LEE COUNTY
SOUTHWEST FLORIDA

LOCAL PLANNING AGENCY
OLD LEE COUNTY COURTHOUSE
2120 MAIN STREET, FORT MYERS, FL 33901
BOARD CHAMBERS
MONDAY, MAY 11, 2015
8:30 AM

AGENDA

1. Call to Order/Review of Affidavit of Publication/Pledge of Allegiance

2. Public Forum

3. Approval of Minutes – March 23, 2015

4. Lee Plan Amendments

   A. CPA2015-00001 Corkscrew Farms

   Text and map amendments to establish an environmental restoration overlay within the Density Reduction/Groundwater Resource future land use category. The amendment is requesting a maximum density of 1,325 dwelling units, including amenities such as clubhouses, and other recreational uses.

5. Other Business

6. Adjournment – Next Meeting Date: To Be Determined

A verbatim record of the proceeding will be necessary to appeal a decision made at this hearing.

Persons with disabilities who need an accommodation to participate in the Local Planning Agency meeting should contact Janet Miller, 1500 Monroe Street, Fort Myers, FL 33901 (239-533-8583 or jmiller@leegov.com). To ensure availability of services, please request accommodation as soon as possible but preferably five or more business days prior to the event. Persons using a TDD may contact Janet Miller through the Florida Relay Service, 711.

The agenda can be accessed at the following link approximately 7 days prior to the meeting: http://www.leegov.com/dcd/calendar

Direct links to plan amendment documents: CPA2015-00001

CPA 2015-01
CORKSCREW FARMS
PRIVATELY SPONSORED
AMENDMENT
TO THE

LEE COUNTY COMPREHENSIVE PLAN

THE LEE PLAN

Privately Sponsored Application
Staff Analysis

LPA Public Hearing Document
For the
May 11, 2015 Public Hearing

Lee County Planning Division
1500 Monroe Street
P.O. Box 398
Fort Myers, FL 33902-0398
(239) 533-8585

May 1, 2015

LEE COUNTY
DIVISION OF PLANNING
STAFF REPORT FOR
COMPREHENSIVE PLAN AMENDMENT
CPA2015-01

✓ **Text Amendment** ✓ **Map Amendment**

	This Document Contains the Following Reviews
✓	**Staff Review**
	Local Planning Agency Review and Recommendation
	Board of County Commissioners Hearing for Transmittal
	Staff Response to Review Agencies' Comments
	Board of County Commissioners Hearing for Adoption

STAFF REPORT PREPARATION DATE: May 1, 2015

PART I – EXECUTIVE SUMMARY

This report contains an analysis and recommendation for a proposed Comprehensive Plan amendment for property located in the Density Reduction/Groundwater Resource (DR/GR) future land use category. The amendment, titled Corkscrew Farms, is located on the north side of Corkscrew Road, approximately 7 miles east of Interstate 75. The request proposes increased density and intensity on approximately 1,361 acres. The property is currently an improved farm field with uplands impacted by the previous site activities and wetlands. This area is near the headwaters of Spring Creek and the Imperial River, which flow into Estero Bay.

The DR/GR was established in 1990 with two specific purposes, the protection of surface and sub-surface water resources and a reduction of the total carrying capacity of the Future Land Use Map. A more detailed history of the DR/GR land use category is contained in the Background Information section of this report. Future Land Use Map amendments in this area of the DR/GR that increase the current allowable density or intensity of land use are discouraged by the County's Comprehensive Plan, the Lee Plan, and specific criteria for the review of such amendments are contained in Policy 2.4.3.

The subject property is currently zoned AG-2. There is an application to amend the zoning to Industrial Planned Development that has been put on hold, pending the outcome of this Lee Plan

amendment. The impacts of these allowable uses were considered in the analysis of this proposal.

The amendment would allow a maximum density of 1,361 dwelling units, including amenities such as clubhouses and recreational uses. The result of the amendment will provide for the protection, conservation, enhancement and/or restoration of natural resources such as flowways and indigenous habitats, restoration of panther habitat, and/or other community and regional benefits.

After thorough review and consideration of the numerous factors discussed in the following report staff is recommending that the proposed amendments, as modified by staff, be transmitted to the state reviewing agencies.

PART II - BACKGROUND AND STAFF RECOMMENDATION

A. SUMMARY OF APPLICATION

1. APPLICANT/REPRESENTATIVES:

Camprop, Inc. – Joe Cameratta / Matt Noble, AICP ANobleplan. LLC

2. REQUEST:

1. Amend the Lee Plan to establish an 'Environmental Enhancement and Preservation Communities Overlay' within the Density Reduction/Groundwater Resource Future Land Use Category, promoting restoration, enhancement and preservation of natural resources.

2. Amend the Future Land Use Map Series, Maps 6 and 7. 'Lee County Utilities Future Water & Sanitary Sewer Service Areas' to place the Corkscrew Farms property within the Service Areas.

3. Amend Map 17 to incorporate the Environmental Enhancement and Preservation Communities Overlay, placing the Corkscrew Farms subject property within that Overlay.

B. STAFF RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. RECOMMENDATION:

After thorough review and consideration of the numerous factors discussed in the following report staff is recommending that the proposed amendments, as modified by staff, be transmitted to the state reviewing agencies.

Reasons to support this recommended transmittal include: restoration of the Flint Pen Strand, a regional flowway along the western side of the property; preservation of wildlife habitat that connects large areas of publicly owned conservation areas; and, continued protection of the DR/GR as an area that can provide substantial groundwater recharge to aquifers suitable for wellfield development.

In summary, staff recommends that the text of the Future Land Use Element be amended to incorporate an Environmental Enhancement and Preservation Communities Overlay for the DR/GR land use category, and inclusion of the subject property within the Overlay. To accomplish this, staff recommends the following changes.

TEXT:
Amend Policies 1.4.5; 1.7.13; Objective 33.3; and, add new policies 33.3.4 and 38.1.9 along with the subsequent renumbering of the remaining policies under Objective 33.3.

MAPS:
Amend Map 6: Future Water Service Areas;
Amend Map 7: Future Sewer Service Areas to add the subject property; and
Amend Map 17: Southeast DR/GR Residential Overlay to add a new Environmental Restoration Overlay.

Attachment #1 contains these modifications, shown in strikethrough and underline format as it relates to the existing Lee Plan, along with the revised maps.

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

- The Lee County Division of Natural Resources finds that 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).
- The Density Reduction/Groundwater Resources future land use category was adopted to protect groundwater resources.
- The proposed "Environmental Enhancement and Preservation Communities 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 Environmental Enhancement and Preservation Communities Overlay provides a methodology to address transportation impacts of increased development in the Southeast DR/GR.
- There are sufficient public facilities and services to serve the proposed development.

C. PROJECT SUMMARY DISCUSSION:

The Corkscrew Farms Comprehensive Plan Amendment was filed by Camprop, Inc. – Joe Cameratta on January 12, 2015. The applicant has also filed a companion rezoning application that is being reviewed concurrently with the plan amendment application by the Lee County Zoning Division.

Florida Statutes Chapter 163.3184(12) provides that "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 to take into account the concurrent rezoning request on the subject site, DCI2011-00033.

The applicant has provided, in part, that the requested Comprehensive Plan Amendment is to allow higher residential densities so that the proposed restoration strategy would be cost feasible. The applicant is requesting a total of 1,325 residential units through the rezoning request.

Staff has been working with the applicant to determine the best approach to meet both the County's goals for the DR/GR future land use category and the development proposed by the applicant. Based on this, the applicant has revised their proposed text amendments from language that specifically addressed their property to language that promotes the provision of regional benefits through the enhancement of major flowways, the restoration of native habitat, and improves groundwater levels.

D. BACKGROUND INFORMATION

1. EXISTING CONDITIONS:

SIZE OF PROPERTY: 1,361.1 Acres.

PROPERTY LOCATION: The subject property is located on the north side of Corkscrew Road approximately 2.26 miles east of the intersection of Alico Road and Corkscrew Road.

EXISTING USE OF LAND: The subject site is currently used for a variety of agricultural uses such as row crops, cattle grazing and sod farming.

CURRENT ZONING: Agricultural (AG-2).

CURRENT FUTURE LAND USE CATEGORY: Density Reduction/Groundwater Resource (DR/GR) and Wetlands.

2. INFRASTRUCTURE AND SERVICES:

FIRE: Estero Fire and Rescue.

EMS: Lee County EMS service area.

LAW ENFORCEMENT: Lee County Sheriff's Office.

SOLID WASTE: The subject site is located in solid waste Service Area 3, service provided by Waste Pro USA.

MASS TRANSIT: LeeTran does not currently serve the subject site.

WATER AND SEWER: The subject site is not currently located within the Lee County water and sewer Future Service Areas as identified on Maps 6 and 7 of the Lee Plan. Water is available at Alico Road, and sewer service is available to the west of the subject site at residential developments located along Corkscrew Road, such as Bella Terra and Corkscrew Shores.

3. SURROUNDING FUTURE LAND USE, ZONING, AND EXISTING LAND USES

All of the properties discussed below are located in the DR/GR future land use category. The majority of the properties are zoned AG-2.

Located west of the subject site is the Burgundy Farms Road large lot single family residential area, zoned AG-2. This single road neighborhood (unrecorded subdivision) contains about 16 single family homes as well as additional vacant residential parcels. The proposed restoration plan for Corkscrew Farms will preserve the adjacent forested area located on the west property line. West of the Burgundy Farms neighborhood is conservation lands, zoned AG-2, owned by Lee County and the Corkscrew Water Production Plant. Additional public wells (Lee County) are located adjacent to the subject site along the north side of Corkscrew Road.

Located south of the subject property and south of Corkscrew Road are agricultural uses such as those located on the Pepperland LLC property and the Florida Farm Development Company property. The Florida Farm Development Company property is zoned AG-2. The Pepperland LLC property is zoned IPD to accommodate a proposed dirt mine. The dirt mine was never developed and the site is used for agricultural purposes. The Old Corkscrew Golf Course is also located south of the subject site on the south side of Corkscrew Road. The golf course property is zoned PRFPD (Private Recreational Facilities Planned Development). There is also a large lot single family residential area, zoned AG-2, generally located at the intersection of 6 L's Farm Road and Corkscrew Road.

Located to the east is the Corkscrew Regional Mitigation Bank (CRMB) zoned AG-2. The CRMB consists of approximately 632 acres owned by the South Florida Water Management District. The CRMB is located along the southern edge of the Imperial Marsh Preserve. The goal of the CRMB has been to restore historic wetland functions through hydroperiod restoration, exotic removal and controlled burns.

North of the subject site is the Airport Mitigation Park, zoned AG-2. The Park is a 7,000 acre conservation area that was established to compensate for the impact of long-term development of the Southwest Florida International Airport. The site includes the Imperial Marsh, the largest freshwater marsh in Lee County, and also connects to the Flint Pen Strand.

PART III - STAFF ANALYSIS

A. STAFF DISCUSSION

COMPREHENSIVE PLAN BACKGROUND:

Density Reduction/Groundwater Resource

The subject property's future land use category is Density Reduction/Groundwater Resource (DR/GR) and Wetlands. DR/GR was originally 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 (DCA). The Settlement Agreement required that the Future Land Use Map be amended to lower the allowable density in a new water resource category to one dwelling unit per ten acres in three specified areas of the County. The three areas were described as:

> *...most non-urban land east of Interstate 75, southeast of the airport, and south of State Road 82; all non-urban land located north of the City of Cape Coral between Burnt Store Road and U.S. 41; and, all non-urban land lying east of U.S. 41 and bounded on the south by a line lying two miles south of the Charlotte County line.*

There were two underlying reasons for the adoption of this new future land use category. The first was the County's desire to protect the shallow aquifers that could be used to produce much of the County's potable water needs. The second reason was in response to the state concern that the Future Land Use Map allowed considerably more density, accommodating considerably more population, than the Planning Horizon of 2010. This reduction of density, one tenth of the original density of 1 dwelling unit per acre, was included in the settlement agreement to reduce the carrying capacity of the County's overall Future Land Use Map.

At the time, Lee County's main interest was in protecting the water resources of the County. Prior to the adoption of the Stipulated Settlement Agreement, the Lee County Division of Natural Resources proposed to protect the shallow aquifers, in part, with an amendment to the Future Land Use Map. This amendment, Plan Amendment Map/Text 89-19 (PAM/T 89-19), was initiated by the Board of County Commissioners on May 3, 1989. The staff proposal was for the creation of a new future land use category for the southeast area of the county called "Groundwater Resource." In order to protect the shallow aquifers, the amendment proposed a reduction in density from one dwelling unit per acre to one dwelling unit per five acres. The Local Planning Agency reviewed the proposal on September 14, 1989 and recommended that the Board of County Commissioners adopt the proposed map amendment. This amendment, along with others, was scheduled to go to the Board of County Commissioners public transmittal hearings on October 24 and 25, 1989. Prior to those public hearings the terms of the Stipulated Settlement Agreement were reached. This proposed amendment was folded into the settlement as an integral part. The pending round of amendments was put on hold and the County began the process of implementing the agreement.

In addition to the water resource goals of Lee County, the DCA was concerned with the carrying capacity of the Future Land Use Map in relation to the Planning Horizon of the Lee Plan. The allowable density was further reduced to one dwelling unit per ten acres and additional lands were added to the new future land use category. These changes were included to partially

address the carrying capacity problem of the Future Land Use Map. These additional changes ultimately led to the inclusion of the words "Density Reduction" in the title of the Policy. The Board of County Commissioners adopted the Stipulated Settlement Agreement plan amendment in September of 1990. The DCA issued its Notice of Intent to find the amendment in compliance in late October 1990.

Southeast Lee County Planning Study

Lee County has further delineated appropriate land uses in the southeast portion of the DR/GR through plan amendment CPA2008-06. This amendment was initiated to provide a balance between several conflicting land uses such as limerock mining, agriculture, residential development, and lands held for conservation purposes.

Lee Plan Goal 33 and the subsequent Objectives and Policies were supported by backup documentation that included the July 2008 Dover, Kohl & Partners' Prospects for Southeast Lee County and the July 2009 Dover, Kohl & Partners' Natural Resource Strategies for Southeast Lee County.

The Dover Kohl Study, Natural Resource Strategies for Southeast Lee County introduced the current Priority Restoration Strategies areas that are currently identified on Map 1, Page 4 of 8 of the Lee Plan. The 2009 Dover Kohl Study, Natural Resource Strategies also provided that "*conservation goals should include the following to protect and enhance the natural resources within the DR/GR:*

1. *Maintaining and enhancing the surface and groundwater resources;*
2. *Avoiding further loss of wetlands, and requiring any loss of wetlands within the DR/GR to be mitigated within the DR/GR;*
3. *Expanding the existing shallow and sandstone aquifer monitoring well system to be uses as a resource management tool;*
4. *Restoring historic flow-ways;*
5. *Providing connectivity between larger, regionally significant preserves for mammal and herpefaunal movement;*
6. *Planning for public potable water well withdrawals to insure natural systems are not harmed;*
7. *Restoration of historic ecosystems;*
8. *Maintaining and enhancing woodstork foraging areas; and*
9. *Maintaining and enhancing agricultural operations.*

CPA2008-06, lead to the adoption of Goal 33: Southeast Lee County. Goal 33 reiterated the importance of water resources in the southeast portion of the county and also introduced the protection of natural habitat as part of the planning goal for this portion of the county. Objective 33.2 and 33.3 allow some flexibility to cluster or concentrate development rights in order to protect water resources and wildlife habitats. Increased density through Transferable Density

Rights is also contemplated in relation to the goals of the Lee Plan adopted as part of CPA2008-06.

In addition, the following maps were amended or added to the Lee Plan as a result of the planning effort. A Future Limerock Mining Overlay, Map 14, Priority Restoration Strategy areas, Map1, Page 4 of 8, and Historic Surface and Groundwater Levels, Map 25. Also adopted was Map 17, Southeast DR/GR Residential Overlay. This map depicts the location of new mixed use communities, golf course communities, as well as existing acreage subdivisions. The Mixed-Use Communities as well as the Rural Golf Course Community are locations that are intended to incorporate Transfer Development Rights (TDRs) and develop at densities above the standard density range of the DR/GR. These maps were adopted on March 3, 2010.

Existing Natural Resource Strategy for Southeast Lee County
The natural resources strategy adopted into the Lee Plan through the Dover Kohl Study sought to incentivize the protection and restoration of strategic areas. This was accomplished by establishing a new Transfer of Development Rights (TDR) strategy. The strategy identifies priority areas within the DR/GR for the creation of TDRs. These areas have been assigned appropriate multipliers, which are intended to incentivize the preservation of areas "critical to restore surface and groundwater levels and to connect existing corridors or conservation areas." Receiving areas were also identified that allow the voluntary concentration of these rights into identified mixed use communities, identified on Lee Plan Map 17. The Board of County Commissioners adopted the current TDR strategy on March 3, 2010. To date, no TDRs have been created from lands in Southeast DR/GR.

ZONING HISTORY

The property is zoned Agriculture (AG-2) and is currently used for agriculture purposes. Since 2000 there have been three applications for rezoning filed on the subject property. In addition there are currently two active zoning applications on the subject property.

Past Rezoning Applications:

- DCI2000-00058 was filed on August 8, 2000 and sought a rezone from Agriculture (AG-2) to Private Recreational Facilities Planned Development (PRFPD) to allow golf course uses on 637+/- total acres of land. This application was withdrawn by the applicant.

- DCI2002-00001 was filed on January 8, 2002 and sought a rezone of 1,366 acres to Private Recreational Facilities Planned Development (PRFPD). The intent of this application was to build three 18-hole golf courses and one 36-hole golf course. This case went to hearing before the Lee County Hearing Examiner and a Hearing Examiner recommendation was released. The case was remanded by the Board of County Commissioners back to the Hearing Examiner for further consideration. This application was withdrawn by the applicant.

- DCI2005-00026 was filed on March 21, 2006 and sought a rezone of 1,360± acres from Agricultural District, AG-2 to Industrial Planned Development (IPD) to allow the use of an Excavation, mining operation (Construction Materials Mining Operation) with a proposed depth of 110 feet below the wet season water table and sod farming. The applicant has also

requested approval of a General Mining Permit under LDC Chapter 34. On May 26, 2010 the Board of County Commissioners denied the requested rezoning.

Current Rezoning Applications:

- DCI2014-00012 was filed on June 6, 2014 seeking a rezone of 1,360± acres from Agriculture District, AG-2 to Mine Excavation Planned Development, MEPD, in order to permit a 30 year mining operation with a maximum excavation depth of 100 feet, with an excavation/mine footprint of 380 acres, and with maximum hours of operation of 5:00 AM to 6:00 PM. This case has been put on hold by the owner to permit the filing of this comprehensive plan amendment and second zoning case to permit the development of a residential project.

- DCI2015-00004 (the concurrent zoning case) was filed on February 18, 2015 seeking to rezone 1,360± ac. from Agriculture District (AG-2) to Residential Planned Development (RPD) to permit the development of up to 1,325 dwelling units, with maximum building heights of 35 feet.

UTILITIES

The DR/GR future land use category limits density to a maximum of 1 dwelling unit for every 10 acres and the Wetlands category limits density to 1 dwelling unit per 20 acres. These low densities would normally discourage the extension of public water and sewer services to the individual residential lots. Providing these utilities is not a requirement of the Lee Plan, nor is it usually cost feasible to expand utilities to such low density areas.

The applicant, however, has proposed to extend water and sanitary sewer infrastructure to the subject site. The water and sewer service provides an opportunity to eliminate the private wells and septic systems that would be necessary if developed in a manner that is consistent with current DR/GR and Wetlands policies. This is particularly important at this location because the subject property contains sensitive lands within the Southeast DR/GR, particularly areas that are within the 6 month and 1 year protection zones of the Lee County Corkscrew Wellfield. Placing individual wells and septic tanks could cause adverse impacts to the water table aquifer as well as the sandstone aquifer. The elimination of these well and septic systems will further protect these valuable resources.

ENVIRONMENTAL ENHANCEMENT AND PRESEVATION OVERLAY AND LEE PLAN CONSISTENCY

In accordance with Policy 2.4.3, increasing density and intensity increases in the DR/GR is discouraged without the use of TDRs created within Southeast Lee County. Landowners and developers in Southeast Lee County have stated that the current TDR based strategy is not financially feasible. While the TDR strategy may still be able to provide benefits in Southeast Lee County it has not to date been effective for large scale ecosystem preservation as originally intended. The applicant and staff have discussed on numerous occasions the best methodology to address all of the goals and concerns that have been identified in southeast Lee County and along the Corkscrew and Alico Road corridors. The 2009 Dover Kohl study recommended that Lee County "Expand the methods of insuring long-term protection and enhancement of the natural resources with the DR/GR by 2012."

Working together, the applicant and staff have developed a new strategy in the area that includes three main components. The components of the new strategy include:

1. Targets strategic areas that can "provide critical connections to other conservation lands that serve as the backbone for water resource management and wildlife movement within the DR/GR," consistent with Policy 33.2.3 of the Lee Plan;
2. Requires the development to be designed with the land, consistent with Goal 4: Sustainable Development Design and numerous other Goals, Objectives, and Policies of the Lee Plan; and,
3. Provides a predictable way to assign appropriate increases in density as an incentive to offset the cost of the improvements thereby achieving these longstanding goals of for the Southeast DR/GR.

With these three overall objectives in mind the applicant and staff worked together to develop the "Environmental Enhancement and Preservation Communities Overlay." The proposed Environmental Enhancement and Preservation Communities Overlay represents a new strategy that has the ability to achieve the County's goals that are articulated in the Lee Plan as well as the goals that were identified in the 2009 Dover Kohl Study, Natural Resource Strategies, as identified above. Each of the components of the Environmental Enhancement and Preservation Communities Overlay is described in greater detail below.

To incorporate the Environmental Enhancement and Preservation Communities Overlay into the Lee Plan staff recommends that the Board of County Commissioners adopt the following text amendments. The text amendments are discussed below in terms of the three components of the proposed overlay. Additional amendments are also needed to update cross-references as well as to renumber subsequent policies. These changes will affect Policies 1.4.5, 1.7.13, Objective 33.3, along with the subsequent renumbering of policies under Objective 33.3. A complete codification of the recommended text amendments are attached to the staff report as Attachment 1.

Target critical restoration areas and minimizing new impacts:

The first component of the proposed Environmental Enhancement and Preservation Communities Overlay is to identify lands that can provide strategic regional benefits while minimizing new and adverse impacts that would be inconsistent with Lee County's goals for Southeast Lee County. To achieve this staff recommends that the Lee Plan should be amended to include the following provisions:

> **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.

The above provisions are consistent with the existing Lee Plan as well as the support documentation that was provided when Lee Plan Goal 33 was adopted. Objective 33.2 of the Lee Plan encourages the use of an overlay designation on land in Southeast Lee County *"that is most critical toward restoring historic surface and groundwater levels and for improving the protection of other natural resources such as wetlands and wildlife habitat."* Policy 33.2.1 provides that "*staff will work with landowners who are interested in voluntarily restoring native habitats and landowners who are required to conduct restoration based upon land use changes."* Policy 33.2.2 and Policy 33.2.3 are specific to the Priority Restoration Areas Tier 1 through Tier 7 within Southeast Lee County. Policy 33.2.2 states that this overlay is to "be utilized as the basis for incentives," and Policy 33.2.3 begins by stating that "*It is in southwest Florida's interest for public and nonprofit agencies to actively pursue acquisition of partial or full interest in land within the Tier 1 areas in this overlay through direct purchase; partnerships with other government agencies; long-term purchase agreements; right of first refusal contracts; land swaps; and other appropriate means."* Policy 33.2.3 goes on to state "*The county will consider incentives for private landowners to maintain and improve water resources and natural ecosystems on properties within Tier 2 through Tier 7, including but not limited to acquiring agricultural or conservation easements…"*

These existing policies and previous studies make clear that restoration of the subject property's historic flowway has the potential to provide strategic regional benefits to Lee County. Through the concurrent rezoning application the applicant has shown restoration of historic flowways, which are part of the Flint Pen Strand. In addition the Master Concept Plan shows the protection of large portions of the subject site along the eastern portion of the property which will allow improvements to surface and groundwater resources. The applicant has requested additional dwelling units to offset the increased costs of the restoration improvements that will be carried out on the subject site.

In addition to identifying lands that can provide strategic regional hydrologic and wildlife habitat benefits, the first component of the proposed overlay is also consistent with Goal 41: Community and Environmental Impacts, and Objective 41.2 of the Lee Plan's Transportation Element. Objective 41.2 states that "New and expanded transportation facilities will continue to be aligned and designed to protect environmentally sensitive areas." Limiting the potential overlay to areas that are adjacent to existing Lee County transportation facilities such as Corkscrew and Alico

Roads makes the proposed overlay consistent with Lee Plan Goal 41 as new county transportation facilities that may affect this environmentally sensitive area would not be required.

Require enhanced development design to get increased density at time of rezoning.
The proposed Environmental Enhancement and Preservation Communities Overlay is an incentive based overlay. The second component of the overlay is to identify enhanced criteria to be used at the time of rezoning to assure that the proposed development meets existing Lee Plan goals, objectives, policies and supporting studies for Southeast Lee County. As previously stated the 2009 Dover Kohl Study, Natural Resource Strategies also provided that "*conservation goals should include the following to protect and enhance the natural resources within the DR/GR:*

1. *Maintaining and enhancing the surface and groundwater resources;*
2. *Avoiding further loss of wetlands, and requiring any loss of wetlands within the DR/GR to be mitigated within the DR/GR;*
3. *Expanding the existing shallow and sandstone aquifer monitoring well system to be uses as a resource management tool;*
4. *Restoring historic flow-ways;*
5. *Providing connectivity between larger, regionally significant preserves for mammal and herpefaunal movement;*
6. *Planning for public potable water well withdrawals to insure natural systems are not harmed;*
7. *Restoration of historic ecosystems;*
8. *Maintaining and enhancing woodstork foraging areas; and*
9. *Maintaining and enhancing agricultural operations.*

With these existing goals in mind staff recommends that the Lee Plan should be amended to include the following provisions:

2. The property is rezoned to a Planned Development that meets the following:

    a. Planned Development must include a minimum of 60 percent open space, not including previously mined lakes, which will be used to accommodate the following:
        1. Restore and accommodate existing and historic regional flowways where they currently or previously existed;
        2. Restore and accommodate existing and historic groundwater levels;
        3. Restore and preserve wetlands;
        4. Restore and preserve indigenous upland habitats;
        5. Provide critical wildlife connections to adjacent conservation areas; and
        6. Provide 100' foot buffer along Corkscrew Road East of Alico Road.

    b. Includes an enhanced lake management plan, that:
        1. Applies best management practices for fertilizers and pesticides;
        2. Provides erosion control and bank stabilization; and

3. Establishes lake maintenance requirements.

c. Develop a site specific ecological and hydrological restoration plan which includes at a minimum the following: preliminary excavation and grading plans, analysis of hydrological improvements and water budget narrative, replanting plan, habitat restoration plan, success criteria, long term monitoring and maintenance.

d. Preservation areas must be platted in separate tracts and dedicated to an appropriate maintenance entity. For projects larger than 1,000 acres a Community Development District (CDD) or a master home owners association must be created, that will accept responsibility for perpetually maintaining the preservation requirements identified in the Planned Development, prior to issuance of certificate of compliance (CC) for first local development order.

e. Record a Conservation Easement for a minimum of 55 percent of the planned development, not including previously mined lakes, to be dedicated to the appropriate maintenance entity that provides Lee County, or some other public agency acceptable to Lee County, with third party enforcement rights.

f. Indigenous management plans must address human-wildlife coexistence.

g. Uses Florida Friendly Plantings with low irrigation requirements in Common Elements.

h. The stormwater management system must demonstrate through design or other means that water leaving the development meets state and federal water quality standards. The developer must obtain authorization from the Division of Natural Resources prior to discharge stormwater from the development into the County's MS4 system directly or indirectly.

i. Elimination of any agricultural row crop uses at time of first development order.

j. Protects Public wells through compliance with the requirements of the Well Field Protection Ordinance.

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. The proportionate share amount can be offset, in accordance with AC13-16, by the dedication of needed right of way or the construction of improvements that would measurably lessen the need for roadway improvements, or by payment of impact fees, or use of impact fee credits, or as otherwise set forth in a written agreement between Lee County and the Developer. Prior to a final determination of a Project's proportionate share amount, compliance may be met through an enforceable instrument that obligates the property owners within a Planned Development to pay

the Project's proportionate share, with said instrument being recorded prior to the issuance of any Development Order.

l. Connect to public water and sewer service. Connect to reclaimed water if available at time of development order approval.

m. Obtain written verification as to adequate public services for the Planned Development, from the sheriff, EMS, fire district, and Lee County School District.

n. Demonstrate that the proposed rezoning will not result in significant detrimental impacts on present or future water resources.

The above provisions are consistent with the existing Lee Plan. The DR/GR descriptor policy, Policy 1.4.5, was amended with CPA2008-06. The policy requires a rezoning or development order must demonstrate compatibility with maintaining surface and groundwater levels at historic levels. The applicant has demonstrated that the proposed increase in density, including the required use of public water and sewer service will maintain surface and groundwater levels. The recent amendments to Policy 1.4.5, paragraph 2, also acknowledge that in certain circumstances it may be beneficial to allow for increased density. This paragraph in part provides this:

> *Permitted land uses include agriculture, natural resource extraction and related facilities, conservation uses, public and private recreation facilities, and residential uses at a maximum density of one dwelling unit per ten acres (1 du/10 acres). See Policies 33.3.2, 33.3.3 and 33.3.4 for potential density adjustments resulting from concentration or transfer of development rights.*

The proposed Environmental Enhancement and Preservation Communities Overlay, including the proposed provisions that allow for increased density, is consistent with the intent of Lee Plan Policy 1.4.5, to protect water resources.

Objective 2.4 addresses the Future Land Use Map amendments. Policies 2.4.2 and 2.4.3 specifically address amendments that would increase the allowable density or intensity of land uses within the Southeast DR/GR. Policy 2.4.2 requires the Board of County Commissioners make a formal finding that "no significant impacts on present or future water resources will result from the change." To assist in making this finding, Policy 2.4.3 requires additional information for any amendment that will increase the density or intensity of the DR/GR future land use category. These four pieces of additional data that are required are discussed in the following paragraphs.

Policy 2.4.3 specifically states that "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." However Policy 2.4.3 also provides that there are four specific requirements for applicants seeking such an amendment. The four requirements are as follows:

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 criteria listed in Rule 9J- 5.006(5) (g), (h), (i) and (j), FAC.*

The applicant has supplied the analysis as required in #1 above (see application materials). As proposed by the applicant, the source of the domestic water is Lee County Utilities, eliminating the need for multiple private wells which would drawdown from the potable water tables below the property. Irrigation water for the residential units would be supplied by a master irrigation system that will draw from the existing wells. The master irrigation system will allow greater control of irrigation water resulting in less use than would be allowed by individual private wells. The applicant has presented the required data to the Lee County Division of Natural Resources. The Division of Natural Resources has found that *"no significant impacts on present or future water resources are expected as a result from the change."* (See attached memo from the Division of Natural Resources)

The proposed Overlay will require a minimum of 60 percent of the subject property to be protected and restored. There are substantial costs for restoration and maintenance of existing or historic groundwater and surface water resources, and wildlife habitat. The Overlay allows an incentive to developers who are willing to meet the restoration and maintenance as well as other design requirements. The Corkscrew Farms development as proposed by the applicant will preserve a total of 728 acres of land. The applicant has estimated that the average cost per acre of restoration and 5 years of maintenance will be approximately $10,165. Through the incentives provided by the proposed Overlay the preservation and restoration of historic flowways that are part of the Flint Pen Strand as well as the expansion of wildlife habitat adjacent to regionally significant preserves will be accomplished at no costs to the county.

The proposed provisions of the Overlay's second component are also consistent with Lee Plan Objective 107.1, Policy 1071.1, Policy 107.2.8 and Policy 107.11.4. Objective 107.1 of the Lee Plan provides that Lee County will *"implement a resource management program that ensures the long-term protection and enhancement of the natural upland and wetland habitats through the retention of interconnected, functioning, and maintainable hydroecological systems where the remaining wetlands and uplands function as a productive unit resembling the original landscape."* Policy 107.1.1 states that County agencies will recommend standards to the Board of County Commissioners for approval of development and conservation that will protect and integrate wetlands. The second component of the Overlay proposes specific standards and criteria that will be reviewed by the Board of County commissioners through a required Planned

Development. The proposed overlay is consistent with Policy 107.2.8 of the Lee Plan, which encourages Lee County to *"Promote the long-term maintenance of natural systems through such instruments as conservation easements, transfer of development rights, restrictive zoning, and public acquisition."* The proposed overlay expands upon the use of conservation easements as a way to ensure long-term maintenance of the onsite natural system. The proposed overlay is consistent with Policy 107.11.4 which encourages the use of buffers and open space to "*protect and expand upon the Corkscrew Regional Ecosystem Watershed Greenway, a regionally significant greenway with priority panther habitat.*"

Provide Predictable Density incentives.

The third component of the proposed Environmental Enhancement and Preservation Communities Overlay is to provide a predictable way to assign density incentives to the subject property as well as other properties which may be eligible to be included in the proposed overlay in the future. Having a predictable way to assign incentive density within the overlay is important to Lee County to be able to plan for future provision of utilities and other services such as transportation, EMS, sheriff, and fire protection. To achieve this staff recommends that the Lee Plan should be amended to include the following provisions:

3. 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 meeting the criteria and requirements outlined above as follows:

    a. Tier 1 lands within the Priority Restoration Strategy will be permitted a maximum density of 1 unit per acre.
    b. Tier 2 lands within the Priority Restoration Strategy will be permitted a maximum density of 1 unit per 2 acres.
    c. Other lands within the Environmental Enhancement and Preservation Overlay, outside of Tier1 and Tier 2, meeting the requirements above will be permitted a maximum density of 1 unit per 3 acres.
    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.

Policy 33.2.2 and Policy 33.2.3 provide that the Priority Restoration Strategy Tiers should be "*utilized as the basis for incentives.*" With this in mind, and considering previous efforts Lee County has put into the study of Southeast Lee County, the proposed overlay seeks to add to the current strategy. The proposed Overlay utilizes the Priority Restoration Strategy Tiers as a basis

to determine incentive densities. The proposed Environmental Enhancement and Preservation Communities Overlay provides incentives to protect and restore those areas that "*provide critical connections to other conservation lands that serve as the backbone for water resource management and wildlife movement within the DR/GR."* As previously stated, Policy 33.2.3 identifies tiers 1 and 2 as being the most important areas to restore.

These incentives recognize that tiers 1 and 2 are currently identified by the Lee Plan as being the most important areas to restore, the proposed Overlay provides an increased level of incentives for these lands. However, it should be noted that all lands within the DR/GR were not evaluated at the time the Tiers system was developed. Specifically previously mined areas and areas with existing approved residential development orders were not evaluated even though these sites may have the ability to provide strategic benefits consistent with Policy 33.2.3. The incentives proposed in the Overlay would provide a maximum of 1 unit per acre in Tier 1 properties, 1 unit per two acres in Tier 2 properties, and 1 unit per 3 acres on other lands within the Overlay. It is anticipated that the higher level of incentives will encourage land owners with Tier 1 and 2 properties to develop in a way that preserves these critical areas. The proposed Overlay is consistent with the existing goals of the Southeast DR/GR, but would establish new incentives or strategies to achieve the existing goals.

TRANSPORTATION/TRAFFIC CIRCULATION IMPACTS

The proposed amendment was reviewed by the Department of Community Development traffic engineer and the Lee County Department of Transportation. LCDOT provided a memo dated April 21, 2015. That memo, in part, provided the following comments:

> *This project has frontage on Corkscrew Road, a County maintained arterial.*
>
> *There are specific transportation analysis requirements in the CPA application for a five-year short-range and a twenty-year long-range analysis of conditions. The long range analysis corresponds with the MPO transportation model and planned roadway network in the Lee Plan. Analysis requirements are specified on pages 5 and 6 of the CPA application form and are contained in the subject application. LCDOT staff finds that the submitted Dec. 18, 2014 traffic study is consistent with CPA application requirements.*
>
> *The traffic study indicates that with the project, all road segments in the study area will meet or exceed the adopted level of service (LOS) issues in the five-year analysis and long range analysis.*
>
> *While the traffic study indicates Corkscrew Road will operate at an acceptable LOS from Cypress Shadows Blvd to Alico Road, LCDOT staff is concerned that Corkscrew Road cannot accommodate the traffic from this project, and other nearby approved and proposed projects. As a result a deficiency may be created on Corkscrew Road, as well as consideration to accelerate other area road widening projects. See F.S. 163.3180.*

Traffic count station #249 is on Corkscrew Road east of Stoneybrook Golf Drive. At that location, the Average Annual Daily Traffic (AADT) was 13,000 in 2013 and 15,780 in the year 2014. Based on current data, the peak hour peak season peak directional traffic volume is 759.

Corkscrew Farms also has submitted a zoning application, DCI2015-00004. The zoning traffic study indicates Corkscrew Farms will add 430 peak hour, peak direction trips to Corkscrew Road east of Ben Hill Griffin Parkway. This development is not contemplated in the socioeconomic data used as the basis for the current LRTP. Corkscrew Shores (DOS2013-00034), Preserve at Corkscrew (DOS2011-00002), and Bella Terra (multiple DOS cases) have approved development orders and are under construction. These area projects are not fully reflected in the socioeconomic data for the current LRTP. The 2014 Concurrency Report forecasts an additional 430 peak hour, peak directional traffic volume on this segment. Since the data was compiled for the concurrency report, there have been additional dwelling units permitted.

The Dec. 18, 2014 traffic study was performed consistent with the CPA requirements and the approved methodology. However, approved and proposed area projects, including Corkscrew Farms, will require additional operational and traffic analysis to determine the cumulative effect of area development and any developer contributions or additional transportation mitigation beyond roads impact fees. The purpose of this analysis is to identify timing of current planned improvements and any additional area improvements to Corkscrew Road east of Ben Hill Griffin Parkway, Estero Parkway extension east of Ben Hill Griffin Parkway, Alico Road from CR 951 to Greenmeadow Road and CR 951 from Corkscrew Road to Alico Road.

In order to address the possible LOS deficiency staff is recommending that the following language be incorporated into the Lee Plan:

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.

ENVIRONMENTAL CONSIDERATIONS

Lee County Division of Environmental Sciences provided a staff report to the Lee County Planning Division on April 20, 2015. This report concludes the following:

The DR/GR was created with specific conservation goals. As per the "Prospects for Southeast Lee County" report published in July 2008 these goals included: Maintaining and enhancing the surface and groundwater resources; Avoiding further loss of wetlands, and

requiring any loss of wetlands within the DR/GR to be mitigated within the DR/GR; Restoring historic flowways; Providing connectivity between large, regionally significant preserves for mammal and herpefaunal movement; Restoration of historic ecosystems; and maintaining and enhancing wood stork foraging areas. These recommendations were incorporated into the Lee Plan upon creation of the Southeast Lee County Planning Community. Goal 33 and Objective 33.2 discuss the DR/GR area as an area set aside for protection of natural resources including both water resources and preserve/habitat. Policies 33.2.1, 33.2.2, and 33.2.3 discuss the importance and value of connecting corridors and conservation areas to allow for flowway connections and wildlife movement through preservation, restoration, and long term protection measures such as conservation easements and indicates that Tier1 lands would provide critical connections to other conservation lands that serve as the backbone for water resource management and wildlife movement within the DR/GR. The Corkscrew Farms property is identified as Tier 1 on Map 1 page 4. Objective 60.5 and Policies 60.5.1, 60.5.2, & 60.5.3 discuss the long-term benefits of incorporating green infrastructure into the stormwater design encouraging incorporation of wildlife habitat, existing wetlands and natural flowways, and restoration of historic flowways. Objective 107.1 and Policies 107.1.2, and 107.2.8 discuss how the county will work with applicants to promote long term protection and enhancement of upland and wetland habitats through preservation of large interconnected systems and the formation of conservation easements over these areas. Finally, Policy 107.11.4 discusses how the county will work with applicants to protect and expand upon the Corkscrew Regional Ecosystem Watershed Greenway.

The Corkscrew Farms project is proposing to improve, preserve, and restore approximately 750 acres of the overall 1361.05 acre site as conservation easements. These preservation areas consist of existing native wetland and upland habitats as well as agricultural fields that will be restored back to native wetland and upland habitat. The preserves also will be re-graded in some areas to promote and restore historic flowways through the site, and in addition crossing of flowways have been reduced over current agriculture and ditching activities. The preservation areas are designed to connect and provide a corridor for wildlife to move through the site and abutting conservation lands. This will allow for large mammal movement for species such as the Florida panther and Florida black bear which currently use and have the potential to use the site for movement throughout the county. A CDD or other bondable entity will be created to ensure the long term maintenance of these preserve areas. Lake bank slopes within the proposed lakes and created flowways will be designed and planted per the current Land Development Code standards providing foraging areas for wading birds including wood storks. The Preliminary Restoration Strategy Plan and the clustered site design as proposed it is consistent with the intent of the DR/GR and the Lee Plan.

NATURAL RESOURCES

Lee County Division of Natural Resources provided written comments to the Lee County Planning Division in a memorandum dated April 16, 2015. The Division of Natural Resources found that:

GROUNDWATER: The subject site has a steep slope across the property compared to the average Lee County topography and is located at the vicinity of a public water supply wellfield. In fact, most of the property is located within wellfield protections zones. The current use on the property is agriculture. There are a number of permitted wells for agriculture use. The existing wells will be used as sources of centralized irrigation system for the project. Natural Resources staff has reviewed the information provided by the applicant including the Groundwater Analysis for the subject site, prepared by Progressive Water Resources. Compared to the current agricultural land use, the proposed amendment will reduce impacts on groundwater resources by using potable water supply provided Lee County Utilities. The centralized irrigation system uses on site lakes replenished by the existing wells on as necessary basis.

SURFACE WATER: The subject site is located adjacent to mitigation or conservation lands owned by other agencies. The residential community located west of the subject property along Burgundy Farm Road experiences flooding from time to time. Farm ditches had been excavated within and around the property altering historical surface water drainage and runoff patterns. The proposed restoration plan will preserve adjacent forested area located on the western property line. The master concept plan attempts to preserve the existing on-site wetlands by incorporating them into recreated flow ways. The restoration plan will also provide a flow way on the western portion of the site east of the forested area to help relieve some of the flooding of adjacent properties. In addition, the proposed development pods are chosen in a way to accommodate and enhance three flow ways to mimic historic flow through the site.

WATER QUALITY: Water quality is a major concern on this project due to its close vicinity to the public water supply system. The applicant has agreed to provide additional treatment of surface water prior to discharging to water management lakes.

One of the conservation goals listed in the Dover Kohl study was to maintain and enhance surface and groundwater resources. This goal is achieved by using lake water for irrigation, providing potable water from Lee County Utilities, elimination of septic systems, and restoration of flow ways through the property. Further, incorporation of a monitoring well network will provide a tool for managing the natural system and work towards achieving other goals listed in the Dover Kohl study.

Furthermore, as required by Lee Plan Policies 2.4.2 and 2.4.3 the Division of Natural Resources found that *"no significant impacts on present or future water resources are expected as a result from the change."* The complete Division of Natural Resources' correspondence is attached to this Staff Report.

FEMA FLOODWAY ISSUE

County records show that the subject site is not located within a FEMA identified floodway.

LEE COUNTY PORT AUTHORITY

The Lee County Port Authority provided correspondence to the Lee County Division of Planning dated April 17, 2015 stating that *"We have met with county staff, developer, and environmental*

consultant to discuss the restoration plans for the proposed Corkscrew Farms Development. It is our understanding from their consultant (Kevin Erwin and Assoc.), that the proposed hydrological restoration would be a benefit to the area by restoring natural flows and not have any detrimental affect to Mitigation Park and our current restoration efforts. We support this idea in concept but would like to see a copy of the restoration plan when it is completed in case we have any further questions or comments."

HISTORIC RESOURCES
The subject site has previously been subjected to an Archaeological and Historical Survey. No evidence of significant historic or prehistoric occupation or utilization of the subject site has been documented. Portions of this site are within the level 2 sensitivity areas for archeological and historic resources. Prior to Development Order approval a Certificate to Dig will be required.

SCHOOL IMPACTS
The Lee County School District provided correspondence to the Lee County Division of Planning dated January 27, 2015 stating that *"Capacities for elementary and middle seats are not an issue within the Concurrency Service Area (CSA). For high school, the development adds to the projected deficit within the CSA, however, there are sufficient seats available to serve the need within the contiguous CSA."*

SOLID WASTE
The Lee County Solid Waste Division provided correspondence to the applicant on December 10, 2014 stating that they are capable of providing solid waste collection service for the proposed project. Lee County Solid Waste Division also stated that "*disposal of solid waste from this development will be accomplished at the Lee County Resource Recovery Facility and the Lee-Hendry Regional Landfill.*"

MASS TRANSIT
Lee County Transit provided the applicant a letter dated December 10, 2014 stating the following:

- *Currently, the closest route to the identified parcel is Route 60 and is 6 miles away from the subject property. This route travels through San Carlos park and Estero, providing access to Florida Gulf Coast University, Miromar Outlets and the Estero Library.*

- *The parcels do not lie within the ¾ mile boundary for paratransit service.*

- *The Transit Development Plan does not recognize the need for services adjacent to this property during the 10 year planning horizon.*

EMERGENCY MEDICAL SERVICES (EMS)
Lee County EMS provided a memo dated December 29, 2014 stating they have concerns about being able to accommodate the additional development proposed on the subject property.

We have two EMS stations that are approximately 8 miles from the proposed entrance off Corkscrew: Station 21 and Station 25.

An evaluation of current response times along Corkscrew Road in that vicinity, as well as drive time modeling, suggests we will not be able to meet existing service standards as required in County Ordinance 08-16. Therefore, we have concerns about our ability to provide service to this new development.

To address this concern the applicant has committed that if the ambulance response time to the property at the time of issuance of the first residential building permit does not meet the required level of service, the developer will pay an ambulance fee of $200,000 to Lee County EMS for an ambulance to assure adequate response times to the property. While this donation does not fully address the service standard issue, the Board of County Commissioners could accept it as mitigation.

POLICE

The Lee County Sheriff's Office provided a letter to the applicant dated December 17, 2014 stating that the proposed Lee Plan amendment "does not affect the ability of the Lee County Sheriff's Office to provide core services as this time." The letter went on to say that service would be provided primarily from the South District Office in Bonita Springs.

FIRE

The San Carlos Park Fire Protection and Rescue Service District provided a letter to the applicant dated December 16, 2014 stating they are able to serve the proposed development. A follow up letter was also sent to the applicant on February 18, 2015 to address mitigation efforts by the applicant.

UTILITIES

Lee County Utilities provided correspondence to the Lee County Division of Planning dated April 24, 2015 stating that there is adequate capacity to serve the proposed development. In part the letter provides the following:

Potable Water:
LCU's current total combined water treatment capacity is 45.9 million gallons per day (MGD). The Green Meadows Water Treatment Plant (WTP) is in the process of being expanded from 9.00 MGD to 14.00 MGD which will bring the total combined treatment capacity of the water system to 50.9 MGD. The projected water system demand included in LCU's Integrated Water Resource Master Plan indicates a total water system demand of 37.04 MGD annual average daily flow (AADF) in the year 2030. This represents a surplus capacity of 13.86 MGD. The 2014 annual average daily demand in LCU's water system was 23.21 MGD. The 2014 maximum month average daily demand in LCU's water system was 26.8 MGD. Based on the information presented above there is sufficient water treatment capacity to serve the proposed development.

Sanitary Sewer:
The current permitted treatment capacity of the Three Oaks Wastewater Treatment Plant (WWTP) is 6.0 MGD. The annual average daily flow to the Three Oaks WWTP in 2014 was 2.71 MGD. There currently is capacity at the Three Oaks WWTP to provide service to the

proposed development. Regarding sufficient treatment capacity in the future, the following should be noted.

LCU has recently completed a study of the Three Oaks WWTP service area which included a flow projection to the facility. This study was completed by a Consultant. The flow projection for this study was based on the Three Oaks WWTP future service area. The Corkscrew Farms project is not located within the Three Oaks WWTP future service area. Therefore, the wastewater flow proposed to be generated by the Corkscrew Farms project (265,000gpd) was not included in this flow projection. The flow projection performed during this study can however be used to project the effect the Corkscrew Farms projected flow will have on the available capacity at the Three Oaks WWTP. The flow projection was revised to add the flow generated from Corkscrew Farms. It was assumed that the Corkscrew Farms project would be fully built out by the year 2020. The revised projection indicates that the annual average daily flow to the Three Oaks WWTP will not exceed the permitted capacity until the year 2033.

Because the wastewater flow to the Three Oaks WWTP is projected to exceed the permitted capacity in the future, LCU has initiated a study to identify options for treatment of wastewater flows that are projected to be generated within the Three Oaks WWTP service area. This study is currently underway.

Lee County Utilities Letter is attached to this staff report.

SOILS

The applicant has provided a description of the soils that are found on site. For a detailed description please see the application materials.

B. CONCLUSIONS

After thorough review and consideration of the numerous factors discussed in the following report staff is recommending that the proposed amendments, as identified in Attachment 1, be transmitted to the state reviewing agencies.

PART IV - LOCAL PLANNING AGENCY REVIEW AND RECOMMENDATION

DATE OF PUBLIC HEARING: May 11, 2015

A. LOCAL PLANNING AGENCY REVIEW

B. LOCAL PLANNING AGENCY RECOMMENDATION AND FINDINGS OF FACT SUMMARY

1. RECOMMENDATION:

2. BASIS AND RECOMMENDED FINDINGS OF FACT:

C. VOTE:

NOEL ANDRESS	_____
TIMOTHY BROWN	_____
DENNIS CHURCH	_____
JIM GREEN	_____
RICK JOYCE	_____
DAVID MULICKA	_____
GARY TASMAN	_____

Text Amendments:

Future Land Use Element

POLICY 1.4.5: The Density Reduction/Groundwater Resource (DR/GR) 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.

1. New land uses in these areas that require rezoning or a development order must demonstrate compatibility with maintaining surface and groundwater levels at their historic levels (except as provided in Policies 33.1.3 and 33.3.~~4~~5) utilizing hydrologic modeling, the incorporation of increased storage capacity, and inclusion of green infrastructure. The modeling must also show that no adverse impacts will result to properties located upstream, downstream, as well as adjacent to the site. Offsite mitigation may be utilized, and may be required, to demonstrate this compatibility. Evidence as to historic levels may be submitted during the rezoning or development review processes.

2. Permitted land uses include agriculture, natural resource extraction and related facilities, conservation uses, public and private recreation facilities, and residential uses at a maximum density of one dwelling unit per ten acres (1 du/10 acres). See Policies 33.3.2, 33.3.3, 33.3.4, ~~and~~ 33.3.5, and 33.3.6 for potential density adjustments resulting from concentration or transfer of development rights.
   a. For residential development, also see Objective 33.3 and following policies. Commercial and civic uses can be incorporated into Mixed-Use Communities to the extent specifically provided in those policies
   b. Individual residential parcels may contain up to two acres of Wetlands without losing the right to have a dwelling unit, provided that no alterations are made to those wetland areas.
   c. The Future Limerock Mining overlay (Map 14) identifies sufficient land near the traditional Alico Road industrial corridor for continued limerock mining to meet regional demands through the Lee Plan's planning horizon (currently 2030). See Objective 33.1 and following policies.

3. Private Recreational Facilities may be permitted in accordance with the site locational requirements and design standards, as further defined in Goal 16. No Private recreational facilities may occur within the DR/GR land use category without a rezoning to an appropriate planned development zoning category, and compliance with the Private Recreation Facilities performance standards, contained in Goal 16 of the Lee Plan.

(Amended by Ordinance No. 91-19, 94-30, 99-16, 02-02, 10-20, 12-24)

POLICY 1.7.13: The Southeast Density Reduction/Groundwater Resource overlay (Map 17) is described in Policies 33.3.1 through 33.3.~~4~~5. This overlay affects only Southeast Lee County and identifies ~~four~~ five types of land:

1. "Existing Acreage Subdivisions": existing rural residential subdivisions that should be protected from adverse external impacts such as natural resource extraction.

2. "Rural Golf Course Communities" potential locations for the concentration of development rights on property zoned Private Recreational Facilities Planned Development and located in the Southeast Density Reduction/Groundwater Resource area.

3. "Mixed-Use Communities" locations where this concentration of development rights from large contiguous tracts with the Density Reduction/Groundwater Resource area that can be supplemented by transfer of development rights from non-contiguous tracts in the Southeast Density Reduction/Groundwater Resource area. See Objective 33.3 and following policies.

4. "Improved Residential Communities:" Property with existing residential approvals that are inconsistent with the Southeast Density Reduction/Groundwater Resource area that could be improved environmentally.

5. "Environmental Enhancement and Preservation Communities:" Properties adjacent to Corkscrew and Alico Roads that have the potential to improve and restore important regional hydrological and wildlife connections.

(Added by Ordinance No. 10-19, Amended by Ordinance No. 12-24, Renumbered by Ordinance No. 14-10)

POLICY 33.2.1: Large-scale ecosystem integrity in Southeast Lee County should be maintained and restored. Protection and/or restoration of land is of even higher value when it connects existing corridors and conservation areas. Restoration is also highly desirable when it can be achieved in conjunction with other uses on privately owned land including agriculture. Lee County Natural Resources, Conservation 20/20, and Environmental Sciences staff will work with landowners who are interested in voluntarily restoring native habitats and landowners who are required to conduct restoration based upon land use changes. The parameters for the required restoration will be established in the Land Development Code by 2012 or within planned development zoning approvals as established in Objective 33.3. (Added by Ordinance No. 10-19)

OBJECTIVE 33.3: RESIDENTIAL AND MIXED-USE DEVELOPMENT. Designate on a Future Land Use Map overlay areas that should be protected from adverse impacts of mining (Existing Acreage Subdivisions), specific locations for concentrating existing development rights on large tracts (Mixed-Use Communities), specific properties which provide opportunities to protect, preserve, and restore strategic regional hydrological and wildlife connections (Environmental Enhancement and Preservation Communities), and vacant properties with existing residential approvals that are inconsistent with the density Reduction/Groundwater Resource future land use category (Improved Residential Communities). (Added by Ordinance No. 10-43, Amended by Ordinance No.12-24)

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 that meets the following:

a. Planned Development must include a minimum of 60 percent open space, not including previously mined lakes, which will be used to accommodate the following:
   1. Restore and accommodate existing and historic regional flowways where they currently or previously existed;
   2. Restore and accommodate existing and historic groundwater levels;
   3. Restore and preserve wetlands;
   4. Restore and preserve indigenous upland habitats;
   5. Provide critical wildlife connections to adjacent conservation areas; and
   6. Provide 100' foot buffer along Corkscrew Road East of Alico Road.

b. Includes an enhanced lake management plan, that:
   1. Applies best management practices for fertilizers and pesticides;
   2. Provides erosion control and bank stabilization; and
   3. Establishes lake maintenance requirements.

c. Develop a site specific ecological and hydrological restoration plan which includes at a minimum the following: preliminary excavation and grading plans, analysis of hydrological improvements and water budget narrative, replanting plan, habitat restoration plan, success criteria, long term monitoring and maintenance.

d. Preservation areas must be platted in separate tracts and dedicated to an appropriate maintenance entity. For projects larger than 1,000 acres a Community Development District (CDD) or a master home owners association must be created, that will accept responsibility for perpetually maintaining the preservation requirements identified in the Planned Development, prior to issuance of certificate of compliance (CC) for first local development order.

e. Record a Conservation Easement for a minimum of 55 percent of the planned development, not including previously mined lakes, to be dedicated to the appropriate maintenance entity that provides Lee County, or some other public agency acceptable to Lee County, with third party enforcement rights.

f. Indigenous management plans must address human-wildlife coexistence.

g. Uses Florida Friendly Plantings with low irrigation requirements in Common Elements.

h. The stormwater management system must demonstrate through design or other means that water leaving the development meets state and federal water quality standards. The developer must obtain authorization from the Division of Natural Resources prior to discharge stormwater from the development into the County's MS4 system directly or indirectly.

i. Elimination of any agricultural row crop uses at time of first development order.

j. Protects Public wells through compliance with the requirements of the Well Field Protection Ordinance.

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. The proportionate share amount can be offset, in accordance with AC13-16, by the dedication of needed right of way or the construction of improvements that would measurably lessen the need for roadway improvements, or by payment of impact fees, or use of impact fee credits, or as otherwise set forth in a written agreement between Lee County and the Developer. Prior to a final determination of a Project's proportionate share amount, compliance may be met through an enforceable instrument that obligates the property owners within a Planned Development to pay the Project's proportionate share, with said instrument being recorded prior to the issuance of any Development Order.

l. Connect to public water and sewer service. Connect to reclaimed water if available at time of development order approval.

m. Obtain written verification as to adequate public services for the Planned Development, from the sheriff, EMS, fire district, and Lee County School District.

n. Demonstrate that the proposed rezoning will not result in significant detrimental impacts on present or future water resources.

3. 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 meeting the criteria and requirements outlined above as follows:

   a. Tier 1 lands within the Priority Restoration Strategy will be permitted a maximum density of 1 unit per acre.
   b. Tier 2 lands within the Priority Restoration Strategy will be permitted a maximum density of 1 unit per 2 acres.
   c. Other lands within the Environmental Enhancement and Preservation Overlay, outside of Tier1 and Tier 2, meeting the requirements above will be permitted a maximum density of 1 unit per 3 acres.
   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.

POLICY 33.3.45: Owners of major DR/GR tracts without the ability to construct a Mixed-Use Community on their own land are encouraged to transfer their residential development rights to Future Urban Areas (see Objective 1.1), specifically the Mixed-Use Overlay, the Lehigh Acres Specialized Mixed-Use Nodes, and any Lee Plan designation that allows bonus density (see Table 1(a)), or to future

Mixed-Use Communities, Rural Golf Course Communities, or Improved Residential Communities on land so designated on Map 17. These transfers would avoid unnecessary travel for future residents, increase housing diversity and commercial opportunities for nearby Lehigh Acres, protect existing agricultural or natural lands, and allow the conservation of larger contiguous tracts of land.

1. To these ends, Lee County will establish a program that will allow and encourage the transfer of upland and wetland development rights (TDR) to designated TDR receiving areas. This program will also allow limited development in accordance with Policy 16.2.6 and 16.2.7.
2. Within the Mixed-Use Communities shown on Map 17, significant commercial and civic uses are required. Each Mixed-Use Community adjoining S.R. 82 must be designed to include non-residential uses not only to serve its residents but also to begin offsetting the shortage of non-residential uses in adjoining Lehigh Acres. At a minimum, each community adjoining S.R. 82 must designate at least 10% of its developable land into zones for non-residential uses. Specific requirements for incorporating these uses into Mixed-Use Communities are set forth in the Land Development Code.
3. Mixed-Use Communities must be served by central water and wastewater services. All Mixed-Use Communities were added to the future water and sewer service areas for Lee County Utilities (Lee Plan Maps 6 and 7) in 2010. Development approvals for each community are contingent on availability of adequate capacity at the central plants and on developer-provided upgrades to distribution and collection systems to connect to the existing systems. Lee County Utilities has the plant capacity at this time to serve full build-out of all Mixed-Use Communities. Lee County acknowledges that the Three Oaks wastewater treatment plant does not have sufficient capacity to serve all anticipated growth within its future service area through the year 2030. Lee County commits to expand that facility or build an additional facility to meet wastewater demands. One of these improvements will be included in a future capital improvements program to ensure that sufficient capacity will be available to serve the Mixed-Use Communities and the additional development anticipated through the year 2030.
4. Development approvals for Mixed-Use Communities are contingent on adequate capacity in the public school system (see Goal 67).
5. Lee County encourages landowners to concentrate development rights from contiguous DR/GR property under common ownership or control.
6. Lee County encourages the creation of TDR credits from Southeast DR/GR lands and the transfer of those credits to all other designated receiving areas, including:
    a. Other Mixed-Use Communities;
    b. Rural Golf Course Communities;
    c. Improved Residential Communities
    d. Future Urban Area (see Objective 1.1);
    e. Mixed-Use Overlay;
    f. Lehigh Acres Specialized Mixed-Use Nodes;
    g. Lee Plan designation that allow bonus density (see Table 1(a)); and,
    h. Incorporated municipalities that have formally agreed to accept TDR credits.

(Added by Ordinance No. 10-43, Renumbered and Amended by Ordinance No. 12-24, Amended by Ordinance No. 14-09)

POLICY 33.3.~~5~~6: The new TDR program will have the following characteristics:

1. This program will be in addition to the existing wetland TDR program described in Article IV of Chapter 2 of the Land Development Code.
2. The preferred receiving locations for the transfer of TDRs are within designated Future Urban Areas due to their proximity to public infrastructure and urban amenities (see Objective 1.1), specifically the

Mixed Use Overlay, the Lehigh Acres Specialized Mixed Use Nodes, and the future urban land use categories that allow bonus density (see Table 1(a)). The only sites in the DR/GR area permitted to receive transferred development rights are Mixed-Use Communities or Rural Golf Course Communities, Improved Residential Communities as shown on Map 17.

3. TDR credits will be available from sending areas as follows:
   a. One TDR credit may be created for each allowable dwelling unit attributable to sending parcels within the Southeast DR/GR area. As an incentive for permanently protecting indigenous native uplands, one extra dwelling unit will be allowed for each five acres of preserved or restored indigenous native uplands.
   b. As an additional incentive for protecting certain priority restoration lands (see Policy 33.2.3.2), each TDR credit created pursuant to the preceding subsection will qualify for up to two additional TDR credits if the credits are created from land in Tiers 1, 2, 3 or the southern two miles of Tiers 5, 6 or 7, as shown on the DR/GR Priority Restoration overlay.
4. The maximum number of TDR credits that can be created from the Southeast DR/GR lands is 9,000.
5. No more than 2,000 dwelling units can be placed on receiving parcels within the Southeast DR/GR Mixed-Use Communities through the TDR credit program.
6. TDR Credits may be redeemed in designated TDR receiving areas as follows:
   a. In Mixed-Use Communities in DR/GR areas, each TDR credit may be redeemed for a maximum of one dwelling unit plus a maximum of 800 square feet of non-residential floor area.
   b. In Rural Golf Course Communities, see Policy 16.2.7.
   c. In the Future Urban Areas described in paragraph 2. above, each TDR credit may be redeemed for a maximum of two dwelling units. In these Future Urban Areas, the redemption of TDR credits cannot allow densities to exceed the maximum bonus density specified in Table 1(a). TDR credits may not be redeemed for non-residential floor area in these Future Urban Areas.
   d. Redemption of TDR credits within incorporated municipalities may be allowed where interlocal agreements set forth the specific terms of any allowable transfers and where the redemption allows development that is consistent with the municipality's comprehensive plan. As in the County's Future Urban Areas, each TDR credit may be redeemed for a maximum of two dwelling units.
7. When severing development rights from a tract of land in anticipation of transfer to another tract, a landowner must execute a perpetual conservation easement on the tract that acknowledges the severance of development rights and explicitly states one of the following options:
   a. Continued agricultural uses will be permitted;
   b. Conservation uses only;
   c. Conservation use and restoration of the property; or
   d. some combination of the above options.

(Added by Ordinance No. 10-43, Renumbered and Amended by Ordinance 12-24)

POLICY 33.3.6<u>7</u>: The Land Development Code will be amended within one year to specify procedures for concentrating existing development rights on large tracts, for transferring development rights between landowners, for seeking approval of additional acreage subdivisions, and for incorporating commercial and civic uses into Mixed-Use Communities as designated on Map 17. (Added by Ordinance No. 10-19, Renumbered by Ordinance 12-24)

POLICY 33.3.~~7~~<u>8</u>: By 2012 Lee County will evaluate the establishment and funding of a DR/GR TDR bank that will offer to purchase development rights for resale in the TDR system. The purpose of this program is to give potential sellers the opportunity to sell rights even if no developer is ready to use them

and to give potential development applicants the opportunity to obtain the necessary rights without seeking them on the open market. (Added by Ordinance No. 10-19, Renumbered by Ordinance 12-24)

Transportation Element

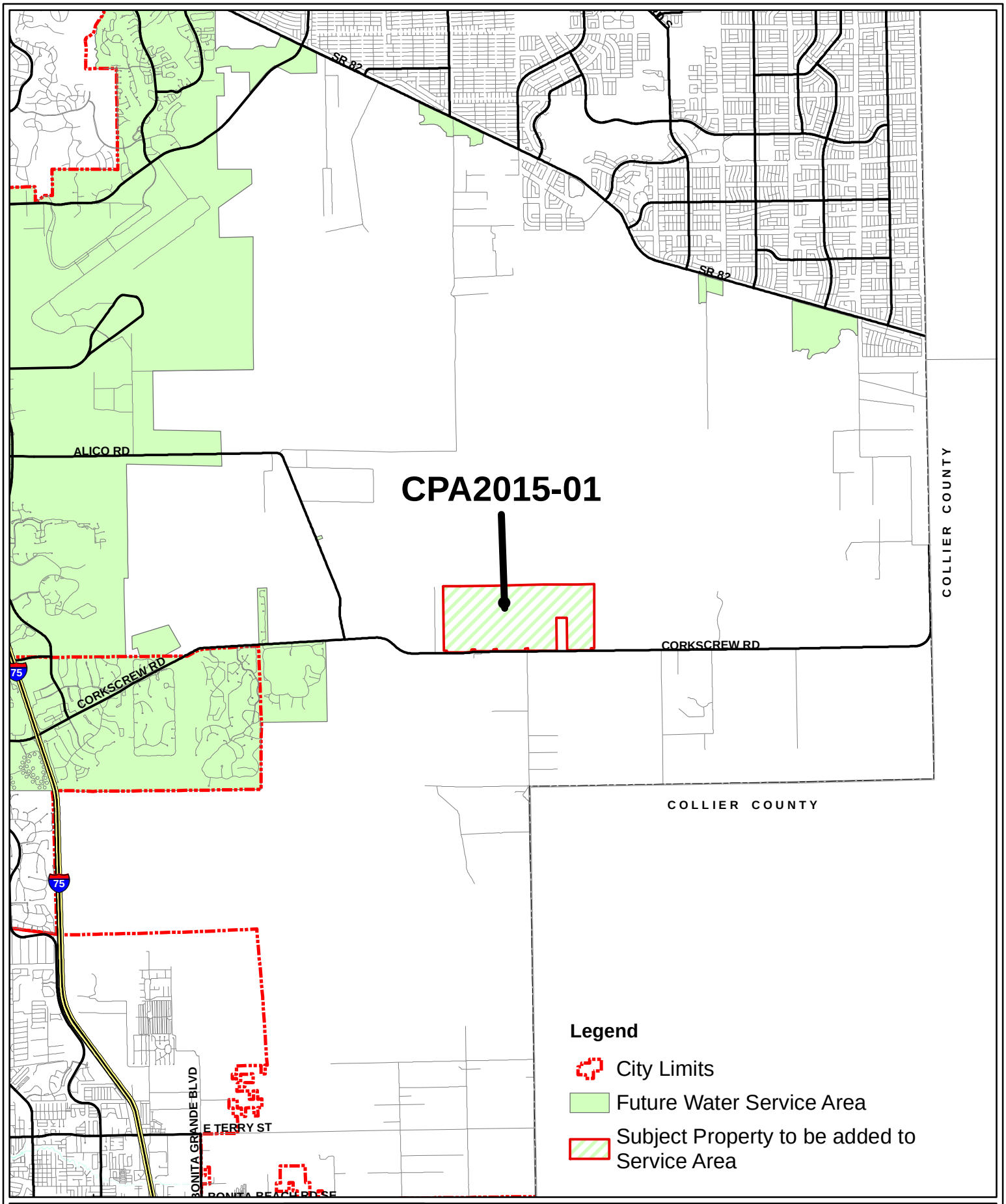
POLICY 38.1.9: Lee County will complete a study by July 1, 2017, with input from property owners, to determine the improvements necessary to address increased density within the Environmental Enhancement and Preservation Overlay (See Policy 33.3.4). The study will include a financing strategy for the identified improvements, including participation in a Proportionate Fair Share Program.

Map Amendments:

Map 6: Future Water Service Areas

Map 7: Future Sanitary Sewer Service Areas

Map 17: Southeast DR/GR Residential Overlay



LEE COUNTY
SOUTHWEST FLORIDA
DIVISION OF PLANNING

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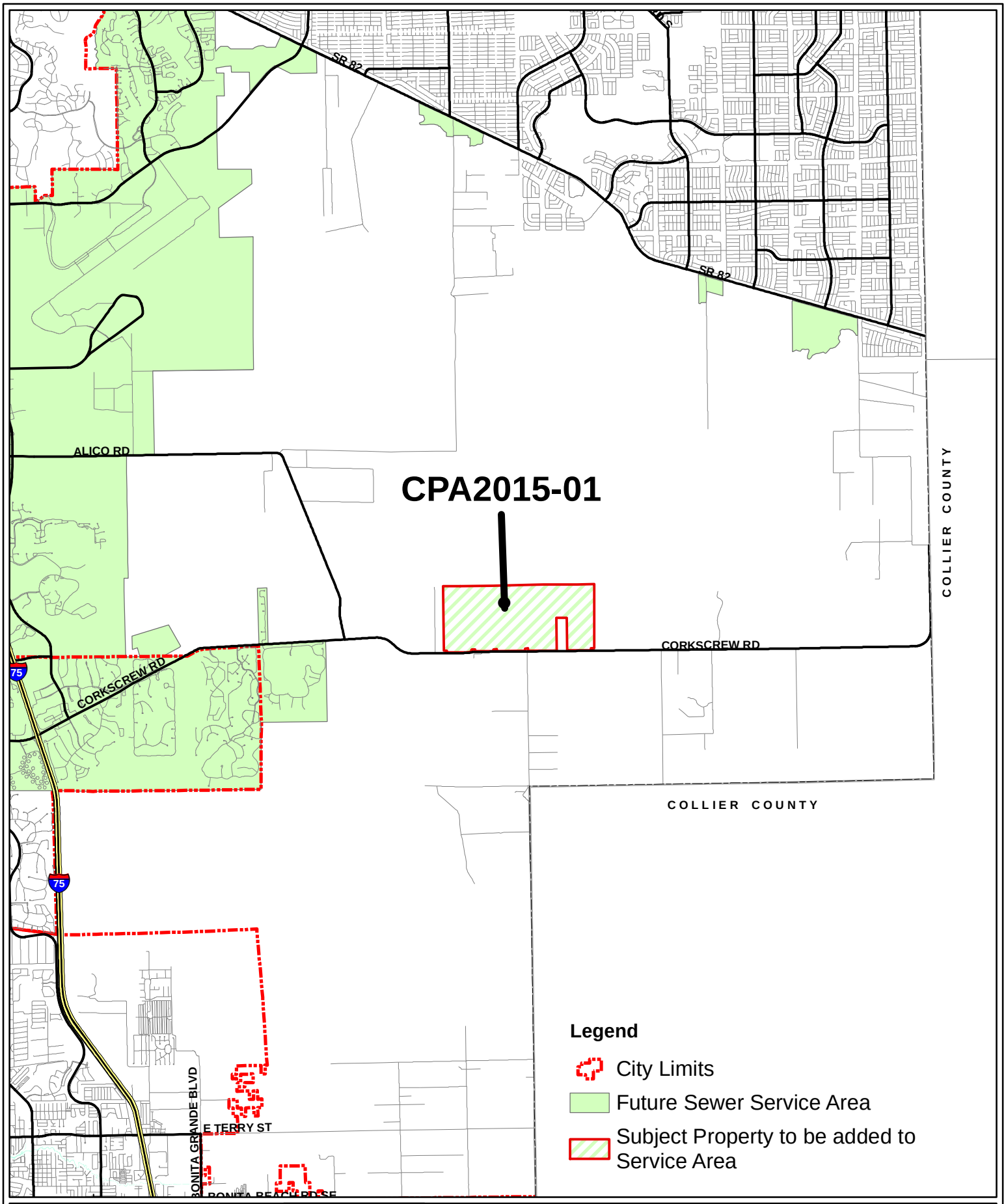
Map Generated April 2015

CPA2015-00001 - CORKSCREW FARMS
LEE PLAN MAP 6
LEE COUNTY UTILITIES
FUTURE WATER SERVICE AREAS



LEE COUNTY
SOUTHWEST FLORIDA
DIVISION OF PLANNING

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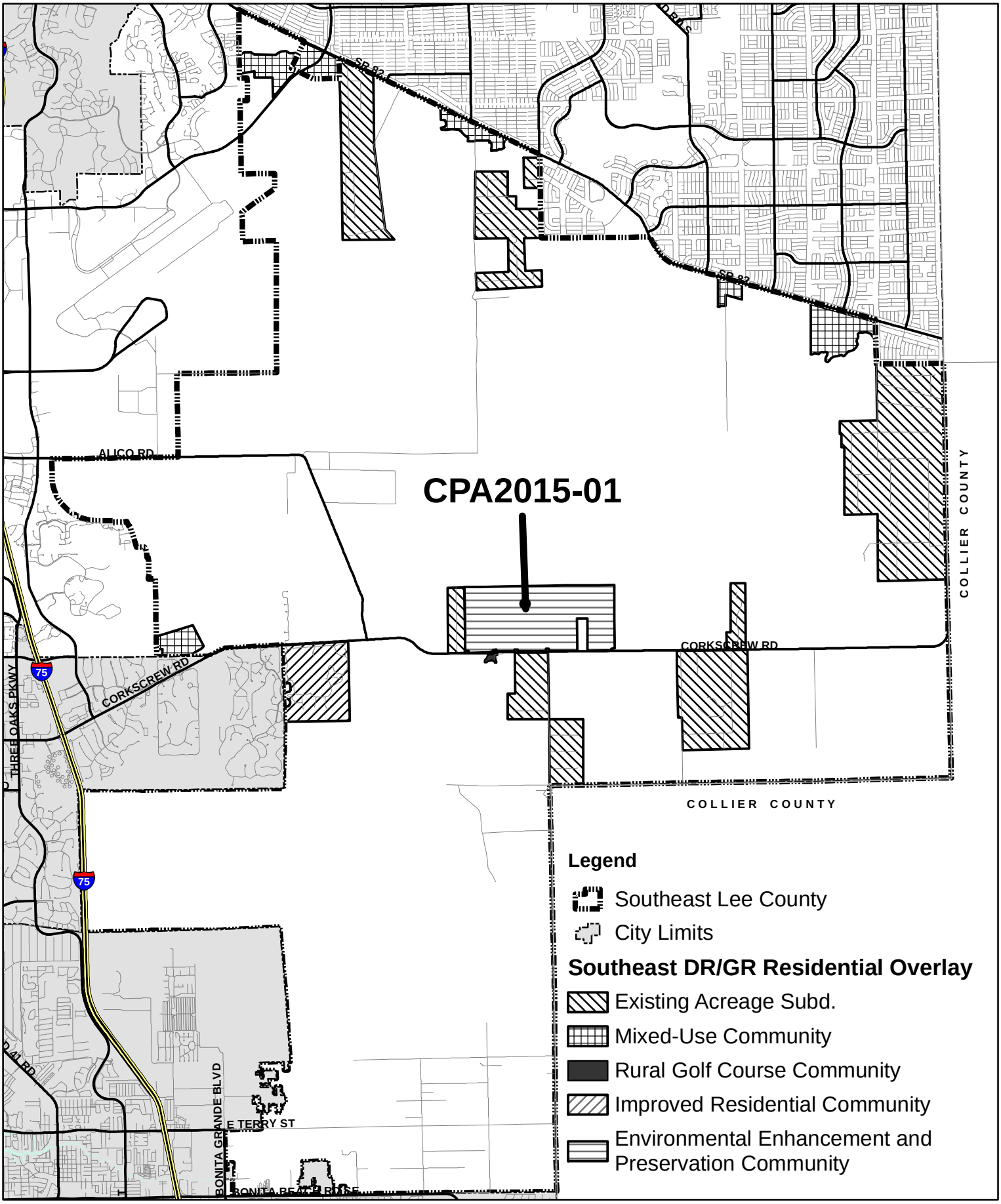
Map Generated April 2015

CPA2015-00001 - CORKSCREW FARMS
LEE PLAN MAP 7
LEE COUNTY UTILITIES
FUTURE SEWER SERVICE AREAS



LEE COUNTY
SOUTHWEST FLORIDA
DIVISION OF PLANNING

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CPA2015-00001 - CORKSCREW FARMS
LEE PLAN MAP 17
SOUTHEAST DR/GR RESIDENTIAL OVERLAY

Lee County
Southwest Florida
BOARD OF COUNTY COMMISSIONERS

December 29, 2014

Matthew Noble
ANoblePlan, LLC
1842 Seafan Circle
North Fort Myers, FL 33903

Re: Initial development review for Corkscrew Farms

Mr. Noble,

I am in receipt of your email dated December 10, 2014, requesting a letter to determine the adequacy of existing and proposed services for the development of Corkscrew Farms, located off Corkscrew Road. The email included a listing of 11 parcels.

Lee County Emergency Medical Services is the primary EMS transport agency responsible for coverage at the address you have provided. We have two EMS stations that are approximately 8 miles from the proposed entrance off Corkscrew: Station 21 and Station 25.

An evaluation of current response times along Corkscrew Road in that vicinity, as well as drive time modeling, suggests we will not be able to meet existing service standards as required in County Ordinance 08-16. Therefore, we have concerns about our ability to provide service to this new development.

Should the plans or access to the property change, a new analysis of this impact would be required.

If you have any questions, please contact me at (239) 533-3961.

Sincerely,

Benjamin Abes
Deputy Chief, Operations
Division of Emergency Medical Services

THE SCHOOL DISTRICT OF LEE COUNTY

2855 COLONIAL BLVD. ♦ FORT MYERS, FLORIDA 33966 ♦ WWW.LEESCHOOLS.NET

DAWN HUFF
LONG RANGE PLANNER
239-337-8142
DAWNMHU@LEESCHOOLS.NET

January 27, 2015

Brandon Dunn, Senior Planner
Lee County Division of Planning
1500 Monroe Street
Fort Myers, Florida 33902-0398

RE: CPA2015-00001
Corkscrew Farms Plan Amendment

Dear Mr. Dunn:

This letter is in response to your request for comments date January 12, 2015 for the Corkscrew Farms Plan Amendment in regard to educational impact. The project is located in the South Choice Zone, S-3.

The developer's request states there is a possibility of 1,325 single-family dwellings. With regard to the interlocal agreement for school concurrency the generation rates are created from the type of dwelling unit and further broken down by grade level.

For single family, the generation rate is .292 and further broken down into the following, .146 for elementary, .070 for middle and .076 for high. A total of 387 school-aged children would be generated and utilized for the purpose of determining sufficient capacity to serve the development.

The Concurrency Analysis attached, displays the impact of this development. Capacities for elementary and middle seats are not an issue within the Concurrency Service Area (CSA). For high school, the development adds to the projected deficit within the CSA, however, there are sufficient seats available to serve the need within the contiguous CSA.

Thank you for your attention to this issue. If I may be of further assistance, please me at 239-337-8142.

Sincerely,

Dawn Huff,
Long Range Planner

LEE COUNTY SCHOOL DISTRICT'S SCHOOL CONCURRENCY ANALYSIS

REVIEWING AUTHORITY	Lee School District
NAME/CASE NUMBER	Corkscrew Farms Plan Amendment/CPA2015-00001
OWNER/AGENT	Resource Cnservation Holdings
ITEM DESCRIPTION	various amendments; all impacts in South CSA, sub area S3
LOCATION	North side of Corkscrew Rd, east of I75
ACRES	1,300
CURRENT FLU	Density Reduction/Groundwater Resource (DRGR) & Wetlands (W)
CURRENT ZONING	Agricultural (AG2)

PROPOSED DWELLING UNITS BY TYPE

Single Family	Multi Family	Mobile Home
1,325	0	0

	Student Generation Rates			
STUDENT GENERATION	**SF**	**MF**	**MH**	**Projected Students**
Elementary School	0.146			193.45
Middle School	0.07			92.75
High School	0.076			100.70
	Source: Lee County School District, January 27, 2015 letter			

CSA SCHOOL NAME 2018/19	**CSA Capacity (1)**	**CSA Projected Enrollment (2)**	**CSA Available Capacity**	**Projected Impact of Project**	**Available Capacity W/Impact**	**LOS is 100% Perm FISH Capacity**	**Adjacent CSA Available Capacity w/Impact**
South CSA, Elementary	12,413	10,768	1,645	193	1,452	88%	
South CSA, Middle	5,621	5,325	296	93	203	96%	
South CSA, High	7,070	7,550	-480	101	-581	108%	

(1) Permanent Capacity as defined in the Interlocal Agreement and adopted in the five (5) years of the School District's Five Year Plan

(2) Projected Enrollment per the five (5) years of the School District's Five Year Plan plus any reserved capacity (development has a valid finding of capacity)

(3) Available Adjacent CSA capacity is subject to adjacency criteria as outlined in the Interlocal Agreement and the School District's School Concurrency Manual

Prepared by: Dawn Huff, Long Range Planner

MEMORANDUM
FROM
PUBLIC WORKS
Natural Resources Division

Date: April 16, 2015

TO: Paul O'Connor
Director, Planning Division

From: Roland Ottolini
Director, Natural Resources Division

SUBJECT: CPA2015-00001 Corkscrew Farms Plan Amendment

The subject property is located on Corkscrew Road east of the intersection of Alico and Corkscrew Roads. The applicant is requesting to build 1,300 dwelling units on the 1,360 +/- acre parcel. The site is located in the DRGR land use and Wetlands categories within the Southeast Lee County Planning Community. The subject site is identified in the Lee Plan as a Tier 1 Priority Restoration property. A request for approval for a commercial mine excavation on the subject property was previously denied by the County.

GROUNDWATER: The subject site has a steep slope across the property compared to the average Lee County topography and is located at the vicinity of a public water supply wellfield. In fact, most of the property is located within wellfield protections zones. The current use on the property is agriculture. There are a number of permitted wells for agriculture use. The existing wells will be used as sources of centralized irrigation system for the project. Natural Resources staff has reviewed the information provided by the applicant including the Groundwater Analysis for the subject site, prepared by Progressive Water Resources. Compared to the current agricultural land use, the proposed amendment will reduce impacts on groundwater resources by using potable water supply provided Lee County Utilities. The centralized irrigation system uses on site lakes replenished by the existing wells on as necessary basis.

SURFACE WATER: The subject site is located adjacent to mitigation or conservation lands owned by other agencies. The residential community located west of the subject property along Burgundy Farm Road experiences flooding from time to time. Farm ditches had been excavated within and around the property altering historical surface water drainage and runoff patterns. The proposed restoration plan will preserve adjacent forested area located on the western property line. The master concept plan attempts to preserve the existing on-site wetlands by incorporating them into recreated flow ways. The restoration plan will also provide a flow way on the western portion of the site east of the forested area to help relieve some of the flooding of adjacent properties. In addition, the proposed development pods are chosen in a way to accommodate and enhance three flow ways to mimic historic flow through the site.

WATER QUALITY: Water quality is a major concern on this project due to its close vicinity to the public water supply system. The applicant has agreed to provide additional treatment of surface water prior to discharging to water management lakes.

One of the conservation goals listed in the Dover Kohl study was to maintain and enhance surface and groundwater resources. This goal is achieved by using lake water for irrigation, providing potable water from Lee County Utilities, elimination of septic systems, and restoration of flow ways through the property. Further, incorporation of a monitoring well network will provide a tool for managing the natural system and work towards achieving other goals listed in the Dover Kohl study

The following items shall be addressed and resolved during the approval process:

1) Potential contamination of public water supply system due to construction or operational activities on the project site.
2) Storm water discharge to water management lakes and potential contamination of public water supply system.
3) Design of the water management system to mimic the functions of the natural system.
4) Discharge of storm water from the development into the County's MS4 system.
5) Maintain historic flow through the property and avoid flooding of adjacent properties.
6) A water quality monitoring plan for review and approval by the Division of Natural Resources.
7) A lake management plan for review and approval by the Division of Natural Resources. Among other issues, the plan shall address issues related to maintenance of water levels and littoral plants in the lake.
8) Setback requirements of Chapter 62-532 with regard to sanitary sewer lines from public water supply system.
9) Compliance with Wellfield Protection Ordinance.

Based on the information provided and given the above concerns are to be addressed in the approval process, the Lee County Division of Natural Resources finds that no significant impacts on present or future water resources are expected as a result from the change. Therefore, 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 are expected as a result from changing the Future Land Use Category, as required in Lee Plan Policy 2.4.2 and Policy 2.4.3. This memo does not intend to relieve the applicant from complying with any other part of the Lee Plan.

April 16, 2015

DNR Conditions

CPA2015-00001 Corkscrew Farms

1. All possible precautions shall be taken to minimize and avoid harm to the public water supply system.
2. In order to minimize potential for contamination of the public water supply system located at the vicinity of the project, storm water runoff from the project site shall be directed to specifically designed and designated storm water pretreatment areas prior to discharging to water management lakes.
3. The water management system shall be designed to mimic the functions of the natural system. The flow ways shall be established within the property as part of the restoration of the natural system. The applicant shall obtain authorization from the Division of Natural Resources prior to discharging storm water from the development into the County's MS4 system.
4. The applicant shall restore historic flow through the property. The proposed development shall not exacerbate flooding on adjacent properties. In the event that the applicant were to provide a portion of the property to a third party, the applicant still shall be responsible for providing storm water flow through the subject site regardless of the activities proposed by the third party.
5. The applicant will provide potable water from Lee County Utilities and a central irrigation system using the existing lakes on the property. The Homeowners Association (HOA) documents such as Declarations and Covenants shall include language prohibiting installation of domestic wells for potable or irrigation use. Those documents shall be reviewed and approved by County staff prior to issuance of the first development order. No domestic wells will be permitted by Lee County.
6. Some portions of the property are located within the wellfield protection zones for public water supply. Storage, handling, use of production of certain hazardous or toxic substances within protection zones have potential for contaminating public water supplies. Homeowners Association documents such as Declarations and Covenants shall allow only licensed landscape or other professionals authorized by Lee County to perform activities including application of fertilizers, pesticides, insecticides, herbicides, nematicides, or other chemicals on the property. A list of BMP's will be required to address potential degradation of groundwater due to storage and use of regulated substances on site during construction and operation of the facility.
7. A Water Quality Monitoring Plan shall be reviewed and approved by County staff prior to issuance of the first development order. The Water Quality Monitoring Plan should follow the attached format and include annual assessment of water quality data, trend

analysis, identification of potential issues, recommended corrective actions for changes in the Lake Maintenance Plan.

8. A Lake Management Plan shall be reviewed and approved by the staff prior to issuance of the first development order. The Lake Management Plan shall incorporate the Lake Maintenance Plan and the Water Quality Monitoring Plan, and shall be reviewed annually by applicant/HOA and take remedial actions, if necessary.
9. All proposed sanitary sewer lines shall be designed to meet the State required (Chapter 62-532) setback requirements from nearby Lee County Utilities public water supply wells. Storm water management lakes are directly connected to potable water bearing aquifer(s) and as such must be protected from sanitary hazards. As defined in Chapter 62-550: (75) "SANITARY HAZARD" means a physical condition which involves or affects any part of a drinking water system or the raw water source, and that creates an imminent or potentially serious risk to the health of any person who consumes water from that system.

Five Steps in the Design of a Water Quality Monitoring Plan

1. Define Information Expectations

a) Determine water quality concerns and management goals.

b) Identify statistical methods to be used.

c) State statistical conclusions to be drawn & how conclusions relate to monitoring goals.

d) Describe means of reporting conclusions

2. Confirm Statistical Design Criteria

a) Statistically characterize water quality of population to be sampled.

b) State if assumptions of chosen statistical methods are met.

3. Design Monitoring Network

a) What to measure (analytes).

b) Define the Data Quality Objectives (DQO).

c) How frequently to sample (monthly, quarterly)

d) Where to sample (cells, grids, EMAP, fixed structures)

4. Develop Operating Plans and Procedures

a) Sampling routes, equipment, training, etc.

b) Field sampling and analysis procedures.

c) Sample preservation and transportation.

d) Laboratory analyses and QA procedures.

e) Data Verification Protocols.

f) Data storage and retrieval

g) Data analysis software for chosen statistical methods.

5. Develop Information Reporting Procedures

a) Type, format & frequency of reporting.

b) Distribution of reports.

c) Automation of reporting.

d) Evaluation of information relative to expectations defined in step 1.

STAFF REPORT
FROM
DEPARTMENT OF COMMUNITY DEVELOPMENT
DIVISION OF ENVIRONMENTAL SCIENCES

Date:	**April 20, 2015**
To:	**Brandon Dunn, Principal Planner**
From:	**Susie Derheimer, Environmental Planner** **Phone: (239) 533-8158** **E-mail: sderheimer@leegov.com**
Project:	**Corkscrew Farms**
Case:	**CPA2015-00001**
STRAP:	**24-46-26-00-00001.0000 & others (see approved legal description)**

PROJECT:
The applicant is requesting to amend the Lee Plan and Future Land Use Map to establish an Environmental Enhancement and Preservation Overlay within the Density Reduction Groundwater Resource (DR/GR) and Wetlands Future Land Use Categories and the adoption of the Corkscrew Farms Restoration Strategy to allow the development of 1,325 residential dwelling units on the Corkscrew Farms property.

PROJECT SITE:
The amendment area is approximately 1361.1 acres in size located on Corkscrew Road, approximately 1.5 miles east of Alico Road. The site is zoned agricultural (AG-2) with current and past agriculture uses consisting of cattle grazing/pasture, production of sod, and row cropping.

The surrounding land use categories include DR/GR, Wetlands, and Conservation Lands. The surrounding zoning consists of AG-2 zoned property to the west, north and east; and AG-2, Private Recreational Facilities Planned Development (PRFPD) and Industrial Planned Development (IPD) zoned property to the south. The site is adjacent to large lot single family residential (Burgundy Farms subdivision), Lee County Airport Mitigation Park, Lee County Utilities Corkscrew Wellfield and conservation lands to the west; Corkscrew Road, Lee County public well sites and vacant Lee County Utilities land immediately to the south and the Old Corkscrew Golf Course, Six L's Farm Road large lot single family residential, and active agriculture (Pepperland LLC and Florida Farm Development Co.) south of Corkscrew Road; South Florida Water Management District Corkscrew Mitigation Park and Lee County 20/20 Conservation Lands to the

east; and Lee County Airport Mitigation Park to the north. The site and adjacent mitigation parks and Lee County conservation lands connect to the much larger Flint Pen Strand and Corkscrew Regional Ecosystem Watershed (CREW) lands located to the west and south.

The site has active use and well permits for the current agricultural operations and two pending zoning applications. DCI2014-00012 (currently on hold) requests to rezone the 1,361.05 acres from AG-2 to Mine Excavation Planned Development (MEPD) to permit a 30 year mining operation and DCI2015-00004 (associated with this comprehensive plan amendment) requested to rezone the 1,361.05 acres from AG-2 to a Residential Planned Development (RPD) to permit a maximum of 1,325 dwelling units.

HABITAT ASSESSMENT:
A vegetative community assessment was conducted by Kevin Erwin Consulting Ecologist, Inc. in July and December 2014 and January and February 2015. The assessment and associated Florida Land Use, Cover and Classification System (FLUCCS) map was submitted by the applicant.

Approximately 91.5% (1,245.8 acres) of the site has been improved for agriculture purposes and consists of agriculture buildings, improved pastures, woodland pastures, row crops, improved pastures-hydric, Brazilian pepper, agriculture ditches, borrow areas, and dikes/levees. The remaining 8.5% (115.3 acres) consists of disturbed indigenous habitats of upland and hydric pine flatwoods, cypress, cypress-pine-palm, and freshwater marsh (indigenous areas are defined as indigenous plant communities that contain less than 75% exotic species coverage).

Topography and historical soils and hydro pattern mapping provided by the applicant indicate the site contains historic flowways running north/south through the site. Theses flowways were/are connected to the much larger Flint Pen Strand and CREW lands to the west and south.

There are approximately 110.4 acres of potential jurisdictional wetlands on the site. The applicant has applied for an informal wetland determination from the South Florida Water Management District (SFWMD) application #150320-13. There has not been a joint (state/federal) Environmental Resource Permit (ERP) application submitted to date.

PROTECTED SPECIES:
A protected species survey for Lee County listed species meeting the requirements of Lee County Land Development Code (LDC) Section 10-473 was conducted by Kevin Erwin Consulting Ecologist, Inc. in July and December 2014 and January and February 2015. The survey was submitted by the applicant. The site contains the following listed species: American Alligator (*alligator mississipiensis*), Audubon's crested caracara (*Polyborus plancus audubonii*), Burrowing owl (Athene cunicularia), Florida Sandhill Crane (*Grus Canadensis pratensis*), Little Blue Heron (*Egretta caerulea*), Big Cypress fox squirrel (*Sciurus niger avicennia*), Common wild pine (*Tillandsia fasciculate*), Royal fern (*Osmunda regalis*), and Simpson's zephyrlily (*Zephyranthes simpsonii*). The survey also notes that this site is located within the primary and secondary Florida panther zone and telemetry points of collared panthers have been recorded on

and surrounding the site (See the Attached Panther Telemetry Map); and the site is located within the core foraging area of four known wood stork nesting colonies. In addition, ES staff notes that the site is located within the primary range of the Big Cypress Florida Black bear population.

PROPOSED OVERLAY:

The applicant is requesting to be added to the Environmental Enhancement and Preservation Overlay as proposed by the Wildblue Development in CPA2014-04. The Corkscrew Farms property is located west of Lee County 20/20 Imperial Marsh Preserve (Corkscrew Tract) and is within one mile north of Corkscrew Road. Therefore, given its location and environmental features, as described above, the property provides opportunities to protect, preserve, and restore strategic regional hydrological and wildlife connections consistent with proposed overlay language Policy 33.3.4. By requesting to be added to the overlay the applicant is opting to utilize the incentive based language that would allow for increased density on the site where the project improves, preserves, and restores regional surface water and groundwater resources and indigenous wildlife habitats. The applicant is proposing the following regional benefits to allow for the clustering of 1,325 residential dwelling units (See the Attached Preliminary Restoration Strategy Plan dated February 18, 2015):

- Preservation of all existing native wetlands and upland habitats and approximately 750 acres of land to be placed into a conservation easement. Along with common open space and water management conveyance areas and lakes results in 66% open space. This is an increase over the 40% open space (544 acres) currently required by the LDC for a RPD;
- Enhance, restore and create historic hydric pine, cypress and marsh wetland habitats in the approximate 750 acres of preserved lands. This will include restoring historic water levels and hydro-periods, removal of exotic species and restoration/creation of wetlands within existing disturbed agriculture areas. This is a drastic increase over the 115.3 indigenous preservation required by the LDC which would only require them to preserve and enhance what exist today;
- Opening the existing berm along property north boundary to re-establish historic sheet flow from the north and re-creation of flowways through the site where they historically existed to improve historic flows to the Flint Pen Stand and CREW lands;
- Improve and restore critical wildlife connections to adjacent public conservation lands to the east, north, and west;
- Preservation of water resources through reductions in water use allocation and the use of native plants to reduce irrigation;
- Connection to sewer and water instead of the currently approved well and septic use;
- Provide a buffer along Corkscrew Road exceeding 400-feet in width to consist of the restored indigenous preserve.

ENVIRONMENTAL CONCERNS:

- The increase in density can have a negative impact on the wildlife in the area through items such as light pollution, human wildlife interactions, and limitations on wildlife movement.

To address these issues the Environmental Enhancement and Preservation Overlay policy language requires a clustered planned development to include a minimum of 60% open space used to accommodate water management, flowways, existing/restored indigenous wetland and upland preserves and perimeter buffers which provide critical wildlife connections to adjacent conservation areas. The applicant is proposing a clustered development footprint with three large north/south corridors containing preserved and restored flowways and wetland and upland habitats. Two large corridors are along the west (min. 850' width) and east (min. 2975' width) property boundaries and one through the center of the project of which only the central corridor will be crossed by internal roads. The development footprint is also setback a minimum of 400-feet from the north and south boundary. ES staff will work with the applicant during the planned development process on the details of the roads to provide optimum wildlife crossings at these locations and place limitations through zoning conditions and association documents on direct lighting into the preserves; and as per the LDC Listed Species Management Plans will be required and as per Lee Plan Policy language a human wildlife coexistence plan will be implement which includes wildlife education efforts and protection measures (i.e. bear proof trash receptacles).

- The project will result in an increase in traffic on Corkscrew Road and this may result in increased road mortality with wildlife that is attempting to cross the road.

ES staff notes that there is an existing large mammal wildlife underpass with associated fencing on Corkscrew Road approximately 1 mile to the west of the projects western most property line and there is an additional wildlife underpass being permitted by Lee County DOT about 2.5 mile further west on Corkscrew Road. The proposed wildlife crossing will also include a total of 1000-feet of fencing running east and west on both sides of Corkscrew Road to funnel wildlife into the crossing. Current panther telemetry indicates that a majority of the panther cross at these locations. Therefore the existing and proposed wildlife underpasses may help to mitigate the proposed increase in automobile trips; however, the timing of this improvements and how it relates to the timing of the proposed development is not known at this time.

- The project is located at the head of Corkscrew Regional Ecosystem Watershed and the increase in density could have a negative effect on the water flow and quality.

To address these issues the Environmental Enhancement and Preservation Overlay Policy language requires the following: restoration of existing or historic flowways through habitat preservation, enhancement, and creation with required site specific ecological and hydrological restoration plans; enhanced lake maintenance plans limiting herbicide, pesticide, and fertilizer, increasing lake bank stabilization measures, and establishing lake maintenance requirements; requiring connection to public water and sewer service and reclaimed water when available; use of Florida Friendly plantings with low irrigation requirements; implementation of water quality monitoring programs and increased water quality treatment for developed areas of the project; and eliminating row cropping agricultural uses. ES staff will work with the applicant during the

planned development process to implement the specific design details of the Restoration Strategy Plan and meet the requirements of the Lee Plan Environmental Enhancement and Preservation Overlay Policy language.

- The applicant proposes to phase the restoration of the farm fields following the schedule of residential development (basin by basin approach). Thus, the proposed ecological improvements to the site have the potential to occur over an extended (unknown) period of time.

To address this issue the Environmental Enhancement and Preservation Overlay Policy language requires an indigenous management plan which must include a phasing plan to be approved as part of the rezoning process. Therefore, the details of the phasing of the restoration will be established prior to any zoning approval and ES staff will work with the applicant to establish a realistic and definitive timeframes.

- The site is proposing 750 acres of preservation. These preserves will include exotic removal, re-grading and replanting/seeding/natural recruitment. Over time these areas will need continual maintenance to ensure that the restoration plants are surviving, the flowways are being maintained, and the areas are free of exotic infestation.

To address this issue the Environmental Enhancement and Preservation Overlay Policy language requires the project to develop a site specific ecological and hydrological restoration plan which includes at minimum excavation and grading plans, analysis of hydrological improvements and water budget, preliminary replanting plan, habitat restoration plan, success criteria, long term monitoring and maintenance (Indigenous Management Plan); to plat the preserve areas as separate tracts and dedicated to an appropriate maintenance entity (i.e. CDD or HOA must be created that will accept responsibility for perpetually maintaining the preservation requirements identified in the Planned Development); and record a Conservation Easement for a minimum of 55 percent of the planned development to be dedicated to the appropriate maintenance entity that provides Lee County, or some other public agency acceptable to Lee County, with third party enforcement rights. ES staff will continue to work with the applicant to implement the requirements of the overlay policy and the Restoration Strategy Plan during review of the corresponding residential planned development application maintenance, monitoring and success criteria.

CONCLUSIONS:

The DR/GR was created with specific conservation goals. As per the "Prospects for Southeast Lee County" report published in July 2008 these goals included: Maintaining and enhancing the surface and groundwater resources; Avoiding further loss of wetlands, and requiring any loss of wetlands within the DR/GR to be mitigated within the DR/GR; Restoring historic flowways; Providing connectivity between large, regionally significant preserves for mammal and herpefaunal movement; Restoration of historic ecosystems; and maintaining and enhancing wood stork foraging areas. These recommendations were incorporated into the Lee Plan upon creation of the Southeast Lee County Planning Community. Goal 33 and Objective 33.2 discuss the DR/GR

area as an area set aside for protection of natural resources including both water resources and preserve/habitat. Policies 33.2.1, 33.2.2, and 33.2.3 discuss the importance and value of connecting corridors and conservation areas to allow for flowway connections and wildlife movement through preservation, restoration, and long term protection measures such as conservation easements and indicates that Tier1 lands would provide critical connections to other conservation lands that serve as the backbone for water resource management and wildlife movement within the DR/GR. The Corkscrew Farms property is identified as Tier 1 on Map 1 page 4. Objective 60.5 and Policies 60.5.1, 60.5.2, & 60.5.3 discuss the long-term benefits of incorporating green infrastructure into the stormwater design encouraging incorporation of wildlife habitat, existing wetlands and natural flowways, and restoration of historic flowways. Objective 107.1 and Policies 107.1.2, and 107.2.8 discuss how the county will work with applicants to promote long term protection and enhancement of upland and wetland habitats through preservation of large interconnected systems and the formation of conservation easements over these areas. Finally, Policy 107.11.4 discusses how the county will work with applicants to protect and expand upon the Corkscrew Regional Ecosystem Watershed Greenway.

The Corkscrew Farms project is proposing to improve, preserve, and restore approximately 750 acres of the overall 1361.05 acre site as conservation easements. These preservation areas consist of existing native wetland and upland habitats as well as agricultural fields that will be restored back to native wetland and upland habitat. The preserves also will be re-graded in some areas to promote and restore historic flowways through the site, and in addition crossing of flowways have been reduced over current agriculture and ditching activities. The preservation areas are designed to connect and provide a corridor for wildlife to move through the site and abutting conservation lands. This will allow for large mammal movement for species such as the Florida panther and Florida black bear which currently use and have the potential to use the site for movement throughout the county. A CDD or other bondable entity will be created to ensure the long term maintenance of these preserve areas. Lake bank slopes within the proposed lakes and created flowways will be designed and planted per the current Land Development Code standards providing foraging areas for wading birds including wood storks. The Preliminary Restoration Strategy Plan and the clustered site design as proposed it is consistent with the intent of the DR/GR and the Lee Plan.

The following Lee Plan Goals, Objectives, and Policies support staff's analysis and findings:
Goal 33: Southeast Lee County. To protect natural resources in accordance with the County's 1990 designation of Southeast Lee County as a groundwater resource area, augmented through a comprehensive planning process that culminated in the 2008 report, Prospects for Southeast Lee County. To achieve this goal, it is necessary to address the inherent conflict between retaining shallow aquifers for long-term water storage and extracting the aquifer's limestone for processing into construction aggregate. The best overall balance between these demands will be achieved through a pair of complementary strategies: consolidating future mining in the traditional Alico Road industrial corridor while initiating a long-term restoration program to the east and south to benefit water resources and protect natural habitat. Residential and commercial development will not be significantly increased except where development rights are being explicitly concentrated

by this plan. Agriculture uses may continue, and environmental restoration may begin. This goal and subsequent objectives and policies apply to Southeast Lee County as depicted on Map 1, Page 2.

Objective 33.2: Water, Habitat, And Other Natural Resources. Designate on a Future Land Use Map overlay the land in Southeast Lee County that is most critical toward restoring historic surface and groundwater levels and for improving the protection of other natural resources such as wetlands and wildlife habitat.

Policy 33.2.1: Large-scale ecosystem integrity in Southeast Lee County should be maintained and restored. Protection and/or restoration of land is of even higher value when it connects existing corridors and conservation areas. Restoration is also highly desirable when it can be achieved in conjunction with other uses on privately owned land including agriculture. Lee County Natural Resources, Conservation 20/20, and Environmental Sciences staff will work with landowners who are interested in voluntarily restoring native habitats and landowners who are required to conduct restoration based upon land use changes. The parameters for the required restoration will be established in the Land Development Code by 2012.

POLICY 33.2.2: The DR/GR Priority Restoration overlay depicts land where protection and/or restoration would be most critical to restore historic surface and groundwater levels and to connect existing corridors or conservation areas (see Policy 1.7.7 and Map 1, Page 4). This overlay identifies seven tiers of land potentially eligible for protection and restoration, with Tier 1 and Tier 2 being the highest priority for protection from irreversible land-use changes. Lee County will evaluate this overlay map every 7 years to determine if changes in public ownership, land use, new scientific data, and/or demands on natural resources justify updating this map. This overlay does not restrict the use of the land in and of itself. It will be utilized as the basis for incentives and for informational purposes since this map will represent a composite of potential restoration and acquisition activities in the county.

Policy 33.2.3: It is in southwest Florida's interest for public and nonprofit agencies to actively pursue acquisition of partial or full interest in land within the Tier 1 areas in this overlay through direct purchase; partnerships with other government agencies; long-term purchase agreements; right of first refusal contracts; land swaps; and other appropriate means. These lands would provide critical connections to other conservation lands that serve as the backbone for water resource management and wildlife movement within the DR/GR. Tier 2 lands are of equal ecological and water resource importance as Tier 1 but have better potential to remain in productive agricultural use as described in Policies 33.2.5 and 33.2.6. Tier 3 lands and the southern two miles of Tiers 5, 6, and 7 can provide an important wildlife connection to conservation lands in Collier County and an anticipated regional habitat link to the Okaloacoochee Slough State Forest.

Objective 60.5: Incorporation Of Green Infrastructure Into The Surface Water Management System. The long-term benefits of incorporating green infrastructure as part of the surface water management system include improved water quality, improved air quality, improved water recharge/infiltration, water storage, wildlife habitat, recreational opportunities, and visual relief within the urban environment.

Policy 60.5.1: The County encourages new developments to design their surface water management systems to incorporate best management practices including, but not limited to,

filtration marshes, grassed swales planted with native vegetation, retention/detention lakes with enlarged littoral zones, preserved or restored wetlands, and meandering flow-ways.

Policy 60.5.2: The County encourages new developments to design their surface water management system to incorporate existing wetland systems.

Policy 60.5.3: The County encourages the preservation of existing natural flow-ways and the restoration of historic natural flow-ways.

Objective 107.1: Resource Management Plan. The county will continue to implement a resource management program that ensures the long-term protection and enhancement of the natural upland and wetland habitats through the retention of interconnected, functioning, and maintainable hydro ecological systems where the remaining wetlands and uplands function as a productive unit resembling the original landscape.

Policy 107.1.2: To increase protection of natural resources, the County will promote the formation of a public/private management team to coordinate area wide conservation easements.

Policy 107.2.8: Promote the long-term maintenance of natural systems through such instruments as conservation easements, transfer of development rights, restrictive zoning, and public acquisition.

Policy 107.11.4: The county will continue to protect and expand upon the Corkscrew Regional Ecosystem Watershed Greenway, a regionally significant greenway with priority panther habitat, through continued participation in land acquisition programs and land management activities and through buffer and open space requirements of the Land Development Code.

Corkscrew Farms Restoration Strategy

Kevin L. Erwin CE PWS
Kevin L. Erwin Consulting Ecologist, Inc.

February 18, 2015

Vision

To restore a key ecological feature within the DRGR by returning approximately 700 acres of Corkscrew Farms' over-drained agricultural lands back to productive, fully functioning and sustainable wetland habitats.

Measurable Restoration Goals

- Preserve all existing native wetlands onsite.
- Restore the historic flow ways on site.
- Restore and create historic hydric pine, cypress and marsh wetland habitats in existing agricultural land.
- Increase wildlife utilization by listed species, especially the wood stork.
- Increase biological diversity of wildlife onsite.
- Increase species richness of native vegetation communities.
- Open the existing berm along the project's north boundary to reestablish historic sheet flow from the north.
- Control surface water at an elevation determined to reestablish the surficial ground water profile in terms of both elevation and duration.
- Reestablish the historic groundwater profile.
- Improve hydrological conditions on adjacent public conservation lands.
- Reconnect wildlife corridors to adjacent public lands
- Remove all exotic and nuisance vegetation from the existing native wetlands and uplands.
- Significantly improve existing water quality conditions.

- Improvement to the current high water elevations seasonally experienced in the Burgundy Farm Subdivision.
- The restoration will limit the discharge of surface water to the Flint Pen Strand to predevelopment flows.

Introduction

The Farms occupies a strategic location in the DRGR immediately adjacent to the Airport Mitigation Park to the north and the Corkscrew Regional Mitigation Bank (CRMB) to the east. Kevin Erwin Consulting Ecologist, Inc. (KECE) has designed and implemented the successful restoration of the CRMB (SFWMD) and Imperial Marsh Preserve (Lee County 20/20) projects east of and adjacent to the Corkscrew Farms site.

The Farms property slopes from a high elevation of 28.0' in the northeast corner to 19.0' in the southwest corner. This significant drop in elevation along with the existing network of agricultural drainage canals and ditches creates an adverse impact to the hydrology of the site as well as the public conservation lands to the east and north by draining those properties. All surface water currently flows into Flint Pen Strand to the west via the Corkscrew Road drainage ditches.

Ground and surface waters that historically pooled on this site during the wet season are now quickly drained directly into the Corkscrew Road drainage ditches that parallel the roadway along the southern boundary of the site. The property is currently subject to agricultural uses including sod farming, row cropping and improved pasture. An agricultural berm extending along the north property line intercepts wet season sheet flow moving south from the Airport Mitigation Park and drains west into the vicinity of the Burgundy Farms subdivision which lies west of and adjacent to the site.

Summary of benefits resulting from the restoration

- Restoration of nearly 700 acres of historic wetlands at no cost to the public.
- Historic water levels and hydroperiods will be restored.
- Restoration will reestablish the historic groundwater profile.
- Restoration will improve hydrological conditions on thousands of acres of adjacent public lands to the north and east.
- Historic flow ways will be restored across the site.

- Water quality will significantly improve onsite
- Improved water quality and groundwater levels will benefit the adjacent Lee County Utilities well field.
- Surface water discharge to the Flint Pen Strand will be limited to predevelopment flows.
- Opening the northern berm to southerly surface flow will improve the current high water elevations seasonally experienced in the Burgundy Farm Subdivision.
- Wildlife utilization and species diversity onsite will significantly increase.
- The incorporation of this form of restoration with residential development will set a new, high standard for future development in Lee County.

Designing the Corkscrew Farms Restoration Plan

Ecological History

Work began when KECE conducted an ecological history of the site and surrounding lands to determine the predevelopment ecological and hydrological conditions. KECE relied in part on the DRGR study that the firm completed for Lee County in 2008. It was this study that identified the property as a Tier 1 Priority Restoration Site. 1953 aerial photographs (Figure 1 shows the subject property) from the Soil Conservation Service (now the National Resource Conservation Service), which were the clearest reliable representation of historic conditions, were scanned and plotted for mapping by KECE to determine the approximate historic hydrological conditions for the entire study area.

The major habitat associations identified relate to specific hydroperiod and water depth conditions (hydropatterns), with each being color-coded to illustrate the historical hydropatterns in the DR/GR (Figure 2 shows the subject property).

KECE found that during a significant part of any year with normal rainfall much of the DR/GR, including the Farms, had historically been flooded or had groundwater levels close to the surface. The deeper ponds, cypress swamps, and marshes have been assigned dark blue with progressively shallower, shorter hydroperiod (shorter duration of inundation) wetlands being assigned lighter shades of blue (Figure 2). This representation illustrates the location of historic flow ways and headwater sheet flow areas and allows us to roughly calculate the historic capacity for water storage during an annual cycle.

Figure 1.

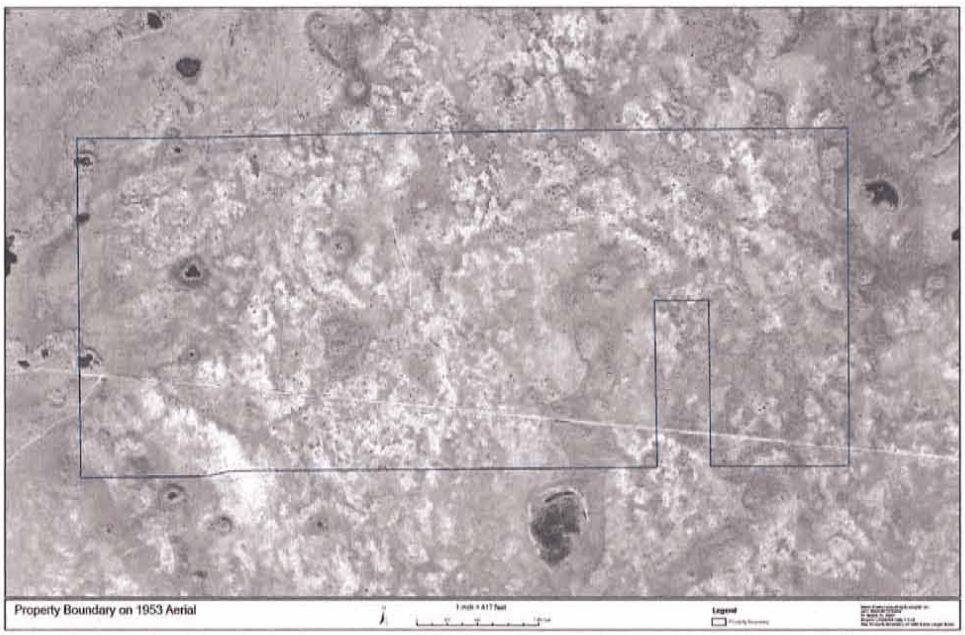
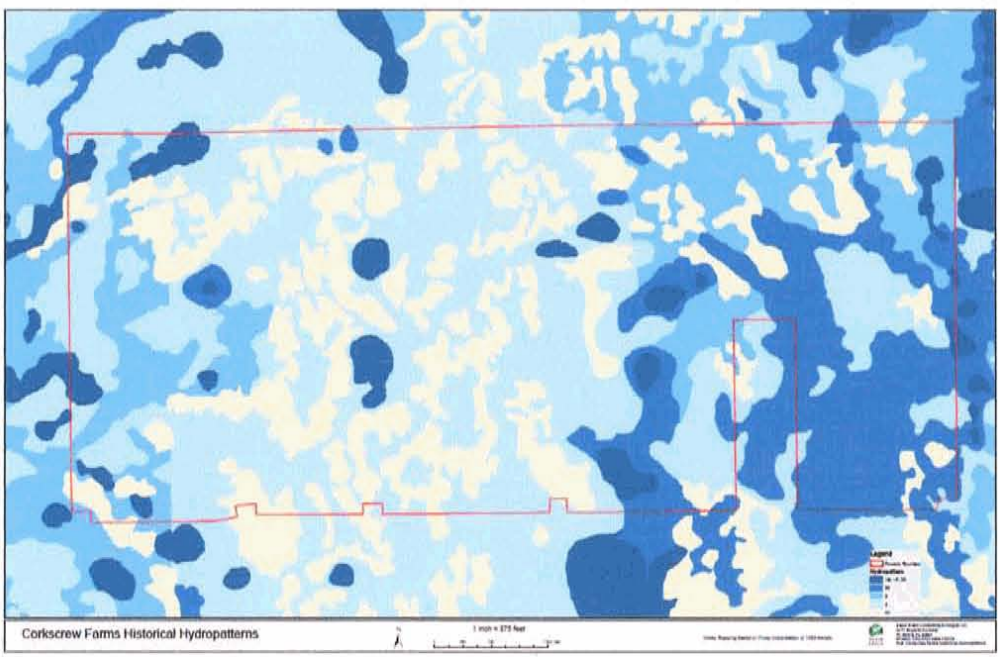


Figure 2.



Existing conditions

With the long-term goal of creating a plan to restore wetlands by reversing manmade site drainage, the first year objective is obtaining data to support engineering and construction plans based on hydrologic models and flora and fauna sampling locations for the sites. The models require information on the current onsite and offsite conditions to be determined by previous studies, baseline hydrology and wildlife information, which requires data collection. Data collection and analysis will be undertaken by KECE and Barraco.

In June of 2014 we installed shallow groundwater monitoring wells and rain gauges across the site to collect existing conditions hydrological data. This data along with the inflow and out flow calculations provided by the project engineer (Barraco) will provide the information required to determine the approximate amount of water that remains available to "rehydrate" the drained farm fields. Similar data, if available, will be requested from the public mitigation lands located to the north and east of the Farms.

Available topographic data (Lee County LiDAR) will be field verified and used by Barraco and KECE to estimate future wet season water levels and hydroperiods on the site given various restoration scenarios we evaluate.

Planning

Each scenario evaluated by Barraco and KECE will involve different combinations of ditches, ditch plugging and risers (water control structures) to "back-up" the water in cascading stages across the site from northeast to southwest. The scenario that best retains water onsite in manageable basins and mimics the historical hydropatterns, by raising the groundwater levels, increasing hydroperiods and restoring the historic flow ways, will be used as the basis for the restoration plan. Surface water will once again be allowed to sheet flow into the site from the lands north and east of the Farms at selected locations where it is now blocked by berms and currently re-directed by farm ditches and canals.

The restoration targets (appropriate vegetation community types for the expected post-restoration hydrological conditions), will be the same as those selected and now doing very well at the CRMB. The restored farm fields will contain a mixture of very shallow (0 to 3" depth) hydric pine forest, slightly deeper shallow cypress and marsh (3" to 12". Unfilled, ditch segments (within basins/no positive outfall) will be re-contoured to become deep marshes and ponds which will provide wood storks with the early nesting season (November-December) foraging habitat that is now rare in this area. National Audubon Society research suggests that wood stork nesting declines in this region are linked to loss of shallow wetlands.

There are a few, drained cypress and hydric pine wetlands remaining on the site. These areas are heavily infested with problematic exotic plant species. They will first be cleaned of all exotics then rehydrated as part of the overall restoration plan.

In order to manage and convey surface water on the site several flow ways will be constructed as part of the restoration plan. These flow ways will be located in the vicinity of the historical flow ways. The constructed flow ways design resembles natural sloughs with wide floodplains. Flow way water levels will be maintained by water control structures, thus allowing water to be stored upstream of the structure and allowing storm flows to pass over or through the structure. A major water control structure will be located at the southwest corner of the site where all surface waters will eventually collect and discharge into the Corkscrew Road ditch and eventually into Flint Pen Strand to the west.

When completed the design and phasing of the restoration plan will resemble the restoration plan KECE developed for the CRMB (Figure 3).

Figure 3.

Offsite Benefits

Historically, a high groundwater table and shallow surface water flowed slowly from the northeast to the southwest. When the Farms agricultural drainage system is replaced by restored wetlands and flow ways the elevated groundwater table will reduce the drainage and extend the hydroperiods of the wetlands within the adjacent Airport Mitigation Park and the CRMB. Seasonal high water levels in the Farms restored wetlands will be managed to match the preferred water levels on the adjacent public lands. The adjacent lands will not experience an increase or decrease in seasonal high water levels however; a restoration of normal hydroperiods (based on normal rainfall) will result.

Prior to the restoration of the CRMB and the Imperial Marsh Preserve the uncontrolled drainage of the lands along the north side of Corkscrew Road quickly drained these properties as well as the adjacent public lands (Airport Mitigation Park) to the north. As the CRMB hydrology was restored followed by the Imperial Marsh Preserve restoration the regional hydrology improved with less water being drained south into the Corkscrew Road ditch. The Farms wetland restoration will complete the last section of restoration of the agricultural drainage system, thus improving hydrological conditions to the north and east while also benefiting the Burgundy Farms subdivision to the west.

No adverse impacts to adjacent public lands or private properties will result from the planned residential development and wetland restoration only a net improvement in conditions.

Expected benefits to wildlife

The restoration of native upland pine forest, cypress and hydric pine wetlands and large expanses of pasture will result in significant benefits to wildlife. These restored habitats are large and will be connected to similarly restored public lands to the north and east thus reestablishing wildlife corridors for species such as panthers and bears.

In normal rainfall years, restored hydric pine, cypress and marsh habitats with extended hydroperiods will provide foraging and nesting habitats for many wetland dependent species including woodstorks and other wading birds. Large numbers of woodstorks will forage in the restored wetlands and particularly the deeper pools created from the enhanced ditch segments and berm removal areas.

There will be no adverse impacts to upland or wetland forests as a result of the restoration or residential development. These forested areas, now infested with exotic and nuisance species of vegetation, will be enhanced through exotic control thus significantly improving potential habitat for species like the fox squirrel, indigo snake. bonneted bat.

Existing farm operations that minimize the site's utilization by species like burrowing owls and Caracara will be discontinued. Row cropping and sod farming will be replaced with restored habitats and land management techniques more conducive to successful nesting and breeding of these and other wildlife species..

KECE's monitoring of similar restoration projects, like CRMB and Little Pine Island, has shown significant increases in biological diversity from the baseline to the restored condition. Many resident and migratory species of birds, reptiles and mammals not currently utilizing the site will quickly be attracted to the restored conditions. Wildlife diversity and density will be recorded by KECE at selected times throughout the wet and dry season to measure changes in ecological values. Changes in vegetative cover will also be periodically summarized by KECE. These data will be essential to gauge the success of the restoration effort and any adaptive management required.

Shallow wetlands of the type that once dominated the Corkscrew area are a priority habitat for wood storks, wading birds and other wetland dependent species. These wetlands contain, and during seasonal dry periods concentrate, the small forage fish nesting wood storks and their chicks need. The most important wood stork nesting site is at Audubon Corkscrew Swamp Sanctuary. From that site storks forage in a radius of approximately 30 kilometers, which is referenced as the core foraging area. Audubon's research indicates the loss of more than 82% of the historic extent of shallow wetlands in the form of wet prairies within the core foraging area. This loss of wetlands is thought to be the most significant factor in regional wood stork decline in the Corkscrew watershed and other parts of the Western Everglades.

Audubon's wood stork colony located within the Corkscrew Swamp Sanctuary boasts the historically largest and arguably most important individual wood stork colony in the United States. Despite this status, the colony also holds the dubious distinction of being among the least stable within its US breeding range. Wood storks are a keystone indicator species for the health of southwest Florida's wetlands and are one of 13 indicator species for Everglades restoration listed by the South Florida Ecosystem Restoration Task Force. The SFWMD and Army Corps of Engineers (ACOE) use wood stork distribution and abundance as an indicator of restoration progress and success.

In addition to the significant wood stork benefits the Corkscrew Farms restoration project will provide, there will be ecological lift to many species that are dependent on shallow wetlands for portions of their life cycles, including a number of other listed species. The restoration will benefit wading birds such as tri-colored herons, little blue herons, white ibis, roseate spoonbills, glossy ibis and snowy egrets as well as mammals such as panthers, black bears and fox squirrels. Migratory and resident birds will also benefit along with the community of aquatic fauna (fish, invertebrates, reptiles and amphibians) that will occupy the restored wetlands. KECE ecologists expect to see the

prey base (fish and invertebrates) increase and concentrate early in the nesting season attracting foraging storks and other wading birds. Other increases should include mammal traffic and diversity of other wildlife as the water levels rebound to near historic patterns and native plant communities become established.

Implementing the restoration plan

The construction of the Farms wetland restoration will be supervised by the project ecologist, Kevin L. Erwin Consulting Ecologist, Inc. The firm has designed and managed the construction and maintenance of more than 100 restoration projects over the past 35 years, many within Lee County such as; CRMB, Imperial Marsh Preserve, Prairie Pines Preserve, Gateway; Six Mile Cypress Preserve North, Western Cape Coral/Matlacha Pass, Florida Gulf Coast University and the Little Pine Island Wetland Mitigation Bank. This experience is a key element of the successful implementation of the Farms restoration plan.

Phasing

The construction activity will be phased according to the activity and season following the schedule of residential development. Initial activity will focus on removing exotic vegetation of all proposed restoration and enhancement areas (pastures and native habitats). Preparation of fields will be accomplished in phases, basin by basin, commencing at the upstream end of the system. Water levels will be restored in a basin only when all other restoration activities are finished in that basin.

Restoration Actions

Restoration in each basin will include a combination of the following activities. Detailed time-lines will be prepared prior to construction and used to manage all planned activities.

1. Exotic vegetation removal from natural areas. All natural wetland and upland areas will be cleaned of exotics and nuisance species prior to any hydrological restoration. This enhancement activity typically involves foliar treatments of approved herbicides on herbaceous species and basal applications to trees such as Schinus and Melaleuca.

2. Prescribed burning. Fire is an important tool for maintaining the upland habitats following exotic removal and may also be used to prepare the pasture areas for restoration.

3. Wildlife mitigation. Wildlife permitting will likely require management protocols for the listed species onsite, such as burrowing owls, to provide protection and enhancement during the restoration activities. All residential development related

panther and woodstork impacts will be offset through the purchase of mitigation bank credits.

4. Removing perimeter ditch berms to natural grade. The berm along the north perimeter of the site will be opened to provide a reconnection of the flow ways offsite and through the restored sections of the Farms. Openings will be located to minimize disturbance to mature trees such as pines and oaks that are now established on sections of the berm

5. Removing farm field ditch berms and backfilling ditch segments. Sections of ditches will be backfilled using the adjacent berms which will be removed to an elevation equal to or less than natural grade. This action eliminates any drainage function and will provide additional wading bird habitat and biological reservoirs for forage species.

6. Raising the groundwater table. This action will involve manipulating the water control structures to enable an evaluation of seedbank response and natural recruitment.

7. Herbiciding and tilling farm fields for seed bank enhancement. This alternating process of herbiciding followed by tilling will control exotics and nuisance plant species while stimulating the natural recruitment of desirable native species from the seed bank.

8. Planting and direct seeding tree, shrub and herbaceous species. A combination of planting or direct seeding may be done within those areas of the restoration site where natural recruitment from the seedbank is lacking. Activities such as row cropping and sod production often impact the seedbank found in the shallow O and A-horizons of the soil. Bare-root seedlings of trees and shrubs, such as slash pine and cypress, will be selectively planted to enhance the process of farm field restoration. Some localized bare-root plantings or direct seeding may be used to enhance the areas where berms have been removed and ditches re-shaped as well as flow way construction.

Enhanced tree plantings may be incorporated along the borders of the residential development footprint to improve the aesthetic appeal of the early stages of restoration. These plantings would be within a 50 ft. wide zone of the restoration area, adjacent to all development (back of lots), and would be planted on 20 ft. centers with shrubs planted on alternating 20' centers subject to review and approval by Lee County and the Florida Fish and Wildlife Conservation Commission.

9. Construction of flow ways and installation of water control structures. These ecological engineering design components will be constructed and installed as each phase as the restoration progresses in a basin by basin sequence. The water control structures utilized will vary from culvert risers to concrete weirs, very similar to the CRMB and Imperial Marsh restoration projects.

The culvert risers will allow the project ecologist to adaptively manage the water levels in each basin. Having this capacity to manage the water levels this way is important, especially during the first few years of a forested wetland restoration project. The concrete weirs will control water levels over larger areas of the site particularly within the flow ways which will be collecting surface water and like a natural slough, will provide direction to the surface water sheet flow onsite.

The constructed flow ways will vary in width from 50 to 150 ft. width with an excavated cross-section that resembles a natural slough complete with a deeper, meandering stream channel. The broad and shallow side-slopes planted with wetland species will be flooded as wet season water levels rise behind the water control structures. As the wet season ends, water levels will slowly recede back into the stream channel providing forage opportunities for wading birds like the wood stork.

9. Construction monitoring and adaptive management of the restoration. All of the restoration activities will be monitored by the project ecologist to provide guidance on the continuing restoration work and also information to agencies as required.

The following photos of similar restoration activities were taken at the CRMB.

Removing invasive exotic vegetation (2003)

Pasture before restoration (2004)

Disking former agricultural fields in early stages of restoration (2004)

Using prescribed fire as a management tool (2005)

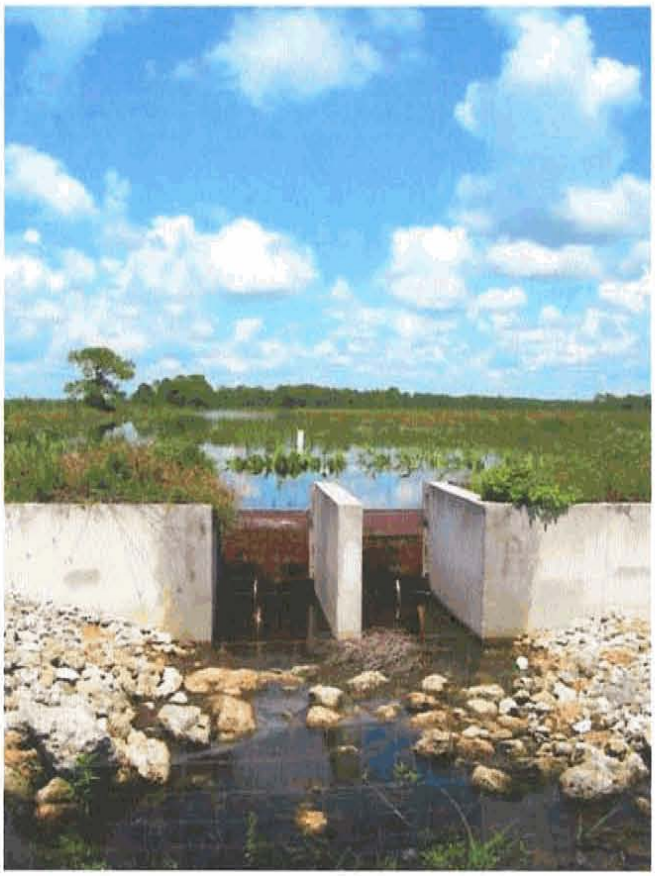
Seeding hydric pine flatwoods pasture restoration area (2005)

Planting bare root pine tree seedlings in restored hydric pine habitat (2007)

Hydric pine restoration area (2008)

Backfilling agricultural ditches (2008)

Backfilled and graded ditches to become hydric pine flatwoods (2008)



Main control structure, adjacent to the Farms, on Corkscrew Road (2009)

Releasing water to maintain appropriate water levels (2009)

Breaching existing berm to restore sheet flow (2008)

Restored sheet flow through breached berm (2008)

Created freshwater marsh (2008)

Monitoring restoration results (2009)

Mixed flock of wading birds (2009)

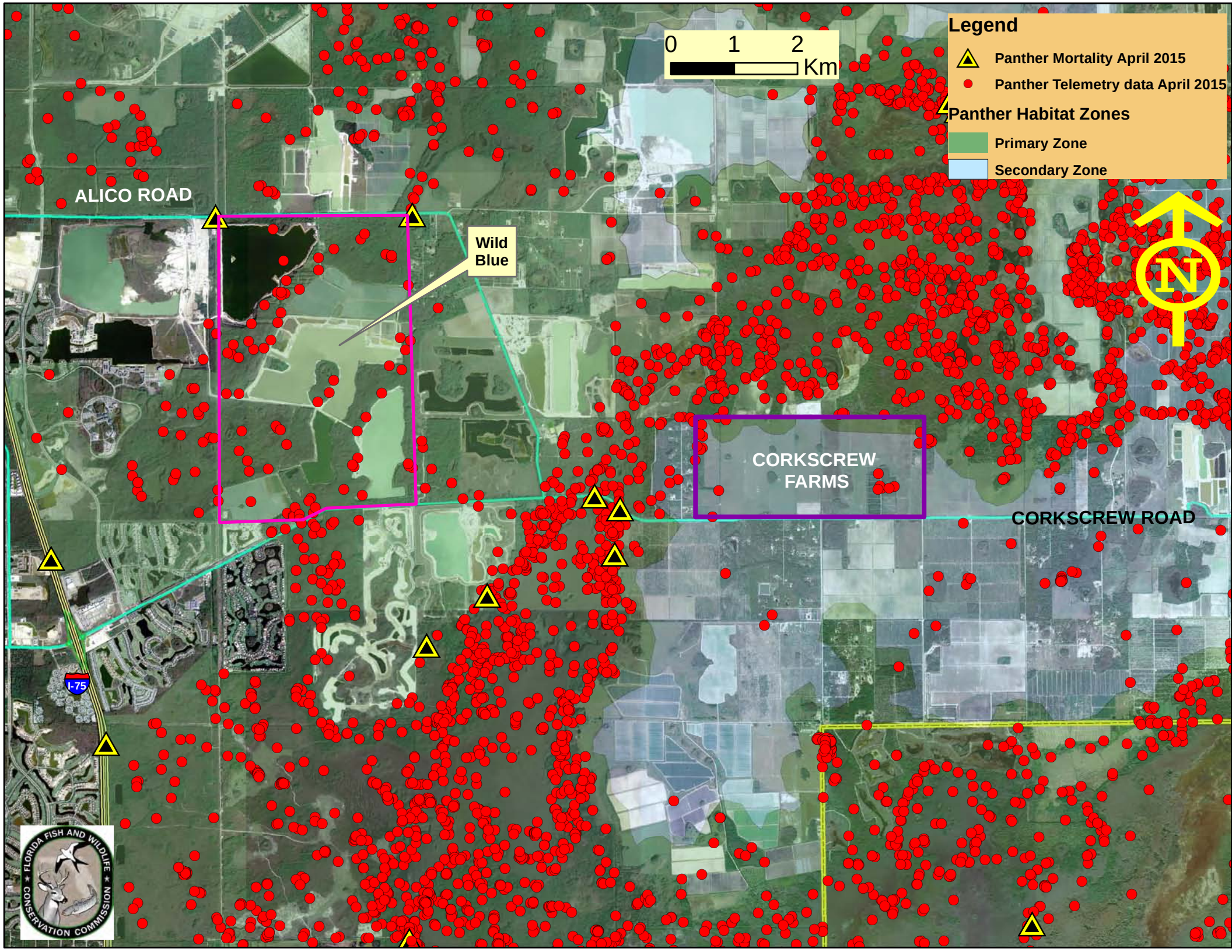
Long-term monitoring and management of the restoration areas.

The proposed design of the Corkscrew Farms wetland restoration focuses on outcomes and restoration targets that will be sustainable for many years with the guidance of an appropriate long-term management plan which will be developed and adopted.

A key to successful, cost-effective, long-term management will be the adoption of a long-term monitoring plan in the restoration area. A long-term monitoring plan will provide ecological data such as water levels, vegetative cover and wildlife utilization. This information will guide the adaptive management of the site.

The restoration areas will be identified as conservation areas as the project is approved and will be placed in conservation easements. The conservation easements will prevent the encroachment of future development as well as activities that are incompatible with the goal of sustaining the restored conservation areas in good ecological health. These areas will be physically managed following the long-term management plan prepared by the project ecologist, implemented by the Home Owners Association with the assistance of an appropriately skilled environmental professional.

Long term management activities required within the restored conservation areas will include periodic surveys of vegetation and wildlife within the restoration area, control of exotic and nuisance plant species, regulating water levels, maintenance of the water control structures and access.


Legend
Panther Mortality April 2015
Panther Telemetry data April 2015
Panther Habitat Zones
Primary Zone
Secondary Zone
0 1 2
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ALICO ROAD
Wild Blue
CORKSCREW FARMS
CORKSCREW ROAD
I-75
FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

LEE COUNTY
SOUTHWEST FLORIDA

DEPARTMENT OF TRANSPORTATION

Memo

To: Brandon Dunn, Principal Planner
Planning Division

From: Andy Getch, Planning Manager AG
LCDOT

Date: April 21, 2015
Subject: Corkscrew Farms (CPA2015-00001)

LCDOT staff has reviewed the subject application. The existing FLUM designation of DRGR allows 130 residential dwelling units in the subject area. The application proposes an additional subsection (4) to Lee Plan Policy 33.3.3. This added language includes a new FLUM Overlay designation to allow 1,325 residential dwelling units.

Staff has several concerns with the applicants proposed new subsection (4)(c). This subsection identifies Corkscrew Road operational improvements at the intersections of Corkscrew Road with (Cypress Shadows Boulevard identified as) the Preserve at Corkscrew, and with Bella Terra (Boulevard). LCDOT does not recommend inclusion of subsection (4)(c) in Policy 33.3.3 as outlined below.

The first concern is the proposed policy identifies improvements that are defined as site-related. The Lee County Land Development Code Section 10-1 defines site-related improvements as follows:

> *Site-related road improvements* means road capital improvements and right-of-way dedications for direct access improvements to the development in question. Direct access improvements include but are not limited to the following:
>
> (1) Site access points and roads;
>
> (2) Median cuts made necessary by those access points or roads;
>
> (3) Right and left turn and deceleration or acceleration lanes leading to or from those access points or roads;
>
> (4) Traffic control measures for those access points or roads;
>
> (5) Access or frontage roads that are not shown as having been considered in impact fee calculation and so identified on figure 2 in the March 1989 report entitled "Lee County Impact Fee Transportation Data Final Report," which document has been placed on file with the clerk of courts and which is incorporated in this section by reference; and
>
> (6) Roads or intersection improvements whose primary purpose at the time of construction is to provide access to the development.

The proposed improvements "the construction of a northbound to westbound channelized receiving acceleration/deceleration lane in the median to improve the left-out movement; construction of a median divider with a channelized left-turn lane on Corkscrew Road; traffic signalization; or comparable operational improvements" all meet the definition of a site-related improvement, not for the applicant, but for the developments Preserve at Corkscrew, Bella Terra and potentially for the property to the north currently in review as WildBlue (DCI2014-00009/CPA2014-00004).

Staff does not recommend insertion of language to perform direct access site-related improvements in a comprehensive plan policy. Direct access site-related improvements are initially determined during review of a local development order. A Traffic Impact Statement submitted with a local development order for larger developments includes detailed intersection and turn lane analysis. This includes turn lane geometry and intersection operation. Identified operational concerns affecting mainline traffic flow may precipitate further staff review of site-related intersection needs. As a result, intersection modifications may be required by staff or funded by the "development in question" at a later time. Bella Terra and The Preserve at Corkscrew are in the Village of Estero. Further development activity will be reviewed by the Village. Any proposed improvements to Corkscrew Road will be reviewed by Lee County. It is staffs understanding that the applicant is offering this potential intersection improvement requirement as a goodwill gesture. If that is the case, there are more appropriate participation options. Options available to both the applicant, and to adjacent developments, include funding the intersection improvements directly or proposing improvements through the development order review process.

The second concern with the proposed policy is that the addition of traffic signal(s) at the project entrances will change the roadway segment from uninterrupted flow to an interrupted flow condition. This will likely result in the reduction of available capacity on Corkscrew Road and potentially accelerate capacity deficiencies on Corkscrew Road as traffic volumes increase.

The third concern with applicants proposed policy is specific to the passage "The Corkscrew Road operational improvements must be agreed to with the Lee County DOT and designed before the issuance of the 50th residential building permit. The operational improvements must be installed before the issuance of the 150th residential building permit, provided that all approvals and permits have been issued." A development order approval would allow the platting of a subdivision. Platted residential development lots only require a building permit and are typically applied for by the home builder or lot owner, not the original developer. This is problematic for tracking and enforcement. An agreement to participate in intersection improvements does not require a comprehensive plan policy.

LCDOT has concerns that go beyond site-related intersection improvements. Staff concerns relate to potential area infrastructure deficiencies as outlined below.

The following table lists planned highway improvements in the area:

Table 1: Lee Plan Map 3A Area Improvements

Roadway segment	From	To	Improvement	Plan Status
Alico Connector	Greenmeadow Road	Immokalee Road (SR 82)	2 to 4 lanes	Cost Feasible 2026-2035*
Alico Road	Ben Hill Griffin Parkway	CR 951 Extension	2 to 4 lanes	CIP 2016/17**
Alico Road	CR 951 Extension	Greenmeadow Road	2 to 4 lanes	Cost Feasible 2026-2035*
Ben Hill Griffin Parkway	FGCU Boulevard	College Club Drive	4 to 6 lanes	MPO Needs**
Corkscrew Road	Three Oaks Parkway	Ben Hill Griffin Parkway	4 to 6 lanes	MPO Needs**
CR 951 Extension	Corkscrew Rd	Alico Road @ Airport Haul Road	New 4 lanes	Cost Feasible 2026-2035* **
East-West Access Road	Ben Hill Griffin Parkway	Airport Haul Road	New 2 lanes	Cost Feasible 2016-2025* **
I-75	Collier County line	Dr Martin Luther King Jr. Boulevard (SR 82)	4 to 6 lanes	MPO Needs **

*Based on the Lee County Metropolitan Planning Organization (MPO) 2035 Long Range Transportation Plan (LRTP). The LRTP is in the process of being updated by the MPO.
**Projects beyond a 3 mile radius from the subject property

Map 3A of the Lee Plan had identified Corkscrew Road 4-laning from Ben Hill Griffin to west of Alico Road as a financially feasible project in the 1990's. Corkscrew Road 4-laning became a reserve (or needs) project in the early 2000's. At that time Map 3A also included an extension of Estero Parkway (fka Koreshan Boulevard) from Ben Hill Griffin Parkway to Corkscrew Road as a reserve project. The evaluation of Estero Parkway extension east of Ben Hill Griffin Parkway became connected with the CR 951 Preliminary Development and Environmental Study in the mid 2000's. Neither project is on the current MPO LRTP or Lee Plan Map 3A. The MPO LRTP is in the process of being updated for the year 2040.

This project has frontage on Corkscrew Road, a County maintained arterial.

The Lee Tran Transit Development Plan does not identify existing or planned public transit routes in walking distance of the proposed project. There are no existing sidewalks or bike lanes along the application area frontage of Corkscrew Road. Lee Plan Map 3D-1, Lee County Bikeway/Walkways Facility Plan, shows a future shared use path, for both bicycle and pedestrian use, on Corkscrew Road.

There are specific transportation analysis requirements in the CPA application for a five-year short-range and a twenty-year long-range analysis of conditions. The long range analysis corresponds with the MPO transportation model and planned roadway network in the Lee Plan. Analysis requirements are specified on pages 5 and 6 of the CPA application form and are contained in the subject application. LCDOT staff finds that the submitted Dec. 18, 2014 traffic study is consistent with CPA application requirements.

The traffic study indicates that with the project, all road segments in the study area will meet or exceed the adopted level of service (LOS) issues in the five-year analysis and long range analysis.

While the traffic study indicates Corkscrew Road will operate at an acceptable LOS from Cypress Shadows Blvd to Alico Road, LCDOT staff is concerned that Corkscrew Road cannot accommodate the traffic from this project, and other nearby approved and proposed projects. As a result a deficiency may be created on Corkscrew Road, as well as consideration to accelerate other area road widening projects. See F.S. 163.3180:

163.3180 Concurrency.—
(h) 4. As used in this subsection, the term "transportation deficiency" means a facility or facilities on which the adopted level-of-service standard is exceeded by the existing, committed, and vested trips, plus additional projected background trips from any source other than the development project under review, and trips that are forecast by established traffic standards, including traffic modeling, consistent with the University of Florida's Bureau of Economic and Business Research medium population projections. Additional projected background trips are to be coincident with the particular stage or phase of development under review.

(i) If a local government elects to repeal transportation concurrency, it is encouraged to adopt an alternative mobility funding system that uses one or more of the tools and techniques identified in paragraph (f). Any alternative mobility funding system adopted may not be used to deny, time, or phase an application for site plan approval, plat approval, final subdivision approval, building permits, or the functional equivalent of such approvals provided that the developer agrees to pay for the development's identified transportation impacts via the funding mechanism implemented by the local government. The revenue from the funding mechanism used in the alternative system must be used to implement the needs of the local government's plan which serves as the basis for the fee imposed. A mobility fee-based funding system must comply with the dual rational nexus test applicable to impact fees. An alternative system that is not mobility fee-based shall not be applied in a manner that imposes upon new development any responsibility for funding an existing transportation deficiency as defined in paragraph (h).

Traffic count station #249 is on Corkscrew Road east of Stoneybrook Golf Drive. At that location, the Average Annual Daily Traffic (AADT) was 13,000 in 2013 and 15,780 in the year 2014. Based on current data, the peak hour peak season peak directional traffic volume is 759.

Corkscrew Farms also has submitted a zoning application, DCI2015-00004. The zoning traffic study indicates Corkscrew Farms will add 430 peak hour, peak direction trips to Corkscrew Road east of Ben Hill Griffin Parkway. This development is not contemplated in the socioeconomic data used as the basis for the current LRTP. Corkscrew Shores (DOS2013-00034), Preserve at Corkscrew (DOS2011-00002), and Bella Terra (multiple DOS cases) have approved development orders and are under construction. These area projects are not fully reflected in the socioeconomic data for the current LRTP. The 2014 Concurrency Report forecasts an additional 430 peak hour, peak directional traffic volume on this segment. Since the data was compiled for the concurrency report, there have been additional dwelling units permitted.

Two other current applications under CPA and Zoning review estimate additional traffic volumes to this roadway segment. Adding the volumes from Corkscrew Crossing (DCI2014-00022) and WildBlue (DCI2014-00009/CPA2014-00004) traffic studies substantially increases the traffic volume (by 400 in the peak hour, peak direction) on Corkscrew Road east of Ben Hill Griffin Parkway.

The Dec. 18, 2014 CPA analysis utilized service volume (1640) as an uninterrupted flow facility for Corkscrew Rd. This assumes Corkscrew Road will have no traffic signals east of Ben Hill Griffin Parkway. Installation of traffic signals in the future would substantially reduce the roadway service volume. Likely future locations for traffic signals are at the intersections of Corkscrew Road with future CR 951 and the intersection of Corkscrew Road with Alico Road, when signal warrants are determined to have been met. As noted above, the applicant is proposing construction of up to two new traffic signals on Corkscrew Road at private development entrances.

The Dec. 18, 2014 traffic study was performed consistent with the CPA requirements and the approved methodology. However, approved and proposed area projects, including Corkscrew Farms, will require additional operational and traffic analysis to determine the cumulative effect of area development and any developer contributions or additional transportation mitigation beyond roads impact fees. The purpose of this analysis is to identify timing of current planned improvements and any additional area improvements to Corkscrew Road east of Ben Hill Griffin Parkway, Estero Parkway extension east of Ben Hill Griffin Parkway, Alico Road from CR 951 to Greenmeadow Road and CR 951 from Corkscrew Road to Alico Road.

LW/AG

Matthew A. Noble
ANoblePlan, LLC
anobleplan@gmail.com
(239)898-5182

April 27, 2015

Brandon Dunn
Principal Planner
Lee County Division of Planning
1500 Monroe Street
Fort Myers, FL. 33902

RE: CPA20015-00001 Corkscrew Farms LPA Additional Info

Dear Brandon:

This letter provides the information that you requested on April 22, 2015. You asked that the applicant provide 14 copies of the application materials, confirmation of the language that the applicant is requesting, as well as an estimate of the restoration costs associated with the project. Please find 14 copies of the application materials attached to this letter. The applicant is comfortable that the applicant's objective to restore the Corkscrew Farms property is achievable with the County proposed "Environmental Enhancement and Preservation Communities" overlay and associated plan amendment language. Incentives are offered to developers that meet restoration, maintenance, and other design requirements described in the "Environmental Enhancement and Preservation Communities" overlay, as a way to offset the significant costs for restoration and maintenance of existing or historic groundwater and surface water resources and wildlife habitat.

The Ecological and Hydrological Restoration of Corkscrew Farms will restore a key ecological feature on a Tier-1 property within the DRGR by returning approximately 728 acres of over-drained agricultural landscape back to fully functioning and sustainable wetland and wildlife habitats.

In addition, rather than taking advantage of the expansive and expensive project restoration work as credits to offset panther and wood stork development impacts on-site, Corkscrew Farms has decided it would separately acquire credits from an approved panther and wood stork bank, whereby making the restoration and wildlife credits stand-alone regional benefits.

Of the 1,361 acres of land that creates the Corkscrew Farms development, more than 60% will be set aside as open space including 728 acres of restoration. The average cost of restoration,

wildlife mitigation, and 5-years of post-construction maintenance/monitoring will be approximately $10,165 per acre. It should be noted that the cost shown relates to 2015 pricing without escalation and does not include the necessary design and permitting fees. Also, as required in Policy 33.3.4(2)(d) the perpetual restoration maintenance responsibility will be handled by the project HOA or CDD. All of the proposed work follows the vision outlined in the DRGR "Dover, Kohl" study and is accomplished at no cost to the county.

Thank you for your attention in this matter. Please do not hesitate to contact me if you need any additional information. We are looking forward to the LPA hearing in May.

Sincerely,

Matthew A. Noble

LEE COUNTY
SOUTHWEST FLORIDA

Lee County Board of County Commissioners
Department of Community Development
Division of Planning
Post Office Box 398
Fort Myers, FL 33902-0398
Telephone: (239) 533-8585
FAX: (239) 485-8344

CPA2015-00001

RECEIVED
APR 28 2015
COMMUNITY DEVELOPMENT

APPLICATION FOR A COMPREHENSIVE PLAN AMENDMENT

PROJECT NAME: Corkscrew Farms

PROJECT SUMMARY:

The application seeks to provide the incentives envisioned in the Lee Plan to enable applicants to provide enhancement, restoration, conservation, and protection of open space, flowways, surface water, groundwater and other features of Tier I Priority lands through the adoption of a Tier 1 Priority Restoration Overlay and the adoption of the Overlay for the Corkscrew Farms property with the adoption of the strategy for the implementation of the overlay which includes conditions and criteria for the enhancement, restoration, improvement, conservation and protection of open space, flowways, surface water and groundwater while providing additional residential units as an incentive to perform certain works, provide improvements and protect certain properties. The Corkscrew Farms Strategy includes conditions which provide for enhanced hydrology which will result in the property functioning in a manner that more closely mimic historic conditions while permitting the development of 1,325 single family dwelling units that includes the development of accessory amenity uses. The increased number of units and the related accessory uses are permitted as an incentive to allow the restoration activity on the Corkscrew Farms property which is identified on Lee Plan Map 1 as a Tier 1 Priority Restoration property. The Restoration Strategy is designed to enhance the hydrology of adjacent public conservation lands. The amendment includes conditions that require mitigation. The Corkscrew Farms Restoration Strategy includes the re-creation of historic flowways and wetlands. The project will be required to connect to Lee County Utilities for potable water and sanitary sewer services and placement of an Overlay on Map 17 which provides a benefit from an environmental perspective.

Plan Amendment Cycle: ☒ Normal ☐ Small Scale ☐ DRI

APPLICANT – PLEASE NOTE:

Answer all questions completely and accurately. Please print or type responses. If additional space is needed, number and attach additional sheets. The total number of sheets in your application is: _____

Submit **6** copies of the complete application and amendment support documentation, including maps, to the Lee County Division of Planning. Up to 90 additional copies will be required for Local Planning Agency, Board of County Commissioners hearings and the Department of Community Affairs' packages. Staff will notify the applicant prior to each hearing or mail out.

I, the undersigned owner or authorized representative, hereby submit this application and the attached amendment support documentation. The information and documents provided are complete and accurate to the best of my knowledge.

Signature of Owner or Authorized Representative

1-12-15
Date

Joseph Cameratta
Printed Name of Owner or Authorized Representative

I. APPLICANT/AGENT/OWNER INFORMATION (Name, address and qualification of additional planners, architects, engineers, environmental consultants, and other professionals providing information contained in this application.)

Applicant: Camprop, Inc. – Joe Cameratta
Address: 4954 Royal Gulf Circle
City, State, Zip: Fort Myers, FL 33966
Phone Number: (239) 425-8662 Email: JCameratta@camerattacompanies.com

Agent*: Matt Noble, ANobleplan, LLC
Address: 1842 Seafan Circle
City, State, Zip: North Fort Myers, FL 33903
Phone Number: (239) 898-5182 Email: anobleplan@gmail.com

Owner(s) of Record: Resource Conservation Holdings, LLC
Address: 506 Andrews Avenue
City, State, Zip: Delray Beach FL 33483
Phone Number: Email:

* This will be the person contacted for all business relative to the application.

II. REQUESTED CHANGE

A. TYPE: (Check appropriate type)

☒ Text Amendment
☒ Future Land Use Map Series Amendment (Maps 1 thru 24)
List Number(s) of Map(s) to be amended: Maps 6, 7, and 17

1. Future Land Use Map amendments require the submittal of a complete list, map, and two sets of mailing labels of all property owners and their mailing addresses, for all property within 500 feet of the perimeter of the subject parcel. An additional set of mailing labels is required if your request includes a change to the Future Land Use

Map (Map 1, page 1). The list and mailing labels may be obtained from the Property Appraisers office. The map must reference by number or other symbol the names of the surrounding property owners list. The applicant is responsible for the accuracy of the list and map.

At least 15 days before the Local Planning Agency (LPA) hearing, the applicant will be responsible for posting signs on the subject property, supplied by the Division of Planning, indicating the action requested, the date of the LPA hearing, and the case number. An affidavit of compliance with the posting requirements must be submitted to the Division of Planning prior to the LPA hearing. The signs must be maintained until after the final Board adoption hearing when a final decision is rendered.

III. PROPERTY SIZE AND LOCATION OF AFFECTED PROPERTY (for amendments affecting development potential of property)

A. Property Location:
   1. Site Address: 17501 Corkscrew Road.
   2. STRAP(s): See Attached

B. Property Information:
   Total Acreage of Property: 1361.1
   Total Acreage included in Request: 1361.1
   Total Uplands: 1250.7 ac.
   Total Wetlands: 110.4 ac.
   Current Zoning: AG-2
   Current Future Land Use Designation: DR/GR and wetlands
   Area of each Existing Future Land Use Category: 1,250.7 ac. DR/GR, 110.4 ac. Wetlands
   Existing Land Use: Agriculture

C. State if the subject property is located in one of the following areas and if so how does the proposed change affect the area:
   Lehigh Acres Commercial Overlay: N/A
   Airport Noise Zone 2 or 3: N/A
   Acquisition Area: N/A
   Joint Planning Agreement Area (adjoining other jurisdictional lands): N/A
   Community Redevelopment Area: N/A

D. Proposed change for the subject property: See Attached Text Amendment and Adopt Tier 1 Priority Restoration Overlay on the Corkscrew Farms property with the associated strategy.

E. Potential development of the subject property:
   1. Calculation of maximum allowable development under existing FLUM:
      Residential Units/Density 130 dwelling units

Commercial intensity	NA
Industrial intensity	NA

2. Calculation of maximum allowable development under proposed FLUM:

Residential Units/Density	1,325 single family attached and detached and townhome dwelling units (incl. amenities)
Commercial intensity	NA
Industrial intensity	NA

IV. AMENDMENT SUPPORT DOCUMENTATION

At a minimum, the application shall include the following support data and analysis. These items are based on comprehensive plan amendment submittal requirements of the State of Florida, Department of Community Affairs, and policies contained in the Lee County Comprehensive Plan. Support documentation provided by the applicant will be used by staff as a basis for evaluating this request. To assist in the preparation of amendment packets, the applicant is encouraged to provide all data and analysis electronically. (Please contact the Division of Planning for currently accepted formats.)

A. General Information and Maps
NOTE: For each map submitted, the applicant will be required to provide a reduced map (8.5" x 11") for inclusion in public hearing packets.

The following pertains to all proposed amendments that will affect the development potential of properties (unless otherwise specified).

1. Provide any proposed text changes.

2. Provide a current Future Land Use Map at an appropriate scale showing the boundaries of the subject property, surrounding street network, surrounding designated future land uses, and natural resources.

3. Provide a proposed Future Land Use Map at an appropriate scale showing the boundaries of the subject property, surrounding street network, surrounding designated future land uses, and natural resources.

4. Map and describe existing land *uses* (not designations) of the subject property and surrounding properties. Description should discuss consistency of current uses with the proposed changes.

5. Map and describe existing zoning of the subject property and surrounding properties.

6. 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.

7. A copy of the deed(s) for the property subject to the requested change.

8. An aerial map showing the subject property and surrounding properties.

9. If applicant is not the owner, a letter from the owner of the property authorizing the applicant to represent the owner.

B. Public Facilities Impacts

NOTE: The applicant must calculate public facilities impacts based on a maximum development scenario (see Part II.H.).

1. Traffic Circulation Analysis: The analysis is intended to determine the effect of the land use change on the Financially Feasible Transportation Plan/Map 3A (20-year horizon) and on the Capital Improvements Element (5-year horizon). Toward that end, an applicant must submit the following information:

   Long Range – 20-year Horizon:

   a. Working with Planning Division staff, identify the traffic analysis zone (TAZ) or zones that the subject property is in and the socio-economic data forecasts for that zone or zones;
   b. Determine whether the requested change requires a modification to the socio-economic data forecasts for the host zone or zones. The land uses for the proposed change should be expressed in the same format as the socio-economic forecasts (number of units by type/number of employees by type/etc.);
   c. If no modification of the forecasts is required, then no further analysis for the long range horizon is necessary. If modification is required, make the change and provide to Planning Division staff, for forwarding to DOT staff. DOT staff will rerun the FSUTMS model on the current adopted Financially Feasible Plan network and determine whether network modifications are necessary, based on a review of projected roadway conditions within a 3-mile radius of the site;
   d. If no modifications to the network are required, then no further analysis for the long range horizon is necessary. If modifications are necessary, DOT staff will determine the scope and cost of those modifications and the effect on the financial feasibility of the plan;
   e. An inability to accommodate the necessary modifications within the financially feasible limits of the plan will be a basis for denial of the requested land use change;
   f. If the proposal is based on a specific development plan, then the site plan should indicate how facilities from the current adopted Financially Feasible Plan and/or the Official Trafficways Map will be accommodated.

   Short Range – 5-year CIP horizon:

   a. Besides the 20-year analysis, for those plan amendment proposals that include a specific and immediated development plan, identify the existing roadways serving the site and within a 3-mile radius (indicate laneage, functional classification, current LOS, and LOS standard);
   b. Identify the major road improvements within the 3-mile study area funded through the construction phase in adopted CIP's (County or Cities) and the State's adopted Five-Year Work Program;

Projected 2030 LOS under proposed designation (calculate anticipated number of trips and distribution on roadway network, and identify resulting changes to the projected LOS);

c. For the five-year horizon, identify the projected roadway conditions (volumes and levels of service) on the roads within the 3-mile study area with the programmed improvements in place, with and without the_proposed development project. A methodology meeting with DOT staff prior to submittal is required to reach agreement on the projection methodology;
d. Identify the additional improvements needed on the network beyond those programmed in the five-year horizon due to the development proposal.

2. Provide an existing and future conditions analysis for (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 should include (but is not limited to) the following (see the Lee County Concurrency Management Report):
   - Franchise Area, Basin, or District in which the property is located;
   - Current LOS, and LOS standard of facilities serving the site;
   - Projected 2030 LOS under existing designation;
   - Projected 2030 LOS under proposed designation;
   - Existing infrastructure, if any, in the immediate area with the potential to serve the subject property.
   - Improvements/expansions currently programmed in 5 year CIP, 6-10 year CIP, and long range improvements; and
   - Anticipated revisions to the Community Facilities and Services Element and/or Capital Improvements Element (state if these revisions are included in this amendment).
   - Provide a letter of service availability from the appropriate utility for sanitary sewer and potable water.

   In addition to the above analysis for Potable Water:
   - 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.
   - Include the current demand and the projected demand under the existing designation, and the projected demand under the proposed designation.
   - Include the availability of treatment facilities and transmission lines for reclaimed water for irrigation.
   - 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; and
f. Schools.

In reference to above, the applicant should supply the responding agency with the information from Section's II and III for their evaluation. This application should include the applicant's correspondence to the responding agency.

C. 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 use 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 Flood Insurance Rate Map effective August 2008.

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).

D. Impacts on Historic Resources

List all historic resources (including structure, districts, and/or archeologically 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 archeological sensitivity map for Lee County.

E. Internal Consistency with the Lee Plan

1. Discuss how the proposal affects established Lee County population projections, Table 1(b) (Planning Community Year 2030 Allocations), 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 and Regional Policy Plan goals and policies which are relevant to this plan amendment.

F. Additional Requirements for Specific Future Land Use Amendments

1. Requests involving Industrial and/or categories targeted by the Lee Plan as employment centers (to or from)
   a. State whether the site is accessible to arterial roadways, rail lines, and cargo airport terminals,
   b. Provide data and analysis required by Policy 2.4.4,
   c. The affect of the proposed change on county's industrial employment goal specifically policy 7.1.4.
2. Requests moving lands from a Non-Urban Area to a Future Urban Area

   a. Demonstrate why the proposed change does not constitute Urban Sprawl. Indicators of sprawl may include, but are not limited to: low-intensity, low-density, or single-use development; 'leap-frog' type development; radial, strip, isolated or ribbon pattern type development; a failure to protect or conserve natural resources or agricultural land; limited accessibility; the loss of large amounts of functional open space; and the installation of costly and duplicative infrastructure when opportunities for infill and redevelopment exist.

3. Requests involving lands in critical areas for future water supply must be evaluated based on policy 2.4.2.

4. Requests moving lands from Density Reduction/Groundwater Resource must fully address Policy 2.4.3 of the Lee Plan Future Land Use Element.

G. Justify the proposed amendment based upon sound planning principles

Be sure to support all conclusions made in this justification with adequate data and analysis.

H. 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.

- ☒ Not Applicable
- ☐ Alva Community Plan area [Lee Plan Objective 26.7]
- ☐ Buckingham Planning Community [Lee Plan Objective 17.7]
- ☐ Caloosahatchee Shores Community Plan area [Lee Plan Objective 21.6]
- ☐ Captiva Planning Community [Lee Plan Policy 13.1.8]
- ☐ North Captiva Community Plan area [Lee Plan Policy 25.6.2]
- ☐ Estero Planning Community [Lee Plan Objective 19.5]
- ☐ Lehigh Acres Planning Community [Lee Plan Objective 32.12]
- ☐ Northeast Lee County Planning Community [Lee Plan Objective 34.5]
- ☐ North Fort Myers Planning Community [Lee Plan Policy 28.6.1]
- ☐ North Olga Community Plan area [Lee Plan Objective 35.10]
- ☐ Page Park Community Plan area [Lee Plan Policy 27.10.1]
- ☐ Palm Beach Boulevard Community Plan area [Lee Plan Objective 23.5]
- ☐ Pine Island Planning Community [Lee Plan Objective 14.7]

AFFIDAVIT

I, Joseph Cameratta, 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

1-12-15
Date

Joseph Cameratta
Printed Name of Applicant

STATE OF FLORIDA
COUNTY OF LEE

The foregoing instrument was sworn to (or affirmed) and subscribed before me on 1/12/15 (date) by Joseph Cameratta (name of person providing oath or affirmation), who is personally known to me or who has produced _____ (type of identification) as identification.

Cheryl A. Yano
Signature of Notary Public

CHERYL ANN YANO
MY COMMISSION # FF 028038
EXPIRES: October 17, 2017
Bonded Thru Notary Public Underwriters

(Name typed, printed or stamped)

OWNER STATEMENT

I, Garrett Bender, on behalf of Ascot Mining, LLC and Ascot Acquisitions, LLC as Authorized Agent, an authorized person to speak on behalf of Resource Conservation Holdings, LLC, do hereby authorize Lee County to place the pending Resource Conservation Holdings, LLC Application (DCI2014-00012) on hold to permit the processing of an application on behalf of Joe Cameratta. I, Garrett Bender, will advise the County in writing when and if the pending application should be activated.

Land Owner:
Resource Conservation Holdings, LLC,

By: Garrett Bender as Authorized Agent
for Seller, Ascot Mining, LLC and Ascot Acquisitions, LLC

STATE OF FLORIDA

COUNTY OF Palm Beach

I hereby certify that the foregoing instrument was acknowledged and executed before me this 29 day of August, 2014, by Garrett Bender, as Authorized Agent of Ascot Mining, LLC and Ascot Acquisitions, LLC . He is [X] personally known to me, or [ ] has produced _____ as identification.

[Notary Seal]

Notary Public, State of Florida
Printed Name: John Narine
My Commission Expires: 3/25/16

JOHN NARINE
Notary Public - State of Florida
My Comm. Expires Mar 25, 2016
Commission # EE 182717
Bonded Through National Notary Assn.

I. Corkscrew Farms Additional Agent Information

Agent: Carl A. Barraco, P.E. – Barraco and Associates, Inc.
Address: 2271 McGregor Boulevard, Ft. Myers, FL 33901
Phone: 239-461-3170
Email: carlb@barraco.net

Agent: Jennifer Sapen - Barraco and Associates, Inc.
Address: 2271 McGregor Boulevard, Ft. Myers, FL 33901
Phone: 239-461-3170
Email: JenniferS@barraco.net

Agent: Kevin L. Erwin – Kevin L. Erwin Consulting Ecologist, Inc.
Address: 2077 Bayside Parkway, Ft. Myers, FL 33901
Phone: 239-337-1505
Email: klerwin@environment.com

Agent: David Brown – Progressive Water Resources, LLC
Address: 5589 Marquesas Circle, Suite 202, Sarasota, FL 34233
Phone: 941-552-5657
Email: dbrown@prowatersource.com

Agent: Ronald T. Talone, AICP
Address: 2149 McGregor Boulevard, Ft. Myers, FL 33901
Phone: 239-332-2617
Email: ronald.talone@dplummer.com

Agent: Neale Montgomery Esq. – Pavese Law
Address: 1833 Hendry Street, Fort Myers, FL 33901
Phone: 239-336-6235
Email: nealemontgomery@paveselaw.com

Agent: Patrick Day – TKW Consulting Engineers, Inc.
Address: 5621 Banner Drive, Ft. Myers, FL 33912
Phone: 239-278-1992
Email: pat.day@tkwonline.com

III. Property Size and Location
A. Property Location
2. STRAPS: Corkscrew Farms
STRAP Numbers:

19-46-27-00-00001.0000
19-46-27-00-00001.0010
19-46-27-00-00001.0040
19-46-27-00-00001.0050
19-46-27-00-00001.0060
19-46-27-00-00001.0070
19-46-27-00-00001.0080

23-46-26-00-00003.0000
23-46-26-00-00003.0010

24-46-26-00-00001.0000
24-46-26-00-00001.0010

Corkscrew Farms
Comprehensive Plan Amendment
Proposed Text Amendment

POLICY 1.7.14: The Southeast Density Reduction/Groundwater Resource overlay (Map 17) is described in Policies 33.3.1 through 33.3.4. This overlay affects only Southeast Lee County and identifies ~~four~~ five types of land:

1. "Existing Acreage Subdivisions": existing rural residential subdivisions that should be protected from adverse external impacts such as natural resource extraction.
2. "Rural Golf Course Communities" potential locations for the concentration of development rights on property zoned Private Recreational Facilities Planned Development and located in the Southeast Density Reduction/Groundwater Resource area.
3. "Mixed-Use Communities" locations where this concentration of development rights from large contiguous tracts with the Density Reduction/Groundwater Resource area that can be supplemented by transfer of development rights from non-contiguous tracts in the Southeast Density Reduction/Groundwater Resource area. See Objective 33.3 and following policies.
4. "Improved Residential Communities:" Property with existing residential approvals that are inconsistent with the Southeast Density Reduction/Groundwater Resource area that could be improved environmentally.
5. "Tier 1 Priority Restoration Overlay:" Property identified on Map 1 Page 4 of 8 as being located within Tier 1 (highest priority) are permitted to develop a specific "Restoration Strategy" that must be adopted by plan amendment as a specific Overlay and Strategy for each Tier 1 property. The Strategy may permit additional residential development above the standard density limitation of the DR/GR Future Land Use category (1 dwelling unit per 10 acres). Each Tier 1 Restoration Strategy will provide the conditions and criteria that must be implemented to achieve the additional residential development.

    a. The Corkscrew Farms property is subject to the Tier 1 Priority Restoration Overlay.

POLICY 33.2.1: Large-scale ecosystem integrity in Southeast Lee County should be maintained and restored. Protection and/or restoration of land is of even higher value when it connects existing corridors and conservation areas. Restoration is also highly desirable when it can be achieved in conjunction with other uses on privately owned land including agriculture. Lee
County Natural Resources, Conservation 20/20, and Environmental Sciences staff will work with landowners who are interested in voluntarily restoring native habitats and landowners who are required to conduct restoration based upon land use changes. The parameters for the required restoration will be established in the Land Development Code by 2012. The protection and/or restoration of private land can also occur through the adoption of a Tier 1 Priority Restoration Overlay for private lands and the adoption of a

strategy for priority restoration and incentives to provide the restoration. All development within Tier 1 Priority Restoration Overlay must be developed with planned development zoning.

OBJECTIVE 33.3: RESIDENTIAL AND MIXED-USE DEVELOPMENT. Designate on a Future Land Use Map overlay areas that should be protected from adverse impacts of mining (Existing Acreage Subdivisions), specific locations for concentrating existing development rights on large tracts (Mixed-Use Communities), ~~and~~ vacant properties with existing residential approvals that are inconsistent with the density Reduction/Groundwater Resource future land use category (Improved Residential Communities) and development of Tier 1 Priority Restoration Overlay properties that have an approved Strategy Plan.

POLICY 33.3.3: Properties within the DR/GR that have existing approvals for residential development inconsistent with the current DR/GR density requirements or properties located within Tier 1 that develop without a Priority Restoration Strategy, may damage surface and sub-surface water resources, impact habitat, and encroach on environmentally important land if developed consistent with the vested approvals or without a Restoration Strategy. As an incentive to reduce these potential impacts additional densities may be granted if strict criteria improving the adverse impacts are followed.

1. These properties may be designated on Map 17 as "Improved Residential Communities," provided they meet all of the following requirements:

a. Abut lands designated as future urban areas;

b. Adjacent to and eligible for public water and sewer services;

c. Can provide two (2) direct accesses to an arterial roadway, and;

d. Is not already designated on Lee Plan Map 17 as an Existing Acreage Subdivision or a Mixed Use Community.

Tier 1 properties that develop a Priority Restoration Strategy that is approved through the plan amendment process may also be designated on Map 17 as being located in the Tier 1 Priority Restoration Overlay.

a. The Corkscrew Farms Restoration Strategy is incorporated into this plan and the property is located in the Tier 1 Priority Restoration Overlay as the "Corkscrew Farms Tier 1 Priority Restoration Overlay". Corkscrew Farms will be permitted to develop 1,325 dwelling units to incentivize the restoration strategy and regional benefits.

2. In order to request an increase in density, the property must be rezoned to a Residential Planned Development (RPD) that demonstrates and is conditioned to provide the following:

a. Reduced stress to the onsite potable aquifers and is more consistent with water resource goals of Lee County in the DR/GR than the existing development approvals.

b. Increased conservation areas, relative to the existing approvals, with a restoration plan and long term maintenance commitment.

c. Active and passive recreational amenities to promote a healthy lifestyle.

d. Demonstrates a net benefit for water resources, relative to the existing approvals that demonstrates the following.
(1) Lower irrigation demand.
(2) Eliminates private irrigation wells
(3) Protects Public wells by meeting or exceeding the requirements of the Well Field Protection Ordinance.
(4) Uses Florida Friendly Plantings with low irrigation requirements in Common Elements.
(5) Connects to public water and sewer service, and must connect to reclaimed water when available.
(6) Reduces impervious area relative to existing approvals improving opportunities for groundwater recharge. This criteria is not applicable to the Corkscrew Farms Tier 1 Priority Restoration Overlay.
(7) Designed to accommodate existing or historic flowways.

e. Includes an enhanced lake management plan that addresses at a minimum the following issues:

(1) Best management practices for fertilizers and pesticides
(2) Erosion control and bank stabilization
(3) Lake maintenance requirements
(4) Public well field protection

f. Indigenous Management Plans must address human-wildlife coexistence.

3. Properties meeting the above criteria and requirements and located in the Improved Residential Communities overlay may be permitted additional residential dwelling units in addition to the already existing approvals, but in no case in excess of three (3) dwelling units per DR/GR upland acre. The application for Residential Planned Development must identify the source of the additional residential dwelling units from the criteria below. Approval of the rezoning will be conditioned to reflect the source of additional dwelling units:

a. 2 dwelling units for every acre of offsite DR/GR property acquired for conservation purposes with the possibility of passive recreation activities.
b. 2 dwelling units for every additional acre of offsite DR/GR property put under a conservation easement dedicated to Lee County.

c. 1.5 dwelling units for every additional acre of onsite property put under a conservation easement.
d. 1 dwelling unit for every acre of onsite restoration, subject to restoration plan approval as part of the Planned Development rezoning process.
e. 2 dwelling units for every acre of non-isolated DR/GR preserved primary and secondary panther habitat.
f. 2 dwelling units for every acre of protected onsite wetlands connected to a regionally significant flowway identified in the Lee Plan.
g. 1 dwelling unit for every $8,500 (the current estimated cost to purchase an acre of Southeast DR/GR land) the applicant provides to the county to extinguish density on other Southeast DR/GR parcels.
h. 1 dwelling unit for every $8,500 the applicant provides to the county to construct a planned large mammal roadway crossing in the Southeast DR/GR area.
The improvements or acquisition of properties serve to mitigate impacts of the increased density.
Future "Improved Residential Communities" proposed to be added to Map 17 must provide a reanalysis of the cost to purchase one acre of DR/GR property if criteria (g.) or (h.) are used to account for the increased density.

4. The Corkscrew Farms Tier 1 Priority Restoration Overlay property is permitted 1,325 dwelling units, including ancillary residential uses such as clubhouses and recreational uses. The residential units are permitted as the incentive for the protection, conservation, and restoration of the Tier 1 property in accordance with the approved Restoration Strategy. The Restoration Strategy requirements for the Corkscrew Farms property are as follows:

a. The County will create a DR/GR Density Fund. The DR/GR Density Fund must be used to extinguish density in the DR/GR, or to enhance or improve water and wildlife resources in the DR/GR. The developer must pay $1,500 per residential units prior to the issuance of a building permit.

b. Land must be set aside on the Corkscrew Farms property for retention, detention, water storage, water treatment, green space, restoration, preservation, and enhancement areas. The lands to be set aside must be a minimum of 800 acres.

c. Corkscrew Road operational improvements must be provided. The operational improvements will are intended to improve left-turn egress and ingress from the Preserve at Corkscrew and Bella Terra onto Corkscrew Road. These operational improvements, to be established in consultation with the Lee County Department of Transportation, could include the following, up to a total cost of $700,000: the construction of a northbound to a westbound channelized receiving lane/acceleration lane in the median to improve the left-turn out movement; construction of a median divider with a channelized left-turn lane on Corkscrew Road; traffic signalization; or comparable operational improvements. The Corkscrew Road operational improvements must be agreed to with the lee County DOT and designed before the issuance of the 50th residential building permit. The operational

improvements must be installed before the issuance of the 150th residential building permit, provided that all approvals and permits have been issued.

d. All duly adopted impact fees will be paid upon the issuance of a building permit.

e. If the ambulance response time to Corkscrew Farms does not meet the required level of service at the time of building permit, the Developer must pay an ambulance fee of $150.00 per unit to Lee County EMS for the ambulance at the Corkscrew Road Fire Station to assure adequate response times.

f. The Restoration Strategy includes a Proposed Restoration Map that depicts the proposed re-created flowways. These flowways will be designed, if feasible, to accept overland flows from the north. Flowway specifications and parameters will be established in the Environmental Resource Permit.

g. The development will incorporate a surface water management plan with water control structures, detention and retention features, and flowways that improve hydrology onsite and benefit existing public conservation lands adjacent to the site.

h. Deed restrictions must be adopted that provide unified maintenance, application of fertilizers and pesticides utilizing a homeowners association, community development district or similar mechanism to ensure compliance with the restrictions.

i. The development will connect to Lee County Utilities for potable water, fire protection, and sanitary sewer services.

j. The Development will provide the opportunity for a healthy lifestyle by providing sidewalks throughout the development as well as providing amenity areas that may include but are not limited to:

Clubhouse, restaurant, bar, and maintenance/storage buildings;
Exercise, multi-purpose, meeting, and gathering rooms;
Tennis , bocce, and pickle courts, pool(s);
Tennis pro shop;
Pool side bar and kitchen;
Play ground, picnic pavilion, fire pits, and open field play area;
Passive recreation areas, walking trails, scenic and wildlife viewing areas.

Specific recreational amenities will be identified at the time of planned development zoning approval.

k. The vertical building development "footprint" will incorporate the following setbacks from adjacent properties including the following:

850 feet from the westerly property line;

400 feet from the right of way of Corkscrew Road, with the exception of project access roads and entrance features;

400 feet from the northern property line, and;

2,975 feet from the eastern property line.

Water management facilities, water control structures, and infrastructure for the development including utilities (wells, sewers, potable water lines, irrigation lines, pump stations, lift stations, pipes, water management berms, bridges, causeways, swales, lakes, ponds, signage, fencing, entry roads, gatehouses, guardhouses, landscape features, etc.) as well as restoration activities including flowway re-creation are permitted within these setbacks.

PROPERTY DEVELOPMENT REGULATIONS

MIN LOT SIZE (W x D)	PRODUCT TYPE	MIN FRONT SETBACK	MIN SIDE SETBACK	MIN REAR PRINCIPAL SETBACK	MIN REAR ACCESSORY SETBACK	MIN PRESERVE SETBACK	MAX HEIGHT
45' X 165'	TWO FAMILY ATTACHED	25'	5' / 0'	10'	5'	25'	35'
50' X 165'	SINGLE FAMILY ATTACHED	25'	5'	10'	5'	25'	35'
60' X 165'	SINGLE FAMILY ATTACHED	25'	5'	10'	5'	25'	35'
75' X 165'	SINGLE FAMILY ATTACHED	35'	7'	15'	5'	25'	35'
85' X 165'	SINGLE FAMILY ATTACHED	35'	10'	15'	5'	25'	35'

LAND USE SUMMARY

WATER MANAGEMENT LAKES	95 AC.
PARKS AND AMENITY	19 AC
LOTS AND ROADS	440 AC
EXISTING AND ENHANCED PRESERVE AREAS	768 AC
TREATMENT AREAS	39 AC
PROJECT TOTAL:	1361 AC.

0 500 1000
SCALE IN FEET

N
W E
S

400'
1400'
2975'
850'
400'
LAKE ± 10 AC.
LAKE ± 6 AC.
LAKE ± 8 AC.
LAKE ± 17 AC.
LAKE ± 7 AC.
LAKE ± 9 AC.
LAKE ± 7 AC.
LAKE ± 20 AC.
LAKE ± 11 AC.
LAKE ± 16 AC.
PARK ± 1 AC.
AMENITY ± 18 AC.
CORKSCREW ROAD

NOTE: WETLAND DEPICTIONS ARE BASED ON AERIAL INTERPRETATION, GIS DATA AND FIELD INVESTIGATION. ACTUAL WETLAND LIMITS MAY VARY BASED ON FUTURE SURVEY LOCATIONS.

Barraco and Associates, Inc.
CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING - LANDSCAPE DESIGN
www.barraco.net
2271 McGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

THIS PLAN IS PRELIMINARY AND INTENDED FOR CONCEPTUAL PLANNING PURPOSES ONLY.

SITE LAYOUT AND LAND USE INTENSITIES OR DENSITIES MAY CHANGE SIGNIFICANTLY BASED UPON SURVEY, ENGINEERING, ENVIRONMENTAL AND / OR REGULATORY CONSTRAINTS AND / OR OPPORTUNITIES.

NOT FOR CONSTRUCTION

FILE NAME	DEVFOOT.DWG
LOCATION	J:\23244\DWG\ZONING\
PLOT DATE	FRI. 1-9-2015 - 10:08 AM
PLOT BY	JENNIFER SAPEN

CROSS REFERENCED DRAWINGS

BASEPLAN = 23244Z00.DWG

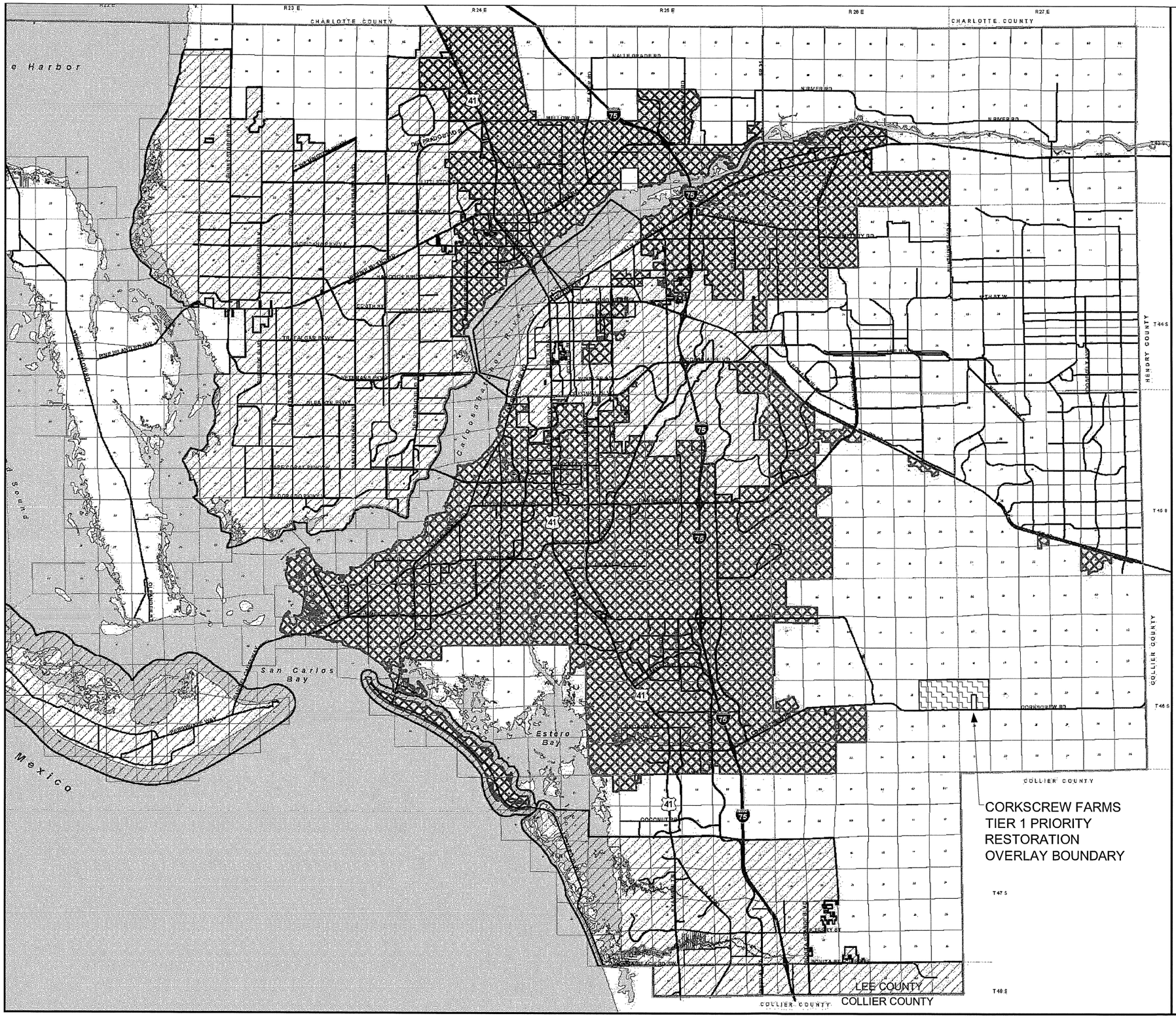
PLAN REVISIONS

1-9-14	

PLAN STATUS

CONCEPTUAL SITE PLAN

PROJECT / FILE NO.	SHEET NUMBER
23244	



LEE COUNTY UTILITIES FUTURE WATER SERVICE AREAS

Legend

- City Limits
- Future Water Service Areas
- Subject Property (Future Water Service Area)

LEE COUNTY
SOUTHWEST FLORIDA
DIVISION OF PLANNING

N
W E
S

1 0.5 0 1 2 3 4
Miles

Map Generated: September 2013
City Limits current to date of map generation

Adopted by Ord. No. 89-02, 1/31/1989
Amended by Ord. Nos. 00-22, 03-19, 10-06, 10-40, 10-43, 12-24, 13-18

Lee Plan Map 6

Barraco and Associates, Inc.
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LAND PLANNING - LANDSCAPE DESIGN
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PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES
CORKSCREW FARMS

LEE COUNTY, FLORIDA

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NOT FOR CONSTRUCTION

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LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	WED. 12-31-2014 - 10:25 AM
PLOT BY	JENNIFER SAPEN

CROSS REFERENCED DRAWINGS

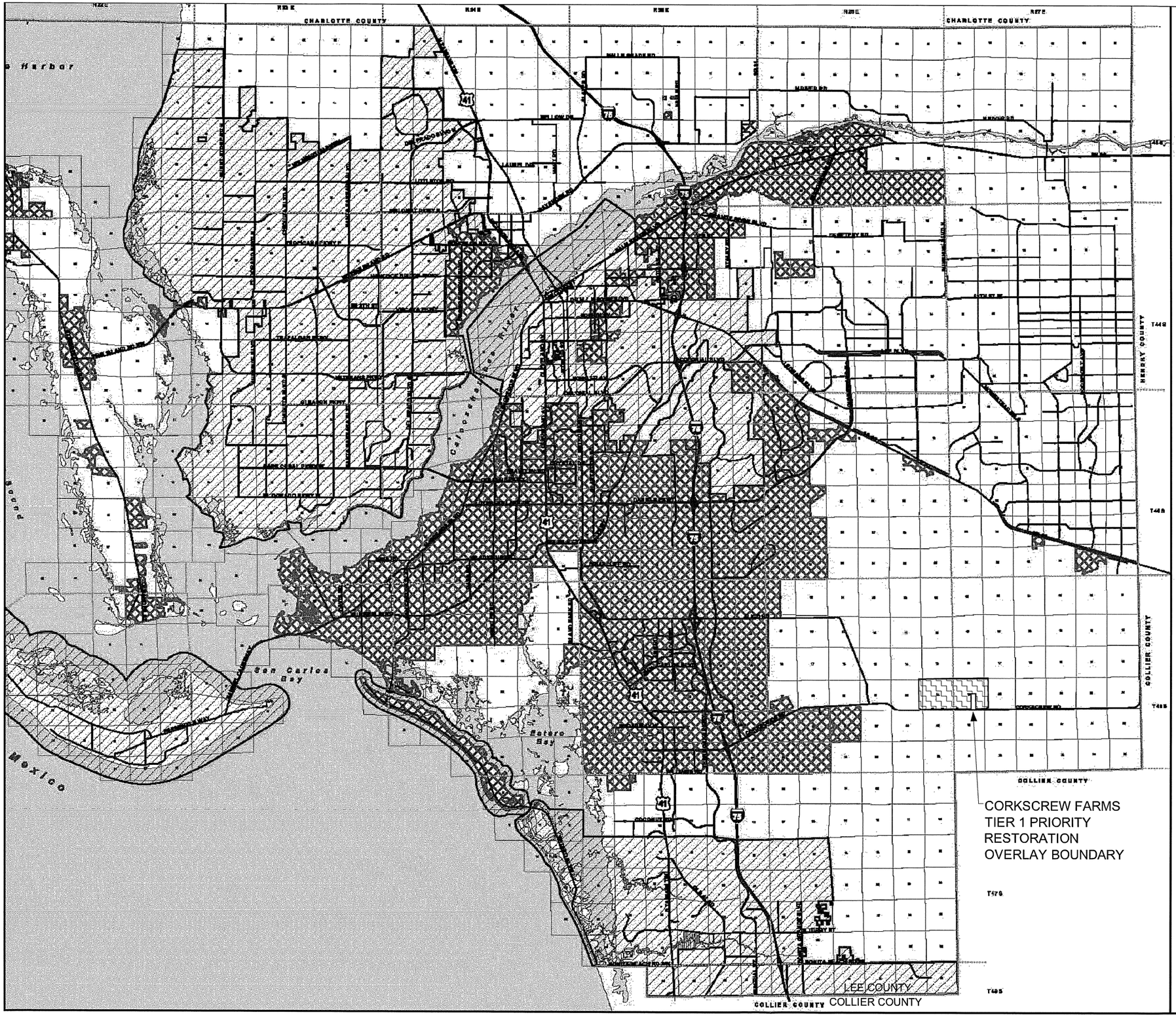
PLAN REVISIONS

PLAN STATUS

UTILITIES
FUTURE WATER
SERVICE AREAS

PROJECT / FILE NO.	SHEET NUMBER
23244	

LEE COUNTY UTILITIES FUTURE SEWER SERVICE AREAS



Legend

- City Limits
- Future Sewer Service Areas
- Subject Property (Future Sewer Service Area)

LEE COUNTY
SOUTHWEST FLORIDA
DIVISION OF PLANNING

N W E S

1 0.5 0 1 2 3 4
Miles

Map Generated: December 2012
City Limits current to date of map generation

Adopted by Ord. No. 89-02, 1/31/1989
Amended by Ord. Nos. 00-22, 03-19, 10-07, 10-40, 10-43, 11-13, 12-24

Lee Plan Map 7

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PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

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NOT FOR CONSTRUCTION

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LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	WED. 12-31-2014 - 10:26 AM
PLOT BY	JENNIFER SAPEN

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

UTILITIES FUTURE SEWER SERVICE AREAS

PROJECT / FILE NO.	SHEET NUMBER
23244	

SOUTHEAST DR/GR RESIDENTIAL OVERLAY

Legend

- Southeast Lee County
- Existing Acreage Subd.
- Mixed-Use Community
- Rural Golf Course Community
- Improved Residential Community
- County Line
- Section Lines
- Major Roads
- Minor Roads
- City Limits
- Subject Property

CORKSCREW FARMS
TIER 1 PRIORITY
RESTORATION
OVERLAY BOUNDARY

LEE COUNTY
COLLIER COUNTY

LEE COUNTY
SOUTHWEST FLORIDA
DIVISION OF PLANNING

N
W E
S

1 0.5 0 1 2 3 4
Miles

Map Generated:December 2012
City Limits current to date of map generation

Adopted By: Ords 10-19, 10-21 (3/3/10), & 10-43 (11/1/10)

Amended By: Ord 12-24 (10/1/12)

Lee Plan Map 17

Barraco and Associates, Inc.
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FLORIDA CERTIFICATES OF AUTHORIZATION
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PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES
CORKSCREW FARMS

LEE COUNTY, FLORIDA

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NOT FOR CONSTRUCTION

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LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	WED, 12-31-2014 - 10:16 AM
PLOT BY	JENNIFER SAPEN

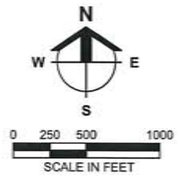
CROSS REFERENCED DRAWINGS

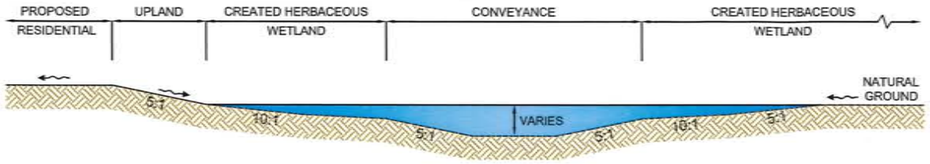
PLAN REVISIONS

PLAN STATUS

SOUTHEAST DR / GR RESIDENTIAL OVERLAY MAP

PROJECT / FILE NO.	SHEET NUMBER
23244	



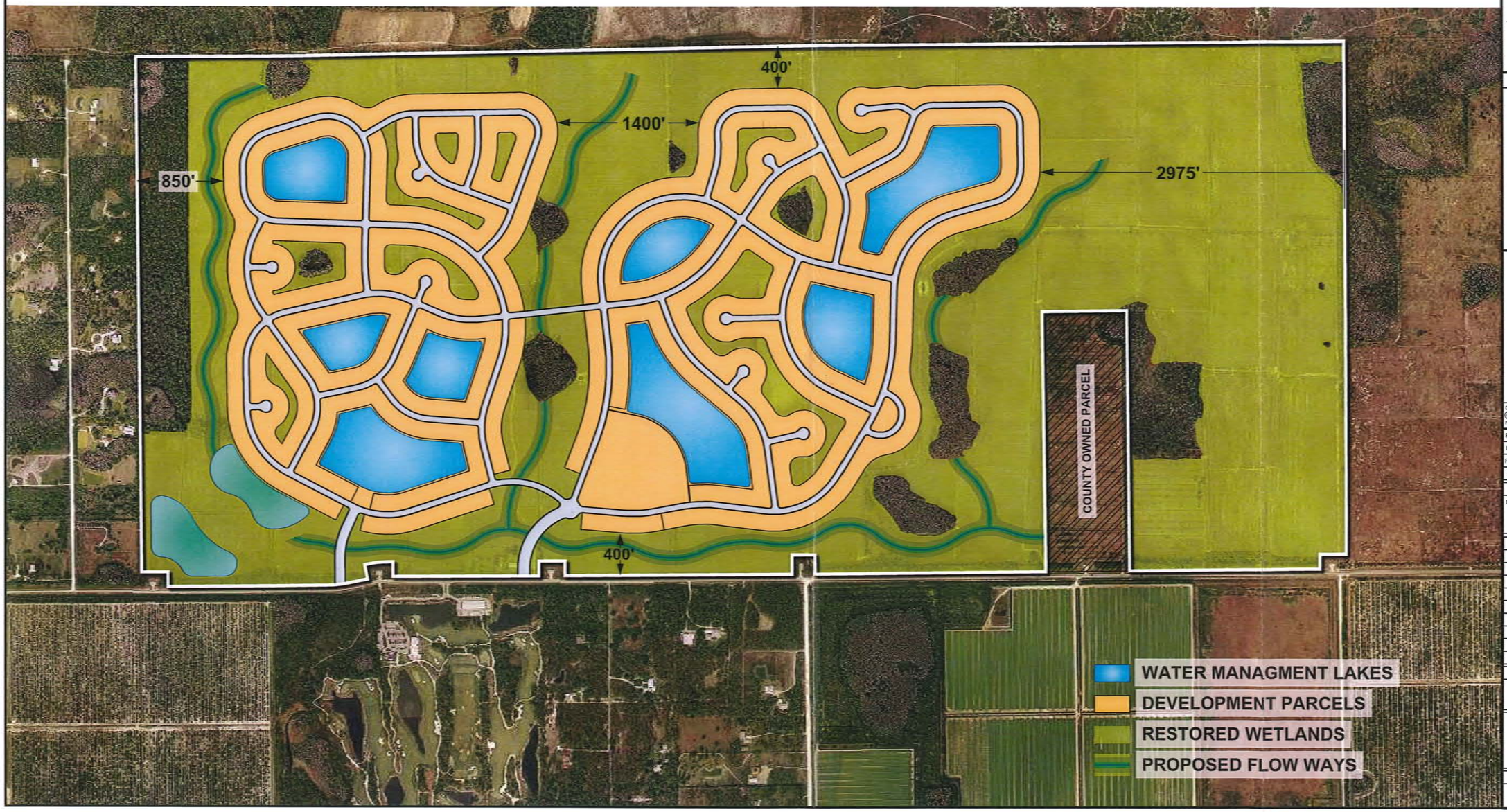


TYPICAL FLOW-WAY CROSS SECTION

N.T.S.

NOTES:

1) FLOW-WAY LOCATIONS MAY VARY BASED ON FUTURE PERMITTING AND FIELD INSPECTIONS.
2) UPLAND PLANTINGS TO CONSIST OF .....
3) CREATED HERBACEOUS WETLAND PLANTINGS TO CONSIST OF .....



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LAND PLANNING - LANDSCAPE DESIGN
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POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

THIS PLAN IS PRELIMINARY AND INTENDED FOR CONCEPTUAL PLANNING PURPOSES ONLY.

SITE LAYOUT AND LAND USE INTENSITIES OR DENSITIES MAY CHANGE SIGNIFICANTLY BASED UPON SURVEY, ENGINEERING, ENVIRONMENTAL AND / OR REGULATORY CONSTRAINTS AND / OR OPPORTUNITIES.

NOT FOR CONSTRUCTION

FILE NAME	23244-FLOWMAP.DWG
LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	FRI, 1-9-2015 - 9:27 AM
PLOT BY	JENNIFER SAPEN

CROSS REFERENCED DRAWINGS

BASEPLAN = 23244A00-OPT22.DWG

PLAN REVISIONS

PLAN STATUS

PROPOSED RESTORATION MAP

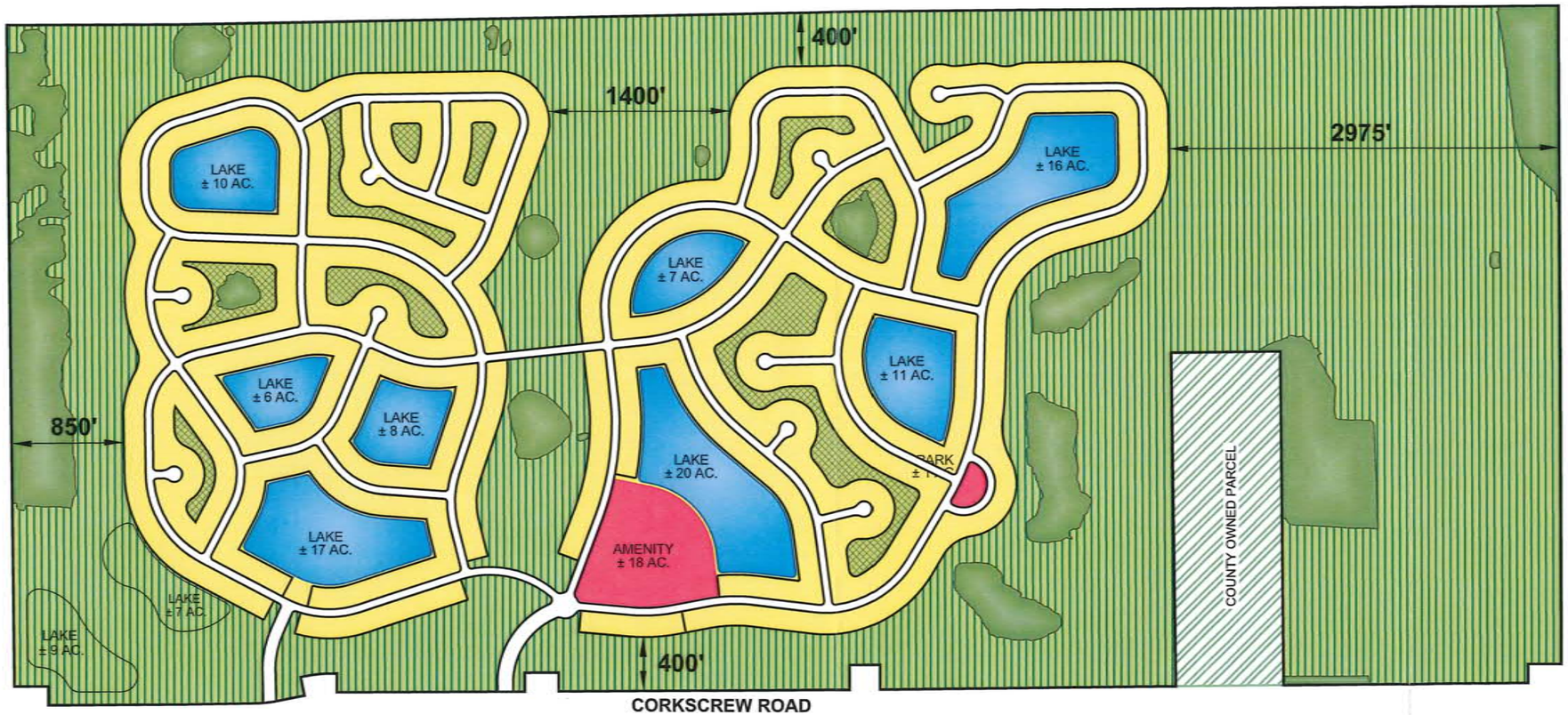
PROJECT / FILE NO.	SHEET NUMBER
23244	

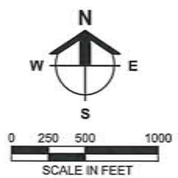
PROPERTY DEVELOPMENT REGULATIONS

	PRODUCT TYPE	MIN FRONT SETBACK	MIN SIDE SETBACK	MIN REAR PRINCIPAL SETBACK	MIN REAR ACCESSORY SETBACK	MIN PRESERVE SETBACK	MAX HEIGHT
45' X 165'	TWO FAMILY ATTACHED	25'	5' / 0'	10'	5'	25'	35'
50' X 165'	SINGLE FAMILY ATTACHED	25'	5'	10'	5'	25'	35'
60' X 165'	SINGLE FAMILY ATTACHED	25'	5'	10'	5'	25'	35'
75' X 165'	SINGLE FAMILY ATTACHED	35'	7'	15'	5'	25'	35'
85' X 165'	SINGLE FAMILY ATTACHED	35'	10'	15'	5'	25'	35'

LAND USE SUMMARY

WATER MANAGEMENT LAKES	95 AC
PARKS AND AMENITY	19 AC
LOTS AND ROADS	440 AC
EXISTING AND ENHANCED PRESERVE AREAS	768 AC
TREATMENT AREAS	39 AC
PROJECT TOTAL:	1361 AC





PROPOSED DENSITY CAP: 1325 UNITS

EXISTING WETLANDS
PRESERVE / BUFFER
TREATMENT AREAS
OFFSITE RESTORED AREA
LAKE
AMENITY / PARKS

NOTE: WETLAND DEPICTIONS ARE BASED ON AERIAL INTERPRETATION, GIS DATA AND FIELD INVESTIGATION. ACTUAL WETLAND LIMITS MAY VARY BASED ON FUTURE SURVEY LOCATIONS.

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ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

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NOT FOR CONSTRUCTION

FILE NAME	23244X00-OPT25.DWG
LOCATION	J:\23244\DWG\PRELIM.
PLOT DATE	FRI. 1-9-2015 - 10:17 AM
PLOT BY	JENNIFER SAPEN

CROSS REFERENCED DRAWINGS

BASEPLAN = 23244A00-OPT21-WET.DWG

PLAN REVISIONS

1-9-14	

PLAN STATUS

PRELIMINARY SITE PLAN

PROJECT / FILE NO.	SHEET NUMBER
23244	

LEGEND

- DENSITY REDUCTION / GROUNDWATER RESOURCE
- WETLANDS
- CONSERVATION LANDS WETLANDS
- CONSERVATION LANDS UPLANDS

NOTE: WETLAND DEPICTIONS ARE BASED ON AERIAL INTERPRETATION, GIS DATA AND FIELD INVESTIGATION. ACTUAL WETLAND LIMITS MAY VARY BASED ON FUTURE SURVEY LOCATIONS.

N
W E
S

0 250 500 1000
SCALE IN FEET

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PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

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NOT FOR CONSTRUCTION

FILE NAME	23244-EXISTFLUM.DWG
LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	FRI, 1-9-2015 - 9:13 AM
PLOT BY	JENNIFER SAPEN

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

1-9-14	

PLAN STATUS

CURRENT FUTURE LAND USE MAP

PROJECT / FILE NO.	SHEET NUMBER
23244	

LEGEND

- DENSITY REDUCTION / GROUNDWATER RESOURCE
- WETLANDS
- CONSERVATION LANDS WETLANDS
- CONSERVATION LANDS UPLANDS

NOTE: WETLAND DEPICTIONS ARE BASED ON AERIAL INTERPRETATION, GIS DATA AND FIELD INVESTIGATION. ACTUAL WETLAND LIMITS MAY VARY BASED ON FUTURE SURVEY LOCATIONS.

N W E S

0 250 500 1000

SCALE IN FEET

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ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

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NOT FOR CONSTRUCTION

FILE NAME	23244-PROPFLUM.DWG
LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	FRI. 1-9-2015 - 9:11 AM
PLOT BY	JENNIFER SAPEN

CROSS REFERENCED DRAWINGS

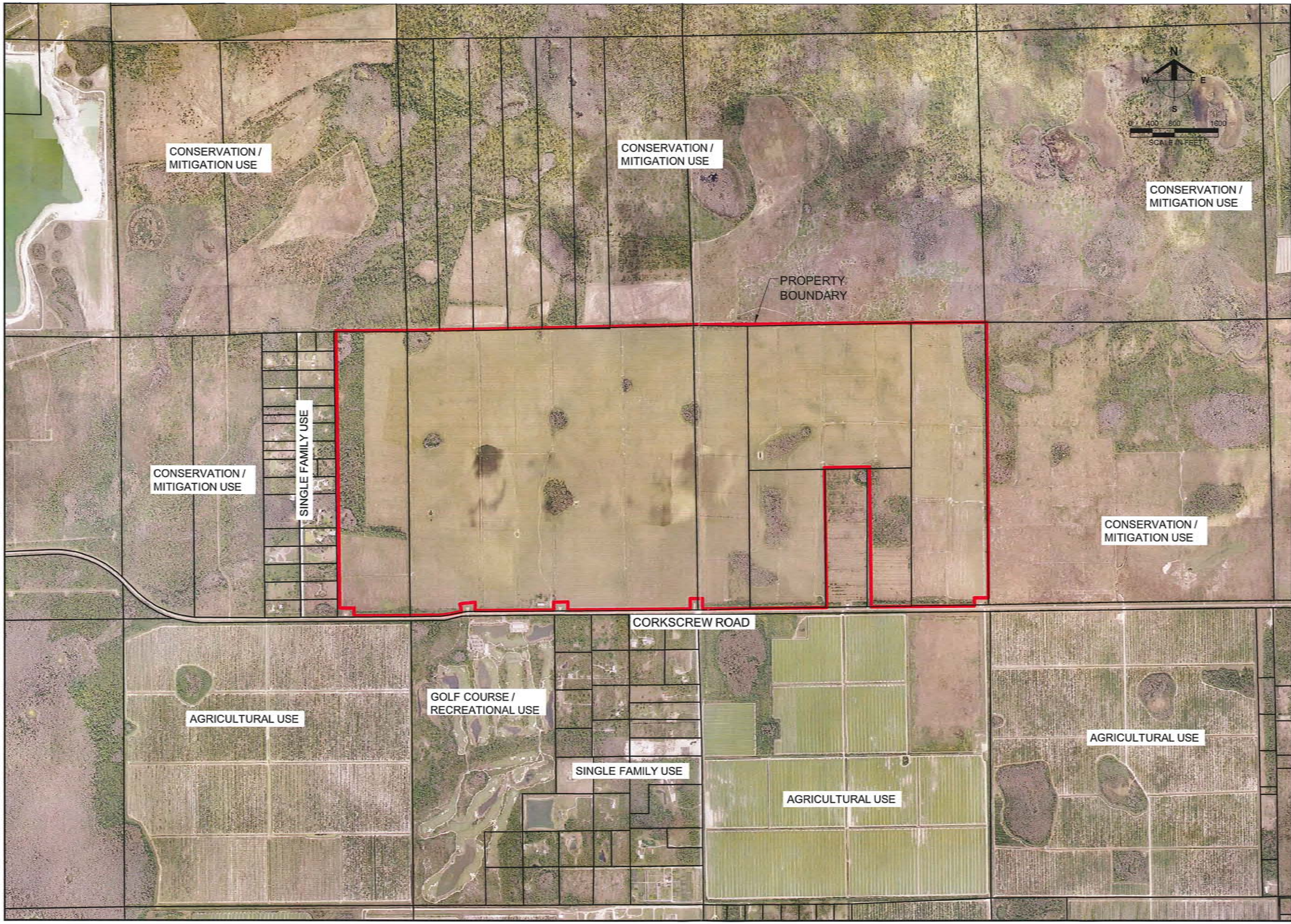
PLAN REVISIONS

1-9-14	

PLAN STATUS

PROPOSED FUTURE LAND USE MAP

PROJECT / FILE NO.	SHEET NUMBER
23244	



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FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

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NOT FOR CONSTRUCTION

FILE NAME	23244-LANDUSE.DWG
LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	MON, 12-29-2014 - 4:46 PM
PLOT BY	ANGELICA CARLEY

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

EXISTING LAND USE MAP

PROJECT / FILE NO.	SHEET NUMBER
23244	

Corkscrew Farms
Part IV. Amendment Support Documentation
A. General Information
4. Description of Existing Land Uses of the Subject Property and Surrounding Properties

The property has been previously cleared and is currently used for agricultural activities. The subject site in the past has been used for a variety of agricultural uses such as cattle grazing/pasture, production of sod, and row cropping. The property is proximate to an area of mitigation/conservation lands such as the Airport Mitigation lands which are located to the north and east of the site. Ongoing agricultural activities are also located in close proximity to the subject site as well as a private recreational facility and large lot residential uses. These uses are further discussed below.

Located west of the subject site is the Burgundy Farms Road large lot single family residential area. This single road neighborhood (unrecorded subdivision) contains about 16 single family homes as well as additional vacant residential parcels. The proposed restoration plan for Corkscrew Farms will preserve the adjacent forested area located on the west property line. The restoration plan will also provide a flowway on the western portion of the site east of the forested area, to help relieve some of the wet season flooding that currently occurs in the Burgundy Farms neighborhood. West of the Burgundy Farms neighborhood is conservation lands owned by Lee County (part of the stair step properties) and the Corkscrew Wellfield. Additional public wells (Lee County) are located adjacent to the subject site along the north side of Corkscrew Road.

Located south of the subject property and south of Corkscrew Road are agricultural uses such as those located on the Pepperland LLC property and the Florida Farm Development Company property. The Old Corkscrew Golf Course is also located south of the subject site on the south side of Corkscrew Road. There is also a large lot single family residential area generally located at the intersection of 6 L's Farm Road and Corkscrew Road.

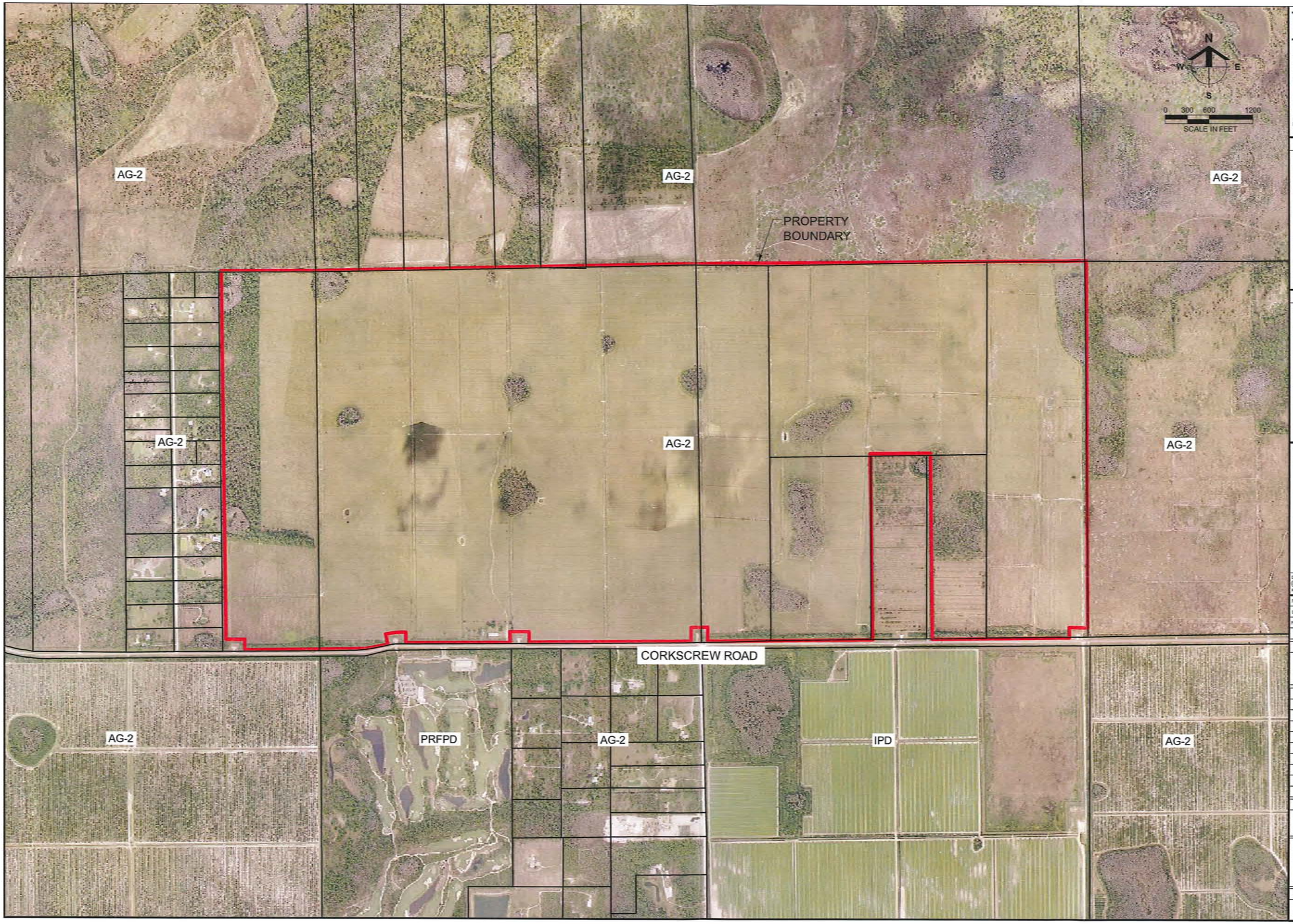
Located to the east is the Corkscrew Regional Mitigation Bank (CRMB). The CRMB consists of approximately 632 acres owned by the South Florida Water Management District. The CRMB is located along the southern edge of the Imperial Marsh Preserve. The goal of the CRMB has been to restore historic wetland functions through hydroperiod restoration, exotic removal and controlled burns. The Corkscrew Farms restoration strategy will complement the efforts that are ongoing on the CRMB and Imperial Marsh Preserve properties. This strategy will expand the amount of contiguous restored and protected conservation land in the area.

North of the subject site is the Airport Mitigation Park. The Park is a 7,000 acre conservation area that was established to compensate for the impact of long-term development of the Southwest Florida International Airport. The site includes the Imperial Marsh, the largest freshwater marsh in Lee County, and the Flint Pen Strand. The Corkscrew Farms restoration strategy complements the restoration efforts that have been undertaken on the Park property. The strategy includes re-establishing flowways from the Park property and accommodating overland surface water flows.

Corkscrew Farms
Part IV. Amendment Support Documentation
A. General Information
5. Description of Existing Zoning of the Subject Property and Surrounding Properties

The subject site is zoned AG-2. The lands to the west, including the Burgundy Farms neighborhood, the stair step lands, and the Corkscrew Wellfield, are all zoned AG-2. The wells located along Corkscrew Road are also all zoned AG-2. The Florida Farm Development Company property south of Corkscrew Road is zoned AG-2. The Old Corkscrew Golf Course property is zoned Private Recreational Facility Planned Development (PRFPD). The Six L's Farm Road large lot residential area is zoned AG-2. The Pepperland LLC property is zoned Industrial Planned Development (IPD). The Pepperland site was originally approved for a dirt mine. The next property to the east, RLF Corkscrew Holdings LLC is also zoned AG-2. East of the RLF property is the Estero General Store that is zoned Community Commercial (CC). The Corkscrew Regional Mitigation Bank property, located east of the subject site, is zoned AG-2. The Airport Mitigation Park is also zoned AG-2.

Corkscrew Farms
Part IV. Amendment Support Documentation
A. General Information
5. Map of Existing Zoning of the Subject Property and Surrounding Properties



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PHONE (239) 461-3170
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FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

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NOT FOR CONSTRUCTION

FILE NAME	23244-SURROUNDINGZONING.DWG
LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	WED., 12-17-2014 - 1:36 PM
PLOT BY	ANGELICA CARLEY

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

SURROUNDING ZONING MAP

PROJECT / FILE NO.	SHEET NUMBER
23244	

Corkscrew Farms
Part IV. Amendment Support Documentation
A. General Information
6. Legal Description

DESCRIPTION
Parcel in
Sections 23 and 24, Township 46 South, Range 26 East,
and Section 19, Township 46 South, Range 27 East
Lee County, Florida

A tract or parcel of land lying in Sections 23 and 24, Township 46 South, Range 26 East and in Section 19, Township 46 South, Range 27 East, Lee County, Florida, said tract or parcel of land being those lands described in deed recorded in Instrument Number 2005000078253, less and except those lands described in Instrument Number 2011000095941, all in the Public Records of Lee County, Florida said tract or parcel of land being more particularly described as follows:

Beginning at the Northwest Corner of said Section 24 run N88°49'15"E along the North line of the Northwest Quarter (NW 1/4) of said Section 24 for 2,619.28 feet to the Northeast corner of said fraction; thence run N88°49'12"E along the North line of the Northeast Quarter (NE 1/4) of said Section 24 for 2,619.33 feet to the Northeast corner of said Section 24; thence run along the North line of the Northwest Quarter (NW 1/4) of said Section 19 the following two courses: N89°27'06"E for 1,330.46 feet and N89°26'55"E for 1,330.55 feet to the Northeast corner of said fraction; thence run along the North line of the Northeast Quarter (NE 1/4) of said Section 19 the following two courses: N89°27'19"E for 1,331.39 feet and N89°26'37"E for 1,330.79 feet Northeast corner of said Section 19; thence run S00°13'51"E along the East line of the Northeast Quarter (NE 1/4) of said Section 19 for 2,621.09 feet to the Southeast corner of said fraction; thence run S00°11'32"E along the East line of the Southeast Quarter (SE 1/4) of said Section 19 for 2,421.24 feet to the Northeast corner of Parcel 109 as described in deed recorded in Instrument No. 2011000095941 of the Public Records of Lee County, Florida; thence run S89°27'58"W along the North line of said Parcel 109 for 259.24 feet; thence run S00°32'02"E along the West line of said Parcel 109 for 144.38 feet to an intersection with the North Right-of-Way line for Corkscrew Road; thence run S89°22'13"W along said North Right-of-Way line for 1,882.46 feet; thence leaving said North Right-of-Way line run N00°33'20"W for 2,559.97 feet; thence run S89°14'00"W for 831.07 feet; thence run S00°46'34"E for 2,557.82 feet to an intersection with the North Right-of-Way line for said Corkscrew Road; thence run S89°24'01"W along said North Right-of-Way line for 2,266.01 feet to the Southeast corner of Parcel 105 as described in said deed recorded in Instrument No. 2011000095941 of the Public Records of Lee County, Florida; thence run N00°32'02"W along the East line of said Parcel 105 for 190.00 feet; thence run S89°27'38"W along the North line of Parcels 105 and 104C as described in said deed recorded in Instrument No. 2011000095941 of the Public Records of Lee County, Florida for 229.24 feet; thence run S00°30'26"E along the West line of said Parcel 104C for 189.94 feet to an intersection with the North Right-of-Way line of said Corkscrew Road; thence run S89°29'39"W along said North Right-of-Way line for 2,232.75 feet to the Southeast corner of Parcel 104B as described in said deed recorded in Instrument No. 2011000095941 of the Public Records of Lee County, Florida;

Continued from previous page

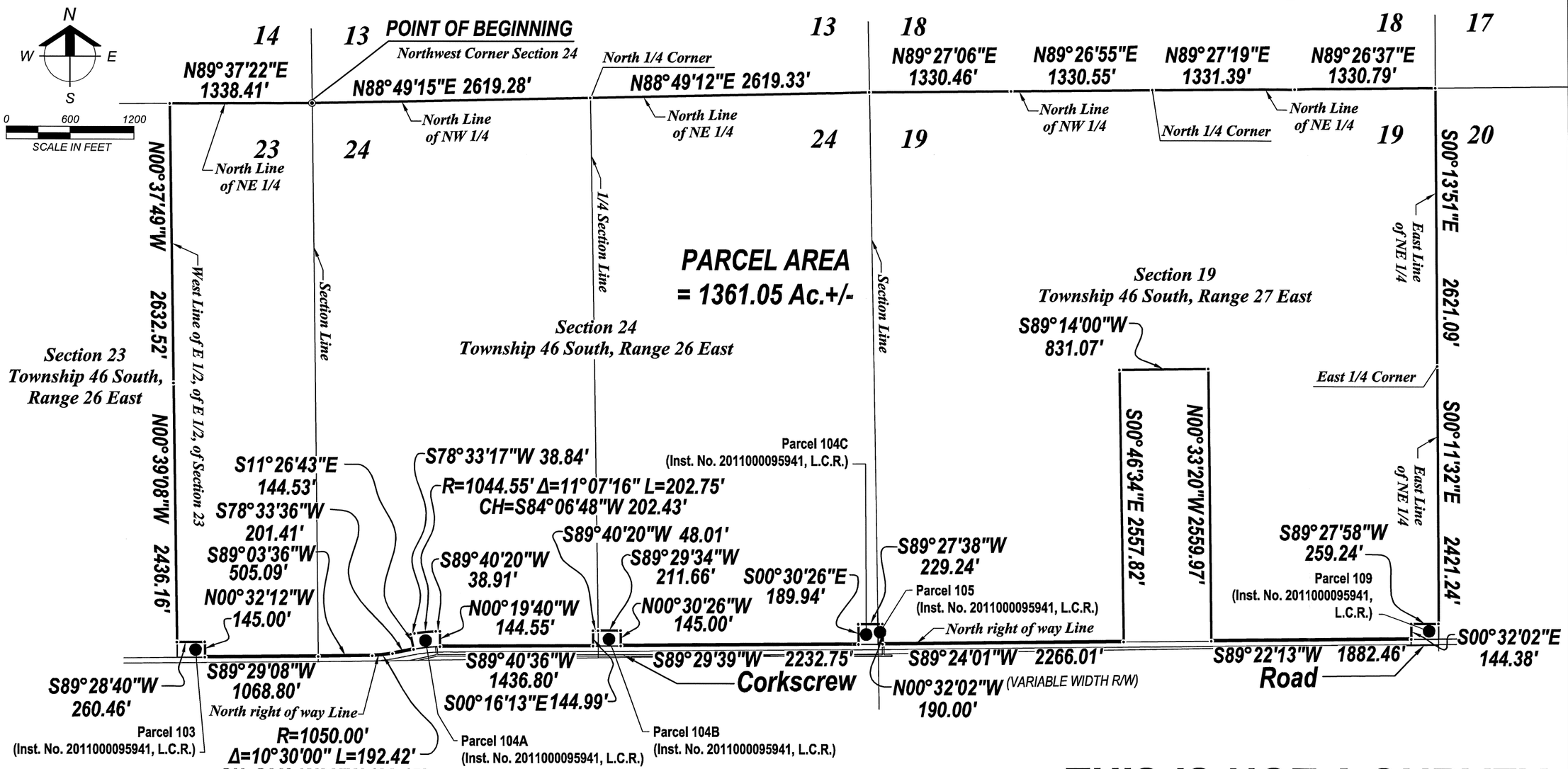
thence run N00°30'26"W along the East line of said Parcel 104B for 145.00 feet; thence run S89°29'34"W along the North line of said Parcel 104B for 211.66 feet; thence run S89°40'20"W along the North line of said Parcel 104B for 48.01 feet; thence run S00°16'13"E along the West line of said Parcel 104B for 144.99 feet to an intersection with the North Right-of-Way line of said Corkscrew Road; thence run S89°40'36"W along said North Right-of-Way line for 1,436.80 feet to the Southeast corner of Parcel 104A as described in said deed recorded in Instrument No. 2011000095941 of the Public Records of Lee County, Florida; thence run along the boundary line of said Parcel 104A the following 5 courses: N00°19'40"W for 144.55 feet, S89°40'20"W for 38.91 feet to a non-tangent curve, Westerly along an arc of a curve to the left of radius 1,044.55 feet (delta 11°07'16") (chord bearing S84°06'48"W) (chord 202.43 feet) for 202.75 feet, S78°33'17"W along a non-tangent line for 38.84 feet and S11°26'43"E for 144.53 feet to an intersection with the North Right-of-Way line of said Corkscrew Road; thence run along said North Right-of-Way line run the following 4 courses: S78°33'36"W for 201.41 feet to a point of curvature, Westerly along an arc of a curve to the right of radius 1,050.00 feet (delta 10°30'00") (chord bearing S83°48'36"W) (chord 192.15 feet) for 192.42 feet to a point of tangency, S89°03'36"W for 505.09 feet and S89°29'08"W for 1,068.80 feet to the Southeast corner of Parcel 103 as described in said deed recorded in Instrument No. 2011000095941 of the Public Records of Lee County, Florida; thence run N00°32'12"W along the East line of said Parcel 103 for 145.00 feet; thence run S89°28'40"W along the North line of said Parcel 103 for 260.46 feet to an intersection with the West line of the East Half (E 1/2) of the East Half (E 1/2) of said Section 23; thence run along said West line the following two courses: N00°39'08"W for 2,436.16 feet and N00°37'49"W for 2,632.52 feet to an intersection with the North line of the Northeast Quarter (NE 1/4) of said Section 23; thence run N89°37'22"E along said North line for 1,338.41 feet to the POINT OF BEGINNING.
Containing 1,361.05 acres, more or less.

Bearings hereinabove mentioned are based on the North line of the Northwest Quarter (NW 1/4) of said Section 24 to bear N88°49'15"E.

This description is based on a boundary survey prepared by Morris Depew, MDA Project No. 05161, dated June 6, 2014.

Scott A. Wheeler (For The Firm)
Professional Surveyor and Mapper
Florida Certificate No. 5949

L:\23244 - Corkscrew Farms (Cameratta)\Descriptions\23244MD_survey_desc.docx



NOTES:

1. ALL DISTANCES SHOWN ARE IN FEET AND DECIMALS THEREOF.
2. CH - DENOTES CHORD BEARING AND DISTANCE
3. INST. No.- DENOTES INSTRUMENT NUMBER, LEE COUNTY PUBLIC RECORDS.
4. L.C.R. - DENOTES LEE COUNTY PUBLIC RECORDS
5. P.U.E. - DENOTES PUBLIC UTILITY EASEMENT.
6. R/W - DENOTES RIGHT-OF-WAY
7. BEARINGS AS SHOWN ARE BASED ON THE NORTH LINE OF THE NORTHWEST QUARTER OF SECTION 24 TO BEAR N88°49'15"E.
8. THIS DESCRIPTION IS BASED ON A BOUNDARY SURVEY PREPARED BY MORRIS DEPEW, MDA PROJECT NO. 05161, DATED JUNE 6, 2014

13. DESCRIPTION IS ATTACHED.

THIS IS NOT A SURVEY

SCOTT A. WHEELER (FOR THE FIRM - LB-6940)
PROFESSIONAL SURVEYOR AND MAPPER
FLORIDA CERTIFICATE NO. 5949

DATE SIGNED:

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

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PHONE (239) 461-3170
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FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

A Parcel of Land in Sections 23 & 24, Township 46 South, Range 26 East and Section 19, Township 46 South, Range 27 East Lee County, Florida

PROJECT SURVEYOR

SCOTT A. WHEELER CERTIFICATE NO. 5949 STATE OF FLORIDA REGISTERED SURVEYOR & MAPPER

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER

FILE NAME	23244SK01.DWG
LAYOUT	1
LOCATION	J:\23244\DWG\SURVEYING\SKETCH\
PLOT DATE	WED. 12-31-2014 - 3:05 PM
PLOT BY	BRANDON HARDY

DRAWING DATA

SURVEY DATE	12-31-2014
DRAWN BY	B. HARDY
CHECKED BY	SAW
SCALE	1"=1200'
FIELD BOOK	

PLAN REVISIONS

STRAP NUMBERS

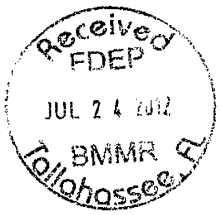
SKETCH TO ACCOMPANY DESCRIPTION

PROJECT / FILE NO.	SHEET NUMBER
23244 23,24-46-26 & 19-46-27	2 OF 2

Corkscrew Farms
Part IV. Amendment Support Documentation
A. General Information
7. Copy of Deeds

INSTR # 2012000179902, Doc Type D, Pages 5, Recorded 08/16/2012 at 01:16 PM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $0.70 Rec. Fee $44.00 Deputy Clerk JMILLER

1
5



This instrument prepared by:

Susan L. Stephens, Esq.
Hopping Green & sams, P.A.
119 South Monroe Street, Suite 300
Tallahassee, FL 32301

QUIT CLAIM DEED

THIS QUIT CLAIM DEED is made as of the 23rd day of July, 2012, by and between the **State of Florida, Department of Environmental Protection** ("First Party"), whose mailing address is 3900 Commonwealth Boulevard, Mail Station 115, Tallahassee, Florida 32399-3000, and **Resource Conservation Holdings, LLC**, a Florida limited liability company ("Second Party"), whose address is 3010 N. Military Trail, 3rd Floor, Boca Raton, Florida 33431.

W I T N E S S E T H:

First Party, for and in consideration of the surrender of Environmental Resource Permit No. 0266397-001 and No. 0266797-002 by Second Party to First Party, and pursuant to Condition 29 thereof and other good and valuable consideration to it in hand paid by Second Party, the receipt whereof is hereby acknowledged, First Party does hereby remise, release and quit-claim unto the Second Party forever, all the right, title, interest, claim, demand in the oil gas and mineral estate which the First Party has in and to the following described lot, piece or parcel land, situate, lying and being in the County of Lee, State of Florida, to wit:

See **Exhibit A** attached hereto and by reference made a part hereof.

TO HAVE AND TO HOLD unto Second Party and Second Party's successors and assigns forever.

[*reminder of page left intentionally blank*]

IN WITNESS WHEREOF, First Party has caused these presents to be executed on the day and yea first above written

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION

Witness Signature

Terry Bentley
Witness Printed Name

By: _____
(Clay Smallwood)
Its: Director, Division of State Lands
(title)

Witness Signature

Elaine Mann
Witness Printed Name

APPROVED AS TO FORM AND LEGALITY

JUL 19 2012

BY: MICHAEL D. MORELLY (DEP ATTORNEY)

STATE OF Florida)
COUNTY OF Leon)

The foregoing instrument was acknowledged before me this 23rd day of July, 2012, by Clay Smallwood, State of Florida, Department of Environmental Protection, Division of State Lands. He is personally known to me or has produced _____ as identification.

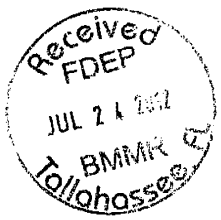
NOTARY PUBLIC
My Commission Expires:

AVIS G. LOCKETT
Commission DD 818021
Expires September 19, 2012
Bonded Thru Troy Fain Insurance 800-385-7019

Received FDEP JUL 24 2012 BMMR Tallahassee, FL

EXHIBIT A

CONSERVATION AREA 1



DESCRIPTION:

A PARCEL OF LAND LYING IN SECTION 19, TOWNSHIP 46 SOUTH, RANGE 27 EAST AND SECTION 24 AND THE EAST 1/2 OF SECTION 23, TOWNSHIP 46 SOUTH, RANGE 26 EAST, ALL IN LEE COUNTY, FLORIDA MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NE CORNER OF SAID SECTION 19; THENCE S.00°13'51"E. ALONG THE EAST LINE OF THE NE 1/4 OF SAID SECTION 19 FOR 2621.09 FEET TO THE EAST 1/4 CORNER OF SAID SECTION 19; THENCE S.00°11'32"E. ALONG THE EAST LINE OF THE SE 1/4 OF SAID SECTION 19 FOR 2267.01 FEET; THENCE S.89°48'28"W. FOR 500.00 FEET; THENCE N.00°11'32"W. FOR 2262.00 FEET; THENCE N.00°13'51"W. FOR 1852.06 FEET; THENCE N.45°22'51"W. FOR 889.60 FEET; THENCE S.89°26'58"W. FOR 1530.91 FEET; THENCE S.89°27'00"W. FOR 2660.24 FEET; THENCE S.88°49'12"W. FOR 2619.63 FEET; THENCE S.88°49'15"W. FOR 172.63 FEET; THENCE S.09°58'46"W. FOR 39.67 FEET; THENCE S.07°19'04"W. FOR 44.31 FEET; THENCE S.29°44'48"W. FOR 50.01 FEET; THENCE N.55°03'00"W. FOR 55.65 FEET; THENCE N.33°23'25"W. FOR 109.72 FEET; THENCE S.88°49'15"W. FOR 1908.36 FEET TO A POINT ON A NON-TANGENTIAL CURVE CONCAVE TO THE NORTHWEST, HAVING A RADIUS OF 401.25 FEET, A CENTRAL ANGLE OF 40°19'49" AND WHOSE CHORD BEARS S.27°40'12"W.; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE FOR 282.44 FEET TO A POINT ON A NON-TANGENTIAL CURVE CONCAVE TO THE SOUTHEAST, HAVING A RADIUS OF 1801.13 FEET, A CENTRAL ANGLE OF 42°38'39" AND WHOSE CHORD BEARS S.54°51'59"W.; THENCE SOUTHWESTERLY ALONG THE ARC OF SAID CURVE FOR 1340.55 FEET; THENCE S.00°13'54"E. FOR 4072.08 FEET TO THE NORTH RIGHT OF WAY LINE OF CORKSCREW ROAD; THENCE S89°29'08"W ALONG SAID NORTH LINE FOR 77.36 FEET; THENCE N.00°13'54"W. FOR 296.86 FEET; THENCE S.89°46'06"W. FOR 418.23 FEET TO THE WEST LINE OF THE EAST 1/2 OF THE SE 1/4 OF SAID SECTION 23; THENCE N.00°39'08"W. ALONG SAID WEST LINE FOR 2267.20 FEET TO THE NW CORNER OF THE EAST 1/2 OF THE SE 1/4 OF SAID SECTIION 23; THENCE N.00°37'49"W ALONG THE WEST LINE OF THE EAST 1/2 OF THE NE 1/4 OF SAID SECTION 23 FOR 2632.52 FEET TO THE NW CORNER OF THE EAST 1/2 OF THE NE 1/4 OF SAID SECTION 23; THENCE N.89°37'22"E. ALONG THE NORTH LINE OF THE NE 1/4 OF SAID SECTION 23 FOR 1338.42 FEET TO THE NW CORNER OF SAID SECTION 24; THENCE N.88°49'15"E. ALONG THE NORTH LINE OF THE NW 1/4 OF SAID SECTION 23 FOR 2619.28 FEET TO THE N 1/4 CORNER OF SAID SECTION 24; THENCE N.88°49'12"E. ALONG THE NORTH LINE OF THE NE1/4 OF SAID SECTION 24 FOR 2619.33 FEET TO THE NW CORNER OF SAID SECTION 19; THENCE N.89°27'00"E. ALONG THE NORTH LINE OF THE NW1/4 OF SAID SECTION 19 FOR 2661.01 FEET TO THE N 1/4 CORNER OF SAID SECTION 19; THENCE N.89°26'58"E. ALONG THE NORTH LINE OF THE NE 1/4 OF SAID SECTION 19 FOR 2662.18 FEET TO THE POINT OF BEGINNING.

CONTAINING 7,283,235 SQUARE FEET OR 167.20 ACRES MORE OR LESS.

SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.

CONSERVATION AREA 2

DESCRIPTION:

A PARCEL OF LAND LYING IN THE EAST 1/2 OF SECTION 19, TOWNSHIP 46 S, RANGE 27 E, LEE COUNTY, FLORIDA MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SE CORNER OF THE NE ¼ OF SAID SECTION 19; THENCE S.89°14'00"W. ALONG THE SOUTH LINE OF THE NE ¼ OF SAID SECTION 19 FOR 1878.92 FEET TO THE POINT OF BEGINNING THENCE S.30°16'44"E. FOR 314.63 FEET; THENCE S.00°37'18"W. FOR 234.94 FEET; THENCE S.89°01'23"E. FOR 296.35 FEET; THENCE S.08°34'17"E. FOR 158.36 FEET; THENCE S.03°42'46"E. FOR 159.47 FEET; THENCE S.01°39'16"E. FOR 550.17 FEET; THENCE S.89°49'28"W. FOR 207.56 FEET; THENCE N.87°09'35"W. FOR 281.89 FEET; THENCE N.81°07'42"W. FOR 281.89 FEET; THENCE N.00°33'20"W. FOR 1316.90 FEET TO THE SOUTH LINE OF THE NE ¼ OF SAID SECTION 19; THENCE S.89°14'00"W. ALONG SAID SOUTH LINE FOR 174.78 FEET; THENCE N.57°53'20"E. FOR 124.38 FEET; THENCE N.73°29'19"E. FOR 183.80 FEET; THENCE S.75°02'20"E. FOR 108.98 FEET; THENCE S.38°08'24"E. FOR 107.00 FEET TO THE POINT OF BEGINNING.

CONTAINING 875,666 SQUARE FEET OR 20.10 ACRES MORE OR LESS.

SUBJECT TO EASEMENTS AND RESTRICTIONS OF RECORD.

INSTR # 2005000078253, Doc Type D, Pages 4, Recorded 10/19/2005 at 09:20 AM, Charlie Green, Lee County Clerk of Circuit Court, Deed Doc. D $232400.00 Rec. Fee $35.50 Deputy Clerk BPERRY

RETURN TO VIRGINIA SCARNA
c/o RUDEN, McCLOSKY, et al., P.A.
Post Office Box 1900
Fort Lauderdale, Florida 33302

Prepared by ~~and return to~~:
Sharon M. Zuccaro, Esq.
Henderson, Franklin, Starnes & Holt, P.A. (Brooks)
9990 Coconut Road Suite 101
Bonita Springs, FL 34135
239-344-1378
File Number: **RCP Ascot SMZ**

[Space Above This Line For Recording Data]

Warranty Deed

This instrument was prepared without benefit of title examination or legal opinion

This Warranty Deed made this 14 day of **September, 2005** between **Resource Conservation Properties, Inc., a Florida corporation** whose post office address is **9990 Coconut Road, Suite 200, Bonita Springs, FL 34135**, grantor, and **Resource Conservation Holdings, LLC, a Florida limited liability company** whose post office address is **140 NE 4th Avenue, Delray Beach, Florida 33483**, grantee:

(Whenever used herein the terms "grantor" and "grantee" include all the parties to this instrument and the heirs, legal representatives, and assigns of individuals, and the successors and assigns of corporations, trusts and trustees)

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS ($10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being **in Lee County, Florida** to-wit:

See Exhibit "A", attached hereto and made a part hereof.

Parcel Identification Numbers: 1946270000001.0010, 1946270000001.0040 1946270000010060, 1946270000001.0050, 1946270000001.0000, 2446260000001.0000, and 2346260000003.0000,

Subject to ad valorem and non-ad valorem real property taxes for the year of closing and subsequent years, zoning and other use restrictions imposed by governmental authority, outstanding oil, gas and mineral interests of record, if any, and restrictions, reservations and easements of record, but this provision shall not operate to reimpose the same.

Together with all the tenements, hereditaments and appurtenances thereto belonging or in anywise appertaining.

To Have and to Hold, the same in fee simple forever.

And the grantor hereby covenants with said grantee that the grantor is lawfully seized of said land in fee simple; that the grantor has good right and lawful authority to sell and convey said land; that the grantor hereby fully warrants the title to said land and will defend the same against the lawful claims of all persons whomsoever; and that said land is free of all encumbrances, except taxes accruing subsequent to December 31, 2004 and those items specified in Exhibit "B".

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

Witness Name: Joan M Ciccaro

Witness Name: Bev Belleau

Resource Conservation Properties, Inc.
a Florida corporation

By: _____
James P. McGowan, Vice President

(Corporate Seal)

State of Florida
County of Lee

The foregoing instrument was acknowledged before me this 14 day of September, 2005 by **James P. McGowan**, Vice-President of **Resource Conservation Properties, Inc.**, on behalf of the corporation. He [X] is personally known to me or [ ] has produced a driver's license as identification.

[Notary Seal]

Notary Public

Printed Name: Beverly A. Belleau

My Commission Expires: 10-19-05

BEVERLY A. BELLEAU
MY COMMISSION EXPIRES
October 19, 2005
#DD 037625
Bonded thru
Notary Public Underwriters
NOTARY PUBLIC, STATE OF FLORIDA

EXHIBIT "A"

DESCRIPTION: PARCEL A
PARCEL OF LAND LYING IN SECTION 19, TOWNSHIP 46 SOUTH, RANGE 27 EAST, TOGETHER WITH A PARCEL OF LAND LYING IN THE EAST ONE HALF (1/2)OF SECTION 24, TOWNSHIP 46 SOUTH, RANGE 26 EAST. ALL IN LEE COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

PARCEL # 1: THE NORTH ONE HALF (1/2) OF THE EAST 1320 FEET OF THE WEST 2310 FEET, TOGETHER WITH THE NORTH ONE HALF (1/2) OF THE WEST THREE QUARTERS (3/4), LESS THE WEST 2310 FEET OF SECTION 19, TOWNSHIP 46 SOUTH, RANGE 27 EAST.

TOGETHER WITH:
PARCEL # 2: THE EAST ONE QUARTER (1/4) OF SECTION 19, TOWNSHIP 46 SOUTH, RANGE 27 EAST; LESS THE CORKSCREW ROAD RIGHT OF WAY.

TOGETHER WITH:
PARCEL # 3: THE EAST ONE HALF (1/2) OF THE FOLLOWING DESCRIBED PROPERTY: THE SOUTH ONE HALF (1/2) OF THE WEST THREE QUARTERS, LESS THE WEST 2310 FEET OF SECTION 19, TOWNSHIP 46 SOUTH, RANGE 27 EAST; LESS THE CORKSCREW ROAD RIGHT OF WAY.

TOGETHER WITH:
PARCEL # 4 : THE SOUTH ONE HALF (1/2) OF THE EAST 1320 FEET OF THE WEST 2310 FEET OF SECTION 19, TOWNSHIP 46 SOUTH, RANGE 27 EAST; LESS THE CORKSCREW ROAD RIGHT OF WAY. LESS A 30 FOOT RIGHT OF WAY FOR INGRESS-EGRESS ALONG THE EASTERLY BOUNDARY OF THE SOUTH ONE HALF (1/2) OF THE EAST 1320 FEET OF THE WEST 2310 FEET OF SECTION 19, TOWNSHIP 46 SOUTH, RANGE 27 EAST.

TOGETHER WITH:
PARCEL # 5: THE EAST 30 FEET OF THE SOUTH ONE HALF (1/2) OF THE EAST 1320 FEET OF THE WEST 2310 FEET OF SECTION 19, TOWNSHIP 46 SOUTH, RANGE 27 EAST. LESS CORKSCREW ROAD RIGHT OF WAY.

TOGETHER WITH:

PARCEL # 6: THE WEST 990 FEET OF SECTION 19, TOWNSHIP 46 SOUTH, RANGE 27 EAST; LESS CORKSCREW ROAD RIGHT OF WAY.

TOGETHER WITH:

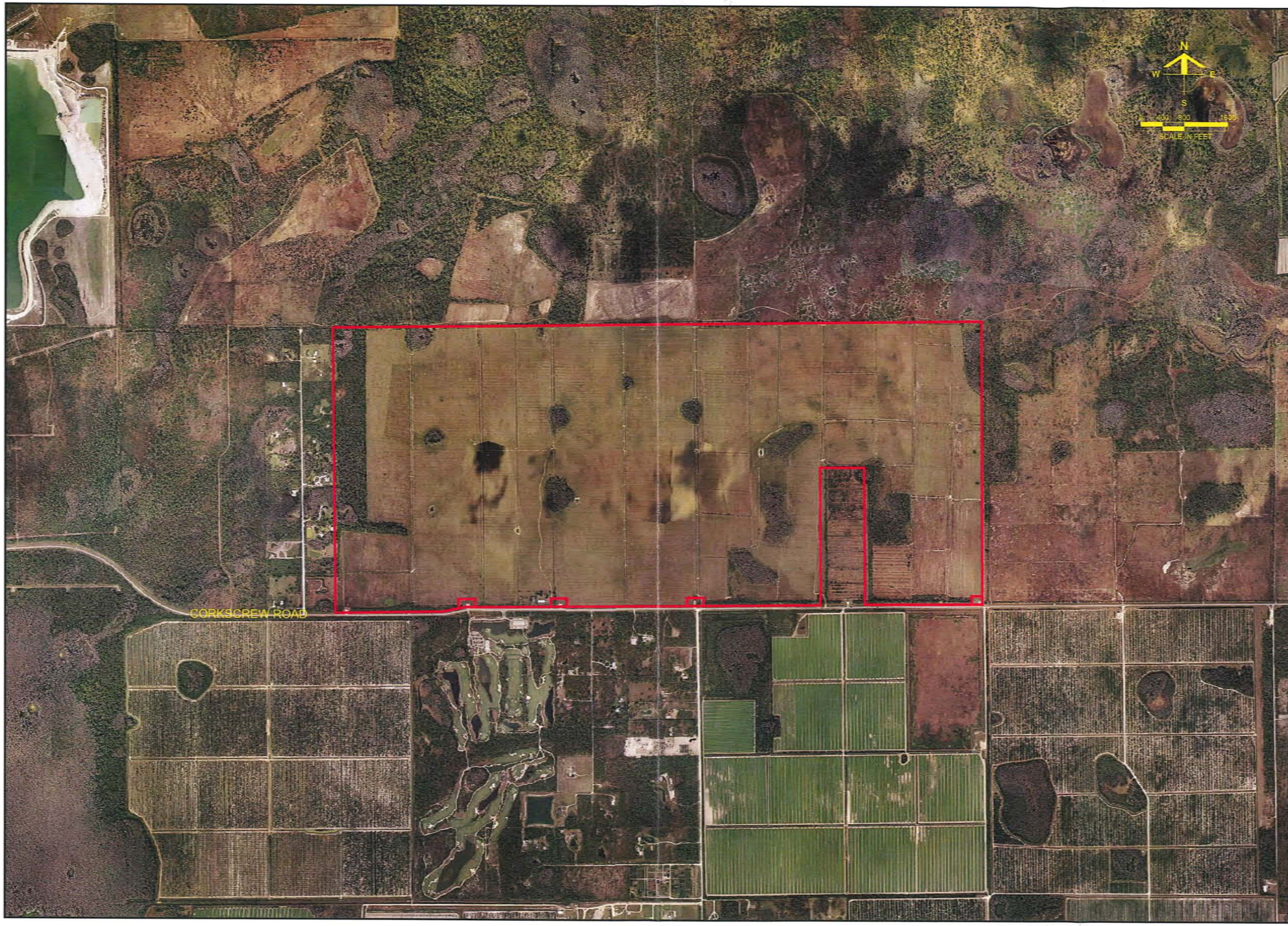
PARCEL # 7: BEGINNING AT THE NORTHEAST CORNER OF SECTION 24, TOWNSHIP 46 SOUTH. RANGE 26 EAST, LEE COUNTY, FLORIDA; THENCE S.00°46'34"E. ALONG THE EASTERLY BOUNDARY OF SAID SECTION 24, 5192.17 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY LINE OF CORKSCREW ROAD (A COUNTY MAINTAINED RIGHT OF WAY); THENCE ALONG SAID NORTHERLY RIGHT OF WAY, S.89°29'39"W. 1230.00 FEET TO A POINT OF INTERSECTION WITH THE EAST BOUNDARY OF THE WEST 1400 FEET OF THE EAST ONE HALF (1/2) OF SAID SECTION 24; THENCE ALONG SAID EAST BOUNDARY, N.00°39'26"W., 5177.78 FEET TO A POINT OF INTERSECTION WITH THE NORTH BOUNDARY OF THE NORTHEAST ONE QUARTER (1/4) OF SAID SECTION 24; THENCE ALONG SAID

EXHIBIT "A"

NORTH BOUNDARY N.88°49'12"E., 1219.27 FEET TO THE POINT OF BEGINNING.

DESCRIPTION: PARCEL B
THE EAST 1/2 OF THE EAST 1/2 OF SECTION 23; AND THE WEST 1/2 OF SECTION 24; AND THE WEST 1400 FEET OF THE EAST 1/2 OF SECTION 24; LESS RIGHT OF WAY FOR CORKSCREW ROAD ALL LYING IN TOWNSHIP 46 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF SECTION 24, TOWNSHIP 46 SOUTH, RANGE 26 EAST, LEE COUNTY, FLORIDA AND RUN THENCE N.88°49'15"E., 2619.28 FEET ALONG THE NORTH BOUNDARY OF THE NORTHWEST ¼ OF SAID SECTION 24 TO THE NORTHEAST CORNER OF THE NORTHWEST 1/4 OF SAID SECTION 24; THENCE N.88°49'12"E., 1400.06 FEET ALONG THE NORTH BOUNDARY OF THE NORTHEAST 1/4 OF SAID SECTION 24 TO THE EAST BOUNDARY OF THE WEST 1400 FEET OF THE EAST 1/2 OF SAID SECTION 24; THENCE S.00°39'26"E., 5177.78 FEET ALONG THE EAST BOUNDARY OF THE WEST 1400 FEET OF THE EAST 1/2 OF SAID SECTION 24 TO A POINT ON THE NORTHERLY MAINTAINED RIGHT OF WAY LINE OF CORKSCREW ROAD (50' FROM CENTERLINE); THENCE ALONG SAID NORTHERLY RIGHT OF WAY LINE THE FOLLOWING SEVEN (7) COURSES: 1) S.89°29'39"W., 1400.00 FEET TO A POINT ON THE EAST BOUNDARY OF THE WEST 1/2 OF SAID SECTION 24; 2) S.89°40'36"W., 1524.05 FEET TO A POINT OF CURVATURE; 3) WESTERLY, 174.62 FEET ALONG THE ARC OF A CURVE TO THE LEFT HAVING A RADIUS OF 900.00 FEET AND A CENTRAL ANGLE OF 11°07'00" (CHORD BEARING S.84°07'06"W., 174.35 FEET) TO A POINT OF TANGENCY; 4) S.78°33'36"W., 240.33 FEET TO A POINT OF CURVATURE; 5) WESTERLY, 192.42 FEET ALONG THE ARC OF A CURVE TO THE RIGHT HAVING A RADIUS OF 1050.00 FEET AND A CENTRAL ANGLE OF 10°30'00" (CHORD BEARING S.83°48'36"W., 192.15 FEET) TO A POINT OF TANGENCY; 6) S.89°03'36"W:, 505.09 FEET TO A POINT ON THE EAST BOUNDARY OF THE AFORESAID SECTION 23; 7) S.89°29'08"W., 1328.97 FEET TO A POINT ON THE WEST BOUNDARY OF THE EAST 1/2 OF THE EAST 1/2 OF SAID SECTION 23; THENCE N.00°39'08"W., 2581.13 FEET ALONG THE WEST BOUNDARY OF THE EAST 1/2 OF THE EAST 1/2 OF SAID SECTION 23; THENCE N.00°37'49"W., 2632.52 FEET ALONG THE WEST BOUNDARY OF THE EAST 1/2 OF THE EAST 1/2 OF SAID SECTION 23 TO THE NORTHWEST CORNER OF THE EAST 1/2 OF THE EAST 1/2 OF SAID SECTION 23; THENCE N.89°37'22"E., 1338.42 FEET ALONG THE NORTH BOUNDARY OF SAID EAST 1/2 OF THE EAST 1/2 OF SECTION 23 TO THE POINT OF BEGINNING.



Barraco and Associates, Inc.
CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING - LANDSCAPE DESIGN
www.barraco.net
2271 McGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL 33966

PROJECT DESCRIPTION

1350 ACRES
CAMERATTA
COMAPANIES

LEE COUNTY, FLORIDA

THIS PLAN IS PRELIMINARY AND INTENDED FOR CONCEPTUAL PLANNING PURPOSES ONLY. SITE LAYOUT AND LAND USE INTENSITIES OR DENSITIES MAY CHANGE SIGNIFICANTLY BASED UPON SURVEY, ENVIRONMENTAL, ENGINEERING AND REGULATORY CONSTRAINTS AND / OR OPPORTUNITIES.
* NOT FOR CONSTRUCTION *

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LAYOUT	LAYOUT1
LOCATION	J:\23244\DWG\EXHIBITS\
PLOT DATE	THU, 5-29-2014 - 8:17 AM
PLOT BY	ANGELICA CARLEY
DESIGN BY	JENNIFER SAPEN

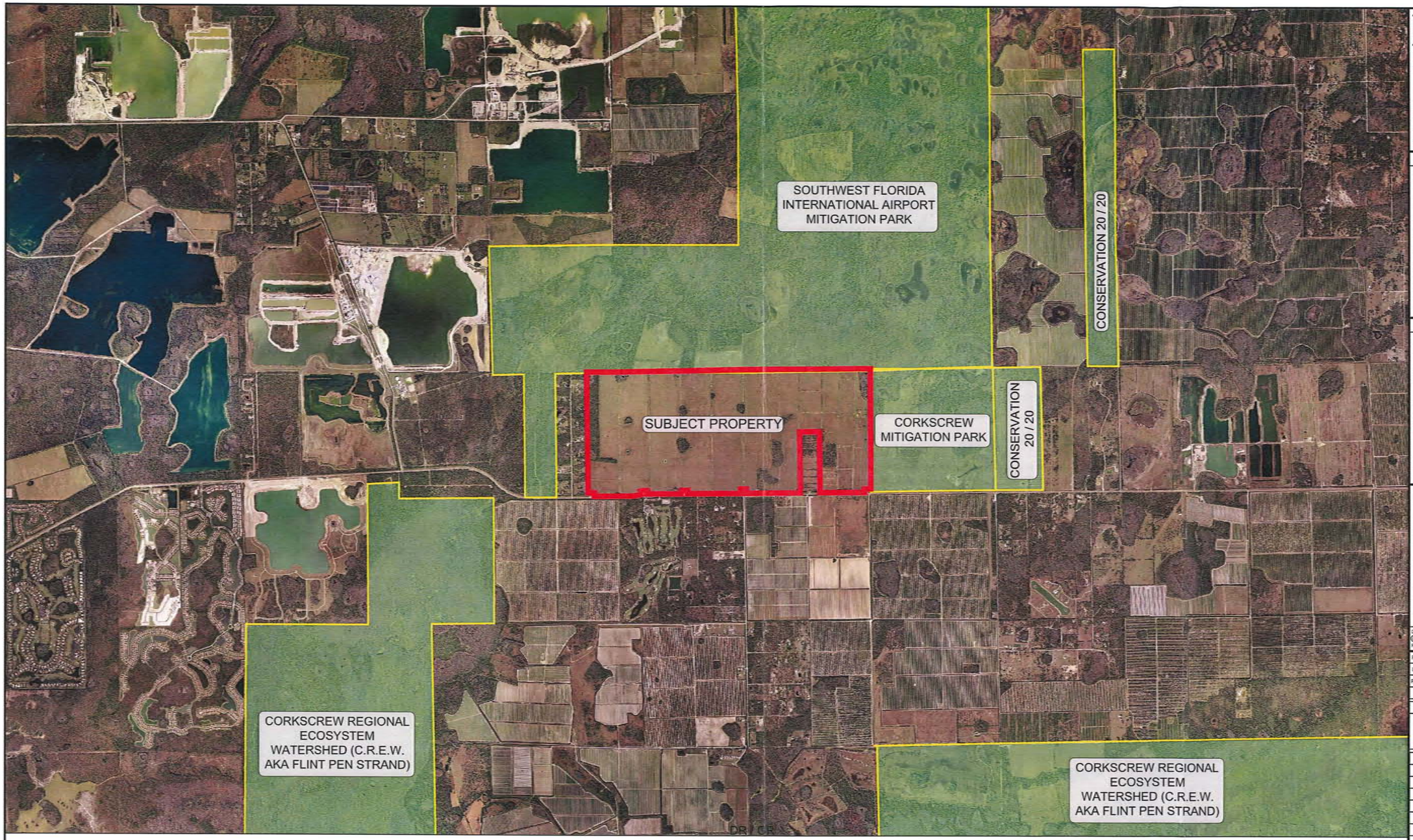
CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

AERIAL SITE EXHIBIT

PROJECT / FILE NO.	SHEET NUMBER
23244	1



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FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

THIS PLAN IS PRELIMINARY AND INTENDED FOR CONCEPTUAL PLANNING PURPOSES ONLY.

SITE LAYOUT AND LAND USE INTENSITIES OR DENSITIES MAY CHANGE SIGNIFICANTLY BASED UPON SURVEY, ENGINEERING, ENVIRONMENTAL AND / OR REGULATORY CONSTRAINTS AND / OR OPPORTUNITIES.

NOT FOR CONSTRUCTION

FILE NAME	23244-CONLANDS.DWG
LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	MON, 12-29-2014 - 4:00 PM
PLOT BY	ANGELICA CARLEY

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

SURROUNDING CONSERVATION LANDS MAP

PROJECT / FILE NO.	SHEET NUMBER
23244	

Corkscrew Farms
Part IV. Amendment Support Documentation
B. Public Facilities Impacts
1. Traffic Circulation Analysis

Prepared by:
DAVID PLUMMER & ASSOCIATES, INC.
2149 McGregor Boulevard
Fort Myers, Florida 33901
December 18, 2014

CORKSCREW FARMS
COMPREHENSIVE PLAN AMENDMENT
TRAFFIC STUDY

Project #14534

December 18, 2014

Prepared by:
DAVID PLUMMER & ASSOCIATES, INC.
2149 McGregor Boulevard
Fort Myers, Florida 33901

CORKSCREW FARMS
COMPREHENSIVE PLAN AMENDMENT
TRAFFIC STUDY

Introduction

Corkscrew Farms is a planned single-family residential community with an amenity center for its residents. The property is located on the north side of Corkscrew Road about two miles east of Alico Road, Exhibit 1.

The proposed Comprehensive Plan Amendment (CPA) for Corkscrew Farms would allow up to 1,325 single-family residential units, with an amenity center for the residents. The property will have access to Corkscrew Road.

This traffic study is in support of the CPA application. Consistent with Lee County's Application for a Comprehensive Plan Amendment, this CPA traffic study provides both a Long Range 20-Year Horizon analysis and a Short Range 5-Year CIP Horizon analysis.

The Long Range 20-Year Horizon analysis provides a comparison of future road segment traffic conditions in 2035 on the Lee County MPO's 2035 Highway Cost Feasible Plan road network, both with and without the proposed CPA.

The Short Range 5-Year CIP Horizon analysis provides an assessment of future road segment traffic conditions in 2020, both with and without the proposed CPA.

Summary of Conclusions

The results of the Long Range 20-Year Horizon analysis and Short Range 5-Year CIP Horizon analysis are summarized below.

1. No new road improvements are needed as a result of the proposed CPA.

2. The Long Range 20-Year Horizon analysis indicates that no road segments within a three mile radius of the site are expected to have level of service issues in 2035, either with or without the proposed CPA. Therefore, no modifications to the Lee County MPO 2035 Highway Cost Feasible Plan or Lee Plan Map 3A are needed as a result of the proposed CPA.

3. The Short Range 5-Year CIP Horizon analysis indicates that no road segments within a three mile radius are expected to have level of service issues in 2020, either with or without the proposed CPA. Therefore, no modifications to the County's five year work program are needed as a result of the proposed CPA.

Transportation Methodology

A transportation methodology outline dated November 21, 2014 was prepared consistent with Lee County's Application for a Comprehensive Plan Amendment and provided to the Lee County staff for review and comment. The staff agreed that a separate methodology meeting was not needed.

The staff generally agreed with the proposed methodology, but provided a few comments and suggestions in an e-mail dated November 25, 2014. DPA's responses to the staff's comments and suggestions were provided in a follow-up e-mail to staff dated November 26, 2014. After reviewing DPA's responses, the staff informed DPA that they were in agreement in an e-mail later on November 26, 2014. The methodology outline and subsequent e-mail correspondence are included in Appendix A.

This CPA traffic study was prepared consistent with the agreed upon methodology.

Study Area

In accordance with Lee County's Application for a Comprehensive Plan Amendment, the study includes a review of projected roadway conditions within a 3-mile radius of the site. The study area therefore extends west along Corkscrew Road to Bella Terra, east along Corkscrew Road for three miles, and north along Alico Road to Green Meadows Road, Exhibit 2.

Existing Road Network

The existing road network is shown in Exhibit 1. The primary east-west road serving the area is Corkscrew Road, which connects US 41 in Lee County with SR 82 in Collier County. Alico Road extends from Corkscrew Road north to Green Meadows Road and then west to US 41. Both of these roads are two-lane roads within the study area.

Scheduled and Planned Road Improvements

Roadway improvements scheduled for construction in the County's current five-year work program were considered committed improvements for purposes of the Short Range 5-Year CIP Horizon analysis. This included one improvement in the general area: the I-75 Airport Direct Connect, which is under construction. There are no committed or scheduled improvements within the three mile study area.

Roadway improvements included in the MPO's 2035 Highway Cost Feasible Plan were considered planned improvements for purposes of the Long Range 20-Year Horizon analysis. They include the Alico Road Widening from Ben Hill Griffin Parkway to Green Meadows Road, the Alico Road Extension northeast to SR 82, and the CR 951 Extension from Corkscrew Road to Alico Road.

CPA Development Parameters

Corkscrew Farms is anticipated to be a single phase development, with build-out expected in 2022. The horizon years for this study, however, are 2035 for the Long Range 20-Year Horizon analysis and 2020 for the Short Range 5-Year CIP Horizon analysis.

The proposed Comprehensive Plan Amendment (CPA) for Corkscrew Farms would allow up to 1,325 single-family residential units, with an amenity center for the residents. All 1,325 units were reflected in the Long Range 20-Year Horizon analysis. For the Short Range 5-Year CIP Horizon analysis, it was assumed that 1,000 units would be in place by 2020.

Trip Generation

The adopted Lee County MPO travel model was used to estimate the trip generation for the Corkscrew Farms property under both scenarios, consistent with all other traffic analysis zones in the MPO travel model.

A single traffic analysis zone was used to represent the Corkscrew Farms property: TAZ 2083. It connects with Corkscrew Road about two miles east of Alico Road.

Worksheets were used to develop the input data for TAZ 2083 for both the long range and short range horizon years. These are provided in Appendix B.

- Long Range 20-Year Horizon (2035) With CPA (Appendix B-1)
- Short Range 5-Year CIP Horizon (2020) With CPA (Appendix B-2)

Long Range 20-Year Horizon (2035) Analysis

The adopted Lee County MPO travel model was used to project future 2035 traffic conditions, both with and without the proposed CPA. As explained above, the future road network used for these travel model assignments was the Lee County MPO 2035 Highway Cost Feasible Plan.

The FSUTMS input and output files for the travel model assignments can be found on DPA's ftp website at this link: ftp://ftpfm.dplummer.com/Public/14534_Corkscrew_Farms_CPA. These files will be available for download from the DPA website for approximately two months.

Exhibit 3 shows future traffic conditions in 2035 without the proposed CPA. As shown in Exhibit 3, no road segments within the study area are expected to have level of service issues in 2035 without the proposed CPA.

Exhibit 4 shows future traffic conditions in 2035 with the proposed CPA. This assignment assumed up to 1,325 single-family units in Corkscrew Farms (Appendix B-1), reflective of the proposed CPA. As shown in Exhibit 4, no road segments within the study area are expected to have level of service issues in 2035 with the proposed CPA.

Therefore, no modifications to the Lee County MPO 2035 Highway Cost Feasible Plan or Lee Plan Map 3A are needed as a result of the proposed CPA.

Short Range 5-Year CIP (2020) Analysis

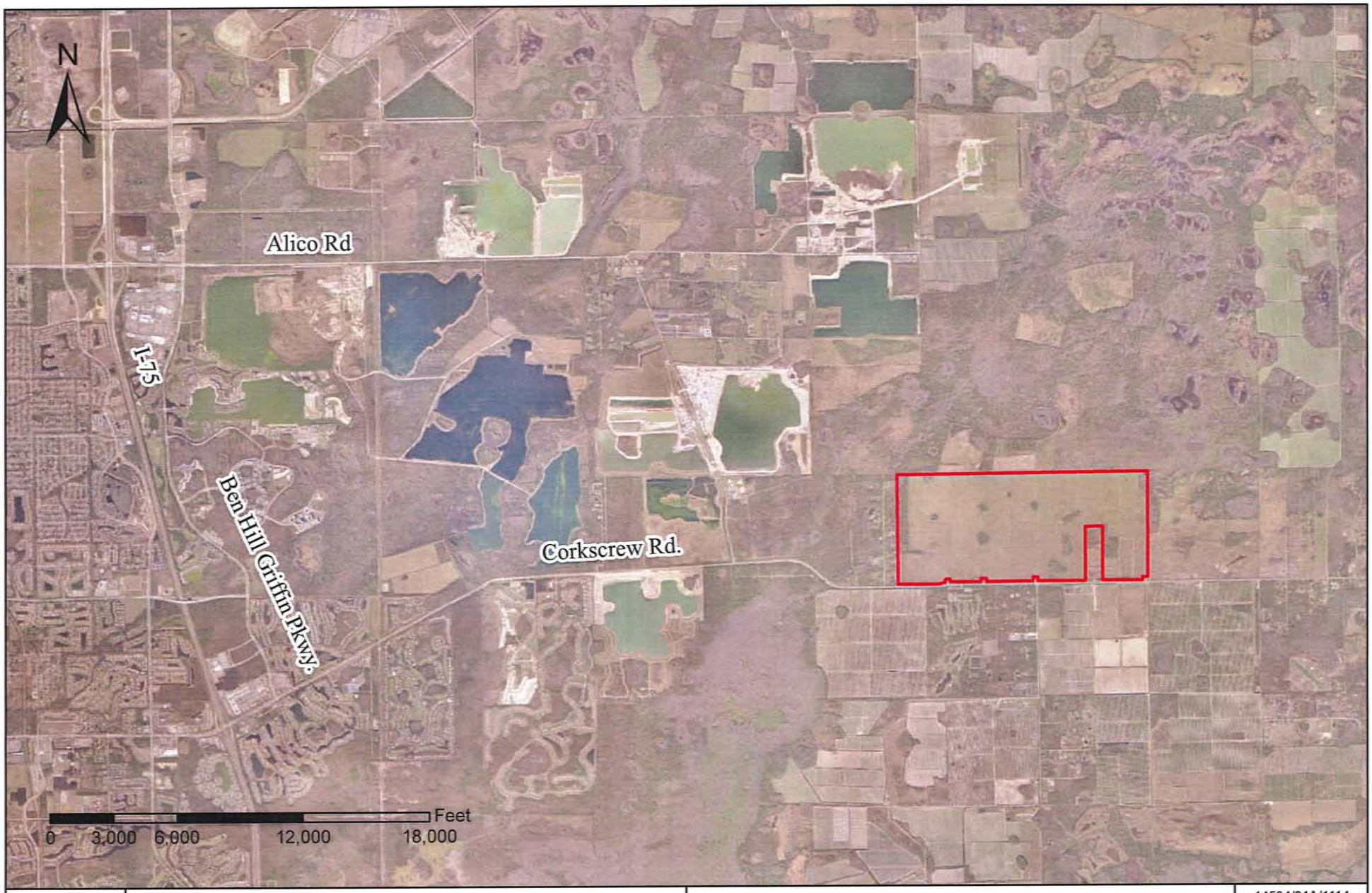
It was agreed in the transportation methodology discussions that historic traffic growth trends would be used to project background traffic for the short term analysis.

As shown in Exhibit 5, historic AADT volumes from the Lee County 2013 Traffic Count Report or the Lee County Traffic Count Database System were used to develop an initial linear growth rate through 2020 to apply to the latest segment volume count to estimate 2020 background traffic volumes without the CPA. Where the initial growth rate was negative or a positive rate of less than 1%, a default rate of 1% per year was used. Where the growth rate was 1% per year or more, that figure was used.

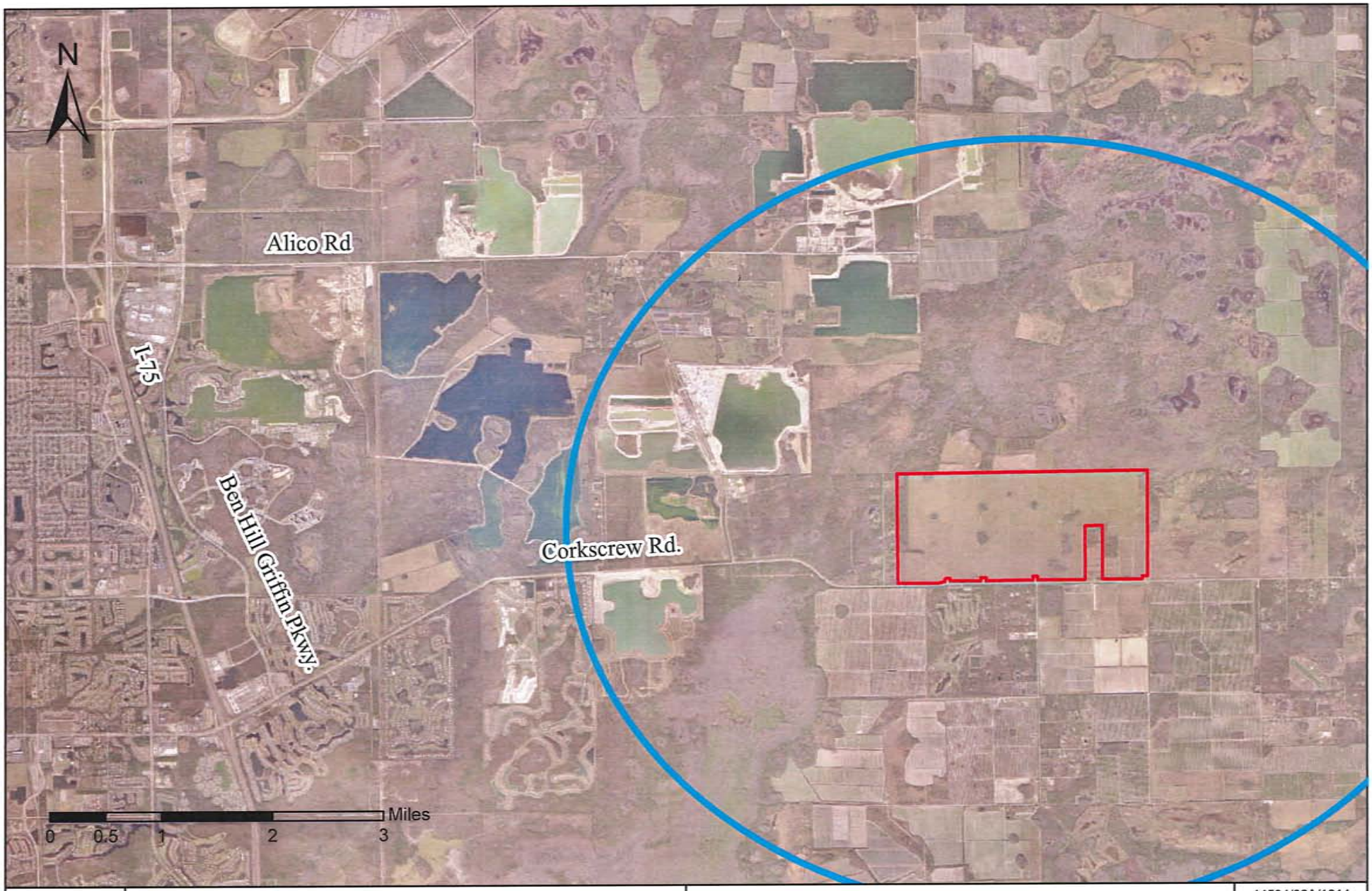
Future 2020 traffic conditions without the CPA are presented in Exhibit 6. No level of service issues are projected in 2020 without the CPA.

Future 2020 traffic conditions with the CPA are presented in Exhibit 7. The travel model assignment done to estimate Corkscrew Farms traffic in this scenario assumed 1,000 single-family units would be in place by 2020 (Appendix B-2). In this model assignment, the background zonal data for 2020 was interpolated based on the MPO adopted base year (2007) and LRTP horizon year (2035). As shown in Exhibit 7, no level of service issues are projected in 2020 with the CPA.

Therefore, no modifications to the County's five year work program are needed as a result of the proposed CPA.



dpa	**CORKSCREW FARMS**	**LOCATION MAP**	14534/01A/1114 1



dpa	**CORKSCREW FARMS**	**STUDY AREA**	14534/02A/1214 **2**

EXHIBIT 3

CORKSCREW FARMS COMPREHENSIVE PLAN AMENDMENT

LONG RANGE 20-YEAR HORIZON ANALYSIS

FUTURE (2035) TRAFFIC CONDITIONS WITHOUT CPA

DIRECTIONAL PEAK HOUR (K100), PEAK SEASON

ROADWAY	FROM	TO	(1) # of Lanes	(3) LOS Std	2035 PSWADT Traffic	PSWADT/ AADT	AADT	K100 Factor	Two-Way Peak Hour Volume	D100 NE	D100 SW	2035 Directional Peak Hr. Vol. NE	2035 Directional Peak Hr. Vol. SW	(2) Directional Service Volumes LOS "A"	LOS "B"	LOS "C"	LOS "D"	LOS "E"	LOS Std		V/C NE	V/C SW	LOS NE	LOS SW
ALICO ROAD	AIRPORT HAUL RD / CR 951 EXT.	GREEN MEADOWS RD	4D	E	31,057	1.103	28,157	0.098	2,759	0.47	0.53	1,297	1,462	1,060	1,810	2,560	3,240	3,590	3,590	(4)	0.36	0.41	B	B
	GREEN MEADOWS RD	CORKSCREW RD	2	E	4,469	1.103	4,052	0.098	397	0.47	0.53	187	210	120	420	840	1,190	1,640	1,640	(4)	0.11	0.13	B	B
CORKSCREW RD	CYPRESS SHADOWS BLVD	BELLA TERRA BLVD	2	E	6,109	1.173	5,208	0.101	526	0.51	0.49	268	258	120	420	840	1,190	1,640	1,640	(4)	0.16	0.16	B	B
	BELLA TERRA BLVD	CORKSCREW SHORES	2	E	6,109	1.173	5,208	0.101	526	0.51	0.49	268	258	120	420	840	1,190	1,640	1,640	(4)	0.16	0.16	B	B
	CORKSCREW SHORES	ALICO RD	2	E	4,755	1.173	4,054	0.101	409	0.51	0.49	209	200	120	420	840	1,190	1,640	1,640	(4)	0.13	0.12	B	B
	ALICO RD	CORKSCREW FARMS	2	E	8,813	1.173	7,513	0.101	759	0.51	0.49	387	372	120	420	840	1,190	1,640	1,640	(4)	0.24	0.23	B	B
	CORKSCREW FARMS	EAST	2	E	8,813	1.173	7,513	0.101	759	0.51	0.49	387	372	120	420	840	1,190	1,640	1,640	(4)	0.24	0.23	B	B

Footnotes:

(1) Lee County MPO 2035 Long Range Transportation Plan Highway Cost Feasible Plan number of lanes.
(2) 2013 Lee County Generalized Peak Hour Service Volumes.
(3) Lee County roadway LOS standard.
(4) Uninterrupted flow service volumes.

EXHIBIT 4

CORKSCREW FARMS COMPREHENSIVE PLAN AMENDMENT

LONG RANGE 20-YEAR HORIZON ANALYSIS

FUTURE (2035) TRAFFIC CONDITIONS WITH CPA (1,325 Units)

DIRECTIONAL PEAK HOUR (K100), PEAK SEASON

ROADWAY	FROM	TO	(1) # of Lanes	(3) LOS Std	2035 PSWADT Traffic	PSWADT/ AADT	AADT	K100 Factor	Two-Way Peak Hour Volume	D100 NE	D100 SW	2035 Directional Peak Hr. Vol. NE	2035 Directional Peak Hr. Vol. SW	(2) Directional Service Volumes LOS "A"	LOS "B"	LOS "C"	LOS "D"	LOS "E"	LOS Std		V/C NE	V/C SW	LOS NE	LOS SW
ALICO ROAD	AIRPORT HAUL RD / CR 951 EXT.	GREEN MEADOWS RD	4D	E	31,249	1.103	28,331	0.098	2,776	0.47	0.53	1,305	1,471	1,060	1,810	2,560	3,240	3,590	3,590	(4)	0.36	0.41	B	B
	GREEN MEADOWS RD	CORKSCREW RD	2	E	5,738	1.103	5,202	0.098	510	0.47	0.53	240	270	120	420	840	1,190	1,640	1,640	(4)	0.15	0.16	B	B
CORKSCREW RD	CYPRESS SHADOWS BLVD	BELLA TERRA BLVD	2	E	9,280	1.173	7,911	0.101	799	0.51	0.49	407	392	120	420	840	1,190	1,640	1,640	(4)	0.25	0.24	B	B
	BELLA TERRA BLVD	CORKSCREW SHORES	2	E	9,280	1.173	7,911	0.101	799	0.51	0.49	407	392	120	420	840	1,190	1,640	1,640	(4)	0.25	0.24	B	B
	CORKSCREW SHORES	ALICO RD	2	E	7,948	1.173	6,776	0.101	684	0.51	0.49	349	335	120	420	840	1,190	1,640	1,640	(4)	0.21	0.20	B	B
	ALICO RD	CORKSCREW FARMS	2	E	13,569	1.173	11,568	0.101	1,168	0.51	0.49	596	572	120	420	840	1,190	1,640	1,640	(4)	0.36	0.35	C	C
	CORKSCREW FARMS	EAST	2	E	8,883	1.173	7,573	0.101	765	0.51	0.49	390	375	120	420	840	1,190	1,640	1,640	(4)	0.24	0.23	B	B

Footnotes:

(1) Lee County MPO 2035 Long Range Transportation Plan Highway Cost Feasible Plan number of lanes.
(2) 2013 Lee County Generalized Peak Hour Service Volumes.
(3) Lee County roadway LOS standard.
(4) Uninterrupted flow service volumes.

EXHIBIT 5

CORKSCREW FARMS COMPREHENSIVE PLAN AMENDMENT

SHORT RANGE 5-YEAR CIP HORIZON ANALYSIS

AADT GROWTH TRENDS (2002-2020)

			(1) AADT														(2) TREND						(3) Annual Rate			2020	
ROADWAY	FROM	TO	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014		2015	2016	2017	2018	2019	2020	Rate	Default		2023 Volume	Bckgrnd Traffic
ALICO ROAD	AIRPORT HAUL RD	GREEN MEADOWS RD			14,700	13,100	12,600	9,400	5,800	3,600	2,600						8,859	8,864	8,868	8,873	8,877	8,881	-2.47%	1.00%		2,860	2,860
	GREEN MEADOWS RD	CORKSCREW RD			2,100	1,600	2,800	2,400	2,000	1,400	1,500						1,979	1,980	1,981	1,982	1,983	1,984	-0.35%	1.00%		1,650	1,650
CORKSCREW RD	CYPRESS SHADOWS BLVD	BELLA TERRA BLVD													11,048	(4)								2.00%	(6)	12,374	12,374
	BELLA TERRA BLVD	CORKSCREW SHORES													3,157	(4)								2.00%	(6)	3,535	3,535
	CORKSCREW SHORES	ALICO RD													3,157	(4)								2.00%	(6)	3,535	3,535
	ALICO RD	CORKSCREW FARMS	2,900	3,900	4,300	4,300	4,900						3,400			(5)							0.00%	1.00%	(7)	3,672	3,672
	CORKSCREW FARMS	EAST	2,900	3,900	4,300	4,300	4,900						3,400			(5)							0.00%	1.00%	(7)	3,672	3,672

Footnote:

(1) Historic AADT volumes from Lee County 2013 Traffic Count Report, except for Corkscrew Road east of I-75, which is from the online Lee County Traffic Count Database System.
(2) Linear best fit line, from which an initial growth rate was developed.
(3) Default growth rate of 1% per year for segments with negative growth rate or positive growth rate less than 1%.
(4) Existing data based on 2014 AADT volume for Station 249 provided by Lee County staff; traffic attenuation of 10% per segment assumed from Grande Oak Way to Bella Terra Boulevard and then 80% east of Bella Terra Boulevard.
(5) Existing data based on last available year of information in 2012 for Station 250 reported in Lee County Traffic Count Database System.
(6) Growth rate of 2% per year established graphically based on best fit line using 2002-2006 and 2013-2014 historic traffuc counts for Station 249 reported in Lee County Traffic Count Database System.
(7) Growth rate of 1% per year established graphically based on best fit line using 2002-2006 and 2012 historic traffuc counts for Station 250 reported in Lee County Traffic Count Database System.

EXHIBIT 6

CORKSCREW FARMS COMPREHENSIVE PLAN AMENDMENT

SHORT RANGE 5-YEAR CIP HORIZON ANALYSIS

FUTURE (2020) TRAFFIC CONDITIONS WITHOUT CPA

DIRECTIONAL PEAK HOUR (K100), PEAK SEASON

ROADWAY	FROM	TO	(1) # of Lanes	(3) LOS Std	2020 Bckgrnd Traffic	(4) K100 Factor	Two-Way Peak Hr. Volume	(4) D100 NE	(4) D100 SW	Background Directional Peak Hr. Vol. NE	Background Directional Peak Hr. Vol. SW	(2) Directional Service Volumes LOS "A"	LOS "B"	LOS "C"	LOS "D"	LOS "E"	LOS Std	V/C NE	V/C SW	LOS NE	LOS SW
ALICO ROAD	AIRPORT HAUL RD	GREEN MEADOWS RD	2	E	2,860	0.098	280	0.47	0.53	132	148	120	420	840	1,190	1,640	1,640 (5)	0.08	0.09	B	B
	GREEN MEADOWS RD	CORKSCREW RD	2	E	1,650	0.098	162	0.47	0.53	76	86	120	420	840	1,190	1,640	1,640 (5)	0.05	0.05	A	A
CORKSCREW RD	CYPRESS SHADOWS BLVD	BELA TERRA BLVD	1	E	12,374	0.101	1,250	0.51	0.49	638	612	120	420	840	1,190	1,640	1,640 (5)	0.39	0.37	C	C
	BELLA TERRA BLVD	CORKSCREW SHORES	2	E	3,535	0.101	357	0.51	0.49	182	175	120	420	840	1,190	1,640	1,640 (5)	0.11	0.11	B	B
	CORKSCREW SHORES	ALICO RD	2	E	3,535	0.101	357	0.51	0.49	182	175	120	420	840	1,190	1,640	1,640 (5)	0.11	0.11	B	B
	ALICO RD	CORKSCREW FARMS	2	E	3,672	0.101	371	0.51	0.49	189	182	120	420	840	1,190	1,640	1,640 (5)	0.12	0.11	B	B
	CORKSCREW FARMS	EAST	2	E	3,672	0.101	371	0.51	0.49	189	182	120	420	840	1,190	1,640	1,640 (5)	0.12	0.11	B	B

Footnotes:

(1) Existing plus Committed Number of Lanes (E+C).
(2) 2013 Lee County Generalized Peak Hour Service Volumes.
(3) Lee County roadway LOS standard. I-75 based on FDOT FIHS LOS standard.
(4) Adjustment factors based on Lee County 2012 Traffic Count Report and FDOT Florida Traffic Online (2012).
(5) Uninterrupted flow service volumes.

EXHIBIT 7

CORKSCREW FARMS COMPREHENSIVE PLAN AMENDMENT

SHORT RANGE 5-YEAR CIP HORIZON ANALYSIS

FUTURE (2020) TRAFFIC CONDITIONS WITH CPA (1,000 Units)

DIRECTIONAL PEAK HOUR (K100), PEAK SEASON

ROADWAY	FROM	TO	(1) # of Lanes	(3) LOS Std	2020 Bckgrnd Traffic	(4) K100 Factor	Two-Way Peak Hr. Volume	(4) D100 NE	(4) D100 SW	2020 Background Directional Peak Hr. Vol. NE	2020 Background Directional Peak Hr. Vol. SW	CPA Traffic FSUTMS	CPA Directional Pk. Hr. Volume NE	CPA Directional Pk. Hr. Volume SW	Total Directional Pk. Hr. Volume NE	Total Directional Pk. Hr. Volume SW	(2) Directional Service Volumes LOS "A"	LOS "B"	LOS "C"	LOS "D"	LOS "E"	LOS Std		V/C NE	V/C SW	LOS NE	LOS SW
ALICO ROAD	AIRPORT HAUL RD	GREEN MEADOWS RD	2	E	2,860	0.098	280	0.47	0.53	132	148	1,036	48	54	179	202	120	420	840	1,190	1,640	1,640	(5)	0.11	0.12	B	B
	GREEN MEADOWS RD	CORKSCREW RD	2	E	1,650	0.098	162	0.47	0.53	76	86	1,252	58	65	134	151	120	420	840	1,190	1,640	1,640	(5)	0.08	0.09	B	B
CORKSCREW RD	CYPRESS SHADOWS BLVD	BELLA TERRA BLVD	2	E	12,374	0.101	1,250	0.51	0.49	638	613	2,790	144	138	781	751	120	420	840	1,190	1,640	1,640	(5)	0.48	0.46	C	C
	BELLA TERRA BLVD	CORKSCREW SHORES	2	E	3,535	0.101	357	0.51	0.49	182	175	2,790	144	138	326	313	120	420	840	1,190	1,640	1,640	(5)	0.20	0.19	B	B
	CORKSCREW SHORES	ALICO RD	2	E	3,535	0.101	357	0.51	0.49	182	175	2,802	144	139	326	314	120	420	840	1,190	1,640	1,640	(5)	0.20	0.19	B	B
	ALICO RD	CORKSCREW FARMS	2	E	3,672	0.101	371	0.51	0.49	189	182	4,244	219	210	408	392	120	420	840	1,190	1,640	1,640	(5)	0.25	0.24	B	B
	CORKSCREW FARMS	EAST	2	E	3,672	0.101	371	0.51	0.49	189	182	288	15	14	204	196	120	420	840	1,190	1,640	1,640	(5)	0.12	0.12	B	B

FSUTMS

4,532

Footnotes:

(1) Existing plus Committed Number of Lanes (E+C).
(2) 2013 Lee County Generalized Peak Hour Service Volumes.
(3) Lee County roadway LOS standard. I-75 based on FDOT FIHS LOS standard.
(4) Uninterrupted flow service volumes.
(5) Controlled access facility service volumes.

APPENDIX A

METHODOLOGY OUTLINE

CORKSCREW FARMS COMPREHENSIVE PLAN AMENDMENT

TRANSPORTATION METHODOLOGY OUTLINE
(November 21, 2014)

Introduction

Corkscrew Farms is a planned single-family residential community, with up to 1,200 single-family-detached residential units and an amenity center for residents. It is located on the north side of Corkscrew Road about two miles east of Alico Road, Exhibit 1.

Corkscrew Farms will be a single phase development with build-out anticipated in 2021. However, for Comprehensive Plan Amendment (CPA) purposes, the long-range horizon year for this study is 2035, consistent with the Lee County MPO's 2035 Highway Cost Feasible Plan.

This traffic study will be in support of the Comprehensive Plan Amendment (CPA) application for Corkscrew Farms and will be prepared consistent with Lee County's Application for a Comprehensive Plan Amendment. This methodology outline will be provided in advance to the County staff for review and comment and will be amended, if needed, based on staff comments.

Methodology

The methodology for the CPA traffic study is summarized below.

1. According to Lee County's Application for a Comprehensive Plan Amendment, the study area should include projected roadway conditions within a 3-mile radius of the site. Therefore, the study area extends west along Corkscrew Road to Bella Terra, east along Corkscrew Road for three miles, and north along Alico Road to Green Meadows Road.

2. The trip generation for the CPA will be established through the adopted Lee County travel model.

3. For the required Long Range 20-Year Horizon analysis, peak hour, peak season (K_{100}), directional roadway segment analysis will be provided for the year 2035, based on Lee County travel model assignments, both with and without the CPA.

    a. The adopted Lee County MPO travel model will be used to project total traffic for future 2035 traffic conditions, both without and with the CPA.
    b. For future 2035 traffic conditions with the CPA, the 1,200 single-family units in Corkscrew Farms will be input into the model ZDATA 1 file, using appropriate land use adjustment factors.

c. The Lee County MPO 2035 Highway Cost Feasible Plan travel model, zonal data and road network will be used for these assignments.
d. Total segment volumes will be taken from the nearest link to the CPA to insure that the highest CPA volume is used.
e. The adjustment factors, service volumes and LOS standards used to estimate levels of service in 2035 will be as described in Section 5 below.
f. Projected 2035 volumes and levels of service without and with the CPA will be compared.

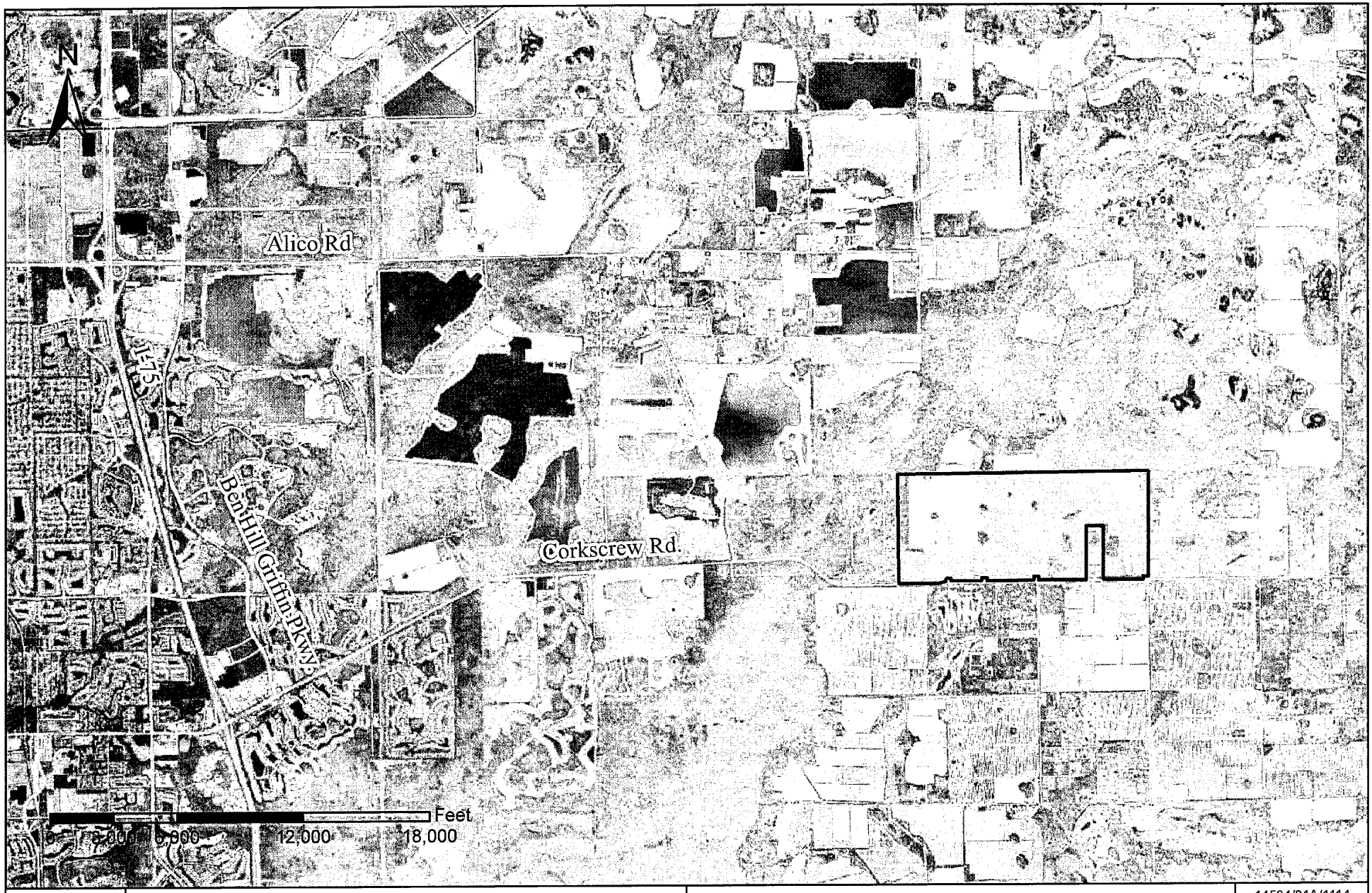
4. For the required Short Range 5-Year CIP Horizon analysis, peak hour, peak season (K_{100}), directional roadway segment analysis will be provided for the year 2019, both with and without the CPA. Background traffic will be based on recent traffic counts and growth trends. CPA traffic will be generated, distributed and assigned by the Lee County travel model.

   a. Background traffic will be projected to the year 2019 based on recent traffic counts reported in the Lee County 2013 Traffic Count Report and historic traffic growth trends developed primarily from the 2004-2013 traffic counts reported in the 2013 Traffic Count Report.
      - A minimum annual growth rate of 1% per year will be assumed.
   b. The MPO travel model will be used to estimate CPA trip generation in 2019 and to distribute and assign CPA traffic to road segments.
      - CPA trip generation will be limited to those units expected to be built, occupied and generating traffic by the year 2019.
      - The following recently completed or scheduled improvements will be included in the E+C network:
        - Corkscrew Road Safety Improvements (2LD) from east of Ben Hill Griffin Parkway to Wildcat Run and at Bella Terra
        - I-75 Airport Direct Connect (U/C)
        - Alico Road widening (4LD) from Ben Hill Griffin Parkway to Airport Haul Road
      - For the FSUTMS travel model assignment, the zonal data for the year 2019 will be interpolated based on the MPO adopted base year (2007) and LRTP horizon year (2035) zonal data.
      - Select Zone analysis will be performed to determine the CPA trip assignment to the surrounding area road network.
      - CPA segment volumes will be taken from the nearest link to the CPA to insure the highest CPA volume is used.
   c. The CPA traffic on each road segment will be added to the background traffic projected using growth trends to estimate total PM peak hour, directional traffic with the CPA in 2019.
   d. The adjustment factors, service volumes and LOS standards used to estimate levels of service will be as described in Section 5 below.
   e. Projected 2019 volumes and levels of service without and with the CPA will be compared.

5. Levels of service (LOS) on the study area road segments will be estimated for peak season, peak hour (K_{100}), peak direction, using the following adjustment factors, service volumes and LOS standards.

    a. The LOS standards in the The Lee Plan will be used for all County roads.
    b. Current Lee County K, D and peak season factors will be used for background road segment traffic volumes on all County roads.
    c. Lee County generalized service volumes (Sept. 2013) will be used for all County roads.

6. The CPA traffic study findings and conclusions, plus supporting documentation, will be submitted to Lee County, along with the corresponding FSUTMS travel model input/output files, for sufficiency review. The CPA traffic study will, of course, be subject to review and acceptance by Lee County.



dpa	CORKSCREW FARMS	LOCATION MAP	14534/01A/1114 1

APPENDIX B

TAZ WORKSHEETS FOR MODEL ASSIGNMENTS

APPENDIX B-1

CORKSCREW FARMS CPA
LONG-TERM (20 YEAR) HORIZON

PROPOSED DEVELOPMENT SUMMARY (2035)
WITH CPA

	Unit	TRACT > TAZ >	TAZ 2083	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	Total
Residential												
SF	d.u.		1,325	0	0	0	0	0	0	0	0	1,325
MF	d.u.		0	0	0	0	0	0	0	0	0	0
Senior Adult (Det)	d.u.		0	0	0	0	0	0	0	0	0	0
	SubTotal		1,325	0	0	0	0	0	0	0	0	1,325
Hotel	rooms		0	0	0	0	0	0	0	0	0	0
Industrial	sq. ft.		0	0	0	0	0	0	0	0	0	0
Retail	sq. ft.		0	0	0	0	0	0	0	0	0	0
Office												
General	sq. ft.		0	0	0	0	0	0	0	0	0	0
Medical	sq. ft.		0	0	0	0	0	0	0	0	0	0
	SubTotal		0	0	0	0	0	0	0	0	0	0
Recreation												
Golf	holes		0	0	0	0	0	0	0	0	0	0
Community Park	acres		0	0	0	0	0	0	0	0	0	0
Regional Park	acres		0	0	0	0	0	0	0	0	0	0
Recreation Center	sq. ft.		0	0	0	0	0	0	0	0	0	0
Library	sq. ft.		0	0	0	0	0	0	0	0	0	0
Community												
Hospital	beds		0	0	0	0	0	0	0	0	0	0
ALF	units		0	0	0	0	0	0	0	0	0	0
Churches	sq. ft.		0	0	0	0	0	0	0	0	0	0
Elementry School	students		0	0	0	0	0	0	0	0	0	0
Middle School	students		0	0	0	0	0	0	0	0	0	0
High School	students		0	0	0	0	0	0	0	0	0	0
Government/Civic	sq. ft.		0	0	0	0	0	0	0	0	0	0

ZDATA (FSUTMS) POPULATION & EMPLOYMENT ESTIMATE

ZDATA 1

			TRACT > TAZ >	TAZ 2083	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	Total
	per/d.u.												
SF	1.46	Tot. Pop.		1,940	0	0	0	0	0	0	0	0	1,940
	14%	PCTVNP											
	9%	PCTVAC											
	1.26	Perm. Pop.		1,670	0	0	0	0	0	0	0	0	1,670
	per/d.u.												
MF	2.04	Tot. Pop.		0	0	0	0	0	0	0	0	0	0
	13%	PCTVNP											
	12%	PCTVAC											
	1.77	Perm. Pop.		0	0	0	0	0	0	0	0	0	0
	per/d.u.												
Senior Adult	0.00	Tot. Pop.		0	0	0	0	0	0	0	0	0	0
		PCTVNP											
		PCTVAC											
	1.00	Perm. Pop.		0	0	0	0	0	0	0	0	0	0
	occp/rm												
Hotel	2.00	Occupants		0	0	0	0	0	0	0	0	0	0

ZDATA 2

	Unit	TRACT > TAZ >	TAZ 2083	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	Total
Industrial	emp/1k 0.0020	Emplys	0	0	0	0	0	0	0	0	0	0
Commercial												
General Retail	emp/1k 0.0025	Emplys	0	0	0	0	0	0	0	0	0	0
Golf	emp/hole 1.7400	Emplys	0	0	0	0	0	0	0	0	0	0
	SubTotal	Emplys	0	0	0	0	0	0	0	0	0	0
Service												
Hotel	emp/rm 0.9000	Emplys	0	0	0	0	0	0	0	0	0	0
General Office	emp/1k 0.0045	Emplys	0	0	0	0	0	0	0	0	0	0
Medical Office	emp/1k 0.0041	Emplys	0	0	0	0	0	0	0	0	0	0
Community Park	emp/acre 0.2700	Emplys	0	0	0	0	0	0	0	0	0	0
Regional Park	emp/acre 0.2700	Emplys	0	0	0	0	0	0	0	0	0	0
Recreation Center	emp/1k 0.0020	Emplys	0	0	0	0	0	0	0	0	0	0
Library	emp/1k 0.0011	Emplys	0	0	0	0	0	0	0	0	0	0
Hospital	emp/bed 2.2800	Emplys	0	0	0	0	0	0	0	0	0	0
ALF	emp/unit 0.6480	Emplys	0	0	0	0	0	0	0	0	0	0
Church	emp/1k 0.0010	Emplys	0	0	0	0	0	0	0	0	0	0
Elementary School	emp/studnt 0.0780	Emplys	0	0	0	0	0	0	0	0	0	0
Middle School	emp/studnt 0.1900	Emplys	0	0	0	0	0	0	0	0	0	0
High School	emp/studnt 0.1900	Emplys	0	0	0	0	0	0	0	0	0	0
Government/Civic	emp/1k 0.0045	Emplys	0	0	0	0	0	0	0	0	0	0
	Sub Total	Emplys	0	0	0	0	0	0	0	0	0	0
Total Employment	Total	Emplys	0	0	0	0	0	0	0	0	0	0

APPENDIX B-2

CORKSCREW FARMS CPA
SHORT-TERM (5-YEAR) HORIZON

PROPOSED DEVELOPMENT SUMMARY (2020)
WITH CPA

	Unit	TRACT > / TAZ >	TAZ 2083	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	Total
Residential												
SF	d.u.		1,000	0	0	0	0	0	0	0	0	1,000
MF	d.u.		0	0	0	0	0	0	0	0	0	0
Senior Adult (Det)	d.u.		0	0	0	0	0	0	0	0	0	0
	SubTotal		1,000	0	0	0	0	0	0	0	0	1,000
Hotel	rooms		0	0	0	0	0	0	0	0	0	0
Industrial	sq. ft.		0	0	0	0	0	0	0	0	0	0
Retail	sq. ft.		0	0	0	0	0	0	0	0	0	0
Office												
General	sq. ft.		0	0	0	0	0	0	0	0	0	0
Medical	sq. ft.		0	0	0	0	0	0	0	0	0	0
	SubTotal		0	0	0	0	0	0	0	0	0	0
Recreation												
Golf	holes		0	0	0	0	0	0	0	0	0	0
Community Park	acres		0	0	0	0	0	0	0	0	0	0
Regional Park	acres		0	0	0	0	0	0	0	0	0	0
Recreation Center	sq. ft.		0	0	0	0	0	0	0	0	0	0
Library	sq. ft.		0	0	0	0	0	0	0	0	0	0
Community												
Hospital	beds		0	0	0	0	0	0	0	0	0	0
ALF	units		0	0	0	0	0	0	0	0	0	0
Churches	sq. ft.		0	0	0	0	0	0	0	0	0	0
Elementry School	students		0	0	0	0	0	0	0	0	0	0
Middle School	students		0	0	0	0	0	0	0	0	0	0
High School	students		0	0	0	0	0	0	0	0	0	0
Government/Civic	sq. ft.		0	0	0	0	0	0	0	0	0	0

ZDATA (FSUTMS) POPULATION & EMPLOYMENT ESTIMATE

ZDATA 1

			TRACT > / TAZ >	TAZ 2083	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	Total
	per/d.u.												
SF	1.46	Tot. Pop.		1,460	0	0	0	0	0	0	0	0	1,460
	14%	PCTVNP											
	9%	PCTVAC											
	1.26	Perm. Pop.		1,260	0	0	0	0	0	0	0	0	1,260
	per/d.u.												
MF	2.04	Tot. Pop.		0	0	0	0	0	0	0	0	0	0
	13%	PCTVNP											
	12%	PCTVAC											
	1.77	Perm. Pop.		0	0	0	0	0	0	0	0	0	0
	per/d.u.												
Senior Adult	0.00	Tot. Pop.		0	0	0	0	0	0	0	0	0	0
		PCTVNP											
		PCTVAC											
	1.00	Perm. Pop.		0	0	0	0	0	0	0	0	0	0
	occp/rm												
Hotel	2.00	Occupants		0	0	0	0	0	0	0	0	0	0

ZDATA 2

	Unit	TRACT > TAZ >	TAZ 2083	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	TAZ x	Total
Industrial	emp/1k 0.0020	Emplys	0	0	0	0	0	0	0	0	0	0
Commercial												
General Retail	emp/1k 0.0025	Emplys	0	0	0	0	0	0	0	0	0	0
Golf	emp/hole 1.7400	Emplys	0	0	0	0	0	0	0	0	0	0
	SubTotal	Emplys	0	0	0	0	0	0	0	0	0	0
Service												
Hotel	emp/rm 0.9000	Emplys	0	0	0	0	0	0	0	0	0	0
General Office	emp/1k 0.0045	Emplys	0	0	0	0	0	0	0	0	0	0
Medical Office	emp/1k 0.0041	Emplys	0	0	0	0	0	0	0	0	0	0
Community Park	emp/acre 0.2700	Emplys	0	0	0	0	0	0	0	0	0	0
Regional Park	emp/acre 0.2700	Emplys	0	0	0	0	0	0	0	0	0	0
Recreation Center	emp/1k 0.0020	Emplys	0	0	0	0	0	0	0	0	0	0
Library	emp/1k 0.0011	Emplys	0	0	0	0	0	0	0	0	0	0
Hospital	emp/bed 2.2800	Emplys	0	0	0	0	0	0	0	0	0	0
ALF	emp/unit 0.6480	Emplys	0	0	0	0	0	0	0	0	0	0
Church	emp/1k 0.0010	Emplys	0	0	0	0	0	0	0	0	0	0
Elementary School	emp/studnt 0.0780	Emplys	0	0	0	0	0	0	0	0	0	0
Middle School	emp/studnt 0.1900	Emplys	0	0	0	0	0	0	0	0	0	0
High School	emp/studnt 0.1900	Emplys	0	0	0	0	0	0	0	0	0	0
Government/Civic	emp/1k 0.0045	Emplys	0	0	0	0	0	0	0	0	0	0
	Sub Total	Emplys	0	0	0	0	0	0	0	0	0	0
Total Employment	Total	Emplys	0	0	0	0	0	0	0	0	0	0

Corkscrew Farms
Part IV. Amendment Support Documentation
B. Public Facilities Impacts
2. Existing and Future Conditions Analysis

Sanitary Sewer

The subject property is located on the north side of Corkscrew Road approximately a mile and a half east of the intersection of Corkscrew Road and Alico Road. The amendment proposes to place the subject site in the Lee County Utilities Service Area. To accomplish this, the applicant is seeking to amend Map 7, Lee County Utilities Future Sewer Service Areas, to have the property depicted as lying within the "Future Sewer Service Areas."

The proposed development would be serviced by the Three Oaks Regional Sewage Treatment Plant. The plant has a permitted treatment capacity of 6,000,000 gallons per day (GPD). The Level of Service (LOS) Standard, per Lee Plan Policy 95.1.3, is 200 gallons per day per Equivalent Residential Connection (ERC) or for the purposes of this analysis, per each residential unit that is connected to the system. The project proposes to connect 1,325 dwelling units to the Lee County Utility sewer system.

According to the December 2014 Lee County Concurrency Report, the Three Oaks Wastewater Treatment Plant had an actual average daily flow of 3,295,000 GPD in 2013, with a projected flow of 3,400,000 GPD in 2014. The Concurrency Report concludes that based upon the flow data and capacity information contained in the report, there are no apparent sanitary sewer concurrency Level of Service problems anticipated in 2014 and beyond, as projected.

Currently, the property does not generate any sanitary sewer use. The proposed development would generate 265,000 GPD. This would not cause any issues as the Three Oaks Wastewater facility has excess capacity to handle this amount of demand. Pump station and forcemain infrastructure will have to be extended to the site.

Placing the subject property on centralized sanitary sewer service is a benefit to the public given the location of the adjacent public wellfield. Currently the subject site could be developed with single family homes, each on an individual septic system that would be subject to individual maintenance or lack of maintenance at the whim of the individual homeowner.

Potable Water

The LOS standard for Potable Water is 250 gallons (per Policy 95.1.3) per residential connection or unit. The proposed development will be serviced by the Pinewoods and Corkscrew Water Treatment Plants. Pinewoods has a design capacity of 5,300,000 GPD

and Corkscrew has a design capacity of 15,000,000. In 2013 Pinewoods had an actual average daily flow of 3,891,000 GPD. In 2013 Corkscrew had an actual average daily flow of 12,363,000 GPD. The proposed development would have a potable water demand of 331,250 GPD. This would not cause any issues at either facility as there is excess capacity to handle this amount of demand. Infrastructure will have to be extended to the site.

Placing the subject property on centralized potable water service is a public benefit given the location of the adjacent public wellfield. Centralized service would eliminate individual wells with their associated draw down impacts.

Surface Water/Drainage Basins

Lee Plan Policy 60.3.1.C. establishes that the level of service standard will be that all arterial roads at their crossing of the trunk conveyances will be free of flooding from the 25 year, 3 day storm event (rainfall).

The proposed development will comply with the requirements of Policy 60.3.1.D., which is reproduced below:

> *Surface water management systems in new private and public developments (excluding widening of existing roads) must be designed to SFWMD standards (to detain or retain excess stormwater to match the predevelopment discharge rate for the 25-year, 3-day storm event [rainfall]). Stormwater discharges from development must meet relevant water quality and surface water management standards as set forth in Chapters 17-3, 17-40, and 17-302, and rule 40E-4, F.A.C. New developments must be designed to avoid increased flooding of surrounding areas. Development must be designed to minimize increases of discharge to public water management infrastructure (or to evapotranspiration) that exceed historic rates, to approximate the natural surface water systems in terms of rate, hydroperiod, basin and quality, and to eliminate the disruption of wetlands and flow-ways, whose preservation is deemed in the public interest.*

The 2014 Concurrency Report confirms that none of the evacuation routes in the studied watersheds are anticipated to be flooded for more than 24 hours, and that new development which receives approval from the South Florida Water Management District will be deemed concurrent with the Lee Plan's surface water management LOS:

> *Based upon information available from current studies, none of the crossings associated with evacuation routes located within the forty-eight (48) watershed areas are anticipated to be flooded for more than twenty-four (24) hours. This satisfies the existing infrastructure/interim surface water management Level of Service standard for unincorporated Lee County established in LEE PLAN Policy 60.3.1.A.*

All new developments which receive approval from the South Florida Water Management District and that comply with standards in Chapters 17-3, 17-40, and 17-302 of the Florida Statutes and Rule 40E-4 of the Florida Administrative Code will be deemed Concurrent with the surface water management Level of Service standards set forth in THE LEE PLAN.

Flooding conditions on the site, as well as to adjacent properties, will be improved upon completion of a surface water management system for the subject site. The re-creation and accommodation of onsite flowways will help lessen flooding conditions in the Burgundy Farms neighborhood.

Parks, Recreation, and Open Space

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

Regional Parks

The 2014 Lee County Concurrency report states there are 3,149 acres of Regional Parks. The report also provides that 5 additional future Regional Parks will be added to the inventory, which will increase the inventory by 844 acres.

The report also states:

The 7,235 acres of existing Regional Parks currently operated by the County, City, State and Federal governments is sufficient to meet the non-regulatory "Level of Service Standard" of six (6) acres per 1,000 total seasonal population in the County for the year 2013 and will continue to do so at least through the year 2019 as currently projected. The Regional Park acreage also met the non-regulatory "Desired Level of Service Standard" of eight (8) acres per 1,000 total seasonal County population in 2013 and will continue to do so at least through the year 2019 as currently projected.

The proposed development could accommodate a population of 3,379 persons (1,325 units X 2.55 persons per unit, rounded up). So dividing this figure by 1,000, (the total seasonal population) results in a factor of 3.379. Multiply this factor by 6 (acres) results in a Regional Park demand of 20.27 acres. The Concurrency Report indicates that there is adequate excess capacity to handle this level of demand. The applicant notes that there is access to regional recreational facilities in the area such as CREW lands.

Community Parks

The 2014 Concurrency Report states that there are 907 acres of existing Community Parks within unincorporated Lee County. The report provides the following discussion concerning planned Community Parks:

> *The Pine Island Park is a 30-acre Community Park that is planned in the Pine Island/Matlacha district in the 2014/2015 fiscal year. Additionally, future plans include the Alva Wayside Park (1-acre) and Lehigh Park-Joel Site (30-acre) in the East Fort Myers/Alva district, Bat House Park (1-acre) and the St. James Kayak Launch Site (2-acres) in the Pine Island/Matlacha district, and the Jerry Brooks Park Expansion (3-acres) in the South Fort Myers district.*

The subject property is located within Community Parks District 48 (Estero/San Carlos, Three Oaks Community Park). The Concurrency Report contains the following concerning this District:

> *The Community Park District inventory of one-hundred-thirty-two (132) acres provided meets the non-regulatory Level of Service standard (47.5 acres in 2013). The non-regulatory "Desired" Level of Service was met in 2013 (118.8 acres) and will continue to be met through the year 2019.*

As previously stated the project could accommodate 3,379 persons. So dividing this figure by 1,000, results in a factor of 3.379. Multiplying this factor by 2 (acres of desired community parks), results in a Community Park demand of 6.758 acres. The Concurrency Report indicates that there is excess capacity to handle this level of demand. The applicant notes that the project is providing community park level of recreational amenities internal to the development to promote the healthy lifestyles of the community's residents. The proposed community is also located in close proximity to the Old Corkscrew Golf course that is under utilized.

Public Schools

The proposed development is located within the South Student Assignment Zone S3. The Lee County School District use a generation rate of .292 students per each single family dwelling unit. This rate is further broken down by school type (elementary, middle school and high school), .146 for elementary, .070 for middle school, and .076 for high school. Utilizing these rates results in a demand of 386 school aged children, 193 elementary students, 92 middle school students, and 100 high school students. These figures do not sum due to fractions.

The Concurrency Report indicates that there are 197 available elementary seats. The report indicates that there are 107 available middle school seats. The report indicates that there is a deficit of 82 high school seats. The concurrency system allows contiguous districts to provide capacity when capacity in the project's District is not available. The Concurrency report states this:

If capacity is not available in the CSA where the development is proposed, then the County will examine if the contiguous CSAs have capacity. If capacity is not available in the CSA in which the proposed development is located or in a contiguous CSA, the developer may provide mitigation acceptable to the School District and the County in order to mitigate the impact of that development.

There is capacity in a contiguous CSA. The S2 zone has 169 available high school seats at South Fort Myers High. For the entire South Zone, the report states this:

The Level of Service Standard was met in 2013 with 1,430 available seats in Elementary Schools, 764 available seats in Middle Schools, and 282 available seats in High Schools. The Level of Service Standard will be met in 2014 since there is available capacity in the South Zone Elementary Schools (1,448 seats), Middle Schools (764 seats), and High Schools (282 seats).

Conclusions

As this analysis demonstrates, there are adequate public facilities to support the development of the proposed project. The amendment will not cause any public facility deficiencies.

Corkscrew Farms
Part IV. Amendment Support Documentation
B. Public Facilities Impacts
3. Agency Review Letters

LEE COUNTY
SOUTHWEST FLORIDA
BOARD OF COUNTY COMMISSIONERS

leetran
6035 Landing View
Fort Myers, FL 33907
Phone: (239) 533-0393
www.rideleetran.com

December 10, 2014

Mr. Matthew Noble
1842 Seafan Circle North
Fort Myers, FL 33903

Re: Corkscrew Farms

Dear Mr. Noble:

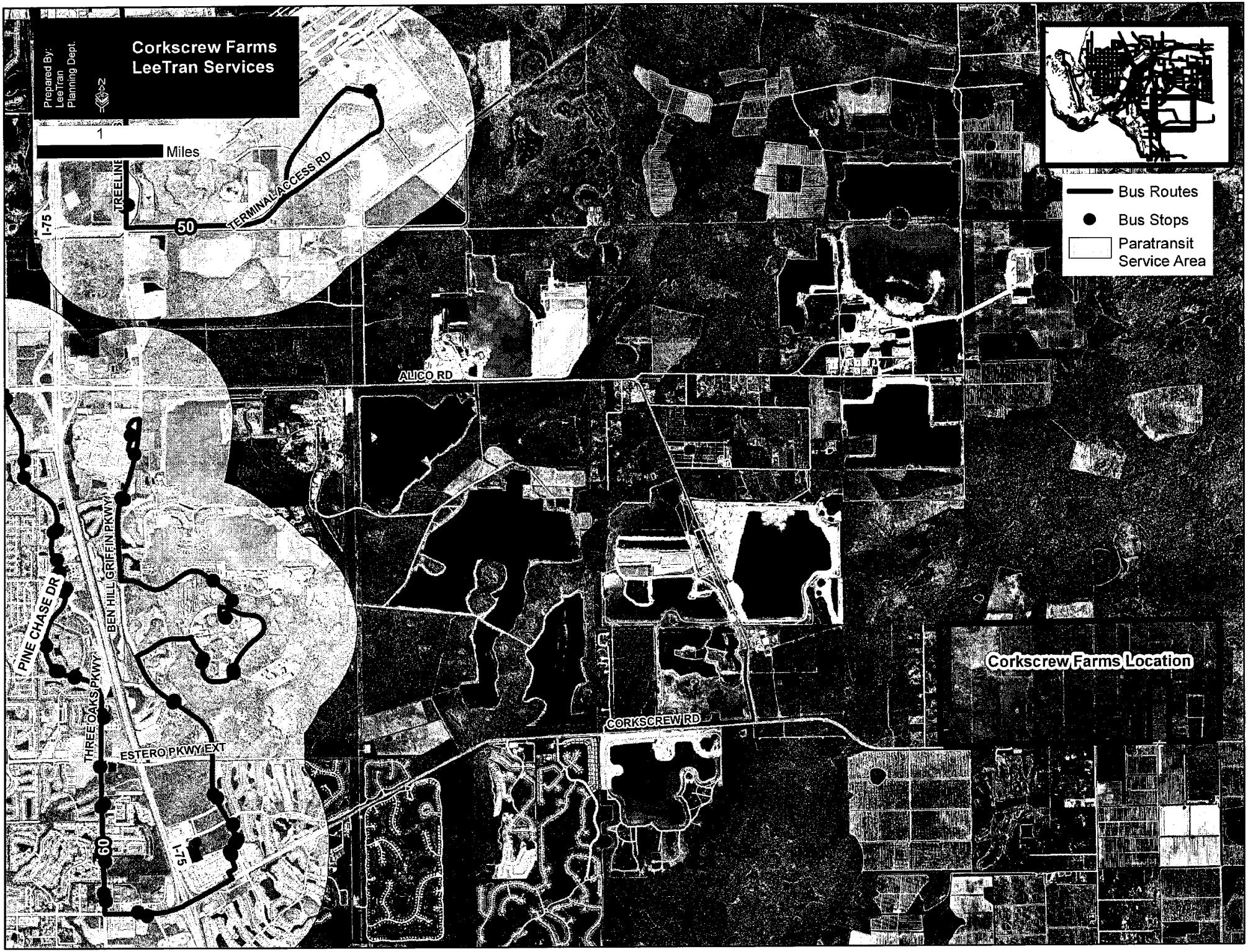
I received your e-mail request regarding the availability of transit services near the property located off of Corkscrew Road. After reviewing the aerial of the site, the strap numbers and comparing the location with our existing route locations and planned route locations according to the Board of County Commissioners adopted Transit Development Plan, I have confirmed the following:

- Currently, the closest route to the identified parcel is Route 60 and is 6 miles away from the subject property. This route travels through San Carlos Park and Estero, providing access to Florida Gulf Coast University, Miromar Outlets and the Estero Library.
- The parcels do not lie within the ¾ mile boundary for paratransit service.
- The Transit Development Plan does not recognize the need for services adjacent to this property during the 10 year planning horizon.

Please see the attached map for our route and bus stop locations, as well as the boundaries for fixed route and paratransit services. Should you need any additional documentation or have any further questions, please do not hesitate to contact me via e-mail at slayman@leegov.com or by telephone at 533-0393.

Sincerely,

Sarah Layman
Planner
LeeTran


Corkscrew Farms
LeeTran Services
Prepared By:
LeeTran
Planning Dept.
N
1
Miles
Bus Routes
Bus Stops
Paratransit
Service Area
TREELINE
TERMINAL ACCESS RD
50
I-75
ALICO RD
PINE CHASE DR
BEN HILL GRIFFIN PKWY
THREE OAKS PKWY
ESTERO PKWY EXT
60
I-75
CORKSCREW RD
Corkscrew Farms Location

Lee County
Southwest Florida
BOARD OF COUNTY COMMISSIONERS

December 29, 2014

Matthew Noble
ANoblePlan, LLC
1842 Seafan Circle
North Fort Myers, FL 33903

Re: Initial development review for Corkscrew Farms

Mr. Noble,

I am in receipt of your email dated December 10, 2014, requesting a letter to determine the adequacy of existing and proposed services for the development of Corkscrew Farms, located off Corkscrew Road. The email included a listing of 11 parcels.

Lee County Emergency Medical Services is the primary EMS transport agency responsible for coverage at the address you have provided. We have two EMS stations that are approximately 8 miles from the proposed entrance off Corkscrew: Station 21 and Station 25.

An evaluation of current response times along Corkscrew Road in that vicinity, as well as drive time modeling, suggests we will not be able to meet existing service standards as required in County Ordinance 08-16. Therefore, we have concerns about our ability to provide service to this new development.

Should the plans or access to the property change, a new analysis of this impact would be required.

If you have any questions, please contact me at (239) 533-3961.

Sincerely,

Benjamin Abes
Deputy Chief, Operations
Division of Emergency Medical Services

Estero Fire Rescue
21500 Three Oaks Parkway
Estero, Florida 33928
(239) 390.8000
(239) 390.8020 (Fax)
www.esterofire.org

December 16, 2014

Matthew Noble

Re: Corkscrew Farms

Mr. Noble,

This correspondence will serve as a Letter of Service Availability for the project known as Corkscrew Farms. Estero Fire Rescue is able to provide Fire Protection and Non-Transport EMS services from our Fire Station 44 located near Pinewoods Elementary.

In addition, a new fire station is being planned in the vicinity of 6 L's Farm Road and Corkscrew Road. Please note that this station maybe several years from completion.

Should you require any additional information please feel free to contact me at 239-390-8000.

Respectfully,

Phillip Green
Division Chief of Prevention

Estero Fire Rescue
21500 Three Oaks Parkway
Estero, Florida 33928
(239) 390.8000
(239) 390.8020 (Fax)
www.esterofire.org

August 5, 2014

Mr. Joseph Cameratta

Mr. Cameratta,

Please accept this letter as proof of Service Availability for the following tracts : 19-46-27-00-00001.0000; 19-46-27-00-00001.0010; 19-46-27-00-00001.0040; 19-46-27-00-00001.0050; 19-46-27-00-00001.0060; 19-46-27-00-00001.0070; 19-46-27-00-00001.0080; 23-46-26-00-00003.0000; 23-46-26-00003.0010; 24-46-26-00-00001.0000; 24-46-26-00-00001.0010. These parcels are within the boundaries of the Estero Fire Rescue District.

Estero Fire Rescue is capable of providing both Fire Protection and Advanced Life Support –Non Transport services for these parcels.

Should you require any additional information please feel free to contact me at 239-390-8000.

Respectfully,

Phillip Green
Division Chief of Prevention
Estero Fire Rescue

Mike Scott
Office of the Sheriff

State of Florida
County of Lee

December 17, 2014

Matthew Noble
ANoblePlan, LLC
1842 Seafan Circle
North Fort Myers, FL 33903

Mr. Noble,

The proposed Corkscrew Farms development does not affect the ability of the Lee County Sheriff's Office to provide core services at this time.

As such, this agency does not object to a change in the Comprehensive Plan for this location that would allow 1,343 single family dwelling units at the 1,361 acre site.

We will provide law enforcement services primarily from our South District office in Bonita Springs.

At the time of application for new development orders or building permits, the applicant shall provide a Crime Prevention Through Environmental Design (CPTED) report done by the applicant and given to the Lee County Sheriff's Office for review and comments.

Please contact Crime Prevention Practitioner Trisha Bissler at 477-1801 with any questions regarding the CPTED study.

Respectfully,

Stan Nelson

Stan Nelson
Director, Planning and Research

LEE COUNTY
SOUTHWEST FLORIDA
BOARD OF COUNTY COMMISSIONERS

December 10, 2014

Mr. Matthew Noble
For
Resource Conservation Holdings

SUBJECT: Corkscrew Farms Plan Amendment – Letter of Availability
Your request from December 10, 2014

Dear Mr. Noble:

The Lee County Solid Waste Division is capable of providing solid waste collection service for the planned 1,343 residential dwelling units proposed for the Corkscrew Farms development located off Corkscrew Road, East of Alico Road. Disposal of the solid waste from this development will be accomplished at the Lee County Resource Recovery Facility and the Lee-Hendry Regional Landfill. Plans have been made, allowing for growth, to maintain long-term disposal capacity at these facilities. To ensure service, it is the responsibility of the property owners to follow Lee County Ordinance 11-27 when purchasing garbage container(s) - a garbage receptacle should have two handles for easy lifting and capacity of no more than 40 gallons, and a tight fitting lid. Recycling containers will be furnished by the Lee County Solid Waste Division upon notification by the property owner. Residents will be billed an annual Solid Waste Assessment with the Property Tax Bill for collection and disposal service availability.

Please be sure to supply me a pdf of the plans of the development. Thank you.

If you have any questions, please call me at (239) 533-8000.

Sincerely,

Brigitte Kantor

Brigitte Kantor
Operations Manager
Solid Waste Division

Cc: A. Fleming, Environmental Specialist Sr.

THE SCHOOL DISTRICT OF LEE COUNTY

2855 COLONIAL BLVD. ♦ FORT MYERS, FLORIDA 33966 ♦ WWW.LEESCHOOLS.NET

DAWN HUFF
LONG RANGE PLANNER
239-337-8142
DAWNMHU@LEESCHOOLS.NET

December 15, 2014

Matthew Noble
ANoblePlan, LLC
1842 Seafan Cir
North Fort Myers, FL 33903

RE: Corkscrew Farms Plan Amendment

Dear Mr. Noble:

This letter is in response to your request for comments date December 10, 2014 for the Corkscrew Farms Plan Amendment in regard to educational impact. The project is located in the South Choice Zone, S-3.

The developer's request states there is a possibility of 1,343 single-family dwellings. With regard to the interlocal agreement for school concurrency the generation rates are created from the type of dwelling unit and further broken down by grade level.

For single family, the generation rate is .292 and further broken down into the following, .146 for elementary, .070 for middle and .076 for high. A total of 392 school-aged children would be generated and utilized for the purpose of determining sufficient capacity to serve the development. Within the Concurrency Analysis provided, the increase in dwelling units creates 582 high school students above the capacity available within the South Zone Concurrency Service Area (CSA). School Concurrency states that the County will determine whether a contiguous CSA has available capacity for that particular type of school and assign the demand from the proposed development to that CSA. The School District finds this development insufficient within the CSA and would like to further discuss mitigation options.

Thank you for your attention to this issue. If I may be of further assistance, please me at 239-337-8142.

Sincerely,

Dawn Huff,
Long Range Planner

LEE COUNTY SCHOOL DISTRICT'S SCHOOL CONCURRENCY ANALYSIS

REVIEWING AUTHORITY	Lee School District
NAME/CASE NUMBER	Corkscrew Farms Plan Amendment
OWNER/AGENT	Resource Cnservation Holdings
ITEM DESCRIPTION	various amendments; all impacts in South CSA, sub area S3
LOCATION	North side of Corkscrew Rd, east of I75
ACRES	1,300
CURRENT FLU	Density Reduction/Groundwater Resource (DRGR) & Wetlands (W)
CURRENT ZONING	Agricultural (AG2)

PROPOSED DWELLING UNITS BY TYPE

Single Family	Multi Family	Mobile Home
1,343	0	0

	Student Generation Rates			
STUDENT GENERATION	**SF**	**MF**	**MH**	**Projected Students**
Elementary School	0.146			196.08
Middle School	0.07			94.01
High School	0.076			102.07
	Source: Lee County School District, December 15, 2014 letter			

CSA SCHOOL NAME 2018/19	**CSA Capacity (1)**	**CSA Projected Enrollment (2)**	**CSA Available Capacity**	**Projected Impact of Project**	**Available Capacity W/Impact**	**LOS is 100% Perm FISH Capacity**	**Adjacent CSA Available Capacity w/Impact**
South CSA, Elementary	12,413	10,768	1,645	196	1,449	88%	
South CSA, Middle	5,621	5,325	296	94	202	96%	
South CSA, High	7,070	7,550	-480	102	-582	108%	

(1) Permanent Capacity as defined in the Interlocal Agreement and adopted in the five (5) years of the School District's Five Year Plan

(2) Projected Enrollment per the five (5) years of the School District's Five Year Plan plus any reserved capacity (development has a valid finding of capacity)

(3) Available Adjacent CSA capacity is subject to adjacency criteria as outlined in the Interlocal Agreement and the School District's School Concurrency Manual

Prepared by: Dawn Huff, Long Range Planner

LEE COUNTY SCHOOL DISTRICT'S SCHOOL CONCURRENCY ANALYSIS - EAST ZONE

REVIEWING AUTHORITY	Lee School District
NAME/CASE NUMBER	Corkscrew Farms Plan Amendment
OWNER/AGENT	Resource Cnservation Holdings
ITEM DESCRIPTION	various amendments; all impacts in South CSA, sub area S3
LOCATION	North side of Corkscrew Rd, east of I75
ACRES	1,300
CURRENT FLU	Density Reduction/Groundwater Resource (DRGR) & Wetlands (W)
CURRENT ZONING	Agricultural (AG2)

PROPOSED DWELLING UNITS BY TYPE

Single Family	Multi Family	Mobile Home
1343	0	0

	Student Generation Rates			
STUDENT GENERATION	**SF**	**MF**	**MH**	**Projected Students**
Elementary School	0.146			196.08
Middle School	0.07			94.01
High School	0.076			102.07

Source: Lee County School District, December 17, 2014 letter

CSA SCHOOL NAME 2018/19	CSA Capacity (1)	CSA Projected Enrollment (2)	CSA Available Capacity	Projected Impact of Project	Available Capacity W/Impact	LOS is 100% Perm FISH Capacity	Adjacent CSA Available Capacity w/Impact
East CSA, Elementary	14,959	13,619	1,340	196	1144	92%	
East CSA, Middle	6,464	6,439	25	94	-69	101%	
East CSA, High	7,702	7,496	206	102	104	99%	

(1) Permanent Capacity as defined in the Interlocal Agreement and adopted in the five (5) years of the School District's Five Year Plan

(2) Projected Enrollment per the five (5) years of the School District's Five Year Plan plus any reserved capacity (development has a valid finding of capacity)

(3) Available Adjacent CSA capacity is subject to adjacency criteria as outlined in the Interlocal Agreement and the School District's School Concurrency Manual

Prepared by: Dawn Huff, Long Range Planner

LEE COUNTY SCHOOL DISTRICT'S SCHOOL CONCURRENCY ANALYSIS-WEST ZONE

REVIEWING AUTHORITY	Lee School District
NAME/CASE NUMBER	Corkscrew Farms Plan Amendment
OWNER/AGENT	Resource Cnservation Holdings
ITEM DESCRIPTION	various amendments; all impacts in South CSA, sub area S3
LOCATION	North side of Corkscrew Rd, east of I75
ACRES	1,300
CURRENT FLU	Density Reduction/Groundwater Resource (DRGR) & Wetlands (W)
CURRENT ZONING	Agricultural (AG2)

PROPOSED DWELLING UNITS BY TYPE

Single Family	Multi Family	Mobile Home
1343	0	0

Student Generation Rates				
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Elementary School	0.146			196.08
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Source: Lee County School District, December 17, 2014 letter

CSA SCHOOL NAME 2018/19	CSA Capacity (1)	CSA Projected Enrollment (2)	CSA Available Capacity	Projected Impact of Project	Available Capacity W/Impact	LOS is 100% Perm FISH Capacity	Adjacent CSA Available Capacity w/Impact
West CSA, Elementary	14,391	10,359	4,032	196	3836	73%	
West CSA, Middle	6,722	6,312	410	94	316	95%	
West CSA, High	8,948	8,401	547	102	445	95%	

(1) Permanent Capacity as defined in the Interlocal Agreement and adopted in the five (5) years of the School District's Five Year Plan

(2) Projected Enrollment per the five (5) years of the School District's Five Year Plan plus any reserved capacity (development has a valid finding of capacity)

(3) Available Adjacent CSA capacity is subject to adjacency criteria as outlined in the Interlocal Agreement and the School District's School Concurrency Manual

Prepared by: Dawn Huff, Long Range Planner

Corkscrew Farms
Part IV. Amendment Support Documentation
C. Environmental Impact Analysis

Prepared by:
Kevin L. Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Fort Myers, Florida 33901

CORKSCREW FARMS

ENVIRONMENTAL IMPACTS PLAN AMENDMENT ANALYSIS

January 11, 2015

Prepared for:

Cameratta Properties, Inc.

Prepared by:

Kevin Erwin Consulting Ecologist, Inc.

Table 1. Property Acreage by Uplands, Wetlands and Other Surface Waters.

Total Uplands	1,210.7 Acres
Total Wetlands	110.4 Acres
Total Other Surface Waters	40.0 Acres
Total Area of Property	1,361.1 Acres

IV-A.4. Current FLUCFCS map with acreages.

See attached map.

IV-A.6. Current wetland map with acreages for each wetland and total.

See attached map.

IV-A.8. An aerial map showing the subject property and surrounding properties.

See attached map.

IV-B.2c. Provide an existing and future conditions analysis for: Surface Water/Drainage Basins

The site occupies a strategic location in the DRGR immediately adjacent to the Airport Mitigation Park to the north and the Corkscrew Regional Mitigation Bank to the east. The property slopes from a high elevation of 28.0' in the northeast corner to 19.0' in the southwest corner. This significant drop in elevation along with the existing network of drainage canals and ditches creates an adverse impact to the hydrology of the subject property as well as the public conservation lands to the east and north by over-draining the properties. All surface water currently flows into Flint Pen Strand to the west via the Corkscrew Road drainage ditches.

Ground and surface water that historically pooled on the subject site during the wet season are now quickly drained directly into the Corkscrew Road drainage ditches that parallel the roadway along the southern boundary of the site. The subject property is developed for agricultural uses which includes an agricultural berm that extends along the north property line. The berm intercepts some wet season sheet flow from the Airport Mitigation Park and drains into the vicinity of the Burgundy Farms subdivision which lies west of and adjacent to the site.

The proposed Corkscrew Farms plan amendment would require 800 acres or approximately 60% of the site to remain as open space which will include surface water management improvements and wetland restoration. The surface water management plan will focus on the storage and treatment of surface water and the improvement of

the onsite hydrology. The restoration will include the recreation of historic wetlands, now consisting of improved pasture. The restoration activity will include functional wetland habitats similar to those that historically existed on the site prior to agricultural conversion.

Key sections of drainage canals and ditches will be backfilled and water control structures will be installed to manage ground and surface water levels which will improve hydroperiods to a more normal range that approach historic levels. Exotic vegetation will be removed and managed to encourage recruitment of native species from the seed bank. The cypress and hydric pine wetlands throughout the site will be cleared of exotic vegetation. The restored wetlands will incorporate flow ways that will transmit surface water across the site from north to south with controlled discharges through structures north of Corkscrew Road and ultimately west to Flint Pen Strand.

Future conditions will see an improvement with; improved wetland hydroperiods in the upstream adjacent public lands, a reduction in water currently entering the Burgundy Farms subdivision, an improvement in the water levels during the rainy season along Corkscrew Road, and improved water quality onsite.

IV-C. Environmental Impacts

Provide an overall analysis of the character of the subject property and surrounding properties.

The subject property was historically comprised of pine flat wood uplands, hydric pine, wet prairie, and cypress wetland habitats. Major wetland flow ways traversed the property from north to south offsite to the head of Flint Pen Strand and Corkscrew Swamp. In the late 1950's and 1960's the property was cleared and drained for agriculture.

Current uses include cattle, row cropping and sod farming. The majority of the site consists of improved pasture with some widely scattered isolated cypress wetlands. These vestiges of cypress wetlands occurring within the pasture are extensively drained and infested with exotic vegetation such as Brazilian pepper (*Schinus terebinthifolius*), Caesar's weed (*Urena lobata*) and West indian marsh grass (*Hymenachne amplexicaulis*). Cogon grass (*Imperata cylindrica*), tropical soda apple (*Solanum viarum*) and other exotics are prevalent within the pasture. The western side of the property is vegetated by a buffer of upland pine flatwoods and wetland hydric pine and cypress swamp.

Assess the site's suitability for the proposed use upon the following:

1. A map of the Plant Communities as defined by the Florida Land Use Cover and Classification system (FLUCCS).

The Florida Land Use, Cover and Forms Classification System (FLUCFCS 1999) was used to classify vegetation communities and land use on the subject property. Using Lee County 2014 color aerial photography, ground truthing was conducted by KECE ecologists during July 2014. [Site conditions were relatively dry during the ground truthing effort, especially for July, typically a wet month.] The current vegetation map utilizes a modification to the FLUCFCS system to add a fourth level modifier (e.g., 6219 Cypress, Disturbed) to indicate areas of altered hydrology and/or areas where the estimated density of exotic vegetation exceeded 10 percent.

The following vegetation communities and land use categories currently exist onsite:

FLUCFCS 205: Agriculture Buildings – 2.1 acres (0.2%)

This area consists of a building used for the storage of tractors and other farm equipment, and a cattle loading station. Several large live oak trees (*Quercus virginiana*) are also present here.

FLUCFCS 211: Improved Pastures – 1,130.44 acres (83.1%)

This upland community comprises the majority of the site. Dominant species include bahia grass (*Paspalum notatum*), smut grass (*Sporobolus indicus*), dog fennel (*Eupatorium capillifolium*), shrubby false buttonweed (*Spermacoce verticillata*), frog fruit (*Phyla nodiflora*), American bluehearts (*Buchnera americana*), broomsedge (*Andropogon virginicus*), and cogon grass (*Imperata cylindrica*). This upland community type consists of some areas (primarily in the northeast quadrant of the property) that are marginally hydric, especially during wetter years.

Simpson's zephyr lily (*Zephyranthes simpsonii*) was observed within this community type in the northeastern portion of the property. This state-listed species is categorized as Threatened (Chapter 5B-40.0055(b), F.A.C.).

FLUCFCS 213: Woodland Pastures – 9.34 acres (0.7%)

This upland community is represented by areas within the larger improved pastures community. These areas are forested with either slash pine (*Pinus elliottii*) and/or pond cypress (*Taxodium ascendens*), but are heavily drained due to ditching. The pines and cypress are typically located at the top of berms and/or in upland areas adjacent to heavily drained cypress wetlands. The midstory, if present, typically consists of Brazilian pepper (*Schinus terebinthifolius*). Ground cover is dominated by bahia grass,

smut grass, dog fennel and many of the same species found in the improved pasture community.

FLUCFCS 262: Improved Pastures, Hydric – 15.10 acres (1.1%)

This wetland community is represented by areas of improved pastures adjacent to some of the forested wetland communities scattered throughout the site described below. These areas are slightly lower in elevation than the surrounding improved pasture (211). Dominant species include dog fennel, frog fruit, blanket crabgrass (*Digitaria serotina*), bahia grass, American bluehearts, broomsedge, shrubby false buttonweed, flatsedges (*Cyperus surinamensis, C. polystachyos, C. ligularis*), carpetgrass (*Axonopus* sp.) and coinwort (*Centella asiatica*). Some of the more hydric areas include bushy bluestem (*Andropogon glomeratus*), maidencane (*Panicum hemitomon*), knotroot foxtail (*Setaria parviflora*), bighead rush (*Juncus megacephalus*), white-top sedge (*Rhynchospora colorata*), smooth water hyssops (*Bacopa monnieri)*, false pimpernel (*Lindernia grandiflora*), water pennywort (*Hydrocotyle umbellata*), buttonweed (*Diodia virginiana*), and increased percentages of coinwort.

FLUCFCS 4119: Pine Flatwoods, Disturbed– 19.94 acres (1.5%)

This upland community is located within the northwestern portion of the site, along the western property boundary. Slash pine is the dominant canopy species. Midstory species include wax myrtle (*Myrica cerifera*), myrsine (*Myrsine cubana*), saltbush (*Baccharis halimifolia*), Brazilian pepper, melaleuca (*Melaleuca quinquenervia*), earleaf acacia (*Acacia auriculiformis*) and cabbage palm (*Sabal palmetto*). Ground cover is dominated by saw palmetto (*Serenoa repens*), with scattered chocolateweed (*Melochia corchorifolia*), grape vine (*Vitis rotundifolia*) and saltbush.

FLUCFCS 422: Brazilian Pepper– 13.15 acres (1.0%)

This highly disturbed upland community is primarily located along the southern fence line of the property adjacent to Corkscrew Road. Another strip of this habitat type exists along the eastern boundary of the property and a third area exists adjacent to the slash pine forest in the northwestern portion of the property. Brazilian pepper is highly dominant and typically creates a monoculture. Scattered slash pines, oaks, cypress, and Carolina willows (*Salix caroliniana*) also exist. The ground is mostly bare in these areas. Ditches and berms are located throughout this community type.

FLUCFCS 511: Agricultural Ditches– 38.56 acres (2.8%)

Agricultural ditches of various sizes are numerous and located throughout the property. Dominant vegetation within the ditch banks typically includes dog fennel, mock bishopsweed (*Ptilimnium capillaceum*), false pimpernel, water pennywort, frog fruit,

torpedo grass (*Panicum repens*), and West Indian marsh grass (*Hymenachne amplexicaulis*).

FLUCFCS 6219: Cypress, Disturbed– 47.39 acres (3.5%)

These forested wetland communities are scattered throughout the site. Most of them are located within the improved pastures and are highly drained by agricultural ditches. These areas are infested with exotic vegetation. The healthier cypress wetlands are located within the northeast corner of the property, the northwestern portion of the property and along the western boundary. These cypress forests also have significant percentages of exotic species. Pond cypress dominates the canopy within this wetland community type. The midstory is typically dominated by Brazilian pepper, with scattered cabbage palm, strangler fig (*Ficus aurea*), wax myrtle and dahoon holly (*Ilex cassine*). Some cypress forests also have a few scattered pond apple (*Annona glabra*) in the midstory. Others, the more heavily drained ones in the center of the property, have guava (*Psidium guajava*) in the midstory. Ground cover species typically include dog fennel, blanket crabgrass, frog fruit, swamp fern (*Blechnum serrulatum*), false nettle (*Boehmeria cylindrica*), dotted smartweed (*Polygonum punctatum*), common dayflower (*Commelina diffusa*), West Indian marsh grass, Tropical soda apple (*Solanum viarum*), Caesar's weed (*Urena lobata*), balsam pear (*Momordica charantia*), shrubby false buttonweed, and thistle (*Cirsium* sp.). Airplants (*Tillandsia usneoides, T. fasciculata, T. setacea, T. paucifolia*) are also common within these cypress forests. Common wild pine (*Tillandsia fasiculata*) is a state-listed species that is categorized as Endangered (Chapter 5B-40.0055(a), F.A.C.). Royal fern (*Osmunda regalis*) was observed within this community type in the northwestern corner of the property. This state-listed species is categorized as Commercially Exploited (Chapter 5B-40.0055(c), F.A.C.).

FLUCFCS 6249: Cypress-Pine-Cabbage Palm, Disturbed– 11.59 acres (0.9%)

These two forested wetland communities are located in the southeastern portion of the property immediately east of the Lee County outparcel and along that property boundary. Pond cypress and slash pine are the dominant canopy species. The midstory includes pond cypress, slash pine, cabbage palm, laurel oak (*Quercus laurifolia*), wax myrtle, melaleuca and Brazilian pepper. Ground cover species include dog fennel, blanket crabgrass, frog fruit, Caesar's weed, shrubby false buttonweed, swamp fern, swamp flatsedge (*Cyperus ligularis*), bahia grass and knotroot foxtail.

FLUCFCS 6259: Hydric Pine Flatwoods, Disturbed– 33.82 acres (2.5%)

This forested wetland community type is represented by two areas in the northeast corner of the property, one area immediately east of and adjacent to the Lee County outparcel, and one more area located within the northwestern portion of the property adjacent to the western boundary. Slash pine is the dominant canopy species. The

midstory and ground cover differs within these communities, therefore, dominant species within each distinct hydric pine (HP) forest are listed as follows:

HP1: Midstory species include Brazilian pepper, laurel oak, cabbage palm, wax myrtle and melaleuca. Ground cover includes dog fennel, blanket crabgrass, frog fruit, Caesar's weed, swamp fern, swamp flatsedge, bahia grass, knotroot foxtail and blue maidencane (*Amphicarpum muhlenbergianum*).

HP2: The midstory consists of melaleuca saplings. Ground cover includes bahia grass, smut grass, dog fennel, shrubby false buttonweed, knotroot foxtail, Caesar's weed and limpo grass (*Hemarthria altissima*).

HP3: Midstory consists of Brazilian pepper, slash pine, wax myrtle, and scattered pond cypress. Ground cover is primarily bahia grass, with scattered Caesar's weed, smut grass, dog fennel, shrubby false buttonweed and coinwort.

HP4: Midstory species include Brazilian pepper, melaleuca, wax myrtle, cabbage palm, myrsine, swamp bay (*Persea palustris*), and earleaf acacia. Ground cover includes muhly grass (*Muhlenbergia capillaris*), dog fennel, beakrush (*Rhynchospora* sp.), rosy camphorweed (*Pluchea rosea*), maidencane, blue maidencane, chocolateweed, Caesar's weed, shrubby false buttonweed, grape vine, coinwort and saw grass (*Cladium jamaicense*), with scattered saw palmetto throughout.

FLUCFCS 641: Freshwater Marshes– 0.97 acres (0.1%)

This herbaceous wetland exists within the slash pine forest located along the western boundary of the property. Dominant species include maidencane, dotted smartweed, pickerelweed (*Pontederia cordata)*, Carolina willow, dog fennel, saw grass, sweetscent (*Pluchea odorata*), climbing hempvine (*Mikania scandens*) and sand cordgrass (*Spartina bakeri*).

FLUCFCS 6419: Freshwater Marshes, Disturbed– 1.51 acres (0.1%)

These herbaceous wetlands are located within the centers of four different disturbed cypress forests (FLUCFCS 6219). Dominant species within each distinct marsh are listed as follows:

M1: Primarily dotted smartweed, with red ludwigia (*Ludwigia repens*) and paragrass (*Urochloa mutica*).

M2: West Indian marsh grass and dotted smartweed, with scattered pickerelweed and water lettuce (*Pistia stratiotes*).

M3: West Indian marsh grass, fire flag (*Thalia geniculata*) and Carolina willow.

M5: Primarily West Indian marsh grass, with scattered fire flag, common dayflower, climbing hempvine and dotted smartweed.

FLUCFCS 742: Borrow Areas– 1.41 acres (0.1%)

This land use category consists of several decommissioned cow ponds and other excavated areas located within the improved pastures and scattered throughout the site. Most of these areas have standing water. Some of the shallower ones occasionally dry up and become invaded with weedy native and exotic grasses and forbs, similar to the ditch vegetation described above.

FLUCFCS 747: Dikes and Levees– 35.62 acres (2.6%)

This land use category represents the spoil berms associated with the agricultural ditches. Vegetation primarily consists of exotic pasture grasses (i.e., bahia grass, smut grass, etc.) and dog fennel. The large berm along the northern property boundary is also vegetated with slash pine, Brazilian pepper and scattered saw palmetto.

Table 2 below provides the acreage summary results of the Corkscrew Farms vegetation mapping survey.

Table 2. Corkscrew Farms Vegetation Mapping Summary

FLUCFCS	Description	Acres	Percent
205	Agriculture Buildings	2.21	0.1
211	Improved Pastures	1,130.44	83.1
213	Woodland Pastures	9.34	0.7
262	Improved Pastures, Hydric	15.10	1.1
4119	Pine Flatwoods, Disturbed	19.94	1.5
422	Brazilian Pepper	13.15	1.0
511	Agricultural Ditches	38.56	2.8
6219	Cypress, Disturbed	47.39	3.5
6249	Cypress-Pine-Cabbage Palm, Disturbed	11.59	0.9
6259	Hydric Pine Flatwoods, Disturbed	33.82	2.5
641	Freshwater Marshes	0.97	0.1
6419	Freshwater Marshes, Disturbed	1.51	0.1
742	Borrow Areas	1.41	0.1
747	Dikes and Levees	35.62	2.6
Total		**1,361.05**	**100.0**

2. A map and description of the soils found on the property (identify the source of the information).

The following soils, as mapped and described by the Soil Survey of Lee County, Florida (USDA, NRCS-formerly SCS 1984), are found on the subject property. See attached map.

6 - Hallandale Fine Sand (Hydric)
This is a nearly level, poorly drained soil on low, broad flatwoods areas. Slopes are smooth and range from 0 to 2 percent. Included with this soil are scattered areas of rock outcrop, less than 1 acre, and soils that have hard calcareous material at a depth of less than 20 inches. In most years, under natural conditions, the water table is less than 10 inches below the surface for 1 to 3 months. It recedes below the limestone for about 7 months. Natural vegetation consists of saw palmetto, pineland threeawn, bluestem, panicums and South Florida slash pine.

9 - EauGallie Sand (Non-Hydric)
This is a nearly level, poorly drained soil on flatwoods. Slopes are smooth to convex and less than 1 percent. In most years, under natural conditions, the water table is within 10 inches of the surface for 2 to 4 months. It is 10 to 40 inches below the surface for more than 6 months. Natural vegetation consists of saw palmetto, South Florida slash pine, chalky bluestem, pineland threeawn and runner oak.

10 - Pompano Fine Sand (Hydric)
This is a nearly level, poorly drained soil on sloughs. Slopes are smooth to concave and range from 0 to 1 percent. In most years, under natural conditions, the water table is at a depth of less than 10 inches for 2 to 4 months and at a depth of 10 to 40 inches for about 6 months. It recedes to a depth of more than 40 inches for about 3 months. During periods of high rainfall, the soil is covered by slowly moving water for periods of about 7 to 30 days or more. Natural vegetation consists of pineland threeawn, scattered South Florida slash pine, bluestem, maidencane and scattered saw palmetto.

12 - Felda Fine Sand (Hydric)
This is a nearly level, poorly drained soil on broad nearly level sloughs. Slopes are smooth to concave and range from 0 to 2 percent. In most years, under natural conditions, this soil has a water table within 10 inches of the surface for 2 to 4 months. The water table is 10 to 40 inches below the surface for about 6 months. It is more than 40 inches below the surface for about 2 months. During periods of high rainfall, the soil is covered by a shallow layer of slowly moving water for periods of about 7 to 30 days or more. Natural vegetation consists of cabbage palm, pineland threeawn, South Florida slash pine, wax myrtle and maidencane.

14 - Valkaria Fine Sand (Hydric)

This is a nearly level, poorly drained soil on sloughs. Slopes are smooth to concave and range from 0 to 1 percent. In most years, under natural conditions, the water table is at a depth of less than 10 inches for 1 to 3 months. It is at a depth of 10 to 40 inches for about 6 months and recedes to a depth of more than 40 inches for about 3 months. During periods of high rainfall, the soil is covered by slowly moving water for periods of about 7 to 30 days or more. Natural vegetation consists of sparse saw palmetto, South Florida slash pine and maidencane.

26 - Pineda Fine Sand (Hydric)

This is a nearly level, poorly drained soil on sloughs. Slopes are smooth to slightly concave and range from 0 to 1 percent. In most years, under natural conditions, the water table is within 10 inches of the surface for 2 to 4 months. It is 10 to 40 inches below the surface for more than 6 months, and it recedes to more than 40 inches below the surface during extended dry periods. During periods of high rainfall, the soil is covered by a shallow layer of slowly moving water for periods of about 7 to 30 days or more. Natural vegetation consists of pineland threeawn, panicums, sedges, maidencane, wax myrtle, South Florida slash pine and scattered clumps of saw palmetto.

27 - Pompano Fine Sand, Depressional (Hydric)

This is a nearly level, poorly drained soil in depressions. Slopes are concave and less than 1 percent. In most years, under natural conditions, the water table is within 10 inches of the surface for 2 to 4 months and stands above the surface for about 3 months. It is 10 to 40 inches below the surface for more than 5 months. Natural vegetation consists of pond cypress, St. John's wort and waxmyrtle.

28 - Immokalee Sand (Non-Hydric)

This is a nearly level, poorly drained soil in flatwoods areas. Slopes are smooth to convex and range from 0 to 2 percent. In most years, under natural conditions, the water table is within 10 inches of the surface for 1 to 3 months and 10 to 40 inches below the surface for 2 to 6 months. It recedes to a depth of more than 40 inches during extended dry periods. Natural vegetation consists of saw palmetto, fetterbush, pineland threeawn and South Florida slash pine.

33 - Oldsmar Sand (Non-Hydric)

This is a nearly level, poorly drained soil on low, broad flatwoods areas. Slopes are smooth to slightly convex and range from 0 to 2 percent. In most years, under natural conditions, the water table is at a depth of less than 10 inches for 1 to 3 months. It is at a depth of 10 to 40 inches for more than 6 months, and it recedes to a depth of more

than 40 inches during extended dry periods. Natural vegetation consists of saw palmetto, South Florida slash pine, pineland threeawn and meadowbeauty.

34 - Malabar Fine Sand (Hydric)
This is a nearly level, poorly drained soil on sloughs. Slopes are smooth to concave and range from 0 to 1 percent. In most years, under natural conditions, the water table is at a depth of less than 10 inches for 2 to 4 months. It is at a depth of 10 to 40 inches for more than 6 months, and it recedes to a depth of more than 40 inches during extended dry periods. During periods of high rainfall, the soil is covered by a shallow layer of slowly moving water for periods of about 7 to 30 days or more. Natural vegetation consists of pineland threeawn, wax myrtle, scattered saw palmetto, maidencane, panicums and South Florida slash pine.

49 - Felda Fine Sand, Depressional (Hydric)
This is a nearly level, poorly drained soil in depressions. Slopes are concave and less than 1 percent. In most years, under natural conditions, the soil is ponded for about 3 to 6 months or more. The water table is within a depth of 10 to 40 inches for 4 to 6 months. Natural vegetation consists of pond cypress, waxmyrtle and water-tolerant grasses and weeds.

53 - Myakka Fine Sand, Depressional (Hydric)
This is a nearly level, poorly drained soil in depressions. Slopes are smooth to concave and are less than 1 percent. In most years, under natural conditions, the soil is ponded for about 3 to 6 months. The water table is 10 to 40 inches below the surface for about 3 to 6 months. Natural vegetation consists of scattered cypress, St. John's wort, sedges, maidencane, sand cordgrass and waxmyrtle.

3. A topographic map depicting the property boundaries and 100-year flood prone areas indicated (as identified by FEMA).

Project is completely outside 100 year flood zone.

4. A map delineating the property boundaries on the Flood Insurance Rate Map effective August 2008.

Corkscrew Farms Location FIRM map (see attached map).

5. A map delineating wetlands, aquifer recharge areas, and rare & unique uplands.

See attached map. Rare and unique uplands do not exist on the property.

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).

The Florida Fish and Wildlife Conservation Commission (FWC) maintains the state list of animals designated as Federally-designated Endangered or Threatened, State-designated Threatened, or State-designated Species of Special Concern, in accordance with Rules 68A-27.003, and 68A-27.005, respectively, Florida Administrative Code (F.A.C.).

On November 8, 2010 new threatened species rules approved by the Commission went into effect. All Federally listed species that occur in Florida are now included on Florida's list as Federally-designated Endangered or Federally-designated Threatened species. In addition, the State has a listing process to identify species that are not Federally listed but at risk of extinction. These species are called State-designated Threatened. The FWC will continue to maintain a separate Species of Special Concern category until all the species have been reviewed and those species are either designated as State-designated Threatened, or given a management plan and removed from the list.

The local, Lee County, protected species list is derived from Appendix H derived from Ord. No. 94-10, § 8, 4-20-94.

The State lists of plants, which are designated endangered, threatened, and commercially exploited, are administered and maintained by the Florida Department of Agriculture and Consumer Services (DOACS) via Chapter 5B-40, F.A.C.

Table 3. Potential Listed Animal and Plant Species by FLUCFCS

Scientific Name	Common Name	Plant Communities by FLUCFCS	Status	
			Federal/ State	Local
Reptiles				
Athene cunicularia floridana	Burrowing owl	211,213,262,747	SSC	X
Alligator mssissippiensis	American alligator	511,621,641,742	FT (SA)	X
Drymarchon corais couperi	Eastern indigo snake	213,411,422,621,624, 625,641	FT	X
Gopherus polyphemus	Gopher tortoise	213,411,747	ST	X
Birds				
Egretta caerulea	Little blue heron	511,621,625,641,742	SSC	X

Egretta thula	Snowy egret	511,621,625,641,742	SSC	X
Egretta tricolor	Tricolored heron	511,621,625,641,742	SSC	X
Eudocimus albus	White ibis	211,213,262,511,621, 624,625,641,742	SSC	-
Falco sparverius paulus	Southeastern American kestrel	213,411	ST	X
Grus canadensis pratensis	Florida sandhill crane	211,213,262,641	ST	X
Mycteria Americana	Wood stork	511,621,625,641,742	FE	X
Polyborus plancus audubonii	Audubon crested caracara	213,624	FT	-
Mammals				
Eumops floridanus	Florida bonneted bat	411,621,624,625	T	-
Felis concolor coryi	Florida panther	211,213,262,411,621, 624,625,641	E	X
Sciurus niger avicinnia	Big Cypress fox squirrel	213,411,621,624,625	ST	X
Ursus americanus floridanus	Florida black bear	411,621,624,625		X
Plants				
Osmunda regalis	Royal fern		*CE	
Tillandsia fasciculate	Common wild pine	621,624,625	SE	
Zephyranthes simpsonii	Simpson's zephyrlily	211	ST	

* Commercially exploited

9. Requests involving lands in critical areas for future water supply must be evaluated based on policy 2.4.2. IV-F.3

POLICY 2.4.2: 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 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. (Amended by Ordinance No. 92-47, 94-30, 00-22, 02-02,14-10).

Corkscrew Farms
Part IV. Amendment Support Documentation
C. Environmental Impacts
1. & 5. FLUCCS and Wetlands Maps

Legend

Property Boundary

FLUCFCS

262; 6219; 624; 6249; 625; 6259; 641; 6419

511; 742

FLUCFCS	Description	Acres	Percent
205	Agriculture Buildings	2.21	0.1%
211	Improved Pastures	1130.44	83.1%
213	Woodland Pastures	9.34	0.7%
* 262	Improved Pastures, Hydric	15.10	1.1%
4119	Pine Flatwoods, Disturbed	19.94	1.5%
422	Brazilian Pepper	13.15	1.0%
511	Agricultural Ditches	38.56	2.8%
* 6219	Cypress, Disturbed	47.39	3.5%
* 6249	Cypress-Pine-cabbage Palm, Disturbed	11.59	0.9%
* 6259	Hydric Pine Flatwoods, Disturbed	33.82	2.5%
* 641	Freshwater marshes	0.97	0.1%
* 6419	Freshwater Marshes, Disturbed	1.51	0.1%
742	Borrow Areas	1.41	0.1%
747	Dikes and Levees	35.62	2.6%
		1361.05	100.00%

* Wetlands

Corkscrew Farms Preliminary Wetland/Vegetation Map

N

1 inch = 370 feet

0 412.5 825 1,650 Feet

Kevin Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Ft. Myers, FL 33901
Project: CFIES101 Date 12/3/14
File: Wetland Map

Barraco and Associates, Inc.
CIVIL ENGINEERING - LAND SURVEYING
LAND PLANNING - LANDSCAPE DESIGN
www.barraco.net
2271 McGREGOR BLVD., SUITE 100
POST OFFICE DRAWER 2800
FORT MYERS, FLORIDA 33902-2800
PHONE (239) 461-3170
FAX (239) 461-3169
FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

THIS PLAN IS PRELIMINARY AND INTENDED FOR CONCEPTUAL PLANNING PURPOSES ONLY.

SITE LAYOUT AND LAND USE INTENSITIES OR DENSITIES MAY CHANGE SIGNIFICANTLY BASED UPON SURVEY, ENGINEERING, ENVIRONMENTAL AND / OR REGULATORY CONSTRAINTS AND / OR OPPORTUNITIES.

NOT FOR CONSTRUCTION

FILE NAME	23244-FLOWMAP.DWG
LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	WED. 12-24-2014 - 11:08 AM
PLOT BY	JENNIFER SAPEN

CROSS REFERENCED DRAWINGS

BASEPLAN = 23244A00-OPT22.DWG

PLAN REVISIONS

PLAN STATUS

PROPOSED FLOW-WAY MAP

PROJECT / FILE NO.	SHEET NUMBER
22254	

Legend

Property Boundary

Hydropattern

1M; 1P; 2D

2S

3

4

4U

Corkscrew Farms Historical Hydropatterns

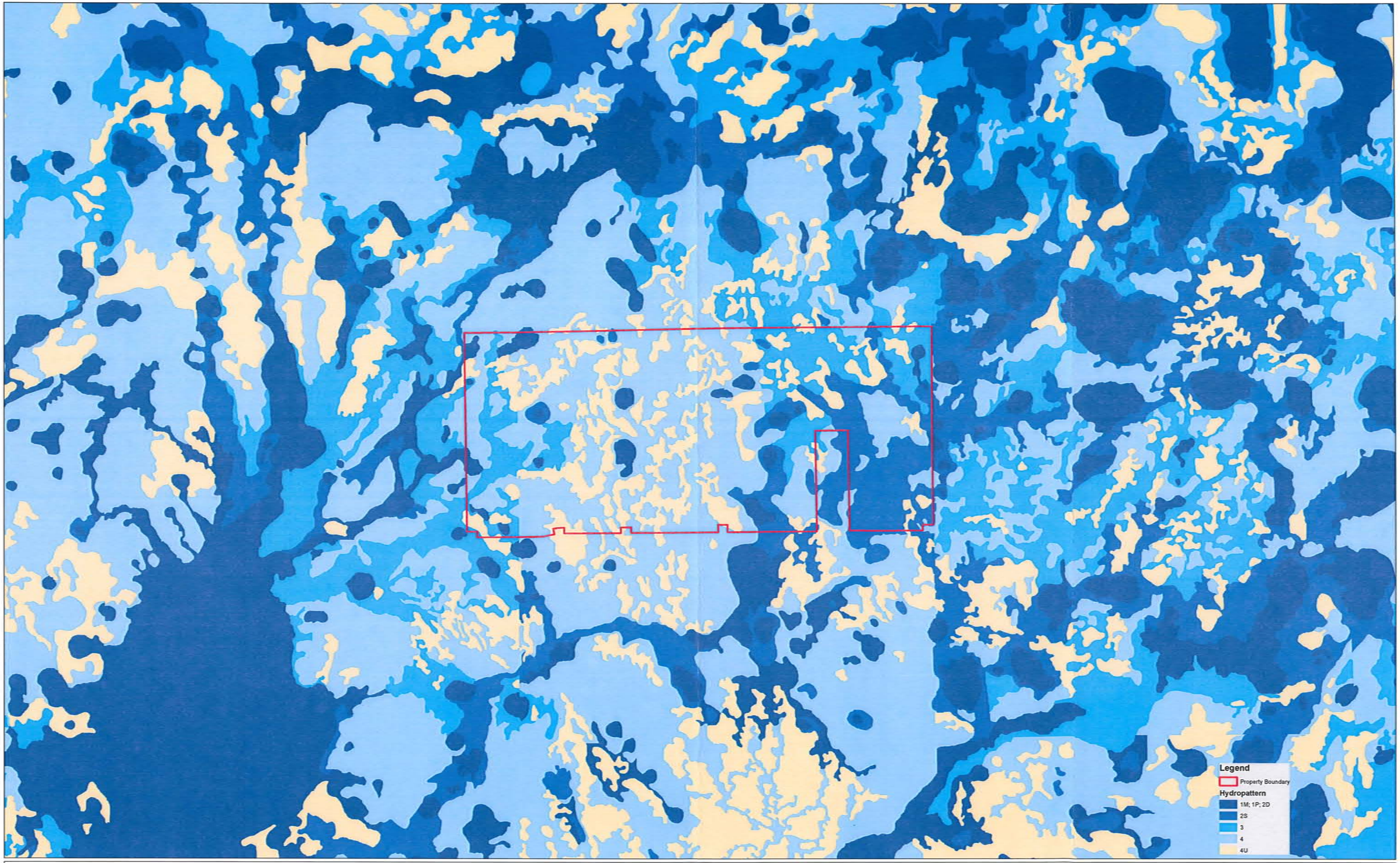
N

1 inch = 375 feet

0 380 760 1,520 Feet

Notes: Mapping Based on Photo interpretation of 1953 Aerials.

Kevin Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Ft. Myers, FL 33901
Project: CPICF101 Date 7-30-14
File: Corkscrew Farms Historical Hydropatterns



Corkscrew Farms Historical Hydropatterns

N

1 inch = 1,000 feet

0 1,000 2,000 4,000 Feet

Notes: Mapping Based on Photo interpretation of 1953 Aerials.

KEVIN ERWIN

Kevin Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Ft. Myers, FL 33901
Project: CPICF101 Date 7-30-14
File: Corkscrew Farms Historical Hydropatterns Surrounding Area

Corkscrew Farms
Part IV. Amendment Support Documentation
C. Environmental Impacts
2. Soil Map

Corkscrew Farms Soils Map

N

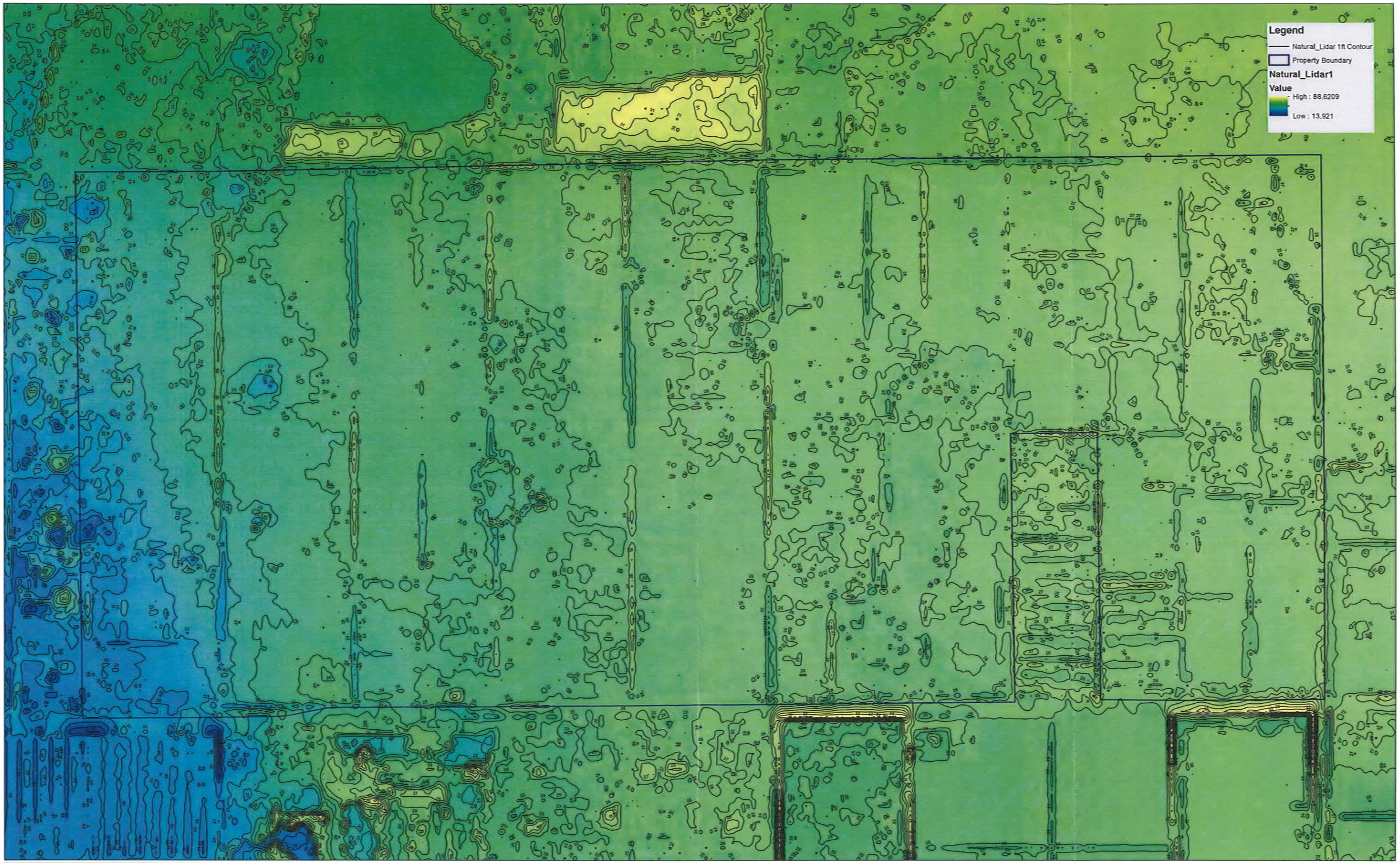
1 inch = 375 feet

0 425 850 1,700 Feet

Source - Natural Resources Conservation Service

Kevin Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Ft. Myers, FL 33901
Project: CPIES101 Date 7-7-14
File: Soils Map

Corkscrew Farms
Part IV. Amendment Support Documentation
C. Environmental Impacts
3. Topographic Maps



1 Foot Contour Elevation Map

N

1 inch = 375 feet

0 420 840 1,680 Feet

Kevin Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Ft. Myers, FL 33901
Project: CPIES101 Date 6-11-14
File: 1 Foot Contour Elevation Map

Corkscrew Farms - 1 Foot Contour Elevation Map

N

1 inch = 400 feet

0 445 890 1,780 Feet

Legend

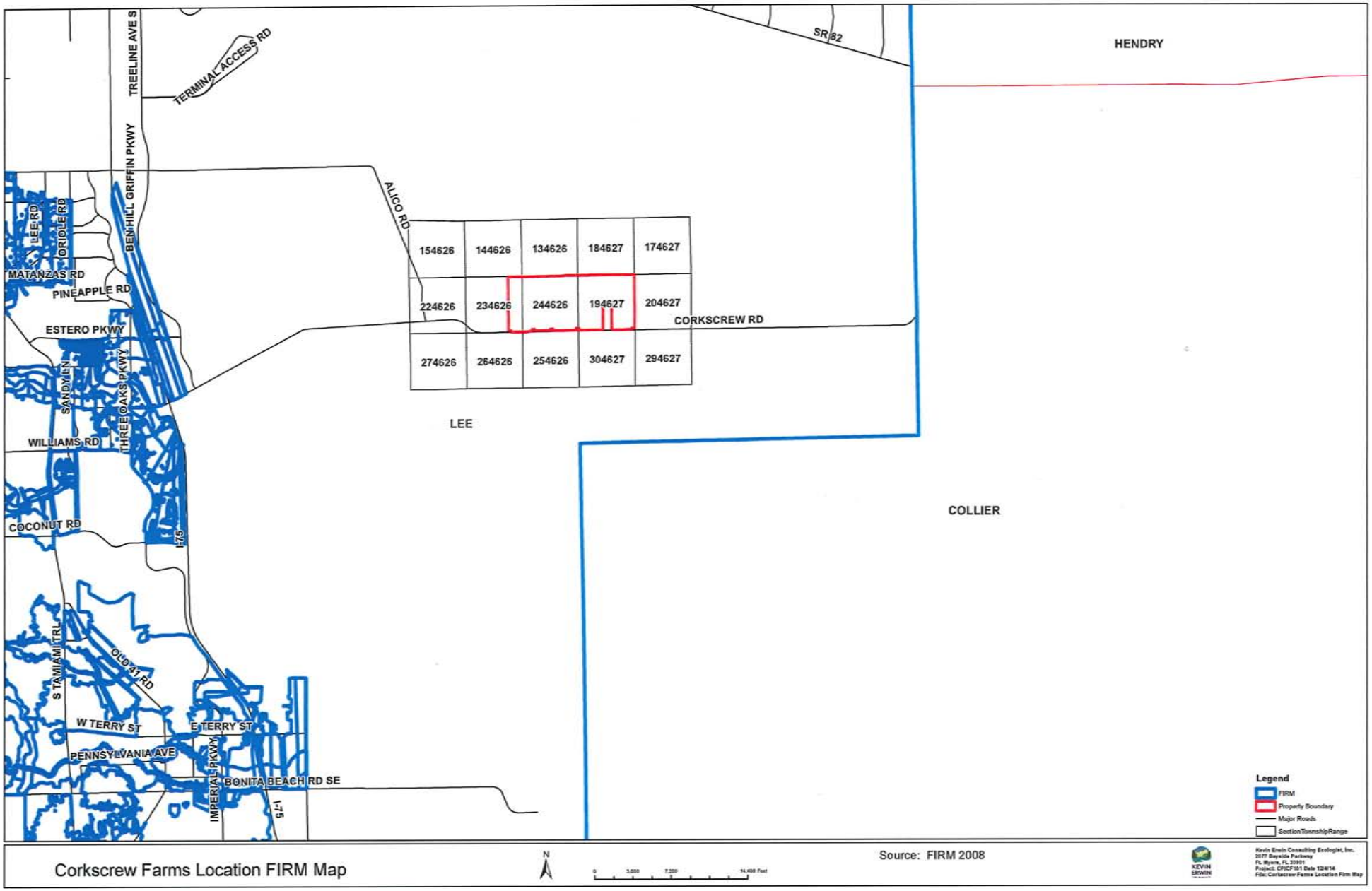
Natural_Lidar 1ft Contour

Property Boundary

KEVIN ERWIN

Kevin Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Ft. Myers, FL 33901
Project: CPIES101 Date 6-11-14
Data Source: Lee County Lidar
File: 1 Foot Contour Elevation Map

Corkscrew Farms
Part IV. Amendment Support Documentation
C. Environmental Impacts
4. Flood Insurance Rate Map



Corkscrew Farms Location FIRM Map

N

Source: FIRM 2008

KEVIN ERWIN

Kevin Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Ft. Myers, FL 33901
Project: CFCF101 Date 12/4/14
File: Corkscrew Farms Location Firm Map

Corkscrew Farms
Part IV. Amendment Support Documentation
C. Environmental Impacts
6. Wildlife Map

Listed Wildlife Species Map

N

0 375 750 1,500 Feet

Kevin Erwin Consulting Ecologist, Inc.
2077 Bayside Parkway
Ft. Myers, FL 33901
Project: CPICF101 Date 7-29-14
File: Listed Wildlife Map 11x17

Corkscrew Farms
Part IV. Amendment Support Documentation
C. Environmental Impact Analysis
Groundwater Analysis

Prepared by:
Progressive Water Resources, LLC
5589 Marquesas Circle, Ste. 202
Sarasota, Florida 34233

CORKSCREW FARMS
COMPREHENSIVE PLAN AMENDMENT
PROPOSED TEXT AMENDMENT

2. In order to request an increase in density, the property must be rezoned to a Residential Planned Development (RPD) that demonstrates and is conditioned to provide the following:

a. Reduced stress to the on-site potable aquifers and is more consistent with water resource goals of Lee County in the DR/GR than the existing development approvals.

The Lee Plan Policy 2.4.2 states that changes to the Future Land Use Map in critical areas for future potable water supply (i.e. 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 supplies and will assess whether the proposed land uses would cause any significant impact on present or future water resources.

The following addresses the existing allowable and proposed allowable land uses and demonstrates the proposed allowable land use will reduce stress to the regional and on-site potable aquifers and is more consistent with the water resource goals of Lee County in the Density Reduction / Groundwater Resource (DR/GR) area than the existing allowable density. Furthermore, the proposed land use will not cause any significant impact to present or future water resources.

SFWMD Existing Agriculture Land Use

The South Florida Water Management District (SFWMD) recently authorized the withdrawal of groundwater from the Surficial Aquifer System (SAS) for the irrigation of a proposed agricultural operation on-site. Water Use Permit (WUP) No. 36-06874-W allows groundwater withdrawals to irrigate up to 278 acres of seasonal row crops, i.e., small vegetables. The SFWMD WUP authorizes an annual irrigation allocation of 316.85 million gallons (mg) and a max monthly allocation of 57.66 million gallons (mg). The proposed row crop irrigation system is authorized to be supplied by eight (8) SAS aquifer wells, five of which are primary and three standby. In addition to the agricultural groundwater withdrawals, there are six Lee County public supply well sites, each with one SAS well and one Intermediate Aquifer System (IAS), or Sandstone Aquifer well, located along the southern boundary of the property.

To more clearly understand the withdrawal of groundwater from the irrigation wells and their influence on the Lee County Utilities' (LCU) Corkscrew Wellfield SAS production wells, nearby environmental features, and local water resources, an analytical groundwater flow model (WinFlow32) was evaluated by the SFWMD. Using the same analytical model and methodologies and practices prescribed by the SFWMD Water Use Permit Applicant's Handbook, withdrawal related impacts resulting from the use of the SAS irrigation wells were resimulated. The analytical groundwater flow model (WinFlow32) simulation was run with max month withdrawals for 90 days with no recharge. The results are presented in **Figure 1**. In addition, **Table 1** summarizes the SFWMD permitted SAS impacts resulting from WUP No. 36-06874-W at several on-site "reference" wetlands and at each LCU Corkscrew Wellfield SAS production well.

Table 1. SFWMD Existing Agriculture Land Use Impacts

Reference Point	Drawdown (Ft)
Wetland 1	0.69
Wetland 2	0.93
Wetland 3	0.55
Wetland 4	0.66
34S	0.10
35S	0.17
36S	0.22
37S	0.27
38S	0.14
39S	0.04

Existing Allowable Residential Land Use

In addition to agricultural uses, the property is currently zoned for up to 127 residential lots. If constructed, the Existing Allowable Residential Land Use would replace the authorized agricultural operation. Due to its low level of service, the site's potable and irrigation residential supplies would undoubtedly be derived from 127 individual, domestic self-supply wells. Conceivably, all such wells could be constructed into the SAS, the same aquifer system as the agricultural wells described above. Consistent with similar residential areas, wastewater from the 127 residential lots would be disposed of by 127 individual septic systems, dispersed across the property. The site's septic systems would also be constructed into the upper section of the SAS. In addition, it is conceivable that some minor common or amenity area would also be irrigated by a SAS well.

To more clearly understand the self-supply water use demands from the 127 residential home sites, potable water demand projections for the Existing Allowable Residential Land Use were estimated consistent with the Lee Plan Policy 2.4.3 and the SFWMD Regional Water Supply Plan. The Bureau of Economic and Business Research (BEBR) statistics for 2012 indicates that Lee County has an approximate average of 2.33 persons per residential household. According to the SFWMD Lower West Coast Water Supply Plan Update of 2012, South Florida's indoor per capita use rate (PCUR) is approximately 70 gallons per day (gpd).

Based on these values, the annual indoor potable water demand for the Existing Allowable Residential Land Use is projected to be approximately 7.56 million gallons (mg) per year or approximately 20,714 gpd. Seasonal fluctuations in potable demands are variable, with maximum month daily demands (MMDD) equaling up to 1.3 times the average daily demand (Lee County Water Supply Facilities Work Plan, July 2008). According to the Lee County Water Supply Facilities Work Plan, the peaking factor of 1.3 accounts for seasonal variation in water consumption due, in part, to seasonal residents and visitors. Based on this multiplier, a maximum month demand of approximately 0.82 mg is derived.

Outdoor or irrigation water supply demands for the Existing Allowable Residential Land Use could also be sourced from the same domestic self-supply wells. Using the 127 platted lots and a

conservative assumption that an average of approximately 30% of the total lot area would be landscaped and irrigated, yields a total residential irrigated area of approximately 234.42 acres, or an average of approximately 1.8 acres per lot. There also could conceivable be 12.48 additional irrigated acres of common buffer area and amenities sourced from a single dedicated community irrigation well. Using the modified Blaney-Criddle Irrigation Model, developed by the SFWMD to establish irrigation water allocations for lawn and landscape, indicates that up to 322.26 mg (approximately 882,904 gpd) could be withdrawn from the 127 self-supply wells and the one (1) community irrigation well during a 1-in-10 drought condition. In addition, the dry season, or peak month, demand for lawn and landscape irrigation could reach approximately 40.52 mg (**Table 2**).

Table 2. Existing Allowable Residential Land Use - 127 Unit Irrigation Demands

Calculations Of Irrigation Requirements (1-in-10)

Rainfall Station:	Immokalee 1-in-10
Irrigation System:	Sprinkler
Irrigated Acreage:	246.90
Crop:	Turf Grass
Soil Type:	0.80
Multiplier	1.30
Efficiency	0.77

Calculations	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Average Rainfall (inches)	2.14	2.26	3.09	2.23	4.23	8.61	7.48	7.35	6.71	2.90	1.95	1.51	50.46
Evapotranspiration (inches)	1.86	2.16	3.68	4.91	6.57	7.34	7.75	7.46	7.07	4.84	2.81	2.17	58.62
Average Effective Rainfall (inches)	0.99	1.05	1.51	1.21	2.34	4.49	4.08	3.95	3.58	1.53	0.96	0.73	26.42
1-in-10 Effective Rainfall (inches)	0.81	0.86	1.24	0.99	1.92	3.68	3.34	3.24	2.93	1.25	0.78	0.60	21.64
Average Irrigation (inches)	0.87	1.11	2.17	3.70	4.23	2.85	3.67	3.51	3.49	3.31	1.85	1.44	32.20
1-in-10 Irrigation (inches)	1.05	1.30	2.44	3.92	4.65	3.66	4.41	4.22	4.14	3.59	2.03	1.57	36.98

1-in-10 Annual Supplemental Crop Requirement = 36.98 Inches

Annual Supplemental Crop Water Use:

36.98 inches X '246.9 Acres X 1.3 X 0.02715 MG/AC-IN = 322.26 MG

1-in-10 Maximum Monthly Supplemental Crop Requirement = 4.65 Inches

Maximum Monthly Supplemental Crop Water Use:

4.65 inches X '246.9 Acres X '1.3 X 0.02715 MG/AC-IN = 40.52 MG

Based on these estimates, a total annual potable and irrigation water demand of approximately 329.82 mg could be withdrawn from the surficial aquifer to supply the Existing Allowable Residential Land Use. There could also be periods corresponding to the peak dry season when maximum monthly potable and irrigation water demands of approximately 41.34 mg could be withdrawn from the surficial aquifer.

Existing Allowable Residential Land Use withdrawals from the SAS are conceivably allowable and would not be subject to any water use permitting by the SFWMD. Similar to the agricultural withdrawals, the influence of the domestic self-supply wells, their withdrawal of groundwater from the SAS and influence on LCU SAS production wells, nearby environmental features, and local water resources, can be assessed with the same analytical groundwater flow model used for the agricultural wells. Using the analytical model and methodologies and practices prescribed by the SFWMD WUP Applicant's Handbook, the groundwater flow model simulated max month withdrawals for 90 days with no recharge. The predicted withdrawal related impacts resulting from the use of the 127 domestic self-supply wells and one (1) irrigation well are presented in **Figure 2**. In addition, **Table 3** summarizes the analytical model's results for the Existing Allowable Residential Land Use at the same on-site reference wetlands and LCU SAS production wells provided in **Table 1**. Even though quantities are dispersed among 128 wells, due to well locations, impacts are increased at an on-site wetland and at each of the LCU SAS production wells under this scenario.

As stated above, the Existing Allowable Residential Land Use would also allow for the construction of 127 individual septic systems that would dispose of domestic wastewater to the SAS, potentially in close proximity to the LCU SAS production wells. This scenario is considered unfavorable to the LCU, as well as to the Lee Plan Policy 2.4.2, which discourages potential future impacts to present or future water resources within the DR/GR.}

Table 3. Existing Allowable Residential Land Use Impacts

Reference Point	Drawdown (Ft)
Wetland 1	0.60
Wetland 2	0.67
Wetland 3	0.69
Wetland 4	0.51
34S	0.26
35S	0.42
36S	0.44
37S	0.42
38S	0.22
39S	0.14

Proposed Allowable Residential Land Use

The Proposed Allowable Residential Land Use is based upon LCU supplying the residential development with potable water and wastewater services, thereby eliminating concerns regarding increased drawdown in the SAS from 127 individual wells and the one community irrigation well in

addition to potential water quality issues associated with 127 individual septic systems. This scenario will also better align with the Lee Plan Policy 2.4.2, prescribing the reduction of impacts to present and future water resources in the DR/GR. In compliance with the Lee Plan Policy 2.4.3, (2), the applicant and LCU are preliminarily agreeable to the construction of a water line tie-in at the corner of Alico Road and Corkscrew Road, which could serve the proposed development. The applicant is also working in partnership with LCU to analyze the existing wastewater infrastructure along Corkscrew Road to ascertain if a repump station is necessary to increase available capacity for the proposed system.

The only on-site water supply source needed for the Proposed Allowable Residential Land Use is non-potable irrigation water, which will be supplied through a centralized master controlled system. The total acreage of the proposed residential lots is approximately 342.61acres of which approximately 173.60 acres are occupied by building units. Since the lot sizes are substantially reduced in size as compared to the Existing Allowable Residential Land Use, it is conceivable that the balance of the remaining lot area will be irrigated. This equates to approximately 169.01 total lot acres irrigated. In addition, it is assumed that there will be 15 acres of irrigated area corresponding to an amenity center and a park, as well as 14.31 acres of irrigated buffer area, which equates to approximately 29.31 additional acres. Therefore, the total irrigated area under the proposed plan equals approximately 198.32 acres, which is approximately 20 percent less than the area that could conceivably be irrigated under the Existing Allowable Residential Land Use. Using the SFWMD's modified Blaney-Criddle Irrigation Model to estimate irrigation water demands for the 198.32 acres indicates a demand of 258.85 mg (or 709,178 gpd) that may need to be withdrawn from SAS during a 1-in-10 drought condition. In addition, the dry season or peak month demand for lawn and landscape irrigation could reach approximately 32.55 mg (**Table 4**). Irrigation water is proposed to be provided by five (5) of the existing permitted SAS agricultural wells (WT-1, WT-5, WT-6, WT-7, and WT-8) currently authorized by the SFWMD WUP No. 36-06874-W.

Table 4. Proposed Allowable Residential Land Use - 1,325 Unit Irrigation Demands

Calculations Of Irrigation Requirements (1-in-10)

Rainfall Station:	Immokalee 1-in-10
Irrigation System:	Sprinkler
Irrigated Acreage:	198.32
Crop:	Turf Grass
Soil Type:	0.80
Multiplier	1.30
Efficiency	0.77

Calculations	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Average Rainfall (inches)	2.14	2.26	3.09	2.23	4.23	8.61	7.48	7.35	6.71	2.90	1.95	1.51	50.46
Evapotranspiration (inches)	1.86	2.16	3.68	4.91	6.57	7.34	7.75	7.46	7.07	4.84	2.81	2.17	58.62
Average Effective Rainfall (inches)	0.99	1.05	1.51	1.21	2.34	4.49	4.08	3.95	3.58	1.53	0.96	0.73	26.42
1-in-10 Effective Rainfall (inches)	0.81	0.86	1.24	0.99	1.92	3.68	3.34	3.24	2.93	1.25	0.78	0.60	21.64
Average Irrigation (inches)	0.87	1.11	2.17	3.70	4.23	2.85	3.67	3.51	3.49	3.31	1.85	1.44	32.20
1-in-10 Irrigation (inches)	1.05	1.30	2.44	3.92	4.65	3.66	4.41	4.22	4.14	3.59	2.03	1.57	36.98

1-in-10 Annual Supplemental Crop Requirement = 36.98 inches

Annual Supplemental Crop Water Use:

36.98 inches X 198.32 Acres X 1.3 X 0.02715 MG/AC-IN = 258.85 MG

1-in-10 Maximum Monthly Supplemental Crop Requirement = 4.65 inches

Maximum Monthly Supplemental Crop Water Use:

4.65 inches X 198.32 Acres X 1.3 X 0.02715 MG/AC-IN = 32.55 MG

In order to assess the withdrawal of groundwater from the irrigation wells and their influence on the LCU's nearby SAS production wells, nearby environmental features, and local water resources, the same analytical groundwater flow model was again employed using max month withdrawals for 90 days with no recharge. Using the analytical model and methodologies and practices prescribed by the SFWMD WUP Applicant's Handbook, withdrawal related impacts resulting from the use of the irrigation wells were simulated and are presented in **Figure 3**. **Table 5** quantifies the Proposed Allowable Residential Land Use impacts at the same on-site reference wetlands and LCU SAS production wells and clearly demonstrates the Proposed Allowable Residential Land Use would result in a reduction in drawdown impacts. **Table 6** provides a summary comparison in the reduction in impacts to the SAS by comparing the Proposed Allowable Residential Land Use with the Existing Allowable Residential Land Use.

Table 5. Proposed Allowable Residential Land Use Impacts

Reference Point	Drawdown (Ft)
Wetland 1	0.39
Wetland 2	0.52
Wetland 3	0.31
Wetland 4	0.37
34S	0.06
35S	0.10
36S	0.12
37S	0.16
38S	0.08
39S	0.03

Table 6. Comparison of Impact Reduction with Proposed Allowable Residential Land Use

	SFWMD Existing Agriculture Land Use	Existing Allowable Residential Land Use	Proposed Allowable Residential Land Use
Reference Point	**Drawdown (Ft)**	**Drawdown (Ft)**	**Drawdown (Ft)**
Wetland 1	0.69	0.60	0.39
Wetland 2	0.93	0.67	0.52
Wetland 3	0.55	0.69	0.31
Wetland 4	0.66	0.51	0.37
34S	0.10	0.26	0.06
35S	0.17	0.42	0.10
36S	0.22	0.44	0.12
37S	0.27	0.42	0.16
38S	0.14	0.22	0.08
39S	0.04	0.14	0.03

Irrigation of the Proposed Allowable Residential Land Use will not impact the ability of LCU to withdraw groundwater from the SAS at their existing production wells, located at the southern project boundary and reduces overall impacts. Similarly, the proposed irrigation withdrawals will not negatively impact the hydroperiods of on-site or nearby wetlands, and the water resources since it represents a substantial decrease in SAS withdrawals as compared to the existing allowable land uses. These results demonstrate that the Proposed Allowable Residential Land Use meets the Lee Plan Policy set forth in Section 2.4 regarding reduction of impacts to water resources within the DR/GR and Policy 2.4.3 by demonstrating that the proposed land use will not cause significant harm to the present and future public water resources.

The Proposed Allowable Residential Land Use also represents an opportunity to avoid the construction of 127 individual domestic self-supply wells and an opportunity to reduce SAS impacts through reduction in overall irrigated acreage and a corresponding decrease in on-site

irrigation demands. The Proposed Allowable Residential Land Use would avoid the construction of 127 individual septic systems in the vicinity of LCU SAS production wells and supplant the proposed row crop farming operation. Additionally, the Proposed Allowable Residential Land Use reduces impacts and does not harm or alter the functionality of the proposed restoration hydrologic features.

d. Demonstrates a net benefit for water resources, relative to the existing approvals that demonstrates the following.

(1) Lower irrigation demand.

The Proposed Allowable Residential Land Use will reduce irrigated acreage and annual SAS groundwater withdrawals as compared to the existing SFWMD permitted agricultural withdrawals and the Existing Allowable Residential Land Use by as much as 58 and 70 mg respectively, thus providing a net benefit to the water resources (**Table 7**).

Table 7. Surficial Aquifer System (SAS) Withdrawals

SFWMD Existing Agriculture Land Use			**Existing Allowable Residential Land Use - 127 Lots**			**Proposed Allowable Residential Land Use - 1,325 Lots**		
Irrigated Acres[1]	Annual Irrigation (MG)	Max Month Irrigation (MG)	Irrigated Acres[2]	(Domestic + Irr) Annual Demand (MG)[3]	(Domestic + Irr) Max Month Irrigation (MG)[3]	Irrigated Acres [4]	Annual Irrigation (MG)	Max Month Irrigation (MG)
278	316.85	57.66	246.9	329.82	41.34	198.32	258.85	32.55

1) 278 acres of small vegetable row crop irrigation using flood seepage system. Allocation from SFWMD WUP 36-06874-W
2) 781.4 total lot acreage. Assume 30% irrigated = 234.42 plus 5.19 acres of common area entrance buffer and 7.29 acres of irrigated amenity area equals 246.9 total irrigated acres.
3) Allocation based on 2.33 persons per unit, with an indoor per capita use rate of 70 gallons per person and a peak factor of 1.3, plus SFWMD Blaney-Criddle allocation for 246.9 irrigated acres of Lawn and Landscape (Turf Grass).
4) 342.61 total lot acreage. Total building acreage 173.6, remaining total lot acreage = 169.01 acres irrigated plus 15 acres of irrigated amenity complex and 14.31 acres of common area entrance and buffers. Total irrigated equals 198.32 acres. Allocation from SFWMD Blaney-Criddle.

Notably, the proposed use of advanced water conservation and irrigation demand management techniques will potentially further reduce water usage. Residential irrigation is proposed to be controlled by centralized systems that will utilize weather station information, moisture sensing systems, rainfall cutoff sensors, evapotranspiration rates, and zone control, to maximize water conservation. The centralized control systems will also allow for highest efficiency since individual residences will not control irrigation schedules. In addition, the systems will use online controls that will monitor in "real time" pressures and flows per zone allowing for rapid and efficient leak detection and repair by controlling each zone with isolation valves. This system should provide the highest water use efficiency and lower overall irrigation demand. Further, it is anticipated that limiting conditions contained within the modified SFWMD WUP (to be pursued after approval of the requested land use change) will require the measurement and reporting of total irrigation water withdrawals. In addition, the proposed centralized irrigation system will enable restriction of irrigation water use to those periods allowed by SFWMD rule (e.g.

Chapter 40E-24, Florida Administrative Code [FAC]) and any periodic SFWMD-declared water shortages.

Furthermore, the Proposed Allowable Residential Land Use will benefit the water resources by eliminating chemigation and fertigation commonly associated with agricultural activities.

This lowering of overall irrigation demands, the implementation of enhanced conservation, and highest achievable efficiency afforded by central controlled irrigation systems, and elimination of agricultural chemigation and fertigation practices is in alignment with the goals of the DR/GR and specifically with the Lee Plan Policy 2.4.2 and 2.4.3 requiring the short-term and long-term availability of irrigation water sources are met without causing any significant harm to present or future water sources.

(2) Eliminates private irrigation wells

The Proposed Allowable Residential Land Use will reduce private irrigation wells from 128 (127 domestic self-supply wells and one community (1) irrigation well) to five (5).

(3) Protects Public wells by meeting or exceeding the requirements of the Wellfield Protection Ordinance.

The Proposed Allowable Residential Land Use borders LCU's Wellfield Protection Zone 3 and is within Zone 4. These well field protection zones adopted under Lee County Land and Development Code, Chapter 14, Article III, Ordinance No 07-33, regulate the following:

- *The use, handling, production or storage of regulated substances... in quantities greater than those set forth in section 14-208.*

The Proposed Allowable Residential Land Use is a residential community. Therefore, regulated substances will not be permitted to be used, handled or stored on-site in quantities greater than those set forth is section 14-208. As per section 14-208, there will not be an aggregate of any one, or all, regulated substances on a given parcel or in a certain building exceeding 110 gallons if the substance is a liquid, or 1,110 pounds if the substance is a solid.

- *Wastewater effluent disposal, except that public access reuse of reclaimed water and land application under the conditions set forth in F.A.C. 62-610, Part III, may be permitted. Where public access reuse is permitted the chloride content must be no greater than 500 milligrams per liter.*

The proposed allowable land use eliminates 127 individual septic systems near existing LCU SAS production wells. There will not be any wastewater disposal on-site. Currently, public access reuse water is not available.

- *Liquid waste disposal and solid waste disposal*

The proposed land use is a residential community. There will be no liquid or solid waste disposal.

- *Stormwater or surface water discharged within this protection zone must conform to existing South Florida Water Management District and state department of environmental protection rules.*

  The stormwater and surface water management system will be subjected to review and approval from the SFWMD and the Florida Department of Environmental Protection (FDEP). All discharges will be incompliance with their existing rules.

- *Sanitary Hazard Zone. Sanitary hazards are prohibited within a 100-foot radius around an existing or proposed public water supply well.*

  There will be no on-site septic systems and no sanitary hazards within a 100-foot radius of existing and proposed public water supply wells.

- *Abandoned wells on property lying within the ten-year travel time zone of wells regulated by this article will be physically plugged in accordance with the provisions of Lee County Ordinance No. 06-09, Section 9.3.4.*

  Any wells to be abandoned on-site will be properly plugged and abandoned as per Lee County Ordinance No. 06-09, Section 9.3.4, as well as adhering to proper plugging and abandonment requirements of SFWMD Rule 40E-3.531(3) F.A.C.

  The proposed residential land use will meet and exceed the requirement of the Lee County Wellfield Protection Ordinance.

(4) Uses Florida Friendly Plantings with low irrigation requirements in Common Elements.

Florida-Friendly Landscaping will be incorporated to the greatest extent practical in the design of the residential and common area elements. University of Florida Institute of Food and Agriculture Science (IFAS), Florida Friendly Yards and Neighborhoods Handbook will be used as a guide in developing the landscape architecture. The goal will be to develop quality landscapes that incorporate drought tolerant plantings and the use of micro-jet irrigation to maximize water conservation.

(5) Connects to public water and sewer service, and must connect to reclaimed water when available.

LCU has the capacity to serve potable water to the Proposed Allowable Residential Land Use and has conceptually approved a tie-in at the corner of Alico Road and Corkscrew Road. Furthermore, LCU has confirmed it has the wastewater treatment plant capacity for the Proposed Allowable Residential Land Use. The applicant is also working in partnership with LCU to analyze the existing wastewater infrastructure along Corkscrew Road to ascertain if a repump station is necessary to increase available capacity for the

proposed system. Reclaimed water is not currently available. The development will utilize reclaimed water if and when it becomes available at the site.

(6) Reduces impervious area relative to existing approvals improving opportunities for groundwater recharge.

Impervious area will be minimized to the greatest extent possible. The proposed allowable land use will enhance recharge opportunities across the property through the use of approximately 95 acres of on-site stormwater lakes in addition to the Southwest Storage Area. The features are located in areas of the project site that are reported to have the highest recharge potential as demonstrated in **Figure 4**. Conversely, the existing wetland areas generally present a lower possible recharge opportunity, as documented in the U.S. Geological Survey, Water-Resources Investigation Report 95-4003, Recharge to the Surficial Aquifer System in Lee and Hendry Counties, Florida:

Places where the water table is very near the land surface are often wetlands of one type or another. Wetland areas predominate in Lee and Hendry Counties and are more often indicative of discharge areas than recharge areas in southern Florida. There is little opportunity for precipitation to recharge the surficial aquifer system in such wetland areas. Precipitation either runs off or is lost to evapotranspiration. Thus, areas where the water table is near the land surface are areas of little recharge in Lee and Hendry Counties and are, in fact, discharge areas in most cases.

The proposed allowable residential land use takes full advantage of the recharge areas provided by the higher recharge Flatwoods soils on-site while protecting the hydroperiods and functions of the existing wetlands. The enhancement of recharge through the stormwater lakes, flow-ways and the Southwest Storage Area provides an opportunity to substantially benefit the DR/GR and, as such, meets the intent and objectives of the Lee Plan Policy 2.4.2 and 2.4.3 by providing opportunity for enhancement of present and future water resources.

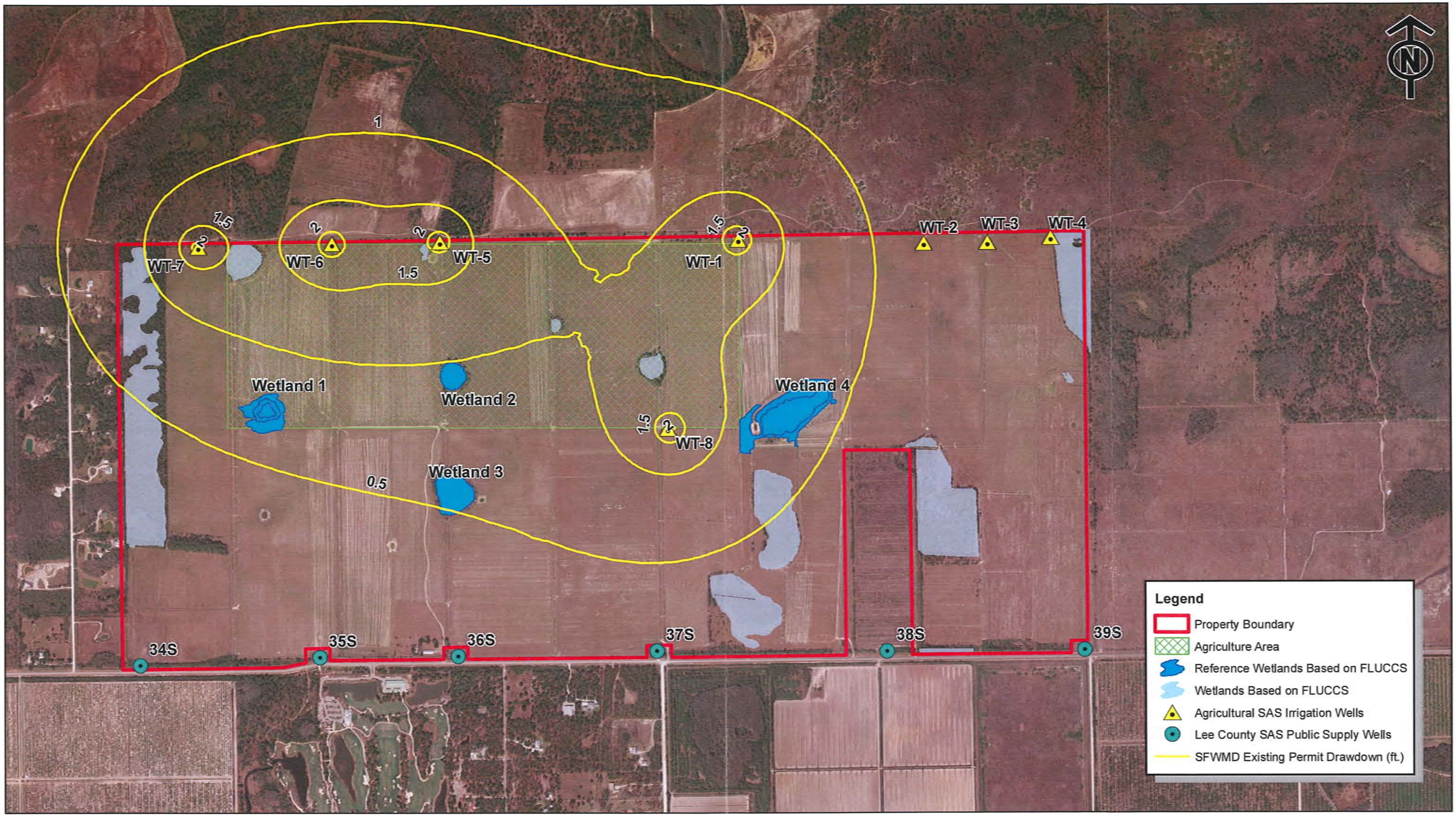
(7) Designed to accommodate existing or historic flow-ways.

The proposed allowable land use will maintain to the greatest extent practicable the current land elevations and gradients. Therefore, the drainage pattern will generally maintain the historic northeast to southwest flow-way patterns, while maintaining the hydroperiods of the on-site wetlands, in addition to accommodating runoff into the proposed stormwater lakes and the Southwest Storage Area. The development of the site is also subject to SFWMD ERP rules which require that development of the site not cause flooding or adverse impacts to wetlands and other water resources.

e. Includes an enhanced lake management plan that addresses at a minimum the following issues:

(4) Public wellfield protection

The stormwater and surface water discharged from any on-site lakes will conform to existing SFWMD and FDEP rules and Lee County Wellfield Protection Ordinance, all of which are intended to protect water resources and existing legal users of water.



Scale: 1:13,000 1/6/2015 Image: ESRI

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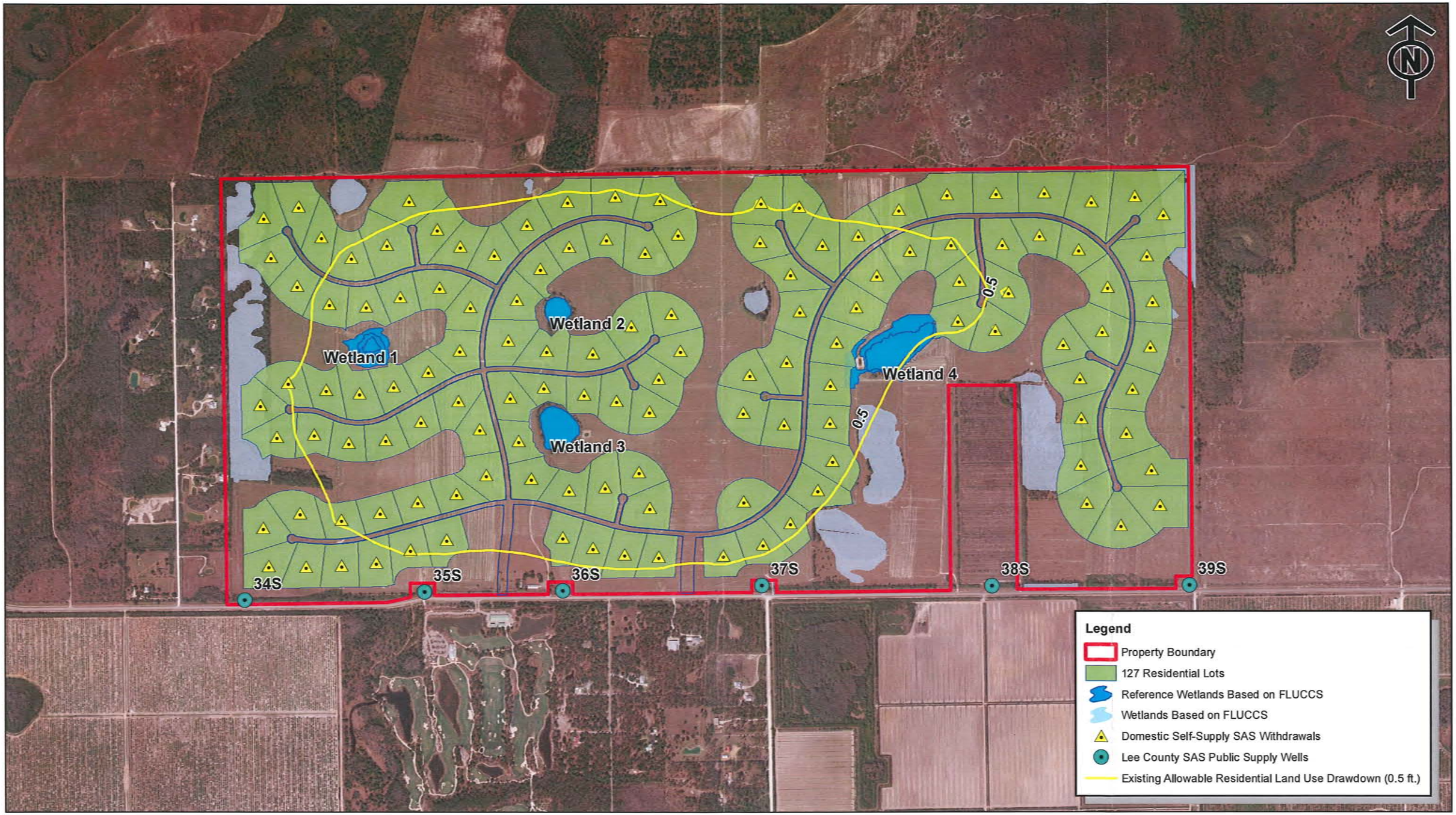
Figure 1
SFWMD Existing Agriculture Land Use
Max Month Surficial Aquifer System Impact Assessment

Progressive Water Resources
Integrated Water Resource Consultants



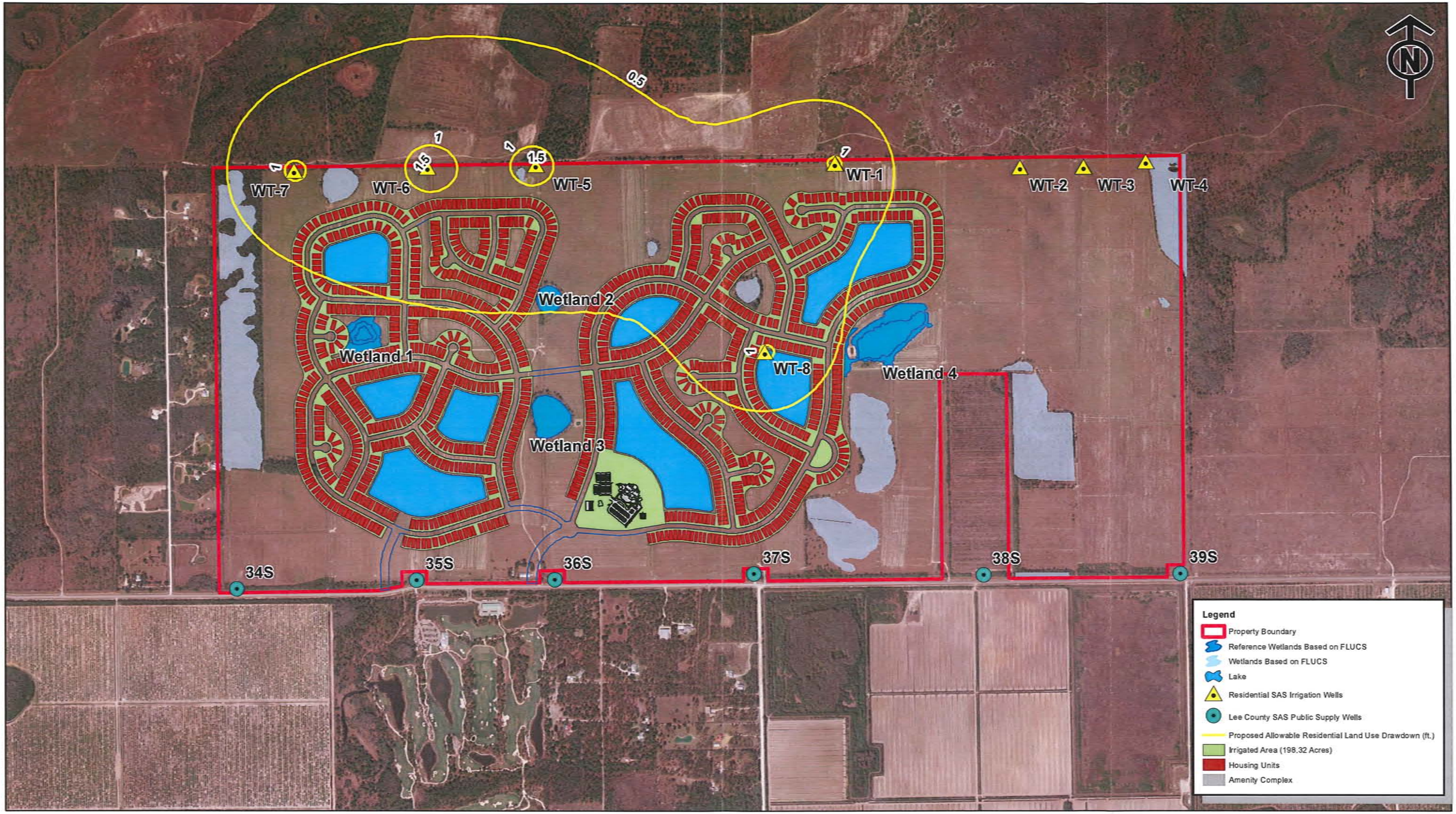
Scale: 1:13,000 1/6/2014 Image: ESRI

0 0.05 0.1 0.2 0.3 0.4 Miles

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

Figure 2
Existing Allowable Residential Land Use
Max Month Surficial Aquifer System Impact Assessment

Progressive Water Resources
Integrated Water Resource Consultants

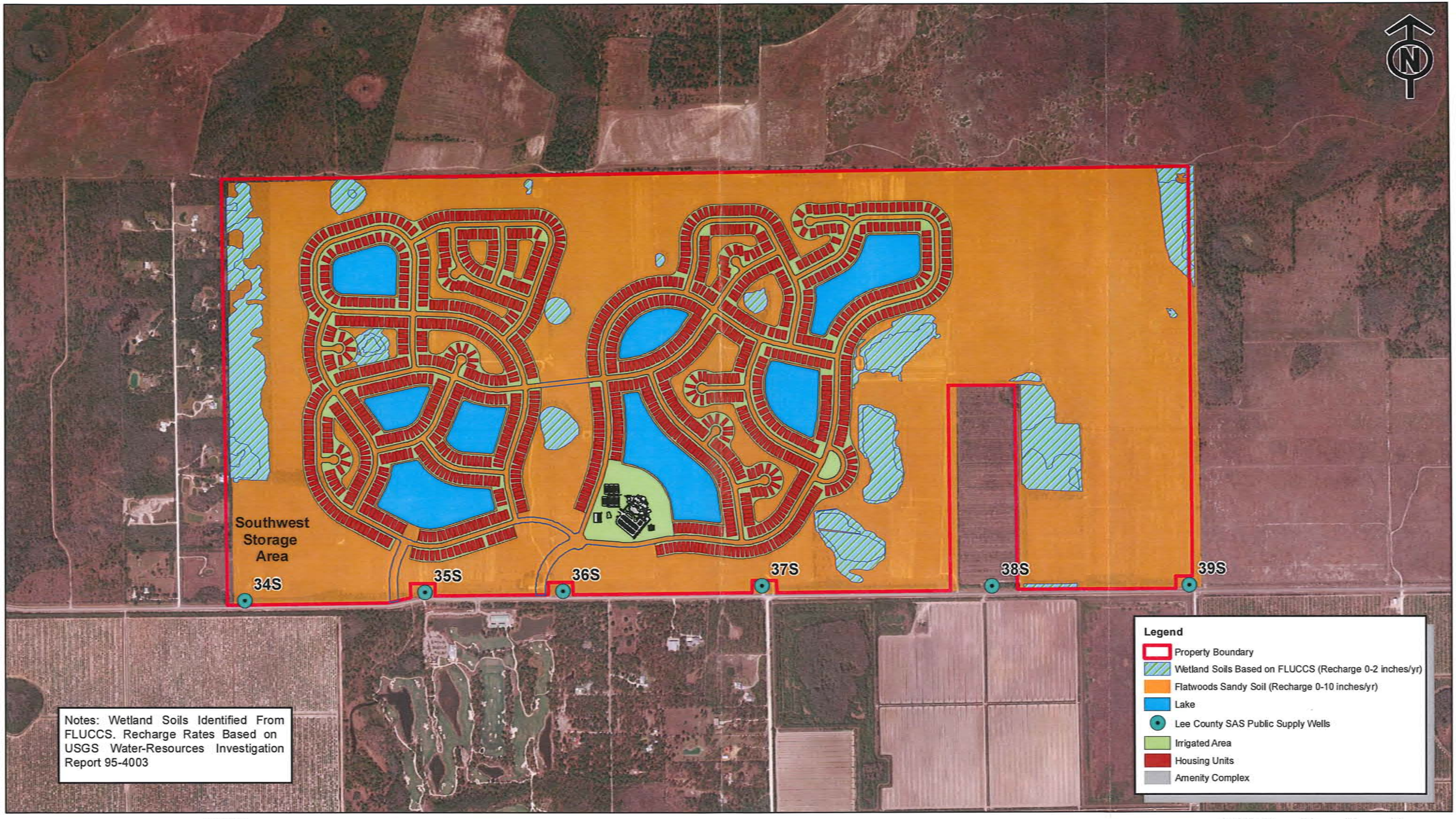


Scale: 1:13,000 1/7/2014 Image: ESRI

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

Figure 3
Proposed Allowable Residential Land Use
Max Month Surficial Aquifer System Impact Assessment

Progressive Water Resources
Integrated Water Resource Consultants



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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

Figure 4
Soil Recharge Rate
Lee County, FL

Progressive Water Resources
Integrated Water Resource Consultants

Corkscrew Farms
Part IV. Amendment Support Documentation
D. Impacts on Historic Resources
Archaeological Survey, Florida Department of State, Division of Historical Resources Letters

#00VA0501

Archaeological and Historical Conservancy, Inc.

4800 S.W. 64th Avenue, Suite 107 Davie, FL 33314
954/792-9776 Fax 954/792-9954

January 13, 2003

Kenneth C. Passarella
Passarella and Associates, Inc.
9110 College Pointe Court
Fort Myers, FL 33919

Re: An Archaeological Survey of the Corkscrew Links Parcel, Lee County, Florida (2003.05)

Dear Mr. Passarella,

Enclosed is a copy of our report, *An Archaeological Survey of the Corkscrew Links Parcel, Lee County, Florida, AHC Technical Report #416,* for your review. If you have any questions, please call us.

Sincerely,

Alison Elgart-Berry

Alison Elgart-Berry
Archaeologist

cc: Laura Kammerer

enclosure

An Archaeological Survey of The Corkscrew Links Parcel, Lee County, Florida

by

John G. Beriault, B.A.

conducted under the direction of
Robert S. Carr, M.S.
Archaeological and Historical Conservancy

for

Passarella and Associates, Inc.

AHC Technical Report #416
January, 2003

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Consultant Summary

In December, 2002, the Archaeological and Historical Conservancy (AHC) conducted a phase 1 archaeological and historical assessment and survey of the 1365.75 acre Corkscrew Links property, located seven miles east of the community of Estero in southern Lee County, Florida for Passarella and Associates, Inc. Fieldwork consisted of a pedestrian survey and some subsurface excavation.

This assessment was conducted in accordance with Section 106 of the National Historic Preservation Act of 1966 (Public Law 89-665), as amended in 1992, and 36 C.F.R., Part 800: Protection of Historic Properties. The work and the report conform to the specifications set forth in Chapter IA-46, Florida Administrative Code.

A windshield and pedestrian survey was conducted in all parts of the parcel. The parcel is highly disturbed from agricultural activities. Five targets were identified as having moderate to low probability for archaeological sites, and were selectively shovel tested.

No archaeological or historic sites were discovered on the parcel, and available data based on field investigations indicates that no significant archaeological or historical resources regarded as potentially eligible for listing on the National Register of Historic Places occur on the project parcel.

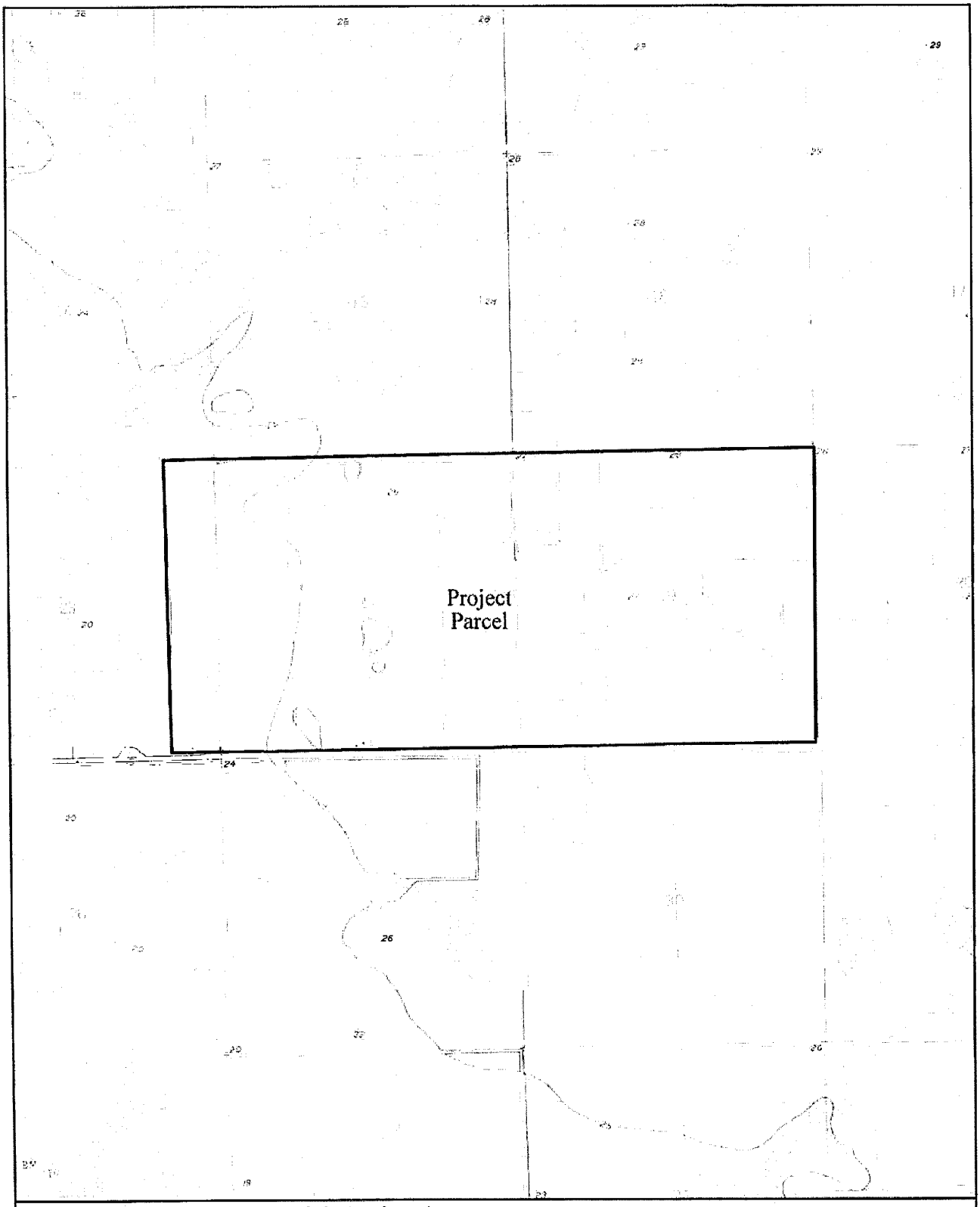

Figure 1. Map of Corkscrew Links Project Area.

Twp. 46S, Rng. 27E, Section 19 and Twp. 46S, Rng 26E, Sections 23-24.

0 1/4 1/2 mile

N

Source: USGS Corkscew NW Quad. (1958 rev. 1973)

Project Setting

The project parcel consists of 1365.75 acres located in Section 19 of Township 46 South, Range 27 East and Sections 23 and 24, of Township 46 South, Range 26 East, located approximately seven miles east of the community of Estero in southern Lee County, Florida (Figure 1). The parcel is nearly rectangular in shape (with allowance for an approximately 43 acre outparcel near the southeastern quadrant of the property), with the southwest corner located approximately 970 feet east of the intersection of Burgundy Farm Road and Corkscrew Road. The project parcel extends approximately two miles east along Corkscrew Road, thence one mile north, thence west 2 miles, thence south approximately one mile. The western, northern, and eastern boundaries do not border any roads. The relevant USGS map is Corkscrew NW (1973). The project parcel is a ranch with pastureland, former vegetable fields, small, generally circular remnant cypress head/ solution ponds, and contains several farm maintenance structures approximately 40 years old.

The northern Collier County/southern Lee County area has been rapidly developed over the last forty years. Large residential developments and extensive commercial activities have changed the land use patterns from low-impact livestock pasturage and agriculture to one of rapid urbanization. The advent of a new state university, Florida Gulf Coast University, has accelerated development along Corkscrew Road and adjacent areas. Much of this region was alternating southern slash pine/saw palmetto flatwoods together with low pond cypress forests, linear cypress sloughs, and cypress dome/pond features. The Estero River had drained the land in the immediate vicinity of the subject area. To the south the drainage patterns were southwesterly through a series of cypress sloughs toward Spring Creek and the Imperial River. In recent years the drainage patterns have changed significantly as the result of excess water from the Southwest Regional Airport and other facilities being pumped south as a sheetflow runoff. To the west between the coast and the interior were a series of linear sand hills that were remnant Pleistocene marine terraces shaped by subsequent wind activity. There is also the ever-increasing presence throughout the vegetated portions of the subject parcel of invasive exotic plants such as meleleauca (*Meleleauca quinquenervia*) and Brazilian pepper (*Schinus terebinthifolius*). In many instances the presence of these exotics in a given area exceeds 50% of the vegetative biomass.

The vegetative communities that historically dominated the subject tract were slash pine (*Pinus elliotii var. densa*) flatwoods and pond cypress (*Taxodium ascendens*) strands and areas. There were several (as many as ten) prominent bald cypress (*Taxodium distichum*) solution ponds (Figures 2, 3 and 5). These solution ponds had very distinctive "signatures" on the color aerial photographs used in the survey. The terrain is very flat with few, if any, areas exhibiting elevational increases exceeding 30 cm, even over great distances. What elevational relief there is expressed as negatives in the form of the deep solution ponds in the center of the cypress domes. During the last 20 plus years the area has experienced a general lowering of the water table so that many of the areas that were open cypress forest or grass prairie areas are now dry for a considerable portion of the year. At least 85% of the area is now cleared farm fields or pastures with a series of drainage ditches dividing these fields at regular intervals (Figure 2). The remaining areas are either isolated cypress strand/solution pond features in the pastures or approximately 80 acres of low lying slash pine/pond cypress flatwoods situated on the western side and northeastern corner of this large parcel.

The geology of the southern Lee County area is characterized by solutioned limestone caprock lying exposed or overlain to various depths by sands or shelly marls. In cypress sloughs, and particularly in cypress dome/solution ponds, there are potentially deep deposits of muck or peat. Immokalee fine sand is a coarse tan to whitish sand found extensively in the district, which usually overlies relict marine deposits of shelly marl and limestone caprock that are part of the Pleistocene Caloosahatchee formation. These marine marls contain lenses and deposits of clay intermixed with varying percentages of sand. These clays may have been a source for ceramic manufacture by the Formative period Native Americans.

Both cypress solution ponds and grass marshes have the potential of yielding Archaic period human burials, as other similar features in the area have been used as mortuary ponds (Beriault *et al.*, 1981:57) (Figure 4). The difficulty of adequately testing these features at the time of initial survey should be considered in the event that subsequent development uncovers these archaeological resources. In this event, a plan should be in place to allow for mitigation or recovery of these resources.

Figure 2. Jeff Ransom walks towards a solution pond (Target 1), facing northeast.

Figure 3. Facing north, viewing the solution pond (Target 1).

Figure 4. The location of ST-5, facing north.

Figure 5. Corkscrew Links facing northeast, on the edge of a prominent solution pond area.

Previous Research

Southwest Florida has been a focus of archaeological investigations since the 1880s, although much of the early work was directed toward recovery of museum quality artifacts rather than understanding cultural processes. Griffin (1988:48-50) discussed some of the very early references to archaeological sites in south Florida. He noted that these early reports were mostly casual observations, and few appear to refer to southwest Florida, but rather refer to the southeast and Key West areas.

Kenworthy's (1883) informal report on shell mounds and ancient canals was one of the first reports of Southwest Florida archaeological sites. At about the same time as Kenworthy's investigations, Simons (1884) gave a narrative account of some of the very large coastal shell middens, and Douglass (1885) provided further information about prehistoric canals (although he did not accept that they were prehistoric). One described canal near Gordon's Pass is probably the Naples Canal (8CR59), and one further north may be the Pineland Canal. Douglass' diaries record excavations of a post-contact era site (8CR41) on Horrs Island, as evidenced by the presence of European artifacts (Griffin, 1988:50-51). Douglass visited Lostman's River and other areas in the Ten Thousand Island area, and a visit to Horrs Island was briefly narrated in Douglass (1890).

In 1895 Durnford reported that cordage and other artifacts were recovered from a mangrove muck pond on Marco Island (site 8CR49). The material was shown to Cushing, who mounted a major project to recover more material from the site. Cushing (1897) reported recovering wood and other perishable artifacts from the muck pond on Marco Island, adjacent to a large shell works and midden village site. Publication of illustrations of the spectacular finds generated a great deal of subsequent interest. Wells M. Sawyer, a young artist accompanying the expedition, produced an excellent and presumably accurate contour map for the entire Key Marco Shell Midden. This map is valuable to present-day efforts in understanding many of the now obliterated features and interpreting (reconstructing) the "architecture" of the shell midden. Widmer (1983) notes that Cushing also focused attention on the nonagricultural chiefdom level of social organization supported by the rich estuary and marine resources, although his anthropological observations have remained overshadowed by the wealth of artifacts.

Moore (1900, 1905, 1907) investigated a number of sites along the Collier/Lee County coast, apparently attempting to find material comparable to Cushing's finds. Although Moore provided information about site locations and general contents, most of his work was extremely crude and uncontrolled, by both contemporary archaeological standards, and by modern standards.

The first attempt to systematically survey and investigate archaeological sites was initiated by Ales Hrdlička, who visited a number of sites along the coast and tidal mangrove estuaries in 1918, focusing on the Ten Thousand Island region (Hrdlička 1922). Hrdlička noted that southwest Florida was a distinct region within south Florida and made an attempt to type sites by function.

Matthew Stirling's (1931,1933) excavation of a burial mound on Horrs Island represents one of the first controlled excavations in Collier/Lee Counties (although he attempted stratigraphic control, Cushing had little success in his wet site excavation). The site was named the Blue Hill Mound, but it is not recorded under that name in the FMSF (either as a primary or secondary name), so it is

unclear exactly which site he excavated, although it was probably site 8CR41 (McMichaels, 1982). These reports by Stirling are preliminary, and apparently neither a final report nor a skeletal analysis has been published.

John M. Goggin was the first to define a south Florida cultural area (Glades Area), and describe south Florida ceramics (Glades ware), establishing a basis for later archaeological work. He published an analysis of the ceramic sequence in south Florida (Goggin, 1939, 1940). In later reports (Goggin, 1947, 1949a, 1949b), he formulated a basic framework of cultural areas and chronologies that is still current (although modifications with additional data have been made, see further discussion below). Goggin (1949b) summarized much of this information in an unpublished manuscript, which Griffin (1988) thoroughly described.

In passing, one unfortunate aspect of Goggin's work was a dependence on informant information for location of sites (especially interior sites) and he had a real concern that existing sites would be looted. This concern resulted in his either deliberately or incidentally reporting vague locational data for many sites. Some of these sites have never been satisfactorily relocated, although a few have undoubtedly been rerecorded by later investigators.

For several decades, much of the subsequent archaeological investigations in the region took place in Lee and Charlotte Counties, especially in the Cape Haze, Charlotte Harbor and Pine Island areas. It is rumored that Goggin had a "gentleman's agreement" with many of the other leading practicing Florida archaeologists of the time that the South Florida area was his exclusive province to investigate. If this rumor is correct, it might explain the neglect shown the southwest Florida area in the archaeological arena from the end of World War II to Goggin's death in 1964.

In 1956, Sears reported on a large village and mound complex at the mouth of Turner River on Chokoloskee Bay south of Marco Island, and in 1967 he reported on the results of a survey of the Cape Coral area (Sears, 1956, 1957). Laxson (1966) reported on excavations at Turner River Jungle Garden site, which is upriver from the Turner River site, although these have been confused in recent accounts.

Van Beck and Van Beck (1965) excavated three small test pits on Marco Island (at the Marco midden, 8CR48) associated with the Cushing site (8CR49). The resulting publication of this work was some of the first reported scientific archaeological work to come from the southwest Florida area in nearly twenty years (Van Beck and Van Beck, 1965).

In 1967 through 1969, Marco Island was extensively surveyed and a few sites were tested through excavation by Cockrell, Morrell, and others (Morrell, 1969). No complete site report was ever published, although an unpublished and incomplete manuscript is available. Some of these sites were discussed in Cockrell's master's thesis (1970). Widmer performed a survey of Big Key, John Stevens Creek, Barfield Bay, Blue Hill Bay, and Collier Bay, which are proximal to Marco Island (Widmer, 1974). Widmer eventually utilized his southwest coast experience to write a doctoral dissertation on the Calusa that not only remains the definitive work on that group, but also explored the relationship between subsistence adaptation and cultural evolution (Widmer, 1983).

In Lee County, Arlene Fradkin and other investigators from the University of Florida began an

ongoing involvement with the Pine Island Sound/Sanibel Island area in the 1970s. Her first investigations were at the Wightman site on northern Sanibel Island (Fradkin, 1976).

Several archaeologists excavated at Horrs Island in the 1980s. McMichaels (1982) reviewed sites on Horrs Island in a Master's thesis. In 1983, Marquardt began a series of investigations at Josslyn Key, Useppa Island, Pineland, Buck Key, Galt Island in Lee County, and at Big Mound Key in Charlotte County (Marquardt, 1984, 1987, 1988, 1992). Marquardt and Russo have investigated Horrs Island in Collier County. A number of the large shell midden village sites they excavated appear to be late Archaic, and they expect to document a more elaborate social organization at these sites and larger sedentary or semi-sedentary population sizes than previously known for that period (Russo, 1990, and pers. comm.).

Most of these studies focused on the coastal sites, as have subsequent summaries and discussions. Recent work on the interior has made significant advances in documenting the extent and intensity of inland resources, especially in the Big Cypress and Everglades parks (Ehrenhard *et al.*, 1978, 1979; Ehrenhard and Taylor 1980; Ehrenhard *et al.*, 1980; Taylor and Komara 1983; Taylor, 1984, 1985). Griffin's (1988) synthesis of the Everglades Park data is the defining work on south Florida archaeology to date. Athens (1983) summarized some of the results of the Big Cypress survey, but more analysis of this data resource is needed.

Beriault and colleagues (1981) reported on salvage excavations at Bay West Nursery (8CR200). Their description of the site includes a well known but rare and infrequently documented Early and Middle Archaic use of ponds for cemeteries.

In 1995, Widmer and Story began an ongoing investigation at the Key Marco Midden (Widmer, 1996). In the first season they excavated with the help of graduate students and volunteers. The results of their work have appeared in the *Florida Anthropologist*.

In the last two decades the pressure of development, as well as a recognized need for preservation or mitigation of prehistoric sites has led to a number of reports by commercial cultural resource management consultants. While most of these reports are limited in scope due to restriction to a small tract of land, many have produced useful summaries of regional archaeology, as well as insightful analysis of the relationship between site types and location and ecotypes. (Almy and Deming, 1982, 1986a, 1986b, 1986c, 1987; Austin, 1987; Carr and Allerton 1988a, 1988b; Deming and Almy, 1987, 1988; Fay and Carr 1990; Fuhrmeister *et al.*, 1990; Martinez, 1977; Miller and Fryman, 1978; Swift and Carr,1989).

Arthur W. Lee, John Beriault and others in the Southwest Florida Archaeological Society (SWFAS) have recorded and investigated a large number of archaeological sites in Collier and Lee Counties. It is an ongoing effort of the Society to publish and disseminate reports and manuscripts (Lee *et al.*, 1993, 1997, 1998; Beriault, 1973, 1982, 1986, 1987; Beriault and Strader, 1984). Many of these reports deal with small, interior seasonal sites. This avocational society is one of the strongest voices for the protection of Collier and Lee County archaeological resources, and they have been careful to document and control their excavations, the majority of which are salvage operations on sites that have been heavily impacted. In addition, Beriault has provided several unpublished manuscripts as to site types and areas (Beriault 1982, 1987).

The Archaeological and Historical Conservancy reviewed a number of Collier County sites and provided a preliminary site location model (Carr, 1988). A similar site location model has been generated by Piper Archaeology for Lee County (Austin, 1987).

A review of the Florida Master Site File indicates that no previously recorded sites occur within the project parcel or within the immediate one-mile vicinity.

Cultural Summary

Stirling was the first to distinguish the indigenous prehistoric cultures of southern Florida in 1936 by defining a Glades cultural area, including all of south Florida (Carr *et al.*, 1994b:9; Milanich, 1994:5-6). Griffin (1988) pointed out that this was not formulated as a strict cultural area, but it was rather a geographic region with some common cultural traits. Kroeber (1939), in a review of North American prehistory, utilized a slightly different term, the "South Florida Area", basing his definition on both environmental and cultural factors. Subsequently Goggin delineated more particular boundaries for southern Florida and divided the region into three sub-areas: "Okeechobee" around Lake Okeechobee, "Tekesta" for southeast Florida and the Florida Keys, and "Calusa" for Southwest Florida (Carr *et al.*, 1994b:10; Goggin, 1947:114-127).

Following Goggin's study, subsequent researchers have refined or altered the cultural distinctions attributed to southern Florida's prehistoric populations. There has been criticism that Goggin's names and definitions were based on historic accounts of the main (proto) historic groups found in the respective regions and not on the archaeological evidence of spatial, temporal, and cultural differences (Sears, 1966; Griffin, 1974; Carr and Beriault, 1984; Griffin, 1988). Griffin, in particular, questioned the distinctions. He believed that South Florida cultures varied only by local environmental conditions and ceramic exchange rates. Griffin believed the inhabitants of prehistoric southern Florida were mainly dwelling on the coast and that the interior was nearly uninhabited and under-utilized. Griffin designated the entire southern Florida region as the "Circum-Glades" area (Eck, 1997:5; Griffin, 1974:342-346). This new designation for the area was furthered by a widely-circulated book on Florida archaeology by Milanich and Fairbanks (1980). Griffin later (1988) retreated to some extent from his earlier position as further research (particularly by Ehrenhard, Carr, Komara, and Taylor in the Big Cypress and Carr in the eastern Everglades in the 1970s and 1980s) showed abundant sites (and concomitant use and habitation) in the interior and Everglades.

Carr and Beriault, in particular, have taken issue with the concept of a Circum-Glades region. Carr's research in the Big Cypress and Everglades and his subsequent analysis demonstrating variation of key cultural markers (particularly in decorated ceramics) formed the basis for this contention. There is abundant evidence for cultural (and probably political or tribal) diversity in the various areas of south Florida. Carr and Beriault particularly noted and defined differences between the lower southwest Florida coast, which they termed the "Ten Thousand Island" region, and the area to the north, which they called the "Caloosahatchee" region. This latter area they believed to be the seat of the historic Calusa chiefdomship, although previous (and some subsequent) researchers have called the entire southwest Florida from Cape Sable to the Cape Haze peninsula (and beyond) in Charlotte County "Calusa".

Griffin, in his definitive 1988 synthesis on Everglades archaeology, attempted to reconcile and refine some of the conflict in the definition of south Florida prehistoric and historic culture areas. As stated by Carr and colleagues (1994b), "the issue...appears in part to be one of trying to determine the significance of regional and temporal variation, rather than whether these differences are real." There is evidence that changes through time in regional political affiliations or realties makes any model *not* addressing this complex issue two-dimensional. The Calusa hegemony that was in place by the time of the arrival of Europeans may have begun as early as 800 AD in the Ten Thousand Island "district" or area (Griffin, 1988:321; Carr *et al.*, 1994b:12). There is currently ongoing

research to further refine present thought as to cultural affiliations in south Florida. It would seem only a matter of time before new directions and emphases provide a more accurate summation of south Florida cultural affinities.

Using the present models, the coastal zones of Collier County and southern Lee County contain three distinct culture areas. Indian Hill on Marco Island lies thirty miles from the projected interface by Carr and Beriault (1984) of the Caloosahatchee area (called the "the 'heartland' of the Calusa", Carr *et al.*, 1994b:12) to the north, and the Ten Thousand Islands area to the south. At a yet undefined point to the east lies the Okeechobee cultural area, but the boundary, if it is a definite, fixed one, is likely to occur in the vicinity of the Immokalee rise forty miles or more to the northeast of Indian Hill. Further work is in progress by Carr to address the issue of where the southwest boundaries of the Okeechobee culture area occur.

Temporal Periods and Adaptations

At the same time as our south Florida archaeological cultural models have evolved over the past 60-plus years, so have the temporal markers or framework on which we base evolution of that culture. Much of this latter effort has resulted from comparisons made between the recovered artifacts from the 100 year period of scientific and *non*scientific excavation and collection by the various individuals and institutions (and others) enumerated in part above. This Floridian effort must be seen against the broader background of archaeological work in eastern North America and the New World as a whole. All of these efforts have been mutually complimentary and certainly not exclusive.

The greater the region considered, the greater the variation, but archaeology has to date hammered out a temporal framework accepted by the greater portion of the academic archaeological community. In general, for south Florida, the following periods and adaptations seem to be generally accepted. Part of this chronology involving the later or Formative period is called the Glades sequence in honor of Goggin, the greater part of whose work in defining the ceramic sequence or markers has withstood the test of time and subsequent criticism (Goggin, 1939, 1947, 1949c). From Goggin's day to present, pottery variability in form, substance, and decoration has proven useful for providing time markers, at least during the archaeologically-brief (± 3500 year) period spanning the late Archaic and Formative periods that it was produced. Other artifact types and their variations have, to present, proven somewhat less reliable as absolute indicants of prehistoric age. Radiocarbon dating, a phenomena of the last 30-plus years, provides, within the standard deviation expressed in plus-or-minus years BP (before present), a relatively absolute date for a given sample and provides a yardstick to measure traits or distinctions in provenienced artifacts. Determining and adequately defining what traits we can discern against this absolute is part of the ongoing function of the regional archaeological effort.

The following information is generalized and abbreviated. The dates are approximate; transitions between periods are in reality more gradual that the manner they are expressed for convenience. Dates are expressed in years before present (BP), which is more consistent with radiocarbon dating termination than the better-known and more widely used B.C./A.D. system.

Paleo Period (14,000 - 8,500 BP)

During the Paleo Period, the first Native Americans began moving into the southeastern portion of North America and Florida. Most evidence of their presence in our state can be reliably dated to about 10,000 BP.

There are no known Paleoindian sites in Collier County. Several are documented from elsewhere in south Florida, including Warm Mineral Springs and Little Salt Springs in Sarasota County (Cockrell and Murphy, 1978; Clausen and Gifford, 1975), Harney Flats in Hillsborough County (Daniel and Wisenbaker, 1987) and the Cutler Fossil Site in Dade County (Carr, 1986).

During this period, the terminal Wisconsian ice age, the climate was probably less extreme, with cooler summers and warmer winters. The climate was also drier, and sea levels were lower (Carbone, 1983; Allerton and Carr 1988a; Griffin, 1988).

One reason that possible Paleo period sites have not been discovered in Collier and Lee Counties is that the shoreline may have been as much as 100 miles further west due to lower sea levels. Drier conditions may have made the interior very inhospitable, and the shallow estuarine and littoral sites that existed were flooded by post-ice age Holocene sea rises.

Any possible interior sites from the Paleo Period may be unrecognizable due to lack of diagnostic artifacts, subsequent reuse of site areas, low population density, and few permanent camps. These and other factors may help explain the absence to date of identifiable Paleo period sites in Collier and Lee Counties. On the other hand, the southwest Florida coast south of Charlotte Harbor may have been uninhabitable during this period due to an absence of key conditions for the successful hunting of large game, a trait of the Paleo period.

Archaic Period (8,500 - 2,500 BP)

The Archaic period reflects a post-Pleistocene shift in adaptation marked by an increase in the seasonal exploitation of a broad spectrum of food resources, a more restricted use of territory due to regional specialization, and more semi-sedentary habitation sites. No ceramics are known until the Late Archaic. During the Archaic, regional specializations became more marked, not only with material culture but also with distinct local utilization of local plant and animal resources.

As mentioned above, there is, as yet, no firm evidence of human presence in southwest Florida during the Paleo period. This apparently is also true for the Early Archaic (8500-7000BP), as there is evidence of an environment too arid to support scrub oak, and the presence of shifting wind formed dunes (Watts, 1975; Widmer, 1983). No early Archaic sites are known from southwest Florida (Allerton and Carr, 1988:14).

By about 6500 BP mesic conditions began to spread, although localized xeric conditions continued (and still exist in some areas) through south Florida. Middle Archaic sites dating from this time are rare, although the Bay West Nursery site (8CR200) in Collier County and the Ryder Pond site (8LL1850) in Lee County near Bonita Springs provide evidence of occupation, as do several sites in southeast Florida. The Bay West site is a Middle Archaic cypress pond cemetery, associated with a

lithic scatter. The Ryder Pond site is a similar mortuary pond site surrounded by pine flatwoods (Carr and Heinz, 1996). Beriault has also recorded several aceramic shell scatters in coastal sand hills (paleo dunes), some of which may date to the Middle Archaic. Griffin (1988) summarizes evidence indicating that despite the rise of available surface water, brackish estuaries and other major modern landscape features had not formed, and population (or repopulation) was still sparse.

During the Archaic period sea levels began to rise at a fairly rapid rate, estimated at 8.3 cm. per 100 years 6000-3000 BP, and 3.5 cm per 100 years afterwards (Scholl *et al.,* 1969), although whether sea levels were steadily rising or oscillating is still unclear (see Griffin 1988; Allerton and Carr, 1990 for recent reviews of the literature). Data is somewhat difficult to sort out as sea level rise was accompanied by both shore regression and transgression in places. As conditions became wetter (and warmer) in the interior, cypress swamps and hardwood sub-tropical forests established themselves by about 5000 BP (Carbone 1983, Delcourt and Delcourt 1981).

By late Middle or early Late Archaic times (4000 years BP) there were significant shell mounds and middens on Horrs Island, Marco Island, and elsewhere in the coastal regions, suggesting that the estuary system had been established and was being utilized to provide the subsistence basis for denser populations and semi-sedentary settlements (Morrell, 1969; Cockrell, 1970). At Useppa Island in Lee County, excavations have provided radiocarbon dates from pre-ceramic shell middens ranging between roughly 4900 BP and 5600 BP, suggesting that the Middle Archaic as well as Late Archaic periods saw a growing dependence on shellfish resources (Milanich *et al.*, 1984). There are aceramic coastal sand hill and interior wetland sites as well, but these have not been demonstrated to be Archaic despite some investigators equating aceramic with preceramic. Radiocarbon dates for these sites would clarify this point.

Allerton and Carr (1988) noted that a number of stratified sites in the wet mangrove and marsh areas of the Everglades, as well as on Horrs Island, contain Archaic preceramic horizons, although it is unclear if aceramic was equated with preceramic. Additional supporting evidence of interior use by Archaic peoples will provide a new dimension to the archaeological understanding of Archaic resource utilization. Allerton and Carr point out that if the wet tree islands were initially used by Archaic people, then at least some of the hardwood hammocks in swamp environments were raised in elevation (with subsequent changes in vegetation) due to human activities. Post-Archaic people extensively utilized these hammocks and continued to advance their development as distinct geomorphic features. This is obviously an area where additional archaeological investigations have a potential to contribute to understanding the interaction of geomorphic and cultural evolution in southwest Florida.

Toward the end of the Archaic there was the introduction of fiber-tempered pottery into the archaeological record, often used as a marker of the Orange Phase, commencing at about 4000 BP, either coincident with or soon after the development of the extensive shell middens. The Late Archaic Orange Phase subsistence strategy is characterized by intensive use of shellfish and marine resources, as well as being marked by an accelerated trend toward regional specializations.

A number of the large shell middens on Marco Island (Cockrell, 1970), Horrs Island (Russo n.d.), Cape Haze (Bullen and Bullen, 1956), and elsewhere date from this period or earlier, as they contain fiber-tempered ceramics, although there are known aceramic (preceramic?) levels below the

Orange Phase deposits that may date to the Middle Archaic. These shell middens are usually capped by deposits from later occupations as well.

Formative Stage or Glades Periods (2500 BP - 500 BP)

The Formative or Glades adaptation, based on hunting, fishing, and the harvesting of shellfish and plants, was similar to the Archaic, but was characterized by increasing specializations in gathering strategies and tool-making. Earlier writers have typed this hunter-gatherer society as primitive or "low-level" (Kroeber, 1939). However, there is certainly evidence from the specialization of tools, from the beautifully-executed wood carvings from Key Marco in Collier County and those from Fort Center near Lake Okeechobee (Cushing, 1897; Sears, 1982), and from the historic accounts of the Calusa hegemony, that the south Florida area had an advanced culture that Goggin (1964) has called a "stratified non-agrarian society".

The preceding Late Archaic late Orange phase (also known as the transitional phase) was marked by changes in pottery, and terminated with the relatively rapid replacement of fiber-tempered pottery with sand-tempered, limestone-tempered, and chalky "temperless" pottery. It was also characterized by changes in ceramic style and often by reduction in the size of stone projectile points.

The Formative Stage (beginning about 2500 BP) is divided in south Florida into the Glades Periods sequence. Subsistence adaptation is marked by a narrowing spectrum of resource use, as well as continued trends toward regional diversity and ecological specializations, marked in part by the proliferation of inland resource extraction encampments.

Formative Period cultural evolution eventually led to increased political sophistication, perhaps initially of modest dimensions, but culminating in broad regional political alliances and regulation of materials and goods (*i.e.* resources) between the coast and inland areas (Milanich and Fairbanks, 1980). By protohistoric and contact times the Calusa were the dominant tribal group, gaining broad political influence and at least partial control over much of south Florida as far north as central Brevard County. Historically, the main Calusa village has been regarded as "Calos" on Mound Key in Estero Bay in Lee County, although 50 to 70 large villages were under direct Calusa control by contact times (Griffin, 1988).

During the Formative Periods, village sites grew to the proportions of large multi-use complexes, particularly along the coast and barrier islands of southwest Florida. Some of the projected intra-site functions of the elements of these complex shellworks were as temples, canals, causeways, temple and platform mounds, courtyards and watercourts. Current research involving the excavating of large contiguous areas of these shell mound complexes is beginning to establish demonstrable uses for the features of these large sites, upon which heretofore were merely speculated (Widmer, 1996).

Tidal estuary rivers and inland hammocks along deep water sloughs, marshes, and permanent ponds were seasonally visited for extraction of natural resources, and are now marked by small to relatively large black dirt middens, some of which may have been semi-permanent hamlets. The pine and cypress flatwoods appear to have supported few sites, although areas around Lake Trafford and

other rich interior areas developed substantial sites, including sand mounds, and may be more similar to the Okeechobee cultural area than to the coastal cultures.

In 1992, Dickel and Carr excavated an apparent Deptford Period burial mound (the Oak Knoll Site) in the Bonita Bay Tract north of the Imperial River and north and west of the subject tracts. Exotic trade items and seventy or more human burials were among the material findings. The resulting conclusions and subsequent surveying and testing of the Bonita Bay Shell works (8LL717) suggest social stratification and complexity may extend further back into the past than the Formative period (Dickel and Carr, 1992).

Coastal sites (shell middens) reflect a predominate dependence on fish and shellfish, wild plant foods and products, and larger inland game. The inland sites show a greater reliance on interior resources, including large, medium and small mammals, turtle, small freshwater fish, alligator, snake, frogs, and, sometimes, freshwater shellfish. Interior and coastal resource exchange can be documented by the consistent finds of moderate amounts of marine shell in many interior middens, as well as interior resources in coastal middens.

The Formative Stage (with a nod to Goggin) has been often termed the Glades cultural tradition. Much of this "tradition" is focused on decorated ceramics, the minority in the archaeological record, although the majority of recovered (rim) sherds are plainware. However, despite this, pottery (and its decorations) is usually utilized as the major temporal marker(s) for fitting sites into a temporal framework. Changes in pottery do not represent mere changes in artistic motifs, but reflect inter- and intra-regional trade contacts and outside cultural influences (possibly through exogamy, shifting of populations, and even the through evolution of a culture through time). Whatever the influences, the Glades tradition is continuous from post-Archaic times to contact times.

Despite the fact that exogamy is likely to have been practiced, traders or other specialists probably moved between major cultural areas in small numbers, and genetic flow probably accompanied cultural exchange, although perhaps not on the same scale. This may have increased in later times due to use of traditional obligations of kinship and intermarriage to stabilize alliances that were not codified into a formal legal system.

The Caloosahatchee subarea's chronology has been defined based on the ceramic sequences found there. Below is a table partially adapted from Susan Lynn White in her analysis of Galt Island ceramics (White 1995) which she in turn adapted from Randolph Widmer's book on the evolution of the Calusa (Widmer 1988):

Table 1: Caloosahatchee Area Ceramic Sequence

Period/Time Range	Characteristic Traits
Caloosahatchee I (500 B.C.- A.D.700	☐ Sand-tempered Plain predominant ☐ Belle Glade Plain absent
Caloosahatchee II (A.D. 700-1200)	☐ First appearance of Belle Glade Plain

	☐ Increase in Belle Glade Plain through time
Caloosahatchee III (A.D. 1200-1400)	☐ Englewood ceramics ☐ St. Johns Check Stamped
Caloosahatchee IV (A.D. 1400-1513)	☐ Safety Harbor
Caloosahatchee V (A.D. 1513-1750)	☐ European goods ☐ Mission period aboriginal pottery ☐ Pinellas Plain-Glades Tooled ☐ Decrease in Sand-tempered Plain through time ☐ Laminated/contorted paste ☐ Small amounts of St. Johns Plain

By European contact times (first half of the 16th century) the southwest coast of Florida was maintaining without an agricultural base, a vigorous, possibly expanding political chiefdom with a broad network of alliances, as well as a rich and ancient cultural tradition.

Direct conflict with Europeans and, more importantly, exposure to European diseases led to the rapid decline of the Calusa. By the mid 1700s their numbers had greatly diminished. The remnants of this once-powerful tribe may have left south Florida in the 1760s with the Spanish for relocation in Cuba. Others may have become indistinguishable from Spanish Cuban fishermen who worked the great fishing "ranchos" in the Pine Island Sound region catching and salting fish for export to Cuba. Other groups of indigenous Native Americans may have fused with the Creek derived Seminoles as pressures from colonial (and later) white encroachment on their traditional territories forced them into the Big Cypress and Everglades area by the 1830s. By this time most of the cultural identity of pre-contact times had been lost, although some of the Calusa subsistence strategies may have been in part adopted by Seminoles. A number of Seminole period sites have been documented on earlier Glades middens. This coincidence may in part reflect the paucity of high land in the interior (Ehrenhard et al. 1978, 1979, 1980, 1980; Taylor et al. 1983, 1984, 1985). Older midden sites (particularly those called "black dirt" middens) can be rich agriculturally as well as archaeologically, making these foci for historic Seminole gardens and citrus/banana/ papaya groves.

Seminole periods in south Florida are divided into I (1820-1860), II (1860-1900) and III (1900-1940) (Ehrenhard *et al.,* 1978). Post-1940 Seminole camps are designated "Late Seminole" in some reports. These designations reflect the different stages of Seminole migration into south Florida, Seminole displacement and active conflict with the expanding American culture, and the eventual refuge by Seminole remnants in Big Cypress and Everglades regions.

The present survey did not locate any Seminole period sites, although military records, and in particular the Ives military map of South Florida (1856) shows evidence of forts, trails, villages, and "temporary depots" (military encampments) throughout the area that is now Lee County. Fort Harvey (later designated Fort Myers), only several miles to the west of the subject parcel was the principal fort and military stronghold for the entire southwest Florida region and even was the site later in the Civil War of

a little-known, but important skirmish which was "won" by the Confederates. This fort and other subsidiary military camps were garrisoned in a more or less continual fashion for a forty year period. The subsidiary forts were established in different locations and at different times in a line along the Caloosahatchee River and at strategic points south and east into the interior toward the Big Cypress and Okaloacoochee Strands and the western edge of the Everglades. Estero Bay was then designated "Ostego" Bay on early military charts, and the area to the east and in the interior called "Cho-la-la-palka".

Methodology

Prior to conducting fieldwork in the project parcel, relevant archives and literature was reviewed. This included, but was not limited to, studying previous archaeological reports for sites in northern Collier and southern Lee Counties, reviewing information from the Master Site File in Tallahassee concerning nearby sites, and examining USGS maps of the project area. Also, recent color aerial photographs were reviewed.

Research Design

This Phase I archaeological survey goals were to locate any archaeological or historical sites that might occur on the Corkscrew Links parcel. The survey was based on the use of judgmental strategies employing predictive archaeological site models. These predictive models are based on signatures visible on color aerial photographs, which reflect vegetative and topographical elements often associated with prehistoric sites. Specifically, in this case, remnant elevated areas in close proximity to cypress solution pond features were targeted for survey and testing. The predictive models postulate that sites and features are likely to occur on elevational anomalies such as hammocks and other high ground areas close to cypress strand/solution pond areas. Based on the color aerial photographic review it was anticipated that the area had a low to medium probability of containing archaeological sites. This review revealed that few, if any, elevated features occurred on the parcel that were not destroyed or severely impacted by prior clearing, ranching and agricultural activity. However, five low to medium probability archaeological targets were identified within the subject parcel.

Fieldwork

To determine whether any archaeological sites existed on the parcel, a pedestrian and windshield survey was conducted across the entire parcel. All targets were ground truthed. Specific attention was paid to the wooded and slightly elevated areas on the parcel. The soil in these wooded areas was examined by limited subsurface excavations. After the pedestrian survey, a few areas were identified that had a moderate probability for archaeological sites (Figures 2-5). A series of shovel tests were excavated in these areas (Figure 6). In five areas, 45-centimeter square shovel tests were excavated to obvious sterile levels or to limestone caprock. However, no trace of cultural material was discovered within the various sands encountered, which were mostly cypress strand types such as Immokalee fine and Keri series. Throughout the survey, photographs were taken of various locations within and surrounding the parcel.

Collections

No collections were made during this survey.

Informants

Informants Chris Emblidge and Andy Woodruff of Passarella and Associates were used for this assessment.

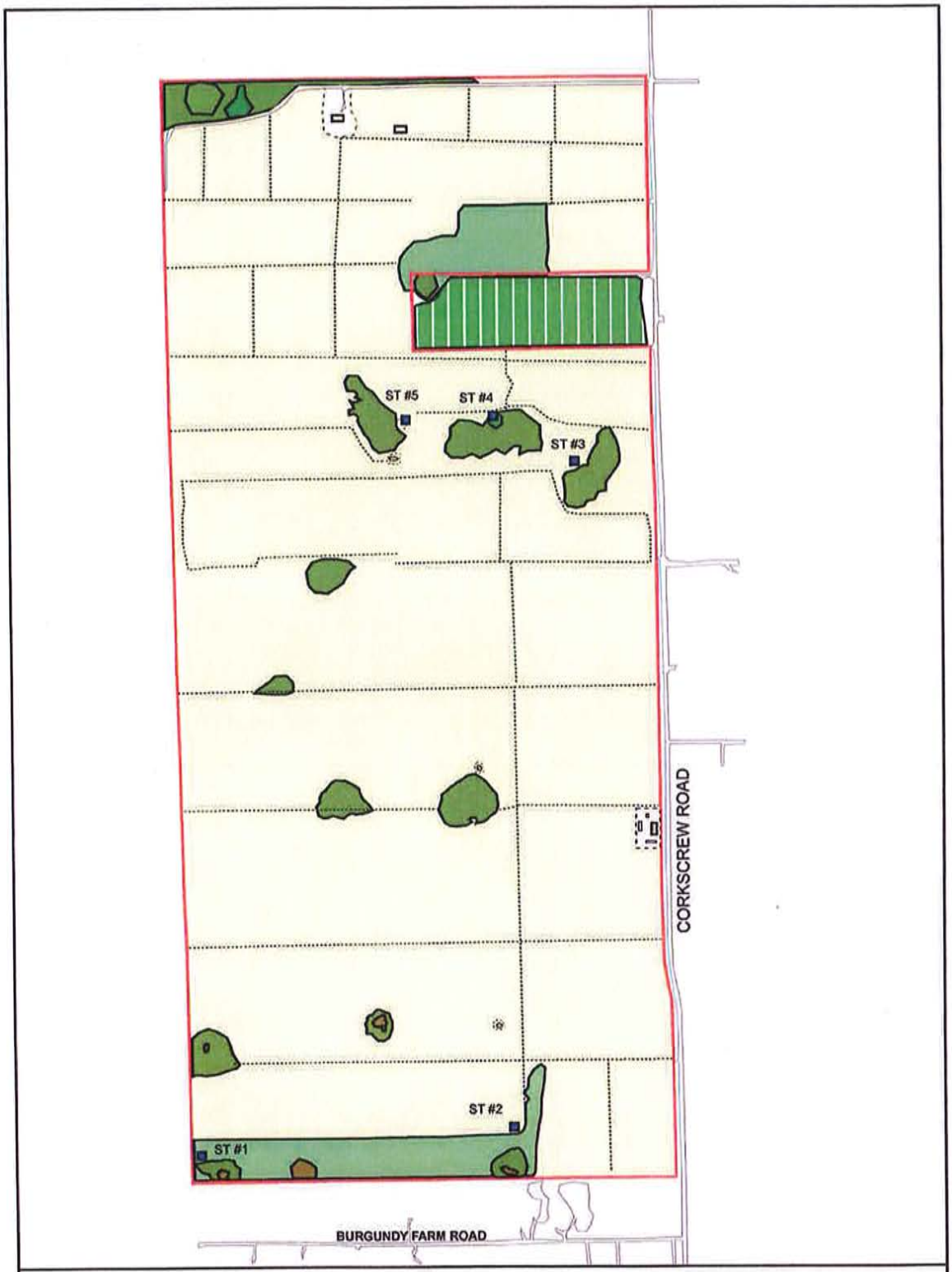

Figure 6. Corkscrew Links Parcel depicting shovel tests.

Results and Recommendations

No historic or archaeological sites, features, or artifacts were uncovered during this assessment of the Corkscrew Links Parcel. These results were in concurrence with the expected results.

Although the entire parcel was subject to a pedestrian and windshield survey, only five targets were identified within the parcel boundaries. The targets, marginally higher ground areas in close proximity to remnant cypress solution pond features, were determined through ground-truthing not to be archaeological sites. A representative number of these were shovel tested. The soil in these tests yielded no midden-like or cultural material that are typical of prehistoric sites of this area.

It was noted during the fieldwork on the parcel that a weathered-looking maintenance barn and several newer buildings are located along the south-central area closest to Corkscrew Road. The investigator requested the help of Chris Emblidge and Andy Woodruff of Passarella and Associates, who consulted vintage aerial photographs of the parcel and determined that the older building was constructed during the period between February 4th, 1966 to March 16th, 1968, and is therefore not considered a historic structure.

It is the consultant's opinion that there will be no adverse impact to any significant archaeological or historic resources by the proposed development of the subject property. However, in the unlikely event that isolated archaeological artifacts, features, or a site is encountered than the relevant county and state agencies should be contacted. If human remains are encountered, than the guidelines of State Statute 872.05, the Unmarked Human Remains Act will apply.

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Appendix 1: Corkscrew Links Shovel Test Log

ST-1 (45 x 45 cm) Negative. East of cypress solution pond in NW corner of parcel, on highest ground in closest proximity to pond.

0-5 cm	Detritus
5-15 cm	Dark gray sand
15 cm	Unconsolidated limestone caprock

ST-2 (45 x 45 cm) Negative. Middle to western portion of parcel immediately east of cypress solution pond in improved pasture.

0-30 cm	Medium gray sand
30-80 cm	Whitish coarse sand

ST-2 (45 x 45 cm) Negative. Middle to southern portion of parcel along southeastern of cypress solution pond in improved pasture.

0-70 cm	Whitish coarse sand

ST-4 (45 x 45 cm) Negative. Middle to southern portion of parcel along eastern edge of cypress solution pond on remnant slash pine grove on slightly elevated ground in improved pasture.

0-20 cm	Light gray sand
20-80 cm	Light golden sand

ST-5 (45 x 45 cm) Negative. Middle to southern portion of parcel along southern edge of cypress solution pond on anomalous elevated high area (20 feet north-south, 30 feet, east-west) in improved pasture. Feature is now believed to be recent spoil pile

0-100 cm	Gray sand, disturbed, some iron oxide nodules in first 20 cm
100-110 cm	Light tan sand (original ground surface?)

Ent D (FMSF only)__/__/__ **Survey Log Sheet**

Survey # (FMSF only) _____

Florida Master Site File
Version 2.0 9/97

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

Identification and Bibliographic Information

Survey Project (Name and project phase) Corkscrew Links Phase One _____

Report Title (exactly as on title page) An Archaeological Survey of The Corkscrew Links Parcel, Lee County, Florida

Report Author(s) (as on title page— individual or corporate; last names first) Beriault, John G._____

Publication Date (year) _2003_____ **T**otal Number of Pages in Report (Count text, figures, tables, not site forms) __29_____

Publication Information (If relevant, series and no. in series, publisher, and city. For article or chapter, cite page numbers. Use the style of *American Antiquity*: see *Guide to the Survey Log Sheet.*) Archaeological and Historical Conservancy Technical Report #416 _____

Supervisor(s) of Fieldwork (whether or not the same as author[s]; last name first) Carr, Robert S._____

Affiliation of Fieldworkers (organization, city) Archaeological and Historical Conservancy(AHC), Miami FL _____

Key Words/Phrases (Don't use the county, or common words like *archaeology, structure, survey, architecture.* Put the most important first. Limit each word or phrase to 25 characters.) Corkscrew Links_____

Survey Sponsors (corporation, government unit, or person who is directly paying for fieldwork)
Name Passarella and Associates, Inc. _____
Address/Phone 9110 College Pointe Ct. Ft. Myers, FL 33919/ (239)274-0067_____

Recorder of *Log Sheet* __John G. Beriault_____

Date *Log Sheet* Completed __1_/__10_/_03__

Is this survey or project a continuation of a previous project? X No θ Yes: Previous survey #(s) [FMSF only] _____

Mapping

Counties (List each one in which field survey was done - do not abbreviate; use supplement sheet if necessary)_ Lee County_____

USGS 1:24,000 Map(s) : Map Name/Date of Latest Revision (use supplement sheet if necessary): ___

Corkscrew, NW _____

Description of Survey Area

Dates for Fieldwork: Start _12_/28__/_02__ End _12_/28__/_02__ **T**otal Area Surveyed (fill in one) _____ hectares _1366_____ acres
Number of Distinct Tracts or Areas Surveyed ___one_____
If Corridor (fill in one for each): **W**idth _____ meters _____ feet **L**ength _____ kilometers _____miles

Page 2 **Survey Log Sheet of the Florida Master Site File**

Research and Field Methods

Types of Survey (check all that apply): x archaeological θ architectural θ historical/archival θ underwater θ other:

Preliminary Methods (4Check as many as apply to the project as a whole. If needed write others at bottom).

θ Florida Archives (Gray Building) θ library research- *local public* θ local property or tax records _____ θ wi
θ Florida Photo Archives (Gray Building) θ library-special collection - *nonlocal*_____ θ ne
x FMSF site property search θ Public Lands Survey (maps at DEP) θ literature search
θ FMSF survey search x local informant(s) θ Sanborn Insurance maps
x other (describe)grayline aerial photographs and USGS Map_____

Archaeological Methods (Describe the proportion of properties at which method was used by **writing in** the corresponding letter. Blanks are interpreted as "None.")
F(-ew: 0-20%), **S**(-ome: 20-50%); **M**(-ost: 50-90%); or **A**(-ll, Nearly all: 90-100%). If needed write others at bottom.
θ Check here if **NO** archaeological methods were used.

_S__ surface collection, controlled
___ surface collection, **un**controlled
__A_ shovel test-1/4"screen
___ shovel test-1/8" screen
___ shovel test 1/16"screen
___ shovel test-unscreened
___ other (describe): _____
___ posthole tests
___ auger (size:____)
___ coring
___ test excavation (at least 1x2 M)
___ other screen shovel test (size: ____)_____ I
___ water screen (finest size: ____) _____ :
___ magnetometer
___ side scan sonar
___ unknown

Historical/Architectural Methods (Describe the proportion of properties at which method was used by **writing in** the corresponding letter. Blanks are interpreted as "None.")
F(-ew: 0-20%), **S**(-ome: 20-50%); **M**(-ost: 50-90%); or **A**(-ll, Nearly all: 90-100%). If needed write others at bottom.
_ Check here if **NO** historical/architectural methods were used.

___ building permits
___ commercial permits
___ interior documentation
__X_ other (describe):aerial photos _____
___ demolition permits
___ exposed ground inspected
___ local property records
___ neighbor interview
_X__ occupant interview
___ occupation permits
___ subdivision maps
___ tax records
___ unknown

Scope/Intensity/Procedures Windshield and pedestrian survey with selected areas shovel tested and the spoil screened through ¼" mesh._____
_____
_____

Survey Results (cultural resources recorded)

Site Significance Evaluated? XYes θNo If *Yes*, circle NR-eligible/significant site numbers below.

Site Counts: Previously Recorded Sites ___ None_____ Newly Recorded Sites None _____

Previously Recorded Site #'s (List site #'s without "8." Attach supplementary pages if necessary) N/A___

_____

Newly Recorded Site #'s (Are you sure all are originals and not updates? Identify methods used to check for updates, ie, researched the FMSF records. List site #'s without "8." Attach supplementary pages if necessary.)N/A _____

_____

_____

Site Form Used: X SmartForm θ FMSF Paper Form θ Approved Custom Form: Attach copies of written approval from FMSF Supervisor.

DO NOT USE ♣♣♣♣♣♣SITE FILE USE ONLY♣♣♣♣♣♣DO NOT USE

BAR Related

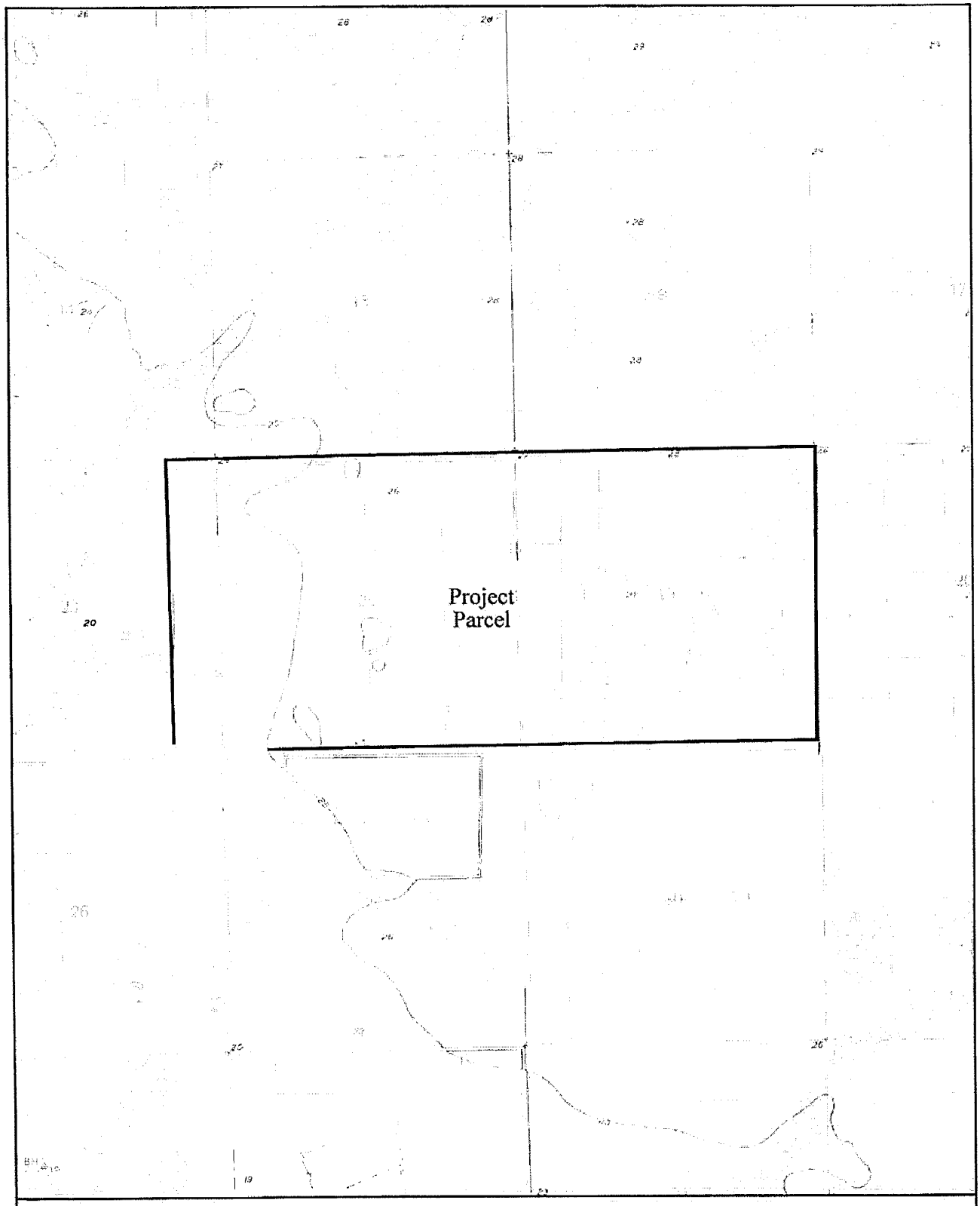
BHP Related

θ 872 θ 1A32 θ State Historic Preservation Grant

θ CARL θ UW θ Compliance Review: CRAT

#_____

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



Twp. 46S, Rng. 27E, Section 19 and Twp. 46S, Rng 26E, Sections 23-24.

0 1/4 1/2 mile

N

Source: USGS Corkscew NW Quad. (1958 rev. 1973)

FLORIDA DEPARTMENT OF STATE
Kenneth W. Detzner
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Ms. Alison Elgart-Berry
Archaeological and Historical Conservancy, Inc.
4800 S.W. 64th Avenue, Suite 107
Davie, Florida 33314

February 6, 2003

Re: DHR No. 2003-00538/ Date Received by DHR: January 21, 2003
Project No. 00VAD501 / DHR Reference No. 2002-5151
An Archaeological Survey of the Corkscrew Links Parcel, Lee County, Florida

Dear Ms. Elgart-Berry:

Our office has received the referenced project in accordance with Chapters 267, 373, *Florida Statutes*, Florida's Coastal Management Program, and implementing state regulations, regarding possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places*, or otherwise of historical, architectural or archaeological value. The State Historic Preservation Officer is to advise and assist state and federal agencies when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or minimize adverse effects.

No archaeological or historic properties were identified during the survey. It is the opinion of Archaeological and Historical Conservancy, Inc. that development of the subject parcel will have no effect on any historic properties eligible for listing in the *National Register of Historic Places*, or otherwise of historical or archaeological value. Based on the information provided, this agency concurs with this determination and finds the submitted report complete and sufficient in accordance with Chapter 1A-46, *Florida Administrative Code*.

If you have any questions concerning our comments, please contact Alissa Slade, Historic Sites Specialist, at aslade@mail.dos.state.fl.us or (850) 245-6333. Your interest in protecting Florida's historic properties is appreciated.

Sincerely,

Ludwick P. Gaske, Deputy SHPO

for Janet Snyder Matthews, Ph.D., Director, and
State Historic Preservation Officer

500 S. Bronough Street • Tallahassee, FL 32399-0250 • http://www.flheritage.com

☐ Director's Office (850) 245-6300 • FAX: 245-6435
☐ Archaeological Research (850) 245-6444 • FAX: 245-6436
☐ Historic Preservation (850) 245-6333 • FAX: 245-6437
☐ Historical Museums (850) 245-6400 • FAX: 245-6433
☐ Palm Beach Regional Office (561) 279-1475 • FAX: 279-1476
☐ St. Augustine Regional Office (904) 825-5045 • FAX: 825-5044
☐ Tampa Regional Office (813) 272-3843 • FAX: 272-2340

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Office of the Secretary
Office of International Relations
Division of Elections
Division of Corporations
Division of Cultural Affairs
Division of Historical Resources
Division of Library and Information Services
Division of Licensing
Division of Administrative Services

MEMBER OF THE FLORIDA CABINET
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Trustees of the Internal Improvement Trust Fund
Administration Commission
Florida Land and Water Adjudicatory Commission
Siting Board
Division of Bond Finance
Department of Revenue
Department of Law Enforcement
Department of Highway Safety and Motor Vehicles
Department of Veterans' Affairs

FLORIDA DEPARTMENT OF STATE
Katherine Harris
Secretary of State
DIVISION OF HISTORICAL RESOURCES

Ms. Julie Arrison
Passarella and Associates, Inc.
4575 Via Royale, Suite 201
Fort Myers, Florida 33919

June 17, 2002

RE: DHR No. 2002-05151
Received by DHR: May 24, 2002
Project Name: Corkscrew Links
Project No.: 00VAD501
Lee County

Dear Ms. Arrison:

Our office received and reviewed the above referenced project in accordance with Section 106 of the *National Historic Preservation Act of 1966* (Public Law 89-665), as amended in 1992, and *36 C.F.R., Part 800: Protection of Historic Properties*, Chapters 267 and 373, *Florida Statutes*, Florida's Coastal Management Program, and implementing state regulations, for possible impact to historic properties listed, or eligible for listing, in the *National Register of Historic Places*, or otherwise of historical, architectural or archaeological value. The State Historic Preservation Officer is to advise and assist state and federal agencies when identifying historic properties, assessing effects upon them, and considering alternatives to avoid or minimize adverse effects.

A review of the Florida Master Site File indicates that there are no archaeological or historic sites currently recorded within the project area. However, the lack of recorded historic properties is not considered significant because the area has never been subjected to a systematic, professional survey to locate such properties. Data from environmentally similar areas indicate that archaeological and historic sites, especially the former, are likely to occur in the study area. It is, therefore, the opinion of this office that there is a reasonable probability of project activities impacting historic properties potentially eligible for listing in the *National Register,* or otherwise of historical, architectural or archaeological value.

Since potentially significant archaeological and historic sites may be present, it is our recommendation that the project area should be subjected to a systematic, professional archaeological and historical survey. The purpose of this survey will be to locate and assess the significance of historic properties present. The resultant survey report must conform to the specifications set forth in Chapter 1A-46, *Florida Administrative Code*, and will need to be forwarded to this agency in order to complete the process of reviewing the impact of this proposed project on historic properties.

Based on the information provided, consistency with Section 307 of the *Coastal Zone Management Act*, Chapter 373.414 *Florida Statutes*, 16 U.S.C. Sections 1456 (c) and (d) and implementing regulations, and 15 CFR Part 930 can not be determined by this agency at this time. Under provisions of Chapter 267.061 *Florida Statutes*, it must be determined if the proposed activity will adversely affect or will enhance significant historical or archaeological resources. Meeting these consistency criteria is conditioned upon a thorough cultural resource evaluation to determine if any properties of archaeological or historical significance are present within the area of potential effect for the proposed project.

It is the opinion of this agency that until the required survey described above has been conducted, and any cultural resources identified determined to be significant or potentially significant scheduled for avoidance or mitigation, the proposed project will not be consistent with the *Coastal Zone Management Act* and implementing regulations.

Because this letter and its contents are a matter of public record, consultants who have knowledge of our recommendations may contact the project applicant. This should in no way be interpreted as an endorsement by this agency. The *Registry of Professional Archaeologists* (RPA) is the national certifying organization for archaeologists. A listing of archaeologists who are RPA members living or working in Florida can be accessed at http://dhr.dos.state.fl.us /bhp/compliance. In addition, the complete RPA Directory of Certified Professional Archaeologists is available at www.rpanet.org. Otherwise, upon request, we will forward our RPA list to the applicant.

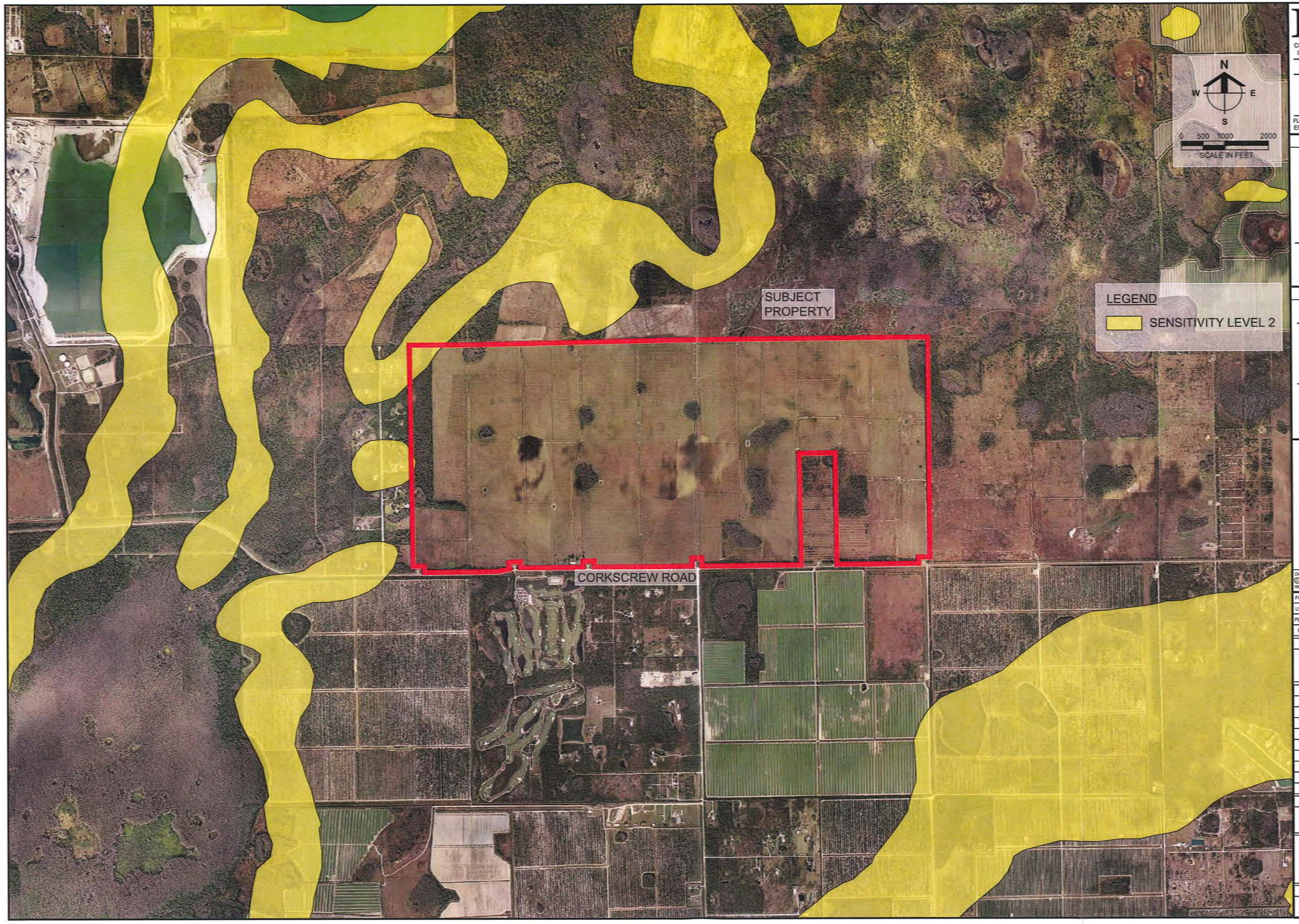
If you have any questions concerning our comments, please contact Sarah Jalving, Historic Sites Specialist, by electronic mail at sjalving@mail.dos.state.fl.us or at 850-245-6333 or 800-847-7278. Thank you for your interest in protecting Florida's historic properties.

Sincerely,

Frederick P. Gaske, Deputy SHPO

for Janet Snyder Matthews, Ph.D., Director, and
State Historic Preservation Officer

Corkscrew Farms
Part IV. Amendment Support Documentation
D. Impacts on Historic Resources
2. Subject Property Depicted on the Archaeological Sensitivity Map of Lee County



Barraco and Associates, Inc.

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PHONE (239) 461-3170
FAX (239) 461-3169

FLORIDA CERTIFICATES OF AUTHORIZATION
ENGINEERING 7995 - SURVEYING LB-6940

PREPARED FOR

CAMPROP INC.

4954 ROYAL GULF CIRCLE
FORT MYERS, FL. 33966

PROJECT DESCRIPTION

1360 ACRES CORKSCREW FARMS

LEE COUNTY, FLORIDA

THIS PLAN IS PRELIMINARY AND INTENDED FOR CONCEPTUAL PLANNING PURPOSES ONLY.

SITE LAYOUT AND LAND USE INTENSITIES OR DENSITIES MAY CHANGE SIGNIFICANTLY BASED UPON SURVEY, ENGINEERING, ENVIRONMENTAL AND / OR REGULATORY CONSTRAINTS AND / OR OPPORTUNITIES.

NOT FOR CONSTRUCTION

FILE NAME	23244-ARCHSENS.DWG
LOCATION	J:\23244\DWG\ZONING\EXHIBITS\
PLOT DATE	THU. 12-18-2014 - 8:52 AM
PLOT BY	ANGELICA CARLEY

CROSS REFERENCED DRAWINGS

PLAN REVISIONS

PLAN STATUS

ARCHAEOLOGICAL SENSITIVITY MAP

PROJECT / FILE NO.	SHEET NUMBER
23244	

Corkscrew Farms
Part IV. Amendment Support Documentation
E. Internal Consistency with the Lee Plan
1. Population Projections & Table 1(b) Discussion

The proposed Overlay and companion rezoning will strictly limit the development footprint on the subject property. This proposed amendment is not proposing any amendments to the development allocations contained in Table 1(b). Table 1(b) allocates 4,015 acres for residential development before the year 2030. Posted information on the Lee County website indicates that 2,102 acres have been developed for residential uses, leaving 1,913 acres available for development before the year 2030. The development footprint, including lots, roads, parks and amenity areas, and water management lakes is approximately 554 acres. The proposal is consistent with the allocations contained in Table 1(b).

The Overlay would result in an additional 1,195 dwelling units. The population that would be accommodated by these units is insignificant when comparing this against the total population capacity of the Lee Plan Future Land Use Map.

Corkscrew Farms
Part IV. Amendment Support Documentation
E. Internal Consistency with the Lee Plan
2. Lee Plan Goals Objectives and Policies Discussion

INTRODUCTION

Corkscrew Farms is a ±1,361 acre restoration, conservation, and water management project that allows for a small portion of the property to include a residential community. The property is identified by Lee Plan Map 1, Page 4 of 8, as a Tier 1 (highest priority) Priority Restoration property. The property is currently used for agricultural purposes. The property has been significantly impacted by these activities that have been occurring on the site over many decades.

The plan amendment will require restoration/preservation activities while permitting the development of a residential community in a manner that is consistent with the intent and vision of the Density Reduction/Groundwater Resource Future Land Use Category and with the Southeast Lee County Planning Community. This plan amendment request seeks to:

1. Incorporate the "Corkscrew Farms Tier 1 Priority Restoration Overlay" in the Lee Plan Goals, Objectives, and Policies such as in Goal 33), as well as in the plan Map (such as Map 17) series.

2. Amend Future Land Use Map Series, Maps 6 and 7 to place the property within the Lee County Utilities Service Areas.

The Corkscrew Farms property is located along Corkscrew Road in the southeast portion of unincorporated Lee County. The property is located within the Southeast Lee County Planning Community. The Vision Statement provides this for the Southeast Lee County community:

> ***18. Southeast Lee County*** *- As the name implies, this Community is located in the southeast area of Lee County, south of SR 82, north of Bonita Beach Road, east of I-75 (excluding areas in the San Carlos Park/Island Park/Estero Corkscrew Road and Gateway/Southwest Florida International Airport Communities), and west of the county line. With very minor exceptions, this community is designated as Density Reduction/Groundwater Resource, Conservation Lands (both upland and wetlands), and Wetlands on the Future Land Use Map. This community consists of regional mining operations, active and passive agricultural uses, public wellfields and water treatment plants, significant contiguous tracts set aside for preservation, a private golf course, and very large lot residential home sites. Through the year 2030, Southeast Lee County will change dramatically. Mining pits will double in size as the northwest portion serves as the major supplier of limerock aggregate for southwest Florida,*

an activity that continues to generate significant truck traffic especially on Alico Road. The remainder of Southeast Lee County will continue as the county's primary agricultural region and home to its largest (and still expanding) natural preserves. Residential and commercial development will not be significantly increased except in very limited areas where development rights are concentrated by this plan. Some existing farmland will be restored to natural conditions to increase the natural storage of water and to improve wildlife habitat.

The project proposes hydrologic restoration that will more closely mimic natural conditions, increase the storage and flows of surface water and improve wildlife habitat. The project will enhance hydrology to thousands of acres of existing public conservation lands. These lands are located north and east of the subject site.

FUTURE LAND USE MAP DESIGNATION

The subject site is designated Density Reduction/Groundwater Resources (DR/GR) on the Lee Plan's Future Land Use Map. The Lee Plan descriptor policy, Policy 1.4.5, is reproduced below:

> ***POLICY 1.4.5:*** *The Density Reduction/Groundwater Resource (DR/GR) 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.*
>
> *1. New land uses in these areas that require rezoning or a development order must demonstrate compatibility with maintaining surface and groundwater levels at their historic levels (except as provided in Policies 33.1.3 and 33.3.4) utilizing hydrologic modeling, the incorporation of increased storage capacity, and inclusion of green infrastructure. The modeling must also show that no adverse impacts will result to properties located upstream, downstream, as well as adjacent to the site. Offsite mitigation may be utilized, and may be required, to demonstrate this compatibility. Evidence as to historic levels may be submitted during the rezoning or development review processes.*
>
> *2. Permitted land uses include agriculture, natural resource extraction and related facilities, conservation uses, public and private recreation facilities, and residential uses at a maximum density of one dwelling unit per ten acres (1 du/10 acres). See Policies 33.3.2, 33.3.3, 33.3.4, and 33.3.5 for potential density adjustments resulting from concentration or transfer of development rights.*
>
> *a. For residential development, also see Objective 33.3 and following policies. Commercial and civic uses can be incorporated into Mixed-Use Communities to the extent specifically provided in those policies.*

b. Individual residential parcels may contain up to two acres of Wetlands without losing the right to have a dwelling unit, provided that no alterations are made to those wetland areas.

c. The Future Limerock Mining overlay (Map 14) identifies sufficient land near the traditional Alico Road industrial corridor for continued limerock mining to meet regional demands through the Lee Plan's planning horizon (currently 2030). See Objective 33.1 and following policies.

3. Private Recreational Facilities may be permitted in accordance with the site locational requirements and design standards, as further defined in Goal 16. No Private recreational facilities may occur within the DR/GR land use category without a rezoning to an appropriate planned development zoning category, and compliance with the Private Recreation Facilities performance standards, contained in Goal 16 of the Lee Plan.

Consistent with the DR/GR designation, the property can presently be developed with 130 single family dwelling units. There is presently no limitation on the footprint for the development of the homes and related uses. These units could be spread across the entire property. This could occur under the existing AG-2 zoning of the property. These units would be serviced by independent individual potable water wells and septic systems. The development of residential units on central water and sewer provides a benefit to the public water wellfield located to the south along Corkscrew Road. The amendment will permit development that is more compatible with the purpose of Goal 33 which promotes initiating a long-term restoration program to benefit water resources and protect wildlife habitat. The supporting documentation from Progressive Water Resources demonstrates that the proposed project will serve to maintain and improve surface and groundwater levels.

The subject site also includes areas designated as Wetlands on the Future Land Use Map. The Wetlands policy descriptor policy is reproduced below:

> ***POLICY 1.5.1:*** *Permitted land uses in Wetlands 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 114 of this plan. The maximum density is one dwelling unit per twenty acres (1 du/20 acre) except as otherwise provided in Table 1(a) and Chapter XIII of this plan.*

The proposal has very minimal wetland impacts. The restoration strategy that is part of this Overlay is to improve and re-create the historic flowway patterns and improve the existing degraded wetland areas on the property. The restoration plan will be a benefit to the adjacent public conservation lands.

SPECIAL TREATMENT AREAS

Objective 1.7 of the Lee Plan designates "Special Treatment Areas" on the Future Land Use Map as overlays. This objective provides that these areas contain special restrictions or allowances in addition to all of the requirements of their underlying categories. This objective covers Airport Noise Zones, the Development of Regional Impact overlay, the Urban Reserve overlay, Privately Funded Infrastructure, the Water-Dependent overlay, the Planning Communities Map and Acreage Allocation Table (Map 16 and Table 1(b)), the Public Acquisition overlay, the Agricultural Overlay (Map 20), the Urban Infill and Redevelopment Overlay (Map 15), the Airport Mitigation Lands overlay (Map 3M), the Burnt Store Marina Village Area, the Future Limerock Mining overlay (Map 14), the Southeast DR/GR overlay (Map 17), and the Historic Surface and Groundwater Levels overlay (Map 25).

The subject site is not depicted as being located in the Airport Noise Zones, the Development of Regional Impact overlay, the Urban Reserve overlay, Privately Funded Infrastructure, the Water-Dependent overlay, the Urban Infill and Redevelopment Overlay (Map 15), the Burnt Store Marina Village Area, the Future Limerock Mining overlay (Map 14).

The project is subject to the Acreage Allocation Table as indicated in Policy 1.7.6 as follows:

> ***POLICY 1.7.6:*** *The Planning Communities Map and Acreage Allocation Table (see Map 16 and Table 1(b) and Policies 1.1.1 and 2.2.2) depicts the proposed distribution, extent, and location of generalized land uses for the year 2030. Acreage totals are provided for land in each Planning Community in unincorporated Lee County. No development orders or extensions to development orders will be issued or approved by Lee County that would allow the acreage totals for residential, commercial or industrial uses contained in Table 1(b) to be exceeded.*

Table 1(b) indicates that the Southeast Lee County Planning Community has 4,000 acres allocated for residential development in the DR/GR category before the year 2030. Information contained on the county's website indicates that there are currently still 1,906 acres remaining available for residential development within the DR/GR category in the Southeast Lee County Planning Community. This figure is larger than the entire subject site. In all probability less than 600 acres of the site will be inventoried for residential use at the development order stage. No changes to the allocations are proposed at this time as there is sufficient allocation. The project is consistent with Policy 1.7.6 of the Lee Plan and with the allocations contained in Table 1(b).

The lands immediately north of the subject site are within the Airport Mitigation Lands overlay (Map 3M). The lands west of the Burgundy Farms neighborhood are also included in the Airport Mitigation Lands overlay.

The amendment proposes to add the subject site to the Southeast DR/GR overlay (Map 17), as well as amending Policy 1.7.13 to recognize the proposed priority restoration overlay.

The proposed restoration plan takes into account the properties "Historic Surface and Groundwater Levels" as depicted on the Historic Surface and Groundwater Levels overlay (Map 25).

OBJECTIVE 2.4

Lee Plan Objective 2.4 and its supporting policies specifically address comprehensive plan amendments that request an increase in the allowable density or intensity within the DR/GR. Policy 2.4.3 provides four specific requirements that applicants seeking amendments of this type must address.

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 water resources; and

4. Supply data and analysis specifically addressing the urban sprawl criteria listed in Rule 9J-5.006(5)(g), (h), (i) and (j), FAC.

An analysis has been conducted by Progressive Water Resources indicating that irrigation for the subject property will be a central system that draws from the surficial aquifer. A central system provides greater control of irrigation water and will result in lower water use than will an individual private well system. The analysis includes the necessary data and analysis to demonstrate that the proposal will not cause harm to present or future water resources. The proposed development will connect to central water and sewer to be provided by Lee County Utilities. A letter of availability has been requested from Lee County Utilities. The public facilities impact analysis demonstrates there is adequate capacity available to serve the proposed development. The connection to central utilities would eliminate the potential of individual potable water wells and septic systems.

The applicant notes that the State has repealed 9J-5. The amendment represents an opportunity to end a long running controversy between the landowners and the community. A limerock mine has been proposed as a use on the property several times in the past. These requests have generated substantial public opposition to this use on this property for a variety of reasons. This request, if approved, would foreclose the opportunity to establish a mine on the subject site. The request represents a unique

opportunity to accommodate an appropriately planned residential community and substantial restoration of the site. The proposal is compatible with the surrounding land uses. Lee Plan Policy 5.1.5 seeks to protect existing and future residential areas from any encroachment of uses that are potentially destructive to the character and integrity of the residential environment. Policy 5.1.5 is reproduced below:

> ***POLICY 5.1.5:*** *Protect existing and future residential areas from any encroachment of uses that are potentially destructive to the character and integrity of the residential environment. Requests for conventional rezonings will be denied in the event that the buffers provided in Chapter 10 of the Land Development Code are not adequate to address potentially incompatible uses in a satisfactory manner. If such uses are proposed in the form of a planned development or special exception and generally applicable development regulations are deemed to be inadequate, conditions will be attached to minimize or eliminate the potential impacts or, where no adequate conditions can be devised, the application will be denied altogether. The Land Development Code will continue to require appropriate buffers for new developments.*

The proposal is compatible with the existing single family uses, recreational uses, and conservation/mitigation uses that are adjacent to the subject site. The proposal will provide substantial setbacks from these adjacent uses, and will reestablish and restore historic flowways onsite. This will help both the adjacent single family uses as well as providing additional wildlife habitat contiguous to the public preserves. These regional benefits occur with no public expenditures required.

The request, if approved, would result in significant restoration of the site which would enhance the hydrology of the adjacent public preserves. The result would be the increase of wildlife habitat on the subject site. The project would also help to alleviate local flooding conditions of the Burgundy Farms neighborhood, as well as to Corkscrew Road.

GOAL 33 SOUTHEAST LEE COUNTY

As stated previously, the subject site is located in Southeast Lee County. Goal 33 of the Lee Plan is specific to this area of the County and represents an attempt to protect the natural resources of the area and balance the competing interests in the use of land in the community from established residential communities, limerock mining areas, public conservation areas, and agricultural uses. Goal 33 is reproduced below:

> ***GOAL 33: SOUTHEAST LEE COUNTY.*** *To protect natural resources in accordance with the County's 1990 designation of Southeast Lee County as a groundwater resource area, augmented through a comprehensive planning process that culminated in the 2008 report, Prospects for Southeast Lee County. To achieve this goal, it is necessary to address the inherent conflict between retaining shallow aquifers for long-term water storage and extracting the aquifer's limestone for processing into construction aggregate. The best overall*

balance between these demands will be achieved through a pair of complementary strategies: consolidating future mining in the traditional Alico Road industrial corridor while initiating a long-term restoration program to the east and south to benefit water resources and protect natural habitat. Residential and commercial development will not be significantly increased except where development rights are being explicitly concentrated by this plan. Agriculture uses may continue, and environmental restoration may begin. This goal and subsequent objectives and policies apply to Southeast Lee County as depicted on Map 1, Page 2.

The effort that resulted in this Goal and subsequent Policies was really focused on the "mining issue" and residential community compatibility. The Goal has been amended by the inclusion of the "Improved Residential Communities" concept in the recent past. This proposal represents an opportunity to incentivize significant restoration of a priority property that is recognized by the Future Land Use Map series. The subject site is designated as being a Tier 1 Restoration property by Policy 33.2.1. Objective 33.2 and Policies 33.2.1 and 33.2.2 are reproduced below:

OBJECTIVE 33.2: WATER, HABITAT, AND OTHER NATURAL RESOURCES. *Designate on a Future Land Use Map overlay the land in Southeast Lee County that is most critical toward restoring historic surface and groundwater levels and for improving the protection of other natural resources such as wetlands and wildlife habitat.*

POLICY 33.2.1: *Large-scale ecosystem integrity in Southeast Lee County should be maintained and restored. Protection and/or restoration of land is of even higher value when it connects existing corridors and conservation areas. Restoration is also highly desirable when it can be achieved in conjunction with other uses on privately owned land including agriculture. Lee County Natural Resources, Conservation 20/20, and Environmental Sciences staff will work with landowners who are interested in voluntarily restoring native habitats and landowners who are required to conduct restoration based upon land use changes. The parameters for the required restoration will be established in the Land Development Code by 2012.*

POLICY 33.2.2: *The DR/GR Priority Restoration overlay depicts land where protection and/or restoration would be most critical to restore historic surface and groundwater levels and to connect existing corridors or conservation areas (see Policy 1.7.7 and Map 1, Page 4). This overlay identifies seven tiers of land potentially eligible for protection and restoration, with Tier 1 and Tier 2 being the highest priority for protection from irreversible land-use changes. Lee County will evaluate this overlay map every 7 years to determine if changes in public ownership, land use, new scientific data, and/or demands on natural resources justify updating this map. This overlay does not restrict the use of the land in and of itself. It will be utilized as the basis for incentives and for informational*

purposes since this map will represent a composite of potential restoration and acquisition activities in the county.

The county recognizes, through these Lee Plan provisions that surface and groundwater levels and flows should be improved and restored and the county wants other natural resources such as wetlands and wildlife habitat on the subject property to be protected. This is critical to the County given the level of public investment in conservation and mitigation lands adjacent to the subject site. The proposal restores surface and groundwater levels to the extent possible given other development in the area. The plan amendment conditions will require the restoration and protection of the existing wetlands on the subject site. The plan amendment will set aside land that can be used by wildlife adjacent to the public preserves, enhancing those preserves, at no cost to the taxpayers.

Goal 33 and the implementing objectives and policies will be amended to include the ability to adopt a Tier 1 Restoration Overlay that can be adopted for any Tier 1 property and the adoption of the Overlay and a Restoration Strategy specific to the Corkscrew Farms property. The Restoration Strategy will permit two residential neighborhoods in a compact and clustered design to be developed outside of the restored flowway areas. These neighborhoods are located internal to the property with a specified separation from adjacent uses. The separation protects adjacent preserves and neighborhoods. The open space areas will be designed to allow the re-creation of onsite flowways that will, if possible, connect to off-site conservation areas. This design will have the affect of providing improved water resources and natural habitat. The remaining forested lands are incorporated into the open space plan. The Restoration Strategy includes an increase in density to make the private water and natural resource restoration and preservation feasible without the investment of public dollars.

The amendment proposes to add the ability to adopt a Tier 1 Restoration Overlay to provide for the protection and restoration of significant resources on Tier 1 properties. The amendment also proposes the adoption of the Tier 1 Restoration Overlay for the Corkscrew Farms property as well as the adoption of the Corkscrew Farms Restoration Strategy. The amendment proposes specific conditions to address public facilities and provide improved public safety. One example is the installation of operational improvements to Corkscrew Road. Conditions are included which require the provision of funds to assist in the acquisition of an ambulance to assure that there are adequate response times for Emergency Medical Services if there are inadequate response times at the time of residential building permits. The amendment includes a condition that requires the creation of a DR/GR Density Fund. The Fund will be used by the county to extinguish density, or to undertake capital improvements or land acquisition that result in the enhancement of water and wildlife resources in the DR/GR.

SURFACE WATER MANAGEMENT

The project furthers the County's efforts in coordinating land use on a watershed basis. Goal 60 and subsequent selected policies are reproduced below:

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: *Develop surface water management systems in such a manner as to protect or enhance the groundwater table as a possible source of potable water.*

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

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

The Restoration Strategy conditions require the construction of a surface water management system that will improve groundwater levels which can then be used as a possible source of potable water consistent with Policy 60.1.1. The Restoration Strategy conditions require the restoration of flowways and associated wetland habitats such as the existing cypress domes which is in furtherance of Policy 60.1.2. The project furthers Policy 60.1.3 by the restoration of the on-site flowways.

GREEN INFRASTRUCTURE

The Lee Plan includes an objective and policies that encourage development to incorporate green infrastructure in the surface water management systems. These provisions are reproduced below:

OBJECTIVE 60.5: INCORPORATION OF GREEN INFRASTRUCTURE INTO THE SURFACE WATER MANAGEMENT SYSTEM. *The long-term benefits of incorporating green infrastructure as part of the surface water management system include improved water quality, improved air quality, improved water recharge/infiltration, water storage, wildlife habitat, recreational opportunities, and visual relief within the urban environment.*

POLICY 60.5.1: *The County encourages new developments to design their surface water management systems to incorporate best management practices including, but not limited to, filtration marshes, grassed swales planted with native vegetation, retention/detention lakes with enlarged littoral zones, preserved or restored wetlands, and meandering flow-ways.*

POLICY 60.5.2: *The County encourages new developments to design their surface water management system to incorporate existing wetland systems.*

POLICY 60.5.3: *The County encourages the preservation of existing natural flow-ways and the restoration of historic natural flow-ways.*

The Restoration Strategy requires the incorporation of green infrastructure as part of the surface water management system. The Restoration Strategy incorporates filtration marshes and natural landscaped areas internal to the development footprint. The Restoration Strategy requires preservation of the remaining forested wetlands on the site, and requires these areas to be incorporated into restored flowways. The proposal furthers and is consistent with Objective 60.5, Policy 60.5.1, Policy 60.5.2, and Policy 60.5.3.

WATER RESOURCES

The Lee Plan stresses the protection of water resources:

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.*
POLICY 61.1.1: *Lee County recognizes 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.*

POLICY 61.1.4: *The county's Surface Water Management Master Plan will place particular emphasis on 1) routing surface water runoff from areas of excess to areas where additional subsurface storage is available; and 2) maintaining and increasing historic surface and groundwater levels in the Density Reduction/Groundwater Resource land use category.*

OBJECTIVE 61.2: MIMICKING THE FUNCTIONS OF NATURAL SYSTEM. *Support a surface water management strategy that relies on natural features (flow ways, sloughs, strands, etc.) and natural systems to receive and otherwise manage storm and surface water.*

POLICY 61.2.1: *All development proposals outside the future urban areas must recognize areas where soils, vegetation, hydrogeology, topography, and other factors indicate that water flows or ponds; and require that these areas be utilized to the maximum extent possible, without significant structural alteration, for on-site stormwater management; and require that these areas be integrated into area-wide coordinated stormwater management schemes.*

The Restoration Strategy requires a water management system that will improve the water quality of the surface water that is currently being discharged into receiving waters. The Restoration Strategy will require the surface water management system to re-create historic conditions on the subject site consistent with the intent of the DR/GR future land use category to the extent feasible and permittable. The Restoration Strategy includes conditions that require the water management system to mimic the functions of the natural system. The Restoration Strategy will include conditions that require the inclusion and restoration of on site flowways. The Restoration Strategy has been designed to recognize the sites soils, vegetation, hydrology, and topography. These factors are the determining characteristics that have shaped the Restoration Strategy, including the development footprint and restoration plans. The Tier 1 Restoration Overlay and the Restoration Strategy for Corkscrew Farms furthers and is consistent with these Lee Plan Provisions.

RESOURCE PROTECTION

The Lee Plan contains a goal, Goal 107, which seeks to manage the county's wetland and upland ecosystems to protect habitats, floral and faunal species, water quality, and natural surface water characteristics. Goal 107, Objective 107.1, and a portion of Policy 107.1.1 are reproduced below:

> ***GOAL 107: RESOURCE PROTECTION.*** *To manage the county's wetland and upland ecosystems so as to maintain and enhance native habitats, floral and faunal species diversity, water quality, and natural surface water characteristics.*
>
> ***OBJECTIVE 107.1: RESOURCE MANAGEMENT PLAN.*** *The county will continue to implement a resource management program that ensures the long-term protection and enhancement of the natural upland and wetland habitats through the retention of interconnected, functioning, and maintainable hydroecological systems where the remaining wetlands and uplands function as a productive unit resembling the original landscape.*
>
> ***POLICY 107.1.1:*** *County agencies implementing the natural resources management program will be responsible for the following:*
>
> 1. *Identifying upland and wetland habitats/systems most suitable for protection, enhancement, reclamation, and conservation.*
> 2. *Recommending standards to the Board of County Commissioners for Board approval for development and conservation that will protect and integrate wetlands (as defined in Objective 114.1) and significant areas of Rare and Unique upland habitats (as defined in Objective 104.1).*
> 3. *Preparing standards for wetland and rare and unique upland mitigation.*

4. *Conducting a sensitive lands acquisition program, which will consist of the following elements (see also Policy 107.2.8):*

   a. *A comprehensive inventory of environmentally sensitive lands will be maintained and expanded as new data becomes available.*

   b. *Environmentally sensitive lands will include wetlands (as defined in Objective 114.1); important plant communities (as identified by Objective 107.2); critical habitat for listed wildlife species (see also Objective 107.8 and Policies 107.4.1, 107.4.2, 107.10.4, and 107.11.2); environmentally sensitive coastal planning areas (as defined in Policy 113.1.5); natural waterways; important water resources (as defined in Policy 117.1.1); storm and flood hazard areas; and Rare and Unique uplands (as defined in Objective 104.1).*

   c. *Beginning in 1997, the county will adopt and implement a program to acquire and manage lands critical to water supply, flood protection, wildlife habitat, and passive recreation. The program will be funded by an ad valorem tax of up to 0.50 (1/2) mil annually for a period not to exceed seven years. A fifteen member advisory group to be called the Conservation Lands Acquisition and Stewardship Advisory Committee (CLASAC) will develop and implement the program. Ten percent of the funds will be used to manage the lands acquired.*

   d. *The county will take full advantage of opportunities to cooperatively acquire and manage sensitive lands and to leverage other funding sources by working with state land acquisition and land management agencies such as the Florida Communities Trust and the Florida Game and Fresh Water Fish Commission and by participating in state land acquisition programs such as the Save Our Rivers program and the Conservation and Recreational Lands program. Priority should be given to acquiring and otherwise protecting properties which are adjacent to or in close proximity to existing preservation areas, with emphasis on maintaining opportunities for a regional greenways system that may include a mix of flow ways, areas subject to flooding, native habitats, recreational trails and wildlife corridors.*

Per Policy 107.1.1, 4.d., the proposed Restoration Strategy restores and protects a significant area of land that is directly adjacent to existing preservation areas (i.e., Airport Mitigation Lands to the north and Corkscrew Regional Mitigation Bank to the east). The Restoration Strategy includes a mix of flowways, areas subject to flooding (wetland slough systems), restored historic native habitats, and proposed recreational trails, and significant wildlife corridors, including corridors for black bears and the Federally Endangered Florida panther. Approval of the plan amendment furthers this provision of the Lee Plan.

The Lee Plan also seeks to preserve native plant communities in the County. Lee Plan Objective 107.2 and Policy 107.2.2 are reproduced below:

> ***OBJECTIVE 107.2: PLANT COMMUNITIES.*** *Lee County will maintain and routinely update an inventory of natural plant communities and will protect at various suitable locations remnant tracts of all important and representative natural plant communities occurring within Lee County.*
>
> ***POLICY 107.2.2:*** *Continue to provide regulations and incentives to prevent incompatible development in and around environmentally sensitive lands (as defined in Policy 107.1.1.4.b.).*

In accordance with Policy 107.2.2, the project will not result in incompatible development in and around environmentally sensitive lands (as defined in Policy 107.1.1.4.b.). The project's environmentally sensitive land includes wetlands (as defined in Objective 114.1); important plant communities (as identified by Objective 107.2); critical habitat for listed wildlife species (Objective 107.8 and Policies 107.4.1, 107.4.2, 107.10.4, and 107.11.2); natural waterways; and important water resources (as defined in Policy 117.1.1). Compatible development will occur as a result of the proposed plan amendment and Restoration Strategy.

> ***POLICY 107.2.3:*** *Prevent water management and development projects from altering or disrupting the natural function of significant natural systems.*

In accordance with Policy 107.2.3, the Restoration Strategy will not alter or disrupt the natural function of significant natural systems, but will significantly improve the surrounding area's natural functions. The Restoration Strategy incorporates several restored flow ways and associated wetland habitats such as the existing cypress domes and as such is furthering Policy 60.1.2. The project furthers Policy 60.1.3 by the restoration of the on-site flow ways. Functions for support of wildlife will also be greatly enhanced by restoring suitable habitat for common species and protected species, such as the Florida panther, wood stork, little blue heron and white ibis. The proposed plan amendment is consistent with these Lee Plan provisions.

> ***POLICY 107.2.4:*** *Encourage the protection of viable tracts of sensitive or high-quality natural plant communities within developments.*
>
> ***POLICY 107.2.5:*** *Maintain regulations to control the clearing of natural vegetation, including tree removal and clearing of understory, prior to the development of property or its conversion to agricultural uses.*

The Restoration Strategy incorporates the high-quality natural plant communities in the open space area outside of the development footprint. Natural plant communities are preserved on the subject property while the site's most heavily altered; non native plant communities are targeted for development and/or habitat restoration to historic natural conditions.

POLICY 107.2.6: *Avoid needless destruction of upland vegetation communities including coastal and interior hammocks through consideration during the site plan review process of alternative layouts of permitted uses.*

POLICY 107.2.7: *Require inventories and assessments of the impacts of development in environmentally sensitive lands.*

POLICY 107.2.8: *Promote the long-term maintenance of natural systems through such instruments as conservation easements, transfer of development rights, restrictive zoning, and public acquisition.*

The Restoration Strategy furthers Policy 107.2.8. The project will provide enhancement and restoration of natural systems. A conservation easement will be placed over the preservation areas. Long-term management (e.g., exotic vegetation removal, trash/refuse removal, signage, etc.) of preserves will be in accordance with county-approved plans and the conservation easement. Long-term management will occur in perpetuity.

POLICY 107.2.9: *Maintain regulations, incentives, and programs for preserving and planting native plant species and for controlling invasive exotic plants, particularly within environmentally sensitive areas.*

The Restoration Strategy will preserve, enhance and restore native plant communities. Invasive exotic plants will be removed from the site and controlled in perpetuity. The Restoration Strategy is consistent with Policy 107.2.9.

POLICY 107.2.10: *Development adjacent to aquatic and other nature preserves, wildlife refuges, and recreation areas must protect the natural character and public benefit of these areas including, but not limited to, scenic values for the benefit of future generations.*

The Restoration Strategy is consistent with Policy 107.2.10. The Strategy's completed restoration and preservation areas will protect the natural character of the adjacent aquatic and nature preserves (i.e., Airport Mitigation Lands to the north and Corkscrew Regional Mitigation Bank to the east).

POLICY 107.2.11: *Prohibit the planting of invasive exotic plants in landscaping requirements for land development projects. Prohibited invasive exotic plant species will be specified in the Land Development Code.*

The Restoration Strategy will comply with Policy 107.2.11. No invasive exotic plants will be used.

POLICY 107.2.13: *Promote optimal conditions rather than minimum conditions for the natural system as the basis for sound planning.*

The Restoration Strategy furthers Policy 107.2.13 by means of the proposed development footprint and overall project design, including habitat restoration to historic natural conditions and flow way re-creation.

> ***POLICY 107.2.14:*** *Coordinate and stay informed on exotic eradication, management, and compliance plan, and involve private land owners, with incentives for exotics removal.*

The Restoration Strategy furthers Policy 107.2.14. Exotic plant species will be removed and managed in perpetuity. No invasive exotic plants will be planted on-site.

> ***OBJECTIVE 107.3: WILDLIFE.*** *Maintain and enhance the fish and wildlife diversity and distribution within Lee County for the benefit of a balanced ecological system.*
>
> ***POLICY 107.3.1:*** *Encourage upland preservation in and around preserved wetlands to provide habitat diversity, enhance edge effect, and promote wildlife conservation.*
>
> ***POLICY 107.3.2:*** *Participate with the Southwest Florida Regional Planning Council and the Florida Game and Fresh Water Fish Commission in the development of a regional plan that identifies and protects areas utilized by wildlife, including panthers and bears so as to promote the continued viability and diversity of regional species.*

In furtherance of Objective 107.3., Policy 107.3.1, and Policy 107.3.2, the Restoration Strategy will enhance fish and wildlife diversity and distribution opportunities within Lee County for the benefit of a balanced ecological system. A healthy balance of suitable fish and wildlife habitat will be enhanced, restored, re-created and preserved onsite. Wetland and upland systems will function in a more natural way in order to closely mimic historic natural conditions. Primary and secondary panther habitat will be restored. This will greatly benefit not only the Florida panther, but many other species as well, including panther prey species and the Florida black bear. Overall wildlife diversity will greatly increase as a result of the Restoration Strategy's habitat restoration activities. Also, preservation areas will provide additional wildlife corridors significantly improving existing wildlife corridors by linking to the neighboring preserved systems (i.e., Airport Mitigation Lands to the north and Corkscrew Regional Mitigation Bank to the east).

> ***OBJECTIVE 107.4: ENDANGERED AND THREATENED SPECIES IN GENERAL.*** *Lee County will continue to protect habitats of endangered and threatened species and species of special concern in order to maintain or enhance existing population numbers and distributions of listed species.*
>
> ***POLICY 107.4.1:*** *Identify, inventory, and protect flora and fauna indicated as endangered, threatened, or species of special concern in the "Official Lists of Endangered and Potentially Endangered Fauna and Flora of Florida," Florida*

Game and Freshwater Fish Commission, as periodically updated. Lee County's Protected Species regulations will be enforced to protect habitat of those listed species found in Lee County that are vulnerable to development. There will be a funding commitment of one full-time environmental planner to enforce this ordinance through the zoning and development review process.

POLICY 107.4.2: *Conserve critical habitat of rare and endangered plant and animal species through development review, regulation, incentives, and acquisition.*

POLICY 107.4.3: *Require detailed inventories and assessments of the impacts of development where it threatens habitat of endangered and threatened species and species of special concern.*

POLICY 107.4.4: *Restrict the use of protected plant and wildlife species habitat to that which is compatible with the requirements of endangered and threatened species and species of special concern. New developments must protect remnants of viable habitats when listed vegetative and wildlife species inhabit a tract slated for development, except where equivalent mitigation is provided.*

The proposed Restoration Strategy is consistent with Objective 107.4 and all subsequent policies. Listed species (i.e., endangered, threatened, and species of special concern) surveys were conducted by experienced ecologists as a part of the project planning process. All known listed species onsite, and those expected to potentially occur, will be reported to the local, state and federal wildlife agencies (i.e., Lee County, FWC and FWS). Impacts to listed wildlife species, including compensatory mitigation, will be fully coordinated and permitted with these agencies. Any additions to the project's known list of listed species observations, or potential, will be reported immediately. Ultimately, the project's restoration/preservation plans will significantly enhance onsite habitats for listed wildlife species, and enhance connectivity of listed species habitat with adjacent preserved natural areas.

OBJECTIVE 107.6: SOUTHERN BALD EAGLES. *The county will continue to monitor Southern bald eagle nesting activity and offer incentives to conserve buffer areas around Southern bald eagle nests. (Amended by Ordinance No. 98-09)*

POLICY 107.6.1: *Maintain a policy of negotiations with owners of land surrounding eagle nests to provide an optimal management plan for land subject to imminent development.*

POLICY 107.6.2: *The county Eagle Technical Advisory Committee will continue to conduct nest monitoring through the nesting season for all known eagle nests in Lee County. Information from these assessments will be used to modify, as needed, the adopted nest guidelines and to adopt guidelines for new eagle nests documented in Lee County.*

POLICY 107.6.3: *The Committee will continue to inform land owners and the general public of proper practices to minimize disturbances to eagle nests.*

Although bald eagles have been observed soaring high above the site and above the Airport Mitigation Park to the north, no bald eagles or their nests were observed during the wildlife surveys and none are anticipated to occur onsite. Ultimately, the project's restoration/preservation plans will significantly enhance onsite habitats for bald eagles.

OBJECTIVE 107.8: GOPHER TORTOISES. *The county will protect gopher tortoises through the enforcement of the protected species regulations and by operating and maintaining, in coordination with the Florida Game and Fresh Water Fish Commission, the Hickey Creek Mitigation Park.*

POLICY 107.8.1: *The county's policy is to protect gopher tortoise burrows wherever they are found. However, if unavoidable conflicts make on-site protection infeasible, then off-site mitigation may be provided in accordance with Florida Game and Fresh Water Fish Commission requirements.*

No gopher tortoises or their sign (i.e., burrows, scat, tracks, etc.) have been observed onsite. In the event that they are found onsite, which is highly unlikely due to lack of suitable habitat, the appropriate measures will be taken to protect them per Objective 107.8.

OBJECTIVE 107.9: RED-COCKADED WOODPECKER. *County staff will coordinate with the Florida Game and Fresh Water Fish Commission to determine on a case-by-case basis the appropriate mitigation for the protection of the red-cockaded woodpecker's habitat. Mitigation may include on- site preservation, on-site mitigation, off-site mitigation, and associated habitat management.*

POLICY 107.9.1: *County staff will note and document other possible red-cockaded woodpecker sites during routine site inspections.*

No red-cockaded woodpeckers or their sign (i.e., nest cavities, forage trees, calls, etc.) have been observed onsite and none are anticipated to occur due to lack of suitable habitat.

OBJECTIVE 107.10: WOODSTORK. *Lee County will maintain regulatory measures to protect the wood stork's feeding and roosting areas and habitat.*

POLICY 107.10.1: *County protected species regulations will continue to include wood storks as a Lee County Listed Species, requiring surveys for and protection of wood stork habitat. The county will continue to maintain an inventory of documented feeding, roosting, and rooking areas for the wood stork to ensure that surveys submitted through the Protected Species Ordinance include such areas.*

POLICY 107.10.2: *The county will continue to require management plans for existing wood stork feeding, roosting, and rooking areas to utilize "Habitat Management Guidelines for the Wood Stork in the Southeast Region" (U.S Fish and Wildlife Service, 1990).*

POLICY 107.10.3: *The county will encourage the creation of wood stork feeding areas in mandatory littoral shelf design, construction, and planting.*

POLICY 107.10.4: *By 1995, the county will identify wood stork flight patterns from roosting and rooking areas to feeding areas within the county. By 2000, evaluate the impact of existing tall structures on wood storks within significant flight areas and consider adoption of regulations if it is deemed appropriate. Include significant wood stork roosting, rooking, and feeding areas in the inventory of environmentally sensitive lands for potential acquisition (see Policy 107.1.1.4).*

POLICY 107.10.5: *The county will continue to permit communication towers in excess of 100 feet only by special exception. The impacts of such towers on woodstorks must be considered in the review of these applications.*

The Restoration Strategy is in full accordance with Objective 107.10 and all included policies. The project's impacts to wood storks, including compensatory mitigation, will be fully coordinated and permitted with the local, state and federal wildlife agencies (i.e., Lee County, FWC and FWS). Ultimately, the project's restoration/preservation plans will significantly enhance onsite habitats for wood storks.

OBJECTIVE 107.11: FLORIDA PANTHER AND BLACK BEAR. *County staff will develop measures to protect the Florida panther and black bear through greenbelt and acquisition strategies.*

POLICY 107.11.1: *Lee County will maintain and update data on sitings and habitat for the black bear and Florida panther.*

POLICY 107.11.2: *Encourage state land acquisition programs to include known panther and black bear corridors. The corridor boundaries will include wetlands, upland buffers, and nearby vegetative communities which are particularly beneficial to the Florida panther and black bear (such as high palmetto and oak hammocks).*

POLICY 107.11.3: *Lee County will inform Collier and Charlotte counties as to Lee County corridor acquisition projects to encourage a regional approach to corridor acquisition.*

POLICY 107.11.4: *The county will continue to protect and expand upon the Corkscrew Regional Ecosystem Watershed Greenway, a regionally significant greenway with priority panther habitat, through continued participation in land acquisition programs and land management activities and through buffer and open space requirements of the Land Development Code.*

POLICY 107.11.5: *The county will continue to include the Florida panther and black bear in the protected species management section of Chapter 10 of the Land Development Code.*

POLICY 107.11.6: *In any vegetation restoration projects conducted by Lee County for land acquired due to its environmental sensitivity (such as the Six Mile Cypress Strand and the Flint Pen Strand), plant lists will include species that provide forage for the prey of the Florida panther and forage for the black bear.*

The Restoration Strategy is in full accordance with Objective 107.11 and all included policies. The project's impacts to Florida panthers, including compensatory mitigation, will be fully coordinated and permitted with the local, state and federal wildlife agencies (i.e., Lee County, FWC and FWS). The project's restoration/preservation plans will significantly enhance onsite habitats for the Florida panther and black bear. Primary and secondary panther habitat will be restored. This will greatly benefit not only the Florida panther, but also panther prey species and the black bear. Also, the project's preservation areas will provide additional wildlife corridors and significantly improve existing wildlife corridors by linking to the neighboring preserved systems (i.e., Airport Mitigation Lands to the north and Corkscrew Regional Mitigation Bank to the east).

HOUSING

The Lee Plan contains a goal addressing meeting housing needs of the present and future residents of the county. Goal 135 and Objective 135.1 are reproduced below:

GOAL 135: MEETING HOUSING NEEDS. *To provide decent, safe, and sanitary housing in suitable neighborhoods at affordable costs to meet the needs of the present and future residents of the county.*

OBJECTIVE 135.1: HOUSING AVAILABILITY. *Work with private and public housing providers to ensure that the additional dwellings needed by 2025 are provided in types, costs, and locations to meet the needs of the Lee County population. It is estimated that by 2025, 114,927 additional dwelling units will be needed in all of Lee County and 39,637 will be needed in unincorporated Lee County.*

Objective 135.1 provides that Lee County will work with private and public housing providers to ensure that these is an adequate supply of dwellings in the future in a variety of types, costs, and locations to meet the needs of the Lee County population. The Objective provides that the county will need nearly 115,000 additional dwelling units, nearly 40,000 of these units will be needed in unincorporated Lee County. The amendment helps, in part, to fulfill this identified need. The proposed amendment is consistent and furthers this Objective of the Lee Plan.

POLICY 135.1.9: *The county will ensure a mix of residential types and designs on a countywide basis by providing for a wide variety of allowable housing densities and types through the planned development process and a sufficiently flexible Future Land Use Map.*

The proposed plan amendment furthers this policy by incorporating a Restoration Strategy that permits the restoration of the property incentivized by clustered development. The project will utilize the planned development process.

POLICY 135.9.5: *New development adjacent to areas of established residential neighborhoods must be compatible with or improve the area's existing character.*

POLICY 135.9.6: *Lee County will administer the planning, zoning, and development review process in such a manner that proposed land uses acceptably minimize adverse drainage, environmental, spatial, traffic, noise, and glare impacts, as specified in county development regulations, upon adjacent residential properties, while maximizing aesthetic qualities.*

The proposed Restoration Strategy is compatible with the existing residential neighborhoods adjacent to the subject property such as the Burgundy Farms and Six L's residential neighborhoods. The Restoration Strategy will improve the area's existing character. The Restoration Strategy will minimize adverse drainage, environmental, spatial, traffic, noise, and glare impacts upon adjacent residential properties while maximizing aesthetic qualities. The development footprint portion of the Restoration Strategy is clustered interior to the property with substantial setbacks from adjacent uses. The Strategy will permanently preserve a large portion of the site as open space, containing re-created flowways and wildlife habitat which will maximize aesthetic qualities of the site. The proposal is consistent and furthers these provisions of the Lee Plan.

CONCLUSIONS

The proposed amendment represents a unique opportunity to incentivize the restoration of significant on-site natural resources such as flowways and wildlife habitats. The Restoration Strategy furthers the intent of the Lee Plan's Tier 1 properties and in particular the Corkscrew Farms property. The plan amendment is consistent with protecting the public potable wells adjacent to Corkscrew Farms. The proposal is consistent with the intent of the Lee Plan as discussed in this analysis.

Corkscrew Farms
Part IV. Amendment Support Documentation
E. Internal Consistency with the Lee Plan
3. Adjacent Local Governments & Their Comprehensive Plans

The proposal will have no affect on existing local governments and their comprehensive plans. The closest local government to the subject property is the new Village of Estero. The Restoration Strategy will improve surface and groundwater levels and water quality, provide Corkscrew Road safety improvements, and provide assistance in meeting ambulance response times all of which will provide a benefit to the Village of Estero.

Corkscrew Farms
Part IV. Amendment Support Documentation
E. Internal Consistency with the Lee Plan
4. State Policy Plan & Regional Policy Plan Discussion

State Comprehensive Plan

The proposed plan amendment is consistent and furthers the adopted State Comprehensive Plan. The State Comprehensive Plan is adopted as part of the Florida Statutes, Chapter 187. This Chapter has specific goals specific to topics such as Children, Families, The Elderly, Housing, Health, Public Safety, Water Resources, Coastal and Marine Resources, Natural Systems and Recreational Lands, Air Quality, Energy, Hazardous and Nonhazardous Materials and Waste, Mining, Property Rights, Land Use, Urban and Downtown Revitalization, Public Facilities, Cultural and Historical Resources, Transportation, Governmental Efficiency, The Economy, Agriculture, Tourism, Employment, and Plan Implementation. Relevant portions are discussed below.

187.201(4) Housing

> *Goal – The public and private sectors shall increase the affordability and availability of housing for low-income and moderate-income persons, including citizens in rural areas, while at the same time encouraging self-sufficiency of the individual and assuring environmental and structural quality and cost-effective operations.*
>
> *Policies – 3. Increase the supply of safe, affordable, and sanitary housing for low-income and moderate-income persons and elderly persons by alleviating housing shortages, recycling older houses and redeveloping residential neighborhoods, identifying housing needs, providing incentives to the private sector to build affordable housing, encouraging public-private partnerships to maximize the creation of affordable housing, and encouraging research into low-cost housing construction techniques, considering life-cycle operating costs.*

The proposed project will increase the availability of moderate income housing in this rural portion of Lee County. The proposal includes assuring environmental quality through significant onsite preservation and restoration of land including the re-creation of flowways. The proposal seeks to incentivize these preservation and restoration activities with appropriately placed residential development to offset these costs. The proposal represents a public-private partnership that has the potential to restore the county owned parcel that is surrounded by project restoration.

187.201(5) Health

> *Goal – An environment which supports a healthy population and which does not cause illness.*

Policies-

a. Every Florida resident has a right to breathe clean air, drink pure water, and eat nutritious food.

b. The state should assure a safe and healthful environment through monitoring and regulating activities which impact the quality of the state's air, water, and food.

c. Government shall ensure that future growth does not cause the environment to adversely affect the health of the population.

The proposed development will promote a healthy lifestyle. Residents will experience clean air and will have potable water provided by Lee County Utilities. The proposal includes recreational amenities such as tennis courts, bocce and pickle courts, fitness center, a pool, a play ground, and open play field. Sidewalks will be provided throughout the development. The developer will comply with all required state monitoring requirements.

187.201(6) Public Safety

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

Policies –

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

The Lee County Sheriff's Office has reviewed the request and has provided a review letter that provides that the proposed development does not affect their ability to provide core services. The Sheriff's Office provided that the agency does not object to the proposed Comprehensive Plan Amendment for the subject site. This letter also provides that the applicant "shall provide a Crime Prevention Through Environmental Design (CPTED) report" at the time of application for new development orders or building permits.

The developer of the project will assist in funding for a local ambulance. This has the potential to reduce response times for emergency calls to not only the proposed development but also to existing developments along the Corkscrew Road corridor. In addition, the Estero Fire District has stated that a new fire station is being planned in close proximity to the subject site. The District provides that the new fire station is being planned in the vicinity of 6 L's Farm Road and Corkscrew Road. In addition, the developer constructed water main along Corkscrew Road will allow for fire protection to hundreds of existing residents and properties.

Project on-site storm water management has the potential to limit the existing Corkscrew Road flooding. Project reconstruction of historical on-site surface water flow and

recreated flowways will help to reduce flooding of homes and properties in the Burgundy Farms neighborhood.

187.201(7) Water Resources

> *Goal – Florida shall assure the availability of an adequate supply of water for all competing uses deemed reasonable and beneficial and shall maintain the functions of natural systems and the overall present level of surface and ground water quality. Florida shall improve and restore the quality of waters not presently meeting water quality standards.*
>
> *Policies -*
> *1. Ensure the safety and quality of drinking water supplies and promote the development of reverse osmosis and desalinization technologies for developing water supplies.*
> *2. Identify and protect the functions of water recharge areas and provide incentives for their conservation.*
> *3. Encourage the development of local and regional water supplies within water management districts instead of transporting surface water across district boundaries.*
> *4. Protect and use natural water systems in lieu of structural alternatives and restore modified systems.*
> *5. Ensure that new development is compatible with existing local and regional water supplies.*
> *9. Protect aquifers from depletion and contamination through appropriate regulatory programs and through incentives.*
> *10. Protect surface and groundwater quality and quantity in the state.*

The proposed project better protects the adjacent public water sources versus the existing agricultural activities. The restoration strategy includes creating a water regime on the site that more closely mimics the historic hydrology. The proposal includes significant preservation and restoration activities that protect the function of the water recharge areas on the site. The proposal uses a green infrastructure strategy to incorporate restored flowways in the design of the project. The proposal is compatible with the existing potable well field and conservation land uses in the project vicinity. Substantial setbacks as specified in the amendment documentation are incorporated in the design of the project. The Restoration Strategy will protect surface and groundwater quality and quantity.

The Restoration Strategy will enhance hydrology to thousands of acres of existing public conservation lands. These lands are located north and east of the subject site. In addition, there is the opportunity to accommodate additional county public potable water well locations along the north property line. This has the potential to increase potable water use quantities for the area as deemed necessary by the county. The proposed project will utilize less surficial aquifer water than the existing agricultural use.

187.201(9) Natural Systems and Recreational Lands

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

Policies -

1. Conserve forests, wetlands, fish, marine life, and wildlife to maintain their environmental, economic, aesthetic, and recreational values.

3. Prohibit the destruction of endangered species and protect their habitats.

4. Establish an integrated regulatory program to assure the survival of endangered and threatened species within the state.

6. Encourage multiple use of forest resources, where appropriate, to provide for timber production, recreation, wildlife habitat, watershed protection, erosion control, and maintenance of water quality.

7. Protect and restore the ecological functions of wetlands systems to ensure their long-term environmental, economic, and recreational value.

8. Promote restoration of the Everglades system and of the hydrological and ecological functions of degraded or substantially disrupted surface waters.

10. Emphasize the acquisition and maintenance of ecologically intact systems in all land and water planning, management, and regulation.

The Restoration Strategy for the subject site will preserve all of the remaining forested areas of the site with very minimal wetland impacts. The strategy will permanently preserve wildlife habitat for endangered and threatened species such as the Florida panther. The strategy will restore ecological functions of the onsite wetland systems and will restore several flowways. The project furthers these provisions of the State Comprehensive Plan.

187.201(12) Hazardous and Nonhazardous Materials and Waste

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

Policies. -

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

The project has been reviewed by the Lee County Solid Waste Division and they have provided a review letter dated December 10, 2014. This letter provides that they are capable of providing solid waste collection service for the planned development.

187.201(14) Property Rights

> *Goal. - Florida shall protect private property rights and recognize the existence of legitimate and often competing public and private interests in land use regulations and other government action.*
>
> *Policies. -*
>
> *1. Provide compensation, or other appropriate relief as provided by law, to a landowner for any governmental action that is determined to be an unreasonable exercise of the state's police power so as to constitute a taking.*
>
> *2. Determine compensation or other relief by judicial proceeding rather than by administrative proceeding.*
>
> *3. Encourage acquisition of lands by state or local government in cases where regulation will severely limit practical use of real property.*

The proposed Restoration Strategy and associated comprehensive plan amendment represents a balancing of public and private interests concerning the use of the subject site. The Restoration Strategy will result in significant restoration of the site at no cost to the public.

187.201(15) Land Use

> *Goal. - In recognition of the importance of preserving the natural resources and enhancing the quality of life of the state, development shall be directed to those areas which have in place, or have agreements to provide, the land and water resources, fiscal abilities, and service capacity to accommodate growth in an environmentally acceptable manner.*
>
> *Policies. -*
>
> *1. Promote state programs, investments, and development and redevelopment activities which encourage efficient development and occur in areas which will have the capacity to service new population and commerce.*
>
> *2 Develop a system of incentives and disincentives which encourages a separation of urban and rural land uses while protecting water supplies, resource development, and fish and wildlife habitats.*

There are or will be adequate services available to the site to accommodate the proposed development in an environmentally acceptable manner. The Restoration Strategy will protect potable water supplies as well as restoring onsite wildlife habitats.

187.201(17) Public Facilities

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

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

There are adequate public facilities to provide service to the proposed development. The proposed development will pay all required permit and impact fees, as well as all utility connection fees. The developer constructed water main along Corkscrew Road will allow fire protection to hundreds of existing residents and properties. Developer participation in construction upgrades to the existing Corkscrew Road sewer will provide increased sewer capacity to the area. The developer of the project will assist in providing funds for a local ambulance which has the potential to reduce response times to area emergency calls. The proposal is consistent with these provisions of the State Comprehensive Plan.

187.201(19) Transportation

Goal. - Florida shall direct future transportation improvements to aid in the management of growth and shall have a state transportation system that integrates highway, air, mass transit, and other transportation modes.

Policies. –
9. Ensure that the transportation system provides Florida's citizens and visitors with timely and efficient access to services, jobs, markets, and attractions.

The proposed plan amendment proposes to fund operational improvements for Corkscrew Road to help assure that the project and Corkscrew Road corridor residents have timely and efficient access to services, jobs, markets, and attractions.

187.201(21) The Economy

Goal. - Florida shall promote an economic climate which provides economic stability, maximizes job opportunities, and increases per capita income for its residents.

Policies. -
3. Maintain, as one of the state's primary economic assets, the environment, including clean air and water, beaches, forests, historic landmarks, and agricultural and natural resources.
12. Encourage the development of a business climate that provides opportunities for the growth and expansion of existing state industries, particularly those industries which are compatible with Florida's environment.

187.201(24) Employment

Goal. - Florida shall promote economic opportunities for its unemployed and economically disadvantaged residents.

Approval of the requested Restoration Strategy and comprehensive plan amendment promotes the business climate in Lee County, providing employment opportunities in an environmentally responsible manner.

The proposed plan amendment is consistent with and generally furthers the State Comprehensive Plan. The Construction Industry is well established in the community and the subject site's Restoration Strategy assures it's compatibility with the environment including water resources and wildlife habitat.

Strategic Regional Policy Plan (SRPP)

The Southwest Florida Regional Planning Council provides the following discussion on it's website concerning the SRPP:

The Strategic Plan follows a format that is somewhat different than previous plans, which required that Regional Planning Councils prepare plans that were comprehensive in nature. Under the old format, the Regional Comprehensive Policy Plan was required to address each of the 26 goals in the State Comprehensive Plan. Due to changes in the rule that governs regional plans, however, Regional Planning Councils are now required to address only five issues. Additional issues can be included if the Regional Planning Council so chooses.

The Strategic Plan consists of two volumes. Volume One, the Description of the Region, is an updated version of Volume One of the Comprehensive Plan. As its name implies, the Description of the Region contains a variety of information and statistical data about Southwest Florida.

Volume two contains Regional Goals, Strategies, and actions related to Affordable Housing, Economic Development, Emergency Preparedness, Natural Resources, and Regional Transportation. The relevant portions are discussed below.

Affordable Housing Element

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

Strategy: Increase the supply of affordable housing through public and private efforts.

The proposed development will increase the supply of moderately priced housing.

Economic Development

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

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

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

Approval of the proposed restoration strategy and comprehensive plan amendment increases employment opportunities in the housing construction industry that is an important component of the local employment sector. The proposal will also result in significant environmental restoration with employment in the restoration phase as well as monitoring phase. This portion of the plan also addresses streamlining regulatory processes to avoid delays:

Strategy: Streamline regulatory processes to avoid delays for new or expanding businesses, provided safety, health, and environmental requirements are met.

Actions:
1. Encourage local governments to expedite the permitting process and to assist businesses in permitting and licensing matters.

The proposal meets or exceeds all environmental requirements.

Natural Resources

Goal 2: The diversity and extent of the Region's protected natural systems will increase consistently beyond that existing in 2001.

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

Actions:
7. Create a map depicting regionally significant lands that private landowners agree will be voluntarily managed to maintain their environmental value, yet still provide them with economic benefits, without the need for public acquisition consideration (such lands would be candidates for future conservation easements).

The subject site is identified by the Lee Plan as being a Tier 1 Priority Restoration property. The proposal will protect onsite natural systems as well as recreating natural systems such as flowways that have been impacted by previous agricultural activities. This will be done without the need for public acquisition. The project will enhance the hydrology of the adjacent public conservation lands.

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

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

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

The proposal will result in the long term sustainability of the onsite natural resources as well as adjacent conservation lands as well as public well fields. Wildlife habitat will be improved and maximized by the restoration activities that are proposed.

Goal 5: Effective resource management is maintained across the borders of sovereign public agencies.

Strategy: All plans concerning the same resource shall have as objectives the same effective results.

Actions:
4. The SWFRPC will promote State, regional and local agencies to consider lands identified as priority one habitat south of the Caloosahatchee River and areas formally designated as critical habitat for the Florida Panther to be incorporated in their agency's natural resource management programs and provide intergovernmental coordination for the implementation of management practices that, based on existing data, would be expected to result in maintaining habitat conditions for the panther.

The proposed restoration strategy will maintain habitat conditions for the panther.

Regional Transportation

> *Goal 1: Construct an interconnected multimodal transportation system that supports community goals, increases mobility and enhances Southwest Florida's economic competitiveness.*
>
> *Strategy: Ensure that a network of interconnected roads exist that provide the timely, cost effective movement of people and goods within, through and out of the Region.*
>
> *Goal 4: A regional transportation system that provides Southwest Florida citizens and visitors with safe, timely and efficient access to services, jobs, markets and attractions.*

The proposed plan amendment proposes operational improvements to Corkscrew Road to help assure that project residents have timely and efficient access to services, jobs, markets, and attractions.

The Corkscrew Farms proposed Restoration Strategy and comprehensive plan amendment is consistent with and generally furthers the Strategic Regional Policy Plan.

Corkscrew Farms
Part IV. Amendment Support Documentation
F. Additional Requirements
2. Requests moving lands from a Non-Urban Area to a Future Urban Area

The requested amendment **maintains** the property's DR/GR Future Land Use Map designation. The proposal protects and conserves the natural resources located on the subject site. The restoration strategy includes creating a water regime on the site that more closely mimics the historic hydrology. The proposal includes significant preservation and restoration activities that protect the function of the water recharge areas on the site. Restoration details will be provided in the zoning and development order processes. The proposal uses a green infrastructure strategy to incorporate restored flowways in the design of the project. The proposal is compatible with the existing potable well field and conservation land uses in the project vicinity. Substantial setbacks are incorporated in the design of the project. The design of the project will protect surface and groundwater quality and quantity. Almost 60% of the site will be protected as permanent open space.

The project will pay the costs associated with providing utilities to the site. The developer constructed water main along Corkscrew Road may allow fire protection to hundreds of existing residents and properties if there are excess capacities. Developer participation in construction upgrades to the existing Corkscrew Road sewer will provide increased sewer capacity to the area. The development will establish a fund to provide mitigation for density reduction. The fire district was already planning for a fire station in close proximity of the subject property. The developer will assist in providing funding for a local ambulance to assure adequate response to emergency medical requests from the subject site if necessary. The project will buildout over many years and this issue maybe addressed in the future as other projects contribute impact fees for emergency medical services.

The proposal will help satisfy identified needs for service expansion as well as restoration of the subject site. The request represents a unique opportunity to incentivize the restoration of this priority restoration site.

Corkscrew Farms
Part IV. Amendment Support Documentation
G. Proposal Represents Sound Planning Principles

The proposed plan amendment represents sound planning principles. The Lee Plan, by the property's Tier 1 designation, recognizes that the restoration of the property is a public priority. The proposal balances this public interest with those of the property owner. The proposed strategy represents a kind of public-private partnership. The public interest, hydrologic restoration and protection of wildlife habitat, is satisfied by the proposed restoration strategy. The private interest in utilizing the property is satisfied in a responsible environmental manner. This represents sound planning.

The proposal utilizes the planning principle of clustered development. Sir Ebenezer Howard advocated this form of development at the turn of the 20th century. He is known for his publication "Garden Cities of Tomorrow" that stressed people living in harmony with nature. This publication is credited in founding the garden city movement that influenced planning in the United Kingdom and the United States. Clustered development is a development arrangement that places buildings in concentrated portions of a site, leaving the remainder of the site undeveloped. Typically this form of development is utilized to limit sprawling development patterns while protecting such things as open space, environmentally sensitive areas and natural resources. The project design protects the remaining forested areas of the site, restores onsite flowways, and provides large setbacks to adjacent uses. These uses include publically owned conservation and mitigation lands as well as single family residences.

The proposed strategy also utilizes the planning principle of conservation design or designing with nature. The process of selecting the appropriate restoration and development scenario for the property utilized an analysis of the property's attributes such as property location and location of adjacent uses, soils, topography, previous uses and associated impacts, natural resources, including both surficial as well as subterranean. One guiding principle of conservation design is that environmentally sensitive areas must be first identified and designated as non-buildable. The analysis of the subject site identified the location of wetlands and forested areas on the site and incorporated these areas into the project's open space plan. This process represents sound planning for the subject site, its natural resources, and existing surrounding uses.

The restoration plan offers many benefits to the region in which the project is located. The project design will provide community members with recreational amenities that promote healthy lifestyles. Promoting healthy lifestyles is another sound planning principle that is incorporated into the project through a variety of means. The design accommodates community sidewalks throughout the developed portion of the site. The project will include various recreational amenities such as a pool, tennis courts, bocce and pickle ball courts, exercise room, and open field play area.

The project represents compatible land uses with existing surrounding uses which include public conservation and mitigation, public wellfield, single family, recreational, and agricultural uses. The project single family uses are clustered inside the site with large setbacks to adjacent uses. Project open spaces, recreated flowways and restored native habitats compliment and enhance adjacent public preserves. The project is compatible to the area's wildlife habitat. The end result is larger contiguous native habitats suitable for use by large mammals and other protected species.

The project is compatible with the ongoing public withdrawal of groundwater for potable use. The project has less of an impact to groundwater resources than the permitted agricultural use. The project will control the application of fertilizers and pesticides. The project will potentially result in an expansion opportunity to the wellfield along the northern property boundary.

The project single family uses are compatible with the existing single family homes located to the west and south of the site. The project will help to alleviate local flooding issues. The project will retain the existing forested area on the west side of the subject property, effectively screening the existing Burgundy Farms neighborhood from the project's single family homes. Project compatibility represents sound planning for the region in which the property is located.

The project will be serviced by centralized water and sewer infrastructure. This is compatible with the project's location adjacent to a public potable wellfield. This represents sound planning with the DR/GR's goal of protecting groundwater resources.

The project establishes several funds. One provides funds that the county can utilize to reduce density in the DR/GR. A second one provides funds that can be used for future road improvements to Corkscrew Road. The project will assist in providing funds for an ambulance. These funds represent sound planning for this region of the county.

The project represents a high quality master planned project. The addition of the project to this portion of the county will enhance the quality of the community. The project will be a distinctive community with a sense of place in the DR/GR. The project is sensitive to its location, the location of public preserves, and the location of the public wellfield and nearby single family uses. The applicant respectively asks that the proposed Lee Plan Amendment that proposes the Priority Restoration Strategy Overlay for the subject site is approved to realize these regional benefits.

Corkscrew Farms Restoration Strategy

Kevin L. Erwin CE PWS
Kevin L. Erwin Consulting Ecologist, Inc.

February 18, 2015

Vision

To restore a key ecological feature within the DRGR by returning approximately 700 acres of Corkscrew Farms' over-drained agricultural lands back to productive, fully functioning and sustainable wetland habitats.

Measurable Restoration Goals

- Preserve all existing native wetlands onsite.
- Restore the historic flow ways on site.
- Restore and create historic hydric pine, cypress and marsh wetland habitats in existing agricultural land.
- Increase wildlife utilization by listed species, especially the wood stork.
- Increase biological diversity of wildlife onsite.
- Increase species richness of native vegetation communities.
- Open the existing berm along the project's north boundary to reestablish historic sheet flow from the north.
- Control surface water at an elevation determined to reestablish the surficial ground water profile in terms of both elevation and duration.
- Reestablish the historic groundwater profile.
- Improve hydrological conditions on adjacent public conservation lands.
- Reconnect wildlife corridors to adjacent public lands
- Remove all exotic and nuisance vegetation from the existing native wetlands and uplands.
- Significantly improve existing water quality conditions.

- Improvement to the current high water elevations seasonally experienced in the Burgundy Farm Subdivision.
- The restoration will limit the discharge of surface water to the Flint Pen Strand to predevelopment flows.

Introduction

The Farms occupies a strategic location in the DRGR immediately adjacent to the Airport Mitigation Park to the north and the Corkscrew Regional Mitigation Bank (CRMB) to the east. Kevin Erwin Consulting Ecologist, Inc. (KECE) has designed and implemented the successful restoration of the CRMB (SFWMD) and Imperial Marsh Preserve (Lee County 20/20) projects east of and adjacent to the Corkscrew Farms site.

The Farms property slopes from a high elevation of 28.0' in the northeast corner to 19.0' in the southwest corner. This significant drop in elevation along with the existing network of agricultural drainage canals and ditches creates an adverse impact to the hydrology of the site as well as the public conservation lands to the east and north by draining those properties. All surface water currently flows into Flint Pen Strand to the west via the Corkscrew Road drainage ditches.

Ground and surface waters that historically pooled on this site during the wet season are now quickly drained directly into the Corkscrew Road drainage ditches that parallel the roadway along the southern boundary of the site. The property is currently subject to agricultural uses including sod farming, row cropping and improved pasture. An agricultural berm extending along the north property line intercepts wet season sheet flow moving south from the Airport Mitigation Park and drains west into the vicinity of the Burgundy Farms subdivision which lies west of and adjacent to the site.

Summary of benefits resulting from the restoration

- Restoration of nearly 700 acres of historic wetlands at no cost to the public.
- Historic water levels and hydroperiods will be restored.
- Restoration will reestablish the historic groundwater profile.
- Restoration will improve hydrological conditions on thousands of acres of adjacent public lands to the north and east.
- Historic flow ways will be restored across the site.

- Water quality will significantly improve onsite
- Improved water quality and groundwater levels will benefit the adjacent Lee County Utilities well field.
- Surface water discharge to the Flint Pen Strand will be limited to predevelopment flows.
- Opening the northern berm to southerly surface flow will improve the current high water elevations seasonally experienced in the Burgundy Farm Subdivision.
- Wildlife utilization and species diversity onsite will significantly increase.
- The incorporation of this form of restoration with residential development will set a new, high standard for future development in Lee County.

Designing the Corkscrew Farms Restoration Plan

Ecological History

Work began when KECE conducted an ecological history of the site and surrounding lands to determine the predevelopment ecological and hydrological conditions. KECE relied in part on the DRGR study that the firm completed for Lee County in 2008. It was this study that identified the property as a Tier 1 Priority Restoration Site. 1953 aerial photographs (Figure 1 shows the subject property) from the Soil Conservation Service (now the National Resource Conservation Service), which were the clearest reliable representation of historic conditions, were scanned and plotted for mapping by KECE to determine the approximate historic hydrological conditions for the entire study area.

The major habitat associations identified relate to specific hydroperiod and water depth conditions (hydropatterns), with each being color-coded to illustrate the historical hydropatterns in the DR/GR (Figure 2 shows the subject property).

KECE found that during a significant part of any year with normal rainfall much of the DR/GR, including the Farms, had historically been flooded or had groundwater levels close to the surface. The deeper ponds, cypress swamps, and marshes have been assigned dark blue with progressively shallower, shorter hydroperiod (shorter duration of inundation) wetlands being assigned lighter shades of blue (Figure 2). This representation illustrates the location of historic flow ways and headwater sheet flow areas and allows us to roughly calculate the historic capacity for water storage during an annual cycle.

Figure 1.

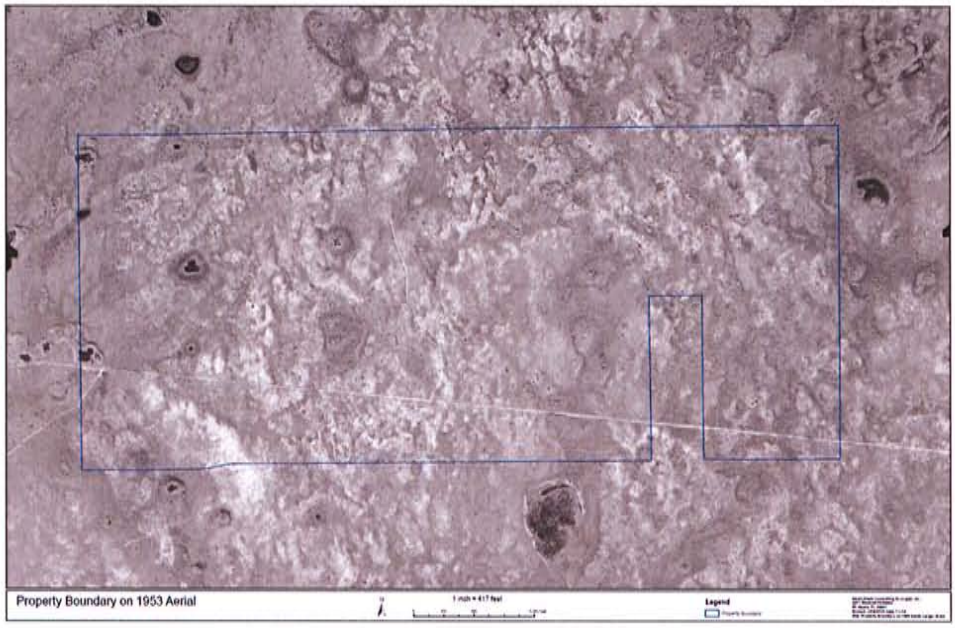
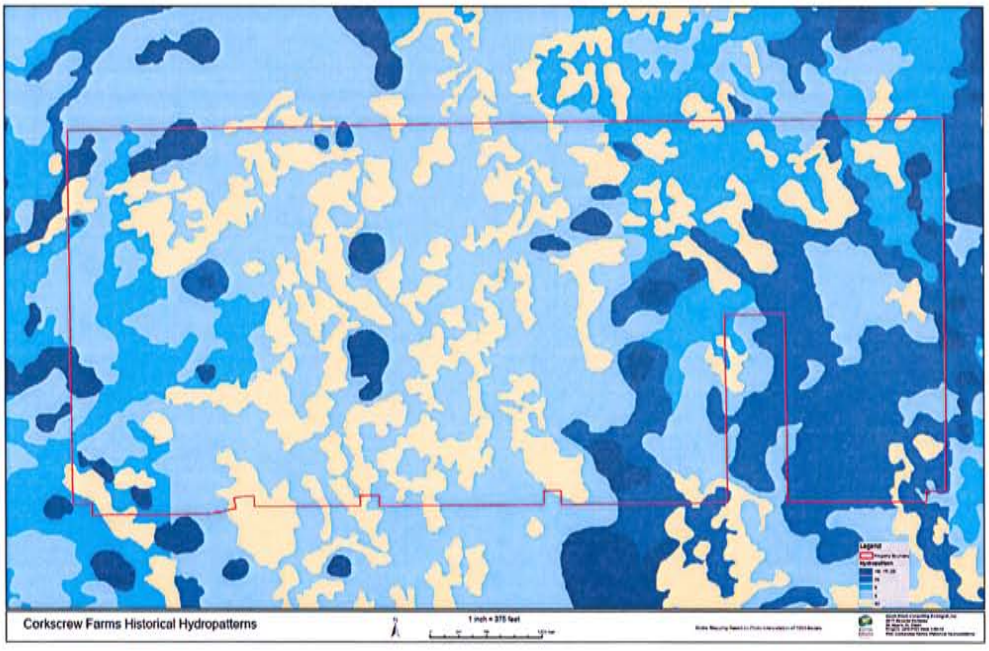


Figure 2.



Existing conditions

With the long-term goal of creating a plan to restore wetlands by reversing manmade site drainage, the first year objective is obtaining data to support engineering and construction plans based on hydrologic models and flora and fauna sampling locations for the sites. The models require information on the current onsite and offsite conditions to be determined by previous studies, baseline hydrology and wildlife information, which requires data collection. Data collection and analysis will be undertaken by KECE and Barraco.

In June of 2014 we installed shallow groundwater monitoring wells and rain gauges across the site to collect existing conditions hydrological data. This data along with the inflow and out flow calculations provided by the project engineer (Barraco) will provide the information required to determine the approximate amount of water that remains available to "rehydrate" the drained farm fields. Similar data, if available, will be requested from the public mitigation lands located to the north and east of the Farms.

Available topographic data (Lee County LiDAR) will be field verified and used by Barraco and KECE to estimate future wet season water levels and hydroperiods on the site given various restoration scenarios we evaluate.

Planning

Each scenario evaluated by Barraco and KECE will involve different combinations of ditches, ditch plugging and risers (water control structures) to "back-up" the water in cascading stages across the site from northeast to southwest. The scenario that best retains water onsite in manageable basins and mimics the historical hydropatterns, by raising the groundwater levels, increasing hydroperiods and restoring the historic flow ways, will be used as the basis for the restoration plan. Surface water will once again be allowed to sheet flow into the site from the lands north and east of the Farms at selected locations where it is now blocked by berms and currently re-directed by farm ditches and canals.

The restoration targets (appropriate vegetation community types for the expected post-restoration hydrological conditions), will be the same as those selected and now doing very well at the CRMB. The restored farm fields will contain a mixture of very shallow (0 to 3" depth) hydric pine forest, slightly deeper shallow cypress and marsh (3" to 12". Unfilled, ditch segments (within basins/no positive outfall) will be re-contoured to become deep marshes and ponds which will provide wood storks with the early nesting season (November-December) foraging habitat that is now rare in this area. National Audubon Society research suggests that wood stork nesting declines in this region are linked to loss of shallow wetlands.

There are a few, drained cypress and hydric pine wetlands remaining on the site. These areas are heavily infested with problematic exotic plant species. They will first be cleaned of all exotics then rehydrated as part of the overall restoration plan.

In order to manage and convey surface water on the site several flow ways will be constructed as part of the restoration plan. These flow ways will be located in the vicinity of the historical flow ways. The constructed flow ways design resembles natural sloughs with wide floodplains. Flow way water levels will be maintained by water control structures, thus allowing water to be stored upstream of the structure and allowing storm flows to pass over or through the structure. A major water control structure will be located at the southwest corner of the site where all surface waters will eventually collect and discharge into the Corkscrew Road ditch and eventually into Flint Pen Strand to the west.

When completed the design and phasing of the restoration plan will resemble the restoration plan KECE developed for the CRMB (Figure 3).

Figure 3.

Offsite Benefits

Historically, a high groundwater table and shallow surface water flowed slowly from the northeast to the southwest. When the Farms agricultural drainage system is replaced by restored wetlands and flow ways the elevated groundwater table will reduce the drainage and extend the hydroperiods of the wetlands within the adjacent Airport Mitigation Park and the CRMB. Seasonal high water levels in the Farms restored wetlands will be managed to match the preferred water levels on the adjacent public lands. The adjacent lands will not experience an increase or decrease in seasonal high water levels however; a restoration of normal hydroperiods (based on normal rainfall) will result.

Prior to the restoration of the CRMB and the Imperial Marsh Preserve the uncontrolled drainage of the lands along the north side of Corkscrew Road quickly drained these properties as well as the adjacent public lands (Airport Mitigation Park) to the north. As the CRMB hydrology was restored followed by the Imperial Marsh Preserve restoration the regional hydrology improved with less water being drained south into the Corkscrew Road ditch. The Farms wetland restoration will complete the last section of restoration of the agricultural drainage system, thus improving hydrological conditions to the north and east while also benefiting the Burgundy Farms subdivision to the west.

No adverse impacts to adjacent public lands or private properties will result from the planned residential development and wetland restoration only a net improvement in conditions.

Expected benefits to wildlife

The restoration of native upland pine forest, cypress and hydric pine wetlands and large expanses of pasture will result in significant benefits to wildlife. These restored habitats are large and will be connected to similarly restored public lands to the north and east thus reestablishing wildlife corridors for species such as panthers and bears.

In normal rainfall years, restored hydric pine, cypress and marsh habitats with extended hydroperiods will provide foraging and nesting habitats for many wetland dependent species including woodstorks and other wading birds. Large numbers of woodstorks will forage in the restored wetlands and particularly the deeper pools created from the enhanced ditch segments and berm removal areas.

There will be no adverse impacts to upland or wetland forests as a result of the restoration or residential development. These forested areas, now infested with exotic and nuisance species of vegetation, will be enhanced through exotic control thus significantly improving potential habitat for species like the fox squirrel, indigo snake. bonneted bat.

Existing farm operations that minimize the site's utilization by species like burrowing owls and Caracara will be discontinued. Row cropping and sod farming will be replaced with restored habitats and land management techniques more conducive to successful nesting and breeding of these and other wildlife species..

KECE's monitoring of similar restoration projects, like CRMB and Little Pine Island, has shown significant increases in biological diversity from the baseline to the restored condition. Many resident and migratory species of birds, reptiles and mammals not currently utilizing the site will quickly be attracted to the restored conditions. Wildlife diversity and density will be recorded by KECE at selected times throughout the wet and dry season to measure changes in ecological values. Changes in vegetative cover will also be periodically summarized by KECE. These data will be essential to gauge the success of the restoration effort and any adaptive management required.

Shallow wetlands of the type that once dominated the Corkscrew area are a priority habitat for wood storks, wading birds and other wetland dependent species. These wetlands contain, and during seasonal dry periods concentrate, the small forage fish nesting wood storks and their chicks need. The most important wood stork nesting site is at Audubon Corkscrew Swamp Sanctuary. From that site storks forage in a radius of approximately 30 kilometers, which is referenced as the core foraging area. Audubon's research indicates the loss of more than 82% of the historic extent of shallow wetlands in the form of wet prairies within the core foraging area. This loss of wetlands is thought to be the most significant factor in regional wood stork decline in the Corkscrew watershed and other parts of the Western Everglades.

Audubon's wood stork colony located within the Corkscrew Swamp Sanctuary boasts the historically largest and arguably most important individual wood stork colony in the United States. Despite this status, the colony also holds the dubious distinction of being among the least stable within its US breeding range. Wood storks are a keystone indicator species for the health of southwest Florida's wetlands and are one of 13 indicator species for Everglades restoration listed by the South Florida Ecosystem Restoration Task Force. The SFWMD and Army Corps of Engineers (ACOE) use wood stork distribution and abundance as an indicator of restoration progress and success.

In addition to the significant wood stork benefits the Corkscrew Farms restoration project will provide, there will be ecological lift to many species that are dependent on shallow wetlands for portions of their life cycles, including a number of other listed species. The restoration will benefit wading birds such as tri-colored herons, little blue herons, white ibis, roseate spoonbills, glossy ibis and snowy egrets as well as mammals such as panthers, black bears and fox squirrels. Migratory and resident birds will also benefit along with the community of aquatic fauna (fish, invertebrates, reptiles and amphibians) that will occupy the restored wetlands. KECE ecologists expect to see the

prey base (fish and invertebrates) increase and concentrate early in the nesting season attracting foraging storks and other wading birds. Other increases should include mammal traffic and diversity of other wildlife as the water levels rebound to near historic patterns and native plant communities become established.

Implementing the restoration plan

The construction of the Farms wetland restoration will be supervised by the project ecologist, Kevin L. Erwin Consulting Ecologist, Inc. The firm has designed and managed the construction and maintenance of more than 100 restoration projects over the past 35 years, many within Lee County such as; CRMB, Imperial Marsh Preserve, Prairie Pines Preserve, Gateway; Six Mile Cypress Preserve North, Western Cape Coral/Matlacha Pass, Florida Gulf Coast University and the Little Pine Island Wetland Mitigation Bank. This experience is a key element of the successful implementation of the Farms restoration plan.

Phasing

The construction activity will be phased according to the activity and season following the schedule of residential development. Initial activity will focus on removing exotic vegetation of all proposed restoration and enhancement areas (pastures and native habitats). Preparation of fields will be accomplished in phases, basin by basin, commencing at the upstream end of the system. Water levels will be restored in a basin only when all other restoration activities are finished in that basin.

Restoration Actions

Restoration in each basin will include a combination of the following activities. Detailed time-lines will be prepared prior to construction and used to manage all planned activities.

1. **Exotic vegetation removal from natural areas**. All natural wetland and upland areas will be cleaned of exotics and nuisance species prior to any hydrological restoration. This enhancement activity typically involves foliar treatments of approved herbicides on herbaceous species and basal applications to trees such as Schinus and Melaleuca.

2. **Prescribed burning**. Fire is an important tool for maintaining the upland habitats following exotic removal and may also be used to prepare the pasture areas for restoration.

3. **Wildlife mitigation.** Wildlife permitting will likely require management protocols for the listed species onsite, such as burrowing owls, to provide protection and enhancement during the restoration activities. All residential development related

panther and woodstork impacts will be offset through the purchase of mitigation bank credits.

4. Removing perimeter ditch berms to natural grade. The berm along the north perimeter of the site will be opened to provide a reconnection of the flow ways offsite and through the restored sections of the Farms. Openings will be located to minimize disturbance to mature trees such as pines and oaks that are now established on sections of the berm

5. Removing farm field ditch berms and backfilling ditch segments. Sections of ditches will be backfilled using the adjacent berms which will be removed to an elevation equal to or less than natural grade. This action eliminates any drainage function and will provide additional wading bird habitat and biological reservoirs for forage species.

6. Raising the groundwater table. This action will involve manipulating the water control structures to enable an evaluation of seedbank response and natural recruitment.

7. Herbiciding and tilling farm fields for seed bank enhancement. This alternating process of herbiciding followed by tilling will control exotics and nuisance plant species while stimulating the natural recruitment of desirable native species from the seed bank.

8. Planting and direct seeding tree, shrub and herbaceous species. A combination of planting or direct seeding may be done within those areas of the restoration site where natural recruitment from the seedbank is lacking. Activities such as row cropping and sod production often impact the seedbank found in the shallow O and A-horizons of the soil. Bare-root seedlings of trees and shrubs, such as slash pine and cypress, will be selectively planted to enhance the process of farm field restoration. Some localized bare-root plantings or direct seeding may be used to enhance the areas where berms have been removed and ditches re-shaped as well as flow way construction.

Enhanced tree plantings may be incorporated along the borders of the residential development footprint to improve the aesthetic appeal of the early stages of restoration. These plantings would be within a 50 ft. wide zone of the restoration area, adjacent to all development (back of lots), and would be planted on 20 ft. centers with shrubs planted on alternating 20' centers subject to review and approval by Lee County and the Florida Fish and Wildlife Conservation Commission.

9. Construction of flow ways and installation of water control structures. These ecological engineering design components will be constructed and installed as each phase as the restoration progresses in a basin by basin sequence. The water control structures utilized will vary from culvert risers to concrete weirs, very similar to the CRMB and Imperial Marsh restoration projects.

The culvert risers will allow the project ecologist to adaptively manage the water levels in each basin. Having this capacity to manage the water levels this way is important, especially during the first few years of a forested wetland restoration project. The concrete weirs will control water levels over larger areas of the site particularly within the flow ways which will be collecting surface water and like a natural slough, will provide direction to the surface water sheet flow onsite.

The constructed flow ways will vary in width from 50 to 150 ft. width with an excavated cross-section that resembles a natural slough complete with a deeper, meandering stream channel. The broad and shallow side-slopes planted with wetland species will be flooded as wet season water levels rise behind the water control structures. As the wet season ends, water levels will slowly recede back into the stream channel providing forage opportunities for wading birds like the wood stork.

9. Construction monitoring and adaptive management of the restoration. All of the restoration activities will be monitored by the project ecologist to provide guidance on the continuing restoration work and also information to agencies as required.

The following photos of similar restoration activities were taken at the CRMB.

Removing invasive exotic vegetation (2003)

Pasture before restoration (2004)

Disking former agricultural fields in early stages of restoration (2004)

Using prescribed fire as a management tool (2005)

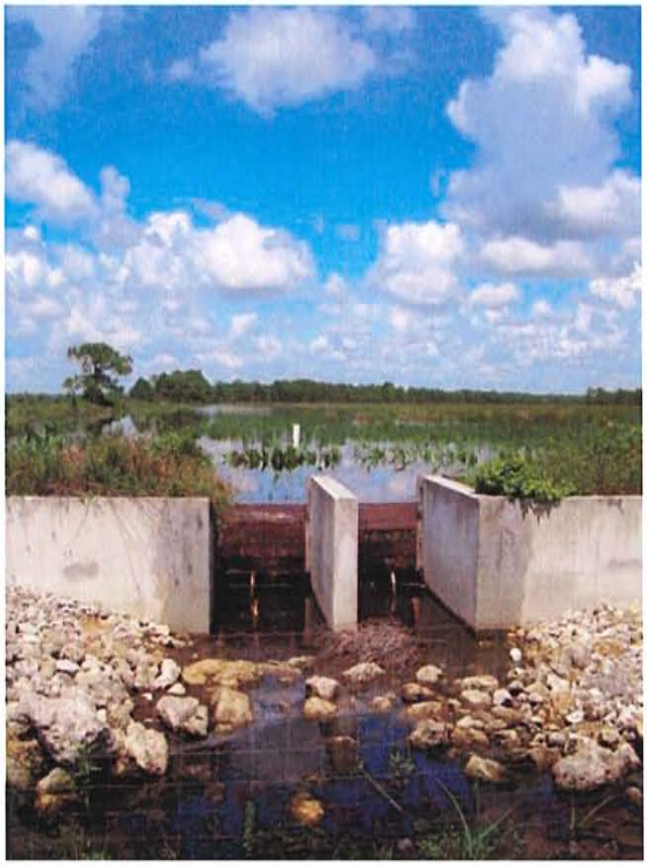
Seeding hydric pine flatwoods pasture restoration area (2005)

Planting bare root pine tree seedlings in restored hydric pine habitat (2007)

Hydric pine restoration area (2008)

Backfilling agricultural ditches (2008)

Backfilled and graded ditches to become hydric pine flatwoods (2008)



Main control structure, adjacent to the Farms, on Corkscrew Road (2009)

Releasing water to maintain appropriate water levels (2009)

Breaching existing berm to restore sheet flow (2008)

Restored sheet flow through breached berm (2008)

Created freshwater marsh (2008)

Monitoring restoration results (2009)

Mixed flock of wading birds (2009)

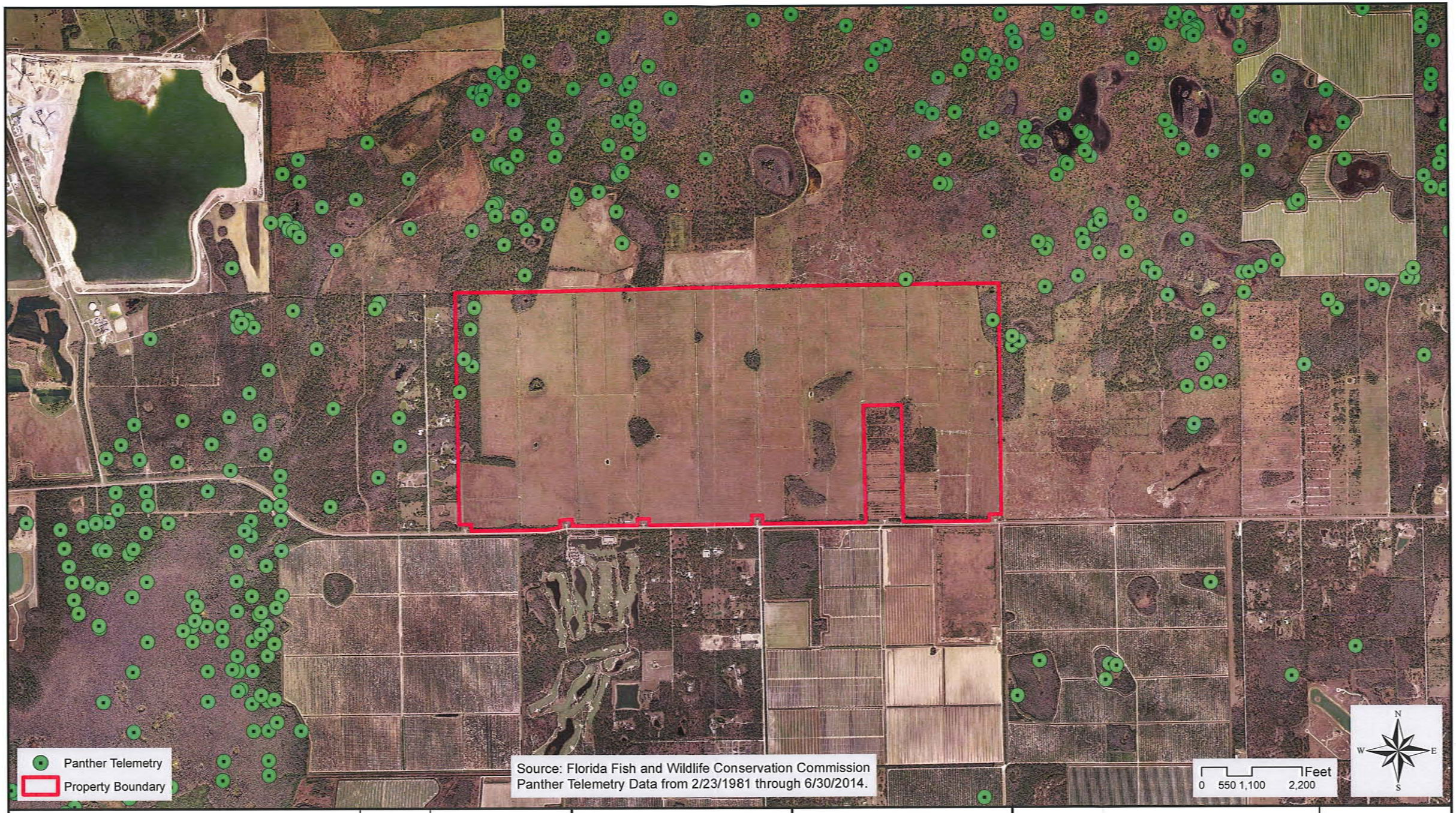
Long-term monitoring and management of the restoration areas.

The proposed design of the Corkscrew Farms wetland restoration focuses on outcomes and restoration targets that will be sustainable for many years with the guidance of an appropriate long-term management plan which will be developed and adopted.

A key to successful, cost-effective, long-term management will be the adoption of a long-term monitoring plan in the restoration area. A long-term monitoring plan will provide ecological data such as water levels, vegetative cover and wildlife utilization. This information will guide the adaptive management of the site.

The restoration areas will be identified as conservation areas as the project is approved and will be placed in conservation easements. The conservation easements will prevent the encroachment of future development as well as activities that are incompatible with the goal of sustaining the restored conservation areas in good ecological health. These areas will be physically managed following the long-term management plan prepared by the project ecologist, implemented by the Home Owners Association with the assistance of an appropriately skilled environmental professional.

Long term management activities required within the restored conservation areas will include periodic surveys of vegetation and wildlife within the restoration area, control of exotic and nuisance plant species, regulating water levels, maintenance of the water control structures and access.



Panther Map		FILE NAME	Corkscrew farms panther map	PROJECT DESCRIPTION	PREPARED FOR	KEVIN ERWIN CONSULTING ECOLOGIST INC.
		LOCATION	Corkscrew_Farm/mapsaves	CORKSCREW FARMS	CAMPROP INC.	2077 Bayside Parkway, Fort Myers, Florida 33901 Phone: +1 239-337-1505; Fax: +1 239-337-5983
		DWG DATE	02-16-2015			www.environment.com
PROJECT / FILE NUMBER	SHEET NUMBER	BY	Kristoffer Bowman	LEE COUNTY, FLORIDA	4954 ROYAL GULF CIRCLE FORT MYERS, FL. 33966	KEVIN ERWIN Consulting Ecologist, Inc.
CPICF101		TECH	Vince Wang			

Responses to Division of Natural Resources Insufficiency Comments:

1. The Storm water runoff must be directed to specifically designed and designated storm water treatment areas; it must not be directly diverted or placed into the proposed lakes.

Applicant Response: The project must provide 1/2" of treatment of all storm water runoff from all sodded areas located within the development footprint prior to discharge into the onsite lake storm water management system.

2. The applicant shall not discharge storm water from the development into the County's MS4 system unless specifically authorized by the Division of Natural Resources.

Applicant Response: With regard to discharge requiring authorization from the Lee County Division of Natural Resources please consider adding the following the following: "if the project can show a post development 10% reduction of nitrogen and phosphorous in the discharge of storm water into the Lee County MS4 system, which will be evidenced by a Nutrient Loading Analysis to be reviewed and approved by the South Florida Water Management Distinct, no additional approvals will be required.

3. Will the applicant be proposing the use of the onsite lakes for boat traffic?

Applicant Response: There will be no motorized recreational boat traffic within the project;

4. Were there any investigations conducted to check the presence of chemical or other forms of contaminants onsite that may have potential for leaching into groundwater or surface water runoff?

Applicant Response: Correspondence from Universal Engineering regarding the Phase I and Phase II Environmental Site Assessment is attached.

5. There is a proposal of use of onsite Surficial aquifer wells as an irrigation source, will this entail a centralized irrigation system for everyone's use or numerous withdrawals for the lakes?

Applicant Response: The proposed use of Surficial Aquifer System (SAS) wells as an irrigation source will include a centralized control system for all irrigated areas, i.e., residential and common areas. The irrigation source will be from the five (5) SAS wells currently permitted by South Florida Water Management District (SFWMD) for agricultural use under Water Use Permit No. 36-0687-W. There are no other groundwater or surface water withdrawals proposed as irrigation sources and individual home owners will be prevented from adjusting or modifying the centralized control system irrigation schedule.

6. How will the applicant propose to meet or exceed requirements of the wellfield protection zones which this project falls within?

Based on Lee County's Wellfield Protection Ordinance, No. 07-35, Composite Iso-Travel Time Map showing protection zones, the Proposed Allowable Residential Land Use appears to be within Wellfield Protection Zones 3 and 4 (travel time one to five years and five to ten years, respectively) and borders Zones 1 and 2 with travel times of six months and one year. These wellfield protection zones regulate the following:

- *The use, handling, production or storage of regulated substances... in quantities greater than those set forth in section 14-208.*

  The Proposed Allowable Residential Land Use is a residential community. Therefore, regulated substances will not be permitted to be used, handled or stored on-site in quantities greater than those set forth is section 14-208. As per section 14-208, there will not be an aggregate of any one, or all, regulated substances on a given parcel or in a certain building exceeding 110 gallons if the substance is a liquid, or 1,110 pounds if the substance is a solid.

- *Wastewater effluent disposal, except that public access reuse of reclaimed water and land application under the conditions set forth in F.A.C. 62-610, Part Ill, may be permitted. Where public access reuse is permitted the chloride content must be no greater than 500 milligrams per liter.*

  The proposed allowable land use eliminates 130 individual septic systems near the existing Lee County Utilities (LCU) production wells. There will be no wastewater disposal on-site. Currently, public access to reuse water is not available.

- *Liquid waste disposal and solid waste disposal*

  The proposed land use is a residential community. There will be no liquid or solid waste disposal.

- *Earth mining within a 500-foot radius of an existing wellhead.*

  The proposed land use is a residential community and eliminates the possibility of a mine being constructed as was proposed by the current owner. There will be no mining onsite or within a 500-foot radius of any existing wellhead.

- *Stormwater or surface water discharged within this protection zone must conform to existing South Florida Water Management District and state department of environmental protection rules.*

The residential stormwater and surface water management system will be subjected to review and approval from the South Florida Water Management District (SFWMD) and the Florida Department of Environmental Protection (FDEP). All stormwater discharges will be incompliance with their existing rules.

- *Sanitary Hazard Zone. Sanitary hazards are prohibited within a 100-foot radius around an existing or proposed public water supply well.*

There will be no on-site septic systems and no sanitary hazards within a 100-foot radius of existing and proposed public water supply wells.

- *Abandoned wells on property lying within the ten-year travel time zone of wells regulated by this article will be physically plugged in accordance with the provisions of Lee County Ordinance No. 06-09, Section 9.3.4.*

Any wells to be abandoned on-site will be properly plugged and abandoned as per Lee County Ordinance No. 06-09, Section 9.3.4, as well as adhering to proper plugging and abandonment requirements of SFWMD Rule 40E-3.531(3) F.A.C.

The proposed residential land use will meet and exceed the requirement of the Lee County Wellfield Protection Ordinance.

7. *Will the applicant be proposing dewatering onsite?*

Applicant Response: Dewatering is anticipated for installation of utilities and construction of lakes. All dewatering will remain "onsite" (no discharge off site). The dewatering plan shall also include a recharge trench to be placed between any dewatering operation and Lee County well heads along Corkscrew Road prior to entering an onsite impoundment.

8. *A lake management plan shall be submitted for review and approval by the Division of Natural Resources. Among other issues, the plan shall address the following issues:*

Best management practices for fertilizers and pesticides,
Erosion control and bank stabilization including any proposed boat slips,
Lake maintenance requirements,
Water Quality Monitoring Plan which will document the specifics of the surface water and groundwater monitoring networks,
Wellfield protection.

Applicant Response: It is agreed a Lake Management Plan which addresses 1) Best Management Practices for fertilizers and pesticides, 2) Erosion control and bank stabilization, 3) Lake maintenance requirements, 4) Water Quality Monitoring Plan which will document specifics of the surface water and ground water monitoring networks, 5) Wellfield protection, will be submitted as part of the Development Order application.

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Proposed Corkscrew Farms
1,350 Acre Property
Corkscrew Road
Estero, Lee County, Florida

Universal Project No. 0540.1400126.0000
October 7, 2014

Prepared on behalf of:

Camprop, LLC
4954 Royal Gulf Circle
Fort Myers, FL 33966

Attention: Mr. Anthony Cameratta

Prepared by:
Universal Engineering Sciences, Inc.
5971 Country Lakes Drive
Fort Myers, Florida 33901
www.UniversalEngineering.com
COA BG33

Prepared by:
Matthew Hoffman, E.I.
Staff Engineer

Signature

Reviewed by:
Michael Geden, P.G.
Senior Geologist

Signature

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October 7, 2014

Camprop, LLC
4954 Royal Gulf Circle
Fort Myers, FL 33966

Attention: Mr. Anthony Cameratta

Reference: **Phase I Environmental Site Assessment**
Proposed Corkscrew Farms
1,350 Acre Property
Corkscrew Road
Estero, Lee County, Florida
Universal Project No. 0540.1400126.0000

Dear Mr. Cameratta:

Universal Engineering Sciences, Inc. (Universal) has completed the Phase I Environmental Site Assessment (ESA) following the American Society for Testing and Materials (ASTM) format E1527-13 for the above-referenced property. The purpose of this evaluation was to identify recognized environmental conditions as described in ASTM E1527-13, which is consistent and compliant with the United States Environmental Protection Agency's (EPA) final *All Appropriate Inquiries* rule (effective November 1, 2006).

Based on the results of the Phase I ESA conducted at the Property, evidence of unresolved recognized environmental conditions was not identified based on Universal's review of regulatory and historical resources and our site reconnaissance with the exception of the following:

> An area of waste oil impacted soil was removed from a currently unknown area of the Property in 2002. Arsenic was reported in a confirmatory soil sample obtained during these previous remedial activities at a concentration of 2.7 milligram per kilogram (mg/kg) which exceeds the Direct Exposure Residential Soil Cleanup Target Level (SCTL) of 2.1 mg/kg. No further assessment was performed in this area of the Property. Based on this reported SCTL exceedance and the planned future use of the Property, UES recommends further assessment of this area of the Property to confirm and possibly delineate area of arsenic impacts.

Further, UES has identified the following Business Environmental Risk (BER):

> Row crops and sod farming operations have been located at various portions of the Property since the early 1970s. These activities mainly occurred between the 1970s and 1990s. However, portions of the site were used for crops at the time of our site reconnaissance. These onsite agricultural operations likely included the use of pesticides, herbicides and fertilizers which may contain hazardous chemicals. Other chemicals (such as arsenic and copper) may also have been used. The proper storage, handling and application of approved chemicals does not constitute a recognized environmental condition at the subject property. Improper or long term application of compounds

containing arsenic and copper has been shown, at times, to leave these metals in the soil at elevated concentrations. In the event that the land usage changes from agricultural to commercial or residential, the elevated metals concentrations may exceed the recommended exposure levels established by the Florida Department of Environmental Protection (FDEP). While the FDEP does not require the cleanup of agriculturally applied compounds, the presence of these compounds in excess of the exposure concentrations may present future liability should the property be redeveloped. While not a REC, if the land usage is to change, UES recommends soil sampling to determine if these compounds are present in concentrations which exceed health based criteria.

The User of this report is required to ensure that continual obligations regarding the subject property are met following the issuance of this Phase I ESA. The User should ensure that all contractors, visitors, etc. to the subject property are following best management practices in preventing any possible release, discharge, etc. of petroleum products, hazardous materials or waste, or any substance likely to result in a recognized environmental condition. In the event of a future discharge or release on the subject property, the current subject property owner or responsible party is required to report the discharge/release to all applicable regulatory agencies.

Universal appreciates this opportunity to provide environmental services to you and looks forward to future endeavors. Please contact the undersigned if you have any questions regarding this report.

Respectfully submitted,
Universal Engineering Sciences, Inc.

Matthew Hoffman, E.I.
Staff Engineer

Michael Geden, P.G.
Senior Geologist

1 cc: Addressee (email: tcameratta@camerattacompanies.com)
1 cc: Ray Blacksmith – (email only: rblacksmith@camerattacompanies.com)

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PHASE II ESA
CORKSCREW FARMS PROPERTY
CORKSCREW ROAD
ESTERO, LEE COUNTY FLORIDA

UES Project No. 0540.1400126.0000

November 3, 2014

Prepared For:

Camprop, LLC
4954 Royal Gulf Circle
Fort Myers, FL 33966

Prepared By:

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5971 Country Lakes Drive
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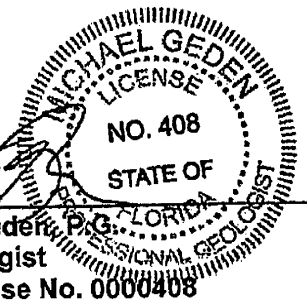
(239) 995-1997

Prepared By:

Matthew A. Hoffman, E.I.
Staff Engineer

Reviewed By:



Michael J. Geden, P.G.
Senior Geologist
Florida License No. 0000408

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November 3, 2014

Camprop, LLC
4954 Royal Gulf Circle
Fort Myers, FL 33966

Attention: Mr. Anthony Cameratta

Reference: Phase II ESA
Corkscrew Farms Property
Corkscrew Road
Estero, Lee County, Florida
UES Project No. 0540.1400126.0000

Dear Mr. Cameratta:

Universal Engineering Sciences, Inc. (UES) has completed soil sampling activities following the Florida Department of Environmental Protection's (FDEP) Standard Operating Procedures (SOPs) for the above referenced site located in Estero, Lee County, Florida. The purpose of this evaluation was to evaluate the business environmental risk (BER) identified in our Phase I ESA, dated October 7, 2014, (UES Project No. 0540.1400126.0000).

Based on the BER identified during the Phase I ESA, the collection and laboratory analyses of soil samples at the subject property were performed as part of this evaluation. Based on results of our soil sampling activities we conclude the following:

> Arsenic was reported in one (1) of the fifty (50) soil samples (sample B-48, obtained in the eastern portion of the Property) collected at the Property at a concentration which exceeds the DER-SCTL of 2.1 mg/kg for arsenic. However, we understand this area of the Property is not planned for future development. Further, based on the remaining lab results which reported no arsenic results above 1 mg/kg, no further evaluation at the subject property is warranted at this time. If the area of the Property in the vicinity of B-48 is redeveloped in the future, further confirmatory soil sampling may be necessary at that time.

Based upon the results of our soil sampling activities, no further investigation at the subject property is warranted at this time.

We appreciate the opportunity to be of service as your environmental consultant on this project and look forward to a continued association. If you have any questions concerning this report or if we may be of any further service, please contact us at mhoffman@universalengineering.com or 239-995-1997.

Respectfully submitted,
Universal Engineering Sciences, Inc.

Matthew A. Hoffman, E.I.
Staff Engineer

MAH/mah

3 cc: Client (email tcameratta@camerattacompanies.com)
1 cc: Ray Blacksmith – Camprop, LLC (email only: rblacksmith@camerattacompanies.com)

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- Pensacola
- Rockledge
- Sarasota
- Tampa
- West Palm Beach

November 17, 2014

Mr. Ray Blacksmith
Camprop, LLC
4954 Royal Gulf Circle
Fort Myers, FL 33966

Reference: **CONFIRMATORY SOIL SAMPLING**
Corkscrew Farms Property
Estero, Lee County, Florida
UES Project No.: 0540.1400126.0000

Dear Mr. Blacksmith:

Universal Engineering Sciences, Inc. (UES) is pleased to present the results of our confirmatory soil sampling at the above referenced site ("subject property"). Based on the results of our recent Phase II Environmental Site Assessment (ESA) performed at the subject property, arsenic was reported in one soil sample, sample B-48, at a concentration of 11 milligrams per kilogram (mg/kg) which exceeds the Direct Exposure Residential - Soil Cleanup Target Level (DER-SCTL) of 2.1 mg/kg for arsenic.

On November 10, 2014 UES obtained five (5), confirmatory surficial (0 to 6 inches below land surface) soil samples at the location of B-48 (CS-1) and five feet around the previous sample (CS-2 to CS-5). The soil samples obtained were analyzed for Arsenic using EPA Method 6010.

The soil sampling activities were conducted in accordance with the Florida Department of Environmental Protection's Standard Operating Procedures as required for General Sampling Procedures (FS 1000), Soil Sampling (FS 3000) and according to the Cleaning/Decontamination Procedures (FC 1000).

Arsenic was not detected above laboratory detection limits in the five confirmatory soil samples (CS-1 to CS-5) collected at the subject property. A summary of the soil analytical data is attached in **Tables 1 and 2**. Copies of the Chain-of-Custody Documentation and Laboratory Reports are also attached.

Based on the results of the confirmatory soil sampling no further assessment is warranted at this time.

The findings of this report represent our professional judgment; UES offers or extends no warranty, express or implied. These findings are relevant to the dates of our site work and the information cited herein. This report should not be relied upon to represent site conditions on other dates or at locations other than those specifically cited within the report. Universal Engineering Sciences, Inc. can accept no responsibility for interpretations of these data made by other parties.

Should you have any questions concerning these supplemental foundation recommendations, please contact us at your convenience.

Respectfully Submitted,
UNIVERSAL ENGINEERING SCIENCES

Matthew A. Hoffman, E.I.
Staff Engineer

1 cc- addressee (email: rblacksmith@camerattacompanies.com)
Attachments: Tables
Laboratory Results and Chain of Custody Report

Estero Fire Rescue
21500 Three Oaks Parkway
Estero, Florida 33928
(239) 390.8000
(239) 390.8020 (Fax)
www.esterofire.org

February 18, 2015

Mr. Brandon Dunn
Principal Planner
Lee County Community Development Services
1500 Monroe Street
Fort Myers, Florida

Re: Corkscrew Farms

Mr. Dunn,

Estero Fire Rescue will no longer require a Fire Department Service Delivery Concurrency Evaluation for the project known as Corkscrew Farms based on the following mitigation efforts by the applicant Joseph Camerata;

1. 5 acres of the site property along Corkscrew Road will be deeded to Estero Fire Rescue for the location of a future fire station upon the closing of the property by Mr. Camerata.
2. A check in the amount of $17,000 shall be forwarded to Estero Fire Rescue for the purpose of Radio System Enhancement also at the time of closing by Mr. Camerata.

If I may be of any further help with this project please feel free to contact at 239-390-8000.

Sincerely,

Phillip Green
Division Chief of Prevention

CC Joseph Camerata

Progressive Water Resources
Integrated Water Resource Consultants
5589 Marquesas Circle • Suite 202 • Sarasota, FL 34233 • (941) 552-5657

March 3, 2015

Anura J. Karuna-Muni, P.E.
Operations Manager
Lee County Natural Resources Department
1500 Monroe Street
Fort Myers, FL 33901

RE: Response to Staff's Request for Additional Information
CPA2015-00001 - Corkscrew Farms

Dear Mr. Karuna-Muni:

This correspondence is provided in response to Lee County staff's additional comments after review of the information provided in the Comprehensive Plan Amendment (CPA) application dated January 12, 2015, as well as an email correspondence from Carl Barraco dated February 10, 2015, and a letter dated February 19, 2015 from Matt Noble. On behalf of the Applicant and the other consultants working on this project, Progressive Water Resources (PWR) appreciates the staff's continued coordination on the project and we are confident that your questions are comprehensively answered by the following responses. To help assist with your review of our responses we have included both the subject and staff's recent comments requiring additional information in bold text, followed by the Applicant's responses.

1) **Subject: County's MS4 system**

Staff Comment: This element may be satisfied with the submittal of a Water Quality Monitoring Plan. While staff encourages monitoring water quality as part of Lake Management Plan, outfall monitoring is required on a quarterly basis for 5 years. Monitoring frequency may be reduced after 5 years if water quality standards are met. The Lake Management Plan shall include remedial actions if water quality falls below state standards. Please submit the Plan for staff review. Discharge water quality from the site into the MS4 system shall meet state standards for the designated class.

Response: In addition to the Conceptual Outfall Water Quality Monitoring Plan outlined below, please see the proposed Lake Management Plan provided in response to Topic No. 5 (below).

Conceptual Outfall Water Quality Monitoring Plan

New stormwater discharges will be authorized provided they meet all applicable requirements of the South Florida Water Management District (SFWMD) Environmental Resource Permitting (ERP) program authorized pursuant to Part IV of Chapter 373, F.S.

As part of the ERP approval (to be pursued after the approval for land use change) a quarterly water quality sampling plan will be developed to create a baseline of nutrient discharge leaving the site prior to development and to show a reduction in nutrient discharge leaving the site post-development. It is important to note that the on-site lakes will be discharging into a few hundred acres of restoration area where additional water quality treatment and storage will be provided.

Quarterly (January, April, July and October) sampling will be conducted at two proposed locations that include an upstream location where surface water enters the property (if available) and a downstream discharge outfall site proposed to be located at the southwest portion of the property. Since the stormwater management system has not been fully designed for the development, the proposed upstream and downstream monitoring locations are conceptual at this time.

Surface water samples will be collected in accordance with Florida Administrative Code (F.A.C.) 62-160, F.A.C, and Florida Department of Environmental Protection (FDEP) standard operating procedure (SOP) for surface water sampling (FDEP SOP 001/01), FS 2100.

The proposed sampling plan will be part of an approved ERP and will include quarterly sampling for the first five years with discontinuation of sampling if water quantity standards are met. Parameters to be collected and analyzed by a NELAC-certified laboratory and will include, but are not limited to, the following field and lab parameters:

- Field Parameters: Depth of Water, Dissolved Oxygen (DO), pH, Temperature, Specific Conductivity, Turbidity and Color
- Lab Parameters: Biological Oxygen Demand, Total Nitrogen, Nitrite/Nitrate, Ammonia, Total Kjeldahl Nitrogen, Total Phosphorus, and Ortho-phosphate

Results of the quarterly sampling will be provided 30 days following the sampling event and summarized in an annual report to be submitted to the SFWMD by April 15th of each year. The annual report will summarize the results for the preceding year from January 1 to December 31. The annual report will include the field and laboratory results for each quarter as well as an analysis and comparison to accepted water quality standards.

2) Subject: Contaminants and the potential for leaching into groundwater or surface water runoff.

Staff Comment: The information provided so far indicates higher levels of Arsenic in soil samples exceeding the direct exposure Soil Cleanup Target Level (SCTL) of 2.1 mg/kg. The Universal Engineering report recommended further assessment of the subject area. Please describe any actions the applicant has taken to mitigate the impacts due to higher levels of Arsenic. The staff has concerns over contamination of surface or groundwater and public water supply. The applicant must demonstrate that Arsenic levels in surface and groundwater leaving the site are below the state standards.

Response: In the November 17, 2014 letter from Universal Engineering Sciences (UES), (**Attachment 1**), that was previously provided, a second confirmatory investigation of soils was performed on November 10, 2014 at the same site where a single soil sample exceeded the direct exposure residential - soils cleanup target level of 2.1 mg/kg for arsenic. Five confirmatory samples were taken, with one sample at the same location previously tested and four (4) additional samples taken at distances of 5 feet from the previous test location. Arsenic was not detected above the laboratory detection limit in all five confirmatory samples. Therefore, UES concluded that no additional assessment was warranted based on the negative results. Therefore, based on the testing performed by UES, arsenic levels are below state standards.

3) Subject: Wellfield protection zones

Staff Comment: Please provide a site plan with an overlay of wellfield protection zones. It appears that based on the information provided so far, portions of the proposed development footprint fall within the wellfield protection zones. Therefore, the applicant will be required to obtain a wellfield protection permit. Conditions will be incorporated into the permit in order to comply with the provisions of the Wellfield Protection Ordinance.

Response: Please find attached **Figure 1**, the requested overlay of wellfield protection zones for the subject properties. As discussed with PWR's David Brown, P.G. on February 26, 2015, the Applicant agrees with County staff that the subject properties are located within Lee County-designated wellfield protection zones. The Applicant further acknowledges that certain types of land use activities are prohibited therein. The specifically "prohibited and regulated activities within protection zones" are identified in Sec. 14-214.

As previously stated, there is no intention to use, handle, produce or store the regulated substances in quantities greater than those set forth in Section 14-208, nor does the Applicant have any intention of disposing of wastewater effluent, liquid or solid waste, or to conduct any earth mining. No abandoned wells will be located onsite. All stormwater management activities will be conducted in conformity with applicable ERP rules and ERP permits from the SFWMD. Further, no "sanitary

hazards" will be located within 100 feet from any existing or known proposed public water supply wells.

The County's stated Purpose and Intent for Chapter 14 (Environment and Natural Resources) Article III (Wellfield Protection) is to safeguard the public health, safety and welfare through regulation of storage, handling, use or production of hazardous substances or sanitary hazards in close proximity to potable water supply wellfields. Because the Applicant has no intention of using, handling, producing or storing the regulated substances as described in the County's ordinance, the Applicant does not believe the County's ordinance and associated regulations requires them to obtain a wellfield protection permit.

4) Subject: Flooding

Staff Comment: Response not yet submitted. The applicant will be required to maintain historic flow patterns and accommodate storm water runoff from the north through the site as depicted.

Response: The proposed allowable land use will maintain to the greatest extent practicable the current land elevations and gradients. Therefore, the drainage pattern will generally maintain the historic northeast to southwest gradient flow-way (s), while extending the hydroperiods of the existing, drained, on-site wetlands, in addition to accommodating runoff into the proposed lakes, and the Southwest Storage Area. The lakes will also be discharging into a few hundred acres of on-site restoration area where additional water quality treatment and storage will be provided.

In addition, consistent with supporting information provided for rezoning of Corkscrew Farms property concurrent with CPA2015-0001, it is important to note the site design proposes a re-created flow-way on the western side of the property to help alleviate wet season flooding within the Burgundy Farms neighborhood. The site design also incorporates two other re-created flow-ways to address surface water movement from off-site properties as well as movement on-site.

The development of the site is also subject to SFWMD ERP rules which require that development of the site not cause flooding or adverse impacts to wetlands and other water resources.

5) Subject: Lake management plan

Staff Response: A conceptual plan must be submitted for review and prior to approval of zoning or comprehensive plan amendment. An example of "COVENANT TO CREATE AN ENHANCED LAKE MANAGEMENT/MAINTENANCE PLAN" is attached for your reference.

Response: Please Refer to **Attachment 2**, for the Conceptual Covenant to Create an Enhanced Lake Management / Maintenance Plan.

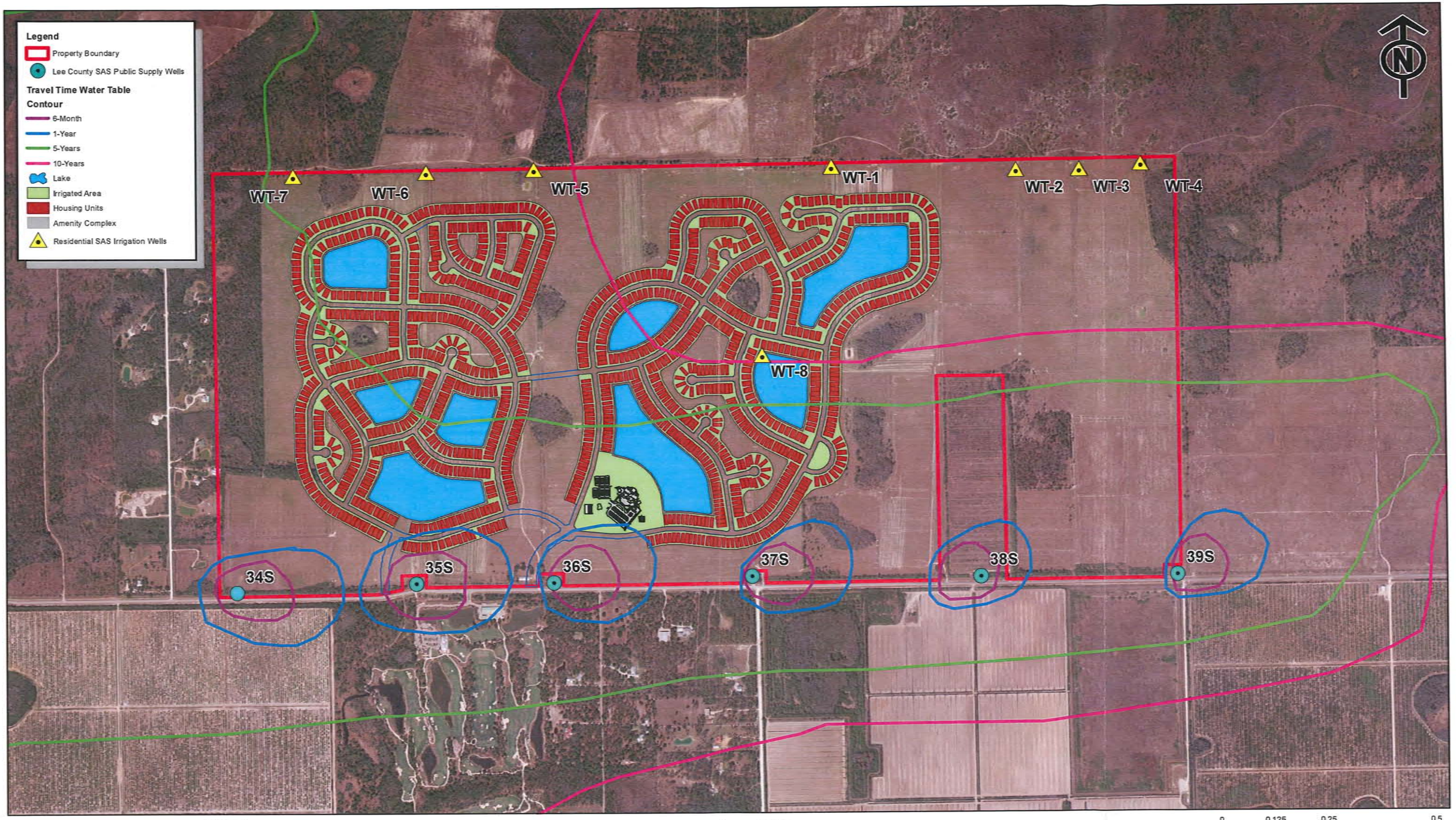
On behalf of the applicant, we would like to thank you for your consideration and assistance in this matter. If you have any questions or if I can be of assistance please do not hesitate to contact me at (941) 552-5657, extension 104.

Sincerely,

David J. Brown, P.G.
Principal
Progressive Water Resources, LLC

Attachments

cc: Ray Blacksmith, Cameratta Companies, LLC



Scale: 1:13,000 1/7/2014 Image: ESRI

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

Figure 1
Modified from Lee County
Wellfield Protection Ordinance Plate 2
Water-Table Aquifer ISO-Travel Time

Progressive Water Resources
Integrated Water Resource Consultants

Attachment 1

UNIVERSAL ENGINEERING SCIENCES
Consultants In: Geotechnical Engineering • Environmental Sciences
Geophysical Services • Construction Materials Testing • Threshold Inspection
Building Inspection • Plan Review • Building Code Administration

LOCATIONS:
- Atlanta
- Daytona Beach
- Fort Myers
- Fort Pierce
- Gainesville
- Jacksonville
- Kissimmee
- Leesburg
- Miami
- Ocala
- Orlando (Headquarters)
- Palm Coast
- Panama City
- Pensacola
- Rockledge
- Sarasota
- Tampa
- West Palm Beach

November 17, 2014

Mr. Ray Blacksmith
Camprop, LLC
4954 Royal Gulf Circle
Fort Myers, FL 33966

Reference: **CONFIRMATORY SOIL SAMPLING**
Corkscrew Farms Property
Estero, Lee County, Florida
UES Project No.: 0540.1400126.0000

Dear Mr. Blacksmith:

Universal Engineering Sciences, Inc. (UES) is pleased to present the results of our confirmatory soil sampling at the above referenced site ("subject property"). Based on the results of our recent Phase II Environmental Site Assessment (ESA) performed at the subject property, arsenic was reported in one soil sample, sample B-48, at a concentration of 11 milligrams per kilogram (mg/kg) which exceeds the Direct Exposure Residential - Soil Cleanup Target Level (DER-SCTL) of 2.1 mg/kg for arsenic.

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Should you have any questions concerning these supplemental foundation recommendations, please contact us at your convenience.

Respectfully Submitted,
UNIVERSAL ENGINEERING SCIENCES

Matthew A. Hoffman, E.I.
Staff Engineer

1 cc- addressee (email: rblacksmith@camerattacompanies.com)
Attachments: Tables
Laboratory Results and Chain of Custody Report

Progressive Water Resources
Integrated Water Resource Consultants
5589 Marquesas Circle • Suite 202 • Sarasota, FL 34233 • (941) 552-5657

Attachment 2
Conceptual Covenant to Create an Enhanced Lake Management / Maintenance Plan

This Covenant to Create an Enhanced Lake Management/Maintenance Plan (hereinafter referred to as the "*Covenant*") is created this _____ day of_____, 201__, by and between CAMPROP, INC., a Florida Corporation whose address is 4954 Royal Gulf Circle, Fort Myers, FL 33966 (hereinafter referred to as the "*Developer*"), for the benefit of **LEE COUNTY**, a political subdivision of the State of Florida, whose address is P.O. Box 398, Fort Myers, Florida 33902 (hereinafter referred to as the "*County*").

I. Recitals

WHEREAS, the County has duly adopted the Lee County Land Development Code ("*LDC*"), which, in §10-329, establishes the need to develop a lake maintenance plan which will provide for the long term maintenance of lakes and lake-shoreline areas and provide for the public's health and safety, preservation of property and enhancement of water quality; and

WHEREAS, the Developer owns or has acquired real property in Sections 23 and 24, Township 46 South, Range 26 East, and Section 19, Township 46 South, Range 27 East, in Lee County, Florida; and

WHEREAS, the Developer intends to develop a project to be known as Corkscrew Farms, which real property is more specifically described in Exhibit attached "A" (the "*Property*"), the description of which is hereby incorporated herein by reference; and

WHEREAS, the Developer must obtain a local development order from the County to plat and develop the Property; and

WHEREAS, the Developer has filed an application for the issuance of a local development order that will be known as Development Order Number _____; and

WHEREAS, DOS____ will include the construction of lakes on the Property; and

WHEREAS, pursuant to Lee County Land Development Code ("LDC") §10-329, the County has agreed to approve Developer's requested DOS_____upon the condition that Developer's development of the Property include a lake maintenance plan so as to achieve reasonable continuing compliance with the County regulations pertaining to lake slopes, littoral planting requirements and building setbacks on the Property; and

WHEREAS, the Developer intends this Covenant to provide guidelines and direction to any subsequent property owner(s), maintenance contractor(s) and any other persons conducting work on or in the lake bank slopes on the Property as set forth herein; and

WHEREAS, in furtherance of the agreement contained herein, the Developer hereby agrees to the terms and conditions of this Covenant and also agrees that the Property described in attached Exhibit "A" will only be sold, dedicated or conveyed subject to the terms and conditions contained herein.

NOW THEREFORE, in consideration of the County's approval of the DOS_____ and in further consideration of the mutual benefits and promises contained in the recitals contained herein, incorporated as part of this Covenant by reference thereto, the sufficiency of which is acknowledged, the Developer hereby agrees to construct and maintain the lake(s) approved in DOS_____ to the specific standards of that development order and as augmented herein, as follows:

II. Plan for Lake Management and Maintenance

A. Purpose for Plan

This Covenant has been created to ensure the subsequent development of the Property will be in compliance with DOS_____4, Lee County Zoning Resolution Number _____, LDC §10-329(d)(5) and Lee Plan Policy 33.3.3(2)(e), the terms and requirements of which are all incorporated herein by reference. This Covenant is written to identify the requirements for lake maintenance so that exotic vegetation is controlled, lake banks are maintained, desirable littoral plants flourish and water quality is enhanced within the project lakes. Generally, the below sections are applicable to every lake within the Property and as covered by the terms of DOS_____. However, due to the proximity to Lee County Well Fields there are specific guidelines herein in the section titled "PUBLIC WELL FIELD PROTECTION – ADDITIONAL REQUIREMENTS FOR LAKE CONSTRUCTION".

B. Maintenance Responsibility

In conjunction with a replat of the Property it is anticipated the Developer will establish and create a homeowner's association (herein referred to as *"HOA")* that will be responsible for maintenance of all features of the surface water management system including all lake areas. At a minimum, the maintenance responsibilities within any subsequent or resulting dedication on a plat or replat of the Property and any resulting Declaration for a HOA will require compliance with the terms and conditions as contained herein. Notwithstanding the maintenance obligations set forth herein, Developer expressly reserves for itself, its successors and assigns, the exclusive rights in and to ownership of the water in the lakes and the related uses.

C. Exotic and Nuisance Vegetation Control

The HOA is responsible for the removal (in perpetuity) of all exotic and nuisance vegetation as defined by the Lee County Land Development Code ("LDC'), 10-329. Lakes must be inspected annually and any prohibited vegetation must be removed by the use of hand clearing or appropriate herbicidal treatment. Herbicides may only be applied by a licensed applicator and applied in accordance with manufacturer specifications, all applicable local, state and/or federal guidelines and requirements, and as further outlined in the sections below. (Refer to "Pesticide, Herbicide or Fungicide Applications" and "Public Wellfield protection within this document.)

D. Littoral Vegetation Preservation

Littoral vegetation is required to be installed and maintained in perpetuity in all the lakes within the project in accordance with the landscape plans approved as part of DOS_____. Any littoral plants approved as part of DOS_____ that die must be replaced so that the total number and type of littoral plants remain in accordance with DOS_____ and the LDC requirements.

The presence and spread of littoral plants throughout the lakes is desirable and may help to improve the water quality within the lakes. The spread of littoral plants will be encouraged throughout the designated planted littoral shelves ("PLS's"). Mechanical trimming, mowing or the use of herbicides on desirable littoral plants is prohibited. Any trimming or removal of vegetation within PLS's required to promote the survival and viability of littoral vegetation must be performed by hand or by approved herbicides and methods as outlined herein. (Refer to section "Public Well field Protection herein for additional standards for herbicide application.)

Inspections of PLS's to verify the survival of required plants and replanting of littoral vegetation when required must be in accordance with County requirements.

E. Fertilizer Application

Beginning January I, 2014, per Florida Statute 482.1562, any person applying commercial fertilizer to an urban landscape must receive a limited certification for urban landscape commercial fertilizer application. The limited certification provides a means of documenting and ensuring compliance with best management practices for commercial fertilizer application to urban landscapes.

Any person(s) applying fertilizers within the project 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 Code of Laws and Ordinances of Lee County Florida Chapter 26, 26-60. (See also Lee County Ordinance No.

08-08.)

Certain general requirements are identified below:

1. Fertilizers containing nitrogen and/or phosphorus may not be applied to turf and/or landscape plants during the rainy season (June I through September 30 of each calendar year).

2. Fertilizer may not be applied, spilled or otherwise deposited on any impervious surfaces. Any fertilizer applied, spilled or deposited, either intentionally or accidentally, on any impervious surface must be immediately and completely removed. Fertilizer released on an impervious surface must be immediately contained and either legally applied to turf or any other legal site, or returned to the original or other appropriate container,

3. Fertilizer may not be applied in or within ten (IO) feet from the top of bank of any water body, seawall, designated wetland or wetland as defined by the rules of the Florida Department of Environmental Protection (Chapter 62-340 F.A.C).

4. Spreader deflector shields are required when fertilizing by use of any broadcast or rotary spreaders. Deflectors must be positioned such that fertilizer granules are deflected away from all impervious surfaces and water bodies, including wetlands.

5. Grass clippings and/or vegetative material may not be washed, swept or blown into storm water drains, ditches, conveyances, water bodies, roadways or other impervious surfaces.

6. A low maintenance zone is recommended adjacent to and on the sloped portion of lake banks not stabilized with hardened structures. The grass within the low maintenance zone is encouraged to be maintained higher than surrounding areas to allow the vegetation to help absorb and filter nutrients from runoff. Fertilizer usage in the low maintenance area is discouraged.

F. Erosion Protection and Lake Bank Maintenance

Lake banks are generally susceptible to erosion due to overland flow of storm water 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. Where the potential for bank erosion due to wave action is low, banks are designed at a 6:1 slope stabilized by sod. Where the potential for bank erosion due to wave action is high, banks may be designed with an enhanced stabilization cross-section consisting of a 4:1 slope with rip-rap stabilization.

Lake banks must be inspected annually to identity areas of erosion. Once identified, the erosion must be repaired and source of erosion shall be eliminated if possible. Where excessive erosion occurs, repair of the lake bank and/or enhancement of the stabilization cross-section may be necessary. Erosion repair on the lake banks may require permitting by the County.

Where applicable, roof drainage gutter outfall must be directed away from lake shorelines. The general layout of residential homes within the project prohibits such discharge, but the developer and home builders must ensure that roof drainage outfall is located so as to prevent the possibility of erosion of lake shorelines. If roof drainage results in lake bank erosion, the roof drainage must be corrected by the lot owner as directed by the HOA.

G. Lake Education Program

A narrative explaining the benefits of littoral vegetation, lake maintenance and water quality must be provided in the project newsletter as one is created and distributed. In addition, lake experts may be invited to the HOA meetings annually to discuss the lake system operation and maintenance requirements.

Individual owners of homes developed within the Property must be informed that they are prohibited from removing or trimming littoral vegetation within the project.

Additionally, the lake information package must include information specifying that the development is located in proximity to Lee County Well Fields, and express the extreme importance related to the elimination of introduction of hazardous materials into the lakes.

H. Pesticide, Herbicide or Fungicide Applications

All applications of pesticides, herbicides and/or fungicides shall be applied by a licensed applicator and applied in accordance with manufacturer specifications, all applicable local, state and/or federal guidelines and requirements and as further outlined in this section.

Commercial applicators of chemical lawn products must register annually with the HOA, its successors or assigns, and provide a copy of their current occupational license, proof of business liability insurance, and proof of compliance with licensing requirements. It should be noted that the HOA will be required to contract for the application of all pesticides, herbicides and/or fungicides within the Project, including on all residential lots, and individual lot owners shall be prohibited from applying pesticides, herbicides and/or fungicides to their lots without prior approval of the HOA.

The use of any chemical product in a manner that will allow airborne or waterborne entry of such products into surface water is prohibited. This rule will not apply to the use of chemical agents by certified lake management specialists or the development's maintenance staff for the control of

algae and nuisance vegetation within the storm water lakes or ponds; however, application of such agents must be in compliance with this section.

It is recommended that pesticides, fungicides, and herbicides be used only in response to a specific problem and in the manner and amount recommended by the manufacturer to address the specific problem. Broad application of pesticides, fungicides and herbicides as a preventative measure is strongly discouraged.

The use of pesticides, fungicides, or herbicides is limited to products that meet the following criteria:

1. Must be consistent with the USDA-NRCS Soil Rating for Selecting Pesticides.
2. Must have the minimum potential for leaching into groundwater or loss from runoff.
3. Products must be FDEP- and EPA-approved.
4. The half-life of products used may not exceed seventy (70) days.

I. Public Wellfield Protection– Stormwater Treatment

As required per Lee County Zoning Resolution No. _____, storm water runoff within the Property must be directed to specifically designed and designated storm water treatment areas.

Accordingly, storm water runoff must be first routed to pre-treatment areas, consisting of either dry-detention areas or wet-detention areas (lakes). The detention areas provide a minimum of 0.5" of pre-treatment prior to discharge. Additionally, plantings within the pre-treatment dry detention areas, will serve to further enhance water quality treatment prior to discharge. These plantings must be maintained in perpetuity (or as long as the development remains viable) by the HOA, its successors or assigns. Lakes shall provide an additional 1.5" of water quality treatment prior to discharge off-site. It is important to note that the lakes will be discharging into a few hundred acres of restoration area where additional water quality treatment and storage will be provided prior to discharge off-site.

Pre-treatment of storm water discharge prior to entry into the lakes serves to enhance the water quality treatment of storm water and reduce undesirable nutrient loading, thereby minimizing contaminants and pollutants from entering the lake and water table.

J. Public Wellfield Protection – Additional Requirements

1. Herbicide Application

Herbicide application to maintain littoral vegetation and rip-rap stabilized shoreline areas within the Property must be conducted in a manner that reduces potential impacts to human health and the environment and in compliance with local, state and federal regulatory guidelines. Because the lakes are located hydraulically upgradient and within the five and ten – year travel time zone of the Lee

County drinking water wells, every precaution will be taken to preserve the quality of surface and groundwater within the Property.

All herbicides used near the lake(s) may only have the active ingredient 3,5,6-trichloro-2-pyridinyloxyacetic acid (triclopyr) such as Garlon® 3A specialty herbicide manufactured by Dow Agrosciences. Only aquatic-approved herbicides may be utilized in all lakes. Other commonly available triclopyr-based products (typically used in smaller residential settings), including Brush Killer® and Brush-B-Oon®, may be used. All must be catalogued or inventoried and monitored for movement toward any and all municipal water supply wells. These products are non-volatile and labeled for foliar applications including emerged weeds and brush in standing water or on the banks and shores of ponds and lakes. Only chemical constituents approved for use or application by Lee County, the State of Florida or the Federal Department of Environmental Protection may be utilized. Any deviation from these specifications will require County approval.

Triclopyr has been classified by the United States Environmental Protection Agency ("U.S. EPA") as "practically nontoxic" (the least toxic category designated by U.S. EPA) to mammals, insects, freshwater fish and invertebrates. Toxicological studies have produced no evidence of cancer, birth defects, genetic damage, genetic mutation, or adverse effects on the immune or nervous system in humans.

Following application, residual herbicide not absorbed by vegetation is rapidly degraded by sunlight as well as microorganisms in soil and groundwater. Under normal conditions, triclopyr photodegradation in surface water is approximately one-half day. Triclopyr half- life in soil is approximately 30 to 45 days and no detectable levels are typically present 6 to 12 months following application. The final degradation products of triclopyr include carbon dioxide, water, and other organic molecules.

Based on the rapid plant absorption rates, adsorptive characteristics binding triclopyr to soil particles, active degradation by photolysis at the surface, and microbial degradation in soil and groundwater, the potential for herbicide application to impact downgradient drinking water supplies is considered low.

2. Lake Monitoring Plan

The Developer and/or HOA will maintain an inventory of the type and quantity of pesticides and herbicides used within the Property boundary to ensure the lake monitoring plan provides a complete assessment of all potential contaminants of concern ("COC or *CDC's").*

Development and maintenance of the Property under DOS_____ must follow water quality sampling in accordance with Florida Administrative Code (F.A.C.) 62-160, F.A.C, and Florida Department of Environmental Protection (FDEP) standard operating procedure (SOP) for surface water

sampling (FDEP SOP 001/01), FS 2100 , and parameters are to be collected and analyzed by a NELAC-certified laboratory.

A surface water sample will be collected from each lake, including samples taken prior to herbicide/pesticide application to establish baseline surface water conditions. Surface water quality will be evaluated on a quarterly basis and more frequently in the event of a spill or release. The sampling interval may be adjusted as necessary based on the findings of the first four quarters of routine sampling. In the event of a spill that poses a potential impact to surface waters, additional surface water samples will be collected to evaluate changes in COC's concentrations.

Additionally, in the event of a spill or release into lakes, potential impacts to soils in proximity to the lakes will also be assessed and remediated according the procedures outlined in the following section.

3. Remediation Plan

In the event significant impacts (as defined below) to surface waters are identified as a result of pesticide/herbicide application at the Property, the president of the HOA or his/her designee must notify the operator of the Lee County municipal water supply system and the Director of the Natural Resources Division within no less than 6-12 hours (or next business day) and a surface water remediation plan will be developed and implemented. If a spill or release "presents an immediate threat to human health and/or the environment or exceeds the Reportable Quantity (RQ) for the COC, the FDEP Office of Emergency Response ("OER") will be contacted within 12 to 24 hours. Guidance outlining the definition of a release as well as reporting procedures is presented in the OER Web page located at: httQ://www.dep.state.fl.us/per/reportable incident.htm.

A significant impact to surface water will be defined as a surface water sample analytical result for a COC's exceeding its respective U.S. EPA MCL as well as HAL concentration.

The Developer and/or their successors or assigns must coordinate 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 may consist of temporary monitoring wells installed for short-term temporal monitoring of potential subsurface impacts and to evaluate the horizontal and vertical distribution of potential COCs. Based on the findings of the initial phase, if necessary, a comprehensive assessment may be required.

K. <u>Overall Reporting for Lake Monitoring Plan</u>

Reporting for surface water sampling, at a minimum:

1. Evaluate the COC results
2. Based on the COC results; propose a remedial action to determine the source of excess (as necessary)

3. Propose any appropriate changes in material handling, application schedule, etc. which caused or contributed to the release or excess.
4. Propose appropriate changes to the monitoring plan when the COC has been discontinued or no longer on property. This could be in the form of reduced testing frequency or a discontinuing sampling as appropriate (only applicable after two consecutive years of non-detection).
5. All field activities shall be conducted in accordance with FDEP's Standard Operating Procedures for Field Activities, FDEP-SOP-00101/01, FS 2100, July 30, 2014 (or current revision). Analytical test shall be conducted by a Florida DOH NELAC certified laboratory.

THE SCHOOL DISTRICT OF LEE COUNTY

2855 COLONIAL BLVD. ♦ FORT MYERS, FLORIDA 33966 ♦ WWW.LEESCHOOLS.NET

DAWN HUFF
LONG RANGE PLANNER
239-337-8142
DAWNMHU@LEESCHOOLS.NET

January 12, 2015

Matthew Noble
ANoblePlan, LLC
1842 Seafan Cir
North Fort Myers, FL 33903

RE: Corkscrew Farms Plan Amendment

Dear Mr. Noble:

This letter is in response to your request for comments date December 28, 2014 for the Corkscrew Farms Plan Amendment in regard to educational impact. The project is located in the South Choice Zone, S-3.

The developer's request states there is a possibility of 1,325 single-family dwellings. With regard to the interlocal agreement for school concurrency the generation rates are created from the type of dwelling unit and further broken down by grade level.

For single family, the generation rate is .292 and further broken down into the following, .146 for elementary, .070 for middle and .076 for high. A total of 387 school-aged children would be generated and utilized for the purpose of determining sufficient capacity to serve the development.

The Concurrency Analysis attached, displays the impact of this development. Capacity for elementary and middle seats is not an issue within the Concurrency Service Area (CSA). For high school, the development adds to the projected deficit within the CSA, however, there are sufficient seats available to serve the need within the contiguous CSA.

Thank you for your attention to this issue. If I may be of further assistance, please me at 239-337-8142.

Sincerely,

Dawn Huff,
Long Range Planner

LEE COUNTY SCHOOL DISTRICT'S SCHOOL CONCURRENCY ANALYSIS

REVIEWING AUTHORITY	Lee School District
NAME/CASE NUMBER	Corkscrew Farms Plan Amendment
OWNER/AGENT	Resource Cnservation Holdings
ITEM DESCRIPTION	various amendments; all impacts in South CSA, sub area S3
LOCATION	North side of Corkscrew Rd, east of I75
ACRES	1,300
CURRENT FLU	Density Reduction/Groundwater Resource (DRGR) & Wetlands (W)
CURRENT ZONING	Agricultural (AG2)

PROPOSED DWELLING UNITS BY TYPE

Single Family	Multi Family	Mobile Home
1,325	0	0

Student Generation Rates			
STUDENT GENERATION	**SF**	**MF**	**MH**	**Projected Students**
Elementary School	0.146			193.45
Middle School	0.07			92.75
High School	0.076			100.70
Source: Lee County School District, January 12, 2015 letter				

CSA SCHOOL NAME 2018/19	**CSA Capacity (1)**	**CSA Projected Enrollment (2)**	**CSA Available Capacity**	**Projected Impact of Project**	**Available Capacity W/Impact**	**LOS is 100% Perm FISH Capacity**	**Adjacent CSA Available Capacity w/Impact**
South CSA, Elementary	12,413	10,768	1,645	193	1,452	88%	
South CSA, Middle	5,621	5,325	296	93	203	96%	
South CSA, High	7,070	7,550	-480	101	-581	108%	

(1) Permanent Capacity as defined in the Interlocal Agreement and adopted in the five (5) years of the School District's Five Year Plan

(2) Projected Enrollment per the five (5) years of the School District's Five Year Plan plus any reserved capacity (development has a valid finding of capacity)

(3) Available Adjacent CSA capacity is subject to adjacency criteria as outlined in the Interlocal Agreement and the School District's School Concurrency Manual

Prepared by: Dawn Huff, Long Range Planner

Corkscrew Farms
Comprehensive Plan Amendment
Proposed Text Amendment

POLICY 1.7.14: The Southeast Density Reduction/Groundwater Resource overlay (Map 17) is described in Policies 33.3.1 through 33.3.4. This overlay affects only Southeast Lee County and identifies ~~four~~ five types of land:
1. "Existing Acreage Subdivisions": existing rural residential subdivisions that should be protected from adverse external impacts such as natural resource extraction.
2. "Rural Golf Course Communities" potential locations for the concentration of development rights on property zoned Private Recreational Facilities Planned Development and located in the Southeast Density Reduction/Groundwater Resource area.
3. "Mixed-Use Communities" locations where this concentration of development rights from large contiguous tracts with the Density Reduction/Groundwater Resource area that can be supplemented by transfer of development rights from non-contiguous tracts in the Southeast Density Reduction/Groundwater Resource area. See Objective 33.3 and following policies.
4. "Improved Residential Communities:" Property with existing residential approvals that are inconsistent with the Southeast Density Reduction/Groundwater Resource area that could be improved environmentally.
5. "Tier 1 Priority Restoration Overlay:" Property identified on Map 1 Page 4 of 8 as being located within Tier 1 (highest priority) are permitted to develop a specific "Restoration Strategy" that must be adopted by plan amendment as a specific Overlay and Strategy for each Tier 1 property. The Strategy may permit additional residential development above the standard density limitation of the DR/GR Future Land Use category (1 dwelling unit per 10 acres). Each Tier 1 Restoration Strategy will provide the conditions and criteria that must be implemented to achieve the additional residential development.

    a. The Corkscrew Farms property is subject to the Tier 1 Priority Restoration Overlay.

POLICY 33.2.1: Large-scale ecosystem integrity in Southeast Lee County should be maintained and restored. Protection and/or restoration of land is of even higher value when it connects existing corridors and conservation areas. Restoration is also highly desirable when it can be achieved in conjunction with other uses on privately owned land including agriculture. Lee
County Natural Resources, Conservation 20/20, and Environmental Sciences staff will work with landowners who are interested in voluntarily restoring native habitats and landowners who are required to conduct restoration based upon land use changes. The parameters for the required restoration will be established in the Land Development Code by 2012. The protection and/or restoration of private land can also occur through the adoption of a Tier 1 Priority Restoration Overlay for private lands and the adoption of a

strategy for priority restoration and incentives to provide the restoration. All development within Tier 1 Priority Restoration Overlay must be developed with planned development zoning.

OBJECTIVE 33.3: RESIDENTIAL AND MIXED-USE DEVELOPMENT. Designate on a Future Land Use Map overlay areas that should be protected from adverse impacts of mining (Existing Acreage Subdivisions), specific locations for concentrating existing development rights on large tracts (Mixed-Use Communities), ~~and~~ vacant properties with existing residential approvals that are inconsistent with the density Reduction/Groundwater Resource future land use category (Improved Residential Communities) and development of Tier 1 Priority Restoration Overlay properties that have an approved Strategy Plan.

POLICY 33.3.3: Properties within the DR/GR that have existing approvals for residential development inconsistent with the current DR/GR density requirements or properties located within Tier 1 that develop without a Priority Restoration Strategy, may damage surface and sub-surface water resources, impact habitat, and encroach on environmentally important land if developed consistent with the vested approvals or without a Restoration Strategy. As an incentive to reduce these potential impacts additional densities may be granted if strict criteria improving the adverse impacts are followed.

1. These properties may be designated on Map 17 as "Improved Residential Communities," provided they meet all of the following requirements:

a. Abut lands designated as future urban areas;

b. Adjacent to and eligible for public water and sewer services;

c. Can provide two (2) direct accesses to an arterial roadway, and;

d. Is not already designated on Lee Plan Map 17 as an Existing Acreage Subdivision or a Mixed Use Community.

Tier 1 properties that develop a Priority Restoration Strategy that is approved through the plan amendment process may also be designated on Map 17 as being located in the Tier 1 Priority Restoration Overlay.

a. The Corkscrew Farms Restoration Strategy is incorporated into this plan and the property is located in the Tier 1 Priority Restoration Overlay as the "Corkscrew Farms Tier 1 Priority Restoration Overlay". Corkscrew Farms will be permitted to develop 1,325 dwelling units to incentivize the restoration strategy and regional benefits.

2. In order to request an increase in density, the property must be rezoned to a Residential Planned Development (RPD) that demonstrates and is conditioned to provide the following:

a. Reduced stress to the onsite potable aquifers and is more consistent with water resource goals of Lee County in the DR/GR than the existing development approvals.

b. Increased conservation areas, relative to the existing approvals, with a restoration plan and long term maintenance commitment.

c. Active and passive recreational amenities to promote a healthy lifestyle.

d. Demonstrates a net benefit for water resources, relative to the existing approvals that demonstrates the following.
(1) Lower irrigation demand.
(2) Eliminates private irrigation wells
(3) Protects Public wells by meeting or exceeding the requirements of the Well Field Protection Ordinance.
(4) Uses Florida Friendly Plantings with low irrigation requirements in Common Elements.
(5) Connects to public water and sewer service, and must connect to reclaimed water when available.
(6) Reduces impervious area relative to existing approvals improving opportunities for groundwater recharge. This criteria is not applicable to the Corkscrew Farms Tier 1 Priority Restoration Overlay.
(7) Designed to accommodate existing or historic flowways.

e. Includes an enhanced lake management plan that addresses at a minimum the following issues:

(1) Best management practices for fertilizers and pesticides
(2) Erosion control and bank stabilization
(3) Lake maintenance requirements
(4) Public well field protection

f. Indigenous Management Plans must address human-wildlife coexistence.

3. Properties meeting the above criteria and requirements and located in the Improved Residential Communities overlay may be permitted additional residential dwelling units in addition to the already existing approvals, but in no case in excess of three (3) dwelling units per DR/GR upland acre. The application for Residential Planned Development must identify the source of the additional residential dwelling units from the criteria below. Approval of the rezoning will be conditioned to reflect the source of additional dwelling units:

a. 2 dwelling units for every acre of offsite DR/GR property acquired for conservation purposes with the possibility of passive recreation activities.
b. 2 dwelling units for every additional acre of offsite DR/GR property put under a conservation easement dedicated to Lee County.

c. 1.5 dwelling units for every additional acre of onsite property put under a conservation easement.
d. 1 dwelling unit for every acre of onsite restoration, subject to restoration plan approval as part of the Planned Development rezoning process.
e. 2 dwelling units for every acre of non-isolated DR/GR preserved primary and secondary panther habitat.
f. 2 dwelling units for every acre of protected onsite wetlands connected to a regionally significant flowway identified in the Lee Plan.
g. 1 dwelling unit for every $8,500 (the current estimated cost to purchase an acre of Southeast DR/GR land) the applicant provides to the county to extinguish density on other Southeast DR/GR parcels.
h. 1 dwelling unit for every $8,500 the applicant provides to the county to construct a planned large mammal roadway crossing in the Southeast DR/GR area.
The improvements or acquisition of properties serve to mitigate impacts of the increased density.
Future "Improved Residential Communities" proposed to be added to Map 17 must provide a reanalysis of the cost to purchase one acre of DR/GR property if criteria (g.) or (h.) are used to account for the increased density.

4. The Corkscrew Farms Tier 1 Priority Restoration Overlay property is permitted 1,325 dwelling units, including ancillary residential uses such as clubhouses and recreational uses. The residential units are permitted as the incentive for the protection, conservation, and restoration of the Tier 1 property in accordance with the approved Restoration Strategy. The Restoration Strategy requirements for the Corkscrew Farms property are as follows:

a. The County will create a DR/GR Density Fund. The DR/GR Density Fund must be used to extinguish density in the DR/GR, or to enhance or improve water and wildlife resources in the DR/GR. Prior to the issuance of the first residential building permit, the developer must pay $1,500 per residential unit approved by the planned development zoning resolution.

b. Land must be placed in open space on the Corkscrew Farms property for retention, detention, water storage, water treatment, green space, restoration, preservation, and enhancement areas. The lands to be included in open space must be a minimum of 800 acres.

c. Corkscrew Road operational improvements must be provided. The operational improvements are intended to improve left-turn egress and ingress from the Preserve at Corkscrew and Bella Terra onto Corkscrew Road. These operational improvements, to be established in consultation with the Lee County Department of Transportation, could include the following, up to a total developer contribution of $700,000: the construction of a northbound to a westbound channelized receiving lane/acceleration lane in the median to improve the left-turn out movement; construction of a median divider with a channelized left-turn lane on Corkscrew Road; traffic signalization; or comparable operational improvements. The Corkscrew Road operational improvements must be

agreed to with the Lee County DOT and designed before the issuance of the 50th residential building permit. The operational improvements must be installed before the issuance of the 150th residential building permit, provided that all approvals and permits have been issued.

d. All duly adopted impact fees will be paid upon the issuance of each building permit.

e. If the ambulance response time to Corkscrew Farms at the time of issuance of the first residential building permit does not meet the required level of service, the developer must pay an ambulance fee of $200,000 to Lee County EMS for an ambulance at the Corkscrew Road Fire Station to assure adequate response times to Corkscrew Farms.

f. The Restoration Strategy includes a Proposed Restoration Map that depicts the proposed re-created flowways. These flowways will be designed, if feasible, to accept overland flows from the north. Flowway specifications and parameters will be established in the Environmental Resource Permit.

g. The development will incorporate a surface water management plan with water control structures, detention and retention features, and flowways that improve hydrology onsite and benefit existing public conservation lands adjacent to the site.

h. Deed restrictions must be adopted that provide unified maintenance, application of fertilizers and pesticides utilizing a homeowners association, community development district or similar mechanism to ensure compliance with the restrictions.

i. The development will connect to Lee County Utilities for potable water, fire protection, and sanitary sewer services.

j. The Development will provide the opportunity for a healthy lifestyle by providing sidewalks throughout the development as well as providing amenity areas that may include but are not limited to:

Clubhouse, restaurant, bar, and maintenance/storage buildings;
Exercise, multi-purpose, meeting, and gathering rooms;
Tennis , bocce, and pickle courts, pool(s);
Tennis pro shop;
Pool side bar and kitchen;
Play ground, picnic pavilion, fire pits, and open field play area;
Passive recreation areas, walking trails, scenic and wildlife viewing areas.

Specific recreational amenities will be identified at the time of planned development zoning approval.

k. The vertical building development "footprint" will incorporate the following setbacks from adjacent properties including the following:

850 feet from the westerly property line;

400 feet from the right of way of Corkscrew Road, with the exception of project access roads and entrance features;

400 feet from the northern property line, and;

2,975 feet from the eastern property line.

Water management facilities, water control structures, and infrastructure for the development including utilities (wells, sewers, potable water lines, irrigation lines, pump stations, lift stations, pipes, water management berms, bridges, causeways, swales, lakes, ponds, signage, fencing, entry roads, gatehouses, guardhouses, landscape features, etc.) as well as restoration activities including flowway re-creation are permitted within these setbacks.

Lee County
Southwest Florida
BOARD OF COUNTY COMMISSIONERS

Writer's Direct Dial Number: (239) 533-8532

February 9, 2015

Matt Noble
ANoblePlan, LLC
1842 Seafan Circle
North Fort Myers, FL 33903

RE: Potable Water and Wastewater Availability
Corkscrew Farm, 17501 Corkscrew Road
Multiple STRAP #s in Section 19, Township 46, Range 27
& in Sections 23 & 24, Township 46, Range 26

Dear Mr. Noble:

The subject properties are not located within Lee County Utilities Future Service Area as depicted on Maps 6 and 7 of the Lee County Comprehensive Land Use Plan. Potable water and sanitary sewer lines are not in operation adjacent to the property mentioned above. In order to provide service to the subject parcels, developer funded system enhancements such as line extensions will be required.

Your firm has indicated that this project will consist of 1,325 single family units with an estimated flow demand of approximately 331,250 gallons per day. Lee County Utilities presently has sufficient capacity to provide potable water and sanitary sewer service as estimated above.

Availability of potable water and sanitary sewer service is contingent upon final acceptance of the infrastructure to be constructed by the developer.

Upon completion and final acceptance of this project, potable water service will be provided through our Pinewood Treatment Plant. Sanitary sewer service will be provided by our Three Oaks Wastewater Treatment Plant.

The Lee County Utilities' Design Manual requires the project engineer to perform hydraulic computations to determine what impact this project will have on our existing system.

Prior to beginning design work on this project, please schedule a meeting with Thom Osterhout to determine the best point of connection and discuss requirements for construction.

This letter should not be construed as a commitment to serve, but only as to the availability of service. Lee County Utilities will commit to serve only upon receipt of all appropriate connection fees, a signed request for service and/or an executed service agreement, and the approval of all State and local regulatory agencies.

Further, this letter of availability of Water and Wastewater service to be utilized for a Comp Plan Amendment purposes for this project Only. Individual letters of availability will be required to obtaining regulatory permits and/or building permits.

Sincerely,

LEE COUNTY UTILITIES

Mary McCormic
Technician Senior
UTILITIES ENGINEERING

VIA EMAIL