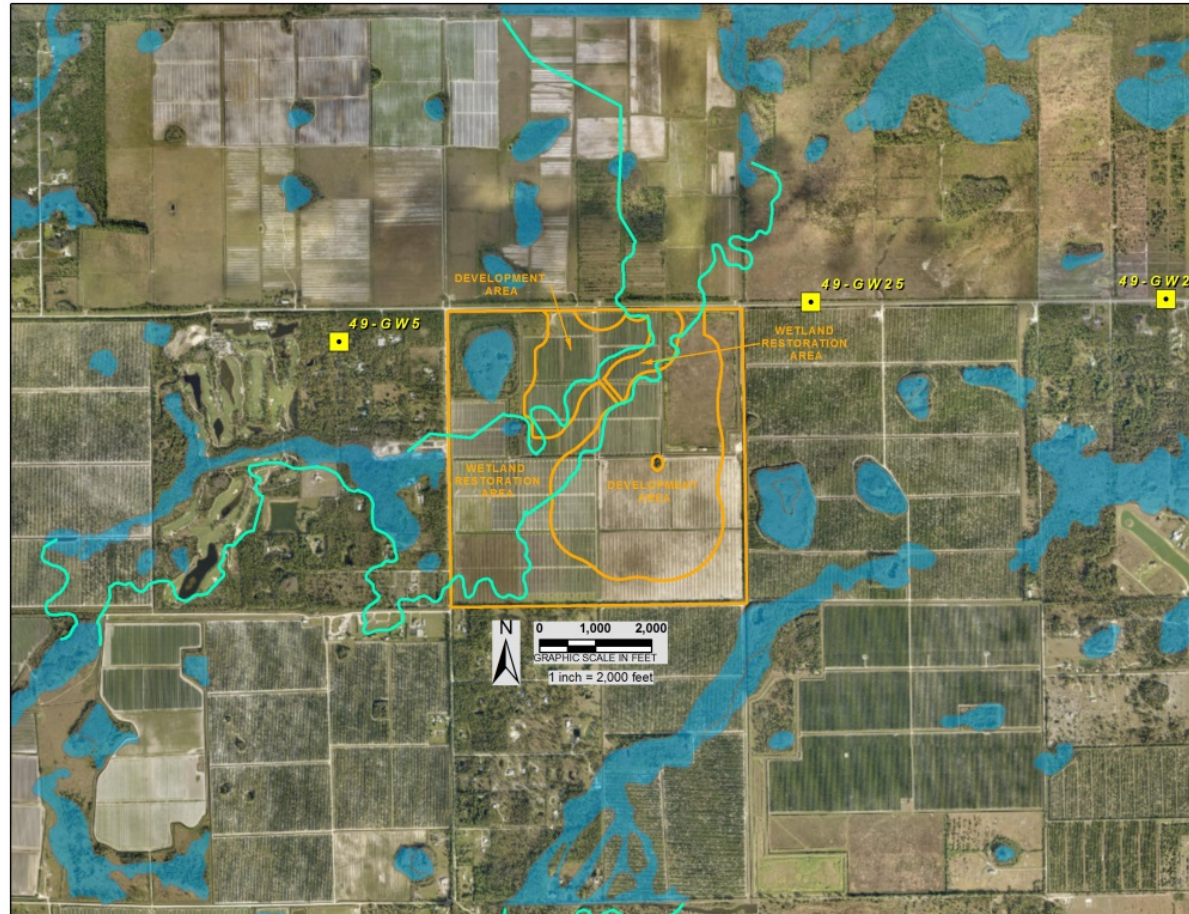


# Pepperland Ranch



CPA2016-00003

Lee County Board of County Commissioners

Transmittal Public Hearing

January 25, 2017

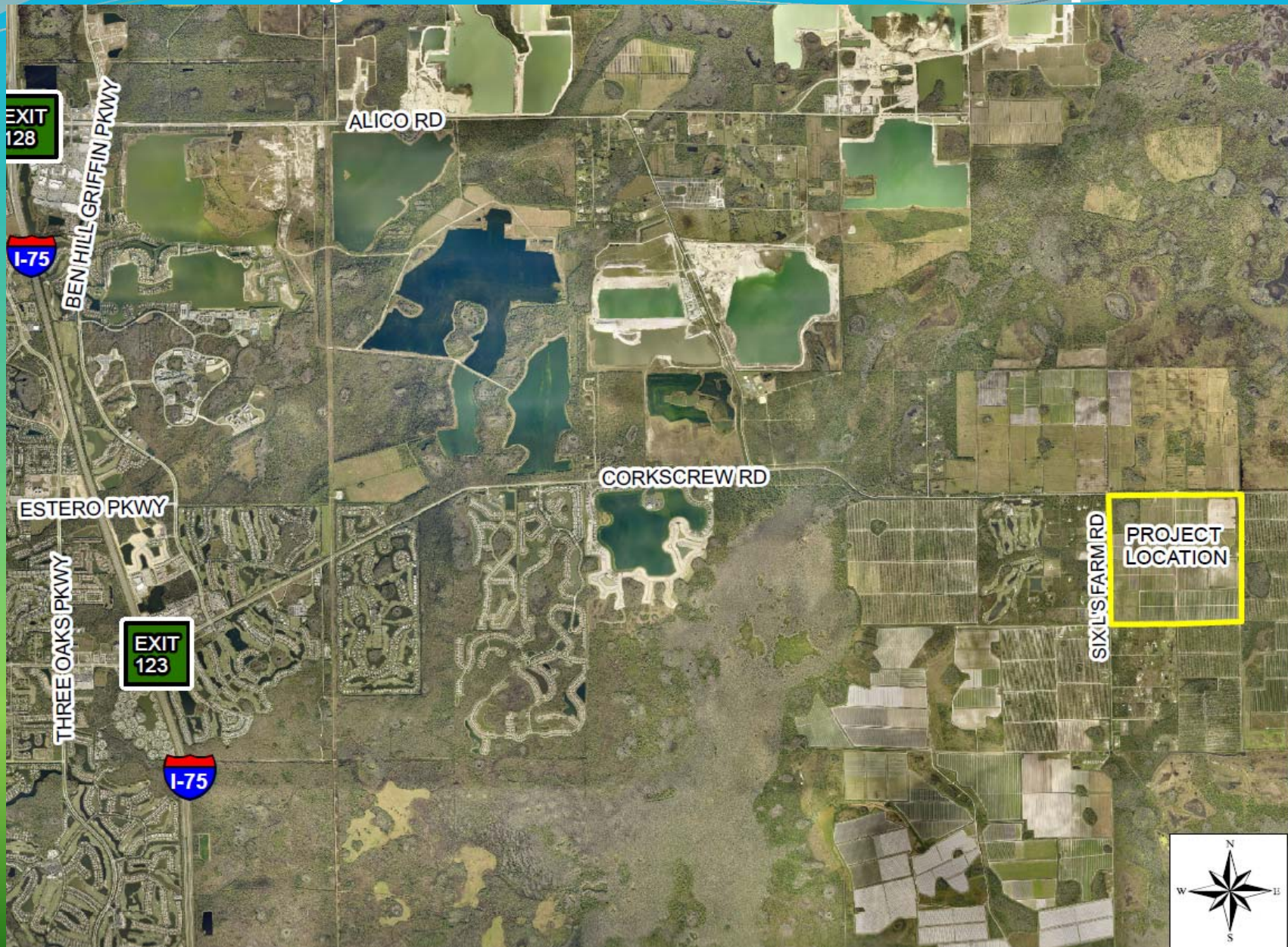
# Applicant Representatives

- **Robert A. Cooper, Partner**  
Hahn Loeser & Parks LLP
- **Matthew A. Noble, AICP**  
ANoblePlan, LLC
- **Stacy Ellis Hewitt, AICP**  
**David R. Underhill, Jr., P.E.**  
Banks Engineering
- **Ted B. Treesh**  
TR Transportation
- **Kirk Martin, PG, President**  
Water Sciences Associates
- **Shane Johnson, Sr. Ecologist**  
Passarella & Associates
- **Brian F. Farrar, President**  
BCF Management Group, LLC





# Project Location Map



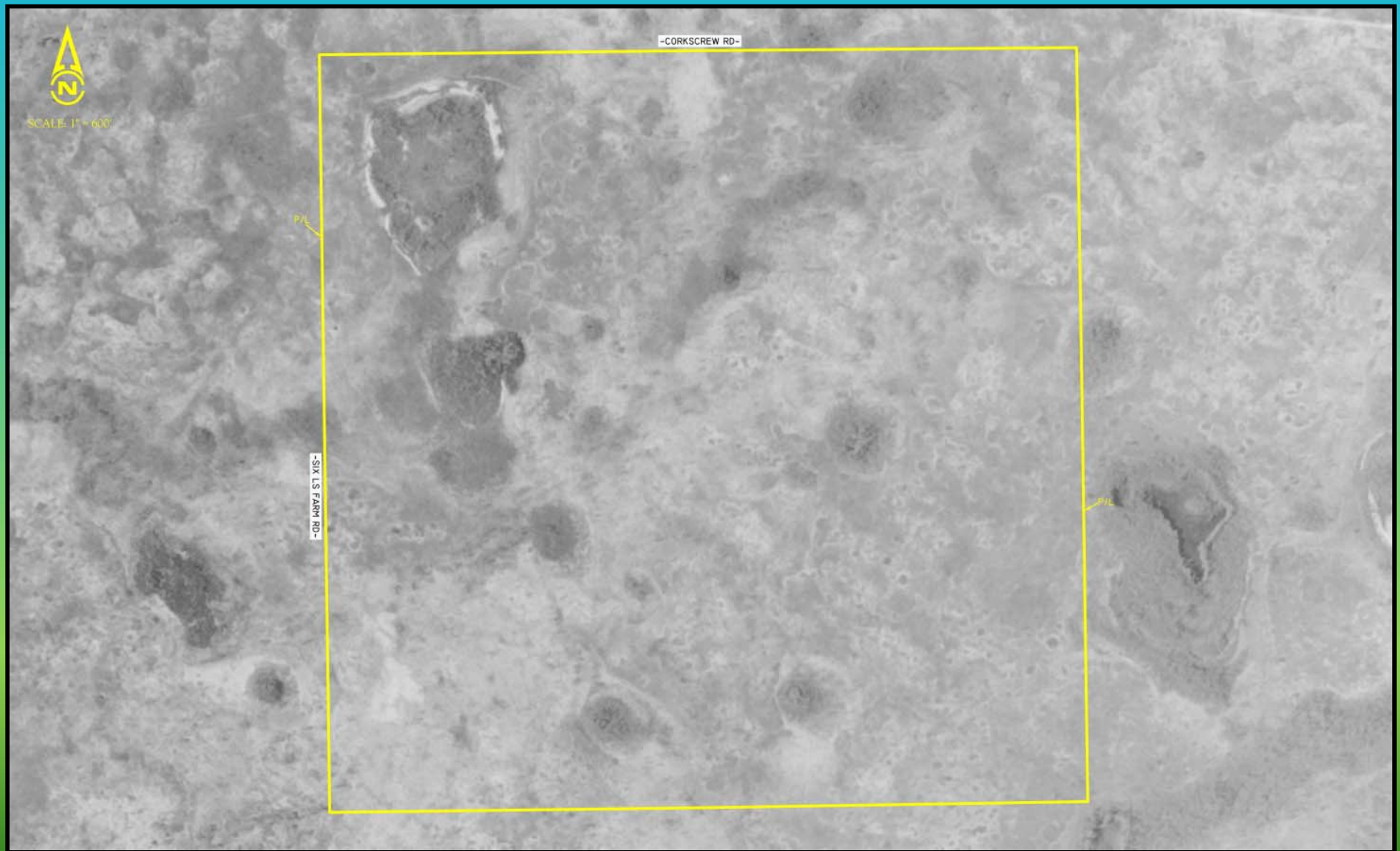
# Introduction

- 637.5 acre site with intensive ongoing agricultural operations
- SFWMD & Lee County borrow pit permitting
- Property highly impacted by existing AG uses
- Meets eligibility criteria in Lee Plan Policy 33.3.4.1 for inclusion in the Environmental Enhancement & Preservation Communities overlay



# Historical Background

No Development in 1951



# Historical Background

Intensive Row Crop Activities in Place by 1968





# Existing Conditions

- Highly disturbed
- Intensive row crop activities still in place
- Berm and ditch system around perimeter of site
- Severed historic sheet flow and hydrologic conditions
- Severed wildlife habitat



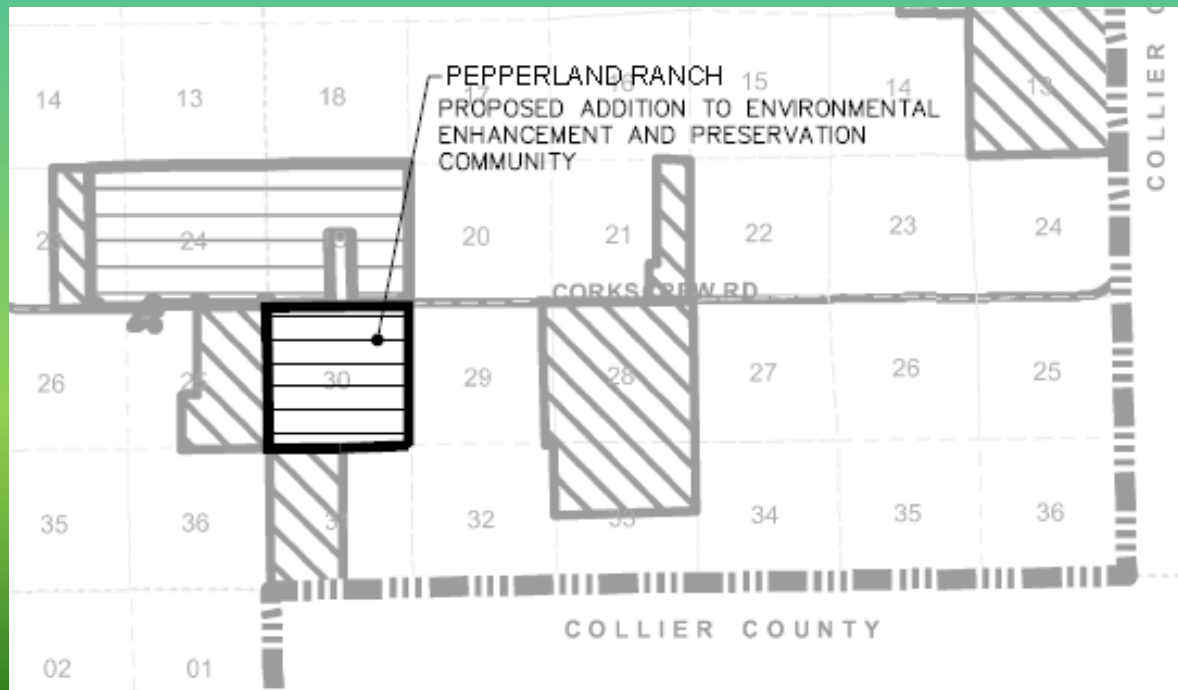
# Existing Intensive Agricultural Use





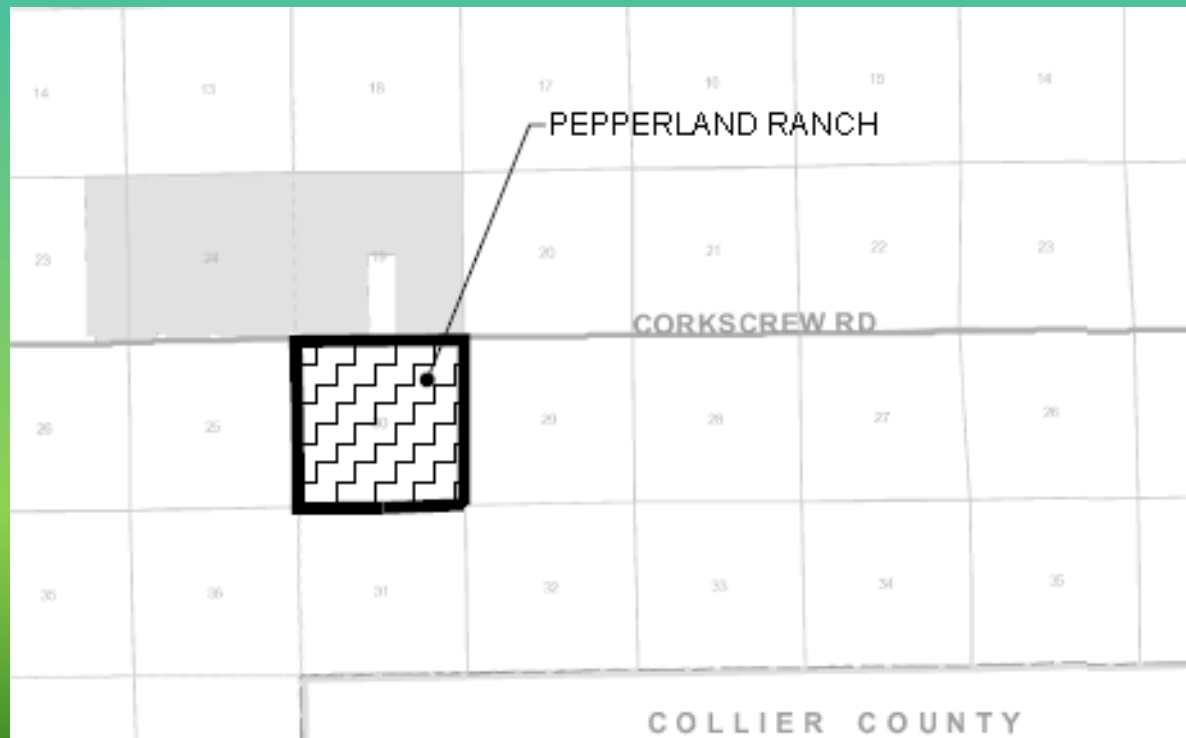
# Requests

- Amend Lee Plan **Map 17 - Southeast DR/GR Residential Overlay**, to designate **637+/- acres** along Corkscrew Road as an “**Environmental Enhancement and Preservation Community**”



# Requests

- **Amend Lee Plan Maps 6 and 7 to include the property within the Future Potable Water and Sewer Service areas**





# Project Regional Benefits

1. **No onsite mining** and associated **activities** such as truck traffic & blasting;
2. **Eliminates AG** use, **reduce** use of **pesticides, herbicides & fertilizers**;
3. **Restores upland** and **wetland** areas/**flowway** restoration corridor;
4. **Preserves** and **restores** wetlands/uplands and **enhances** by **exotic removal**; **restores wildlife habitats** including **creation** of **wood stork habitat/foraging** habitat for wading birds;
5. Preserves to provide **additional** wetland **restoration/flowway** connections to adjacent properties;
6. **Increases** the amount of **land** available for **water recharge**, while **reducing impacts** on **groundwater resources**;

# Project Regional Benefits

7. **Reduces water** utilization **over 65%** from current AG use;
8. AG fields & ditches will be removed & the **land re-graded** to **restore wetland areas/historic flowways** and **surface hydrology**;
9. Provides **additional wildlife connections** & corridors from conservation lands to the north, south, east and west of the property.
10. Preserved & **restored** areas will **increase wildlife** habitat;
11. **Increases native vegetation** on the property;
12. **Connects to public water & sewer** services, **eliminates** individual **wells & septic** systems, which will further **protect** the area's **public water wellfields**;



# Project Regional Benefits

13. **Increases basin storage** that will **potentially** allow **additional surface water flows** to enter the property from Corkscrew Road;
14. Accommodates **water treatment** of any additional **surface water flow** that enters the property **prior to** any **offsite discharge**;
15. The project water management system is designed to **reduce discharges** at the **existing outfall**, which is located in the southwest corner of the property. Reduced discharges will be a **benefit** to the **single family homes** located to the south of the property;
16. **Preserves** future **opportunities** for further **wildlife corridor connections** in addition to **wetland restoration/flowway connections**;
17. Project results in a **more compatible use** with adjacent single-family homes.
18. Provides **Enhanced Lake Management Plan** to **reduce nitrogen and phosphorus** loading;

# Project Regional Benefits

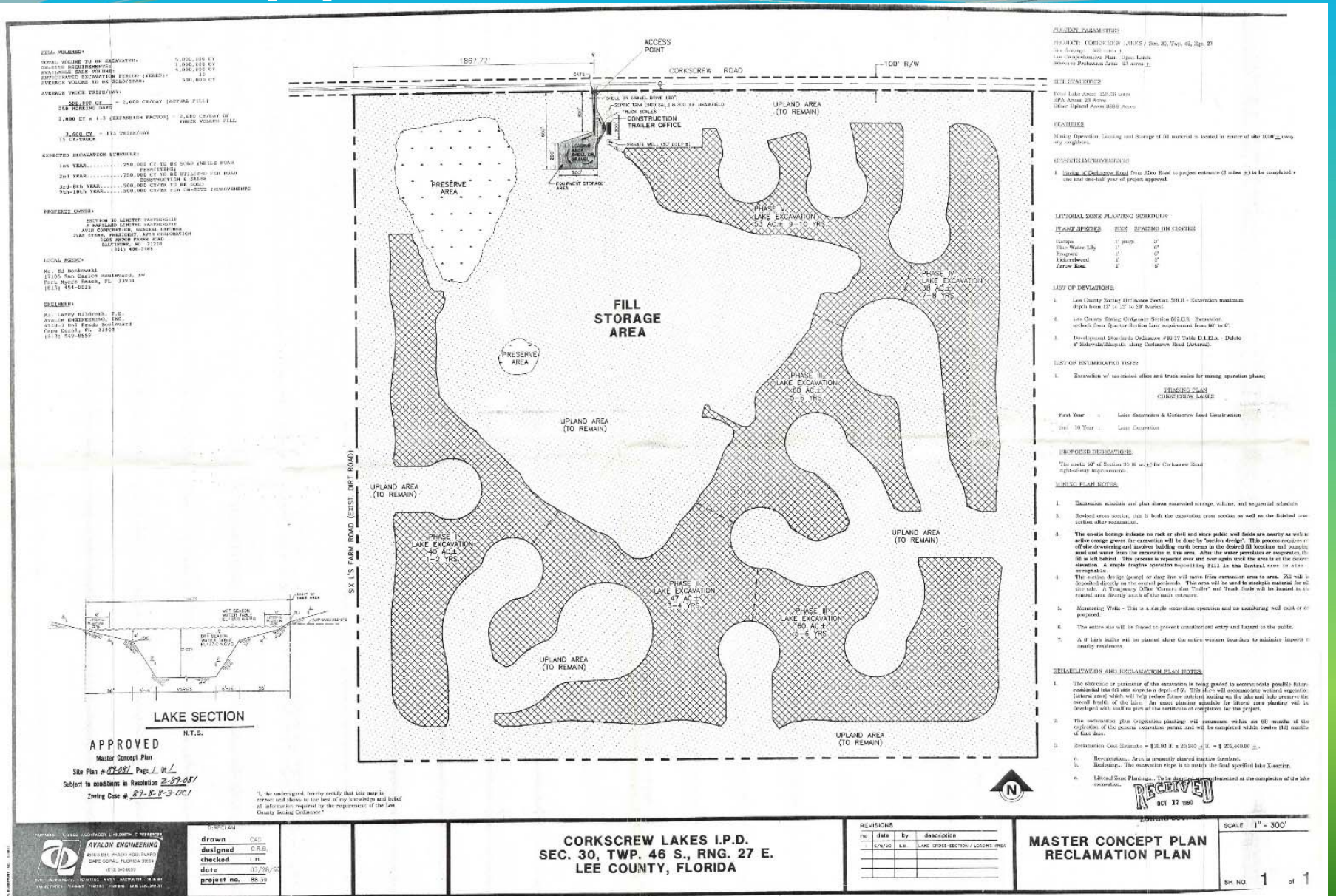
19. Install **monitoring wells** and **coordination** of **ground** and **surface water monitoring** and monitoring wells with **Lee County Natural Resources**;
20. Requires **centralized irrigation** system **controlled** by **homeowner's association** with complete control of duration and timing;
21. Includes **central management** of **fertilizers** and **pesticides** with **prohibition** of **application** by individual **homeowners**;
22. **Restores 55%** of site in **conservation easement** with restoration **without** 20/20 or **tax dollars**. (In 2012 the property north of this proposed project was reviewed as a 20/20 nomination (#496) at \$52,902/acre, which is comparable since this property is also tier 1 and agricultural. Given the subject property at that price, 55% of 637.5 acres (350.63 acres) , the **conservation value** is an **estimated \$18,548,763.75**;



# Project Regional Benefits

23. Florida Friendly **plants** with **low irrigation requirements** will be **utilized** in common elements.
24. **Wildlife management & co-existence plans** will be **implemented**;
25. Generates **Impact fees** in the **estimated** amount of  $\$6,194.88 \times 700 = \mathbf{\$4,336,416.00}$ .
26. **Places portions** of subject property, **within Wellfield Protection Zone 1, into** proposed **conservation easement** as indigenous upland restoration.
27. **Donation of \$46,634.00** toward hard and soft costs in connection with construction improvements to the **Estero Fire District** buildings and other infrastructure **without impact fee credits**.
28. **Donation of \$96,150.00** to **Lee County EMS** toward capital improvements necessary to support service delivery in the area **without impact fee credits**.

# Approved Mine Plan:



# Policy 33.3.4:

Properties that provide a significant **regional** hydrological and wildlife **connection** have the potential to **improve, preserve**, and restore regional **surface** and **groundwater resources** and indigenous **wildlife habitats**. These properties, **located** along **Corkscrew** and Alico Roads, can provide important **hydrological connections** to the Flint Pen Strand and the Stewart Cypress Slough as well as important wildlife habitat **connections between existing CREW and Lee County properties**. As an **incentive to improve, preserve, and restore regional surface and groundwater resources and wildlife habitat** of state and federally listed species **additional densities and accessory commercial uses will be granted** if the project is found consistent with and demonstrates through a Planned Development rezoning the following:

1. These lands are within the “Environmental Enhancement and Preservation Communities” overlay as designated on Map 17 of the Plan. Lands eligible for the Environmental Enhancement and Preservation Communities overlay must be consistent with one of the criteria below;

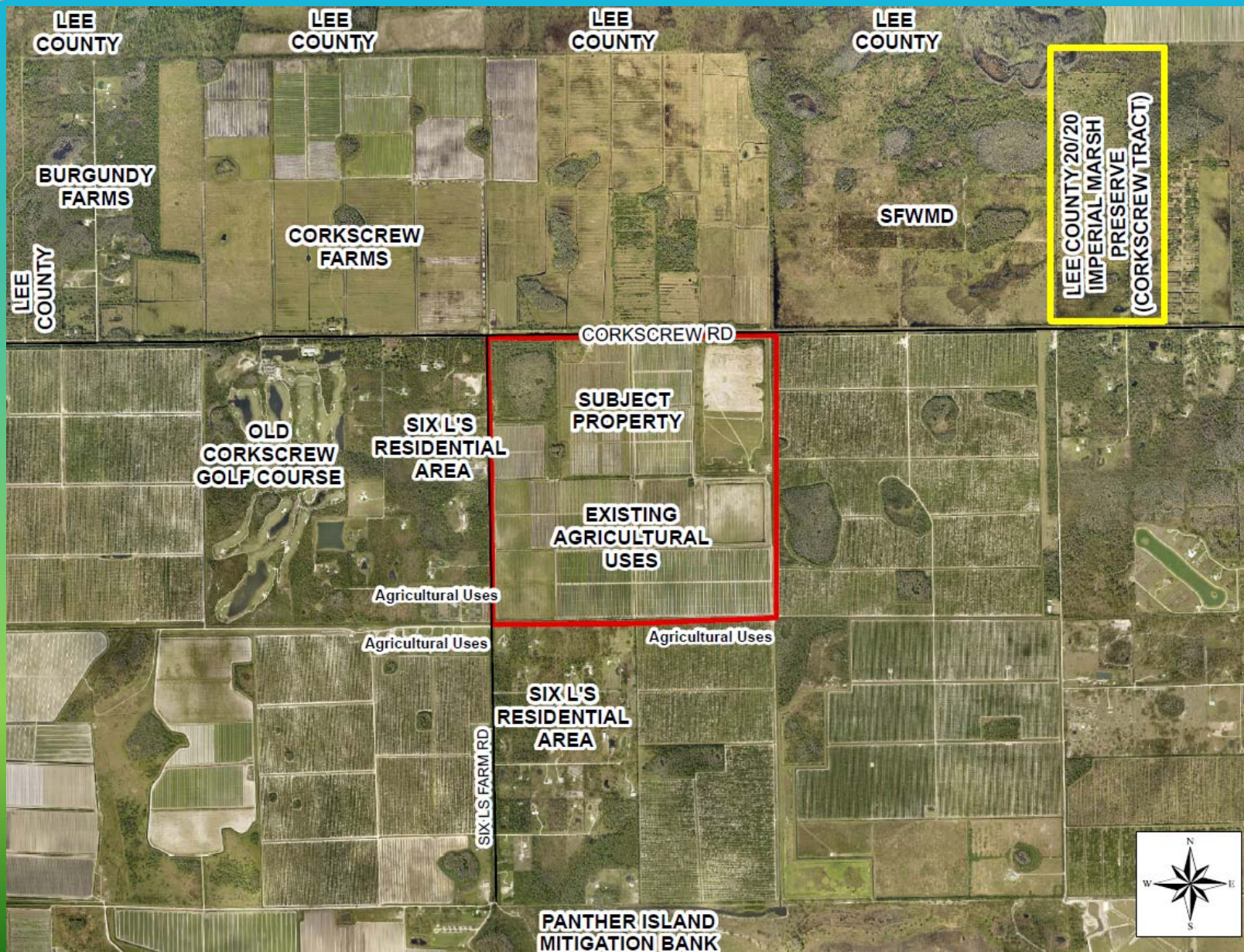
- a. **Lands located west of Lee County 20/20 Imperial Marsh Preserve (Corkscrew Tract), and within one mile north or south of Corkscrew Road.**

- b. Lands located west of the intersection of Alico Road and Corkscrew Road must be located north of Corkscrew Road and south of Alico Road.

2. The property is rezoned to a **Planned Development**



# Existing Uses



# Policy 33.3.4 Incentive Density:

- In **recognition** of the **preservation, enhancement, and protection** of **regional flowways** and **natural habitat corridors**, the **interconnection** with existing **off-site conservation areas**, and the significant enhancement, preservation and protection of these lands, **additional density may be approved through Planned Developments**

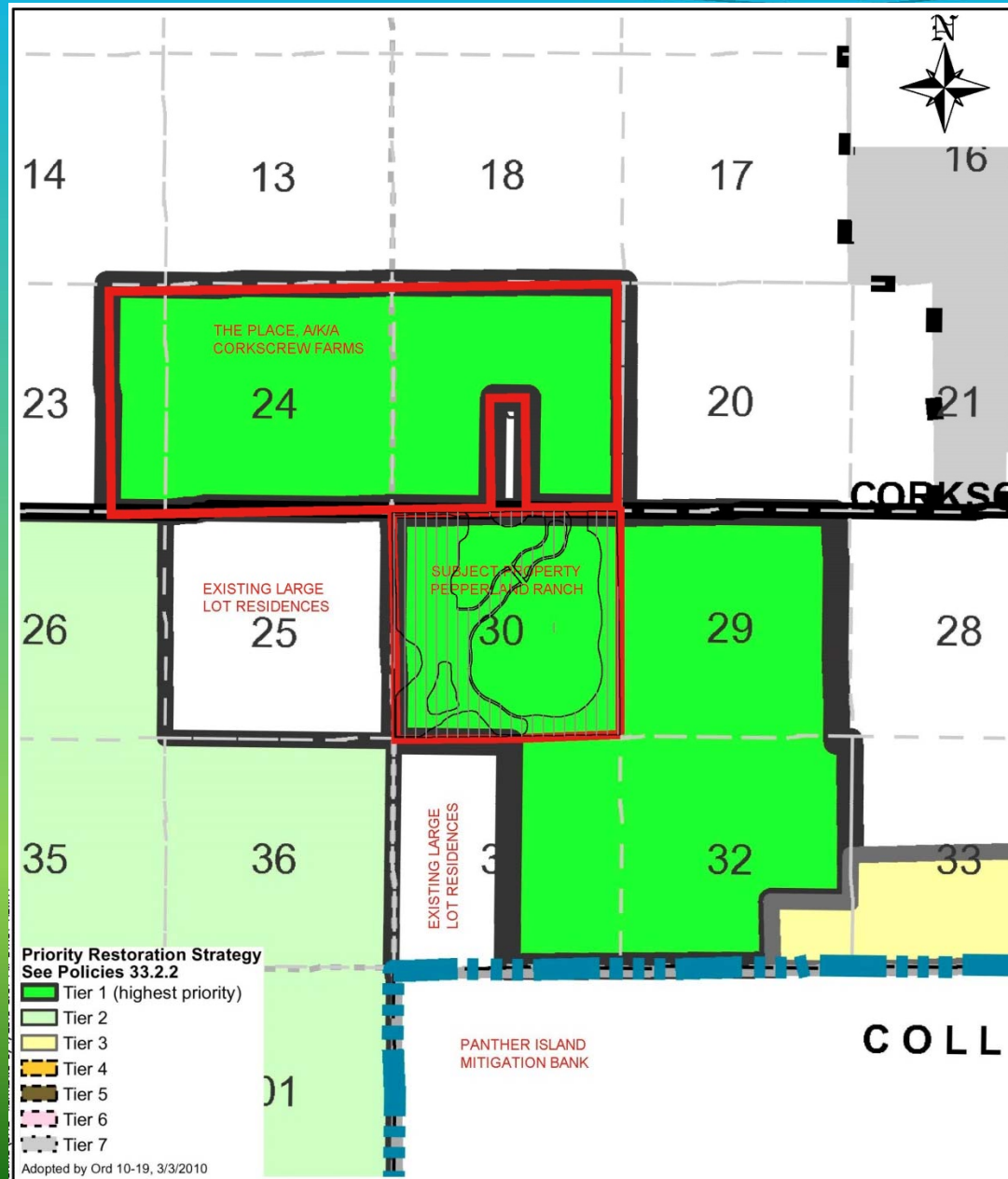


# Policy 33.3.4 Density:

- a. **Tier 1** lands within the Priority Restoration Strategy will be permitted a **maximum density of 1 unit per acre**.
- d. Density in the Environmental Enhancement and Preservation Overlay will be **based upon the acreage of the entire planned development** (i.e. all areas within the boundary of the planned development whether uplands, wetlands, or lake will be calculated at the density provided above).
- e. **Additional dwelling units** may be **approved** in the **Planned Development** meeting the requirements above if **transferred** from **other Southeast Lee County lands** located outside of the Planned Development at the standard density of 1 unit per 10 acres for DR/GR lands and 1 unit per 20 acres for Wetlands future land use category if density rights are extinguished through an instrument acceptable to the County Attorney's Office.



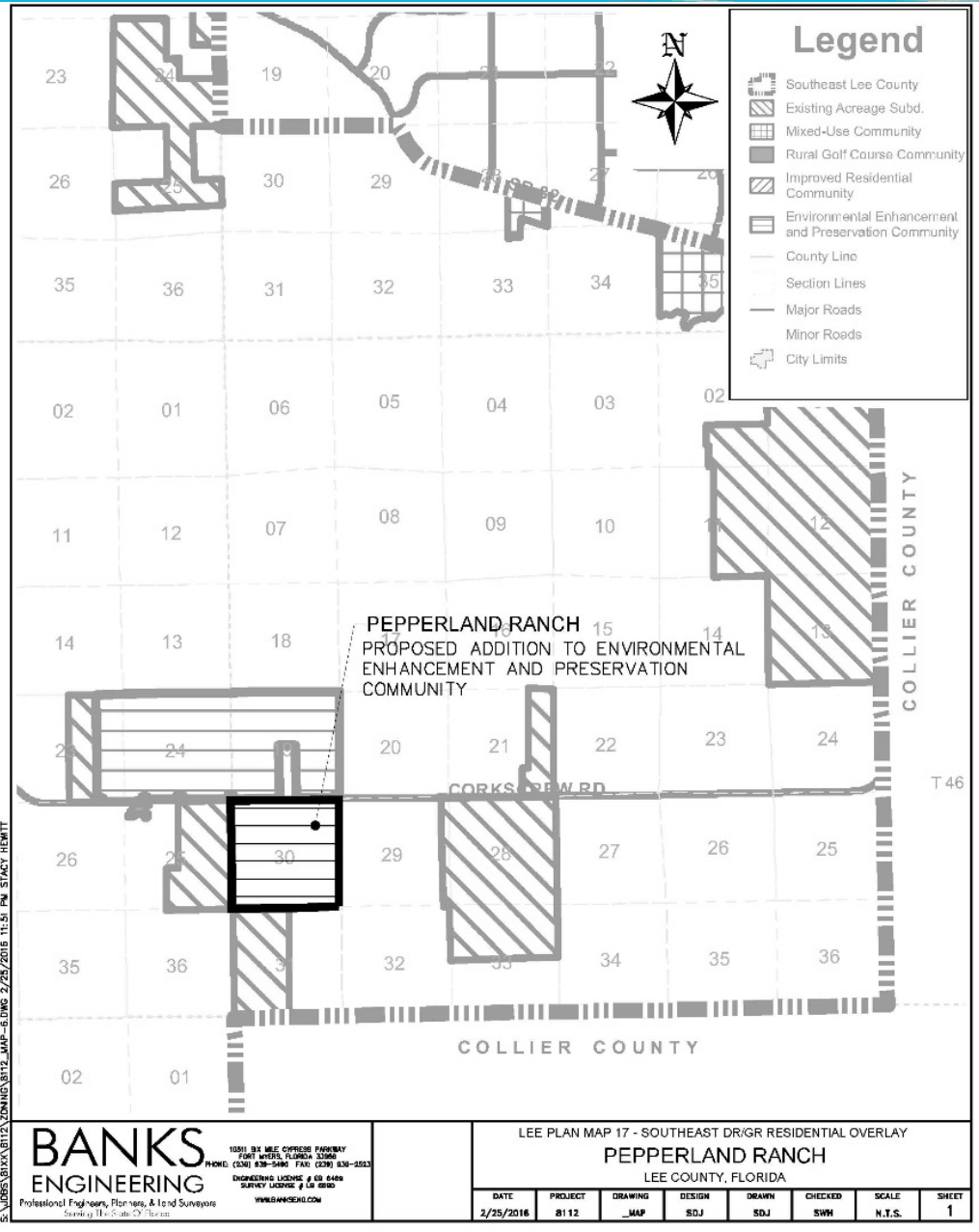
# Priority Restoration Strategy



# CPA2016-00003 – Pepperland Ranch

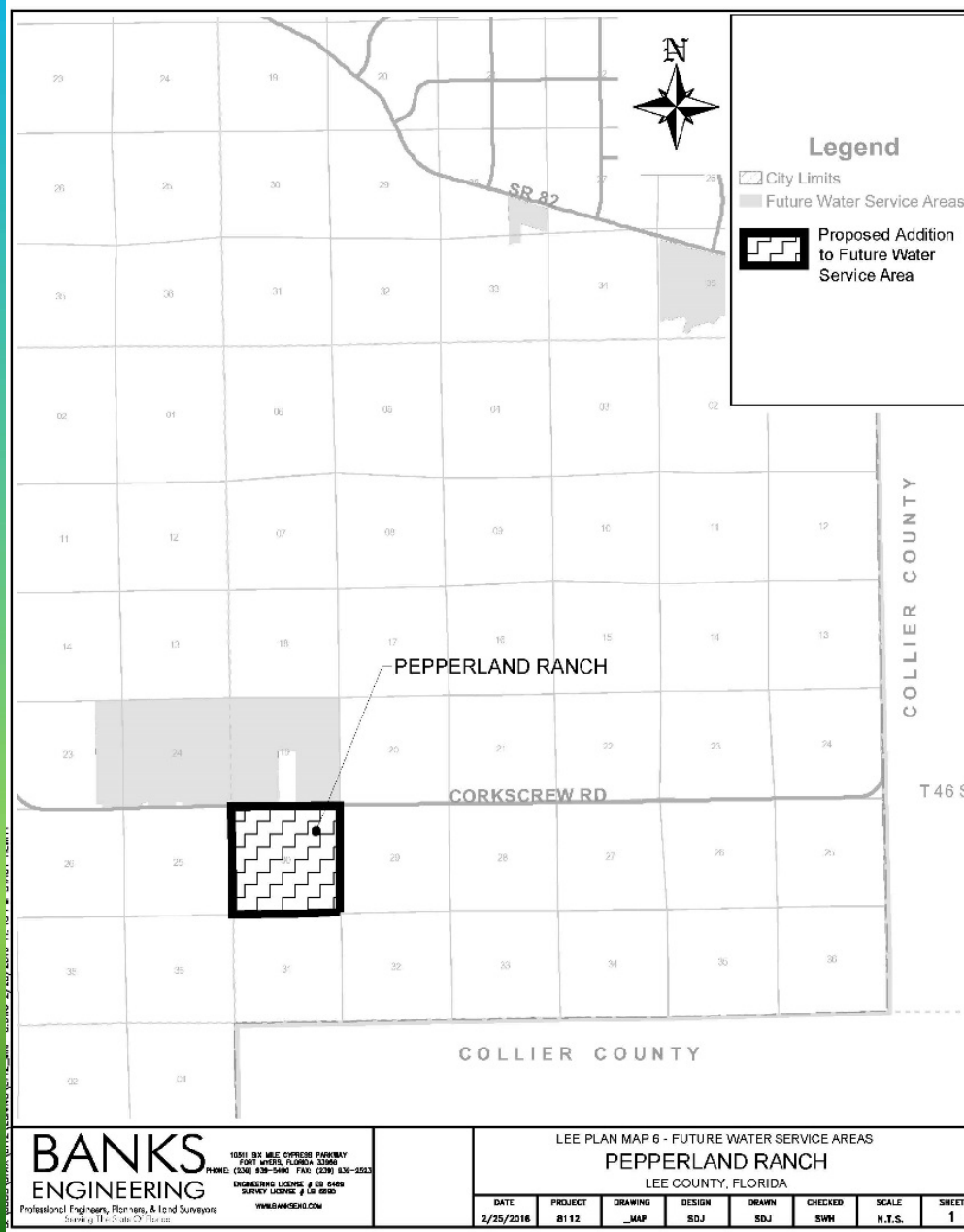
- **Amend Map 17:** Southeast DR/GR Residential Overlay, to designate approximately 637+/- acres along Corkscrew Road as an "**Environmental Enhancement and Preservation Community**" and to **amend** Lee Plan **Maps 6 and 7** to include the property within the **Future Potable Water and Sewer Service areas** in order to develop a residential community.

# Proposed Addition to Map 17

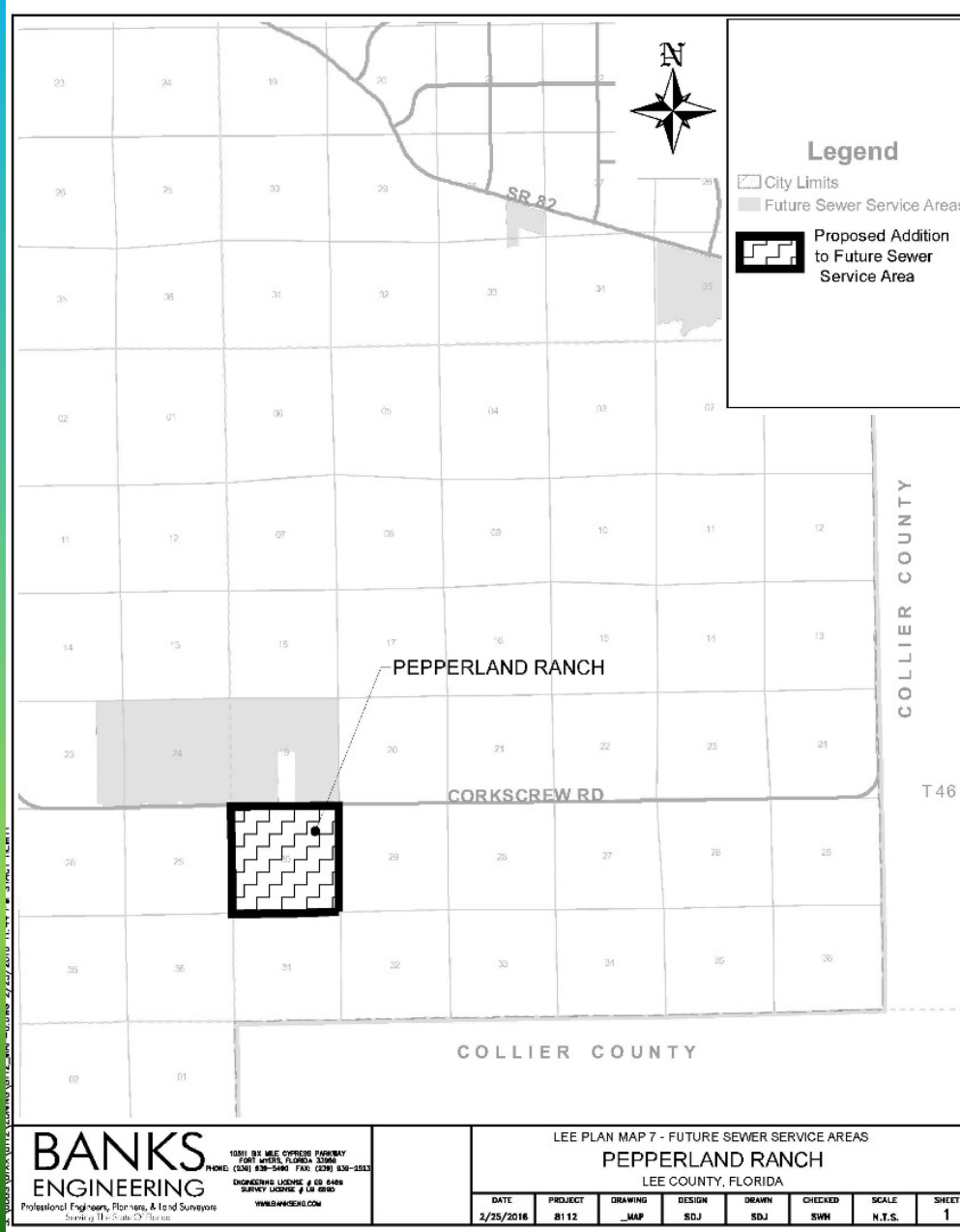




# Proposed Addition to Map 6

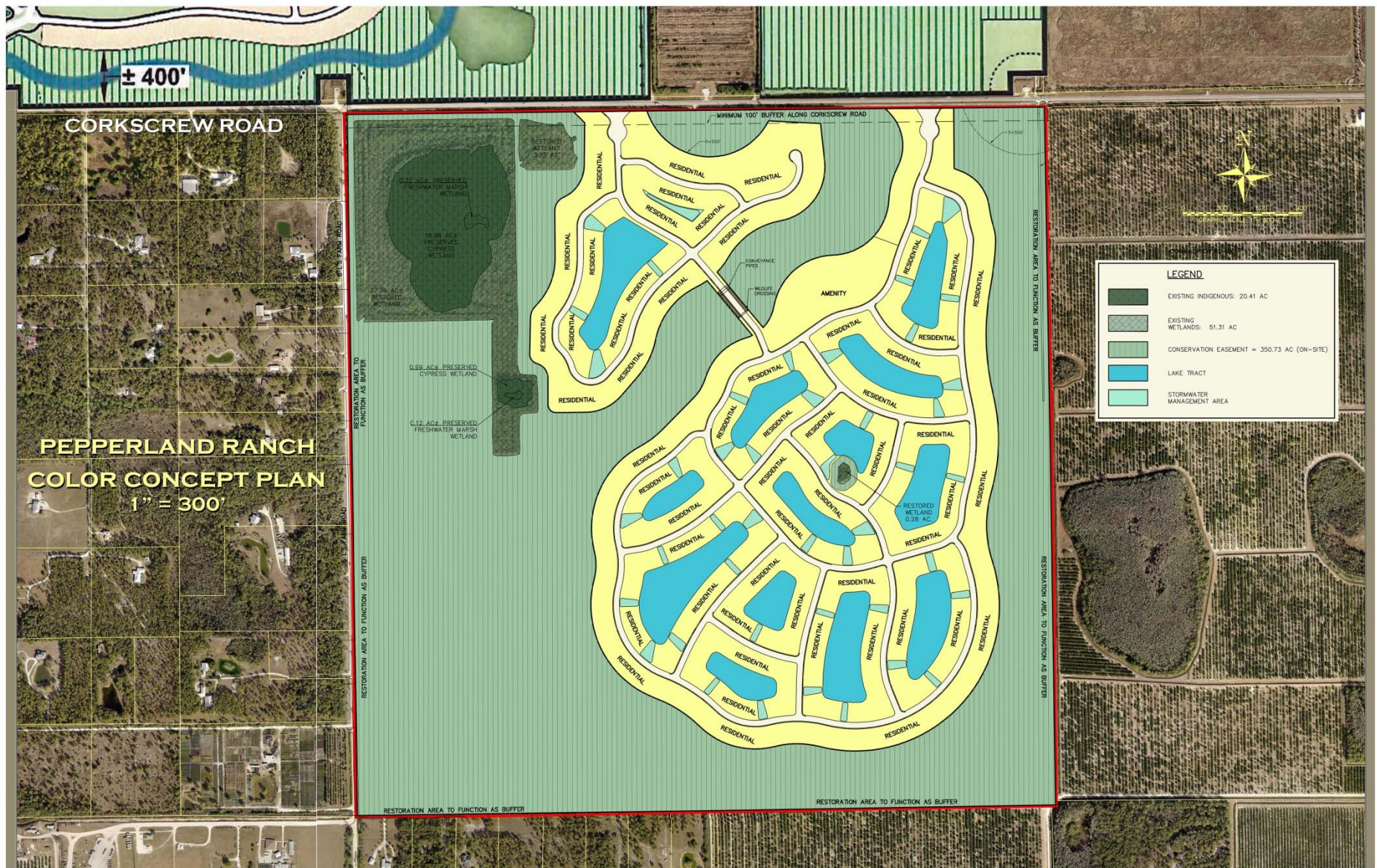


# Proposed Addition to Map 7



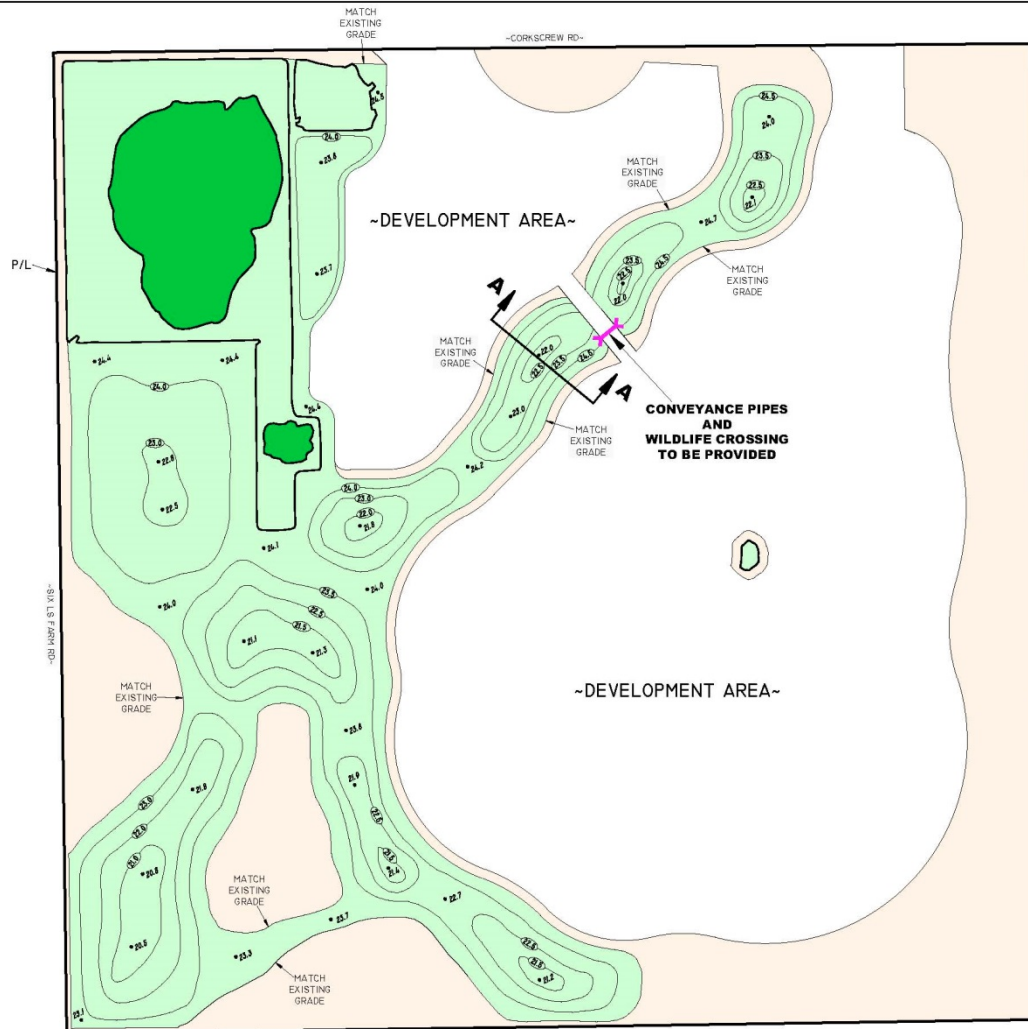


# Proposed Development Plan



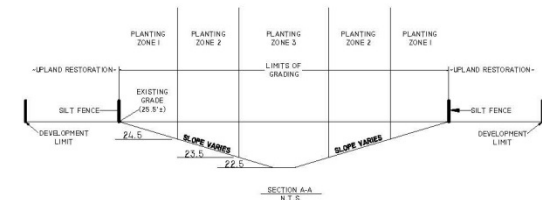


# Restoration Plan



N.T.S.

- LEGEND:
- INDIGENOUS WETLAND PRESERVATION AND ENHANCEMENT (20.41 Ac. ±)
  - INDIGENOUS WETLAND RESTORATION (179.85 Ac. ±)
  - INDIGENOUS UPLAND RESTORATION (150.49 Ac. ±)
  - TOPOGRAPHIC ELEVATION (NAVD)
  - SURVEYED WETLAND LINE



SECTION A-A  
N.T.S.  
**WETLAND RESTORATION CROSS-SECTION**

**NOTES:**

SITE PLAN AND SURVEYED WETLAND LINES PER BANKS ENGINEERING, INC. DRAWING No. 8112.DWG DATED AUGUST 29, 2016.

SURVEYED WETLAND LINES PER BANKS ENGINEERING, INC. DRAWING No. HCP-BASE.DWG DATED MAY 10, 2016.

UPLAND/WETLAND LIMITS WERE FIELD REVIEWED AND APPROVED BY SFVWD STAFF ON JULY 27, 2016.

SEE PLANS PREPARED BY BANKS ENGINEERING, INC. FOR ADDITIONAL RESTORATION CROSS-SECTIONS.

REVISIONS	DATE	DRAWN BY	DATE
		D.B.	8/31/16
		DESIGNED BY	DATE
		S.J.	8/31/16
		REVIEWED BY	DATE
		S.J.	8/31/16

13620 Metropolis Avenue  
Suite 200  
Fort Myers, Florida 33912  
Phone (239) 2740067  
Fax (239) 2740069



PEPPERLAND RANCH  
INDIGENOUS VEGETATION PRESERVATION AND RESTORATION PLAN

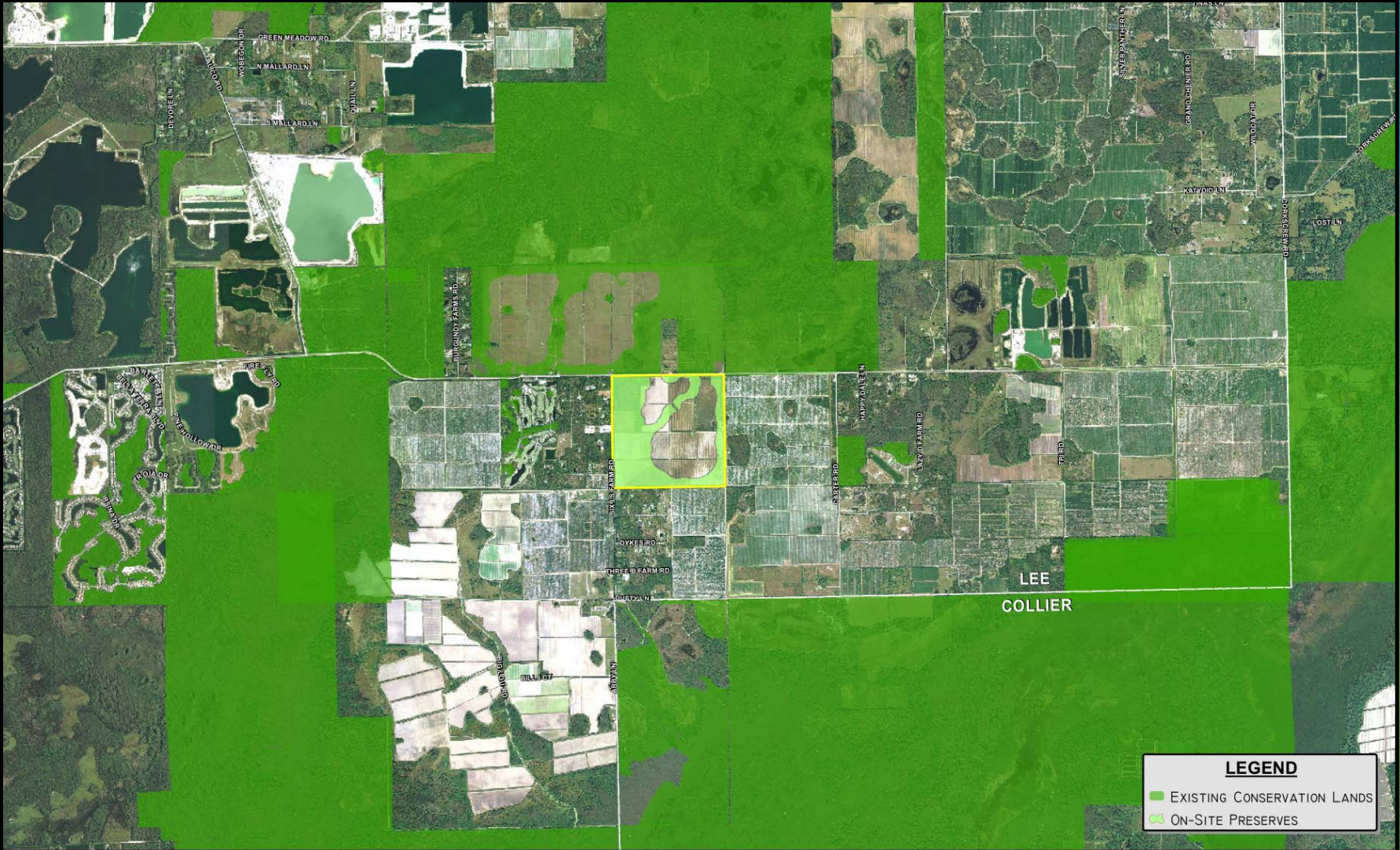
DRAWING No.	15BCF2389
SHEET No.	

# Ecological Benefits

- **Preservation, enhancement, and restoration of 350± acres of indigenous habitat**
- **Preservation of 100% of the Project's existing indigenous vegetation**
- Restoration of historic hydrologic conditions to the greatest extent practicable
- Enhance and restore surface and ground water resources
- Eliminate farming activities
- Improve water quality
- **55% of the total Project area will be preserved and placed under conservation easement**
- Restoration of historic flow-ways
- Provide increased wildlife habitat and connection to adjacent conservation lands
- **Preservation of 100% of existing wetlands**
- Long-term maintenance in perpetuity of preserve areas
- Restoration of historic ecosystems
- Increased foraging habitat for wading birds



# Ecological Benefits



AERIAL WITH CONSERVATION LANDS AND ON-SITE PRESERVES



# Water Resources Benefits

- The Pepperland Project will provide improvements to
  - Onsite water levels
  - Groundwater recharge
  - Surface water quality
  - Connectivity of regional water flow systems
- The Pepperland Project will result in major reductions in
  - Water use on the property
  - Chemical use on the property

# Existing Conditions





# Water Levels and Recharge

- Current water levels highly impacted by agricultural dewatering and irrigation
- Proposed water management system is designed to mimic historic conditions
- Proposed water level controls based on
  - Historic biologic indicators
  - Over 20 years of nearby monitoring
- Allowable discharges reduced by 50%
- Annual water use reduced by over 60%
- Dry season water use reduced by over 90%
- Modeled water level increase of >5 feet at project center and >2 feet at boundaries
- Groundwater recharge increased by over 300 million gallons annually



Wet Season

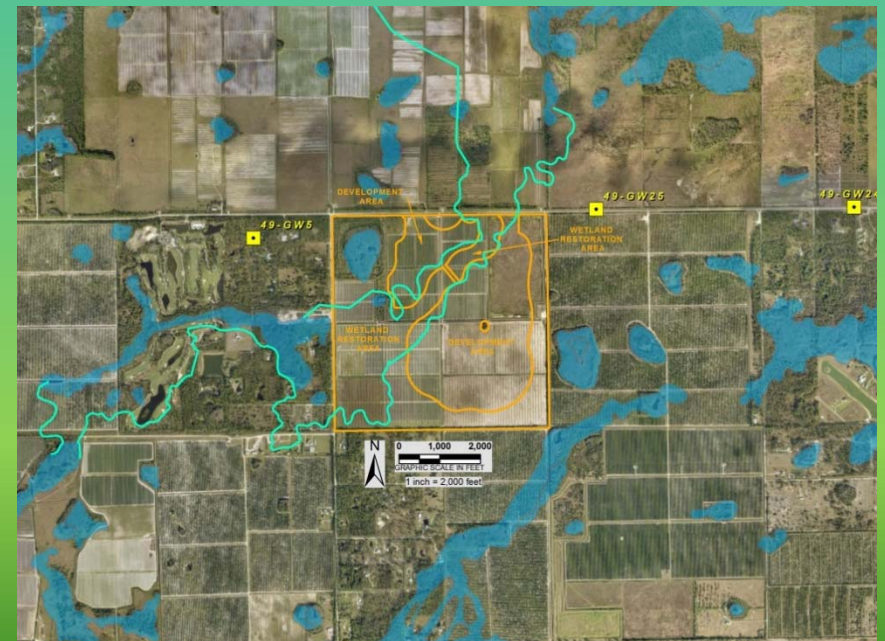


Dry Season



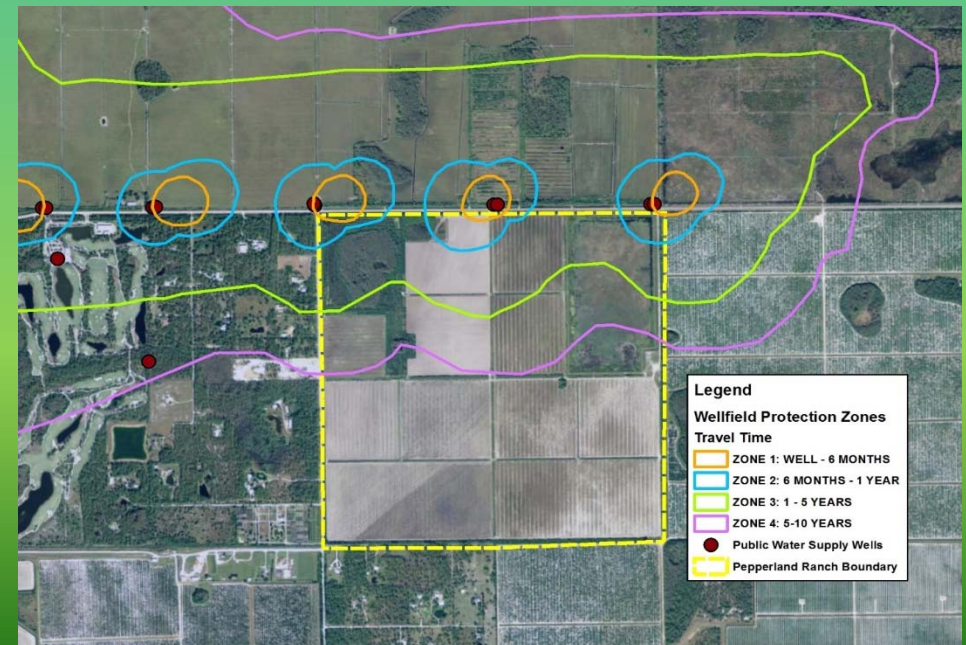
# Regional Connectivity

- Currently no direct connection to regional surface water systems
- Project provides for restoration of historic onsite flowway
- Project provides potential connection to all known adjacent flowways
- Existing development limits offsite flowway restoration opportunities
- Future potential regional flowway connections are uncertain
- Perimeter preserves provide flexibility for connection to current or future regional flow systems



# Wellfield Protection

- Residential land use will replace agricultural land use resulting in
  - Major reduction in pesticides, herbicides, and fertilizers
  - Major reduction in use of water that will benefit LCU wellfield WUP
- Project will meet all provisions of County Well Protection Ordinance
- Proposed monitoring program will provide assurance of
  - Improved hydrology
  - Improved water quality
  - Protection of LCU wellfields

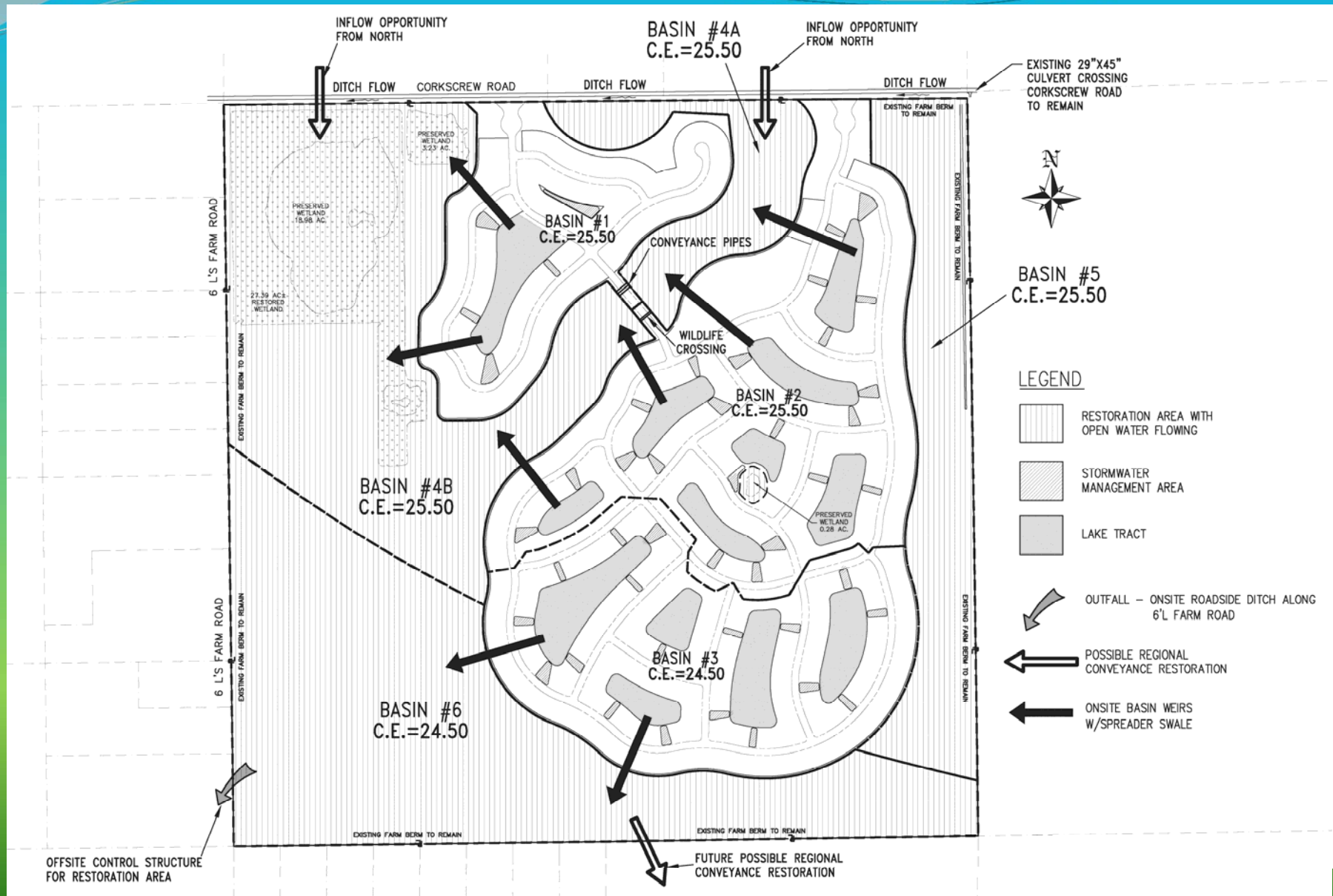


# Water Resources Summary

- Pepperland Project will result in substantial reduction in water use from the project site
- Pepperland Project will result in substantial reduction in the use of regulated substances on the project site
- Both of these reductions will provide direct benefit to nearby Lee County Utilities wellfields
- Water management plan will provide improved water levels on site that mimic regional conditions and increase groundwater recharge
- Water management plan will provide flexibility to receive and convey regional watershed flow with adjacent properties
- Project improvements will provide regional benefits to watershed connectivity, water level maintenance, and groundwater recharge



# Stormwater Drainage Exhibit



# Stormwater Management

## **Current Conditions**

- Existing SFWMD permit for ongoing farm operation
- Control elevation across entire project is 25.3'.
- Current peak discharge is 31cfs from the pumped farm system.

## **Proposed Residential Development**

- Cascading control elevations and robust treatment train to help enhance and restore regional water levels
- Interconnected lakes provide storage and treatment
- Pretreatment prior to lakes
- Discharge to Restoration areas provide additional storage and treatment.
- Reduces discharge by more than half, and provides perpetual ditch maintenance to help protect downstream areas.
- Reduces expected nutrient loading.

# Comprehensive Plan Consistency

- **Traffic Study for Comprehensive Plan request shows consistency with the Lee Plan minimum Level of Service recommendations for Corkscrew Road with the density from this project**
- **Corkscrew Road projected to operate at LOS “B” in 2022 with the project and LOS “C” in 2040 with the project within the study area**



# DRGR Transportation Study per Policy 38.1.9

- Requirement of Proportionate Fair Share Contribution of future road improvements
- Scope of Study is currently under development by County & Consultant
- Results of Study to be completed by July 1, 2017
- **POLICY 38.1.9:** Lee County will **complete** a **study** by **July 1, 2017**, with input from property owners, to determine the improvements necessary to address increased density within the **Environmental Enhancement and Preservation Overlay** (See Policy 33.3.4). The study will include a financing strategy for the identified improvements, including **participation** in a **Proportionate Fair Share Program**. (Added by Ordinance No. 15-13)

# Ordinance 15-13 and Lee Plan Policy 33.3.4:2.k:

- **Policy 33.3.4:2.k** Each Planned **Development** within the **Overlay** will be **required** to **mitigate** the traffic **impacts** of the Planned Development and **provide** its **proportionate share** of the needed **roadway improvements** in accordance with Administrative Code 13-16...
- Pepperland Ranch will provide proportionate share.

# Agreement with Staff Findings

- The Density Reduction/Groundwater Resources future land use category was adopted to protect groundwater resources.
- The Environmental Enhancement and Preservation Communities Overlay (the Overlay) targets critical restoration areas, requires enhanced development standards and provides predictable density incentives, furthering the County's goals for the Southeast DR/GR.
- The Overlay has previously been found to be consistent with Lee Plan Objective 107.1, Policy 1071.1, Policy 107.2.8 and Policy 107.11.4.
- The subject property contains a historic flowway that has been impacted by decades of agricultural uses.



# Agreement with Staff Findings

- Restoration of the flowway can be accomplished using the standards provided in the Overlay.
- The density of the subject property, if added to the Overlay, will be limited to no more than one unit per acre, which is considered a non-urban density by the Lee Plan.
- Preservation of wildlife habitat on the subject property will help to connect large areas of publicly owned conservation and other areas of privately preserved and restored lands;
- The proposed amendment will provide continued protection of the DR/GR as an area that can provide substantial groundwater recharge to aquifers suitable for wellfield development.
- No significant impacts on present or future water resources will result from the change (as required by Policy 2.4.2 of the Lee Plan).

# Summary

- 55% of 637.5 acres (350.63 acres) placed in conservation easement
- Reduces water utilization over 65% from current AG use
- Reduces discharge from agricultural 31 cfs over 50% the cfs as treated flowway discharge
- Reduces expected nutrient loading
- Provides regional benefits to waterway connectivity, water level maintenance, and groundwater recharge
- Provide increased wildlife habitat and connection to adjacent conservation lands
- Removes areas in wellfield protection zone from AG use to conservation

# Community and Agency Outreach

- Florida Wildlife Federation
- Audobon Society
- Conservancy of Southwest Florida
- Corkscrew Road & 6 L's Farm Road Area Property Owners
- Estero Fire Rescue
- Florida Fish & Wildlife Conservation Commission (FWC)
- Army Corps of Engineers (ACOE)
- South Florida Water Management District (SFWMD)
- CREW Land and Water Trust
- Lee County Conservation 20/20 Staff



# County & Regional Financial Benefits

- Comparison 20/20 conservation value **\$18,548,763.75**
- Building Impact Fees **\$ 4,336,416.00**
- Permitting Fees **\$ 518,546.00**
- LCU Connection Fees **\$ 3,570,000.00**
- LCU Usage Fees (annual) **\$ 80,941.00**
- Donation to Estero Fire District **\$ 46,634.00**
- Donation to Lee County EMS **\$ 96,150.00**
- Estimation of comparison restoration **\$ 1,980,000.00**  
and maintenance of Flowways &  
wildlife corridors:
  
- **Initial Total Financial Benefit: \$29,177,450.75**
- **Minimum Annual Benefit: \$ 80,941.00**