)500 9800	W	10500 10000	9.00	54.00	7.80
2018	19100 F	E S	9400	W	9700	9.00	58.50	7.70
2017	18300 C	E S	9000	W	9300	9.00	58.20	7.70
2016	17200 C	Ε {	3600	W	8600	9.00	58.20	6.70
2015	15700 C	E 8	3000	W	7700	9.00	62.20	7.10
2014	15100 F	E	7700	W	7400	9.00	63.40	6.70
2013	14700 C	E	7500	W	7200	9.00	64.30	6.70
2012	12700 C	E	5300	W	6400	9.00	60.20	7.50
2011	13000 F	E	500	W	6500	9.00	61.10	8.60
2010	12800 C	E	5400	W	6400	10.06	63.11	8.60
2009	12200 C	E	00100	W	6100	10.54	62.17	8.80
2008	11100 C	E S	600	W	5500	10.50	66.40	12.30
2007	13200 C	E	800	W	6400	9.62	58.02	13.40
2006	10700 C	E t	5400	W	6500	8.81	55.95	12.70
		ind .	100		5500	3.00	00.00	12.00

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 -

COUNTY: 12 - LEE

SITE: 0107 - SR 82, EAST OF OWEN AVENUE SOUTH

YEAR	AADT	DIREC	FION 1	DI	RECTION 2	*K FACTO	R D FACTOR	T FACTOR
2020	24500 C	E 12	000	52	12500	9.0	0 54.00	8 40
2019	22500 S	E 11	ñññ	F	11500	9.0	57 60	8.00
2018	21500 F	E 10.	500	W	11000	9.0	0 58.50	8.00
2017	20500 C	E 10	000	W	10500	9.0	0 58 20	8.00
2016	18900 C	E 9.	500	W	9400	9.0	0 58.20	5.70
2015	17100 C	E 8	600	W	8500	9.0	0 62.20	6 70
2014	17600 F	E 9	000	W	8600	9.0	63.40	5 90
2013	17000 C	E 8'	700	W	8300	9.0	0 64.30	5.90
2012	14100 C	E 7	100	W	7000	9.0	0 60.20	6.60
2011	15100 F	E 7	600	W	7500	9.0	0 61.10	6.70
2010	14900 C	E 7.	500	W	7400	10.0	6 63.11	6.70
2009	14300 C	E 7.	300	W	7000	10.5	4 62.17	7.90
2008	12700 C	E 6.	500	W	6200	10.5	0 66.40	11.10
2007	15100 C	E 7	900	W	7200	9.6	2 58.02	12.10
2006	15700 C	E 8	000	17	7700	8.8	1 55.95	11.60
2005	12600 C	E 63	200	W	6400	9.6	0 53,80	11.10

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

COUNTY: 12 - LEE

SITE: 4104 - GUNNERY RD, NORTH OF LEE BLVD

YEAR	AADT	DI	RECTION 1	DII	RECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	17500 E	N	0	S	0	9.00	53.40	6.00
2019	17000 F	N		S		9.00	53.80	10.10
2018	16400 C	N	7900	S	8500	9.00	53.30	10.10
2017	15100 T	N	7300	S	7800	9.00	55.40	10.50
2016	14100 S	N	6800	S	7300	9.00	63.90	5.80
2015	13400 F	N	6500	S	6900	9.00	55.50	5.80
2014	12800 C	N	6200	S	6600	9.00	55.20	5.80
2013	17300 S	N	8600	S	8700	9.00	55.00	10.50
2012	17300 F	N	8600	S	8700	9.00	55.30	11.50
2011	17400 C	N	8600	S	8800	9.00	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 -

COUNTY: 12 - LEE

SITE: 4182 - SUNSHINE BLVD., NORTH OF S.R. 82

YEAR	AADT	DI	RECTION 1	DII	RECTION 2	*K FACTOR	D FACTOR	T FACTOR
2020	7400 E		0		0	9.00	59.30	7.30
2019	7400 F	N	3700	S	3400	9.00	59.60	7.30
2017	6300 T	N	3300	S	3000	9.00	55.40	7.30
2016	5900 S	N	3100	S	2800	9.00	63.90	4.90
2015	5600 F	N	2900	S	2700	9.00	55.50	4.90
2013	4100 S	14	2000	. 5	2000	9.00	55.00	4.90
2012	4100 F		0		0	9.00	55.30	7.40
2011	4100 C	N	0	S	0	9.00	55.20	9.10

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

## TRAFFIC DATA FROM LEE COUNTY TRAFFIC COUNT REPORT

PCS 22 - Lee Boulevard west of Gunnery Rd

36,500 VPD 2020 AADT =

January

February

March

April

May

June

July

August

September

October

November

December

Sunday

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Month of Year Fraction Hour Total EB WB 0.29% 0.77% 0 0.48% 1 0.30% 0.19% 0.49% 2 0.22% 0.19% 0.41% 3 0.30% 0.45% 0.15% 0.72% 0.90% 4 0.19% 2.31% 2.70% 5 0.40% 6 0.94% 4.09% 5.02% 7 1.41% 4.10% 5.51% 8 1.74% 3.36% 5.09% 1.94% 3.20% 5.14% 9 10 2.25% 3.20% 5.45% 11 2.60% 3.18% 5.78% 12 3.03% 3.14% 6.16% 3.29% 3.08% 6.37% 13 Day of Week 14 3.57% 3.05% 6.63% 15 4.07% 2.93% 7.01% 16 4.53% 2.96% 7.49% 7.42% 17 4.64% 2.78% 3.81% 2.46% 6.27% 18 2.96% 4.87% 19 1.91% 2.35% 1.46% 3.81% 20 1.76% 1.09% 2.85% 21 22 1.28% 0.79% 2.07% 23 0.86% 0.47% 1.33%

1 00											
1.00	Factor										
1.11	AM	0.81	WB								
0.99	PM	0.62	EB								
0.76											
0.93											
0.99											
0.98											
1.01											
1.03											
1.07											
1.02											
1.05											
	D										
raction	Desig	n Hour V	olume								
raction 0.75	Desig	n Hour V Volume	olume								
raction 0.75 1.02	Desig # 5	n Hour V Volume 3447	olume Factor 0.094								
raction 0.75 1.02 1.06	Desig # 5 10	n Hour V Volume 3447 3425	<b>olume</b> Factor 0.094 0.094								
raction 0.75 1.02 1.06 1.05	<b>Desig</b> # 5 10 20	Hour V           Volume           3447           3425           3407	<b>Olume</b> Factor 0.094 0.094 0.093								
raction           0.75           1.02           1.06           1.05           1.06	Desig # 5 10 20 30	Hour V           Volume           3447           3425           3407           3373	<b>olume</b> Factor 0.094 0.093 0.093								
raction       0.75       1.02       1.06       1.05       1.06       1.12	Desig # 5 10 20 30 50	Hour V           Volume           3447           3425           3407           3373           3337	<b>Colume</b> Factor 0.094 0.093 0.093 0.092 0.091								
naction       0.75       1.02       1.06       1.05       1.06       1.12       0.93	Desig # 5 10 20 30 50 100	Hour V           Volume           3447           3425           3407           3373           3337           3274	Olume Factor 0.094 0.093 0.093 0.092 0.091 0.090								
raction       0.75       1.02       1.06       1.05       1.06       1.12       0.93	Desig # 5 10 20 30 50 100 150	Hour V           Volume           3447           3425           3407           3373           3337           3274           3208	Factor           0.094           0.093           0.093           0.093           0.093           0.093           0.093           0.093           0.093           0.093           0.093           0.093           0.093								

Directional







PCS 53 - Alico Rd east of I-75

2020 AADT =

20,200 VPD



0.117

0.115

0.111

0.107 0.103

0.100

2020 AADT =

Hour	EB	WB	Total
0	0.51%	0.21%	0.72%
1	0.31%	0.16%	0.46%
2	0.23%	0.18%	0.40%
3	0.18%	0.31%	0.49%
4	0.25%	0.73%	0.97%
5	0.45%	2.30%	2.75%
6	1.18%	4.48%	5.67%
7	2.00%	4.65%	6.65%
8	2.01%	3.88%	5.89%
9	1.75%	3.21%	4.97%
10	1.98%	2.97%	4.95%
11	2.31%	2.86%	5.17%
12	2.77%	2.87%	5.64%
13	2.94%	2.81%	5.74%
14	3.53%	2.86%	6.38%
15	4.34%	2.92%	7.25%
16	4.99%	2.98%	7.96%
17	5.23%	2.91%	8.13%
18	3.86%	2.27%	6.12%
19	2.85%	1.52%	4.36%
20	2.21%	1.07%	3.27%
21	1.72%	0.92%	2.63%
22	1.44%	0.65%	2.08%
23	1.01%	0.35%	1.35%

Month of Year	Fraction		Directiona	al
January	1.15		Factor	
February	1.21	AM	0.79	SB
March	0.99	PM	0.63	NB
April	0.69	la contra c		
May	0.85			
July	0.96			
August	0.98			
September	1.02			
October	1.07			
November	1.03			
December	1.07			
December	1.07			
Day of Week	Fraction	Desig	n Hour V	olume
Sunday	0.65	#	Volume	Factor
Monday	1.04	5	48	0.001
Tuesday	1.11	10	4885	0.120

40,600 VPD

Wednesday

Thursday

Friday

Saturday

1.1

1.11

1.12

0.85

20

30

50

100

150

200

4730

4673

4516

4352

4198

4048





Jpdated 2/24/21	Daily Traffic Volume (AADT)											
STREET	LOCATION	Sta- tion #	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
DANIELS PKWY	E OF SIX MILE PKWY	31	53600	52200	53200	51800	53200	59700		60700	62500	54100
DANIELS PKWY	W OF 1 - 75	264	58400	60900	48700	51500	60600		52400			
DANIELS PKWY	E OF I - 75	52	48000	49500	44800	47100	44200		52600	51800	54500	48400
DANIELS PKWY	E OF CHAMBERLIN PKWY	48	35700		35800	38100	37300	41900	45600	41400	41900	40600
DANIELS PKWY	W OF GATEWAY BLVD	89					35800	34500		35700	39000	10000
DANIELS PKWY	S OF IMMOKALEE RD	524	24400	29800	20600	28200	29000	33400	32100			37400
DANLEY RD	W OF METRO PKWY	518				4900		6300		6700		4500
DEL PRADO BLVD	S OF BEACH PKWY	86									25500	25500
DEL PRADO BLVD	S OF CORNWALLIS PKWY	2	37400	36600	37100	37800	38300			40700	40700	36000
DEL PRADO BLVD	S OF FOUR MILE COVE RD	40	48300	45200	45800	46500	45600	46500	46400	45200	45100	40400
DEL PRADO BLVD	E OF US 41	443			4700	5400	6000	6600	7200	7800	7800	8800

1.1

Updated 2/24/21	Daily Traffic Volume (AADT)											
STREET	LOCATION	Sta- tion #	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
EOWI ED ST		544				00700						
FOWLER ST	S OF MORENO ST	20	10000	10400	01700	20700	04500	23300	04000	22100	07100	18800
FOWLER ST	S OF M.L.K. BLVD (SR 82)	<u>20</u> <u>119</u>	19000	19400	21700	23000	24500	23700	24900	23900	27400	24800 14400
GASPARILLA BLVD	S OF CHARLOTTE CO. LINE	510				6500						our d
GATEWAY BLVD	S OF GRIFFIN	536									22460	
GLADIOLUS DR	E OF SAN CARLOS BLVD	284	10200		7600		13100		13100		11000	
GLADIOLUS DR	E OF PINE RIDGE	283										110
GLADIOLUS DR	E OF A&W BULB RD	39	18600	19200	19800	20500	21900	22600	23000	22500	23200	19800
GLADIOLUS DR	W OF WINKLER RD	285										
GLADIOLUS DR	W OF US 41	<u>46</u>	37800	40800	37600	38900	40600	42000	42700	41500	43200	39000
GRIFFIN DR	S OF SR 82	534									8000	
GUNNERY RD	N OF IMMOKALEE RD	290	17300	20200	17600	18300	19100	21500	20400			26300
GUNNERY RD	N OF LEE BLVD (CR 884)	289	14700	15800	13600	13600	15100	14800	15500	15800	15700	16700
GUNNERY RD	S OF BUCKINGHAM RD						7800					
HANCOCK BRIDGE PKWY	W OF BEAU DR	17	20000	17900	18400	20600	21500	22000	22200	23700	22900	19700
HANCOCK BRIDGE PKWY	E OF ORANGE GROVE BLVD	116					Concert.	- Standard				15900
HANCOCK BRIDGE PKWY	W OF ORANGE GROVE BLVD	292	22500		20900	20900	20900	23800	21300	23800	23700	21400
HANCOCK BRIDGE PKWY	W OF NE 24 AVE	115										
Updated 2/24/21				Da	nily Traf	fic Volu	me (AA	DT)				
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STREET	LOCATION	Sta- tion #	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
IMPERIAL PKWY	N OF STRIKE LN	63	8300	9300	9900	11000	13200	13000	14200	14800	15000	11700
IMPERIAL PKWY	N OF BONITA BEACH RD	529										
IMPERIAL PKWY	S OF BONITA BEACH RD	492							22200		20200	
IONA RD	W OF McGREGOR BLVD	303	7400		6800	-	7100		7200		7000	
JOEL BLVD (CR 884)	E OF BELL BLVD	306	12500	14100	12700	13400	14100	14500	14100	13600	14800	13900
JOEL BLVD (CR 884)	N OF E 10TH ST	69						8900	9000	9400	9500	9100
JOEL BLVD (CR 884)	S OF PALM BEACH BLVD	305	7300	8100	7400	7600	8200	8800	9200	9200	11000	10900
JOHN MORRIS RD	S OF SUMMERLIN RD	497										
JOHN MORRIS RD	N OF SUMMERLIN RD	498	3600		3600		4500	3 10	4700		4800	
KELLY RD	W OF SAN CARLOS BLVD	308	3400		4300		5300		4500		4900	
DR. M. L. KING BLVD (SR 82)	E OF CRANFORD AVE	84	-	Ter la la			28500	26800	27600	28300	29100	27000
DR. M. L. KING BLVD (SR 82)	W OF 1 - 75	20			32100	35100	38600	41100	42200	43600	44400	40700
DR. M. L. KING BLVD (SR 82)	E OF 1-75	<u>68</u>			29200	32200	35100	37800	39400	40300	41200	38600
LAUREL DR	E OF BUSINESS 41	309	5900		5500		5900		6500			
LEE BLVD(CR 884)	E OF IMMOKALEE RD	310			38100	42800		49500		44800		
LEE BLVD(CR 884)	W OF GUNNERY RD	22	28600	33800	31000	33500	35300	37400	37900	41300	41000	36500
LEE BLVD(CR 884)	E OF SUNNILAND BLVD	302					- 10.5					
LEE BLVD(CR 884)	E OF SUNSHINE BLVD	312	32300		29500	2. 63	33100		32600		43300	
LEE BLVD(CR 884)	N OF LEELAND HEIGHTS	311	10500	11800	10400	10900	12100	12600	12600	12800		19300
LEE RD	S OF ALICO RD	313					10400					

144 C

			Da	ily Traf	fic Volu	me (AA	DT)				
LOCATION	Sta- tion #	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
N OF GLADIOLUS DR	215	7700		6800		6600		7100		7700	
N OF IMMOKALEE RD	201					6800		7100		6000	
S OF HOMESTEAD RD	200	8800	11100	9000	9300	10300	11000		10200	10700	7900
E OF US 41	204	21800	21700	23400	19900	21900	24100	22100	22800	24200	25600
E OF LEE RD	207										
W OF I - 75	10	25800	27200	29100	38400	41100	43600	44800	47900	49800	41900
E OF I - 75	53	26200	26000	26900	28400	25600	24300	24600	26200	24200	20200
E OF BEN HILL GRIFFIN PKWAY	205				7500		8500		8900		
N OF SUMMERLIN RD	216	8200		8400		8200		11500		11400	
	LOCATION N OF GLADIOLUS DR N OF IMMOKALEE RD S OF HOMESTEAD RD E OF US 41 E OF LEE RD W OF 1 - 75 E OF I - 75 E OF I - 75 E OF BEN HILL GRIFFIN PKWAY N OF SUMMERLIN RD	LOCATION Sta- tion # N OF GLADIOLUS DR 215 N OF IMMOKALEE RD 201 S OF HOMESTEAD RD 200 E OF US 41 204 E OF LEE RD 207 W OF 1-75 10 E OF 1-75 53 E OF BEN HILL GRIFFIN PKWAY 205	Station #         2011           N OF GLADIOLUS DR         215         7700           N OF IMMOKALEE RD         201         2011           S OF HOMESTEAD RD         200         8800           E OF US 41         204         21800           E OF LEE RD         207         208           W OF I- 75         10         25800           E OF I- 75         53         26200           E OF BEN HILL GRIFFIN PKWAY         205         205	Sta- tion #         2011         2012           N OF GLADIOLUS DR         215         7700           N OF IMMOKALEE RD         201	Sta- tion #         2011         2012         2013           N OF GLADIOLUS DR         215         7700         6800           N OF IMMOKALEE RD         201         500         500           S OF HOMESTEAD RD         200         8800         11100         9000           E OF US 41         204         21800         21700         23400           E OF LEE RD         207         207         2010         25800         27200         29100           E OF I- 75         10         25800         27200         29100         26900         26900           E OF BEN HILL GRIFFIN PKWAY         205         8400         8400         8400         8400	Sta- tion #         2011         2012         2013         2014           N OF GLADIOLUS DR         215         7700         6800         2014           N OF IMMOKALEE RD         201         500         500         500         500           E OF US 41         204         21800         21700         23400         19900           E OF US 41         207         207         2000	Daily Traffic Volume (AA)           Sta- tion #         2011         2012         2013         2014         2015           N OF GLADIOLUS DR         215         7700         6800         6600           N OF IMMOKALEE RD         201         -         -         6800           S OF HOMESTEAD RD         200         8800         11100         9000         9300         10300           E OF US 41         204         21800         21700         23400         19900         21900           E OF LEE RD         207         -         -         -         -         -           W OF 1- 75         10         25800         27200         29100         38400         41100           E OF BEN HILL GRIFFIN PKWAY         205         -         -         7500         -         -           N OF SUMMERLIN RD         216         8200         8400         8200         8400         8200	Daily Traffic Volume (AADT)           Sta- tion #         2011         2012         2013         2014         2015         2016           N OF GLADIOLUS DR         215         7700         6800         6600         600	Daily Traffic Volume (AADT)           Sta- tion #         2011         2012         2013         2014         2015         2016         2017           N OF GLADIOLUS DR         215         7700         6800         6600         7100           N OF IMMOKALEE RD         201         7700         6800         10300         11000         7100           S OF HOMESTEAD RD         201         7100         8800         11100         9000         9300         10300         11000           E OF US 41         204         21800         21700         23400         19900         21900         24100         22100           E OF US 41         204         21800         27200         29100         38400         41100         43600         44800           E OF LEE RD         207         2010         28400         25600         24300         24600           E OF 1-75         53         26200         26000         28400         25600         24300         24600           E OF BEN HILL GRIFFIN PKWAY         205         7500         8500         11500         2000         2000         2000         2000         2000         2000         2000         2000         2000	Daily Traffic Volume (AADT)           LOCATION         Sta- tion #         2011         2012         2013         2014         2015         2016         2017         2018           N OF GLADIOLUS DR         215         7700         6800         6600         7100         7100           N OF IMMOKALEE RD         201         7700         6800         9300         10300         11000         7100           S OF HOMESTEAD RD         201         7700         8800         11100         9000         9300         10300         11000         10200           E OF US 41         204         21800         21700         23400         19900         21900         24100         22100         22800           E OF US 41         204         21800         21700         23400         19900         21900         24100         22100         22800           E OF LEE RD         207         207         2010         38400         41100         43600         44800         47900           E OF I- 75         53         26200         26000         26900         28400         25600         24300         24600         26200           E OF BEN HILL GRIFFIN PKWAY         205	Daily Traffic Volume (AADT)           Sta- tion # 2011         2012         2013         2014         2015         2016         2017         2018         2019           N OF GLADIOLUS DR         215         7700         6800         6600         7100         7700           N OF IMMOKALEE RD         201         2010         9000         9300         10300         11000         10200         6000           S OF HOMESTEAD RD         204         21800         21700         23400         19900         21900         24100         10200         10200         10700           E OF US 41         204         21800         21700         23400         19900         21900         24100         22800         24200           E OF US 41         204         21800         21700         23400         19900         21900         24100         22800         24200           E OF LEE RD         207         2070         29100         38400         41100         43600         44800         47900         49800           E OF I - 75         53         26200         26000         28400         26600         24600         24200         24200         24200         24200

# TRAFFIC DATA FROM LEE COUNTY TRAFFIC COUNT DATABASE SYSTEM





Traffic Count Database System (TCDS)

## **Volume Count Report**

LOCATION IN	FO
Location ID	534_NB
Туре	SPOT
Fnct'l Class	-
Located On	Griffin Dr
Loc On Alias	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1
SOUTH OF	SR – 82
Direction	NB
County	Lee
Community	•
MPO ID	
HPMS ID	1
Agency	Lee County

SCONT DAIA IN	Ŭ.	
Count Status	Accepted	
Start Date	Wed 2/3/2021	
End Date	Thu 2/4/2021	
Start Time	12:00:00 AM	
End Time	12:00:00 AM	
Direction		
Notes	lee	
Station	00000000534	
Study		
Speed Limit		
Description		
Sensor Type	Axle/Tube	
Source		
Latitude,Longitude		

	1	5-min	Interv	al	Hourly
Time	1st	2nd	3rd	4th	Count
0:00-1:00	2	2	1	1	6
1:00-2:00	1	2	0	1	4
2:00-3:00	0	0	1	2	3
3:00-4:00	0	= 1	1	0	2
4:00-5:00	6	5	7	6	24
5:00-6:00	17	11	18	32	78
6:00-7:00	38	62	62	98	260
7:00-8:00	91	125	129	86	431
8:00-9:00	69	113	81	59	322
9:00-10:00	35	15	46	36	132
10:00-11:00	29	32	25	30	116
11:00-12:00	34	37	27	31	129
12:00-13:00	41	47	29	44	161
13:00-14:00	27	41	34	43	145
14:00-15:00	40	59	76	80	255
15:00-16:00	61	57	56	38	212
16:00-17:00	46	46	51	52	195
17:00-18:00	39	58	70	97	264
18:00-19:00	67	53	58	46	224
19:00-20:00	43	43	28	22	136
20:00-21:00	22	23	23	25	93
21:00-22:00	19	20	10	16	65
22:00-23:00	9	12	9	5	35
23:00-24:00 📵	6	4	2	2	14
Total					3,306
AM Peak				06	45-07:45 443
PM Peak				17:	15-18:15





Traffic Count Database System (TCDS)

## **Volume Count Report**

LOCATION IN	FO
Location ID	534_SB
Туре	SPOT
Fnct'l Class	7
Located On	Griffin Dr
Loc On Alias	
SOUTH OF	SR â€" 82
Direction	SB
County	Lee
Community	-
MPO ID	
HPMS ID	
Agency	Lee County

COUNT DATA INI	FO	
Count Status	Accepted	
Start Date	Wed 2/3/2021	
End Date	Thu 2/4/2021	
Start Time	12:00:00 AM	
End Time	12:00:00 AM	
Direction		
Notes	lee	
Station	00000000534	
Study		
Speed Limit		
Description		
Sensor Type	Axle/Tube	
Source		
Latitude,Longitude		

	1	5-min	Interv	al	Hourly
Time	1st	2nd	3rd	4th	Count
0:00-1:00	2	0	4	3	9
1:00-2:00	0	1	1	0	2
2:00-3:00	1	1	1	2	5
3:00-4:00	0	0	2	0	2
4:00-5:00	3	0	1	4	E
5:00-6:00	2	3	18	13	36
6:00-7:00	23	31	38	36	128
7:00-8:00	35	42	41	50	168
8:00-9:00	42	33	69	61	205
9:00-10:00	36	28	31	22	117
10:00-11:00	13	28	29	26	96
11:00-12:00	28	28	31	41	128
12:00-13:00	28	27	30	34	119
13:00-14:00	27	38	29	27	121
14:00-15:00	33	31	41	42	147
15:00-16:00	44	81	71	39	235
16:00-17:00	33	42	41	32	148
17:00-18:00	27	42	34	31	134
18:00-19:00	40	33	23	28	124
19:00-20:00	40	31	38	18	127
20:00-21:00	30	35	16	23	104
21:00-22:00	23	11	7	3	44
22:00-23:00	10	7	3	7	27
23:00-24:00 🔘	5	7	4	2	18
Total				-	2,252
AM Peak				08	:00-09:00 205
PM Peak				14	:45-15:45 238

# LEE COUNTY PUBLIC FACILITIES LEVEL OF SERVICE AND CONCURRENCY REPORT

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					PERI	ORMANCE	201	9 100 111	FO	RECAST	
NT NO		ROADWAYLINK	in the set	ROAD	ST	ANDARD	HIGH	ESTHOUR	F	UTURE	
07400	CYPRESS LAKE DR	McGREGOR BLVD	SOUTH POINT BLAD	ALD	E	CAPACITY	LOS	VORTMI	1.05	VOLUME	NOTES
07500	CYPRESS LAKE DR	SOUTH POINT BLVD	WINKLER RD	ALD	E	1.940	D	1.472	D	1.547	
07600	CYPRESS LAKE DR	WINKLER RD	SUMMERLIN RD	ALD	E	1.940	D	1.172	D	1547	
07700	CYPRESS LAKE DR	SUMMERLIN RD	US 41	6LD	E	2.040	D	2.198	D	2.310	
07800	DANIELS PKWY	US 41	METRO PKWY	6LD	E	2,680	D	2,341	D	2,461	
07900	DANIELS PKWY	METRO PKWY	SIX MILE PKWY	6LD	E	2,680	D	2,109	E	2,520	Cunstrained
08000	DANIELS PKWY	SIX MILE PKWY	PALOMINO LN	6LD	E	3,040	-	3.094	1070	3,121	Constrained
08100	DANIELS PKWY	PALOMINO LN	1.75	6LD	E	3,040	112	3,094	T. 8. 1	3,142	Constrained
08200	DANIELS PKWY	1-75	TREELINEAVE	6LD	E	3,260	B	2,698	B	2,835	
08300	DANIELS PKWY	TREELINE AVE	CHAMBERLIN PKWY	6LD	E	3,260	B	2,698	B	2,835	
08400	DANIELS PKWY	CHAMBERLIN PKWY	GATEWAY BLVD	6LD	E	3,260	B	2,412	B	2,535	
8500	DANTELS PKWY	GATEWAY BLVD	SR 82	4LD	E	2,160	В	1,726	B	1,870	SKY Walk *
8600	DANLEY DR	US 41	METRO PKWY	2LN	E	860	C	378	C	409	
B700	DAVIS RD	McGREGOR BLVD	IONA RD	2LN	E	860	c	15	C	29	old count projection(2010)
8800	DEL PRADO BLVD	CAPE CORAL PKWY	SE 46TH ST	6LD	E	2,660	C	1,404	C	1,586	old count projection(2009)
8900	DEL PRADO BLVD	SE 46TH ST	CORONADO PKWY	6LD	E	2,660	C	1,404	C	1,586	old count projection(2009)
9000	DEL PRADO BLVD	CORONADO PKWY	CORNWALLIS PKWY	6LD	E	2,660	D	2,000	D	2,102	
9100	DEL PRADO BLVD	CORNWALLIS PKWY	CORAL POINT DR	6LD	E	2,660	D	2,520	D	2,649	
9200	DEL PRADO BLVD	CORAL POINT DR	HANCOCK B. PKWY	6LD	E	2,800	C	2,111	D	2,218	
9300	DEL PRADO BLVD	HANCOCK B. PKWY	SR 78	6LD	E	2,800	C	1,613	C	1,695	
9400	DEL PRADO BLVD	US 41	SLATER RD	2LN	E	860	C	386		892	Crane Landing
9700	EAST 21ST ST	JOEL BLVD	GRANT AVE	2LN	E	860	C	30	C	31	
9800	ESTERO BLVD	BIG CARLOS PASS BRIDG	PESCADORA AVE	2LN	E	726	A	339	•	356	Constrained*
9900	ESTERO BLVD	PESCADORA AVE	VOORHIS ST	2LN	E	726	C	629	D	662	Constrained*
0000	ESTERO BLVD	VOORHISST	TROPICAL SHORES WAY	2LN	E	726	С	629	D	662	Constrained'
00100	ESTERO BLVD	TROPICAL SHORES WAY	CENTERST	2LN	E	671		716	-	809	Constrained, old count(2010)
4400	ESTERO PKWY	US 41	THREE OAKS PKWY	410	E	2,000	B	790	B	1,083	East & West Cypress View*
4450	ENTERU PRWY	THREE UARS PRWY	BEN HILL GRIFFIN PKWY	4LD	E	2,000	B	676	B	921	
0200	EVERGREEN RU	0541	BUS 41	26.0	E	860	C	100	C	116	old count projection
0300	FORESTICKS BIAD	DOARDHUOSE.	NAIPPOPT PD	2LN	E	860	0	345	C	379	
0500	FOWLERST	NAIPPOPT PD	COLONIAL BLUD	6LD	E	2,300	D	1,258	D	1,322	
0500	CASPADILLA BLAD	RIETH ST	COUNTY LINE	atM	E	2,300	0	1,504	0	1,581	Constanting its
0000	CATEWAY BLVD	DANIELS PKWV	CATEWAY LAKES BLUD	41.0	5	1000	0	241	0	209	Constrained
-	CATEWAY BLVD	GATEWAY LAKES BLVD	SERO	alN	F	860	C	1,200	0	1,209	
0000	CLADIOLUS DR	McGREGOR BLVD	PINE RIDCE RD	41.0	F	1.840	C	303	C	331	
1000	GLADIOLUS DR	PINE RIDGE RD	BASS RD	41.0	E	1.840	C	1 220	c	1965	
1100	GLADIOLUS DR	BASS RD	WINKLER RD	6LD	E	2 780	c	1220	C	1202	
1200	GLADIOLUS DR	WINKLER RD	SUMMERLIN RD	6LD	E	2,780	C	1.230	C	1.202	
1300	GLADIOLUS DR	SUMMERLIN RD	US 41	6LD	E	2,780	B	1.977	C	2.078	
1400	GREENBRIAR BLVD	RICHMOND AVE	JOEL BLVD	2LN	E	860	C	75	c	80	
1500	GUNNERY RD	SR 82	LEE BLVD	4LD	E	1,920	B	965	В	1.014	
1600	GUNNERY RD	LEE BLVD	BUCKINGHAM RD	2LN	E	1,020	с	773	С	908	
1700	HANCOCK BRIDGE PKWY	DEL PRADO BLVD	NE 24TH AVE	4LD	E	1,880	B	1,017	B	1,069	
800	HANCOCK BRIDGE PKWY	NE 24TH AVE	ORANGE GROVE BLVD	4LD	E	1,880	B	1,478	B	1,554	
1900	HANCOCK BRIDGE PKWY	ORANGE GROVE BLVD	MOODY RD	4LD	E	1,880	B	1,529	B	1,607	
2000	HANCOCK BRIDGE PKWY	MOODY RD	US 41	4LD	E	1,880	B	1,529	В	1,607	
2100	HART RD	SR 78	TUCKER LANE	2LN	Е	860	C	357	С	375	
2200	HICKORY BLVD	BONITA BEACH RD	MeLAUGHLIN BLVD	2LN	E	890	E	533	E	560	Constrained*
2300	HICKORY BLVD	McLAUGHLIN BLVD	MELODY LANE	2LN	E	890	E	533	E	560	Constrained*
2400	HICKORY BLVD	MELODY LANE	ESTERO BLVD	2LN	E	890	E	533	E	560	Constrained*
480	HOMESTEAD RD	SR 82	MILWAUKEE BLVD	2LN	E	1,010	D	649	E	820	
2490	HOMESTEAD RD	MILWAUKEE BLVD	SUNRISE BLVD	2LN	E	1,010	D	649	E	682	•
500	HOMESTEAD RD	SUNRISE BLVD	LEELAND HEIGHTS	4LN	E	2.960	С	649	С	682	4 lane under construction
600	HOMESTEAD RD	LEELAND HEIGHTS	LEE BLVD	4LN	E	2,960	D	1,257	D	1,353	
800	1-75	BONITA BEACH RD	CORKSCREW RD	6LF	D	5,620	E	5,811	E	5.967	
900	1-75	CORKSCREW RD	ALICO RD	6LF	D	5,620	E	5,758	E	5,981	
000	I-75	ALICO RD	DANIELS PKWY	6LF	D	6,620	D	5,730	D	6,139	
0019	1-75	DANIELS PKWY	COLONIAL BLVD	6LF	D	5,620	D	5,309	D	5,499	
2300	1-75	M.L.K.(SR 82)	LUCKETT RD	6LF	D	5,620	D	5,072	D	5,204	
2400	-75	LUCKETT RD	SR 80	6LF	D	6,620	C	4.940	C	4,933	
2500 1	-75	SR 80	SR 78	6LF	D	6,620	B	3,804	B	3.791	
2600	-75	SR 78	COUNTY LINE	6LF	C	4,670	B	3,082	B	2,726	
700	IDLEWILD ST	METRO PKWY	RANCHETTE RD	2LN	E	860	C	201	C	212	
000 1	IMMOKALEE RD (SR 82)	E OF COLONIAL BLVD	GATEWAY BLVD	6LD	D	3,171	C	1,737	C	1,971	
100	MMOKALEE RD (SR 82)	GATEWAY BLVD	GUNNERY RD	6LD	D	3,171	C	1,166	C	1,245	
200	MINIOKALEE RD (SR 82)	GUNNERY KD	ALABAMA RD	oLD	D	4,860	B	1,635	B	1,747	
300 1	MMUKALEE RD (SR 82)	ALABAMA RD	OFFT BEAD	4LD	D	3,240	B	612	B	658	
- 1°						0,040	-	U.A.	M	030	

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INTE MA		ROADWAY LINK	10/1	ROAD	PERF ST/	ORMANCE NDARD	201 HIGH	9 100TH EST HOUR	F() Fl	RECAST	
JINK NO	NAME	FROM	10	TYPE	LOS	CAPACITY	LOS	VOLUMIE	1.05	VOLUME	NOTES
21400	PINE ISLAND RD (SR 78)	BARRETT RD	0541	41.0	D	2,100	C	1,696	C	1,843	
21500	PINE ISLAND RD (SR 78)	US 41	BUS 41	4LD	D	2,100	C	1,690	C	1,750	
21600	PINE RIDGE RD	SAN CARLOS BLVD	SUMMERLIN RD	2LN	E	860	C	499	C	545	<u>.</u>
21700	PINE RIDGE RD	SUMMERLIN RD	GLADIOLUS DR	2LN	E	860	C	286	C	545	Heritage Isle*
21800	PINE RIDGE RD	GLADIOLUS DR	MCGREGOR BLVD	2LN	E	860	C	286	C	301	
21900	PLANTATION RD	SIX MILE PKWY	DANIELS PKWY	2LN	E	860	C	288	C	417	Intermed Park
22000	PLANTATION RD	DANIELS PKWY	IDLEWILD ST	21.N	E	860	D	672	D	706	FDOT Metro Pkwy 6-laning
22050	PLANTATION RD	IDLEWILD ST	COLONIAL BLVD	4LN	E	1,790	С	841	C	884	
22100	PONDELLA RD	SR 78	ORANGE GROVE BLVD	4LD	E	1,890	В	736	B	774	
22200	PONDELLA RD	ORANGE GROVE BLVD	US 41	4LD	E	1,890	В	1,164	B	1,239	
22300	PONDELLA RD	US 41	BUS 41	4LD	E	1,890	В	953	B	1,002	
22400	PRITCHETT PKWY	SR 78	RICH RD	2LN	E	860	C	73	C	541	old count, Stoneybrook North(2009)
22500	RANCHETTE RD	PENZANCE BLVD	IDLEWILD ST	2LN	E	860	С	93	C	98	
22600	RICH RD	SLATER RD	PRITCHETT PKWY	2LN	E	860	С	55	C	62	old count projection(2009)
22700	RICHMOND AVE	LEELAND HEIGHTS	E 12TH ST	2LN	E	860	C	79	C	91	
22800	RICHMOND AVE	E 12TH ST	GREENBRIAR BLVD	2LN	E	860	C	70	C	83	
23000	SAN CARLOS BLVD (SR 865)	MANTANZAS PASS B.	MAINST	ZLD	D	020		1.055	and the state	1.176	Constrained
29100	SAN CARLOS BLVD (SR 865)	MAINST	SUMMERLIN RD	ALD	D	2 100	C	1.055	C	1.176	PDAE Study
23180	SAN CARLOS BLVD (SR 864)	SUMMERLIN RD	KELLY RD	21.0	D	020	C	744	C	R47	- Distriction
29200	SAN CARLOS BLVD (SR BAC)	KRILYRD	GLADIOLUS DR	ALD	D	2100	0	744	0	B4T	
22220	SAN CARLOS RIVO	115.41	THREE OAKS PRIVAT	alM	F	860	C	107	C	440	
-3-30	SANTREL BI VD	LIS 41	IFF PD	aLN	5	860	C	42/	0	449	
43200	SANTREL CALICEWAY	CANTREL CUODELINE	TOLL PLATA	alM	F	000	E	404	E	206	
23300	CUCIL POINT DUND	Nucorcon DUM	PALM ACODE	2LN	6	1,140	E	944	E	992	
23400	STIELL POINT BLAD	MCGREGOR BLYD	METTO DIGUT	2LN	E	860	C	290	C	304	
23500	SIX MILLE PKWY (SR 739)	US 41	METRO PKWY	440	D	2,100	C	1,778	C	1,950	
23600	SIX MILE CYPRESS	METRO PKWY	DANIELS PKWY	410	E	2,000	В	1,398	B	1,469	
23700	SIX MILE CYPRESS	DANIELS PKWY	WINKLER EXT.	4LD	E	1,900	B	1,149	B	1,352	
23800	SIX MILE CYPRESS	WINKLER EXT.	CHALLENGER BLVD	410	E	1,900	В	1,050	B	1,104	
23900	SIX MILE CYPRESS	CHALLENGER BLVD	COLONIAL BLVD	6LD	E	2,860	A	1,050	A	3,104	
24000	SLATER RD	SR 78	NALLE GRADE RD	2LN	E	1,010	C	402	C	423	
24100	SOUTH POINTE BLVD	CYPRESS LAKE DR	COLLEGE PKWY	2LD	E	910	D	644	D	67.	•
24200	SR 31 (ARCADIA RD)	SR.80	SR 78	2LN	D	970	C	643	C	610	PD&E/SEIR Study
24300	SR 31 (ARCADIA RD)	SR 78	COUNTY LINE	<b>2LN</b>	C	820	C	564	C	460	PD&E/SEIR Study
24400	STALEY RD	TICE	ORANGE RIVER BLVD	2LN	E	860	C	189	C	215	
24500	STRINGFELLOW RD	1ST AVE	BERKSHIRE RD	2LN	E	1,060	B	315	D	672	Constrained
24600	STRINGFELLOW RD	BERKSHIRE RD	PINE ISLAND RD	2LN	E	1,060	B	315	С	448	Constrained
24700	STRINGFELLOW RD	PINE ISLAND RD	PINELAND RD	2LN	E	1,060	C	551	D	652	Constrained
24800	STRINGFELLOW RD	PINELAND RD	MAIN ST	2LN	E	1,060	C	551	D	648	Contraction and the
24900	SUMMERLIN RD	McGREGOR BLVD	KELLY COVE RD	4LD	E	1,980	A	1,243	Λ	1,306	
25000	SUMMERLIN RD	KELLY COVE RD	SAN CARLOS BLVD	4LD	E	1,980	A	1,243	٨	1,306	
25100	SUMMERLIN RD	SAN CARLOS BLVD	PINE RIDGE RD	6LD	E	3,000	٨	1,919	A	2,149	
25200	SUMMERLIN RD	PINE RIDGE RD	BASS RD	6LD	E	3,000	A	1,919	A	2,016	
25300	SUMMERLIN RD	BASS RD	GLADIOLUS DR	6LD	E	3,000	A	1,919	A	2,016	
25400	SUMMERLIN RD	GLADIOLUS DR	CYPRESS LAKE DR	4LD	E	1,900	C	1.454	C	1.552	
25500	SUMMERLIN RD	CYPRESS LAKE DR	COLLEGE PKWY	6LD	E	2.880	B	1.783	B	1.874	1
25600	SUMMERLIN RD	COLLEGE PKWY	PARK MEADOW DR	6LD	E	2.880	B	1.016	B	2 014	·
25700	SUMMERLIN RD	PARK MEADOW DR	BOY SCOUT	61.D	F	2,880	R	1.016	B	2.014	
25800	SUMMERLIN RD	BOY SCOUT	MATHEWS DR	410	F	1.820	D	1260	P	1994	
25000	SUMMERLINED	MATHEWS DP	COLONIAL BLVD	410	F	1,800	D	1260	P	1994	
26000	SITNEISE BI UD	REITRIVO	COLIMBUS BUND	arvi	F	860	C	4200	C	4324	
26100	CINCUME BIND	SD Bo	COLUMBUS BLYD	OLN I	F	1000	0	44	0	53	
20100	CINCUMP DUVD	DADD CT CW	I DE DI VID	21.1	<u>с</u>	1,010	0	309	0	386	
40150	SUNCHINE BLYD	LEE BLVD	NU SOTU OT	2LN	P	1,010	0	309	0	308	
20200	SUNSTINE BLVD	LEB BLVD	1211131	21.1	5	1,010	D	596	D	020	
20300	SUNSHINE BLVD	W 121H ST	W 751H ST	2LN	Б	860	D	623	D	655	
26400	SW 23RD ST	GUNNERY RD	SUNSHINE BLVD	2LN	E	860	D	650	D	683	
26500	THREE OAKS PKWY	COCONUTED	ESTERO PKWY	4LD	E	1,940	B	1,230	B	1,413	
26600	THREE OAKS PKWY	ESTERO PKWY	SAN CARLOS BLVD	4LD	E	1.940	A	623	B	724	
26700	THREE OAKS PKWY	SAN CARLOS BLVD	ALICO RD	4LD	Б	1,940	A	633	B	976	
26800	TICEST	SR 80	ORTIZ AVE	2LN	E	860	С	163	С	171	old count(2010)
26900	TICE ST	ORTIZAVE	STALEY RD	2LN	E	860	С	203	D	716	Elementry U
27000	TREELINE AVE	TERMIMAL ACCESS RD	DANIELS PKWY	4LD	E	1,980	A	1,272	A	1,510	Harley Davidson
27030	TREELINE AVE	DANIELS PKWY	AMBERWOOD RD	4LD	E	1,980	A	880	A	924	
-1070	TREELINE AVE	AMBERWOOD RD	COLONIAL BLVD	4LD	E	1,980	A	880	A	924	
27070		OLD 41	CORKSCREW RD	6LD	D	3,171	C	2,662	C	2,712	
27070	US 41 (S TAMIAMI TR)	OLD 41	CONTROCTOR IN INC	and the second se		and the second se				and the second se	
27070 29800 29900	US 41 (S TAMIAMI TR) US 41 (S TAMIAMI TR)	CORRSCREWRD	SANIBEL BLVD	6LD	D	3,171	C	2,422	C	2,485	
27070 29800 29900 30000	US 41 (S TAMIAMI TR) US 41 (S TAMIAMI TR) US 41 (S TAMIAMI TR)	CORRSCREW RD SANIBEL BLVD	SANTBEL BLVD ALICO RD	6LD 6LD	D	3,171	C C	2,422	C C	2,485	
27070 29800 29900 30000 30100	US 41 (S TAMIAMI TR) US 41 (S TAMIAMI TR) US 41 (S TAMIAMI TR) US 41 (S TAMIAMI TR)	CORKSCREW RD SANIBEL BLVD ALICO RD	SANTBEL BLVD ALICO RD ISLAND PARK RD	6LD 6LD 6LD	D D D	3,171 3,171 3,171	C C C	2,422 2,623 2,623	C C	2,485 2,686 2,730	

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	5/25/2020	LEE CO	<b>OUNTY Road Link</b>	Volume	es (Cou	inty- and	State-	Maintair	ned R	oadways)	
NK NO	NIME	ROADWAY LINK	74	ROAD	PERF	ORMANCE ANDARD	201 (f)(3)(	9 TOOTH EST HOUR	FC F	UTURE	
19500	IMPERIAL PKWY	COUNTY LINE	BONITA BEACH RD	110	LOS	CAPACITY LOSO	1.0S	ANOIREAMID	LOS	VOLUME	NOTES
3550	IMPERIAL PKWY	E TERRY ST	COCONUTED	ALD	F	1020	8	1,017	B	1,009	
600	IONA RD	DAVIERD	MeCRECOR RIVE	all	E	1,920		4,015	0	1,007	
200	IST AND DADY DD	PIPEPP	ITE AL	26.1	6	000	C	381	C	400	
100	ISLAND PARK RD	PARK RD	05.41	2LN	E	860	C	79	C	251	
00	JUEL BLVD	BELL BLVD	IBTHST	4LN	E	2,120	B	660	B	876	Joel Blvd CPD
00	JOEL BLVD	18TH ST	SR BO	2LN	E	1,010	D	495	D	520	
00	JOHN MORRIS RD	BUNCHE BEACH	SUMMERLIN RD	2LN	E	860	C	62	C	72	old count projection
00	JOHN MORRIS RD	SUMMERLIN RD	IONA RD	2LN	E	860	C	236	C	267	
00	KELLY RD	McGREGOR BLVD	SAN CARLOS BLVD	2LN	E	860	C	277	C	291	
00	KELLY RD	SAN CARLOS BLVD	PINE RIDGE RD	2LN	E	860	C	105	C	120	old count projection(2010)
00	LAUREL DR	BUS 41	BREEZE DR	2LN	E	860	C.	324	C	340	
00	LEE BLVD	SR 82	ALVIN AVE	6LD	E	2,840	B	2,202	B	2,318	
00	LEE BLVD	ALVIN AVE	GUNNERY RD	6LD	E	2.840	B	2,161	B	2.340	
00	LEE BLVD	GUNNERY RD	HOMESTEAD RD	61.0	E	2 840	R	2 121	R	2.240	
00	LEE BLVD	HOMESTEAD RD	WILLIAMS AVE	410	F	1080	P	600	D	660	
20	LEE BLVD	WILLIAMSAVE	TELAND HEIGHTS	410	-	1,980	0	030	D	002	
30	LECOLTO	WILLIAMS AVE	LEELAND HEIGHTS	214	E	1,020	в	630	В	005	
,U	LOC NU	BAN CAKLUS BLVD	ALICO KD	2LN	E	860	C	544	0	614	old count projection(2015)
0	LEELAND HEIGHTS	HUMESTEAD RD	JUEL BLVD	4LN	E	1,800	B	832	B	867	
00	LEONARD BLAD	GUNNERY RD	WESTGATE BLVD	2LN	E	860	D	650	D	706	
00	LITTLETON RD	CORBETT RD	US 41	2LN	E	860	C	470	C	494	
00	LITTLETON RD	US 41	BUS 41	2LN	E	860	C	417	С	439	
00	LUCKETT RD	ORTIZ AVE	1-75	2LN	E	880	B	326	B	401	4 Ln design & ROW
00	LUCKETT RD	1-75	COUNTRY LAKES DR	2LN	E	860	C	273	С	287	
0	MAPLE DR	SUMMERLIN RD	2ND AVE	2LN	E	860	C	77	С	89	old count projection
00	McGREGOR BLVD	SANIBEL T PLAZA	HARBOR DR	4LD	E	1,960	B	1,159	B	1,212	
00	McGREGOR BLVD	HARBOR DR	SUMMERLIN RD	ALD	E	1.960	R	1.114	R	1,170	
00	McGREGOR BLVD	SUMMERLIN RD	KELLY RD	41.0	E	1060	-	064	B	1022	
00	McGRECOP BLVD	KELLYRD		410	12	1,900	-	904		1,022	
00	MORECOR BIND (CD C(-)	OLD Mederana at un los	IONA LOOP PD	4LU	E	1,900		904	A	1,013	
00	MedBECOD BLUD (OR 867)	LONA LOOP DD	ADVE DIDOF AD	400	D	2,100	C	1,594	C	1,731	
00	MCGREGOR BLVD (SR 867)	IONA LOOP RD	PINE RIDGE RD	4LD	D	2,100	С	1,594	С	1,731	
00	MCGREGOR BLVD (SR 867)	PINE RIDGE RD	CYPRESS LAKE DR	4LD	D	2,100	C	1,832	D	2,082	
00	McGREGOR BLVD (SR 867)	CYPRESS LAKE DR	COLLEGE PKWY	4LD	D	2,100	C	1,832	D	2,082	
600	McGREGOR BLVD (SR 867)	COLLEGE PKWY	WINKLER RD	2LN	D	924	C	792	C	861	Constrained
700	McGREGOR BLVD (SR 867)	WINKLER RD	TANGLEWOOD BLVD	2LN	D	970		1,187	10	1,260	Constrained
100	McGREGOR BLVD (SR 867)	TANGLEWOOD BLVD	COLONIAL BLVD	2LN	D	970		1,187		1,260	Constrained
00	METRO PEWY (SR 739)	SIX MILE PKWY	DANTELS PKWY	6LD	D	3,171	С	1,123	C	1,391	
00	METRO PKWY (SR 739)	DANIELS PKWY	CRYSTAL DR	4LD	D	2,100	C	1,193	С	1,441	
00	METRO PKWY (SR 739)	CRYSTAL DR	DANLEY DR	4LD	D	2,100	C	1,544	C	1.764	
00	METRO PKWY (SR 739)	DANLEY DR	COLONIAL BLVD	ALD	D	2.100	C	1.615	C	1.845	
	MICHAEL RIPPE PKWY	USAT	SIX MILES PKWY	61.0	D	9.171	C	1.081	c	1045	
00	MILWAUKEE BLVD	ALABAMA BLVD	AFI ( RIVD	01.N	F	B60	0	1.301	0	4995	
00	MILWAUKEE BLVD	DELL BIND	COLUMPTIC PLUD	2014	6	000	0	1/1	0	180	
00	NOODYDD	DELL BLYD	COLOMBUS BLYD	26.9	E	860	C	171	C	183	
00		MANCOCK B PKWY	FUNDELLA RD	2LN	E	860	C	182	С	206	old count projection(2009)
00	MALLE GRADE RD	SLATER RD	NALLERD	2LN	E	860	C	68	C	71	
00	NALLE RD	SR 78	NALLE GRADE RD	2LN	E	860	C	114	C	134	
00	NEALRD	ORANGE RIVER BLVD	BUCKINGHAM RD	2LN	Е	860	C	120	С	126	
00	NO RIVER RD	SR 31	FRANKLIN LOCK RD	2LN	E	1,140	A	156	B	275	
00	NO RIVER RD	FRANKLIN LOCK RD	BROADWAY RD	2LN	E	1,140	A	156	B	301	
00	NO RIVER RD	BROADWAY RD	COUNTY LINE	2LN	E	1,140	A	108	A	141	
00	OLGA RD*	SR 80 W	SR 80 E	2LN	Е	860	С	82	C	95	old count projection
00	ORANGE GROVE BLVD	CLUB ENTR	HANCOCK B. PKWY	2LN	E	860	C	393	C	488	old count(2000)
00	ORANGE GROVE BLVD	HANCOCK B. PKWY	PONDELLA RD	ALN	E	1 700	C	500	C	620	and connit(coup)
00	ORANGE RIVER BLVD	SR 80	STALEY RD	OIN	F	1,000	C	407	C	140	
20	ORANGE RIVER BIND	STALEVED	BUCKINCHAN PD	aiM	F	1,000	0	44/	C	449	
20		SINCIPLOS BLUD	ALICO PO	2LIN	-	1,000	0	4:27	C	401	
	ODTI2 AVE	SALY CARLOS BLVD	ALICO KD	2LN	E	890	C	130	e	136	
10 0	UKIIZAVE	COLONIAL BLVD	SK 82	2LN	E	900	B	764	C	803	
00	ORTIZAVE	SR 82	LUCKETT RD	2LN	E	900	B	749	C	788	4 Ln design & ROW
00 (	ORTIZAVE	LUCKETT RD	SR 80	2LN	E	900	B	382	B	402	4 Ln design & ROW
0	PALM BEACH BLVD (SR 80)	PROSPECTAVE	ORTE AVE	4LD	D	2,100	C	4175	C	1,310	
Da I	PALM BEACH BLVD (SR 80)	ORTIZAVE	1-75	6LD	D	3.171	C	1,199	C	1,310	
00 1	PALM BEACH BLVD (SR 80)	1-75	SR 31	6LD	D	3,171	C	1,701	C	2,056	
00 1	PALM BEACH BLVD (SR 80)	SR 31	BUCKINGHAM RD	ALD	D	2,100	C	1,774	C	1,824	
00 1	PALM BEACH BLVD (SR 80)	BUCKINGHAM RD	WERNER DR	ALD	D	3,280	B	1.361	B	1.491	
30 0	PALM BEACH BLVD (SR Bo)	WERNER DR	JOEL BLVD	410	C	1.607	r	1180	0	1974	
10 1	PALM BEACH BI VD (CD Ca)	IOFI RI VD	HENDRY CO I DIE	(ID	0	0.007	0	1,000	0	4,454	
	TALONIDIOLINI	DINIELODIA	DENULVICE BUTT	400	C	2,210	0	954	в	1,006	
10 1	ALUMINO LN	DANIELS PKWY	PENZANCE BLVD	2LN	E	860	С	395	С	418	
10 1	PARK MEADOWS DR	SUMMERLIN RD	US 41	2LN	E	B60	C	197	C	207	
10	PENZANCE BLVD	RANCHETTE RD	SIX MILE PKWY	2LN	E	860	C	173	C	185	
- L.	the loss sector as an	own it is not it as it as	NAMES OF TAXABLE AND ADDRESS OF TAXABLE	1	-						CALIFORNIA DATE OF A

Description         Description <thdescription< th=""> <thdescription< th=""></thdescription<></thdescription<>	57	25/2020	LEE OU	JUNIT Road Link V	orume	5 1000	inty- and a	olale	Manntan	leu K	Dadways	
NAM         NAM <th></th> <th></th> <th>ROADWAYLINK</th> <th></th> <th>ROAD</th> <th>PERF</th> <th>ORMANCE ANDARD</th> <th>200 111GH</th> <th>9100TH 2ST HOUR</th> <th>FO FI</th> <th>RECAST</th> <th></th>			ROADWAYLINK		ROAD	PERF	ORMANCE ANDARD	200 111GH	9100TH 2ST HOUR	FO FI	RECAST	
unou         A. N. Y. N. L. A. D.         A. M. A. D. A. D.         A. B.         A. B.         C.         J. B.         C.         J. B.         J. J	INK NO.	NAME	FROM	'†r)	TYPE	LOS	CAPACITY	LOS	VOLUME	LOS	VOLUME	NOTES
Bit	00100 A 8	& W BULB RD	GLADIOLUS DR	McGREGOR BLVD	2LN	E	860	C	380	C	399	
Desc         MAXAA M.S. B. D.         MAXAA M.S. B.         MAXAA M.S. B. <t< td=""><td>00200 AL</td><td>ABAMA RD</td><td>SR 82</td><td>MILWAUKEE BLVD</td><td>2LN</td><td>E</td><td>990</td><td>C</td><td>270</td><td>C</td><td>284</td><td></td></t<>	00200 AL	ABAMA RD	SR 82	MILWAUKEE BLVD	2LN	E	990	C	270	C	284	
Biolog         Link Number Ball,         Biol	00300 AL	ABAMARD	MILWAUKEE BLVD	HOMESTEAD RD	2LN	E	990	D	481	D	506	
Desc         Desc/Processing         Log Prof.         Log Prof. <thlog prof.<="" th="">         Log Prof.         <t< td=""><td>00400 AL</td><td>EXANDER BELL</td><td>SK 82</td><td>MILWAUKEE BLVD</td><td>2LN</td><td>E</td><td>990</td><td>D</td><td>553</td><td>D</td><td>581</td><td>Ob- Jaw Yahar</td></t<></thlog>	00400 AL	EXANDER BELL	SK 82	MILWAUKEE BLVD	2LN	E	990	D	553	D	581	Ob- Jaw Yahar
NAME         NAME <th< td=""><td>DOSDO AL</td><td>ICO RD</td><td>IIS AL</td><td>DUSTY PD</td><td>ALD</td><td>F</td><td>1080</td><td>B</td><td>553</td><td>B</td><td>020</td><td>Shaduw Lakes</td></th<>	DOSDO AL	ICO RD	IIS AL	DUSTY PD	ALD	F	1080	B	553	B	020	Shaduw Lakes
Description         LEX B20         THERE DAY PROVEY         LAD         E         S. 640         B         Low	00590 AL	JCO RD	DUSTY RD	LEE RD	610	F	2.060	B	1,107	B	1,468	Alico Business Park
Deep         ALOO RD         TYPEE DAAS FWY         P:3         Dial         E         2.460         B         2.401         B         2.401         B         2.402         BETO           Deep         ALCO RD         EXTINLLORITYPE NUC)         GREEN MAGOV R         DIAL         E         1.400, AS         C         Dist         E         Dist	00700 AL	LICO RD	LEE RD	THREE OAKS PKWY	6LD	E	2,960	B	1.107	B	1,400	Three Oaks Regional Center
body>body>body>LOD RDPyr <td>00800 AL</td> <td>LICO RD</td> <td>THREE OAKS PKWY</td> <td>1-75</td> <td>6LD</td> <td>E</td> <td>2,960</td> <td>B</td> <td>2,438</td> <td>B</td> <td>2,563</td> <td>EEPCO Study</td>	00800 AL	LICO RD	THREE OAKS PKWY	1-75	6LD	E	2,960	B	2,438	B	2,563	EEPCO Study
00000ALCO RDBEX HILL CARTPR NAUXGREEN MEADOR DRANNELI.O.P.A.S.C0.9S.7.00I.A. END00000ALACOR KDUSAL MADOR DNCONSCREME KDANNENNENNENNENNENNENNENNENNENNENNNNENN <t< td=""><td>00900 AL</td><td>LICO RD</td><td>1-75</td><td>BEN HILL GRIFFIN BLVD</td><td>6LD</td><td>E</td><td>2,960</td><td>B</td><td>1,246</td><td>B</td><td>1,393</td><td>EEPCO Study</td></t<>	00900 AL	LICO RD	1-75	BEN HILL GRIFFIN BLVD	6LD	E	2,960	B	1,246	B	1,393	EEPCO Study
100001000001000000000000000000000000000000000000	01000 AL	JCO RD	BEN HILL GRIFFIN BLVD	GREEN MEADOW DR	2LN	E	1,100/1,840	C	385	E	789	4 Ln constr 2018, EEPCO Shidy
baseBaseBaseCAssBaseCAssA	01050 AL	JCO RD	GREEN MEADOW DR	CORKSCREW RD	2LN	E	1,100	B	131	B	224	EEPCO Study
numberNUMBERSTRADPONDELLA RDPINE ISLANDRADALNENumber <td>01200 BA</td> <td>ABCOCK RD</td> <td>US 41</td> <td>ROCKEFELLER CIR</td> <td>2LN</td> <td>Е</td> <td>860</td> <td>С</td> <td>55</td> <td>C</td> <td>162</td> <td>old count</td>	01200 BA	ABCOCK RD	US 41	ROCKEFELLER CIR	2LN	Е	860	С	55	C	162	old count
ougo         Disk RD         SUMMERLIN R0         CLAUCULE R0         410         E         Lugo         C         Keyo         C         Reso           MARNORE RD (BR, 70)         HAAT RD	01400 BA	RRETTRD	PONDELLA RD	PINE ISLAND RD	2LN	E	860	C	103	C	116	old count projection(2009)
underNANNORS & DIG RAUNP YOR XNPART BUYALDDALDOCLoopCLNDDLNDDCLNDDLNDDCLNDDLNDDCLNDD </td <td>01500 BA</td> <td>ISS RD</td> <td>SUMMERLIN RD</td> <td>GLADIOLUS DR</td> <td>4LN</td> <td>E</td> <td>1,790</td> <td>C</td> <td>612</td> <td>C</td> <td>870</td> <td></td>	01500 BA	ISS RD	SUMMERLIN RD	GLADIOLUS DR	4LN	E	1,790	C	612	C	870	
end         NATURUS NO DRA	01600 BA	YSHORE RD (SR 78)	BUS 41	NEW POST RD/HART RD	4LD	D	2,100	C	1,690	C	1,750	
Name         NATER KD         IPS         ALD         D         D         C         LABS           OPE         ANSERORE RD (87.4)         PASLE RD         SKALE RD </td <td>01700 BA</td> <td>YSHORE RD (SR 78)</td> <td>HARTRD</td> <td>SLATER RD</td> <td>410</td> <td>D</td> <td>2,100</td> <td>c</td> <td>1,703</td> <td>c</td> <td>1,831</td> <td></td>	01700 BA	YSHORE RD (SR 78)	HARTRD	SLATER RD	410	D	2,100	c	1,703	c	1,831	
UNDOR         NAME AND         DATA         D         PER         C         C         PER           DEGRESSION         ALLERDO         SR J         ALD         E         2.000         EN         LAGO         E	01800 BA	AVSHORE RD (SR 78)	SLATER RD	1-75	410	D	2,100	C	1,285	C	1,683	
Name         PERMAN         PERMAN <td>01900 84</td> <td>VSHORE BD (SR 78)</td> <td>NALLE BD</td> <td>SP m</td> <td>RIN</td> <td>D</td> <td>924</td> <td>C</td> <td>710</td> <td>C</td> <td>078</td> <td></td>	01900 84	VSHORE BD (SR 78)	NALLE BD	SP m	RIN	D	924	C	710	C	078	
Sector         Sector<	02100 02	N HILL ORIFED PRUV	CORKSCREW RD	FOCUENTRANCE	din.	E	2000	R	1402	B	1474	
Sector         Sector<	02200 BE	N HILL GRIFFIN PKWY	FGCU BOULEVARDS	COLLEGE CLUB DR	ALD	E	2,000	B	1.402	B	1,4/4	
Bases         Bases         C         C         C         C         C         C         C         C         C         C         C         C         C         D         C         Larger         D         C         Larger         D         C         Larger         D         D         Larger         D         D         Larger         D <thd< th=""> <thd< th="">         D</thd<></thd<>	02250 BF	IN HILL GRIFFIN PKWY	COLLEGE CLUB DR	ALICO RD	6LD	E	3.000	B	1.127	B	1,219	
USD0         BETM STACEY BLVD         280 ST         HOMESTEAD RO         2LN         E         8000         C         340         C         548           DAGG         BONTA BEACH RD         HANDERBLT DR         4LD         E         1,800         C         4,81         Constrained           DEGG         DONTA BEACH RD         US44         OLD 41         4LD         E         1,860         C         4,81         Constrained           DEGG         DONTA BEACH RD         US44         OLD 41         MPERALAST         4LD         E         1,860         C         4,867         C         4,81         Constrained           DENTA BEACH RD         DMERENLAST         WOP F/3         SUD TO ABACH RD         DLD 41         E         2,800         E         671         B         795         Constrained           DENTA BEACH RD         DENTA GRANDE DR         EDBOTO COMATABACH RD         LD         E         4,800         C         1,875         Constrained         Constrained         Constrained         Constrained         2,900         DESG         B         795         Constrained           DEGG         DENTA BEACH RD         US 41         TTRIPACAND RD         LD         E         2,900         L <td>26950 BE</td> <td>IN HILL GRIFFIN PKWY</td> <td>ALICO RD</td> <td>TERMINAL ACCESS RD</td> <td>4LD</td> <td>E</td> <td>1,980</td> <td>٨</td> <td>1,017</td> <td>A</td> <td>1,069</td> <td></td>	26950 BE	IN HILL GRIFFIN PKWY	ALICO RD	TERMINAL ACCESS RD	4LD	E	1,980	٨	1,017	A	1,069	
BOARDY A BRACH RD         INCKOPY BUTO         VANDERBILTOR         BL         L <thl< th="">         L         L         L</thl<>	02300 BE	TH STACEY BLVD	23RD ST	HOMESTEAD RD	2LN	E	860	C	340	С	548	
BORD         BORTA BACH BO         VANDERBAUT DR         UB4         LUD         K         LUD         K        LUD        LUD <t< td=""><td>02400 BO</td><td>INITA BEACH RD</td><td>HICKORY BLVD</td><td>VANDERBILT DR</td><td>4LD</td><td>E</td><td>1,900</td><td>С</td><td>581</td><td>С</td><td>611</td><td>Constrained In City Plan *</td></t<>	02400 BO	INITA BEACH RD	HICKORY BLVD	VANDERBILT DR	4LD	E	1,900	С	581	С	611	Constrained In City Plan *
endersonBONTA BLACH NOUS1A1OLD 41ORANOLD 41ORANISAC ANCOLD 40DE 1000000000000000000000000000000000000	02500 BO	INITA BEACH RD	VANDERBILT DR	US 41	4LD	E	1,900	C	1,530	С	1,608	Constrained In City Plan
corres corres corres corresColumination contrained contrained contrained contrained contrained contrained contrained contrained contrained 	02600 BO	INITA BEACH RD	US 41	OLD 41	4LD	E	1,860	C	1,167	C	1,318	Constrained, old count projection(2
Baleon         DONTRA BRACH RD         IMPERALATS         WOP 175         61D         R         J.Roo         C         Log         Log         C         Log         C         Log         C         Log         Log <thlog< th="">         Log<td>02700 BO</td><td>INITA BEACH RD</td><td>OLD 41</td><td>IMPERIALST</td><td>6LD</td><td>E</td><td>2,800</td><td>C</td><td>1,864</td><td>C</td><td>1,959</td><td>Constrained In City Plan(2010)</td></thlog<>	02700 BO	INITA BEACH RD	OLD 41	IMPERIALST	6LD	E	2,800	C	1,864	C	1,959	Constrained In City Plan(2010)
BONTYA BEACH RU         E OF 75         BONTYA GRAND R         4LD         E         2,000         B         671         B         725         Constrained           BONTA GRANDE NB         BAB         GENAMINALINA         GENAMINALINAN         GENAMINALINAN         GENAMINALINAN         GENAMINALINAN         GENAMINALINAN         GENAMINALINAN	02800 BO	INITA BEACH RD	IMPERIALST	W OF I-75	6LD	E	2,800	C	2,132	C	2,241	Constrained In City Plan
eases         ENDTOR         BONTA CRANDE DR         BEND OF CO. MADTAINED         LIN         E         April         B         Org         Constrained           oggios         BONTA REACH RNDE         SUMMERLIN RD         US 41         21N         E         860         D         692         E         1.776         E         1.866         old	02900 BO	NITA BEACH RD	E OF 1-75	BONITA GRAND DR	4LD	E	2,020	B	671	B	705	Constrained In City Plan
BIONI IA CRANCE DIA         BONITA REACHT RD         E ISARY 51         21.0         E         Borg         Dissourt program	02950 BO	INITA BEACH RD	BONTTA GRANDE DR	END OF CO. MAINTAINED	4LD	E	2,020	B	671	B	705	Constrained In City Plan
Sector         DUTACOT NO         BUTMBELLY RD         US 41         BL         L <thl< th="">         L         L         <th< td=""><td>03100 80</td><td>INITA GRANDE DR</td><td>BONITA BEACH RD</td><td>E TERRY ST</td><td>2LN</td><td>E</td><td>860</td><td>D</td><td>592</td><td>E</td><td>782</td><td>ald count projection (2009)</td></th<></thl<>	03100 80	INITA GRANDE DR	BONITA BEACH RD	E TERRY ST	2LN	E	860	D	592	E	782	ald count projection (2009)
03.000         DAMILIAL IN D         DAMILIA IN D	03200 80	ANTI EV PD	SUMMERLINKD	115 41	OLN	E	2,520	E	1,770	E	1,800	
BANDALDERVISE         Different Structure	03300 BR	LARCLIEFRD	US 41	TRIPLE CROWN CT	21.N	E	860	c	2,0	C	290	
orgyon         BLICKINGHAM RD         SR 82         GUNNERY RD         2LN         E         990         C         425           03730         BUCKINGHAM RD         GUNNERY RD         ORANCE RIVER BLVD         2LN         E         990         C         423         D         445           03730         BUCKINGHAM RD         ORANCE RIVER BLVD         SR 80         2LN         E         990         C         423         D         445           0380         BUCKINGHAM RD         ORANCE RIVER BLVD         SR 80         2LN         E         2.950         B         642         B         990           04000         BURNT STORE RD         VAN BUREN PKWY         CUNTT LINE         2LN         E         1.440         C         4455         C         553           04000         BUS 41 (NTAMIMIT R, SR         FR76         LTTLETON RD         4LD         D         3.471         C         1.673           04400         BUS 41 (NTAMIMIT R, SR         FR76         LTTLETON RD         4LD         D         3.471         C         1.673           04400         CAPTIVA DR         BL/ND PASS         SOUTH SAS         2LN         E         860         C         267         C	03500 BR	ROADWAY RD (ALVA)	SR 80	N RIVER RD	2LN	E	860	C	269	C	304	old count projection(2000)
093730         BUCKINGHAM RD         GUNNERY RD         ORANGE RIVER BLVD         2LN         E         990         C         443         D         445           03600         BUCKINGHAM RD         ORANGE RIVER BLVD         SR 80         2LN         E         990         D         538         Lo77         Buckingham.           03600         BURNT STORE RD         VAN BUREN PKWY         COUNTY LINE         2LN         E         1440         C         465         C         563           04000         BURNT STORE RD         VAN BUREN PKWY         COUNTY LINE         2LN         E         1440         C         1471         C         1473         C         1400	03700 BU	CKINGHAM RD	SR 82	GUNNERY RD	2LN	E	990	С	405	С	426	
03800         BUCKINGHAM RD         ORANGE RIVER BLVD         SR 80         2LN         E         990         D         538         1.207         Buckingham           03000         BURNT STORE RD         SR 78         VAN BUREN PKWY         4LD         E         2,650         B         642         B         990           04000         BURNT STORE RD         SK 78         VAN BUREN PKWY         00UNTY LIMTS         N LA         E         1.407         C         1.471         C         1.673           04000         BUS 41 (N TAMIAMI TR, SR         CITY LIMTS (N END EDLS PONDELLA RD         6LD         D         3.171         C         1.471         C         1.673           04000         BUS 41 (N TAMIAMI TR, SR         FONDELLA RD         SR 78         GITTLETON RD         4LD         D         3.1071         C         1.471         C         1.673           04000         CAPTYA TAMIAMI TR, SR         TUTLETON RD         MLB         D         2.100         C         S552         C         575           04000         CAPTYA DR         BLINP APAS         SOUTH SAX         2.LN         E         8600         C         2.422         C         2.553           04000         CHAMBERLIN RLYON	03730 BU	JCKINGHAM RD	GUNNERY RD	ORANGE RIVER BLVD	2LN	E	990	C	423	D	445	
coggeBURNT STORE RDSR 76VAN BUREN PKWY4LDE2.950B0.422B9.90BURNT STORE RDVAN BUREN PKWYCOUNTY LINE2LNAE1.040C4.65C5.65BURNT STORE RDVAN BUREN PKWYCOUNTY LINE2LNAE1.040C4.77C1.77BURNT STORE RDVAN BUREN PKWYDOUBTLA RDSR 78GLDDJ.07C4.77C1.77BUS 41 (N TAMIANT R, SRFATLETS NEND EDUS PONDELLARSR 78GLDJ.DJ.DJ.DCSS 78CJ.07BUS 41 (N TAMIANT R, SRFATLETS NENDUS 41GLDJ.D <t< td=""><td>03800 BU</td><td>CKINGHAM RD</td><td>ORANGE RIVER BLVD</td><td>SR 80</td><td>2LN</td><td>E</td><td>990</td><td>D</td><td>538</td><td>6.2</td><td>1,207</td><td>Buckingham 345 &amp; Portico</td></t<>	03800 BU	CKINGHAM RD	ORANGE RIVER BLVD	SR 80	2LN	E	990	D	538	6.2	1,207	Buckingham 345 & Portico
Degroe         DURNT STORE RD         VAN BUREN FKWY         COUNTY LINE         LIN         E         1.440         C         4.671         C         1.673           Dease         BUS 41 (N TAMIIANI TR, SR         CIT V LIMITS (N END EDIS         PONDELLA RD         SR 78         GL         J.771         C         J.471         C         J.673         C         J.674         D         J.675<	03900 BU	IRNT STORE RD	SR 78	VAN BUREN PKWY	4LD	E	2,950	B	942	B	990	
bits 4: (N TAMILAMI TR, SR         CITY LIMITS (N END EDLS PONDELLA RD         6LD         D         2.4.71         C         1.4.71         C         1.4.71         C         1.471         C	04000 BU	IRNT STORE RD	VAN BUREN PKWY	COUNTY LINE	2LN	E	1,140	C	465	C	563	
Oddon         BUS 41 (N TAMIAMI TR, SR - PONDELLA RD         SR 78         OLD         D         3.77.         C         1,477.         C         1,478.         C         1,479.         C         1,578.         C         3,678.         C         3,678.         C         3,678.         C         3,678.         C         4,679.         C         1,553.         C         3,678.         C	04200 BU	S 41 (N TAMIAMI TR, SR	CITY LIMITS (N END EDIS	PONDELLA RD	6LD	D	3,171	C	1,471	C	1,673	
Date         BUS A1 (N TAMIAMI TR, SR. ) SR 78         LITTLETON RD         4LD         D         2.100         C         959         C         1,003           04500         BUS A1 (N TAMIAMI TR, SR. )         LITTLETON RD         US 41         4LD         D         2.100         C         SS2         C         575           04500         AFE CORAL BRIDGE         DEL PRADO BL/D         McGREGOR BL/D         4LB         E         4.000         D         3.674         D         3.831           04700         CAFTIVA DR         BLIND PASS         SOUTH SEAS         2LN         E         860         C         2422         C         255           04900         CHAMBERLIN PKWY         AIRPORT ENT         DANIELS PKWY         4LN         E         1,790         C         105         C         420         Estero main           0500         COLLEGE FKWY         MCREGOR BL/D         WINKLER RD         6LD         E         2,980         D         2,059         D         2,164           05300         COLLEGE FKWY         WHISKEY CREEK DR         SUMMERLIN RD         6LD         E         2,980         D         2,054         D         1,918           05400         COLLEGE FKWY         W	04300 BU	S 41 (N TAMIAMI TR. SR	PONDELLA RD	SR 78	6LD	D	3,171	C	1,471	C	1,673	
Description         Disk of the second s	04400 BUS	S 41 (N TAMIAMI TR, SR	SR 78	LITTLETON RD	4LD	D	2,300	c	959	c	1,003	
CARE CORLESIDE         DEL PACAD BLVD         MEGRELOR BLVD         44B         E         4,000         D         3,074         D         3,281           04700         CAPTIVA DR         BLIND PASS         SOUTH SEAS         2LN         E         660         C         267         C         302         Constrained, o           04900         CAPTIVA DR         BLIND PASS         SOUTH SEAS         2LN         E         660         C         247         C         255           04900         CHANBERLIN PKWY         AIRPORT ENT         DANIELS PKWY         4LN         E         1,790         C         105         C         150         Port Authorit           05000         COCONUT RD         WEST END         VIA VENETTO BLVD         2LN         E         860         C         268         C         420         Estero main           05000         COLLEGE FKWY         MCREGOR BLVD         WHIKLER RD         6LD         E         2,980         D         2,059         D         2,164           05200         COLLEGE FKWY         WINKERLIN RD         US 41         6LD         E         2,980         D         1,825         D         1,918           05500         COLLEGE FKWY <td>04500 BUS</td> <td>S 41 (N LAMIAMI TR, SR 1</td> <td>LITTLETON RD</td> <td>US 41</td> <td>410</td> <td>D</td> <td>2,100</td> <td>C</td> <td>552</td> <td>C</td> <td>575</td> <td></td>	04500 BUS	S 41 (N LAMIAMI TR, SR 1	LITTLETON RD	US 41	410	D	2,100	C	552	C	575	
CALL         Control         Control <thcontrol< th="">         Control         C</thcontrol<>	04200 CA	PTIVA DR	RI IND PASS	SOUTH SEAS	4L8	F	4,000	C	3,074	C	3,231	Constrained ald munt/const
Link         Link <thlink< th="">         Link         Link         <thl< td=""><td>04800 CF3</td><td>METERY RD</td><td>BUCKINGHAM RD</td><td>HIGGINS AVE</td><td>2LN</td><td>E</td><td>860</td><td>C</td><td>2.12</td><td>C</td><td>302</td><td>constrained, old count(2010)</td></thl<></thlink<>	04800 CF3	METERY RD	BUCKINGHAM RD	HIGGINS AVE	2LN	E	860	C	2.12	C	302	constrained, old count(2010)
Product         Product <t< td=""><td>04900 CH</td><td>AMBERLIN PKWY</td><td>AIRPORT ENT</td><td>DANIELS PKWY</td><td>ALN</td><td>E</td><td>1,790</td><td>C</td><td>105</td><td>C</td><td>150</td><td>Port Authority maintained</td></t<>	04900 CH	AMBERLIN PKWY	AIRPORT ENT	DANIELS PKWY	ALN	E	1,790	C	105	C	150	Port Authority maintained
OSIOD         COLLEGE FKWY         McGREGOR BLVD         WINKLER RD         6LD         E         2.980         D         2.292         D         2.409           05300         COLLEGE FKWY         WINKLER RD         WHISKEY CREEK DR         6LD         E         2.980         D         2.059         D         2.164           05300         COLLEGE FKWY         WHISKEY CREEK DR         SUMMERLIN RD         US 41         6LD         E         2.980         D         2.059         D         2.164           05400         COLLEGE FKWY         WHISKEY CREEK DR         SUMMERLIN RD         US 41         6LD         E         2.980         D         1.825         D         1.918           05500         COLONIAL BLVD         McGREGOR BLVD         SUMMERLIN RD         US 41         6LD         E         2.840         3.049         3.204         3.028           05600         COLONIAL BLVD         SUMMERLIN RD         US 41         6LD         D         3.040         B         2.117         C         2.225         0           05600         COLNIAL BLVD         SR 82         MILWAUKEE BLVD         2LN         E         860         C         107         C         2.255         0         0	05000 CO	CONUT RD	WESTEND	VIA VENETTO BLVD	2LN	E	860	C	268	C	420	Estero maintains to east
Dagson         COLLEGE FKWY         WTNKLER RD         WHISKEY CREEK DR         6LD         E         2,980         D         2,059         D         2,164           Dagson         COLLEGE FKWY         WHISKEY CREEK DR         SUMMERLIN RD         6LD         E         2,980         D         2,059         D         2,164           Dogson         COLLEGE FKWY         WHISKEY CREEK DR         SUMMERLIN RD         US 41         6LD         E         2,980         D         1,825         D         1,918           Dogson         COLONIAL BLVD         McGRECOR BLVD         SUMMERLIN RD         US 41         6LD         E         2,840         3,049         3,204           Dogson         COLONIAL BLVD         McGRECOR BLVD         SUMMERLIN RD         US 41         6LD         E         2,840         2,882         3,028           Dogson         COLONIAL BLVD         DYNASTY DR         SR 82         GLD         D         3,040         B         2,117         C         2,225         0           Dogson         COLUMBUS BLVD         SR 82         MILWAUKEE BLVD         2LN         E         860         C         217         C         2,25         0         0         0         0         <	05100 COI	LLEGE PKWY	McGREGOR BLVD	WINKLER RD	6LD	E	2,980	D	2,292	D	2.409	
Data         COLLEGE PKWY         WHISKEY CREEK DR         SUMMERLIN RD         6LD         E         2,980         D         2,059         D         2,164           05400         COLLEGE PKWY         SUMMERLIN RD         US 41         6LD         E         2,980         D         1,825         D         1,918           05500         COLONIAL BLVD         McGREGOR BLVD         SUMMERLIN RD         6LD         E         2,840         3,049         3,204         3,204           05500         COLONIAL BLVD         SUMMERLIN RD         US 41         6LD         E         2,840         2,882         3,028           05600         COLONIAL BLVD         SUMMERLIN RD         US 41         6LD         D         3,040         B         2,117         C         2,225           05600         COLUMBUS BLVD         SR 82         MILWAUKEE BLVD         2LN         E         860         C         100         C         105           06400         CONSTITUTION CIR         2LN         E         860         C         217         C         245         old count, added           06500         CORKSCREW RD         IHREE OAKS PKWY         4LD         E         1,900         C         1,272 </td <td>05200 COI</td> <td>LLEGE PKWY</td> <td>WINKLER RD</td> <td>WHISKEY CREEK DR</td> <td>6LD</td> <td>E</td> <td>2,980</td> <td>D</td> <td>2,059</td> <td>D</td> <td>2,164</td> <td></td>	05200 COI	LLEGE PKWY	WINKLER RD	WHISKEY CREEK DR	6LD	E	2,980	D	2,059	D	2,164	
Doty of College PKWY         SUMMERLIN RD         US 41         6LD         E         2,980         D         1,825         D         1,918           Doty of College PKWY         McGREGOR BLVD         SUMMERLIN RD         6LD         E         2,840         3,049         3,204         3,204           Doty of Collonial BLVD         SUMMERLIN RD         US 41         6LD         E         2,840         2,882         3,028         3,028           Doty of Collonial BLVD         DYNASTY DR         SR 82         6LD         D         3,040         B         2,117         C         2,225         0           Doty of Collonial BLVD         DYNASTY DR         SR 82         MILVAUKEE BLVD         2LN         E         860         C         100         C         105           Doty of Collymbus BLVD         SR 78 (PINE ISLANDRD)         LITTLETON RD         2LN         E         860         C         217         C         245         old count, added           Dofy of CORKSCREW RD         US 41         THREE OAKS PKWY         4LD         E         1,900         C         1,272         Galleria at           Dofy of CORKSCREW RD         US 41         THREE OAKS PKWY         4LD         E         1,900         C	05300 CO1	LLEGE PKWY	WHISKEY CREEK DR	SUMMERLIN RD	6LD	E	2,980	D	2,059	D	2,164	
basson         COLONIAL BLVD         McGREGOR BLVD         SUMMERLIN RD         6LD         E         2,840         3,049         3,204           005600         COLONIAL BLVD         SUMMERLIN RD         US 41         6LD         E         2,840         2,882         3,028           05600         COLONIAL BLVD         DYNASTY DR         SR 82         6LD         D         3,040         B         2,117         C         2,225         0           05600         COLUMB US BLVD         SR 82         MILVAUKEE BLVD         2LN         E         860         C         100         C         10,5           05600         COLMM BUS BLVD         SR 82         MILVAUKEE BLVD         2LN         E         860         C         100         C         10,5           05600         CORBETT RD         SR 78 (PINE ISLAND RD)         LITTLETON RD         2LN         E         860         C         21,007         C         1,272         Galletount, added           05600         CORKSCREW RD         US 41         THREE OAKS PKWY         4LD         E         1,900         C         1,272         Galletia at           05600         CORKSCREW RD         THREE OAKS PKWY         W OF 1-75         HLD	05400 COI	LLEGE PKWY	SUMMERLIN RD	US 41	6LD	E	2,980	D	1,825	D	1,918	
boseco         COLONIAL BLVD         SUMMERLIN RD         US 41         6LD         E         2,840         2,882         3,028           boseco         COLONIAL BLVD         DYNASTY DR         SR 82         6LD         D         3,040         B         2,117         C         2,225         5           boseco         COLUMAL BLVD         SR 82         MILWAUKEE BLVD         2LN         E         860         C         100         C         10.5           boseco         CONSTITUTION BLVD         US 41         CONSTITUTION CIR         2LN         E         860         C         100         C         10.5           boseco         CORRECT RD         SR 78 (PINE ISLAND RD)         LITTLETON RD         2LN         E         860         C         21.00         C         24.5         old count, added           boseco         CORRECT RD         SR 78 (PINE ISLAND RD)         LITTLETON RD         2LN         E         1,900         C         1,207         C         24.5         old count, added           boseco         CORRECT RD         SR 78 (PINE ISLAND R)         WOF 1-75         4LD         E         1,900         C         1,207         C         24.55         0ld count, added		LONIAL BLVD	McGREGOR BLVD	SUMMERLIN RD	6LD	E	2,840	E.K.	3,049		3,204	and a strength of the
b66200         COLONIAL BLVD         DYNASTY DR         SR 82         6LD         D         3,040         B         2,117         C         2,225           b6300         COLUMEUS BLVD         SR 82         MILVAUKEE BLVD         2LN         E         860         C         100         C         105           b6400         CONSTITUTION BLVD         US 41         CONSTITUTION CIR         2LN         E         860         C         217         C         24.5         old count, added           b6500         CORBETT RD         SR 78 (PINE ISLANDR)         LITTLETON RD         2LN         E         860         C         217         C         24.5         old count, added           b6600         CORKSCREW RD         US 41         THREE OAKS PKWY         4LD         E         1,900         C         1,207         C         1,272         Galleria at           b6600         CORKSCREW RD         THREE OAKS PKWY         W OF I-75         BEN HILL GRIFFIN BLVD         4LD         E         1,900         C         1,207         C         1,285           b6600         CORKSCREW RD         BEN HILL GRIFFIN BLVD         ALICO RD         4LD         E         1,900         C         1,384         C	05500 COI	I OMITAL BUND	SUMMERLIN RD	US 41	6LD	E	2,840		2,882		3,028	
Dogoo         COLUMBUS BLVD         SR 82         MILWAUKEE BLVD         2LN         E         860         C         100         C         105           06400         CONSTITUTION BLVD         US 41         CONSTITUTION CIR         2LN         E         860         C         217         C         245         old count, added           06500         CORBETT RD         SR 78 (PINE ISLANDR)         LITTLETON RD         2LN         E         860         C         217         C         245         old count, added           06500         CORKSCREW RD         US 41         THREE 0AKS PKWY         4LD         E         1,900         C         1,007         C         1,272         Galleria at           06700         CORKSCREW RD         THREE 0AKS PKWY         W OF 1-75         4LD         E         1,900         C         1,292         C         2,386         Better O           06800         CORKSCREW RD         E OF 1-75         BEN HILL GRIFFIN BLVD         4LD         E         1,900         C         1,394         C         1,285           06900         CORKSCREW RD         BEN HILL GRIFFIN BLVD         ALICO RD         4LD         E         1,900         C         466         C <t< td=""><td>05500 COI</td><td>WNIALBLYD</td><td>and an and a state of the state</td><td>ISR 82</td><td>6LD</td><td>D</td><td>3,040</td><td>B</td><td>2,117</td><td>C</td><td>2,225</td><td></td></t<>	05500 COI	WNIALBLYD	and an and a state of the state	ISR 82	6LD	D	3,040	B	2,117	C	2,225	
Date         CONSTITUTION BLVD         US 41         CONSTITUTION CIR         2LN         E         860         C         217         C         245         old count projection           06500         CORBETT RD         SR 78 (PINE ISLAND RD)         LITTLETON RD         2LN         E         860         C         217         C         245         old count projection           06500         CORRETT RD         SR 78 (PINE ISLAND RD)         LITTLETON RD         2LN         E         860         C         22         C         226         old count, added           06600         CORKSCREW RD         US 41         THREE OAKS PKWY         4LD         E         1,900         C         1,007         C         1,272         Galleria at           06700         CORKSCREW RD         THREE OAKS PKWY         WOF I-75         4LD         E         1,900         C         1,394         C         1,285           06900         CORKSCREW RD         BEN HILL GRIFFIN BLVD         ALICO RD         4LD         E         1,900         C         1,394         C         1,285           07000         CORKSCREW RD         ALICO RD         COUNTY LINE         2LN         E         1,400         C         466         D	05500 COI 05600 COI 06200 COI	LONIAL BLVD	DYNASTY DR		of M	E	860	C	100	С	105	
Observe         CORKSCREW RD         SR 76 (FIVE ISLAND RD)         L11 (LEUN RD)         2LN         E         860         C         22         C         226         old count, added           06600         CORKSCREW RD         US 41         THREE 0AKS PKWY         4LD         E         1,900         C         1,007         C         1,272         Galleria at           06600         CORKSCREW RD         THREE 0AKS PKWY         WO FL-75         4LD         E         1,900         C         1,024         Z,386         Estree C           06600         CORKSCREW RD         E OF 1-75         BEN HILL GRIFFIN BLVD         4LD         E         1,900         C         1,314         C         1,255           05600         CORKSCREW RD         BOT-75         BEN HILL GRIFFIN BLVD         4LD         E         1,900         C         1,314         C         1,255           050900         CORKSCREW RD         BEN HILL GRIFFIN BLVD         ALICO RD         4LD         E         1,900         C         466         C         678           07000         CORKSCREW RD         ALICO RD         COUNTY LINE         2LN         E         1,440         C         466         D         793         EEPCO Stud	05500 COI 05600 COI 06200 COI 06300 COI	LONIAL BLVD LONIAL BLVD LUMBUS BLVD	DYNASTY DR SR 82	MILWAUKEE BLVD	2LIN						and the second se	11
Output         CONSIGNERT RD         US 41         ITREE OARS FRW1         4LD         E         1,900         C         1,007         C         1,272         Galleria at Galleria at           06700         CORKSCREW RD         THREE OAKS PKWY         W OF I-75         4LD         E         1,900         2,129         2,386         Estero C           06600         CORKSCREW RD         E OF I-75         BEN HILL GRIFFIN BLVD         4LD         E         1,900         C         1,134         C         1,255           06900         CORKSCREW RD         BEN HILL GRIFFIN BLVD         ALCO RD         4LD         E         1,960         C         466         C         678           05000         CORKSCREW RD         ALICO RD         COUNTY LINE         2LN         E         1,400         C         466         D         793         EEPCO Stude           07000         CORKSCREW RD         LUCKETT RD         TICE ST         2LN         E         860         C         143         C         293         old count proj           07200         CRYSTAL DR         US 41         METRO PKWY         2LN         E         860         C         495         C         521	05500 COI 05600 COI 06200 COI 06300 COI 06400 COI	LONIAL BLVD LUMBUS BLVD NSTITUTION BLVD	DYNASTY DR SR 82 US 41	MILWAUKEE BLVD CONSTITUTION CIR	2LN 2LN	E	860	C	217	C	245	old count projection(2010)
CONSIDER	05500 COI 05600 COI 06200 COI 06300 COI 06400 COI 06500 COI	LONIAL BLVD LUMBUS BLVD NSTITUTION BLVD RBETT RD	DYNASTY DR SR 82 US 41 SR 78 (PINE ISLAND RD)	MILWAUKEE BLVD CONSTITUTION CIR LITTLETON RD	2LN 2LN 2LN	E	860 860	C	217 22	C C	245 226	ald count projection(2010) ald count, added VA clinic(2009)
CORRECTEMENT     DESCRIPTION     DES	05500 COI 05600 COI 06300 COI 06300 COI 06400 COI 06500 COI 06600 COI	LONIAL BLVD LUMBUS BLVD NSTITUTION BLVD RBETT RD RKSCREW RD	DYNASTY DR SR 82 US 41 SR 78 (PINE ISLAND RD) US 41 THERE OAKS DRUG	MILWAUKEE BLVD CONSTITUTION CIR LITTLETON RD THREE OAKS PKWY W OF L-35	2LN 2LN 2LN 4LD	E E E	860 860 1,900	C C C	217 22 4,007	C C C	245 226 1,272	old count projection(2010) old count, added VA clinic(2009) Galleria at Corkscrew
CORKSCREW RD         ALICO RD         COUNTY LINE         2LN         E         1,140         C         466         D         793         EEPCO Study           07000         COUNTRY LAKES BLVD         LUCKETT RD         TICE ST         2LN         E         860         C         143         C         293         old count proj           07200         CRYSTAL DR         US 41         METRO PKWY         2LN         E         860         C         446         D         793         EEPCO Study	assoc         COI	LONIAL BLVD LUMBUS BLVD NSTITUTION BLVD RBETT RD RKSCREW RD RKSCREW RD	DYNASTY DR SR 82 US 41 SR 78 (PINE ISLAND RD) US 41 THREE OAKS PKWY E OF 1-75	MILWAUKEE BLVD CONSTITUTION CIR LITTLETON RD THREE OAKS PKWY W OF 1-75 BEN HILL GRIEFIN BLVD	2LN 2LN 2LN 4LD 4LD	E E E E	860 860 1,900 1,900	C C C	217 22 1,007 2,129	C C C	245 226 1,272 2,386	old count projection(2010) old count, added VA clinic(2009) Galleria at Corkscrew Estern Crossing
DOTION         COUNTRY LAKES BLVD         LUCKETT RD         TICE ST         2LN         E         860         C         143         C         293         old count proj odd count proj           07100         COUNTRY LAKES BLVD         LUCKETT RD         TICE ST         2LN         E         860         C         143         C         293         old count proj           07200         CRYSTAL DR         US 41         METRO PKWY         2LN         E         860         C         496         C         521	assoc         COI	LONIAL BLVD LUMBUS BLVD NSTITUTION BLVD RBETT RD RKSCREW RD RKSCREW RD RKSCREW RD	DYNASTY DR SR 82 US 41 SR 78 (PINE ISLAND RD) US 41 THREE OAKS PKWY E OF 1-75 BEN HILL GRIFFIN SLAD	MILWAUKEE BLVD CONSTITUTION CIR LITTLETON RD THREE OAKS PKWY W OF 1-75 BEN HILL GRIFFIN BLVD ALLCO RD	2LN 2LN 2LN 4LD 4LD 4LD 4LD	E E E E E	860 860 1,900 1,900 1,900	C C C C	217 22 1,007 2,129 1,194 466	C C C C	245 226 1,272 2,386 1,255 678	old count projection(2010) old count, added VA clinic(2009) Galleria at Corkscrew Estero Crossing
07200 CRYSTALDR US 41 METRO PKWY 2LN E 860 C 496 C 521	assoc         COI	LONIAL BLVD LONIAL BLVD LUMBUS BLVD NSTITUTION BLVD RBETT RD RKSCREW RD RKSCREW RD RKSCREW RD RKSCREW RD	DYNASTY DR SR 82 US 41 SR 78 (PINE ISLAND RD) US 41 THREE OAKS PKWY E OF 1-75 BEN HILL GRIFFIN BLVD ALICO RD	MILWAUKEE BLVD CONSTITUTION CIR LITTLETON RD THREE OAKS PKWY W OF 1-75 BEN HILL GRIFFIN BLVD ALICO RD COUNTY LINE	2LN 2LN 2LN 4LD 4LD 4LD 4LD 2LN	E E E E E	860 860 1,900 1,900 1,900 1,900 1,960	C C C C C C C C C C	217 22 1,007 2,129 1,194 466 466	C C C C C C D	245 226 1,272 2,386 1,255 678 703	old count projection(2010) old count, added VA clinic(2009) Galleria at Corkscrew Estero Crossing
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# LEE COUNTY MPO 2045 COST FEASIBLE HIGHWAY PLAN



## **2045 E+C NETWORK VOLUMES**

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## TAZ MAP

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# LEE COUNTY CIP

#### DRAFT SUMMARY OF MAJOR ROAD PROJECTS PROGRAMMED BY LEE COUNTY - FY20/21TO FY 24/25

COMM	PROJ	PROJECT NAME	DRIVER		FY 98-19 PRIOR EXP	19/20 BUDGET	20/21	21/22
0.011		MAJOR PROJECTS		1				
2,5	209245	Alico Rd. Connector/Alico Rd. to SR 82 opposite Sunshine Blvd. Funds to purchase ROW through Florida Rock property prior to 12/31/2020 per purchase option agreement	People-to-jobs link, Daniels Pkwy. relief NM - Core Critical	9.00	3,936,886 ROW	7,240,686.00 ROW/DES	0	0 0
All	206002	Bicycle/Pedestrian Facilities Annual project for facilities on existing County-maintained roads Specific Projects:	Implementation of bike- ped plan, BPAC prior- ities, Complete Streets principals		16,939,429	7,467,825	473,533	5,647,455
1	19	Veterans Pkwy.SW 10th St. to Skyline Blvd.	2016 Priority #22		ře di	40,500 DES/SUR	232,850 CST/CEI	0
1		Veterans Pkwy.SW 3rd Pl to SW 2nd Ave	2016 Priority #23	1.54		44,910 DES/SUR	258,225 CST/CEI	0
		Hancock Bridge Pkwy Orange Grove to 4055 Hancock	2017 Priority #4				495,000 ROW DES/SUR	Û
		Piantation Daniels - Idlewild Daniels - Crystal	2019 Priority #2				0	0
		Crystal Idlewild	1		1. A	10.000	1.000 ····	
4		Hancock Bridge Pkwy. Sidewalk/North Side, NE 16th Pl. to SE 24th Ave.	2013 Priority #8				1	
2	14	Beacon Manor Dr. Sidewalk, US 41 to S. Danley Dr.	2014 Priority #1	1.0		0 DES/SUR	0 CST/CEI	0
5		Orange River Blvd. Palm Beach Blvd. to Lorraine Dr.	2016 Priority #4		1		0	1,354,571 DES/SUR/ ROW
5		Tice St. Sidewalk/South Side, Lynneda Ave. to Ortiz Ave.	2015 Priority #2				101,038 DES/SUR	580,968 CST/CEI
5		Tice St. Sidewalk/South Side, Ortiz Ave. to Lexington Ave.	2015 Priority #5				167,475 DES/SUR	962,979 CST/CEI
5		Bell Blvd. SR 82 to Sunrise	2016 Priority #3				0	623,080 DES/SUR
2		Alico Rd. Sidewalk/North Side, RR Crossing to Quaker Ln.	2015 Priority #27				0	1,139,782 DES/SUR/ ROW
4		Pine Rd. Allaire Ln to US 41	2016 Priority #28				0	0
3		Bonila Beach Road I-75 to Bonila Grande	2016 Priority #8		1	43,300 DES/SUR	205,020 CST/CEI	0
3	205724	Big Carlos Pass Bridge Replacement of existing 2-lane bascule bridge with new 2-lane fixed span bridge across Big Carlos Pass	Age Condition of bridge (Bridge Health Index) Mandated		1,694,755 PD&E Study	7,274,803 PD&E Study DES/CST	0	47,810,820 CST/CEI

# EMPLOYEMENT CONVERSION FACTORS

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12/31/2003 08:24 2393322645

Land Use		Emplo 1.000 S	oyees/ Sg. Ft. <sup>(1)</sup>	Source (2)
Retail/Commercial				
Retail/Commercial	759 emp.	2.50	2300K SF	DCA
Specialty Retail Cente	r	1.82		ITE, p. 1223
Discount Store		1.96		ITE, p. 1233
Quality Restaurant		7.46		ITE5, p. 1248
High-Turnover Restau	rant	9.92		ITE5, p. 1267
Fast-Food Restaurant (with Drive-Thru)		10.90		ITE5, p. 1305
Walk-In Bank		3.52 (E	istimate)	ITE, p. 1650
Drive-In Bank		3.64 (E	stimate)	ITE, p. 1654
Hotel/Motel				
Hotel		0.90/ro	om	ITE, p. 502
<b>Business Hotel</b>		0.80/ro	om	ITE5, p. 539
Motel		0,44/ro	גמס	ITE, p. 552
Resort Hotel		0.60/100	om	ITE5, p. 568
Recreational				
Golf Course		0.25/aci 1.74/bo	re (Estimate) le (Estimate)	ITE, p. 675 ITE, p. 675
Racquet Club		0.86/co 0.36 (Es	urt (Estimate) stimate)	ITE, p. 760 ITE, p. 760
State Park		0.27/aci	re (Estimate)	ITE5, p. 612

DPA

#00582

#### TYPICAL EMPLOYMENT CONVERSION FACTORS

#### (June, 2001)

Land Use		Emplo 1,000 \$	oyees/ Sq. Ft. <sup>(1)</sup>	Source <sup>(2)</sup>
Industrial				
Industrial	474 emp.	1.89	ZSOK SP	DCA
General Light Industrial		2.31		ITE, p. 89
Industrial Park		2.08		ITE, p. 132
Warehousing		1.28		ITE, p. 188
Office				
General Office, Below 100,	000	3.39 - 4.80		ITE5, p. 940 DCA
General Office, 100,000 - 2	00,000	3.84 4.40		ITE5, p. 940 DCA
General Office, 201,000 - 5	00,000	3.22 3.50		ITE5, p. 940 DCA
General Office, Above 500,	000	2.88 3.50		ITE5, p. 940 DCA
General Office, Average	1,477000	3.32 4.00	yysk sp	ITE, 1059 DCA
Medical-Dental Office Build	ling	4.05		ITE, p. 1073
Office Park		3.26		ITE, p. 1134
Research and Development	Center	2.93		ITE, p. 1156

12/31/2003 08:24 2393322

	Employees/	
Land Use	1,000 Sq. Ft. (1)	Source (2)
Amusement Park	9.09/acre (Estimate)	ITE, p. 744
Marina	0.01/berth (Estimate)	ITE4, p. 627-636
Recreational	0.16/acre (Estimate)	ITE4, p. 537-545
Park	0.13/acre (Estimate)	ITE4, p. 546-563
Institution		
Elementary School	0.078/student	ITE, p. 813
Private School	0.19/student	ITE5, p. 775
Day Care Center	0.145/student	ITE, p. 913
Library	1.11	ITE, p. 956
Hospital	2.28/bed	ITE, p. 977
Nursing Home	0.648/bed	ITE, p. 1005

#### Foolnotes:

(1) Employees per 1,000 square feet Gross Floor Area (GFA), except as otherwise noted.

(2) SOURCE:

- ITE Institute of Transportation Engineers, Trip Generation, Sixth Edition.
- ITE5 Institute of Transportation Engineers, Trip Generation, Fifth Edition.

ITE4 - Institute of Transportation Engineers, Trip Generation, Pounh Edition.

DCA - Florida Department of Community Affairs. Draft report titled <u>Housing Demand, Supply and Need</u> <u>Methodology</u> (April 24, 1991), Appendix A.

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# **TRIP GENERATION EQUATIONS**

### Single-Family Detached Housing (210)

Vehicle Trip Ends vs:	<b>Dwelling Units</b>
On a:	Weekday

Setting/Location:	General Urban/Suburban
Number of Studies:	174
Avg. Num. of Dwelling Units:	246
Directional Distribution:	50% entering, 50% exiting

#### Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.43	4.45 - 22.61	2.13

### **Data Plot and Equation**



Trip Gen Manual, 11th Edition 

Institute of Transportation Engineers

### 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:	192
Avg. Num. of Dwelling Units:	226
 Directional Distribution:	26% entering, 74% exiting

#### Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.27 - 2.27	0.24

### **Data Plot and Equation**



Trip Gen Manual, 11th Edition 

Institute of Transportation Engineers

### 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:	208
Avg. Num. of Dwelling Units:	248
Directional Distribution:	63% entering, 37% exiting

#### Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.94	0.35 - 2.98	0.31

#### **Data Plot and Equation**



Trip Gen Manual, 11th Edition 

 Institute of Transportation Engineers



#### Board of County Commissioners

Kevin Ruane District One

Cecil L Pendergrass District Two

Ray Sandelli District Three

Brian Hamman District Four

Frank Mann District Five

Roger Desjarlais County Manager

Richard Wm. Wesch County Attorney

Donna Marie Collins County Hearing Examiner February 6, 2022

Cindy Leal Brizuela Morris Depew 2914 Cleveland Ave. Fort Myers, FL 33901

Re: Letter of Service Availability - Daniels Parkway South

Ms. Leal Brizuela,

I am in receipt of your letter requesting a Letter of Service Availability for the Daniels Parkway South development. This property consists of five STRAP numbers located south of Daniels Parkway adjacent to SR 82.

Lee County Emergency Medical Services is the primary EMS transport agency responsible for coverage at parcels on the western edge of the proposed project. These parcels have direct access from Daniels Parkway for multifamily development or are part of a restoration area.

Given the limited impact and the vast majority of the area we cover is planned for preservation, it is our opinion that the service availability for the proposed development of this property is adequate at this time. Should the plans change, especially the density, a new analysis of this impact would be required.

Sincerely,

Benjamin Abes Director, Public Safety



### Lehigh Acres Fire Control and Rescue District

636 Thomas Sherwin Avenue S. Lehigh Acres, Florida 33974 Phone: 239-303-5300 Fax: 239-369-2436

March 30, 2021

Ms. Cindy Leal Brizuela, Project Planner Morris-Depew Associates, Inc. 2914 Cleveland Avenue Fort Myers, FL 33901

#### **RE: Letter of Service Availability**

Dear Ms. Brizuela:

Please accept this correspondence as documentation that the Lehigh Acres Fire Control and Rescue District is capable of providing fire protection and EMS transport services to the parcels listed below which falls within the boundaries of our Fire District.

The following parcel (STRAP number) lies within the geographical boundaries of the Lehigh Acres Fire Control and Rescue District:

- 09-45-26-00-00003.0000
- 08-45-26-00-00001.0030
- 17-45-26-00-00001.0010
- 16-45-26-00-00001.0000
- · 21-45-26-00-00001.0000

Please feel free to contact me if you have any questions and/or concerns.

Respectfully,

A O. Lull

**Robert Dilallo Fire Chief** 

cc: Ken Bennett, Asst. Chief/Fire Marshal - LAFCRD



### SOUTH TRAIL FIRE PROTECTION &

**RESCUE SERVICE DISTRICT** 

Established 1965

### "Compassion, Commitment, Courage"

Board of Commissioners

Larry Hirshman Chairman

Jeff Haugh Vice Chairman

John F. Anderson II Secretary-Treasurer

Ron Tarantino Commissioner

Ken Brown Commissioner

#### Administration

Gene Rogers Fire Chief

Chris Wolfe Assistant Chief

Dave Bollen Assistant Chief March 30, 2021

Morris-Depew Associates, Inc.:

The South Trail Fire & Rescue Service District has received your serviceability/availability request. The following parcels (contained within the request) are located within the South Trail Fire District:

- 08-45-26-00-00001.0030
- 17-45-26-00-00001.0010

The South Trail Fire District is capable of servicing the above parcels utilizing our current service-delivery model, to include fire, life safety (EMS), and existing fire inspection services (based on the most current fee structure); provided that the approved density remains within the confines of the request letter provided which equals 350,000 SF of commercial and 1,600 residential units.

I have enclosed a screen shot of the two parcels as identified by the above strap numbers. I have also indicated the current location of our fire station, located at 12780 Commonwealth Drive, just off of Daniels Pkwy.

Please contact me with any questions, comments, or concerns.

Sincerely,

Gene Rogers Fire Chief GRogers@southtrailfire.org South Trail Fire District 5531 Halifax Avenue Fort Myers, FL 33912 Tel: (239) 433-0080

5531 Halifax Ave. Fort Myers, FL 33912-4403 Administration Phone: 239.433.0080 Prevention Phone: 239.482.8030 WWW.SOUTHTRAILFIRE.ORG



MORRIS	2914 Cleveland Avenue   Fort Myers, Florida 33901	
ENGINEERS · PLANNERS · SURVEYORS LANDSCAPE ARCHITECTS	Phone (239) 337-3993   Toll Free (866) 337-7341 www.morris-depew.com	

March 30, 2021

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Gene Rogers Fire Chief South Trail Fire Control and Rescue District 5531 Halifax Ave Fort Myers, FL 33912 grogers@southtrailfire.org

**RE: Letter of Availability Request** 

Chief Rogers,

We are requesting a Letter of Availability for a proposed text amendment which would allow for 350,000 SF of commercial and 1,600 residential units to be located within the following STRAPs;

- 09-45-26-00-00003.0000
- 08-45-26-00-00001.0030 --
- 17-45-26-00-00001.0010 🛩
- 16-45-26-00-00001.0000
- 21-45-26-00-00001.0000

The property is located south of Daniels Parkway and to the southwest of SR 82 and the subject area for future development consists of approximately ±1,233.08 acres. The subject property is zoned AG-2 and is identified as being within the Density Reduction/Groundwater Recharge (DR/GR), Wetlands, and Central Urban future land use designations. A portion of the project is within your service area whereas the remaining parcels are within the boundaries of the Lehigh Acres Fire & Rescue District.

For the purposes of determining availability, please assume all units will be single-family. Should you have any questions regarding this request please do not hesitate to reach out to me.

Thank you, MORRIS-DEPEW ASSOCIATES, INC

Cindy head 3the

Cindy Leal Brizuela Project Planner

LC28000330

This record search is for informational purposes only and does <u>NOT</u> constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does <u>NOT</u> provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at Compliance Permits Idea. By Florida.com for project review information.

September 17, 2021

Bailey Schleifer Assistant Planner 2914 Cleveland Ave Fort Myers, FL 33901 (239) 337-3993 telephone

In response to your request on September 17, 2021, the Florida Master Site File lists one archeological site and one resource group found in a designated area within T45N R26E Sections 09, 08, 17, 16, 15, 21, 22, 27 in Lee County, Florida.

When interpreting the results of our search, please consider the following information:

- This search area may contain unrecorded archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.
- Because vandalism and looting are common at Florida sites, we ask that you limit the distribution of location information on archaeological sites.
- While many of our records document historically significant resources, the documentation of a resource at the Florida Master Site File does not necessarily mean the resource is historically significant.
- Federal, state and local laws require formal environmental review for most projects. This search DOES NOT constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at <u>CompliancePermits@dos.MyFlorida.com</u>

Please do not hesitate to contact us if you have any questions regarding the results of this search.

Sincerely,

Eman M. Vovsi, Ph.D. Florida Master Site File Eman.Vovsi@DOS.MyFlorida.com

500 South Bronough Street • Tallahassee, FL 32399-0250 • www.flheritage.com/preservation/sitefile 850.245.6440 ph | 850.245.6439 fax | SiteFile@dos.state.fl.us

Exhibit M13

#### Florida Master Site File



**Cultural Resource Roster** 

SiteID	Туре	Site Name	Address	Additional Info	SHPO Eval	NR Status
LL02406	RG	Buckingham Gunnery Range	Lehigh Acres	Designed Historic Landscape - 5 Contrib	Eligible	
LL02409	AR	Gunnery Range #3	Lehigh Acres	Resources	Not Eligible	

Page 1 of 1


# STEARNS WEAVER MILLER WEISSLER ALHADEFF & SITTERSON, P.A.

Tina M. Ekblad, MPA, AICP 106 E. College Avenue, Suite 700 Tallahassee, FL 32301 (850) 354-7624 tekblad@stearnsweaver.com

November 10, 2022

#### VIA DIRECT UPLOAD

Brandon Dunn, Principal Planner Department of Community Development, Zoning Section Lee County P.O. Box 398 Fort Myers, FL 33902-0398 BDunn@leegov.com

#### RE: Daniels South Comprehensive Plan Amendments CPA2021-00017 & CPA2021-00018 – 3<sup>rd</sup> Insufficiency Response

Dear Mr. Dunn,

The purpose of this letter is to provide a response to the Lee County Department of Community Development's review comments dated October 28<sup>th</sup>, 2022, for the Comprehensive Plan Amendment applications referenced above. We are in receipt of the Serv-U File Share from Janet Miller on November 2, 2022 and have also provided copies of the requested electronic files to that link. We believe that with this additional information, the comprehensive plan amendment applications can be scheduled for consideration by the Local Planning Agency and Board of County Commissioners. However, we continue to welcome additional calls and emails from County Staff to address any substantive comments ahead of the public hearings.

The integrated surface and groundwater model files were not provided as part of the resubmittal. Please provide the model files to Lee County Division of Natural Resources. Please note Staff will run the models.

Response: The requested digital model files have been uploaded through Lee County's Serv-U File system on November 3, 2022 and should be available to County staff.

If there is any issue accessing the files, they are also available through Progressive Water Resources' (PWR) Sharefile link below. As indicated in the model output files previously submitted, Peter A. Brown, P.E., certified the results and if staff has any questions or comments, please do not hesitate to contact Peter directly at PWR's Sarasota office. Please note that during their development, the model files were reviewed by the firm that created ICPR4, Streamline Technologies, Inc. After review of the model files, Streamline was in agreement with both the approach and results determined by PWR.

https://prowatersource.sharefile.com/d-sec48e31b96e7442ea021b450416c4aa7

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On Page 2 of the Response Letter the applicant states "On June 28, 2022 a dry season groundwater level elevation was recorded in the monitor well at a depth of 20.96 feet below the measuring point". Lee County rain gauges at the Gateway Water Treatment Plant received 9.9 inches in May and 15.34 inches in June for a combined rainfall of 25.24 inches. This is

November 10, 2022 Page 2

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not considered an accurate account for a "Dry Season" data point. Please use a more accurate "Dry Season" water level reading from the months of February, March, or April. Please revise the groundwater model accordingly.

Response: Staff is correct in that rainfall amounts in Lee County are typically lower from January through May as compared to June and the amount of rain reported at the Gateway Water Treatment Plant for May and June 2022 was well above the 30year mean for those same months. However, as staff is also aware there is a delay in which rainfall recharges (increases groundwater levels) within the underlying confined Sandstone Aquifer and records indicate that seasonal highs for the Sandstone Aquifer typically occur from September through November.

To provide additional assurance that the proposed project will not result in adverse impacts to the water resources, PWR looked at the period of record groundwater elevations recorded at USGS Sandstone Aquifer monitoring well L-729, located to the east, within Lehigh Acres. L-729 has been monitored since May 1977 and on April 15, 2017 (prior to Hurricane Irma) groundwater levels exhibited a period of record low of -3.74 feet NGVD or -4.94 feet NAVD. As previously provided, the Sandstone Aquifer at the Applicant's Timber Creek development located across Daniels Parkway occurs at elevation -55.45 feet NAVD. Therefore, the Maximum Developable Limit (MDL) in the vicinity of the proposed Daniels South development is anticipated to occur at approximately -35.45 feet NAVD. Assuming the highly conservative period of record low groundwater elevation recorded at monitor well L-729, Sandstone Aquifer groundwater levels would remain 30.51 feet above the MDL at the applicant's property.

As indicated in PWR's groundwater flow modeling, the Applicants' proposed use of the Sandstone Aquifer for irrigation is predicted to exhibit approximately 1-foot of drawdown at the property boundary. Using the same conservative approach described above, even under the worst-case scenario (using the period of record low from L-729) groundwater levels would remain approximately 29.51 feet above the MDL and 49.51 feet above the Sandstone Aquifer. Therefore, no adverse impacts to the water resources are anticipated. Please note that to date, groundwater levels collected at Timber Creek's Sandstone Aquifer monitoring well exhibits less variability, as compared to monitor wells within, or in close proximity to, Lehigh Acres. This is not surprising given the extraordinary number of Sandstone Aquifer wells within Lehigh Acres.

Please provide the groundwater model results including water level contours resulting from a maximum water withdrawal for 90 days with no recharge. Please detail which well and what qualifying dry season water level was used for the model.

Response: Please note that the 90-day Maximum Month groundwater flow modelling performed by PWR computes drawdown and is independent of groundwater levels. Once the model run is complete, the results are then superimposed on groundwater levels to determine potential impacts to the MDL, exiting egal users, etc. (see response to Question No. 2). Therefore, the model results previously submitted are still relevant. November 10, 2022 Page 3

We believe that the responses above and attached materials provide the information necessary to appropriately respond to the comments provided. Should additional information be necessary to find the application sufficient, please do not hesitate to contact me at 850-354-7624 or email me at tekblad@stearnsweaver.com.

Sincerely,

Jina M. Ekblad

Tina M. Ekblad, MPA, AICP Director of Planning

Cc: Russell Smith, Russell.R.Smith@lennar.com Barry Ernst, Barry.Ernst@lennar.com Lennar Homes, LLC

> Steven C. Hartsell, SteveHartsell@paveselaw.com Pavese Law Firm

David Brown, DBrown@prowatersource.com Progressive Water Resources, LLC

Ryan Shute, RShute@m-da.com Michael Ekblad, MEkblad@m-da.com Morris-Depew Associates, Inc.

Shane Johnson, ShaneJ@passarella.net Passarella & Associates, Inc.

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# STEARNS WEAVER MILLER WEISSLER ALHADEFF & SITTERSON, P.A.

## Daniels South Comprehensive Plan Amendment & Planned Development Meeting Summary

On April 4th, 2022 a meeting was held at the East Lee County Regional Library, 881 Gunnery Road North, Fort Myers, FL beginning at 5:30 pm. No members of the public attended the meeting. Representatives from Lennar Homes LLC, Morris-Depew Associates, Inc., and Pavese Law Firm stayed at the meeting location from 5:15 pm to 6:00 pm.



## Daniels South Comprehensive Plan Amendment & Planned Development Meeting Summary

On April 5th, 2022 a meeting was held at Sunny Grove Landscaping & Nursery, 1511 South Mallard Lane, Fort Myers, FL beginning at 5:30 pm. No members of the public attended the meeting. Representatives from Lennar Homes LLC, Morris-Depew Associates, Inc., and Pavese Law Firm stayed at the meeting location from 5:15 pm to 6:00 pm.

An informational meeting will occur on Tuesday April 5, 2022 at 5:30pm regarding a comprehensive plan and rezoning for a mixed use development to be located at the southeast corner of the intersection of SR 82 and Daniels Parkway. The meeting will be held at Sunny Grove Landscaping & Nurserv at 15111 5 Mallard Lane Fort Myers, FL 33913 in the business conference room. Please contact Tina M. Ekblad, Director of Planning at Stearns Weaver Miller Law Firm for additional information, te kblad@stearnsweaver.com or 850-354-7624.

AD#5180583 March 25, 2022