

DANIELS SOUTH COMPREHENSIVE PLAN AMENDMENTS

Local Planning Agency

March 27, 2023



CPA2021-0001 & CPA2021-0002

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**PASSARELLA
& ASSOCIATES** INC

Shane Johnson



Ryan Shute, PE

TR TRANSPORTATION
CONSULTANTS, INC

Ted Treesh

PROJECT TEAM



PROPERTY BACKGROUND & LOCATION

Owner: Jared F. Holes, Trustee

Applicant: Lennar

Property Size: 1,233 acres

Surrounding Land Use

- **North:** Lehigh Acres
 - Central Urban FLU & Lehigh Acres Community Planning Area
- **East:** Estate Residential
 - Wetlands & DR/GR FLU, Southeast Lee Community Planning Area
- **South:** Southwest Florida International Airport
 - Wetlands & DR/GR FLU
- **West:** Daniels Parkway & Timber Creek
 - Central Urban & Sub-Outlying Suburban FLU, Gateway/Airport & Lehigh Acres Community Planning Area

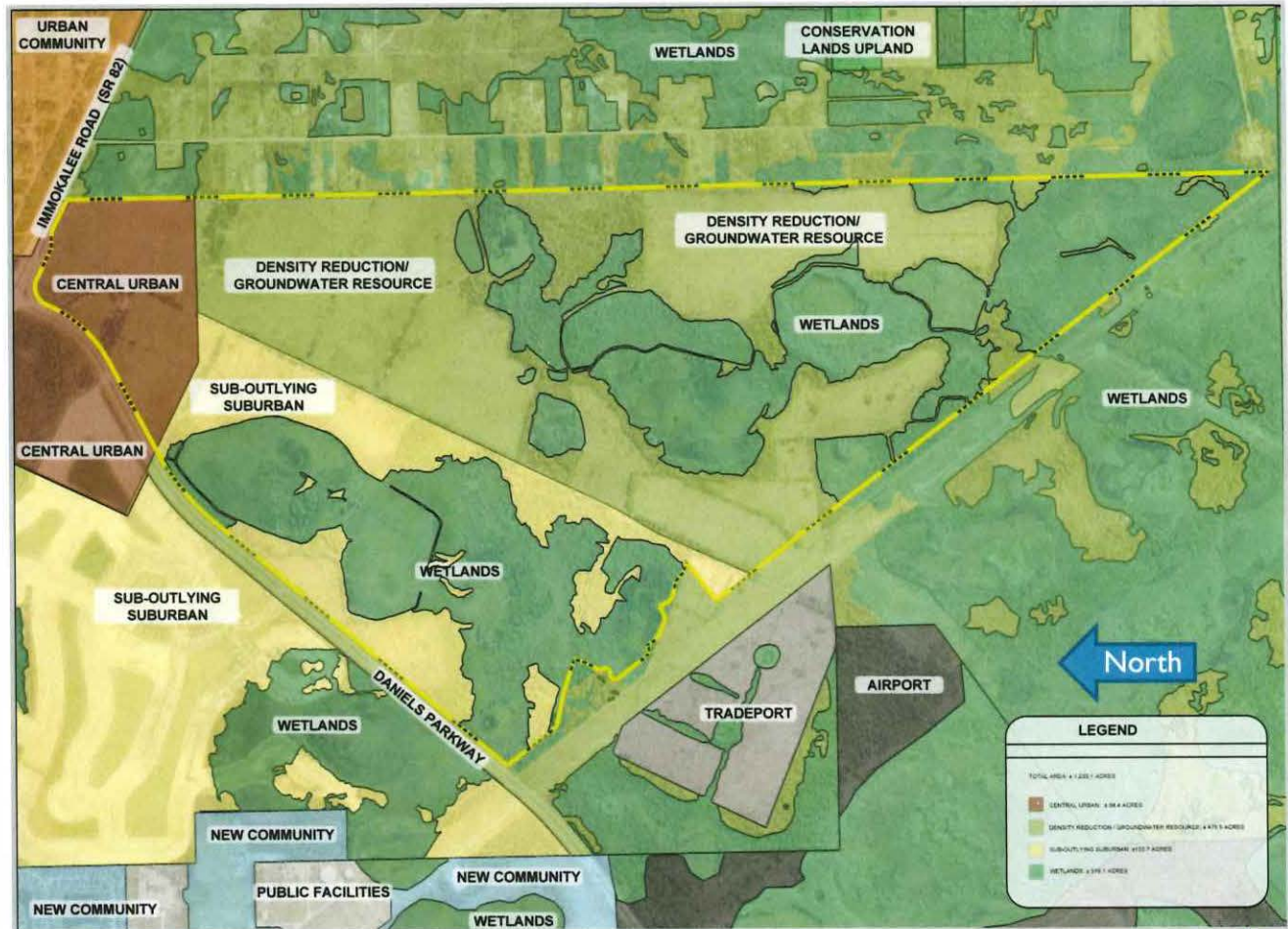
AMENDMENT REQUESTS

Map Amendments

- Future Land Use Map
 - 153.7 AC DR/GR to Sub-Outlying Suburban
- Lee County Utilities Service Area Maps
 - 1,148 AC added
- Private Recreational Facilities Map
 - 515.4 AC removed

Text Amendments

- Table I(b)
 - Year 2045 Allocations
- Policy 33.2.2
 - Address location in Lehigh & Southeast Lee Community Planning Areas



EXISTING LAND USE

■ Central Urban

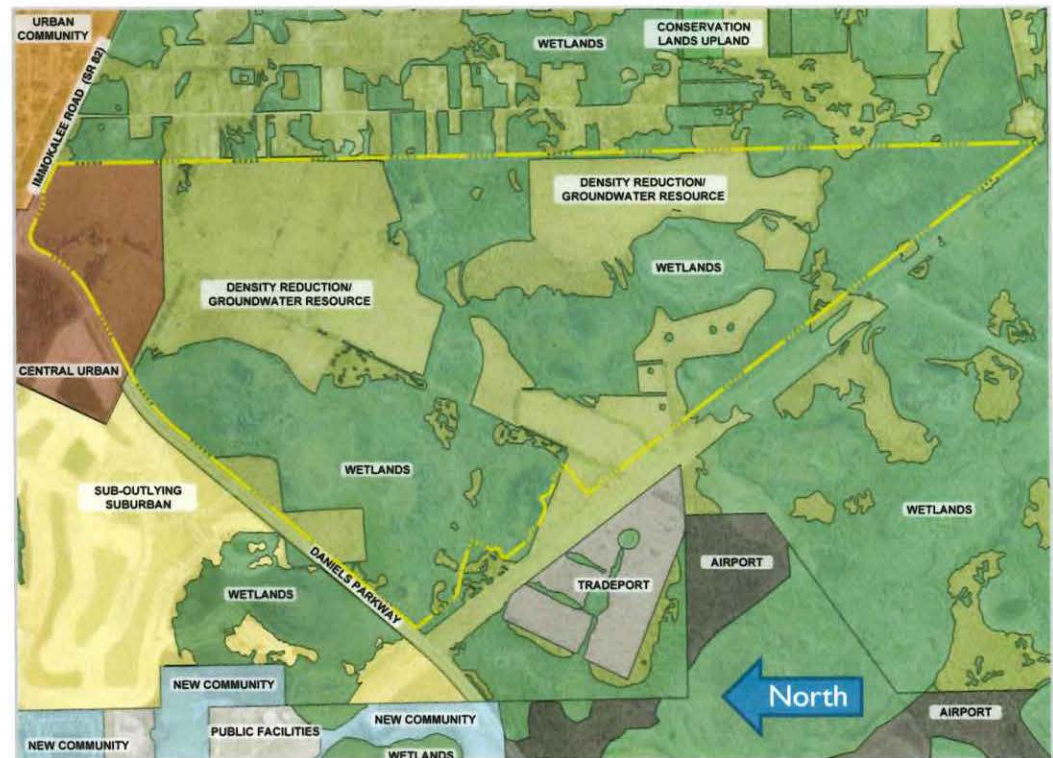
- Heavily settled areas with public services
- Mixed use development is encouraged
- Within Lehigh Acres Community Planning Area

■ Density Reduction/Groundwater Resource

- Substantial recharge to aquifers most suitable for wellfield development
- Demonstrate compatibility with maintaining historic surface & groundwater levels
- Within Southeast Lee County Community Planning Area

■ Wetlands

- Land identified as wetlands in accordance with 373.019(27), Fla. Stat.
- Within Southeast Lee County Community Planning Area



ENVIRONMENTAL RESOURCES

SHANE JOHNSON, VICE PRESIDENT & ECOLOGIST



PASSARELLA
& ASSOCIATES INC

HISTORIC CONDITIONS

- Agricultural development (row crops) first observed in 1953
- Wetland disturbance
- Elevated farm field road severed historic wetland sheet flow
- U.S. Army Air Corps target range in the north



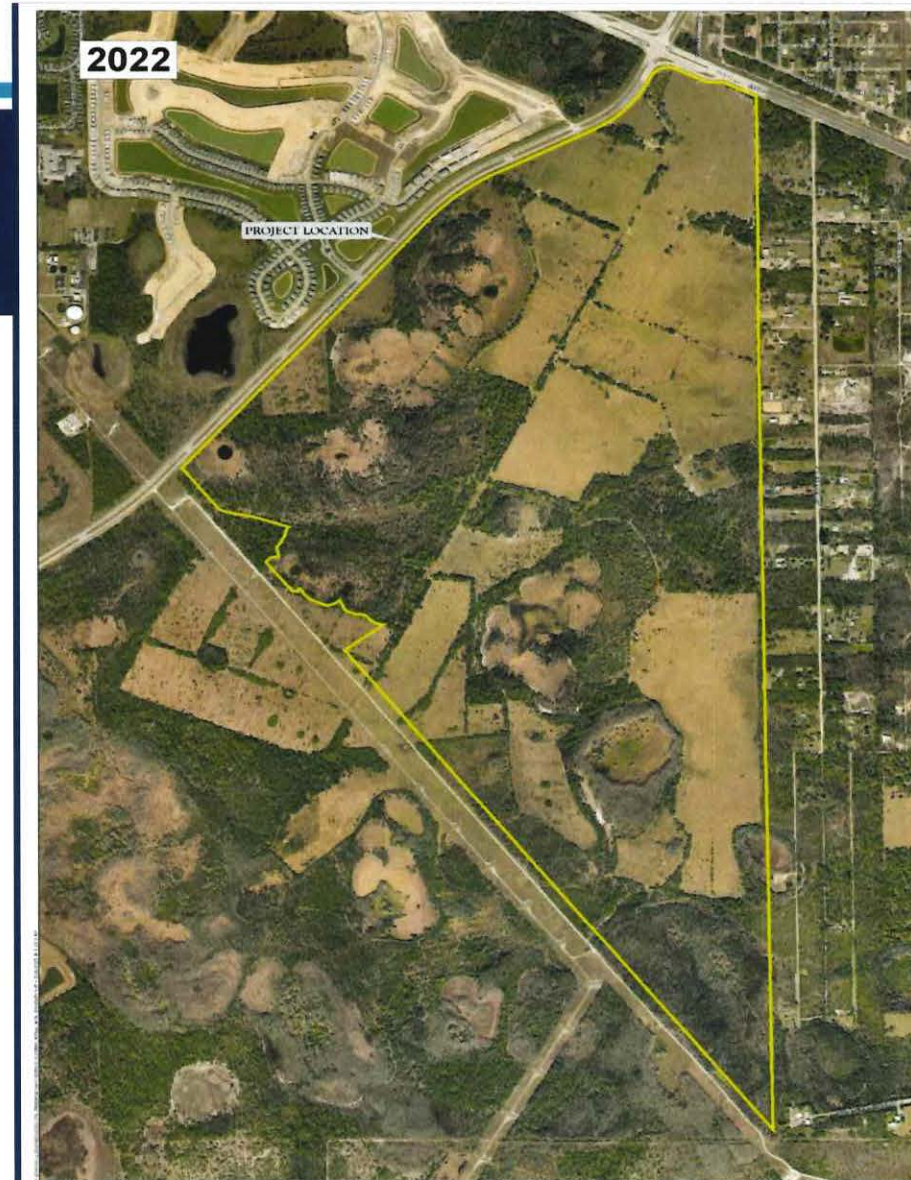
HISTORIC CONDITIONS

- Agricultural activities expanded in the north and along the southeastern boundary by 1972
- Extensive ditching
- Expanded road network
- Adjacent development to the east



EXISTING CONDITIONS

- Agricultural boundaries are similar to 1972 but use changed from row crop → pasture
- Pasture is the dominant land use totaling $\approx 51\%$
- Mixture of native and non-native uplands and wetlands
- Non-native land uses total $\approx 72\%$



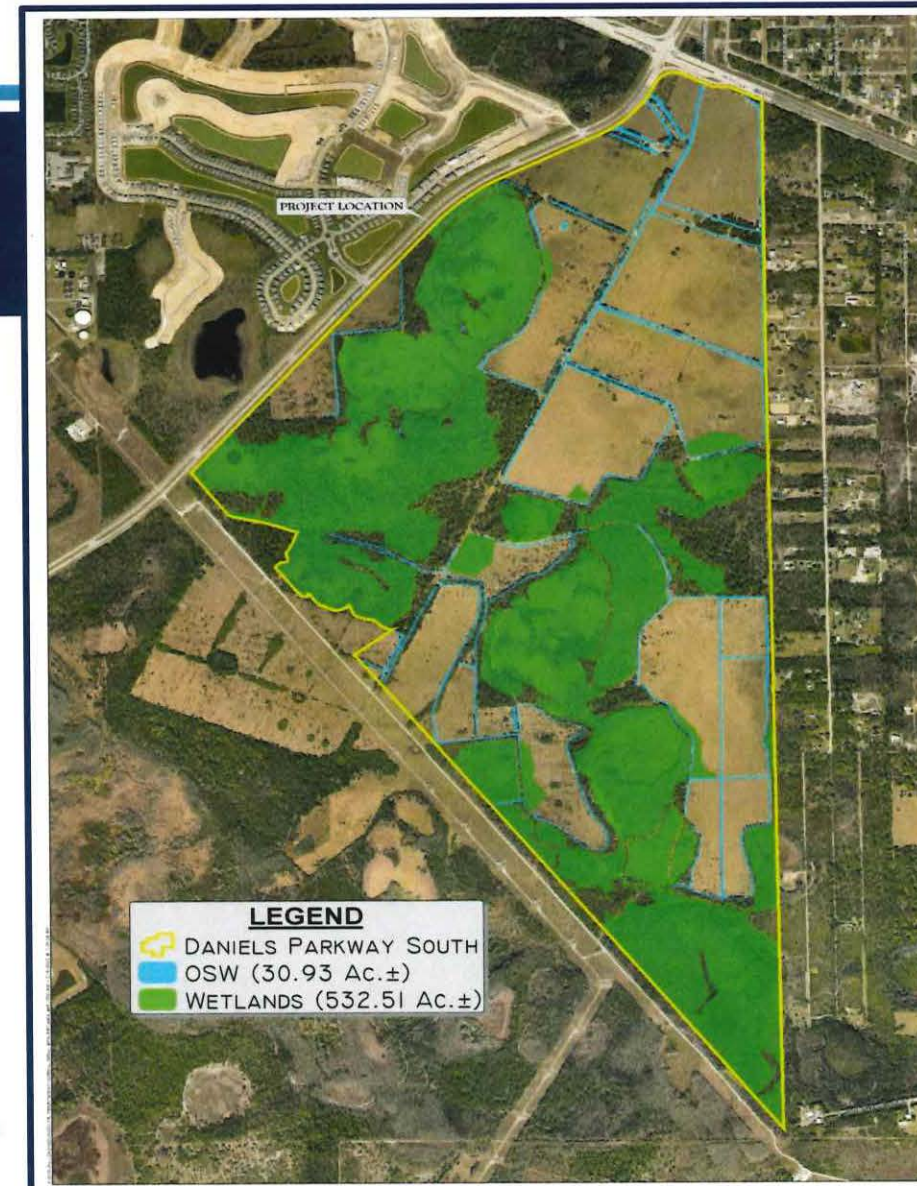
EXISTING CONDITIONS

- 670± acres of uplands
- Dominant upland land uses/habitat types include:
 - Improved pasture
 - Palmetto prairie
 - Pine
 - Pine flatwoods
 - Hardwood/conifer mixed
- Varying degrees of exotic vegetation



EXISTING CONDITIONS

- 532± acres of wetlands
- Dominant wetland habitat types include:
 - Hydric melaleuca
 - Mixed wetland hardwoods
 - Cypress
 - Hydric Pine
 - Freshwater marsh
- Varying degrees of exotic vegetation
- 31± acre of surface waters (ditches)



PROTECTED SPECIES

- PAI conducted a Lee County protected species survey in May and June 2021
- 6 listed wildlife species and their sign (i.e., tracks) observed
- 5 listed plant species observed
- Management activities are provided in a Protected Species Management Plan

SWFIA 10,000-FOOT HAZARDOUS WILDLIFE BUFFER

- **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.
- Design minimizes wildlife attractants within buffer
- Wetlands and/or lake littoral shelves are not created within buffer
- Wildlife Monitoring consistent with LCPA practice will occur

CPA2021-00017 & CPA2021-00018



HAZARDOUS WILDLIFE MINIMIZATION MEASURES

- Stormwater lakes will incorporate a hardened shoreline or steep slopes (no littoral zones)
- Stormwater lakes will be maintained free of emergent and submergent vegetation
- No wetlands will be created with the 10,000-foot buffer
- Restoration plantings will adhere to the Lee County Port Authority (LCPA) Compatible Native Plant List to reduce or eliminate plant material that would provide food and shelter for large flocks of birds
- On-site habitat restoration will be conducted in a “like-for-like” manner to maintain existing habitat types
- Hydrologic restoration within the site is focused on interconnecting wetland systems and will not increase wetland hydroperiods
- Applicant commitment to implement a wildlife monitoring program during construction and exotic removal
- Implementation of BMPs similar to those used at SVFIA

WILDLIFE CONSISTENCY

Policy 47.2.5

- Establishes the 10,000 FT Hazardous Wildlife Buffer
- Promotes compliance with FAA AC 150/5200-33B, or as otherwise amended

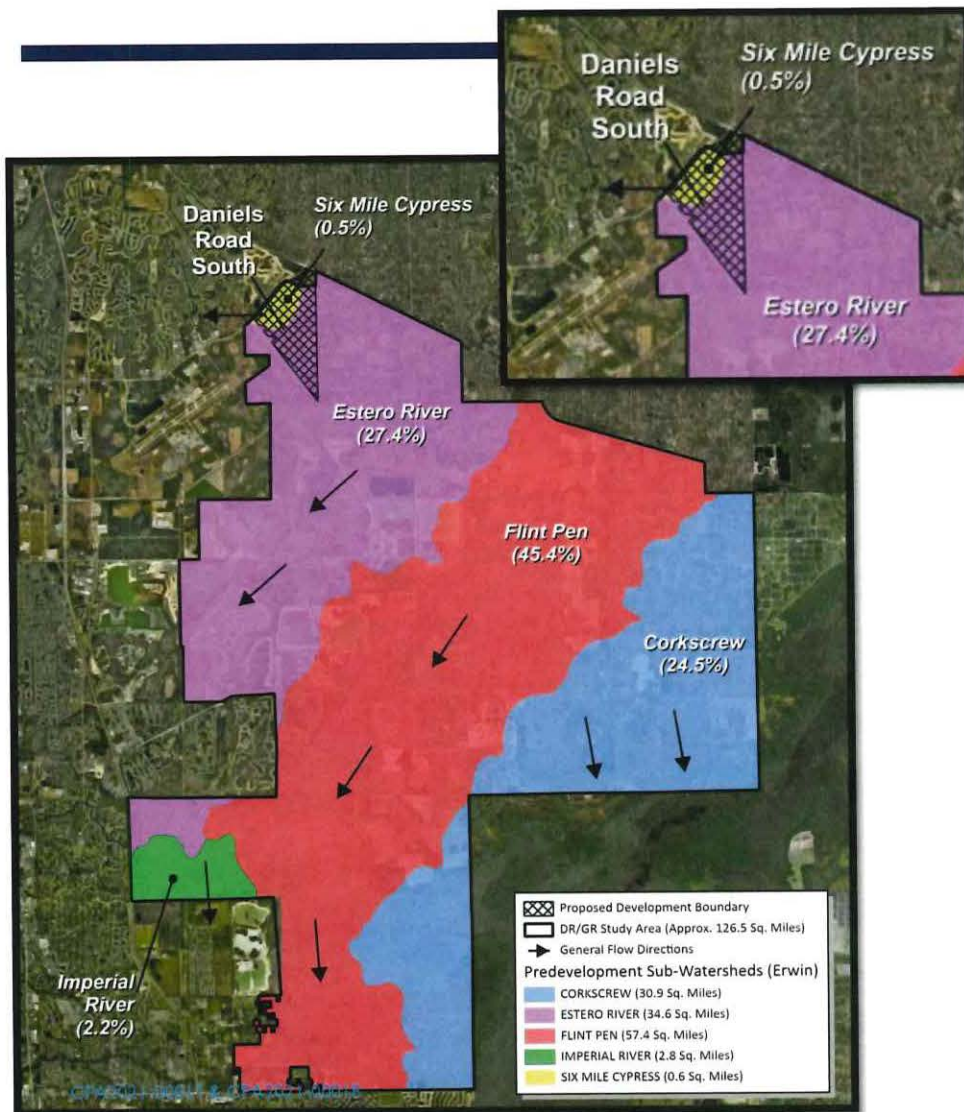
FAA Administrative Circular 150/5200-33C:

- Section 2.3.2 – New Stormwater Management Facilities
 - Recommends the use of steep sided, rip rap or concrete lined, narrow, linear shaped water detention basins.
 - Vegetation around detention basins providing food and cover for wildlife should be eliminated.
- Section 2.4.1 – Existing Wetlands on or Near Airport Property
 - Hazards identified during construction need to be coordinated with LCPA staff
- Section 2.4.3.2 – Off-site Mitigation of Wetland Functions
 - Shall not increase wildlife hazards or attractants



GROUND & SURFACE WATER RESOURCES

DAVID BROWN, PG



Note: "Predevelopment Sub-Watersheds" GIS data provided by Lee County

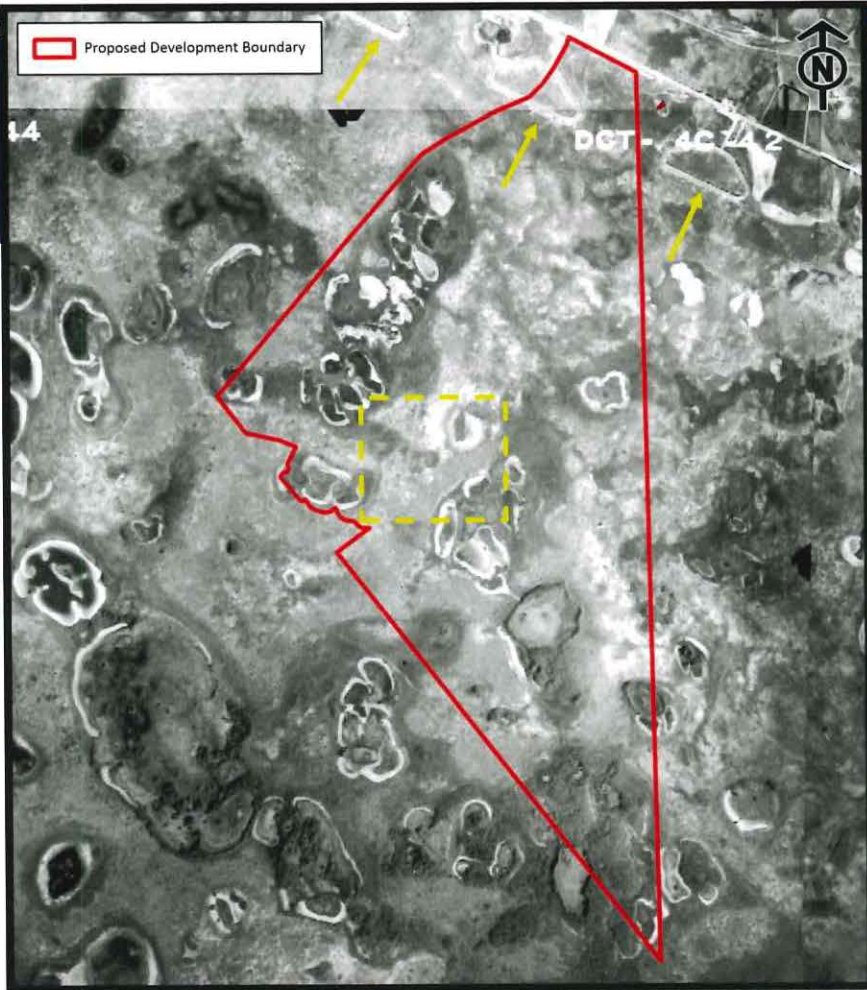
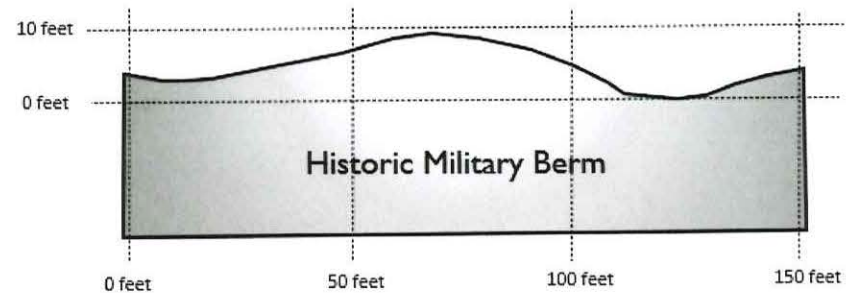
PROPERTY SETTING HISTORICAL PERSPECTIVE

- The DR/GR has five (5) sub-watersheds.
- The Daniels South property is located within both the Six Mile Cypress and Estero River sub-watersheds. The Six Mile Cypress sub-watershed represents only 0.5 percent of the DR/GR land area.
- The pre-development Six Mile Cypress sub-watershed flows to the west-northwest, whereas the other DR/GR sub-watersheds flow to the south to southwest.

PROPERTY SETTING

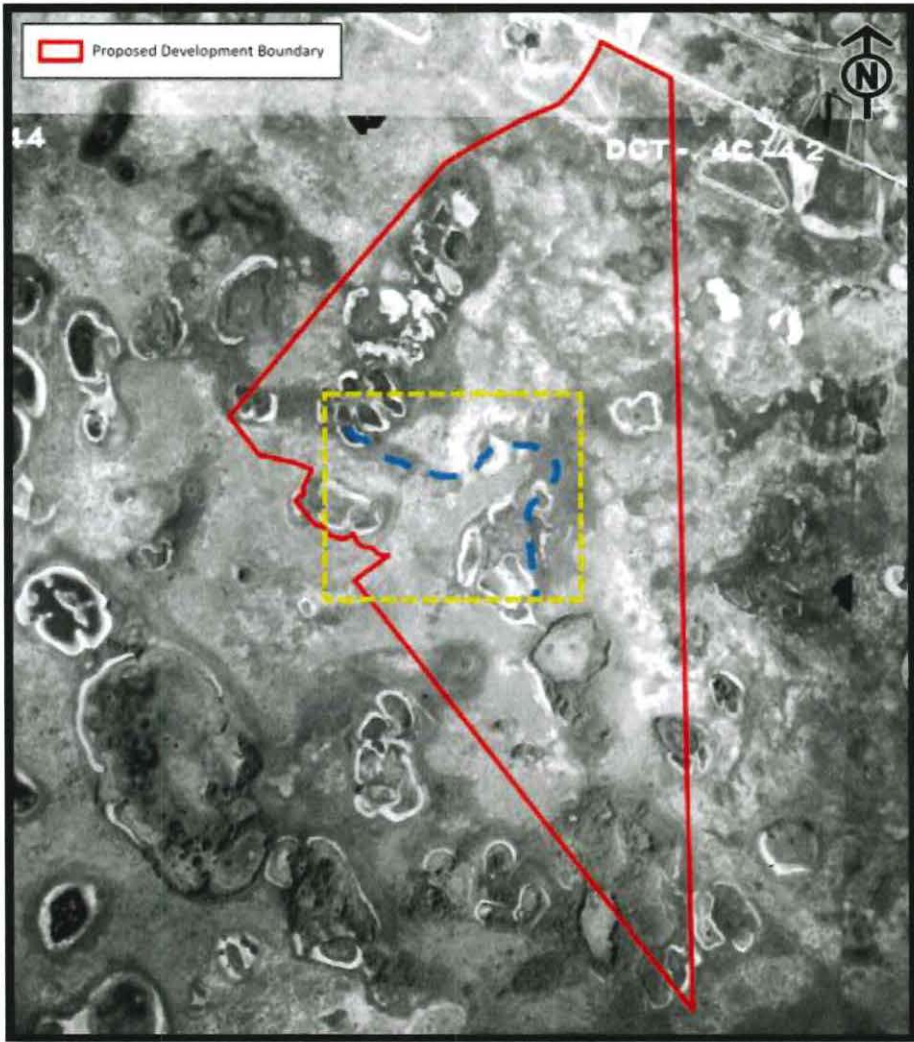
HISTORICAL PERSPECTIVE

- Prior to agricultural development, the project site was characterized as open rangeland and pine flatwoods, interspersed with wet prairies and shallow freshwater marshes.
- Prominent triangular-shaped elevated berms are evident in the 1944 aerial imagery and were created onsite as part of a WWII military training facility. One of these features is located on the northern extent of the property.



1944 Aerial Image

CPA2021-00017 & CPA2021-00018



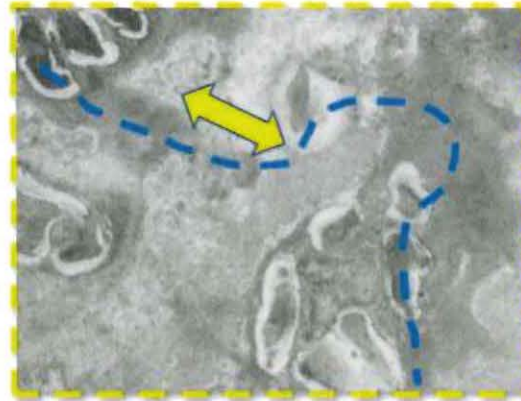
1944 Aerial

CPA2021-00017 & CPA2021-00018

PROPERTY SETTING

HISTORICAL PERSPECTIVE

The pre-development Basin Boundary between Six Mile Cypress and Estero River sub-watersheds was “Leaky” and appears to communicate (flow path) after large storm events. Not a well-defined boundary (partial mingling between basins)



1944 Aerial



Recent (unrecognizable)



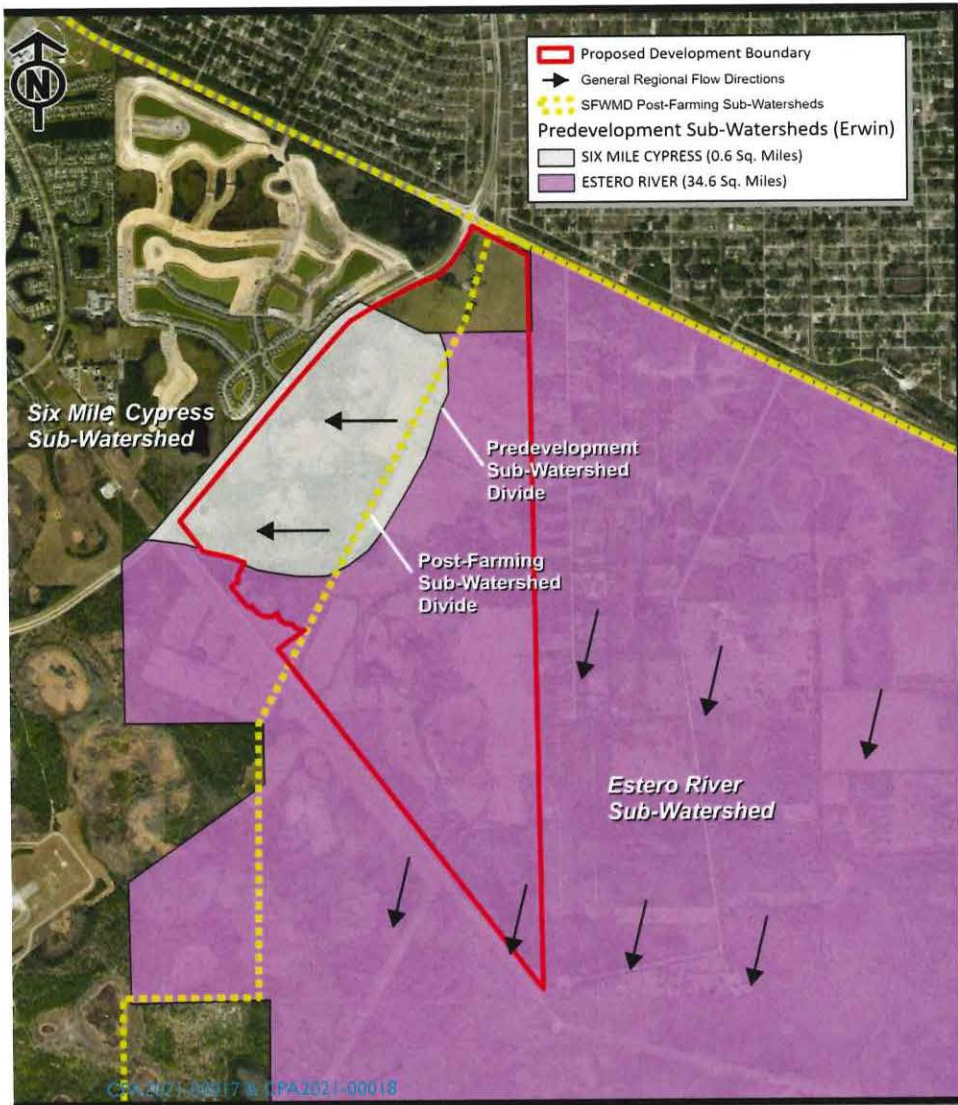
1958 Aerial Image

CPA2021-00017 & CPA2021-00018

PROPERTY SETTING

HISTORICAL PERSPECTIVE

- By **1958**, the interior of the 1,233-acre property was being developed for agricultural row crops with the construction of internal drainage ditches, wetland rim-ditching, and access roads.
- A network of fields and agricultural roadways were constructed including a prominent “elevated” farm road.
- The elevated farm roadway was constructed to facilitate year-round access to farm fields further to the south. The elevated road effectively severed the historic connection between the Six Mile Cypress and Estero River sub-watersheds.



PROPERTY SETTING

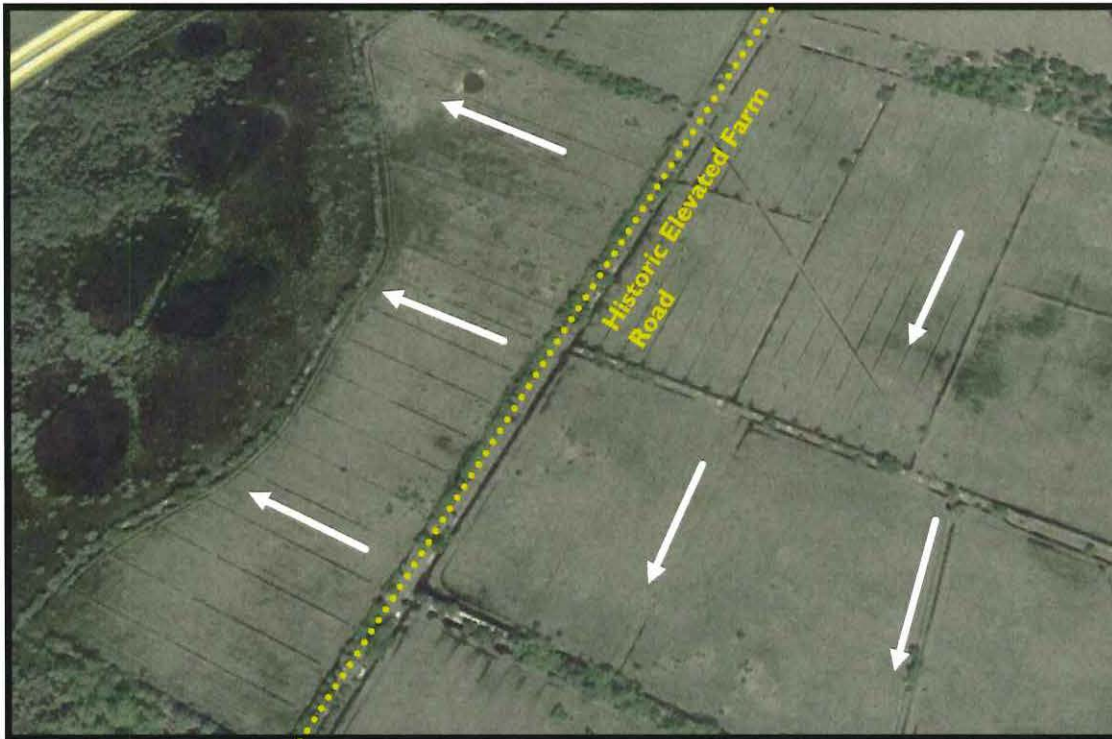
EXISTING CONDITIONS

- The historic elevated farm roadway was investigated in (height of the rainy season) and was found to be intact and still acts as a surface water basin divide. No defined connection, flow-way or conveyance was observed through or around the roadway. (Daniels Parkway further isolates western side of the property)
- There are 2 hydrologically separate sides of the property (Six Mile Cypress sub-watershed isolated)

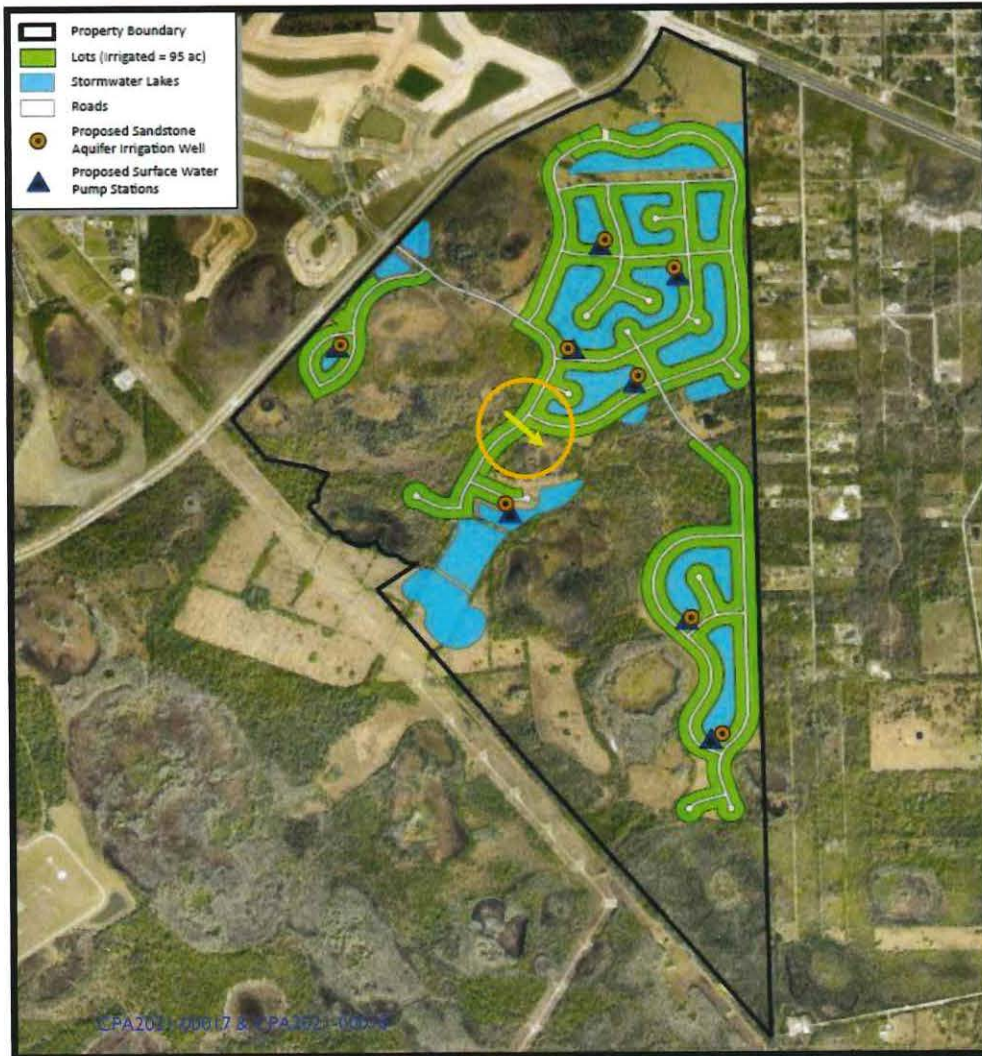


PROPERTY SETTING

Existing Conditions



- The alteration and separation of flow directions is still evident today and can be seen in recent aerial photographs of farm drainage ditches.
- These drainage features further limited surface water resource interaction and hydrologically isolated the western side of the property.
- Hydrologic restorations are therefore proposed as part of the development plan.



PROPERTY SETTING

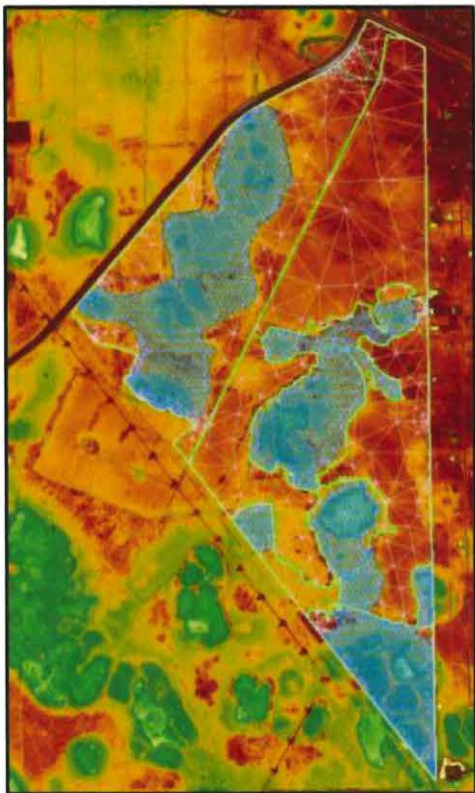
Proposed Hydrologic Enhancements

- Proposed Interconnection (yellow arrow) between Six Mile Cypress and Estero River sub-watersheds undoes the blockage created by the elevated farm road.
- The proposed Daniels Road South conceptual design will use groundwater and recycled stormwater (surface water) for irrigation.
- Seasonal surface water usage and water conservation measures proposed are consistent with LVCWSP and Lee Plan Policies
- The proposed irrigation method optimizes the use of water supply from each source and thereby reduces impacts to present and future water resources.
- The irrigation system will be a master controlled system whereby no individual homeowner can control the timing or duration of irrigation events.
- The development's design significantly increases recharge to underlying aquifer.

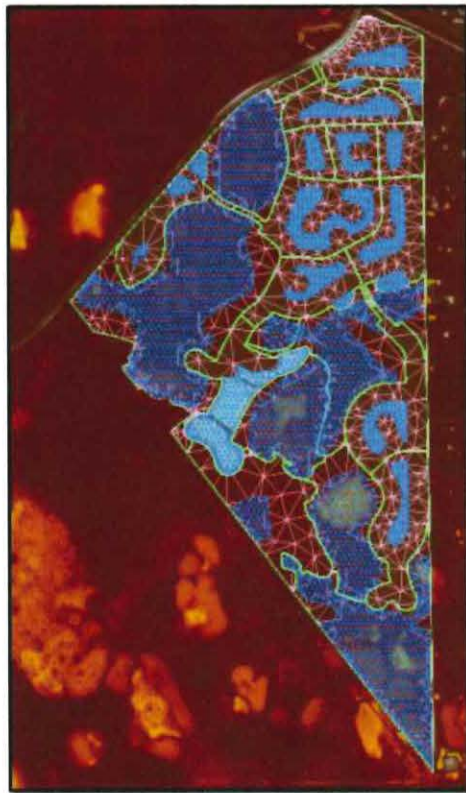
PROPERTY SETTING

Proposed Hydrologic Enhancements

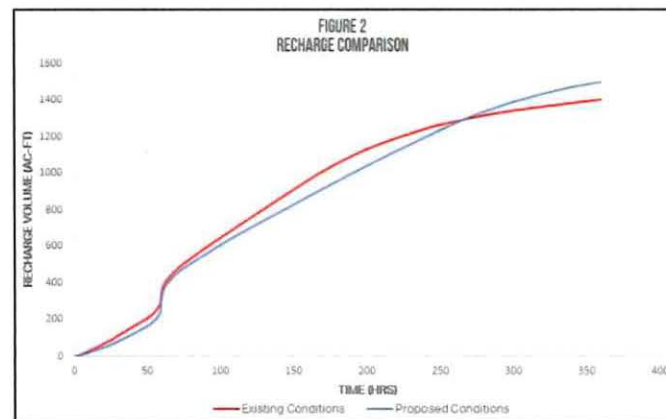
Based on the results of the Integrated modeling analysis for a 25-year, 3-day rainfall event, the groundwater recharge volume simulated in the Proposed Conditions model is greater than existing conditions.. The existing conditions model anticipates a net increase of 94 acre-ft of recharge. (30,630,034 gallons over 15 days)



Existing Conditions



Proposed Conditions



DANIELS SOUTH

Water Resource Benefits

- The retirement of permitted groundwater quantities sourced from the Water Table Aquifer.
- Elimination of existing internal drainage ditches, thereby improving the potential for recharge to the Water Table Aquifer.
- Lee County Utilities (LCU) is to supply both potable and wastewater services.
- Improved surface water quality through the elimination of cattle grazing and the creation of engineered stormwater management “treatment” facilities.
- Development will adhere to Lee County’s Fertilizer Ordinance No. 08-08.
- Implementation of an integrated ground and surface water irrigation system.
- Detailed water quality and water level monitoring plan.



DANIELS ROAD SOUTH

Water Resource Benefits

- A master-controlled irrigation system that regulates the initiation and overall duration of irrigation events to manage irrigation water use and greatly enhance water conservation (no individual homeowner irrigation timers).
- Enhanced recharge to the Water Table Aquifer through the creation of numerous stormwater management system lakes (i.e. stormwater retention).
- Substantial environmental restoration associated with the conversion of active cattle grazing acreage into open space habitat, including the preservation and enhancement of onsite forested conservation areas.
- The removal of earth berms associated with past military exercises.



TRANSPORTATION ANALYSIS

TED TREESH





TRANSPORTATION ANALYSIS

- Evaluate impacts to the Short Term Transportation Network (2026) & Long Term Transportation Plan (2045).
- Trip Generation assumes the Worse Case Scenario - all residential units Single Family Detached.
- Evaluate increase in vehicular trips due to the change in land use categories.

TRANSPORTATION ANALYSIS

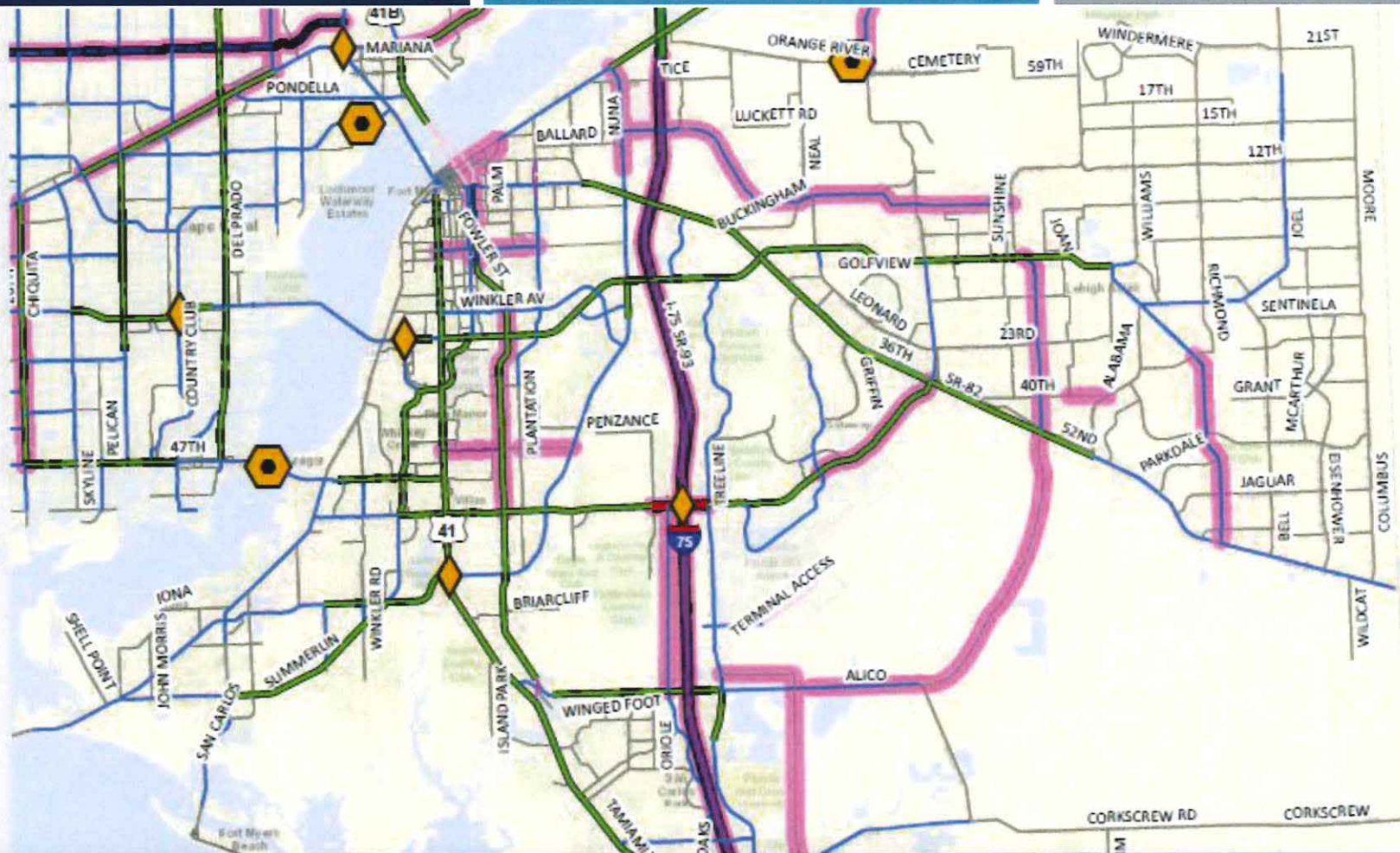


Short Term Analysis – 2026

- Level of Service Analysis results indicate additional trips from this Project will not cause any additional Level of Service issues.

Long Term Analysis – 2045

- Level of Service Analysis results also indicate that additional trips from this Project will not cause any additional Level of Service issues.



2045 COST FEASIBLE MAP

STEARNS
WEAVER
MILLER

PLANNING ANALYSIS

TINA M. EKBLAD, MPA, AICP



EXISTING LAND USE

Density Reduction/Groundwater Resource

- Established via 1990 Settlement Agreement
 - “most non-urban land east of Interstate-75, southeast of the airport, and south of State Route 82.”
- Property included due to contiguous location to a larger property “south of State Route 82.”
 - Underlying characteristics of western 153.7 AC are not the same as the larger DR/GR.

Wetlands

- Land identified as wetlands in accordance with 373.019(27), Fla. Stat.

PROPOSED FUTURE LAND USE

Sub-Outlying Suburban – Policy I.1-11

- Characterized by low density residential areas
- Density is 1 to 2 dwelling units per acre
- Allocate 153.7 AC of uplands
- Promotes a density transition from Lehigh Acres & consistency with existing surrounding development

Wetlands

- SFWMD Jurisdictional Determination received
- 519.1 AC of wetlands



FUTURE LAND USE JUSTIFICATION

Density Reduction/Groundwater Resource

- Promotes the protection of water resources and recharge of groundwater.
 - Historical & current agricultural operations have reduced recharge opportunities.
- Identifies areas suitable for wellfield development
 - Existing wellfield to the south and southeast
 - Quantity of existing & potential individual wells in Lehigh Acres not ideal for County-wide wellfield development.
- Prioritizes restoration of the Estero River watershed.
 - Internal north/south road altered surface water flow since at least 1953.
 - West of the internal road is the Six Mile Cypress watershed sub-basin.
 - No surface water connection across the property to the Estero River watersheds.
- Due to these existing characteristics, it is appropriate to redesignate the 153.7 AC of uplands west of the internal road to Sub-Outlying Suburban.



AMENDMENTS TO THE DR/GR FLU

- **Policy 2.3.1:** Map Amendments within the DR/GR are subject to additional review related to future water resources.
 - Review related to the short-term & long-term availability of irrigation and domestic water source
 - Whether the proposal will cause significant impact on present or future water resources
 - BOCC must make a formal finding that no significant impacts on present or future water resources will result from the amendment.
- **Policy 2.3.2:** Map Amendments to the DR/GR south of SR82 must analyze and provide data and analysis of no significant harm to water resources.
 - Property will be placed within Lee County Utilities Service Area.
 - Concurrent Planned Development will require central water & sewer.
 - Eliminates potable water wells and associated stress to the aquifer.
 - Central Reuse water for irrigation is not available.
 - Hybrid approach is proposed using stormwater lakes and aquifer reducing withdraw of groundwater from aquifer.
 - Sandstone aquifer monitoring well exists west at Timber Creek.
 - Additional monitoring well proposed at Daniels South.
 - Nearby groundwater levels are higher than other areas of Lee County.
 - Integrated Groundwater Model provided is a conservative approach & shows no significant harm.

SOUTHEAST LEE COMMUNITY PLANNING AREA

Goal 33: Protect natural resources through public & private acquisition and restoration efforts.

- Protect and restore surface and ground water, wetlands, and wildlife habitat.
- Allowable land uses: conservation, agriculture, public facilities, low density of clustered residential, natural resource extraction & private recreation facilities
- Map 2-D establishes overlay areas of residential and mixed-use development

Policy 33.2.2: Established Mixed-Use Communities within Southeast Lee

- Concentrates residential density, promotes connection to central water and sewer, permits specific commercial square footage

- Property is identified on Map 2-D
 - Within Lehigh Acre Mixed-Use Community & Future Urban Land Use Category.
- Proposed Text Amendment
 - Establish a transitional location between Future Urban & Non-Urban land use categories.
 - Maintains the intent to protect surface & groundwater resources.
 - Promotes clustered development pattern with enhanced open space.
 - Maintains connection to central water and sewer.
 - Enables a mixed-use community with residential the primary use within Southeast Lee.
 - Commercial will remain within Lehigh Acres Community Planning Area.

PROPOSED TEXT AMENDMENT

Addresses Property Location

- 84.5 AC within Central Urban FLU & Lehigh Acres Community Planning Area
- 1,148 AC within DR/GR, Sub-Outlying Suburban & Wetlands FLU & Southeast Community Planning Area
- Permits density to be calculated and utilized across multiple future land use categories & community planning areas.
 - Mixed Use Planned Development submitted and will be heard by the Hearing Examiner May 4th
 - Master Concept Plan demonstrates 60% Open Space
- Objective is to establish a mixed-use development consistent with the underlying land use & intent of Community Plans.

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 [remains the same]
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:
 1. The project is developed as a Planned Development, and
 2. The project maintains a minimum of 60 percent open space.

GROWTH MANAGEMENT & URBAN SERVICES

- Promote Compact & Contiguous Growth Patterns
 - Objectives 2.1 & 2.2 and supporting policies
 - Proximity to Urban Services & Existing communities
- Urban Services
 - Lee County Utilities Service Area Extension
 - Addresses Standards 4.1.1 & 4.1.2
 - Existing Service and capacity available:
 - Emergency Services
 - Schools
 - Parks & Recreation
 - Solid Waste
- Environmental Reports & Analysis
 - Consistent with Standards 4.1.4
 - Evaluates location within Southeast Lee County & proximity to Southwest Florida International Airport



OBJECTIVE 47.2: DEVELOPMENT COMPATIBILITY IN VICINITY OF AIRPORTS

Generally supporting Policies seek to:

- ensure land use compatibility
- restrict land uses within Airport Noise Zones
- ensure structures permitted do not obstruct air navigation and comply with FAA, state and local standards

Proposed Amendment

- Addresses existing property characteristics
- Majority of development area is clustered away from SWFIA
 - Design is consistent with noise zones & wildlife buffer
- Planned Development includes
 - Building Height Restrictions
 - Purchaser Notifications
 - Airport Wildlife Management Plan



LEHIGH ACRES COMMUNITY PLANNING AREA

Goal 25: Development and redevelopment should convert the community into a “vibrant residential and commercial community.” The community seeks a balance of single family and multi-family residential, commercial and employment centers, mixed use, and green space and recreation.

- **Objective 25.1: Specialized Mixed Use Nodes.** Establish nodes that contribute the uses needed to support Lehigh Acres Community Plan Area.
- **Policy 25.8.2:** Connections to SR 82 must be consistent with the Corridor Access Management Plan (CAMP).
- **Policy 25.8.4:** New commercial development must provide interconnections from adjacent residential areas.
- **Policy 25.9.2:** Direct new development to areas that are expected to receive public services and infrastructure within the planning horizon.
- **84.5 AC within the Central Urban FLU category is within a Community Mixed Use Activity Center.**
 - This FLU category permits a mix of uses as desired & companion PD proposes interconnected commercial and multi-family residential.
 - Access points from SR 82 and Daniels Parkway are consistent with the CAMP for both arterial roadways.
 - All urban services are available and have capacity to serve the proposed development

COMMUNITY PLANS

Lehigh Acres & Southeast Lee Community Planning Areas

- Objective 17.3: Public Input
 - Requires a community meeting for privately-initiated applications proposing a text and/or map amendment
 - Requires the community meeting to be held within the boundaries of the Community Planning Area
- LDC Section 33-1401: Community Review
 - Requires a community meeting for planned development zoning actions within Lehigh Acres

Community Meetings

- Lehigh Acres: April 4, 2022 @ 5:30, East Lee County Regional Library
- Southeast Lee: April 5, 2022 @ 5:30, Sunny Grove Landscaping & Nursery
- Visual graphics and talking points were prepared for Text & Map Amendments and Mixed-Use Planned Development
- No members of the public attended either meeting.